# HEALTH EDUCATION PROMOTION FOR SUSTAINABLE LEARNING IN ZIMBABWEAN RURAL ECOLOGIES

**By**

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**STATEMENT BY THE SUPERVISORS**

As the candidate's supervisors we agree / do not agree to the submission of the thesis.

Dr Ncamisile P. Mthiyane

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Date: 08-12-2021

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## ABSTRACT

Given the exponential growth of both communicable and non-communicable diseases in developing countries, Zimbabwean learners need to be health conscious, to develop positive behaviours, to desist from health threatening activities and to be health literate. This can be achieved through health education programmes in both rural and urban ecologies. This study explored health education for sustainable learning in Zimbabwean rural ecologies. Health challenges among learners in rural learning ecologies and rural communities can be addressed through health education.

Working within the constructivist paradigm, an eclectic framework that combined two theoretical lenses, namely, the Asset-Based Approach and the Health Belief Model, were employed to understand and espouse the need for sustainable health education in rural communities. The Health Belief Model posits that, for an individual to change their behaviour, they must feel threatened and believe that a specific change will be beneficial. For its part, the Asset-Based Approach empowers individuals and communities to address health issues and challenges by utilising available resources (human, physical and social capital in their communities, including health education-based resources like talents, skills and knowledge). It addresses problems in a positive manner by identifying, mobilising and managing the identified assets.

Purposive selection was utilised to select two teachers, a nurse, six learners, six parents and a headman. Data were generated using written narratives, narrative interviews and narrative reflections and were analysed using the narrative analysis approach. The participants narrated their experiences of how health education is accessed and promoted, as well as the challenges faced in implementing health education strategies to enhance sustainable learning in Zimbabwean rural learning ecologies. All ethical requirements were adhered to including anonymity and confidentiality. The study found that the Zimbabwean health sector is experiencing a plethora of challenges with the brain drain of skilled, experienced and competent health professionals compromising sustainable learning. The findings confirm the dire need for health education coupled with collaboration between the Ministries of Health and Education, and rural learning communities. Acute shortages of learning resources and infrastructural challenges were

identified as obstacles to the promotion of health literacy and education. Based on these findings, the study proposes that Zimbabwe's health sector should be fully capacitated.

**KEY WORDS:** Health education, health promotion, sustainable learning, rural ecologies

## LIST OF ABBREVIATIONS

| | |
|---|---|
| ABA | Asset-Based Approach |
| AIDS | Acquired Immunodeficiency Syndrome |
| ART | Antiretroviral Treatment |
| BSE | Breast Self-Examination |
| DoE | Department of Education |
| DoHET | Department of Higher Education and Training |
| ECD | Early Childhood Development |
| ICT | Information and Communication Technology |
| HBM | Health Belief Model |
| HFLE | Health and Family Life Education |
| HIV | Human Immunodeficiency Virus |
| LO | Life Orientation |
| LSE | Life Skills Education |
| MoESC | Ministry of Education Sport and Culture |
| NHS | National Health Strategy |
| PGCE | Post Graduate Certificate in Education |
| PED | Provincial Educational Director |
| PMCT | Prevention of Mother to Child Transmission |
| PMD | Provincial Medical Director |
| SRE | Sex and Relationship Education |
| STI | Sexually Transmitted Infection |
| VHW | Village Health Worker |
| TB | Tuberculosis |
| UN | United Nations |
| UNESCO | United Nations Educational and Scientific Organisation |
| UNFPA | United Nations Population Fund |
| UNICEF | United Nations Children Education Fund |
| US | United States |
| WHO | World Health Organisation |

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## PROPOSED FRAMEWORK FOR HEALTH EDUCATION PROMOTION FOR SUSTAINABLE LEARNING IN ZIMBABWEAN RURAL ECOLOGIES

# CHAPTER ONE

# INTRODUCTION, BACKGROUND, AND MOTIVATION FOR THE STUDY

## 1.1 INTRODUCTION

This chapter introduces this study that explored health education promotion for sustainable learning in Zimbabwean rural ecologies. It presents the background of the study, the problem statement, the rationale and focus of the study, and the objectives and critical research questions. The significance of the study is discussed in detail and confirmed with a brief review of the relevant literature. The operational concepts used in the study are discussed and the procedures that were followed in delimiting challenges are outlined. The chapter concludes with the structure of the study.

## 1.2 BACKGROUND TO THE STUDY

The current economic climate in Zimbabwe, which is characterised by ever-increasing inflation and a continuously weakening local currency, has negatively impacted the country's health sector (Chikanda, 2006; Nyazema, 2010). The myriad of challenges includes acute drug shortages in health delivery centres, dilapidated infrastructure, a demoralised health workforce (evidenced by strikes) (Newsday Zimbabwe, 2018, 2019, 2020), social inequalities, poverty and the HIV/AIDS pandemic (Todd, Madzimbamuto & Sanders, 2010; National Health Strategy, 2016-2020). Rural ecologies are the worst affected. Decisive action is required by decision-makers if sustainable learning is to be achieved. The indications are that the health sector in Zimbabwe is deteriorating at an alarming rate with some health delivery centres having an unprecedented doctor patient ratio of 1: 12 000 compared to 1: 200 as prescribed by the United Nations (UN) (WHO, 2012, 2015). The World Health Organisation (WHO) (2016) notes that the country recorded a dramatic decrease in economic growth from 2013 to 2015. This resulted in the brain drain of skilled health professionals to neighbouring countries like South Africa and Botswana, with some migrating to countries further afield like the United States (US) and the United Kingdom (Ministry of Health and Child Care, 2015; Machingura, 2018). At the time of its independence in 1980, Zimbabwe inherited a world class health delivery system. However, political discord, corruption, misplaced priorities and inadequate

allocation of resources have led to rapid deterioration (Vaughan, 2014). Furthermore, the government's fiscal space has shrunk, reducing external funding to address the challenges confronting the economy and the health sector (Nyazema, 2010). The tight financial situation means that the government cannot adequately capacitate the health delivery system or respond positively to health workers' demands for improved working conditions and salaries. These negative developments motivated this exploration of health education promotion for sustainable learning in Zimbabwean rural ecologies.

Currently, outbreaks of cholera, typhoid, and HIV/AIDS have been reported in the media and deaths due to tuberculosis (TB) remain high due to its close relationship with HIV/AIDS (WHO, 2015). Further HIV/AIDS infections have been recorded, especially among the sexually active age group, and the few gains previously achieved have been eroded by an increase in teenage pregnancies which have resulted in high girl learner dropout rates (Chimhowu et al., 2010; Ministry of Health and Child Care, 2014). The literature confirms that this age group suffers from a number of health related challenges which include drug and alcohol abuse, difficulty in making health decisions, and a lack of access to up-to-date health education literature, which in my view compromise sustainable learning. These challenges are most severe in rural ecologies. The Ministry of Health and Child Welfare (2010) acknowledges that the health delivery system in Zimbabwe is confronting significant challenges with gains being eroded by HIV/AIDS, poverty and social inequalities.

The literature notes that the terms, health education and health promotion are often used interchangeably (Doyle, Ward & Early, 2018; Gilbert, Sawyer & McNeill, 2014; Mold & Berridge, 2013). However, Whitehead (2008) asserts that they are two distinct concepts. He defines health education as consciously constructed learning opportunities in the form of communication designed to improve health knowledge and develop life skills which are conducive to individual health. Whitehead (2008) goes on to state that health promotion is the process of making people aware of their health and wellbeing. The Ottawa Charter of 1986 defines health promotion as the process of enabling people to increase control of and improve their health. Griffin (2012) asserts that, besides making people aware of their health and well-being, health promotion empowers them to take charge of their health. In

similar vein, the Zimbabwe School Health Policy of 2018 defines health promotion as the aggregate of all purposeful activities designed to improve personal and public health through a combination of strategies. It can thus be argued that health promotion implies raising the health status of individuals and communities. This study explored health education promotion in Zimbabwean rural ecologies.

According to Kickbusch and Nutbeam (2017), health education is a combination of planned learning experiences based on sound theories that provide individuals or groups and communities with the opportunity to acquire the health information and skills required to make quality health decisions. This is achieved by consciously constructing opportunities for learning involving some form of communication designed to improve literacy and knowledge, and to develop life skills which are conducive to individual and community health (Glanz, Rimer & Viswanath, 2008). Effective health education involves various techniques and approaches, including preparation of information brochures, pamphlets, videos, role plays, reading and computer assisted learning (Mold & Berridge, 2013). However, in some communities, including rural learning ecologies, different approaches can be employed that meet the needs of individuals in these contexts for successful and sustainable learning. Hammaberg (2014) stresses that health education is target-focused, which requires that the approaches used be considered carefully to meet the needs of rural ecologies as these contexts are often marginalised and underdeveloped. When effectively administered, health education has positive benefits for individuals and communities (Sim & Hogan, 2011). Awareness of different diseases increases, and they develop the ability to make informed health decisions. In turn, learners' academic performance improves, the skills base expands and communities and individuals are able to cope with health challenging situations (Fitzpatrick & Tinnings, 2014; Sivertsen, 2015) as health education is viewed as a powerful tool which empowers people and leads to the adoption of positive behaviours.

Health education is essential to develop healthy behaviours among learners in rural learning ecologies. The main objective of such education is to inform, motivate and guide action among individuals (Gilbert, Sawyer & McNeill, 2014). Communication is thus a key strategy. Musingafi and Zebron (2014) describe communication as sharing ideas,

information and knowledge using different channels, for example, the Internet and social media platforms like Facebook and WhatsApp, to name but a few. Individuals (learners) and communities need access to health knowledge and measures to prevent different diseases and this is enhanced through communication platforms (WHO, 2015; UNICEF, 2012).

This study was not confined to examination of a specific disease. Rather, the goal was to examine strategies to raise awareness and develop health consciousness among learners and rural communities. The study also develops the ability to make health informed decisions among learners, teachers and parents as well as other stakeholders in Zimbabwean rural ecologies in order that they adopt positive behaviours that will enhance sustainable learning. The study also explored how health education is accessed and promoted, and identified challenges in implementing health education promotion strategies in rural learning ecologies in the country. The literature notes that health education promotion remains a challenge in rural ecologies, especially in developing countries like Zimbabwe (WHO, 2015; Goldman, 2008). This inspired my interest in determining the reasons for these challenges as well as identifying strategies to enhance sustainable learning in rural learning ecologies in the country**.** However,terms sustainable learning and rural ecologies will be discussed in detail under definition of terms subsection 1.8 .

## 1.3 PROBLEM STATEMENT

The literature confirms that, following a decade of political and economic crises between 1999 and 2010, health education promotion is in a worrisome state in Zimbabwe, calling for a major overhaul of the health sector (Biti, 2009). The situation has been further exacerbated by a severe brain drain of skilled, experienced and competent health professionals to regional (South Africa, Botswana) and international (United Kingdom, US) destinations in search of greener pastures. The country's health sector confronts a plethora of challenges which compromise the implementation of health education programmes in both rural and urban ecologies, with rural communities worst affected. These include acute drug shortages in health delivery centres, a demotivated health work force (evidenced by unending strikes (Newsday Zimbabwe, 2018, 2019, 2021)),

dilapidated infrastructure, social inequalities, HIV/AIDS and the current COVID-19 pandemic. Learners and communities in rural ecologies lack access to health delivery centres. The sick and expectant mothers are sometimes taken to health delivery centres in ox-drawn scotch carts as there are no ambulances. The rural gravel roads are in a bad state and rural communities are also characterised by poor network coverage due to their geographical location which places the lives of the sick at risk. These challenges prompted me to explore health education promotion in rural ecologies in Zimbabwe.

Guidance and Counselling (at secondary school level) and Life Skills (at primary school level) were introduced to Zimbabwe school curricula to address health issues among learners in accordance with Chief Education Circular Number 16 of 1993 (Ministry of Education, Sport & Culture, 1993). Guidance and Counselling should be taught by Guidance and Counselling teachers to address the health needs of learners and to make them health conscious and knowledgeable about both communicable and non-communicable diseases and other health related challenges. However, Guidance and Counselling as a subject is not adequately resourced and teachers who teach it are not adequately capacitated as they did not receive specialist training. Studies show that learners in rural learning ecologies engage in violence, drug and alcohol abuse, and promiscuous activities which have contributed to a high girl learner drop-out rate in these areas due to unplanned, unwanted pregnancies (Muradzikwa & Chinyoka, 2016; Kidia, 2018). These issues could perhaps be addressed if learners had access to effective health education through Guidance and Counselling.

There is an acute shortage of textbooks and Guidance and Counselling teachers mainly rely on the syllabus, the official guiding document. The subject is only taught once a week for about 30 to 40 minutes (Muguwe & Gwirayi, 2011). Zimbabwean secondary schools are overcrowded; hence Guidance and Counselling teachers resort to expository approaches as opposed to participatory ones (Manzira, 2014; Muguwe & Gwirayi, 2011). The literature shows that if teachers are not adequately capacitated to teach the subject effectively, learners will not gain optimal benefits (Gudyanga, Moyo & Gudyanga, 2015).

Chapter 4, Sub-section 75 of the Zimbabwe Constitution of 2013 stipulates that every citizen and permanent resident of the country has the right to access to basic health care

services, including reproductive health care services (Constitution of Zimbabwe, 2013). However, in rural ecologies, the prohibitive cost of life saving drugs and long walking distances to access basic health care services undermine this constitutional right (Global Fund, 2013). Health education promotion campaigns are sporadic, perhaps due to inadequate funding (Biti. 2009). Urgent steps are needed to avail affordable health care services and roll out regular health education promotion programmes so as to develop health consciousness, health literacy and the ability to make health informed decisions to enhance sustainable learning in disadvantaged communities. Currently, Zimbabwe faces a double burden of communicable and non-communicable diseases (UNAIDS, 2014) which compromises sustainable learning, particularly in rural ecologies as it negatively impacts schooling practices. This study thus explored health education promotion in Zimbabwean rural ecologies in order to enhance sustainable learning.

## 1.4 RATIONALE FOR THE STUDY

The study was motivated by personal, professional and theoretical experiences. I was born, bred and educated in Rhodesia, now Zimbabwe. Health equity and black people's access to effective health education were unheard of during the colonial era, especially in rural areas. World-class health care facilities primarily catered for the minority white population. This population group had its own hospitals which were adequately capacitated, while a few hospitals catered for the majority black population. Racial discrimination was the order of the day. In rural communities, clinics were geographically scattered and most communities had no clinics, resulting in people resorting to traditional healing practices. In communities which were lucky enough to have clinics, the sick had to walk long distances and some were ferried in ox-drawn scotch carts as there were no ambulances.

The rural community where I grew up had no safe drinking water. The majority of black people who resided in rural ecologies which were known as "Tribal Trust Land" consumed unsafe and untreated water, exposing them to water borne diseases like cholera, bilharzia and typhoid. I vividly remember most of my age mates succumbing to water borne infections but I was lucky as both my parents were professionals (teachers) which meant that the family had healthier living standards as we consumed boiled drinking water and

had a pit latrine at home. The majority of people in the rural community where I grew up used bush toilets as they could not afford to build pit latrines. Pit latrines were only found at schools, churches established by missionaries, clinics and at a few rural homesteads. Being privileged to have professional parents, we were periodically taught about health issues, but not about issues relating to sexuality as sex is a taboo subject in most African cultures (Muguve & Gwirayi, 2011; Ngwu, 2016).

The black school curriculum was silent on health issues and the privileged few who underwent formal schooling only received basic literacy skills. In colonial Rhodesia the legislative framework on health issues was skewed in favour of the minority whites as opposed to the majority black population and whites enjoyed world class health facilities and care. Blacks were regarded as second class citizens and health frameworks particularly favoured the whites who received more budgetary allocations. As a result, there were no health awareness campaigns or disease prevention programmes in the schools and community in the rural community where I was raised.

While the situation changed post-independence, the current economic challenges have eroded the gains made. The health sector suffers from low morale, as evidenced by strikes in 2018, 2019 and 2020 (Newsday - Zimbabwe, 2020). Many skilled, experienced health professionals have migrated to neighbouring countries, especially South Africa and Botswana and many are scattered across the globe (Nyandoro et al., 2016; Nyazema, 2010). My informal interactions with health professionals revealed an acute shortage of medical resources in most health delivery centres as well as a severe shortage of specialist health professionals, which hamper health education initiatives and full implementation of health education programmes. Legislative frameworks have been put in place to support health education programmes in both rural and urban contexts, but this study found that a lack of resources and skilled manpower are major challenges.

In learning ecologies (schools), the compulsory subjects of Health and Life Skills (primary level) and Guidance and Counselling (secondary school level) are now receiving attention through the new curriculum framework of 2013, but it was noted that teachers are ill-equipped and need in-service training. Teacher training institutions also need to introduce courses or modules to adequately capacitate trainee teachers. Health awareness

campaigns have been hampered by a lack of adequate financial resources. Both teachers and health professionals acknowledged that all is not well in the health sector which is characterised by crumbling health infrastructure and a lack of drugs in both rural and urban ecologies.

Professionally, I began my journey as a teacher in 1983 and I have been a deputy head for 15 years. Health education has been included in the curriculum from primary to secondary school level and in universities, although more needs to be done by curriculum planners. The changes noted in learners and rural communities are now being eroded by the deteriorating economic climate (Ministry of Health and Child Care, 2015). I have observed that collaborative frameworks between the Ministry of Primary and Secondary Education and the Ministry of Health and Child Care have been effective in addressing some of the challenges (Zimbabwe School Health Policy, 2018). Such collaboration centres on health education and promotion, and disease prevention. Print and electronic media is now being used for health information dissemination; however, the lack of Internet connectivity and poor network signal coverage compromise access to current health education programmes in rural ecologies, thus undermining sustainable learning.

Theoretically, the Ministry of Health and Child Care and Non-Governmental Organisations (NGOs) have partnered with education institutions to promote health awareness and disease prevention through drama, poetry and music competitions, posters and pamphlets, although rural ecologies remain disadvantaged due to their remoteness and lack of Internet connectivity (Zimbabwe School Health Policy, 2018; Zimbabwe Health Strategy, 2016-2020). According to the Zimbabwe Health Policy of 2018, the Ministry of Primary and Secondary Education is striving to form partnerships with key stakeholders and encouraging public and private sector participation in health education (Zimbabwe School Health Policy, 2018). The vaccination and immunisation strategy which was initiated in 2018, in terms of which girl learners between the ages of 10 and 14 are screened and vaccinated against cervical cancer while boy learners in the same age group are circumcised, has the support of the Ministry of Health and Child Care (Zimbabwe).

Urban and rural parents have expressed mixed reactions to vaccination and circumcision of learners. Perhaps due to their low level of literacy, rural parents feel that the programme clashes with their cultural values and initiates learners into intimate sexual activity. In contrast, urban parents fully support the programme which can probably be attributed to their exposure to current health literature through the Internet, and social media platforms and also to their high level of literacy. The immunisation and circumcision programme was initially implemented in urban ecologies and later in rural communities. From observation, adequate health awareness campaigns were not run on the programme, which could also explain why rural communities are uncomfortable with its implementation. Learners in both rural and urban ecologies are now becoming health conscious through health education initiatives and programmes and through Guidance and Counselling (a compulsory subject at secondary school level) (Ministry of Health and Child Care, 2015; Muguwe & Gwirayi, 2011).

While health awareness campaigns spearheaded by health professionals from the Ministry of Health and Child Welfare are irregular, they promote health consciousness among learners in both ecologies. Traditional leadership also give Village Health Workers a platform at community gatherings to address community members on different diseases and sometimes issue birth control devices to the sexually active group. However, these stakeholders do not collaborate. The Ministry of Primary and Secondary Education introduced supplementary feeding schemes in all rural primary schools to cater for the poor and the vulnerable which has greatly improved learners' health status and contributed to a reduction in diseases associated with food deficiencies. Improved school attendance was also noted. A lack of feeding schemes could lead to increased drop-out rates, while girl learners might be forced into early marriage or engage in promiscuous activities, with the risk of contracting sexually transmitted infections (STIs) including HIV/AIDS. Safe drinking water is important for health. Water helps the body to digest food and maintain a constant temperature. It flushes out harmful toxins and enables people to feel well (WHO, UNICEF & USAID, 2016). Consuming water from unsafe sources exposes people to waterborne infections like cholera and typhoid, to name but a few (WHO, 2019).

Globally, and in Zimbabwe, people die from water, sanitation and hygiene-related diseases which can be minimised by access to safe water and sanitation (WHO & UNICEF, 2017). Strides have been made in providing clean, safe water and sanitation facilities in the rural ecologies of Zimbabwe. The government and some NGOs have drilled boreholes in most rural communities and it is now mandatory that every school in rural ecologies and each rural homestead has blair toilets (Nyazema, 2010). However, more boreholes and affordable sanitation facilities are required. Furthermore, health education programmes need to be rolled out in marginalised rural ecologies through public and private partnerships. Religious groups who do not allow their children to receive medical attention need to be educated so as to prevent their children from contracting health threatening diseases. Financial resources are required for such health education.

## 1.5 OBJECTIVES OF THE STUDY

The study's objectives were to:

1. Analyse the current situation regarding health education promotion in Zimbabwean rural ecologies.
2. Explore the strategies used to access and promote health education in rural ecologies.
3. Identify the challenges (if any) faced by Zimbabwean rural learning ecologies in the implementation of health education promotion strategies for sustainable learning.

## 1.6 CRITICAL RESEARCH QUESTIONS

The research questions were:

1. What is the current situation regarding health education promotion in Zimbabwean rural ecologies?
2. How is health education accessed and promoted in Zimbabwean rural ecologies?
3. What health education strategies are used in Zimbabwean learning ecologies to enhance sustainable learning?

## 1.7 SIGNIFICANCE OF THE STUDY

There is a rich body of international, regional and local research on health education with some studies focusing on improving such education (Jezermberg, 2014). A number of the studies reviewed focused on HIV/AIDS (Chikonzo, 2017; Tungwarara, 2018; Moyo, 2016; Chiware, 2017) in either urban or peri-urban ecologies. Studies conducted in Zimbabwe and sub-Saharan Africa centred on preventive measures against HIV/AIDS and targeted adolescent learners, with none exploring health education promotion in Zimbabwean rural ecologies which in my view are worst affected by a number of health related challenges due to a lack of access to health education programmes. Furthermore, the reviewed studies did not identify strategies that could be utilised to develop health consciousness, health literacy, and acquisition of health knowledge on communicable and non-communicable diseases. The current study sought to address this gap in order to empower learners and rural communities to make effective health decisions and improve their quality of life.

Health education benefits learners in both urban and rural ecologies (Hernandez, 2011). As their knowledge of health challenges increases, they develop the ability to make health-informed decisions. Their academic performance improves, their skills base expands and they are able to cope with health challenging situations (Hammaberg, 2014; Hernandez, 2011; Fitzpatrick & Tinnings, 2014). Furthermore, health education equips parents in rural communities with knowledge on health threatening activities, and communicable and non-communicable diseases and enhances their interaction with their children (Sapungan & Sapungan, 2014). Involving parents in school health education programmes tends to reduce cultural conflict and reinforces the knowledge learners acquire in the school context, thereby enhancing sustainable learning. Learners and parents will benefit as they will be empowered to make health-informed decisions and develop positive behaviours. This study also sought to identify how health education is accessed and promoted to enhance sustainable learning. The findings will assist the Zimbabwean Ministries of Health and Education to formulate and implement health-friendly policies and to identify other strategies that promote health education in learning ecologies and rural communities. They will also encourage school administrators, teachers and other stakeholders to take Guidance and Counselling (a compulsory subject

at secondary school level) seriously and to capacitate trainee and practicing teachers to ensure successful health education.

This study utilised narrative inquiry (a qualitative research methodology) to unpack how health education is accessed and promoted in rural ecologies through narratives (stories). Narrative inquiry was also employed to explore challenges in implementing health education promotion strategies. By incorporating the principles of the two theoretical lenses utilised, namely, the Asset-Based Approach (ABA) and the Health Belief Model (HBM), the research aimed to empower and motivate learners and rural communities to desist from health threatening activities and to adopt positive behaviours which enhance the quality of life.

Finally, this study adds to existing knowledge in the field of Educational Psychology on how health education is accessed and promoted and its effectiveness in enhancing sustainable learning. It makes a unique contribution by integrating three concepts, namely, health education, sustainable learning and rural ecologies. The study was not disease specific but adopted an inclusive approach to the development of health consciousness and awareness of different diseases as well as possible strategies that can be used to promote health education. In conclusion, it is hoped that this study has created knowledge which can be used by future researchers as a springboard to explore health education promotion in rural ecologies.

## 1.8 CLARIFICATION OF OPERATIONAL CONCEPTS

The operational concepts that are the main pillars of this study are defined and clarified in this section. They include health education, health promotion, sustainable learning and rural ecologies.

### 1.8.1 Health education

Briggs (2010) and the WHO (2013) define health education as consciously constructed opportunities for learning involving some form of communication designed to improve health literacy, including improving knowledge and developing skills that are conducive to individual and community health. In similar vein, Hernandez (2011) states that health education involves consciously constructed learning opportunities involving some kind of

communication designed to improve literacy and health knowledge acquisition. He adds that it involves a set of techniques such as preparation of health information brochures and pamphlets as well as computer-assisted learning. It can be deduced that health education is not a haphazard undertaking, but a process aimed at encouraging positive living and enabling people to remain healthy and seek medical attention when the need arises. School curricula and informative health awareness campaigns can be effective platforms to promote health knowledge acquisition to enhance sustainable learning.

School curricula have been identified as one of the opportunities to improve health knowledge and facilitate development of the skills required to make quality health decisions in developed countries (Menrath, Mueller-Godeffroy, Pruessmann, Ravens-Sieberer, Ottova, Pruessmann & Tayern, 2012; UNICEF, 2012), developing countries (Makoye, 2015; Mukumbo, 2009; Abobo, 2012; Mthiyane, 2014) and in the Zimbabwean context (Constitution of Zimbabwe, 2013; Zimbabwe School Health Policy, 2018; Ministry of Education, Sport & Culture, 1993). Health literacy is an outcome of health education. It refers to the degree to which people are able to access, understand, appraise and communicate information or to engage with the demands of different health contexts in order to promote and maintain good health during the course of their life (Cottrel, Girvan & McKenzie, 2015). This implies that platforms should be available to individuals and communities to access quality health According to James and Elsie (2013), availing health education empowers people to adopt positive behaviours that benefit them throughout their lives.

Furthermore, Glanz, Rimer and Viswanath (2008) posit that health education is not limited to dissemination of health related information, but also fosters the motivation, skills and confidence (self-efficacy) necessary to take action to improve health as well as communication on the underlying social, economic and environmental conditions impacting on health, individual risk factors and behaviours, and the use of the health care system. Kickbusch and Nutbeam (2017) contend that health education is a combination of planned learning experiences based on sound theories that provide individuals with the opportunity to acquire the information and skills required to make quality health decisions. Glanz, Rimer and Viswanath (2008) and Vernandez (2011) argue that health education

involves a set of techniques such as preparation of health information brochures, pamphlets and videos, facilitating role plays, participating and reflecting in groups, reading and computer-assisted learning. It can thus be argued that health education is a process aimed at encouraging people to want to stay healthy, know how to stay healthy and seek medical treatment when needed. Through the selected data generation methods for this study, namely, written narratives, narrative interviews and narrative reflections, health education promotion was explored and in-depth information was obtained from stakeholders in Zimbabwean rural ecologies. The literature confirms that technology is a powerful tool to promote health knowledge acquisition and consciousness. It facilitates access to information through different technological platforms like the Internet as well as social media platforms like Facebook, Twitter, and WhatsApp. It was thus important to consider how technology could be effectively incorporated in rural learning ecologies as a tool to promote health education. When individuals and communities are adequately health informed, this translates into healthy lifestyles, thus enhancing sustainable learning.

### 1.8.2 Health promotion

The literature notes that, while the terms, health education and health promotion have been used interchangeably (Doyle & Ward, 2018; Bezeera, 2014), they are distinct concepts. The Ottawa Charter of 1986 defines health promotion as the process of enabling people to increase control of and improve their health (World Health Organisation, 2015), while Griffin (2012) views it as the process of making people aware of their health and well-being. In similar vein, the Zimbabwe School Health Policy of 2018 defines health promotion as the aggregate of all activities designed to improve personal and public health through a combination of strategies, health education, health protection measures, risk factor detection, health enhancement and health maintenance. I argue that health promotion empowers individuals and communities and it improves their health status and enables them to have more control of aspects of their lives that affect their health. Furthermore, health promotion embraces a wide range of social and

environmental interventions designed to protect everyone's health and quality of life by addressing the causes of poor health rather than focusing on treatment and cure (World Health Organisation, 2015). Thus, the primary aim of health promotion programmes is to engage individuals and communities to choose healthy behaviours. This study focuses on health education promotion.

### 1.8.3 Sustainable learning

Sustainable learning is defined as learning that lasts and is retained (and is maybe transferable) after initial exposure to it and it may involve the process of "learning to learn" (Tractenburg et al., 2016; Pedler & Hsu, 2014). According to Graham, Berman and Bellert (2015), sustainable learning is continuous learning that is directed not only at providing for individual needs but those of the relevant community. For the purposes of this study, sustainable learning is defined as the process of acquiring knowledge and updating all types of learning including skills and interests. It begins in the preschool period and continues beyond the end of formal instruction. In the teaching and learning context, sustainable learning can be achieved if the school curriculum and methods of instruction are compatible with and relevant to the culture and society in which learners grow (Pare et al., 2015; Gardiner & Rieckmann, 2015). It can be concluded that the school curriculum and teachers who are responsible for implementing it play a pivotal role in enhancing sustainable learning. This study aimed to empower learners and communities in rural contexts with information on health issues so that they adopt positive behaviours, acquire skills and knowledge, and establish the relationship between learning and real life experiences. Jackson (2011) states that sustainable learning involves ongoing purposeful, responsive and proactive learning. The learner effectively builds and rebuilds his/her knowledge and skills base as circumstances change. This implies lifelong learning which Pedler and Hsu (2014) refer to as "learning to learn". On the other hand, Strigher (2014) notes that sustainable learning also involves unlearning. In this study, this could imply unlearning unhealthy, health damaging behaviours which have serious health consequences. It can be therefore concluded that sustainable learning is conscious, intentional learning that goes beyond traditional schooling and continues throughout adult life.

### 1.8.4 Rural ecology

There is general agreement that no single definition adequately describes the theoretical construct of “rural” (Hart, 2012). As a result, numerous definitions have been developed across and within disciplines. American scholars Cromartie and Bulcholtz (2008) describe rural as that which is not urban. I infer that rural implies an area located far from an urban setting characterised by low population density as well as isolation. Hlalele (2012a) notes that this term is ambiguous in Southern Africa and South Africa in particular as it includes communal areas, farmland, peri-urban settings and unplanned settlements. Most studies perceive of rural contexts as suffering from poverty, diseases, low levels of education and learner achievement, and low self-esteem among those who live there (Howley, Rhodes & Bell, 2009). Chikoko and Khanare (2012) provide a more detailed characterisation of rurality, positing that it is a multi-layered concept encompassing farming communities, peri-urban settings, informal settlements and what is often known as “deep rural” areas which are the remotest parts of the countryside.

For the purposes of this study, a rural ecology is regarded as a rural area characterised by limited infrastructure. Most rural ecologies lack electricity, while cellphone signals are very poor, there are no tarred roads and most gravel roads are in a poor state. Some communities may obtain water from rivers and housing mainly consists of grass thatched round huts. Rural ecologies are also characterised by subsistence farming. Given these conditions, they are marginalised and marked by high rates of illiteracy and unemployment, with parents usually of low economic status (Jackson, 2011; Siemens, 2008). All these factors contribute to limited access to sustainable learning in rural areas, thus compromising access to quality health education promotion initiatives in Zimbabwean rural ecologies. Thus, schools may be centres of community life in rural ecologies.

## 1.9 DELIMITATION OF THE STUDY

Silverman (2017) and Leedy and Omrod (2010, 2019) define delimitations as characteristics that limit the scope and define the boundaries of a study. Creswell (2012) adds that delimitations are the boundaries set by the researcher in order to control the study’s range. Setting delimitations helps a researcher to maintain objectivity. In this study

I viewed the delimitations as the parameters I personally established with the goal of controlling the study. The delimiting factors included the six gender-balanced learners and six parents (groups under study) and one rural secondary school in Zimuto district (Masvingo province, Zimbabwe). I established that no similar study had been conducted in Zimuto district which is a physical delimitation.

According to Silverman (2017), delimitations also include the theoretical framework that underpins a research study. This study delimitated two theoretical lenses, namely, the ABA and the HBM. In order to gain a comprehensive understanding of health education promotion, this study was guided by three research objectives and questions that shaped the literature review and the themes that emerged. This helped me to remain focused throughout the study.

## 1.10 OVERVIEW OF THE STUDY

This study consists of seven chapters.

### Chapter one

This chapter introduced the study by presenting an overview of the background on health education promotion for sustainable learning in Zimbabwean rural ecologies. It briefly reviewed the differences between health education and health promotion. The chapter also presented the problem statement, the rationale for the study, and its focus, objectives and critical research questions. The study's significance and delimitations were discussed and its operational concepts were clarified.

### Chapter two

Chapter two presents the theoretical framework employed for this study, namely, the Asset Based Approach and the Health Belief Model and highlights their relevance and applicability. It examines how the HBM is utilised to predict behaviours as well as its two values, and four constructs. The ABA's main principles and utilisation are also discussed.

### Chapter three

This chapter presents a review of the relevant literature on health education promotion to enhance sustainable learning in rural ecologies in developed and developing countries.

Sub-topics examined include understanding health education, the role of schools, parents and communities in promoting health education, curriculum approaches in the implementation of health education promotion in developed and developing countries, and accessing and promoting health education promotion in Zimbabwean rural ecologies. The chapter also highlights challenges in the implementation of health education promotion in rural learning ecologies.

**Chapter four**

Chapter four presents the research design and methodology employed for this study. It discusses constructivism that was utilised as the research paradigm, and its applicability to the study and narrative inquiry that was employed as the research design. Selection and selection procedures are discussed, including how each group of participants was selected and the value each group brought to the study. The chapter also focuses on data generation methods, and trustworthiness and ethical considerations.

**Chapter five**

This chapter presents and analyses the data generated through written narratives, narrative interviews and narrative reflections. It draws on the literature review to strengthen the analysis and findings on the participants' experiences of health education strategies utilised in health education promotion as well as challenges in the implementation of such to enhance sustainable learning in rural ecologies.

**Chapter six**

Chapter six discusses the findings presented in the previous chapter using the themes that emerged. The findings are also compared with those in the literature.

**Chapter seven**

This chapter highlights the study's contributions to knowledge, offers recommendations based on its findings, and makes suggestions for further research.

## 1.11 CHAPTER SYNTHESIS

This introductory chapter presented an overview of the study. The importance of health education was discussed and strategies and challenges in the implementation of health education promotion were identified and discussed. Curriculum approaches in developed and developing countries were reviewed. The chapter also presented the problem statement, the rationale for the study, and its focus, objectives and critical research questions. This was followed by a discussion on the significance of the study, clarification and discussion of operational concepts, delimitations and an overview of the study.

The following chapter focuses on the theoretical framework that underpinned this study.

# CHAPTER TWO

# THEORETICAL FRAMEWORK

## 2.1 INTRODUCTION

This chapter discusses the Asset Based Approach and the Health Belief Model that were selected as the two theoretical lenses to explore health education promotion for sustainable learning in Zimbabwean rural ecologies. Each theory and its principles are discussed in detail, as well as its strengths, relevance and weaknesses. I also show how the Asset Based Approach and Health Belief Model were integrated to enhance the exploration of health education.

### 2.1.1 Conceptualising a theoretical framework

A theoretical framework is a foundation from which all knowledge is constructed for a research study. Much like a house that cannot be built without a blueprint, without a theoretical framework, the structure and vision of a study become opaque (Lederman, 2015). It is derived from an existing theory (or theories) in the literature that has been used and validated by others. Thus, a theoretical framework is the lens through which the researcher views the world (Lederman, 2015; Grant & Asanloo, 2018). Mertens (2015) notes that it provides a structure to define how a researcher will philosophically, epistemologically, methodologically and analytically approach the study as a whole. The theoretical framework supports the rationale for the study, the problem statement, and the study's purpose, significance and research questions (Denzin & Lincoln, 2015; Adam, Hussein & Joe, 2018). It further clarifies the research problem (in this case, health education promotion in rural ecologies), the concepts and their meaning. I therefore argue that it enables a researcher to determine the degree to which his or her study links with the existing body of knowledge. Grant and Asanloo (2018) highlight that it also determines how a problem can be investigated and what meaning is ascribed to the data.

This study employed two theoretical lenses, namely, the Asset Based Approach and the Health Belief Model to explore how health education is accessed and promoted in the rural ecologies of Zimbabwe. I utilised assets in the form of teachers, a health professional, parents, learners and a headman to investigate health education in rural

ecologies. The lived experiences of the selected participants assisted in revealing their health challenges. The ABA and HBM assisted in selecting appropriate data generation tools (written narratives, narrative interviews and narrative reflections) which were helpful in enabling me to answer the research questions. My choice of narrative inquiry as the research design was guided by these lenses. It can be argued that a theoretical framework guides a researcher's choice of a research design, data analysis plan and the data to be collected (Denzin & Lincoln, 2015). These two theoretical lenses enabled me to gain an in-depth understanding of health education in rural ecologies in Zimbabwe through the lived experiences of the selected participants.

The chapter discusses the origins, assumptions, strengths and weaknesses of the Asset Based Approach and Health Belief Model and how theoretical triangulation overcame their deficiencies. The theoretical lenses were integrated by using the assets identified in the rural context to empower rural communities, resulting in behaviour change and further understanding the phenomenon. The literature confirms that theories fertilise each other and new ideas emerge. Integrating the ABA and the HBM produced a vivid holistic picture of health education promotion in rural learning ecologies in Zimbabwe. This was achieved by combining the perspectives of each theory. These perspectives acknowledge that urban constituencies receive more attention than rural contexts.

## 2.2 THE ASSET-BASED APPROACH

The ABA recognises and builds on a combination of human, physical and social capital that exists in local communities (Michael, 2017; Kasonga, 2019); hence, this study utilised the selected participants (assets) to explore health education promotion at a rural secondary school (physical asset) to gain deeper understanding of the phenomenon under study. The ABA is an integral part of community development in the sense that it is concerned with facilitating people and communities to come together to achieve positive change using their own skills, talents, and lived experiences (Lopez, 2018). I selected this theoretical lens because it recommends the use of rural communities and assets to solve problems and the main problem noted was challenges in access to current health information. The data generation methods that were adopted revealed the lived experiences of the selected participants, which resulted in deeper understanding of the

phenomenon under study. As noted previously, health education encourages communities and individuals (learners) to adopt positive behaviours through the utilisation of locally available resources. The ABA is based on the principle of identifying and mobilising individual and community assets rather than focusing on problems and deficits (Khanare, 2009; Chikoko & Myende, 2012). In this way, it offers solutions to problems and empowers communities to make health-informed decisions. The ABA's focus on assets, capabilities, resources and skills within people and across systems enables challenges to be addressed in both rural and urban contexts. In this study, assets in the form of learners, teachers, parents, a nurse, a headman and the selected rural secondary school were used to explore health education promotion for sustainable learning in the rural ecologies in Zimbabwe.

Myende and Chikoko (2014) and Friedli (2013) identify the following main categories of assets:

- Individual assets. In this study these are all the purposively selected participants.
- Assets within a group of people. This is the head of the selected rural secondary school in this study although he was not selected as a participant (Gatekeeper).
- Relationships in the community. This study explored relationships among and between parents and also the relationship between the purposively selected secondary school and parents.
- Physical assets. In this study this is the purposively selected rural secondary school, including furniture which the gatekeeper allowed me to utilise during the data gathering phase.
- Thus, the ABA intervention starts with assets and resources that individuals and the environment possess rather than focusing on what is needed (Chikoko & Myende, 2012; Khanare, 2009). Relationships should be built and rebuilt (Burgers, 2017), an issue which was addressed in this study as I established good rapport with the selected participants before, during and after the data gathering phase. Furthermore, the ABA acknowledges that resources should not be provided from outside; rather, individual communities should utilise and mobilise their own resources, an issue which was also addressed in this study. Chikoko and Myende

(2012) point to the need for rural contexts to break out of the cycle of dependence on the outside to solve their challenges. It can be argued that the ABA assists communities to unlock their potential (Maclean & MacNeice, 2012).

The ABA compares the community to a half full glass (Chikoko & Myende, 2012; Khanare, 2009). This implies that there are existing assets in both rural and urban contexts, suggesting that for external players to make the glass full, they merely add to what is contained therein (Myende, 2012; Burgers, 2017). The implication for this study is that rural communities have people with knowledge, skills and talents and they possess a wealth of knowledge on traditional and modern health practices, including life threatening diseases like HIV/AIDS and different forms of cancers. What is thus needed from external assets is to fully equip and capacitate rural contexts so as to overcome health challenges that might occur or exist in their communities. The ABA asserts that support from communities is possible, feasible and sustainable, if it begins from within (Michael, 2017; Chikoko & Myende, 2012). According to this theory, "beginning from within" implies determining available assets, capacities, abilities, gifts, skills and social resources to be utilised by the community in question. Chikoko and Khanare (2012) describe this process as asset mapping, which was also followed in this study.

The ABA is characterised by a bottom-up approach. It begins in the community that has internally focused talents, skills, and knowledge, and external contributions merely add to what is already present (Morgan & Ziglio, 2010; Kasonga, 2019). According to Michael (2017), communities must be built from the inside out rather than the outside in. The main emphasis of the ABA is building from the bottom up as rural communities are not passive recipients of information. In this study, I utilised the assets within the purposively selected rural community to explore health education promotion activities, including the strategies that are used to spread health information in rural contexts. Furthermore, the views of the selected participants were sought on the issues explored, further illuminating the study. In my view, this study is likely to create a sense of ownership among rural communities and help them to take charge of their health through health education promotion strategies.

The ABA challenges the deficit model in community development (Chikoko & Khanare, 2012; Pretorius & Nel 2012). It should be noted that this theory has a variety of different names; it is also known as the needs approach, the pathology model or the paradigm of scarcity (Mathie, Cameron & Gibson 2017). The deficit model has a strong focus on problems, deficiencies and needs. It starts with the needs of the community, responds to problems, and sees individuals as clients and consumers of services (Hopkins & Rippon; 2015, Lopez, 2018). There is a perception that only external experts are able to solve community challenges and problems, thus entrenching a cycle of dependence and disempowerment (Pretorius & Nel 2012). This approach inhibits participation in decision-making; hence, it was unsuitable for this study. Furthermore, it contributes to a sense of hopelessness because solutions to problems do not come from within but from outside (Kasonga, 2019). It is my contention that the deficit model might be inefficient in addressing modern day challenges in society as it views individuals as consumers of services. Its negative constructs led to the formulation of the ABA. Venter (2010) asserts that the ABA restores poor and marginalised communities' well-being and happiness as it rebuilds social structures through empowerment; hence, the justification for its use in this study.

### 2.2.1 Historical background of the Asset-Based Approach

The ABA was developed in the 1990s and grew from Kretzmann and McKnight's (1993) research on community development. Kretzmann and McKnight (1993) challenged the conventional way of addressing rural challenges (the needs or deficit approach) and observed that assets within a community can be utilised as building blocks. They defined the ABA as a means to focus on potential opportunities in available systems and subsystems (Kretzmann & McKnight, 1996). At the core of this approach is the belief that every person and community has capacities, abilities, gifts, skills and social resources (Mathie, Cameron & Gibson, 2017; Myende, 2012). Myende (2012) and Burgers (2017) define assets as skills, talents, gifts, resources, capacities, and strengths that are shared with individuals, families, schools, institutions, communities and organisations. The ABA is a vehicle that brings individuals and communities together to achieve positive change

using their own knowledge, skills, and lived experiences of issues (MacLean & McNiece, 2012).

### 2.2.2 An overview of the Asset-Based Approach

The ABA starts with the premise that all communities have assets and strengths. Foot (2012) and Green and Haines (2012) state that its key features are that it is people-centred, builds and uses local knowledge and focuses on relationship building among partners so that the community is empowered in areas such as decision making, planning, and prioritising identified needs. In this study, knowledge from the selected learners, teachers, a nurse, the headman and the parents was used to explore health education promotion in Zimbabwean rural ecologies. Relationships were established before, during and after data collection. Through health education, the participants were empowered in decision making that will enable them to become conscious of and avoid health threatening diseases. Ferreira and Ebersohn (2012) and Foot (2012) note that the ABA makes use of local resources and indigenous knowledge in order to introduce change and enhance the quality of life. Examples of assets in this study included professionals in the form of the nurse and the two senior teachers.

The ABA is viewed as a strength-based approach or the “half full glass approach” (Myende & Chikoko, 2014). It focuses on assets, capabilities, resources and skills within people across systems which will make positive contributions. The interconnected phases of the ABA are identification, mobilisation and management of assets and resources (Burgers, 2017). It does not deny problems and challenges, but aims to address them in a positive manner (Loots, 2011). Furthermore, the ABA highlights that rather than waiting for resources to be provided from outside, individuals and communities can utilise and mobilise their own resources that are sometimes under-utilised. It can thus assist individuals to unlock their potential. The main emphasis of this approach is promoting development “of” rather than “in” communities with the emphasis on effectiveness, empowerment and independence. The following section discusses the ABA’s assumptions.

### 2.2.3 Assumptions of the Asset-Based Approach

The ABA adopts a solution-based approach to intervention and development because, rather than focusing on the community's needs, deficiencies and problems, it emphasises commitment to discovering a community's capacity and assets (Mathie, Cameron & Gibson, 2017). The basic assumption of the ABA is the belief that every individual and community has capacities, gifts, skills, talents and resources to overcome societal challenges (Kretzmann & McKnight, 1993; Mathie, Cameron & Gibson, 2017). In the context of this study, it acknowledges that individuals and communities have the potential to address health related challenges utilising the resources, talents, skills, and knowledge at their disposal. Through health education, selected participants revealed the health challenges in their community as well as the current situation and how health education is promoted and accessed in rural ecologies in Zimbabwe.

The ABA also assumes "a half full glass approach" (Khanare, 2009), implying that assets exist in communities and that external partners that aim to fill the "glass" should rely on such assets. This means that health education conducted in rural communities by external partners like health professionals will add health knowledge and skills to that which these communities already possess. Communities, whether urban or rural, possess knowledge, expertise, skills and talents which need to be used to achieve positive change, thus enhancing sustainable learning and further empowering individuals and communities to make informed decisions on issues pertaining to their health. The following section focuses on the principles of the ABA.

### 2.2.4 THE UNDERLYING PRINCIPLES OF THE ASSET-BASED APPROACH

The ABA is based on three principles, namely, assets (the skills, resources and other assets in the community), an internal focus (regarding the community as capable) and relationship driven (emphasising constant building and rebuilding of relationships within the community) (Michael, 2017; Green & Haines, 2012). Assets refer to talents, gifts, resources, capacities and strengths that are shared with individuals, schools, families, communities and organisations (Pretorius & Nel, 2012). In the context of this study, they refer to the selected participants, namely, the two senior teachers, a nurse, six gender-balanced learners, six parents and a headman as well as the rural secondary school (physical asset) that were used to explore health education promotion for sustainable

learning in rural ecologies in Zimbabwe. Capacity refers to the possibility of sharing with others in order to mobilise these assets (Eloff, 2006, p. 28). In this study the nurse and two senior teachers (through curricula) shared their knowledge on health education with the learners and the parents to enhance sustainable learning. Gifts refer to personal characteristics, skills or interests, and resources that, according to the ABA, have the capacity to support asset mobilisation and relationship building (Eloff, 2006, p. 29). Creativity implies thinking outside the box and creating something new in order to move away from the deficit model to a strengths-based model (ABA) where individuals focus on strengths and assets. Creativity is required to identify assets in a world where many people face health challenges (Coetzee et al., 2009). Partnerships, which are implicit in the ABA, involve two or more individuals who share resources and support each other to achieve a common goal (Burgers, 2017). In this study, the Ministries of Education and Health (Zimbabwe) work together to promote health among rural communities and learners and make them conscious of health challenges, empowering them to make informed decisions. The common goal of these ministries is to achieve healthy living and thus improve learners and rural communities' lifestyles. This is achieved through the implementation of health education strategies.

As the ABA is internally focused, the selected participants in the selected rural ecology were utilised to explore health education promotion using the assets (participants and the rural secondary school) to identify and address health challenges and also identify possible deficiencies. The data gathering tools, namely written narratives, narrative interviews and narrative reflections revealed the current situation in rural ecologies, including how health education is accessed and promoted as well as challenges in the implementation of health education promotion strategies in the rural learning ecologies of Zimbabwe. In accordance with the ABA, I recognised the potential value of external agencies and resources but believed that they might be used more effectively when internal resources have been fully mobilised and utilised to address possible health challenges.

Relationships are central to the ABA (Michael, 2017; Green, 2009; Kasonga, 2019) and the theory is relationship driven. There are a multitude of dividing forces in rural

communities like different religious persuasions and traditional beliefs. In this study, the principle of relationship building was observed before, during and after the data gathering phase. This process commenced when I formally informed the gatekeeper (the Head of the selected rural secondary school) of my intention to work with the selected participants. Interaction with the participants took place throughout this study. The following section discusses the three tiers of community assets.

### 2.2.5 The three tiers of community assets

The diagram below presents the three tiers of assets adapted by Chikoko and Khanare (2012, p. 29) from Mourad and Ways (1998).

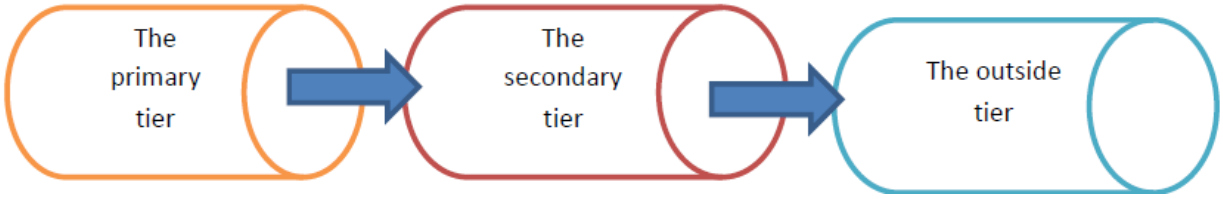



Figure 2. 1 The three tiers of assets (Chikoko & Khanare, 2012)

Drawing on Mourad and Ways (1998), Chikoko and Khanare (2012) classified community assets into three tiers, namely, primary, secondary and outside assets. According to Green and Haines (2012), community assets are the skills, gifts and capabilities of individuals, associations and institutions within a community that can be used to reduce or prevent poverty and injustice. Assets can be tangible or intangible (Myende, 2012). Tangible assets include buildings (the purposively selected secondary school) while intangible ones could be individuals who have talents, knowledge, skills and capabilities at their disposal. They may also include networks that individuals form in their communities and other forms of capital at the disposal of communities.

Myende and Chikoko (2014) note that primary assets are the most immediate to a community. In this study, the purposively selected teachers and learners fell into this category. These assets were found within the premises of the purposively selected secondary school. Their skills, knowledge and lived experiences were utilised to explore health education promotion in Zimbabwean rural ecologies. In this study, secondary

assets were the school's immediate local community. The purposively selected rural health delivery centre, the nurse and parents were the assets that were utilised in this study. Although the local business community qualified for this tier, it was not used in the study. Myende and Chikoko (2014) note that assets in the outside tier consist of interested individuals and organisations that are not in the immediate community. In this study, NGOs and other stakeholders constituted the outside tier. Successful utilisation of assets begins with the primary tier before moving to the secondary tier, with the outside tier assets as the last one. This three-tier framework was employed to explore health education promotion for sustainable learning in the rural ecologies of Zimbabwe. In my view, it is capable of empowering the community under study and other poverty stricken and marginalised rural communities in Zimbabwe.

The ABA involves several procedures which are crucial in ensuring that community assets are utilised to their maximum potential (Myende, 2012). It begins by mapping of assets, followed by mobilisation and management of assets. These constitute the components of the ABA which are discussed below,

### 2.2.6 The components of the Asset-Based Approach

As noted above, the first step in the ABA is mapping assets.

#### 2.2.6.1 Mapping of assets

Asset mapping is the process of constructing a map or inventory of resources, skills, talents, capacities or strengths (Kasonga, 2019; Mathie, Cameron & Gibson, 2017; Kretzmann & McKnight 1993, 1997, 1999). Ebersohn and Eloff (2006b) observe that it is not a static or one-sided process, but an ongoing one that involves everyone. Kasonga (2019) describes asset mapping is a valuable way of assisting participants to obtain more comprehensive insight into their skills, talents, abilities and experiences which is important in asset mobilisation. According to Chikoko and Khanare (2012) and Lopez (2018), asset mapping is undertaken to identify the different groups in a community and to determine the expertise, equipment and economic power they can contribute to an initiative (Mathie, Cameron & Gibson, 2017). In this study asset mapping thus involved identifying assets that would contribute to the exploration of health education promotion

for sustainable learning in rural Zimbabwean ecologies. The purposively selected participants were involved in the construction of an asset map and this enabled me to identify their individual talents and skills. One of the strengths of asset mapping is that it enables individuals and communities to think positively about the place in which they live and work.

The Improvement and Development Agency (2010) identifies the following steps for a community-led asset mapping process.

- The facilitator meets the group that becomes the core group that takes the lead.
- The group and the facilitator contact individuals who are active in the community.
- Using face-to-face conversations and other techniques such as storytelling, these individuals collate the assets and talents of individuals in the community.
- The group and the facilitator identify the resources and assets of local associations, volunteers and clubs.

In this study, asset mapping was not mainly used to locate where these assets were in the selected community but rather to explore health education promotion for sustainable learning in the rural ecologies of Zimbabwe. Once the assets have been mapped, the next step is asset mobilisation.

#### 2.2.6.2 Mobilisation of assets

The process of asset mobilisation involves using the information captured in asset maps for asset mobilisation (Myende & Chikoko, 2014; Michael, 2017). Burgers (2017) refers to asset mobilisation as “asset building” and notes that it is an important exercise in ensuring community well-being and happiness. According to Kretzmann and McKnight (1993) and Gibson (2017), asset mobilisation involves connecting people with other people. Michael (2017) thus emphasises the important role played by relationship building during this phase as partnerships are a core value of the ABA. I established a research relationship with the selected participants before, during and after the data generation phase. Furthermore, Hopkins and Rippon (2015) highlight the importance of constantly strengthening relationships as the ABA is relationship driven. In this study, relationships were built and strengthened with the purposively selected participants before, during and

after the data gathering phase to explore health education promotion for sustainable learning in Zimbabwean rural ecologies.

Green (2009) and Chikoko and Khanare (2012) highlight that asset mobilisation is a process which helps to build the capacity of a community to utilise resources which are underutilised. Furthermore, Chikoko and Khanare (2012) note that the process of asset mobilisation helps residents to become self-organised and active as they share knowledge and resources and identify common interests. A key issue is that communities and individuals should take charge of their assets and resources and mobilise solutions to a challenge they encounter.

In this study, I facilitated the process of engaging purposively selected participants in asset mobilisation with the aim of obtaining their views on the benefits of health education with regard to different communicable and non-communicable diseases and the possible and effective ways of preventing their spread. As noted in this study, asset mapping and mobilisation have been identified as the major components for the operationalisation of the ABA. The final phase of the ABA is management of assets.

#### 2.2.6.3 Management of assets

The final phase of the ABA is managing the mobilised resources, taking ownership and responsibility for sustaining the mobilised assets and initiating action (Loots, 2011; Myende, 2014). The process of managing assets and resources includes assessing processes, revising strategies and if necessary, re-identifying and re-mobilising assets and resources in order to achieve the set goals (Loots, 2011). Commitment by all parties is necessary in order to build assets while communicating and adjusting strategies. The following section discusses possible challenges of the ABA.

### 2.2.7 Possible challenges of the Asset-Based Approach

The literature identifies some challenges in relation to the ABA. According to the Glasgow Centre for Population Health (2012), there is lack of strong evidence that this approach successfully prevents ill health in “hard to reach areas”. One of the goals of this study was to encourage rural communities and individuals to become health conscious and to adopt positive behaviours to prevent ill health. Rural communities need to be empowered to

access health information so as to enjoy an improved quality of life. As noted by McLean and McNiece (2012), many of these communities are marginalised; hence, they need to be capacitated to access health knowledge.

Hopkins and Rippon (2015) also point to selective bias in the ABA with regard to which particular assets are of most relevance. While there is no consensus on this issue, the asset-based literature highlights the following resources above others: communities, social networks, connectedness and resilience. Despite this challenge, in this study, ultilisation of the identified assets enabled me to explore health education promotion in Zimbabwean rural ecologies. Furthermore, the definition of an asset-rich individual or community is a hotly contested one (Foot, 2012; Hopkins & Rippon, 2015). However, I regarded the participants selected for this study as information-rich in relation to the issue explored. These participants (assets) need only to be capacitated to enable them to make informed health decisions through health education, thus enhancing sustainable learning.

Evaluating an ABA initiative, particularly in terms of assessing whether or not a given intervention has had a beneficial effect on health, is another challenge. To understand the effectiveness of an intervention, it is necessary to know who it worked for and under what circumstances, as well as how and why it worked or did not work (Mathie, Cameron & Gibson, 2017). In my view, if positive behaviours are noted through health education interventions, the intervention is successful and beneficial. For example, the current screening and vaccination against cervical cancer of girl learners between the ages of 10 and 14 in Zimbabwean schools could be regarded as an effective intervention aimed at reducing cervical cancer as this has not been resisted in both urban and rural contexts.

Mathie and Cunningham (2005, 2008) assert that while an ABA intervention exposes the strengths of all participants, collective participation is not guaranteed. They add that fostering inclusive participation is no easy task as the success of an ABA initiative is largely dependent on individuals' willingness to invest in themselves and their capacities in initiatives aimed at their development. While this is an overall challenge, in my view, it might be more prevalent in societies where there is marginalisation of other groups. The following section discusses the ABA' s application in this study.

### 2.2.8 Application of the Asset-Based Approach in the study

Kretzmann and McKnight (1993) initially introduced the ABA in order to empower communities from the inside out. As such, it focuses on strategies, abilities, resources and possibilities that already exist but might not have been adequately mobilised. I regard health education as a strategy that empowers learners and the community by making them aware of communicable and non-communicable diseases and other health challenges. I am of the view that rural contexts are home to agents and experts who are key in suggesting and developing strategies for health education promotion. As such, the ABA was appropriate for this study on health education promotion in rural contexts that might be facing health challenges. I subscribe to Burgers' (2017) view that the asset-based framework is more than an intervention approach but concerns people's attitudes as well as intervention strategies. I therefore regard the ABA not as a theory, but a dynamic strategy for empowerment and intervention (Burgers, 2017; Myende & Chikoko, 2014). Within the context of my study, I explored health education promotion by relying on existing assets and resources in a purposively selected context; hence, the applicability of the ABA. This study was informed by two theories, namely, the ABA and HBM which in my view complement each other. Drawing on the principles of each theory, the ABA proposes that solutions to problems using locally available resources (senior teachers, health professional) achieves positive change (in learners) (Chikoko & Khanare, 2012). It also proposes that utilising these assets exposes individuals (learners) to knowledge on health threatening activities like pre-marital sex, STIs, and drug and alcohol abuse (perceived susceptibility - HBM) (Abraham & Sheeran, 2014). Such exposure through senior teachers and health professionals (assets - ABA) develops positive behaviours and health informed decisions (perceived benefits - HBM) (Gozam & Capik, 2014), including barriers to the adoption of positive behaviours (perceived barriers - HBM). Achieving positive behaviours and health informed decisions can be enhanced by utilising locally available resources (senior teachers and health professionals). When these two theories are combined and applied, learners in rural learning ecologies may adopt positive behaviours through exposure to health education.

The following section discusses the HBM.

## 2.3 THE HEALTH BELIEF MODEL

This study utilised the HBM as a second theoretical lens to complement the ABA in exploring health education promotion for sustainable learning in Zimbabwean rural ecologies. The HBM is a conceptual framework that is used to understand human behaviour and non-compliance with a recommended health action (Rosenstock, 1984). It is a commonly used model in health education, health promotion and health-related behaviours (Champion, 2009; Tarkarang & Zotor, 2015). Although this study was not disease specific, the HBM was a relevant theoretical lens. It provides guidelines for programme development, enabling planners to understand and address the reasons for non-compliance.

The HBM has been applied to predict a broad range of behaviours among a wide range of populations, particularly in studies on HIV/AIDS prevention (Ofori, 2019). It posits that in order for an individual to change his/her behaviour, he/she must feel threatened, believe that a specific change will be beneficial, and must feel that he/she is competent to implement the recommended health related action (Rosenstock, 1974; Gozam & Capik, 2014). Health education equips and exposes individuals and communities to the benefits of adopting positive behaviours that result in an improved quality of life. This study focused on the current situation with regard to health education in Zimbabwean rural ecologies, as well as how it is accessed and promoted and the challenges (if any) in implementing health education promotion strategies for sustainable learning. It utilised locally available assets in the form of teachers and a health professional who are the key drivers in implementing health education programmes in learning ecologies.

The HBM is based on two values, namely, the desire to avoid illness or get well, and specific health actions available to an individual that would prevent undesirable consequences (Carpenter, 2010; Abraham & Sheeran, 2005, 2014). This study was based on the assumption that this could be achieved by exposing learners in rural learning ecologies and rural communities to health education through school curricula and other strategies such as print and electronic media and workshops collaboratively conducted by the Ministries of Education and Health. Such education would equip them to avoid health threatening diseases. At the core of the HBM is the desire to reduce and avoid

illness. It assists in explaining and predicting behaviours; hence its application to many health related prevention strategies like obesity prevention, mammograms, breast self-examination, condom usage, stopping smoking, reduced alcohol use, vaccination and HIV/AIDS prevention (Glanz, Rimer & Viswanath, 2008). This model was applicable to this study as it articulates values which can be encouraged among learners and communities in rural ecologies through health education programmes.

According to Tarkarang and Zotor (2015) and Mold and Berridge (2013), the HBM asserts that the motivation for people to take action to promote and prevent diseases is based on the extent to which they are susceptible to the disease in question; whether the disease will have serious effects on their lives if they contract it; whether the suggested intervention is of value; and the influence of someone who may have been susceptible to the same disease, signalling the need for action. One of the objectives of health education is to increase awareness and to impart knowledge and skills to the target population (Cicchino, 2013). Effective health education promotion strategies are likely to contribute to increased awareness among learners and communities in rural ecologies in the sense that no individual is immune to communicable and non-communicable diseases and modern health care systems offer effective treatment. Furthermore, learners in rural ecologies and rural communities would be equipped with relevant health knowledge through health education programmes. Sound health has positive benefits like improved academic performance and positive behaviours; this will motivate them to take action and prevent diseases.

### 2.3.1 THE HISTORICAL BACKGROUND OF THE HEALTH BELIEF MODEL

Pender, Murdaugh and Parsons (2011) note that a variety of health behaviour models and theories have been developed to explain and predict behaviour. The HBM is a commonly used theory in health education, health promotion and disease prevention (Mold & Berridge, 2013). It emerged from the research of several psychologists in the 1950s which sought to explain why some individuals declined participation in health care programmes to prevent diseases such as TB and different types of immunisation (Hochbaum, 1958). The HBM was developed in the US by psychologist Hochbaum (1958) and later modified by Rosenstock (1974). Both were working in the US public health

service. The model was developed in response to the failure of free TB screening X-Rays in mobile units that were conveniently located in various neighborhoods. Few adults used the free service and the programme organisers began investigating why more did not do so (Rosenstock, 1974). However, Hochbaum (1958) focused on what motivated the few who did come and found that their perceived risk of the disease and perceived benefits of action were the crucial factors (Elvis & Francis, 2015; Griffin, 2012; Champion, 2009; Tones & Green, 2008). This study investigated how rural communities in Zimbabwe perceive the current cervical cancer screening and vaccination of girl learners in rural learning ecologies. Parents in these ecologies might have negative perceptions of the current vaccination drive, perhaps due to their cultural beliefs and religious persuasion. Perhaps due to their exposure and access to current health literature through different technological platforms like the Internet and social media, parents in urban areas might be more likely to consent to their girl children being vaccinated against cervical cancer. Rosenstock (1974) and Hochbaum (1958) assert that if an individual feels that a health programme has positive benefits, he/she is likely to comply with a recommended health action, while if he/she is skeptical about that action, he/she might not comply.

The main constructs which emerge from the HBM are perceived susceptibility, perceived severity, perceived benefits and perceived barriers which were applied in this study. Individually or in combination, these constructs can be used to explain behaviour and in this study, this refers to health decisions. Recently, the model has been expanded to include cues to action, motivating factors and self-efficacy; these were not applied in this study.

### 2.3.2 ASSUMPTIONS OF THE HEALTH BELIEF MODEL

Elvis and Francis (2015) identify the following assumptions of the HBM:

- A person will take preventive action if he/she has positive expectations that by taking a recommended action, the negative condition will be avoided. The person needs to become aware of the benefits of practicing a behaviour. If they do not see the benefits, it is very difficult to take the necessary action or maintain it. The literature acknowledges that many girl learners who engage in sexual encounters become victims of unwanted and unplanned pregnancies. This study was based

on the assumption that health education would teach learners the benefits of abstinence in order to prevent such pregnancies as well as STIs, HIV/AIDS and other diseases. Drug and alcohol abuse also has negative health consequences on the lives of learners in rural communities. It negatively affects their academic performance and exposes these learners to the risk of diseases such as lung cancer (through smoking) as well as other cancers. Health education can be utilised to expose learners and rural communities to different health challenges, and to develop skills that can be used to avoid and prevent health challenging diseases. In the teaching and learning context, school curricula and health education would enable learners and individuals in rural communities to take preventive measures against disease. This would improve their well-being, and enhance sustainable learning.

- The HBM also assumes that a person takes a health-related action if he/she is confident of success. This requires that the person feels that he/she has the capacity to take the recommended action. In turn, the person requires the necessary knowledge and skills in a supportive environment in order to carry out the required action. This study assumed that health education is a platform that equips learners and rural communities to acquire knowledge of communicable and non-communicable diseases. Health knowledge acquisition in rural learning ecologies can be enhanced through school curricula. In Zimbabwe, Guidance and Counselling is a compulsory subject at secondary school level and it engages learners on health issues. When learners are equipped with age-relevant health knowledge, there is a likelihood that they will take recommended health actions so as to improve their quality of life. Health education is therefore an effective platform that enables learners to be aware of the benefits of positive behaviours, and motivates them to avoid health threatening activities through a supportive environment. The assets in this study, namely, the teachers, health professional and parents should create an enabling environment that encourages learners in rural learning ecologies to make health informed decisions.

**Understanding the Health Belief Model**

The HBM posits that people will take action to prevent illness if they regard themselves as susceptible to a condition (perceived susceptibility), if they believe it would have serious consequences (perceived seriousness), if they believe that a particular course of action available to them would reduce susceptibility or severity or lead to other positive outcomes (perceived benefits) and if they perceive few negative attributes related to a health action (perceived barriers) (Janz & Becker, 1984; Griffin, 2012; Champion, 2009). The model thus breaks health decisions into a series of stages and offers a catalogue of variables that influence action (Abraham & Sheeran, 2005, 2014). It does not provide a mechanism that sets out exactly how these operate. Thus in the HBM, the likelihood that a person will adopt a preventive behaviour is influenced by his/her subjective weighing of the costs and benefits of action (Griffin, 2012). This study aimed to make learners and rural communities aware that communicable and non-communicable diseases have negative health consequences and that there are benefits in recommended health actions like screening and vaccinations as they enhance one's quality of life. Health education through school curricula, technological platforms like the Internet and health awareness campaigns enhance access to current health information which equips and empowers learners and rural communities to make health informed decisions.

The figure below sets out the HBM's four main constructs which were applied in this study.

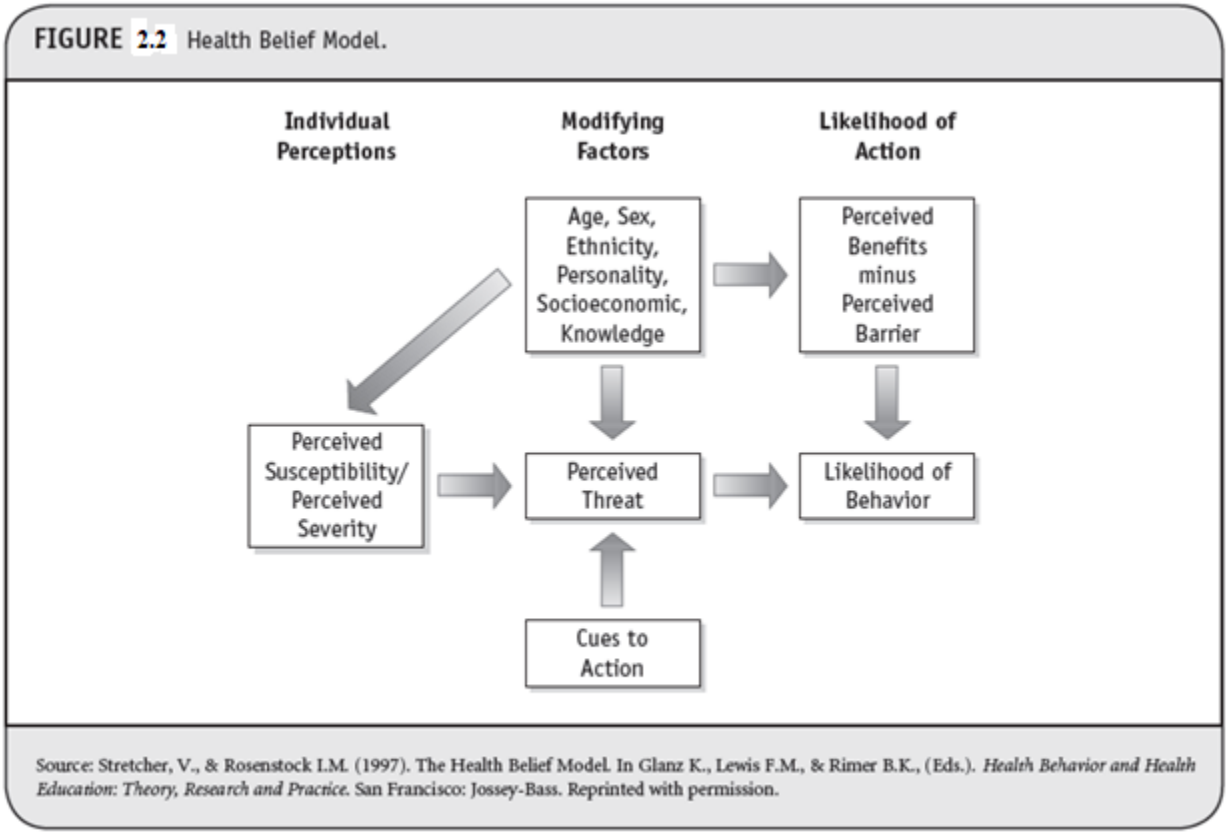



Figure 2.2: Constructs of the HBM. Source: Stretcher and Rosenstock (1997*)*

The four constructs are perceived susceptibility, perceived severity, perceived benefits and perceived barriers.

### 2.3.2.1 Perceived susceptibility

Perceived susceptibility is a person's judgement of their risk of developing a health problem (Abraham & Sheeran, 2005, 2014). People who perceive that they are susceptible to a particular health challenge or problem will engage in positive behaviours to reduce the risk of developing it (Glanz, Rimer & Viswanath, 2008). For example, people will desist from engaging in sexual adventures as there is a likelihood of contracting STIs and HIV/AIDS through unprotected sex; hence the need for learners to practice abstinence. Smoking causes lung cancer and avoiding this health damaging activity reduces the likelihood of contracting the disease. The global COVID-19 pandemic poses a grave threat to health and if one has symptoms of COVID-19, one should get tested

and treatment at the nearest health delivery centre so that this health challenge does not develop into a full blown health problem. According to Carpenter (2010), perceived susceptibility can be measured by questions such as, 'Taking all the factors into account, what do you think are the chances of getting the disease?' Susceptibility is a powerful perception that prompts people to adopt healthier behaviours. At the same time, health education imparts health related information and knowledge that influences beliefs, values, attitudes and motivations (Fitzpatrick & Tinning, 2014). Therefore. Singizi (2013) suggests that health education programmes in learning ecologies and rural communities facilitate behaviour change, provide relevant knowledge on different health challenges and build skills to enable individuals to make informed decisions. The aim of this study was to educate and empower Zimbabwean rural communities, including school communities, to adopt positive health behaviours through health education programmes. The HBM construct of susceptibility indicates that if the risk is perceived to be great, individuals tend to engage in behaviours that decrease it. Conversely people with low perceptions of risk are likely to engage in risky behaviours. Common risky behaviours in Zimbabwean rural ecologies include, but are not limited to drug and alcohol abuse, and pre-marital sexual adventures which result in unplanned pregnancies and STIs, including HIV/AIDS, which is a deadly disease. Perceived susceptibility leads to positive collaboration in communities. Collaboration between the Ministries of Education and Health in Zimbabwe has resulted in screening and vaccination of girl learners between the ages of 10 and 14 against cervical cancer, while boys in the same age group are circumcised at health delivery centres countrywide. This is an annual event on the Zimbabwean school calendar.

#### 2.3.2.2 Perceived severity

According to Gozam and Capik (2014) and Glanz, Rimer and Viswanath (2008), perceived severity refers to one's perception of how serious a condition is and its consequences. It is based on medical information and knowledge and also the person's beliefs about the difficulties a disease would create or the effects it would have on his or her life in general (Rosenstock, 1974; Tarkarang & Zotor, 2015). This construct proposes that individuals who perceive a disease to be serious are likely to engage in positive

behaviours to prevent it from occurring or reduce its severity (Abraham & Sheeran, 2014). For example, if one contacts HIV and does not take any action, it might develop into AIDS which leads to death. However, there are ways to prevent HIV infection or ways to deal with it to prevent the virus from develop into AIDS which could be severe and fatal. Thus, perceived severity refers to subjective assessment of a health problem or challenge and its potential consequences. Questions which might be asked include, “If you get the disease, how serious would it be?” This study aimed to empower learners and rural communities with knowledge that diseases, whether communicable or non-communicable, have serious health consequences. Life Skills, which is a compulsory subject from primary school to tertiary level in Zimbabwe, should convey this message; however, some learners and rural communities might believe in traditional healing practices which are common in most African cultures. It was hoped that learners and rural communities would be motivated to adopt positive health actions.

#### 2.3.2.3 Perceived benefits

The construct of perceived benefits refers to an individual’s opinion on the value or usefulness of a new behaviour in decreasing the risk of developing a disease (Abraham & Sheeran, 2005, 2014). According to the HBM, individuals tend to adopt healthier behaviours when they believe that a new behaviour will decrease their chances of developing a disease (Champion, 2009). Thus, the individual needs to believe that taking a certain action will help to prevent a health related challenge and help one to avoid it. The expected outcome (benefits) gives the person the confidence required to take action. Questions which might be asked include, “Will the proposed action be effective in reducing the risk or does this course of action have other benefits?” The person’s beliefs rather than factual evidence are influential (Rosenstock, 1974; Glanz, Rimer & Viswanath, 2008). Perceived benefits are thus beliefs about the benefits of preventive health action like cervical cancer screening and vaccination of girl leaners in Zimbabwe. This construct can be nurtured by health education that motivates positive health behaviours to prevent disease.

#### 2.3.2.4 Perceived barriers

Change does not come easily to most people. Perceived barriers is an individual's evaluation of obstacles to adopting a new behaviour (Glanz, Rimer & Viswanath, 2008; Champion & Skinner, 2008). Several barriers affect people's decisions to take particular actions like access, phobias (the side effects of medical procedures/medication), and physical and psychological barriers (Champion, 2009). Thus, perceived barriers hinder engagement in preventive behaviours. In other words, they prevent engagement in health promoting behaviours. This becomes a barrier to act in a way that could prevent one from engaging in risky behaviour. In my view, lack of education on health issues can be a barrier to adopting healthy behaviours in rural communities. Perceived barriers can be dangerous as they are not proven. Therefore, this study aimed to conscientise rural communities about the dangers of perceived barriers that hinder a change in behaviours. It aimed to engage all relevant stakeholders in the community in health education programmes. Zimbabwe's health delivery system is currently facing a plethora of challenges including the prohibitive cost of accessing health care services, obsolete equipment, a lack of funding and on-going strike action. These barriers as well as other barriers were explored in rural communities in order to assess their impact on health behaviours. In order to overcome barriers and adopt new behaviours, individuals need to believe that the benefits of a new behaviour outweigh the consequences of continuing with an old behaviour, an issue that was explored in this study. The following section discusses the three components of the HBM.

### 2.3.3 COMPONENTS OF THE HEALTH BELIEF MODEL

This section discusses the three components of the HBM, namely, the belief component, the attitude component and the behaviour component. The belief component pertains to how an individual perceives the value or the effects of a particular disease while the attitude component involves an individual's judgement of whether a health action will have positive or negative outcomes. The behaviour component refers to the key factors that influence health behaviours as an individual evaluates the health effects of a particular disease. If the person notes that a disease has negative health consequences, he/she is likely to adopt positive behaviour.

#### 2.3.3.1 The belief component

Griffin (2012) notes that the belief component of the HBM pertains to how an individual feels about a situation, which could be a health challenge or a disease. Thus, medical information or knowledge may influence a person's beliefs on the consequences of diseases. Beliefs are thus influenced by how a person perceives the consequences, effects or origins of that disease, and whether or not it is fatal (Glanz, Rimer & Viswanath, 2008). Therefore, if an individual believes that a given health challenge is serious, he/she is likely to engage in behaviours that prevent it from occurring. For example, rural communities and learners in rural learning ecologies have different beliefs and perceptions about different diseases. Some diseases are associated with witchcraft as most African cultures believe in traditional practices (Muguwe & Gwirayi, 2011). Utilising the HBM meant that learners and rural communities were exposed to relevant health knowledge that will enable them to move away from prior beliefs and properly assess a situation in order to curb the consequences of different diseases. The learners and the selected parents assessed the current situation in Zimbabwe and strategies adopted to prevent disease. It is hoped that this will empower them with the knowledge that diseases are real and have serious health consequences if they are not medically attended to.

#### 2.3.3.2 Attitude component

According to Mold and Berridge (2013) and Griffin (2012), the attitude component pertains to an individual's assessment of a situation which includes feelings. Attitudes influence individuals' judgement of whether health actions have positive or negative health outcomes. Furthermore, they help learners or individuals to adopt preventive behaviours. People have different attitudes and feelings in relation to health challenges, which might be positive or negative. Learners and rural communities might have negative or positive attitudes towards the current vaccination and immunisation drive to prevent cervical cancer in girl learners. For instance, they might perceive it as a programme that goes against their traditional practices, or they might feel that it harms girls' health. Some adults may not be comfortable with the idea of using protection during sexual intercourse and because of this negative attitude they might contract STIs, including the deadly HIV/AIDS. Therefore, attitudes towards health challenges and diseases determine whether or not people will adopt preventive behaviours. As noted previously, Zimbabwe's health system

is currently experiencing serious challenges due perhaps to misplaced priorities and corruption. The myriad of challenges which include demoralised health professionals, outdated machinery and a lack of essential drugs in health delivery centres (National Health Strategy 2016-2020), which could result in negative attitudes among intended beneficiaries who might regard health delivery centres as death traps. Learners in rural learning ecologies might also have negative attitudes to Health and Life Skills and Guidance and Counselling (compulsory subjects in school curricula) which are not examined at secondary school level in Zimbabwe (Gwirayi, 2011). The written narratives, narrative interviews and narrative reflections provided a detailed description of the current situation in rural ecologies, thus giving a true picture of the attitudes of learners and rural communities. Health education cultivates positive feelings, attitudes and skills that enable individuals to make informed decisions (Gilbert, Sawyer & McNeil, 2014). It is hoped that this study cultivated positive attitudes in learners and rural communities so that they will not engage in health damaging behaviours, but make informed decisions.

#### 2.3.3.3 Behaviour component

This pertains to an individual's opinion on the usefulness of a new behaviour in reducing the risk of developing diseases (Mold & Berridge, 2013). Adolescents that are conscientised on the dangers of smoking, drug and alcohol abuse and promiscuity through health education are likely to adopt positive behaviours as such education makes them aware of the negative health consequences. Abstaining from health threatening activities yields health benefits; for example, stopping smoking prevents lung cancer, abstinence from sex prevents individuals from contracting STIs and HIV/AIDS and early screening and vaccination reduce cervical cancer in girls (Champion & Skinner, 2008). Changes in behaviour are noted when an individual becomes aware of the benefits of adopting new behaviour (Champion, 2009). An adequately informed person is less likely to engage in risky behaviours, resulting in the development of new positive behaviours. Health education in rural learning ecologies has resulted in changes in the behaviours of adolescent learners. This study highlighted the benefits of engaging in positive behaviours through health education promotion and empowered rural communities and

learners to make informed health choices and decisions. The following section focuses on the HBM's limitations.

## 2.4 LIMITATIONS OF THE HEALTH BELIEF MODEL

The HBM has been used extensively to study health screening behaviours ranging from influenza inoculations, to seat belt use, nutrition, chronic illness, smoking, breast cancer screening in relation to self-examination and mammograms, health beliefs and AIDS related behaviours (Champion & Skinner, 2008). However, the model has some limitations.

The theoretical constructs that constitute the HBM are broadly defined and the model does not clearly specify how they interact with one another (Skinner, Tiro & Champion, 2015). Most notably, the HBM lacks clear operational definitions of the proposed constructs and does not specify how these variables should combine (in an additive or multiplicative fashion) to predict behaviour. According to the literature, constructs are channels of influence (Champion & Skinner, 2008). Messages are thought to influence behaviours through one or more of these channels. In addition, the number of constructs included across studies varies greatly which prevents cross study comparisons (King et al., 2014). Despite a large body of research supporting the influence of HBM constructs on health behaviour, ambiguity persists concerning which constructs are most important, which has led to variations in application of the HBM (Bish & Michie, 2010).

The HBM assumes that everyone has equal access to health information (Champion & Skinner, 2008), which may not be the case. Access to health knowledge or health literature varies, with some people having more exposure and access than others. Due to their geographical location, rural ecologies are often marginalised and underdeveloped (Chikoko & Khanare, 2009), with limited access to print and electronic media. This results in limited exposure to health knowledge and current health issues. Furthermore, rural ecologies are characterised by low levels of literacy. Thus, people in rural ecologies might have less access to health information than those in urban areas. Finally, the HBM does not acknowledge that environmental factors beyond people's control may prevent engagement in desired behaviours (Skinner, Tiro & Champion, 2015). An environment characterised by violence results in individuals in that environment engaging in violence.

Individuals in a dangerous neighbourhood may not be able to jog outdoors due to safety concerns. Furthermore, Davidhizar (1983) highlights that tools have not be refined to measure the HBM components and there has been lack of uniformity in testing the model due to the way the variables have been operationalised.

These limitations notwithstanding, the HBM was a useful tool to understand attitudes and behaviours and the level of health information in this study and to develop effective interventions and strategies. The shortcomings of the model were addressed by also using the ABA.

## 2.5 APPLICATION OF THE HEALTH BELIEF MODEL TO THE STUDY

The goal of health education is to consciously construct opportunities for learning designed to improve health literacy and health knowledge and empower individuals to make health informed decisions (Jacobs & Frantz, 2014). Such education enables individuals, groups and communities to acquire the information and skills required to make quality health decisions.

The HBM posits that people will take action to prevent disease if they regard themselves as susceptible (vulnerable) to a condition, if they believe it would have serious consequences (perceived seriousness), if they believe that a particular course of action available to them would reduce susceptibility or severity or lead to positive outcomes (perceived benefits) and if they perceive negative attributes related to a health action (perceived barriers) (Glanz, Rimer & Viswanath, 2008; Griffin, 2012). Health education increases an individual's ability to assess the health risks of particular actions. The HBM predicts that individuals who feel that they are susceptible to a particular health challenge engage in positive behaviours (Abraham & Sheeran, 2005, 2014). HIV/AIDS and all forms of cancer are health threatening diseases.

Learners and parents who are adequately informed about these diseases (through health education) will engage in positive behaviours and adopt preventive approaches like abstinence and cancer screening and vaccination. Susceptibility prompts people to adopt healthier behaviours which enhance sustainable learning. Health education is thus concerned with imparting health related information that influences values, beliefs,

attitudes and motivations (Fitzpatrick & Tinning, 2014) and all these aspects are implicit in the HBM which made it relevant to this study.

Communicable and non-communicable diseases have serious health consequences if they are not medically attended to (Frantz, 2011). Health education influences a person's health beliefs by enabling him/her to evaluate the impact and consequences of contracting a particular disease (Gozam & Capik, 2014). The HBM proposes that individuals who perceive a given health challenge as serious are likely to engage in positive behaviours to prevent the disease from occurring or to reduce its severity (Abraham & Sheeran, 2014). Health education provides medical information and knowledge about different diseases. Through school curricula, learners in rural learning ecologies are likely to be influenced, motivated and empowered to adopt positive health behaviours and realise the benefits of healthy lifestyles.

The characteristics implicit in the HBM made it relevant to this study. Individuals tend to adopt positive behaviours when they realise the benefits or usefulness in decreasing the risk of developing a disease (Champion, 2009). Health education educates them on such benefits, thus giving them the confidence to take preventive actions that result in improved healthy lifestyles, further enhancing sustainable learning. Health education also enables individuals to identify obstacles in the way of adopting a new behaviour. The HBM proposes that perceived barriers may prevent an individual from engaging in healthy behaviours, calling for education to overcome any barriers and assist people to make positive health decisions.

The HBM is thus a framework that is used to understand human behaviours and possible reasons for non-compliance with recommended health actions. It is goal oriented as it is based on the desire to avoid ill health and the belief that a specific health action will prevent illness. To achieve this goal, health education imparts the necessary knowledge and skills to enable an individual to make informed choices, thus enhancing sustainable learning. The following section discusses the integration of the HBM and the ABA.

## 2.6 THEORETICAL INTEGRATION OF THE ASSET-BASED APPROACH AND THE HEALTH BELIEF MODEL

The HBM was used as a second theory to complement the ABA in exploring health education promotion for sustainable learning in Zimbabwean rural ecologies. The literature confirms that the health sector in Zimbabwe confronts a plethora of challenges caused by economic decline (Biti, 2009). This has compromised health delivery in both rural and urban ecologies. In exploring health education promotion in Zimbabwean rural ecologies, this study was informed by two theoretical lenses, namely, the ABA and the HBM. In my view, the principles of these theories complement each other (theory fertilisation).

The ABA's objective of finding solutions to problems in order to achieve positive change is enhanced when locally available resources are used (Chikoko & Khanare, 2012). In this study, the assets were the two senior teachers (primary tier assets) and a health professional (nurse) (secondary tier asset) whose knowledge and skills were deployed to develop health consciousness and adoption of positive behaviours in learners and rural communities. For its part, the HBM suggests that in order for an individual to change his/her behaviour, he/she must feel threatened, believe that a specific action will be beneficial (perceived benefits) and she/he must be competent to implement the recommended health action (Rosenstock, 1974; Gozam & Capik, 2014). Exposure to health education by the senior teachers and the health professional (assets) led to acquisition of health knowledge in learners and rural communities to enhance sustainable learning. Furthermore, learners and rural communities become health conscious and health literate, and adopt positive behaviours through school curricula and health awareness campaigns. Education on health threatening activities and diseases results in the adoption of positive behaviours (perceived benefits - HBM)

Two values are implicit in the HBM, namely, the desire to avoid illness and that specific health actions available to an individual that would prevent undesirable health consequences (Carpenter, 2010). To avoid health threatening situations and activities, individuals (learners) and rural communities are exposed to education by local assets (senior teachers and a health professional). This results in the adoption of positive

behaviours. When these two theories (the HBM and ABA) are combined and applied, as in this study, learners in rural ecologies and rural communities develop health consciousness and health literacy, and adopt positive behaviours and attitudes using locally available resources. Thus, in the context of this study, the main focus of the ABA was utilising the capabilities and skills within individuals (assets) to address health challenges.

The HBM is a conceptual framework that is used to understand human behaviour and non-compliance with a recommended health action, while assets (the ABA) in the form of health professionals and teachers can influence behaviour and compliance through health education programmes, which made these two theoretical lenses ideal for this study on health education promotion in Zimbabwean rural ecologies. The HBM motivates and empowers individuals to adopt preventive health actions while the ABA proposes that individuals and communities can be empowered to address their challenges from the inside out (Chikoko & Myende, 2012). It is hoped that the skills and knowledge of the professionals in this study that were used to provide health education will empower learners and rural communities to practice positive health behaviours which enhances sustainable learning. If assets in a community are adequately mobilised and utilised, sustainable learning is enhanced.

What is evident from these two theoretical lenses is that the HBM is concerned with predicting behaviours in individuals while the ABA focuses on enabling individuals and communities to achieve positive change through their own skills, knowledge and lived experiences. These two approaches have the potential to change behaviour patterns and make individuals conscious of the severity of different diseases and the benefits of positive living, further enhancing sustainable learning. Both the HBM and the ABA have the capacity to transform individuals and rural communities by empowering and motivating them to address health challenging situations. Therefore, the principles of the ABA dovetail with those of the HBM and they complemented each other in exploring health education promotion in the rural ecologies of Zimbabwe to enhance sustainable learning.

## 2.7 CHAPTER SYNTHESIS

This chapter presented and discussed the two theoretical lenses employed for this study, namely, the ABA and the HBM. It noted that the ABA is a strength based approach with the main focus on assets, capabilities, resources and skills within people to solve problems and achieve positive change (Myende & Chikoko, 2014). The ABA thus aims to address problems in a positive manner by identifying, mobilising and managing assets (Loots, 2011). Furthermore, it assists individuals and communities to unlock their own potential. The HBM is a commonly used theory in health education, health promotion and health related challenges (Champion, 2009) that is employed to understand human behaviour. The core focus of the HBM is reducing and avoiding illness. Its four main constructs, perceived susceptibility, perceived severity, perceived benefits and perceived barriers (Carpenter, 2010) can be used individually or in combination to explain behaviour (Rosenstock, 1974).

The following chapter presents a review of the literature on health education promotion.

# CHAPTER THREE

# REVIEW OF RELATED LITERATURE

## 3.1 INTRODUCTION

Chapter two presented and discussed the theoretical lenses (the ABA and HBM) employed for this study on health education promotion to enhance sustainable learning in Zimbabwean rural ecologies. This chapter reviews the literature on health education promotion in developed and developing countries, and in the Zimbabwean context as well as the assumptions, objectives and principles of health education. The review is aligned with the research objectives:

- To analyse the current situation regarding health education promotion in Zimbabwean rural ecologies.
- To explore the strategies used to access and promote health education in Zimbabwean rural ecologies and why these are employed.
- To identify the challenges (if any) faced by Zimbabwean rural learning ecologies in implementing health education promotion strategies for sustainable learning.

## 3.2 LITERATURE REVIEW

A literature review is a summary of existing scholarship on a topic (Silvester et al., 2013; Rodney, 2012). It is based on secondary sources, that is, what other people have already written on the subject and is not concerned with discovering new knowledge or information (Pare et al., 2015). A literature review enables a researcher to understand the current state of knowledge on a given subject area, to relate this to ongoing research and to identify gaps in this knowledge (Sulton, 2016). It may resolve a debate, establish the need for additional research and define a topic of inquiry (Silvester et al., 2013; Sulton, 2016). It is thus a critical analytical account of existing research on a particular topic and its main purpose is to provide the background to and justification for the research undertaken (Rodney, 2012; Gorman & MacIntosh, 2014, 2015). I reviewed the literature

on what health education entails, the role of schools, parents and communities in health education promotion and the role of the media as well as the components. Furthermore, the review covered curriculum approaches in emerging economies and developed countries, including the current state of health education promotion in Zimbabwean rural ecologies.

## 3.3 UNDERSTANDING HEALTH EDUCATION

The goal of health education is to positively influence the behaviour of individuals and ultimately the health of communities (Felton & Chapman, 2014). This study explored the promotion of health education in Zimbabwean rural ecologies.

As noted previously, the terms health education and health promotion have been used interchangeably (Bezerra, 2014; Doyle, Ward & Early, 2008) when, in fact, they are distinct concepts (Whitehead, 2008). According to the Ottawa Charter of 1986, health promotion refers to the process of making people aware of their health. I thus infer that it aims to develop health consciousness among individuals and communities. Griffin (2012) defines health promotion as the process of making people aware of their health and well-being. These two definitions concur on the issue of health awareness but Griffin adds the dimension of well-being, implying that health promotion facilitates positive living to enhance the quality of life. This study explored health education promotion for sustainable learning in Zimbabwean rural ecologies. Health is described in the literature as a state of complete physical, mental and social well-being and not merely the absence of disease (Sharma, 2016; WHO, 2012). It is thus a means to achieve desirable goals in life.

Kickbusch and Nutbeam (2017) assert that health education is a combination of planned learning experiences based on sound theories that provide individuals, groups and communities with the opportunity to acquire the information and skills required to make quality health decisions. This implies that health education is not a haphazard undertaking as it requires utilisation of strategies for it to be effective. Furthermore, health education provides a platform for health knowledge acquisition to enable individuals (learners in rural learning ecologies) and communities to make quality health decisions to enhance the quality of life. Glanz, Rimer and Viswanath (2008) and Hernandez (2011) state that health education refers to consciously constructed opportunities for learning involving

some form of communication designed to improve literacy and knowledge and to develop life skills which are conducive to individual and community health. I view health education as a carefully planned activity with the goal of developing health literacy. In this study, its target was learners and parents in rural ecologies. Health awareness campaigns and school curricula can be used to develop skills and expand the health knowledge base which ultimately results in the development of health consciousness. Furthermore, health education involves techniques such as information brochures, pamphlets and videos, role plays, participating and reflecting in groups, reading, and computer-assisted learning (Kickbusch & Nutbeam, 2017; Maphalala, 2016; Sharma, 2016). In order for health education to produce the desired results, there is a need to utilise different effective strategies to enhance knowledge acquisition, taking into account the suitability of each for the target audience. There is a need to avail health education literature in the form of books and through technological platforms like the Internet. The WHO health promotion glossary describes health education as not limited to dissemination of health related information, but also fostering the motivation, skills, and confidence (self-efficacy) necessary to take action to improve health. In addition, it calls for communication of information on the underlying social, economic and environmental conditions that impact health and individual risk factors and risk behaviours, and the use of the health care system (WHO, 2015; Donatelle, 2009). Effective health education results in health literacy which Gilbert, Sawyer and McNeill (2014) and Donatelle (2009) define as increasing an individual's capacity to access and use health information in order to make appropriate health decisions. This study investigated how health education is accessed in the rural ecologies of Zimbabwe and how health literacy is enhanced. Fitzpatrick and Tinning (2014) assert that people with low literacy have poorer overall health and that they tend to misuse medication and misunderstand health information. Furthermore, people with low literacy skills often wait longer to seek medical help, with the result that health problems can become a crisis. Therefore, this study aimed to develop health literacy among learners and rural communities so that they will seek medical attention when the need arises.

From the above definitions, it is clear that health education involves systematic and planned application which qualifies it as a science and that delivery of such education

involves a set of techniques. The primary purpose is to influence the antecedents of behaviour so that healthy behaviours develop voluntarily (Thomas, Chase & Aggleton, 2018; Ingleby, 2012; Donatelle, 2009). The common antecedents of behaviour are awareness, information, knowledge, skills, beliefs, attitudes and values. Health education is performed at different levels. It can be one-on-one such as in a counselling session, or with a group of people through group discussions and at community level through health awareness campaigns.

### 3.3.1 Purpose of health education

The literature notes that health education has a unique and particular purpose. Doyle, Ward and Early (2018) assert that it seeks to impart health related information that influences beliefs, attitudes and motivation. It is hoped that utilising school curricula through Guidance and Counselling (a compulsory subject at secondary schools in Zimbabwe) will equip learners in rural ecologies with age-appropriate health education in order to make quality health decisions and be motivated to adopt positive behaviours to enable sustainable learning. This is not limited to learners, but includes parents in rural ecologies. Health awareness campaigns would probably increase health awareness in these ecologies as some parents have negative attitudes towards health education programmes like the current cervical cancer screening and vaccination of girl learners between the ages of 10 and 14, perhaps due to their religious persuasion or cultural practices (Muguwe & Gwirayi, 2011).

Gilbert, Sawyer and McNeill (2014) observe that health education seeks to achieve health or illness related learning through acquisition, assimilation and dissemination. School curricula provide a platform for health knowledge acquisition complemented by health awareness campaigns among learners and rural communities. In Zimbabwe, these campaigns are spearheaded by the Ministry of Health and Child Welfare (Ministry of Health & Child Care, 2015). Exposure to health education results in the development of skills to avoid negative behaviors and adopt positive ones. Learners and rural communities should be aware that communicable and non-communicable diseases have negative health consequences if they are not prevented and treated. It can thus be

argued that health education is a vehicle to drive behaviour modification, which was one of the goals of this study.

### 3.3.2 Assumptions of health education

Health education is underpinned by the assumption that individuals value and prioritise their health and it is reasonable for a health professional to act on the basis that people want to avoid or reduce any negative health state (Fitzpatrick & Tinning, 2014). Zimbabwe experiences challenges in relation to both non-communicable and communicable diseases like STIs, HIV/AIDS, cholera and malaria, to name but a few. These diseases have claimed many lives and it is hoped that thus study will assist learners and rural communities to avoid contracting life threatening diseases through health education which is now offered from primary to tertiary level (Manzira, 2014). Zimbabwe's new curriculum (2013) includes health education as a subject and it is being taught to all learners and is age/grade relevant.

Health education assumes that the health professional has the necessary health related information to impart to recipients (learners and rural communities) and that these recipients are in need and will benefit from the information, (WHO, 2015; Ingleby, 2012). An analysis was conducted of Zimbabwean secondary school curricula to evaluate whether learners and rural communities benefit from the health literature cascaded to them by teachers in the teaching and learning context and by health professionals in local communities. The effectiveness of the collaborative mechanisms between the Ministry of Primary and Secondary Education and the Ministry of Health and Child Care was also explored. Health education further assumes that if recipients correctly assimilate the information, any further action on their part will involve change or modification in their behaviour (Whitehead, 2008). It is hoped that that this study will have a positive influence on learners in Zimbabwe's rural learning ecologies.

As noted, health education is designed to influence the knowledge base of recipients as well as their attitudes, values and belief systems. This leads to conscious personal decisions to avoid unhealthy behaviours (Glanz, Rimer & Viswanath, 2008; Donatelle, 2009). This study aimed to use health education to develop a preventative approach where learners and rural communities who might be at risk of contracting communicable

or non-communicable diseases will consciously avoid engaging in risky behaviours. It can be argued that health education also requires that individuals are willing to participate in expert driven programmes of behavioral change in exchange for a reduction in the risk of illness or disease, resulting in improved health status and intention to modify health damaging behaviours where risk factors are known (Rosenstock, Rimer & Viswanath, 2011). The following section discusses the objectives of health education.

### 3.3.3 Objectives of health education

Cottrell, Girvan and McKenzie (2009, 2015) and Sharma (2016) note that the key objectives of health education are to:

- Cultivate desirable health practices.
- Develop sound health habits.
- Appreciate the health programmes undertaken by the school and community.
- Eradicate diseases through health driven programmes.
- Develop health consciousness in the school and community.
- Provide a healthy environment for physical and mental growth.

Rower (2011) suggests that robust health education programmes should be rolled out in communities to develop health consciousness and eradicate diseases. It is hoped that this study will result in learners in rural learning ecologies and rural communities developing sound habits and health consciousness as well as the eradication of diseases. The following section discusses the principles of health education.

### 3.3.4 Principles of health education

The above objectives are guided by principles which are the fundamental norms, rules or values that represent what is desirable for an individual or community and help to determine the rightfulness or wrongfulness of actions (Fitzpatrick & Tinning, 2014; Cottrell; Girvan & McKenzie, 2015). Wandberg and Rohwer (2011) suggest that motivation, reinforcement, participation, involvement, comprehension and good human relations are among the basic principles that can enhance sustainable learning. Health

education thus enables individuals of all ages to make informed decisions and be active citizens through motivation and participation, which this study hoped to achieve.

### 3.3.5 Strategies utilised in implementing health education promotion in rural ecologies

Porter (2008) defines a strategy as a plan, method or a series of actions designed to achieve a specific goal while Ackermann and Eden (2011) view a strategy as the skill of making or carrying out plans to achieve a goal. A strategy thus refers to the means that an individual employs in order to achieve his/her objectives. One of the strategies that is relevant in rural learning ecologies is the lecture method which assumes that it is the responsibility of teachers in the teaching and learning context to make decisions regarding the content to be taught on health issues (Jack, 2015). In this strategy, teachers and health professionals believe that learners' heads have to be filled with age-appropriate information. Cicchino (2013) states that this can be done using audio visual support such as slides, videos, books, compact discs (CDs), posters, pictures and software programmes. The Internet is another platform that can used as a strategy to promote health education programmes but its use needs to be monitored by both parents and teachers as it can negatively impact learners. Ballan (2012) proposes that parents of learners play a pivotal role when it comes to health education promotion, especially in relation to sexual and reproductive health education. Parents are able to answer critical, sensitive health questions but some may be unwilling to open up and be honest, while lack of knowledge can result in parents giving incorrect information, compromising sustainable learning. This study examined the health education strategies used to promote health among learners in rural learning ecologies.

## 3.4 THE ROLE OF SCHOOLS, PARENTS AND COMMUNITIES IN PROMOTING HEALTH EDUCATION

### 3.4.1 Schools

The school setting is an important venue to transmit information and skills that protect learners against risky behaviours (Jourdan, 2011). Research studies indicate that

secondary school learners are vulnerable to unplanned pregnancies, HIV/AIDS, STIs and other health related challenges due to a lack of proper health education (Donatelle, 2009).

Health education in schools is a necessity to develop optimal physical, mental, emotional, spiritual, and social health among learners (Ngwu, 2016). Teachers are thus expected to enhance learners' health knowledge and skills to raise their critical consciousness and promote their interest in health education because teachers serve as role models and influential behavioral and attitudinal change agents to adolescent learners (Oyerinde et al., 2013). In my view, this justifies the inclusion of health education subjects like Life Skills, Life Orientation, and Guidance and Counselling in school curricula, an issue on which a number of scholars agree. According to Higgins et al. (2008) and Ngwu (2016), health education assists learners to adopt healthful behaviours, thereby improving their academic performance (Botchway et al., 2015). Learners must be healthy in order to function well academically. To stay healthy and safe, learners need access to high quality, relevant and age/grade relevant health education. This study explored this issue in rural learning ecologies in Zimbabwe.

Recent studies show that secondary school learners in both developed and developing countries are less conscious of issues concerning their health (Stateuniversity, 2016). Today's learners have a great deal of freedom and are exposed to modern technologies such as television, computer games, mobile phones, and the Internet and these are seen as contributing to them engaging in risky behaviours. The effects of such exposure include an increased number of teenage pregnancies, HIV/AIDS, STIs and other communicable diseases which justifies the inclusion of health education in school curricula to promote the healthy living that is required to enhance sustainable learning and enhance society's development (Botchway et al., 2015; Jourdan, 2011).

### 3.4.2 Parents

Studies show that parents play an important role in shaping their children's behaviour, academic achievement and social skills (Sapungan & Sapungan, 2014). Kwatubana and Makhalemele (2015) state that parental engagement can promote positive healthy behaviours among learners. For example, learners who are supported by their parents are less likely to suffer from emotional stress and disengage from school and learning. In

addition, school efforts to promote health among learners have been shown to be more successful when parents are involved (Sivertsen, 2015). This calls for schools in rural learning ecologies to establish clear communication channels between parents and the school. Opportunities need to be created for schools to communicate with parents about school health related activities such as health education programmes, subjects like Life Skills and Life Orientation, screening programmes and other health related events in order to avoid cultural conflict and build parents' confidence that their children are not exposed to sensitive sexual issues as sex is a taboo subject in most African cultures (Muguve & Gwirayi, 2011). Learners are less likely to engage in risky and unhealthy behaviours such as alcohol and drug abuse and sexual adventures if their parents are involved in school activities in regard to health education. This study thus explored whether parental engagement is visible in rural learning ecologies with regard to health education promotion.

### 3.4.3 Communities

Schools do not exist in isolation from the communities in which they operate (Goldman, 2008) and the literature recognises that for any school programme to be effective and sustainable, it needs the cooperation of the community. In order for a school to successfully implement a health education programme such as sex education, it must understand the values held by the community since a clash of cultural values triggers resistance (Pooblan et al., 2009). When the community participates in a school's health education programme, it becomes a shared responsibility (Goldman, 2008). According to Kilpatrick (2009), three groups, namely, schools, parents and communities make positive contributions to learners' health needs. Communities play a major role in children's behaviour and can influence learners to adopt positive behaviours and shun health damaging activities like alcohol and drug abuse and pre-marital sex (Sapungan & Sapungan, 2014). This study therefore examined the role played by rural communities in health education programmes.

## 3.5 THE BENEFITS OF HEALTH EDUCATION

Health education motivates the youth and adolescent learners to improve and maintain their health, prevent communicable and non-communicable diseases and avoid

unhealthy behaviours. The following sub-sections discusses how learners, parents and teachers benefit from health education.

### 3.5.1 Learners

Health education in a school setting calls for communication which involves learning and teaching related to knowledge, beliefs, attitudes, values, skills and competencies (Hammaberg, 2014). The aim of health education is to expand the knowledge base, gain skills and shape a health oriented attitude in a given society (Donatelle, 2009). Health education does not only mean transferring knowledge, but also enables learners to apply the knowledge effectively by making them think, make decisions and take action concerning their health (Gilbert, Sawyer & McNeill, 2014). According to Hernandez (2011) and Fitzpatrick and Tinnings (2014), as a result of health education, learners' awareness of different types of diseases increases, they develop the ability to make informed decisions, their academic performance improves, their skills base expands and they are able to cope with health challenging situations. When intensively administered in the school environment, health education makes a positive contribution to learners' health and welfare. This study aimed to equip learners in rural learning ecologies to adopt positive behaviours and desist from health damaging activities.

### 3.5.2 Parents

When parents are involved in health education, teachers are able to complement and reinforce knowledge that learners bring from the home environment (Clinton & Hatie, 2013) and help them to develop positive social behaviours. The home and the school complement each other. Furthermore, Sapungan and Sapungan (2014) note that health education equips parents with knowledge on the risks associated with drug and alcohol abuse, health threatening diseases like HIV/AIDS and STIs and other communicable and non-communicable diseases. Hernandez (2011) states that when parents are equipped with health knowledge, there is increased interaction, communication and discussion between parents and their children and between parents and the school, and parents become more responsive and sensitive to their children's social and health needs. Parents want their children to be healthy and safe and hope that their children will cope with any health challenges they encounter. They also need to be able to support their

children when this occurs. Health education equips parents with knowledge so that they are able to give their children the right information when the need arises and to answer sensitive questions. This study aimed to make parents aware that there is a need for them be health literate.

### 3.5.3 Teachers

Studies have shown that when schools actively involve parents and communities in their educational activities, schools receive their support (Champion, 2016). Teachers are able to teach what is compatible with the cultural norms and values of that particular community. Hernandez (2011) highlights that teachers are experts in their field and that parents' contributions to health programmes like sex education and reproductive health, which could have far-reaching consequences when mishandled, need the input of communities. Such topics call for a professional approach (Sapungan & Sapungan, 2014). Sex is a taboo subject in most African cultures (Muguve & Gwirayi, 2011) and teachers' knowledge of health education enables them to determine what to teach, when to teach and how to teach it by employing appropriate teaching methodologies. Furthermore, Hammaberg (2014) posits that through parental engagement, teachers come to understand learners' health and through parental contributions, learners tend to develop positive behaviours, thus enhancing sustainable learning.

The following section discusses the media's role in promoting health education as communication is a key strategy to inform individuals and communities about health issues and concerns.

## 3.6 THE ROLE OF THE MEDIA IN HEALTH EDUCATION PROMOTION

The objectives of health education are informing people (cognitive objective), motivating people (affective objective) and guiding people to action (behavioural objective) (Sapungan & Sapungan, 2014; Gilbert, Sawyer & McNeill, 2014). Communication is a key strategy to inform individuals and communities about health concerns (Sharma, 2015) and the mass media and technological innovations are useful tools to disseminate health information and increase awareness of health related issues. According to Sharma and Gupta (2016) and Williamson and Carr (2009), the mass media refers to different

channels of communication which send messages and information to many people simultaneously through radio, television, newspapers, magazines, the Internet and social networking websites, and via satellite. The media plays a crucial role in disseminating information, increasing awareness and educating individuals and communities, which is important in health education promotion (ManJunath, Tarekaswara & Venkateswarlu, 2018). Research studies show that the media has the ability to influence behaviour and is capable of reaching different individuals and communities in hard-to-reach areas (rural ecologies). Sharma and Gupta (2016) highlight that the media is a change agent that influences positive behaviours and helps individuals and communities to adopt preventative measures against the spread of diseases. It is thus extensively employed in health education programmes. This study examined the role played by the media in promotion of health education in Zimbabwean rural ecologies. The following section discusses the essential components of a health education programme.

## 3.7 COMPONENTS OF HEALTH EDUCATION PROGRAMMES

Doyle and Ward (2018) and Briggs (2010) identify the following essential components of health education programmes and services which, according to the literature, have stood the test of time in enhancing individual and community health.

### 3.7.1 Community involvement

Community members should be involved in all phases of programme development. Community needs should be identified and collective planning and implementation mechanisms are required for successful health education programmes (Briggs, 2010; Whitehead, 2008; Jourdan et al., 2010). This study explored whether rural communities are involved in the development of health education programmes or whether there is a top-down approach in planning and implementing these programmes in Zimbabwean rural ecologies.

### 3.7.2 Planning

Health education programmes need to be carefully planned. Donatelle (2009), Marks (2010) and the WHO (2015) note that planning involves identifying health problems through community participation, formulating goals, identifying target behaviour and

environmental characteristics that will be the focus of environmental efforts and deciding how stakeholders will be involved in building a cohesive group. This study examined how NGOs and the Ministry of Health and Child Care identify health challenges in rural ecologies and how they work with rural communities to prevent diseases through health education promotion programmes.

### 3.7.3 Needs and resource assessment

Prior to implementing a health education initiative, the health care needs and capacities of the community and the resources that are available need to be assessed (Doyle & Ward, 2018; Randall, Cottrell, Girvan & McKenzie, 2009; Jourdan, 2010). This study investigated the needs of learners in rural ecologies pertaining to health education as well as the resources at their disposal in the implementation of health education programmes at their school and in their community.

### 3.7.4 Comprehensive programme

Health education programmes with the greatest promise are comprehensive in that they address multiple risk factors, use different channels for programme delivery, target several different levels (individuals, families, social networks, organisations and the community as a whole) and are designed to not to only change risky behaviour, but the factors and conditions that sustain such behaviour (WHO, 2015; Felton & Chapman, 2014; Sharma, 2016).This study aimed to identify how health education is promoted in rural learning ecologies and the targeted audience as well as the channels used for health information dissemination.

### 3.7.5 Integrated programme

A health education programme should be integrated. Each of its components should reinforce other components (WHO, 2015; Felton & Chapman, 2014). Programmes should be physically integrated in the settings where people gather, for example, in schools, work places and communities (WHO, 2015; Sharma, 2019; Thomas, Chase & Aggleton, 2019). This study explored how health education programmes are delivered in rural learning ecologies and whether recipients are benefiting.

### 3.7.6 Long-term change

Health education programmes should be designed to produce stable, lasting changes in behaviour. This will require long-term funding (James & Elsie, 2017; WHO, 2015; Marks, 2010) of programmes and the development of health education infrastructure within the community; an aspect that was explored taking into account the economic crisis Zimbabwe is experiencing. This study aimed to bring about lasting behaviour changes through health education programmes, thus enhancing sustainable learning.

### 3.7.7 Altering norms

In order to have a significant impact on an entire population, organisation or community, a health education programme must be able to alter community or organisational norms and standards of behaviour (Glanz & Rimer, 2008; Gilbert, Sawyer & McNeill, 2014; WHO, 2015). This requires that a substantial proportion of the community or organisation's members are exposed to programme messages or are involved in some way. This study examined the extent to which learners and their parents in Zimbabwean rural ecologies are exposed to health education literature so as to adopt positive health behaviours considering that most rural communities are very traditional with regard to health issues. The following section reviews curriculum approaches in the implementation of health education promotion in developed and developing countries, and schools.

## 3.8 CURRICULUM APPROACHES IN IMPLEMENTING HEALTH EDUCATION FOR SUSTAINABLE LEARNING

### 3.8.1 Curriculum approaches in developed countries

Health education has long been a focus of programmes in both developed and developing countries with the emphasis largely on the provision of information (WHO, 2015). This approach has evolved in response to growing understanding of how social, family and peer influences, individual experiences and norms can affect the development of skills, attitudes and behaviours related to health. Most research studies done by Chiwara

(2017), Ngundu (2018) and Pedrinah's (2019), on health education focus on specific topics or aspects such as HIV/AIDS prevention, sexual reproductive health, early pregnancies, reducing infections, violence and drug abuse.

Health education is now internationally recognised and promoted (UNICEF, 2012), with universal acknowledgement of the need for partnerships and collaboration between the education and health sectors to implement it in schools. Evidence shows that health education is being implemented in schools in many parts of the world (UNICEF, 2012, Menrath et al., 2012).

Historically, health education in schools tended to be based on the topic approach (Cole, Sim & Hogan, 2011; Koplan et al., 2009) which meant dealing with issues such as smoking cessation, alcohol use, sexuality and relationships, safety, mental health and healthy eating separately. However, these topics interact and are not separate at the behavioural level (Koplan et al., 2009; Rosenstock, Helsing & Rimer, 2011). For example, teenage sexual activity can be linked to alcohol and drug abuse. Current evidence shows that the teaching of health education (Life Skills Education) varies from country to country with some countries teaching it as a stand-alone subject while in others it is implemented across subjects in school curricula (Vollum, 2014).

The major international organisations that address global health issues include the WHO, UN, United Nations International Children's Fund (UNICEF), World Bank (WB) and International Federation of the Red Cross (WHO, 2015; UNICEF, 2012). These organisations seek to address health issues that have a global impact, for example, the spread of infectious diseases like the current COVID-19. The international health community acknowledges the need for partnerships to curb the spread of diseases (Rosenstock, Helsing & Rimer, 2011; Cole, Sim & Hogan, 2011) as an epidemic that starts in the US or China may become a global one.

The UN Sustainable Development Goal Number 3 states that every individual has the right to health and the constitutions of many countries, including Zimbabwe, acknowledge that health is a basic human right (WHO, 2015). The right to health is also affirmed in several international and human rights treaties although they may lack enforcement mechanisms (Vollum, 2014). Countries like Finland and Belgium have ratified these

treaties and have included the right to health in the highest laws of their lands (Lohrmann, 2011; Opteshallitus, 2016). The WHO constitution of 1946 defines the right to health as enjoyment of the highest attainable standard of health, which in my view can be achieved by promoting health education in the rural ecologies of Zimbabwe to enhance sustainable learning.

Health education (Life Skills Education) is part of school curricula in the US and surveys show that parents, learners and school administrators fully support its inclusion in the teaching and learning context (*American Journal of Health*, 2013; Jackson et al., 2015) and believe that adolescents should be taught more about health. In secondary schools, Lifelong Learning (as a subject) is infused into age/grade curricula. This subject is taught separately and is also integrated into other subjects like Science and Social Studies. Age/grade relevant health education is taught from primary school upwards and parent are encouraged to get involved (Campbell-Heider, Tuttle & Knapp, 2011). In other developed countries like Mexico and Germany, Life Skills Education (Health Education) programmes for schools are designed to promote positive refusal skills and effective decision making around smoking, alcohol/drug abuse, HIV/AIDS, contraception, and perceptions about sexual activities (Givaudan et al., 2008). This study thus explored parental involvement and Lifelong Learning as a compulsory subject in schools in rural learning ecologies in Zimbabwe.

In Finland, Life Skills Education (Health Education) is integrated into the formal curriculum and is a compulsory subject (Sahu, 2013). The subject is part of other subjects such as Ethics and Religion (Opetushallis, 2016). The country's Basic Education Act of 1998 Section 2(1) states that health education must be provided in accordance with the age of learners so as to ensure healthy growth. Finland's national curriculum provides that health education must be taught as a separate subject (UNFPA, 2015). Such education is fully supported by parents. All in all, health education is very visible in Finland's schools and it promotes positive health behaviours and improved lifestyles, thus enhancing sustainable learning. This study explored the visibility of health education in Zimbabwean rural learning ecologies as well as how it is promoted.

In the United Kingdom, sex and relationship education (SRE) is compulsory in schools from age 11 upwards. According to the Sex and Relationship Guidance of 2000, SRE should be tailored to the age, and physical and emotional maturity of learners and parents have a right to withdraw their children from lessons on topics that they feel are too sensitive (Aparna & Raahee, 2013). Schools in the United Kingdom are required by law to provide a written policy on sex education to parents and the national curriculum explicitly states what should be taught (Department of Education, 2017).

Life Skills Education in Barbados follows the regional (Caribbean) curriculum framework for Health and Family Life Education (HFLE) (UNICEF, 2010; Baltang, Pachiyana & Hall, 2015). The main health challenges in Barbados are prostitution (due to the growth of the tourism industry), drug and alcohol abuse, violence and crime, high risk sexual behaviour and HIV/AIDS (WHO, 2015). The HFLE curriculum covers four themes, namely, self and interpersonal relations; sexuality and sexual health; healthy eating and fitness; and management of health (Bonel, Humphrey & Fletcher, 2014). Health and Family Life Education is a stand-alone subject which promotes positive behaviour and enables learners to make informed choices. The subject is taught from primary to secondary school level and upwards (WHO, 2015). Schools sometimes invite external experts to teach sensitive topics to learners and parents are aware of the content.

In conclusion, the evidence shows that developed countries have made great strides in implementing health education in schools to enable learners to make informed decisions.

### 3.8.2 Curriculum approaches in developing countries

Tanzania is among the developing countries that confront the challenges of HIV/AIDS, early pregnancies, and high girl learner drop-out rates (Muhanga & Malungo, 2017). Effective health education programmes tend to reduce misinformation and teenage pregnancies, increase knowledge, promote positive behaviours, address peer group norms and delay early sexual activities (UNESCO, 2009, 2010). The school curriculum is an effective tool to build sound health habits. In Tanzania, the Ministry of Health in collaboration with the Ministry of Education and Vocational Training promotes health education from primary school level and health education has been incorporated in the national curriculum (Makoye, 2015; Mukumbo, 2009; Shegesha, 2015). Aspects of sex

education are covered in subjects like Social Studies, Civics, Science and Biology at secondary school level. Health and Life Skills Education is not a standalone subject. As noted, the effectiveness of collaborative mechanisms and the inclusion of health education in school curricula was explored in the context of Zimbabwean rural ecologies.

Health and Life Skills Education (Health Education) was introduced in Kenyan school curricula when the Government of Kenya declared HIV/AIDS a national disaster (Abobo, 2012; Ministry of Education, 2008). Some other elements of Health and Life Skills Education were also infused in other subjects such as Religious Education, Social Studies and Biology at secondary school level (Githinji, 2011; UNESCO, 2010). Health and Life Skills Education is a stand-alone subject in both primary and secondary schools. The subject is allocated one lesson per week at both levels (UNICEF, 2012) and is non-examinable. This study investigated whether the time allocated to health education in rural learning ecologies in Zimbabwe is sufficient and whether the content taught is age/grade appropriate.

Life Skills Education is a compulsory subject in all Namibian schools and is taught from Grades 4 to 12 (Linhard, 2015). The most common problems among secondary school learners are teenage pregnancies, violence, passion killings, HIV/AIDS, a high learner drop-out rate due to early pregnancies, and alcohol and substance abuse (Lunerburg, 2010; Erford, 2011; Gibson, 2008). Health and Life Skills Education is included in Namibia's National Curriculum and parents are aware of the content covered. This study aimed to shed light on the current situation in Zimbabwean rural learning ecologies and how health education is accessed and promoted.

Life Skills and health education were merged in South Africa when the Department of Health implemented a comprehensive life skills and HIV/AIDS education programme in all schools as part of a response to the HIV/AIDS pandemic (Jacobs & Frantz, 2014). According to Van Deventer (2009), the programme aims to increase knowledge and develop skills in learners to protect themselves from HIV/AIDS and to safeguard their reproductive health. Mthiyane (2014) notes that Life Orientation was introduced as a compulsory subject for all grades (R – 12) as part of the restructuring of the South African education system in 1994 and also as part of the curriculum for pre-service students

registered for the one-year Post Graduate Certificate in Education (PGCE) in higher education institutions. Life Skills (in primary schools) and Life Orientation (in secondary schools) are compulsory subjects that cover health issues/topics which are age/grade relevant. This study investigated whether health education is being promoted from primary to tertiary level in Zimbabwean rural learning ecologies.

Life Skills aims to prepare learners for meaningful and successful lives in a rapidly changing society (DoE, 2011; Frantz, 2011). Learners are taught about personal health and safety, the relationship between people and the environment, social relationships, technological processes and elementary science (Frantz, 2011). Life Orientation adopts a holistic approach. Van Deventer (2009) notes that it is concerned with learners' personal, social, intellectual, emotional, spiritual, and physical growth and development. The following section examines the current situation regarding health education promotion for sustainable learning in Zimbabwean rural ecologies.

## 3.9 CURRENT SITUATION REGARDING HEALTH EDUCATION IN ZIMBABWEAN RURAL ECOLOGIES

At independence in 1980 Zimbabwe inherited a world-class health care system; however, corruption, misplaced priorities, economic mismanagement and political discord have resulted in the health sector falling into a shambolic state (Kidia, 2018). While the government inherited a highly motivated workforce (Todd, Ray & Madzimbamuto, 2010), staff morale is now at an all-time low. Zimbabwe's economy is collapsing under the weight of debt and corruption, contributing to infrastructural decay and a lack of basic health supplies in most health delivery centres (WHO, 2014). The health gains made over the past decade are slowly being eroded (National Health Strategy, 2016 – 2020).

The right to education and health is enshrined in Zimbabwe's 2013 Constitution that commits the state to taking practical measures to ensure the provision of basic accessible health services throughout the country (Constitution of Zimbabwe, 2013). Zimbabwe's 2013 curriculum provided for health education in primary and secondary schools. Life Skills Orientation is part of syllabi from Early Childhood Development (ECD) to Form 6 (Education Act of 2013). All secondary schools teach Guidance and Counselling and all primary schools teach Life Skills. In September 2015 the government approved a

Curriculum Framework for 2016 to 2022 which sets out a broad range of learning areas for secondary and primary schools. In terms of this framework, Life Skills Orientation and Guidance and Counselling are seen as vehicles of Life Skills, HIV/AIDS and sexuality education (Kidia, 2018).

Zimbabwe has recorded a decline in HIV prevalence among its sexually reproductive age group over the past decade due to massive media campaigns (UNAIDS, 2014). However, due to economic challenges and poverty in rural ecologies, there has been an increase in HIV/ AIDS and STIs among the sexually reproductive age group (Ministry of Health & Child Care, 2015; UNAIDS, 2014) in these ecologies. Research studies in rural ecologies show that rural girls are more vulnerable than their urban counterparts and tend to become mothers earlier; this could be attributed to cultural and religious practices (Muguve & Gwirayi, 2011). However, it could also be the result of a lack of health education. What is apparent on some research studies on health education in rural ecologies is that they have been negatively affected by financial, material and human resources resources (Chimhowu et al., (2010) and Mangwaya and Ndlovu (2013). Studies by Nyandoro et al., (2016) and Chikanda (2010) acknowledge that rural health delivery centres have been hard hit by migration of skilled and competent health professionals. There is clear urban/rural disparity in access and exposure to sexual reproductive education (Muradzikwa & Chinyoka, 2016). Due to health education, Zimbabwe is currently making strides in preventing mother to child transmission of HIV/AIDS (UNAIDS, 2014). People living with HIV are also accessing antiretroviral treatment (ART). Health education through workshops in rural communities and the use of informative posters in rural health delivery centres are bearing tangible fruits (Mangwaya & Ndlovu, 2013; UNAIDS, 2014).

Zimbabwe has also introduced school health education programmes (Education Act of Zimbabwe, 2013; National Health Strategy of Zimbabwe, 2016 – 2020) from Early Childhood Development (ECD) to Form 6 (Gwarinda, 2011). These programmes are designed to positively influence learners' health knowledge, attitudes and skills (Todd, Ray & Madzimbamuto, 2011). They have had a positive impact, especially among adolescent learners, and the school drop-out rate among girl learners is declining.

Village health workers (VHW) are highly visible in Zimbabwe's rural ecologies and their primary focus is prevention of different diseases (Ministry of Health & Child Care, 2010). They are a link between the community and the health delivery centre (Dieleman, Watson & Sisimayi, 2012; Ministry of Health & Child Care, 2014) and their main objective is to educate rural communities on preventing diseases as well as general education on sanitation and maternal health and to refer cases that need treatment to the nearest health delivery centre (Ministry of Health & Child Care, 2010). Village health workers also collaborate with traditional leaders who give them platforms during social gatherings to teach communities about health issues. Health education in rural communities is thus receiving due attention through the efforts of VHWs who are employed by the Ministry of Health and Child Care of Zimbabwe.

Gono (2012) and Biti (2009) note that the negative macroeconomic climate in Zimbabwe has impacted the health sector in a variety of ways. The majority of families in rural areas cannot afford health care services whilst the government cannot adequately fund them (National Health Strategy of Zimbabwe, 2016 – 2020). Communicable and non-communicable diseases and conditions continue to affect a great number of people in rural ecologies (UNAIDS, 2014). Through health education campaigns by the Ministry of Health and Child Care, efforts are under way to screen for and diagnose these diseases, although they are constrained by limited resources. From 2018 to date, girl learners between the ages of 10 and 14 are screened for and immunised against cervical cancer and boy learners in the same age group are circumcised in the health delivery centres (NHS, 2016 – 2020). While constrained by financial limitations, the government is procuring diagnostic equipment (Ministry of Health & Child Care. 2015). In conclusion health education is visible in the rural ecologies of Zimbabwe although more needs to be done. This study aimed to encourage rural communities and learners to see the value of health education. The literature shows that HIV/AIDS education has been extensive (Tungwarara, 2018; Moyo, 2016; Chiwara, 2017; Chikonzo, 2018) in urban and peri-urban ecologies. While Ngundu (2018) and Pedrinah's (2019) studies focused on health education in the urban areas of Zimbabwe, to the best of the researcher's knowledge, no research has been conducted on health education promotion in Zimuto district, Masvingo

province, Zimbabwe. This study aimed to fill this gap. The following section discusses access to and promotion of health education in Zimbabwean learning ecologies.

## 3.10 ACCESS TO AND PROMOTION OF HEALTH EDUCATION IN ZIMBABWEAN RURAL LEARNING ECOLOGIES

Much has been written about HIV/AIDS with a few studies on STIs, the silent partner of HIV/AIDS, yet the two co-occur. Sexually transmitted infections remain a significant health concern regionally, continentally, globally and in Zimbabwe (UNAIDS, 2014). Together with HIV/AIDS, STIs fall under the sexual reproductive health component of health education. School health programmes offer an opportunity to access information on sexual reproductive health (Zimbabwe National Health Policy, 2018). Education on health issues differs between countries depending on their political priorities as well as the goals for particular education systems (UNICEF, 2015). In countries like Finland and Ireland, health education is a subject in its own right that is the responsibility of health teachers, while in other countries, it is implemented across the curriculum in a range of subjects. In Zimbabwe, health education falls under the subjects of Health and Life Skills, and Guidance and Counselling (Zimbabwe School Health Policy, 2018; National Health Strategy for Zimbabwe, 2016 – 2020; Constitution of Zimbabwe, 2013; Education Act of Zimbabwe, 2013).

### 3.10.1 Guidance and Counselling

Guidance and Counselling, HIV/AIDS and Health and Life Skills were introduced as subjects in all secondary schools in Zimbabwe (Ministry of Education Sport and Culture – MoESC, 1993) and, in accordance with the Chief Education Officer's circular Number 16 of 1993 (MoESC), the subject is to be taught by a Guidance and Counselling teacher. The Technical Guidance on Sexuality Education (UNAIDS, 2014) offers guidelines on the sexuality education content to teach at a particular age. However, there is evidence that many countries' curricula are not performing as expected (UNESCO, 2014). In Zimbabwe, sexuality education which is one of the components of health education on HIV/AIDS and STIs is a stand-alone subject, whereas the International Technical Guidance on sexuality education recommends that Guidance and Counselling be infused in mainstream

subjects (UNAIDS, 2014). In Zimbabwe, teaching of Guidance and Counselling is the sole responsibility of Guidance and Counselling teachers.

Furthermore, Guidance and Counselling is a non-examinable subject that is only taught once a week for about 30 – 40 minutes (Manzira, 2014; Muguve & Gwirayi, 2011). Due to the fact that the Zimbabwean timetable is overloaded, teachers end up resorting to expository rather than participatory approaches to teaching health related issues (Manzira, 2014). A lack of adequate resources in rural secondary schools has also resulted in some teachers and learners not paying much attention to the subject; an issue that was explored in this study. Research indicates that most teachers are not adequately capacitated in terms of training to effectively teach the subject and others are shy to handle topics in health education such as sexuality education, arguing that such topics clash with their cultural values and beliefs and that it is taboo to talk about sex. Furthermore, Zimbabwe is a multicultural society comprising Shona, Ndebele, Tonga, Shangaan, Asian, Indian and English cultures and this places teachers in a dilemma. The teacher does not know the cultural beliefs and values of every learner and what is taught might be seen to be offensive to a particular culture. This study explored the effectiveness of Guidance and Counselling in rural secondary schools in Zimbabwe.

### 3.10.2 Life Skills education

Health and Life Skills education plays a pivotal role in promoting responsible behaviour among adolescent learners (Singizi, 2013). It facilitates behaviour change, provides information on sexual reproductive health (STIs and HIV/AIDS) and builds skills to enable learners to make informed decisions on health matters (UNAIDS, 2014). Statistics from most Zimbabwean health delivery centres in both urban and rural contexts indicate a steep rise in STIs among the youth (Muradzikwa & Chinyoka, 2016). Promiscuous activities are perhaps a result of poverty and the unending economic challenges in the country. While little research has been conducted on Health and Life Skills in Zimbabwe, if taught effectively, it is a vehicle that can be used to enhance behaviour change among adolescent learners at all levels in Zimbabwean schools. Through written narratives with learners and narrative interviews with parents and the headman, this study evaluated the

effectiveness of health education for adolescent learners at the selected rural secondary school in Zimbabwe.

### 3.10.3 The National Health Strategy for Zimbabwe 2016 – 2020

Health education in Zimbabwe is informed by the National Health Strategy for Zimbabwe 2016 – 2020 that acknowledges citizens' right to equity and quality health. In order to achieve this, the strategy aims to deliver quality health services by means of education on preventive methods through the collaborative efforts of the Ministry of Primary and Secondary Education and the Ministry of Health and Child Care.

### 3.10.4 The Zimbabwean Constitution 2013

Section 29 sub-sections 1 and 3 of the Zimbabwean Constitution (2013) commit the state to the provision of basic, accessible and adequate health services; this includes robust health education awareness campaigns as evidenced by the current awareness campaigns on COVID-19. Furthermore, the state is committed to taking all preventive measures within the limits of the resources available to it, including health education and public awareness campaigns against the spread of diseases. This study focused on health education promotion for sustainable learning in the rural ecologies of Zimbabwe to determine the extent to which these commitments are being honoured.

### 3.10.5 The Education Act of Zimbabwe 2013

Section 64, sub-section 1 of the Education Act (2013) stipulates that the Minister of Primary and Secondary Education in consultation with the Minister responsible for health shall draft regulations for the purpose of safeguarding the health of learners at all levels of the education system in Zimbabwe. The Act provides a broad frame of reference to guide the implementation of a number of health related interventions relating to the welfare of learners in the school system such as nutrition, water, sanitation and hygiene, mental health, sexual and reproductive concerns and care and support, including guidance and counselling of all learners. The success of this policy depends heavily on

effective coordination, implementation linkages, learner participation, community participation, ownership, and monitoring and evaluation.

As noted, Zimbabwe has excellent health blueprints but unending economic challenges are hampering health education initiatives. There is massive brain drain of experienced and highly competent health professionals to neighbouring countries and abroad, machinery in hospitals is old and health infrastructure is in a dilapidated state. Teachers are not adequately capacitated to handle health education as there is acute shortage of resources.

### 3.10.6 Collaboration between the Education and Health Ministries in Zimbabwe

The Zimbabwe School Health Policy (2018) acknowledges an inseparable relationship between education and health and the fact that many health challenges can be prevented by appropriate interventions in the early stages of life. There is consensus among Zimbabwean stakeholders on the need for close collaboration between the Ministries of Primary and Secondary Education, and Health and Child Care. The policy provides a framework for health education and health promotion, although this study focused on health education promotion in Zimbabwean rural ecologies. The main thrust of the policy is to ensure that learners at all levels of education develop positive behaviours which they will carry throughout their lives. UNESCO (2014) defines sustainable learning as a process that enables people to acquire knowledge, skills, attitudes and values to shape a sustainable future. Furthermore, sustainable learning requires participatory teaching and learning methods that motivate and empower learners, an issue that was explored in this study. Thus, collaboration between the Education and Health Ministries of Zimbabwe would enhance sustainable learning; hence, the study also explored health education for sustainable learning in Zimbabwean rural ecologies.

## 3.11 CHALLENGES IN IMPLEMENTING HEALTH EDUCATION PROMOTION STRATEGIES IN RURAL LEARNING ECOLOGIES

### 3.11.1 Barriers to implementing Guidance and Counselling

Rural learning ecologies in Zimbabwe face a myriad of challenges in implementing health education promotion strategies. According to Gudyanga (2019), the teaching of Guidance

and Counselling, and Life Skills education in rural secondary schools is negatively impacted by several factors. There is an acute shortage of teaching and learning resources and textbooks for Guidance and Counselling, perhaps due to the high cost (Muguwe & Gwirayi, 2011). Guidance and Counselling is not an examinable subject; hence, teachers responsible for teaching it do not take it seriously (Gudyanga, Moyo & Gudyanga, 2015), yet it is pivotal in making learners aware of health challenges and learning how to overcome them and make informed decisions on issues concerning their health. Manzira (2014) notes that Zimbabwean teachers' timetables are overloaded and Guidance and Counselling is only taught once a week for around 40 minutes at secondary school level, while Life Skills education (at primary school level) is taught for 30 minutes once per week. I am of the view that the time allocated should be reviewed since these two subjects are compulsory and are crucial to learners' health and welfare. As noted previously, teachers responsible for teaching Guidance and Counselling resort to expository rather than participatory approaches (Muguwe & Gwirayi, 2011; UNESCO, 2012b). The apparent boredom suffered by learners in Guidance and Counselling classes can be addressed by using participatory pedagogies; however, teachers lack training in participatory approaches (Muguwe & Gwirayi, 2011).

It should be acknowledged that some trained teachers do not know how to teach Guidance and Counselling while some are shy to teach sensitive topics in sexuality education, arguing that such topics clash with their cultural values and beliefs as it is taboo to talk about sex in most African cultures (Mugweni, Hartel & Phatudi, 2013). Further, Zimbabwe is a multicultural society and teachers cannot be familiar with the cultural values and beliefs of every learner and what might be offensive to a particular culture (Mugweni, Moyo & Phatudi, 2013). All these issues contribute to Zimbabwean Guidance and Counselling teachers failing to fully implement Guidance and Counselling in secondary schools, thus compromising sustainable learning.

### 3.11.2 Barriers to implementing ICT

The ICT revolution has facilitated sharing of diverse kinds of information, included health information (Aryee, 2014). Learners need to be exposed to high quality, relevant, current health related information and this can be enhanced by access to the Internet (Weinstein

& Lopez, 2014). Information and communication technology includes computers, telecommunications and audio-visual systems that enable the collection, processing, transmission and delivery of information and communication to users (Anderson, 2008). Musingafi and Zebron (2014) define ICT as anything which allows individuals to obtain information and communicate with one another while Goyal, Purohit and Bhaga (2011) state that ICT refers to hardware, software, networks and media for the collection, storage, processing, transmission and presentation of information. Information and communication technology can be broadly defined as technologies that are used to convey, manipulate and store data by electronic means, including e-mail, SMS text messaging, video chats (e.g., Skype) and online social media (e.g., Facebook).

The current literature confirms the utilisation of ICT in schools across the world and Zimbabwean schools have also embraced its use (Musingafi & Zebron, 2014; Ndawi, Thomas & Nyaruwata, 2014). However, challenges confront its implementation in rural learning ecologies (Ganyani, 2016). Most rural learning ecologies in the country confront infrastructural challenges, including the lack of appropriate buildings (computer laboratories) and a lack of electricity and optic fibre cables to enhance Internet connectivity due to their marginalisation and remoteness (Ndawi, Thomas & Nyaruwata, 2013). This study explored this issue at the selected rural secondary school. Konjana and Konjana (2013) also highlight that computers and other accessories are beyond the reach of many schools in remote learning ecologies and they struggle to attract qualified computer teachers who are in short supply in Zimbabwe (Konjana & Konjana, 2013). Finally, while ICT utilisation is an effective health education promotion strategy, it can have negative consequences on learners who may spend time on undesirable websites with health damaging content like pornographic material if they are not closely supervised by teachers and parents. In short, rural ecologies confront challenges in accessing modern technologies which are necessary and effective in health education promotion.

## 3.12 CHAPTER SYNTHESIS

This chapter presented a review of related literature on health education promotion with reference to developed countries and developing countries and in the Zimbabwean context. The review was aligned with the research objectives. The difference between

health education and health promotion was explained and the purpose, assumptions, objectives, and principles as well as the strategies utilised in the implementation of health education promotion were discussed. The chapter concluded with the current challenges confronting rural learning ecologies in implementing health education promotion strategies. The following chapter focuses on the research design and methodology employed to explore health education promotion for sustainable learning in Zimbabwean rural ecologies.

# CHAPTER FOUR

# RESEARCH METHODOLOGY

## 4.1 INTRODUCTION

The previous chapter presented a review of related literature on health education promotion in developed and developing countries and in the Zimbabwean context. This chapter spells out the research paradigm, research design, research approach, data generation tools and their justification in the context of this study. The selection of participants and selection procedures as well as ethical considerations are also discussed.

## 4.2 RESEARCH PARADIGM

The word paradigm has its etiology in a Greek word that means a pattern (Hammaberg, 2016). American philosopher Thomas Kuhn (1963, 1970) first used the term to mean a philosophical way of thinking. In educational research, a paradigm has been defined in a variety of ways. According to Hesse- Biber (2017), Kivunja and Kuyini (2017), and Flick (2014), it describes a worldview, a perspective or thinking, a school of thought or a set of shared beliefs that inform meaning or interpretation of research data, or a set of beliefs that guide an action. Denzin and Lincoln (2015) perceive a paradigm as a way of seeing the world that frames a research topic and influences the way a researcher thinks about a topic.

Guided by the study's research questions and the theoretical lenses, namely, the ABA and HBM, I decided to utilise the interpretive (naturalistic/constructivist) paradigm. Merriam and Tisdell (2016) explain that a paradigm reflects a researcher's beliefs about the world he/she lives in and wants to live in. This implies that, a researcher might have positive or negative views about the phenomenon under study based on his/her lived experiences. Merriam and Tisdell (2016) add that a paradigm is made up of abstract beliefs and principles that shape how a researcher sees the world and how he/she interprets and acts within it.

In exploring health education promotion for sustainable learning in Zimbabwean rural ecologies, I had different perceptions of the phenomenon under study. The study enlightened me through the participants' responses on the reality of health education promotion in rural ecologies from their own perspective. Lincoln and Guba (2013) explain that a paradigm guides an action or an investigation. From the above definitions, I define a paradigm as a conceptual lens through which a researcher examines the methodological aspects of a research project to determine the research methods that will be used and how data will be analysed.

Hesse-Biber (2017) and Denzin and Lincoln (2015) identify six paradigms, namely, constructivism, interpretivism, feminism, positivism, post-positivism and critical theory, while Creswell (2014) identifies post-positivism, participatory/advocacy, social constructivism and pragmatism. As noted previously, the key terms used in paradigms (epistemology, ontology, methodology and axiology) are discussed in detail in this chapter. The study is underpinned by constructivism which, according to Creswell (2013, 2014, 2015), seeks to understand the subjective world of human experiences. The main emphasis is on understanding the individual and their interpretation of the world around them.

### 4.2.1 The constructivist paradigm

This study situates itself in the constructivist/intrepretivist paradigm which entails the study of phenomena in their natural settings. This paradigm was appropriate as it relies as much as possible on participants' views on the issue being studied (Lincoln & Guba, 2015; Taylor & Medina, 2013; Gergen, 2015). As this study was a narrative inquiry, the constructivist paradigm was considered most appropriate since I generated data through narratives from two senior teachers, a health professional (nurse), six gender-balanced learners, six parents and a headman at a purposively selected rural secondary school. The selected participants' stories and experiences of health education promotion were socially constructed before, during and after the data generation phase. The constructivist paradigm enabled me to utilise firsthand information from the participants through their narratives to understand the phenomenon explored (health education promotion in the

rural ecologies of Zimbabwe). Individual participants' experiences were captured through the narratives they wrote and told.

According to Creswell (2015), a paradigm comprises four elements, namely, epistemology, ontology, methodology and axiology. It is important to understand these elements as they contain the basic assumptions, beliefs, norms and values of the constructivist paradigm (Mertens, 2015; Silverman, 2017; Denzin & Lincoln, 2015).

#### 4.2.1.1 Epistemology

Epistemology has its etiology in Greek where the word "episteme" means knowledge (Denzin & Lincoln, 2015). Basically, epistemology is concerned with knowledge and how it can be acquired and communicated to other human beings (Punch, 2015). This study situated itself in the constructivist paradigm which entails studying phenomena in a natural setting (a purposively selected rural secondary school). I solicited the participants' understanding of how health education is accessed and promoted through written narratives, narrative interviews and narrative reflections utilising locally available assets in the form of primary and secondary tier assets Asset Based Approach (ABA). Written narratives were produced by the six selected learners, a nurse and two senior teachers while narrative interviews were conducted with the headman and parents and narrative reflections were done by the six learners, a nurse and the two senior teachers. The rural secondary school provided a natural setting as advocated for by Denzin and Lincoln (2015). The contributions from the selected participants enabled me to gain in-depth understanding of health education promotion in Zimbabwean rural ecologies. Collaborative sharing of ideas in interactions before, during and after the data generation process produced deeper understanding of the issue studied.

#### 4.2.1.2 Ontology

This is a branch of philosophy concerned with the assumptions we make in order to believe that something makes sense or is real (Crossman, 2017; Silverman, 2017). It involves the philosophical study of the nature of existence or reality, of being or becoming as well as the basic categories of things that exist and their relations (Denzin & Lincoln,

2015). Philosophical assumptions about the nature of reality are crucial in understanding how a researcher makes meaning of the data gathered.

Relativist ontology implies that the situation being studied has multiple realities and that these can be explored and meaning made of them (Mertens, 2015; Denzin & Lincoln, 2015). Human interaction is key to the outcome of a study using constructivism. I interacted amicably with the participants throughout the study in my quest to explore their understanding of health education promotion in the rural ecologies of Zimbabwe. Their experiences were made explicit through the written narratives, narrative interviews and narrative reflections and these assisted in answering the research questions. I interacted with the participants during the data gathering process and addressed any concerns they had about the study, which resulted in the generation of the desired data. The utilisation of primary, secondary and outside tier assets Asset Based Approach (ABA) contributed to the generation of relevant data.

#### 4.2.1.3 Methodology

In broad terms, a methodology refers to a research design, a method, a procedure and an investigation that is well planned to study a phenomenon (Cohen, Manion & Morrison, 2014; O'Leary, 2014; Silverman, 2017). According to Creswell (2014), a naturalistic methodology in constructivist research implies that a researcher utilises data gathered through interviews, discourses, text messages and reflective sessions with the researcher as a participant observer. I did not interfere with the data gathering process but merely acted as a facilitator. I utilised the data generated to gain in-depth understanding of health education promotion in rural ecologies to enhance sustainable learning. A methodology further implies a systematic process to conduct a research study so as to gain knowledge. The researcher should ask questions like, "How shall I go about obtaining the desired data, knowledge and understanding that will enable me to answer my research question(s) and thus make a contribution to knowledge?" (Creswell, 2015). I conducted this study in a natural setting (a purposively selected rural secondary school). Data was generated using written narratives, narrative interviews and narrative reflections to explore health education promotion for sustainable learning in rural ecologies in Zimbabwe. The qualitative methods employed yielded the desired data. These methods

entailed face-to-face interactions (narrative interviews), enabling me to take note of non-verbal cues including facial expressions.

#### 4.2.1.4 Axiology

Axiology refers to ethical issues that need to be considered when conducting research. This involves defining, evaluating and understanding the concepts of right and wrong (Best & Khan, 2014; Patton, 2015). Axiology addresses the question, "What is the nature of ethics or ethical behaviour?" (Cohen, Manion & Morrison, 2014). Taking into account that all human beings have dignity which must be respected, and the right to make choices, this aspect was fully observed. Pseudonyms were assigned to the participants to protect their identity. Permission to work with the learners was sought from their parents as they are minors. I ensured that no harm befell the participants and they were informed that they were free to withdraw from the study at any time without any repercussions. Confidentiality was maintained and the information provided by the participants was not disclosed to third parties and was only used for academic purposes (Creswell, 2014).

Two theoretical lenses were utilised in this study, namely the Asset Based Approach and the Health Belief Model. Green (2014) defines a theoretical framework as the use of a theory or theories in a study that assists in understanding the generated data. Merriam and Tisdell (2016) note that a theoretical framework provides a researcher with a lens to examine the data, conduct data analysis, interpret the findings, discuss them and make recommendations (narrative analysis was employed to examine the data).

A paradigm defines a researcher's thinking that influences what should be studied, how it is studied, and how the results will be interpreted (Kivunja & Kuyini, 2017). Furthermore, it guides the researcher's choice of methods to be utilised in the research design (Maxwell, 2013; Kivunja & Kuyini, 2017; Okesina, 2020). The constructivist paradigm and the Asset Based Approach and Health Belief Model guided the research design for this study.

## 4.3 THE QUALITATIVE APPROACH

A qualitative approach was chosen as it enabled me to explore and understand the participants' perceptions and views on health education promotion and the manner in which it is accessed and promoted. The utilisation of assets (senior teachers and a health professional) (Asset Based Approach) enabled in-depth understanding of the phenomenon under study. Qualitative research is a Social Science approach that gathers non-numerical data and interprets it to understand social life (Rahman, 2017). It focuses on words and their meaning and is usually conducted in a natural setting (Denzin & Lincoln, 2015). The six learners, six parents, a nurse and a headman provided rich descriptive data in their natural setting, that is, the rural secondary school. The qualitative approach enabled me to explore and understand health education promotion in the rural ecologies of Zimbabwe through the lived experiences of the purposively selected participants. The rich data generated through written narratives, narrative interviews and narrative reflections enabled me to answer the research questions (Rossman & Rallis, 2017).

### 4.3.1 Strengths of the qualitative approach

Qualitative research as a research methodology has both strengths and limitations. O'Leary (2014) notes that its greatest strength is the close relationship between a researcher and the participants, which was established in this study. Trust was established between the researcher and the participants, with initial informal interaction prior to commencement of the study and formal interaction during it. Flick (2014), Choy (2014) and Patton (2015) state that the qualitative approach enables rich and detailed description of the population under study through the use of open-ended questions which reveal new or unanticipated phenomena through broad and open inquiry. Creswell (2015) notes that the use of descriptive and narrative styles enables a researcher to gain insight into a phenomenon. Flick (2014) and Mertiler (2016) concur that qualitative research provides a rich description and picture of a social phenomenon in its context. Furthermore, it requires few participants and does not call for extensive resources. This approach enabled me to gain an insider's view which is often missed by scientific inquirers

(Mertens, 2015). My close interaction with the participants enabled me to explore health education promotion in Zimbabwean rural ecologies.

### 4.3.2 Limitations of the Qualitative Approach

Rahman (2017) highlights that one of the limitations of the qualitative approach is that it is labour intensive. To overcome this limitation, I put in extra effort to produce credible and relevant data. Data collection can also be time consuming and costly (Denzin & Lincoln, 2015). I worked during weekends to collect the data and after hours in the data analysis stage. The research methodologies, namely, the booklets with guiding prompts, were not costly, therefore addressing this limitation. Finally, Walia (2015) and Mertens (2015) assert that qualitative research requires skilled interviewers. While I cannot describe myself as such, the narrative interviews addressed this shortcoming as the participants narrated their experiences while I was a passive listener. I only asked questions on issues I had not comprehended.

## 4.4 RESEARCH DESIGN

A research design provides a researcher with a clear research framework, guides the selection of methods and decisions and provides the basis for interpretation of the research findings (Mitchell & Clark, 2018). This ensured that suitable research methods were used to achieve the objectives set in Chapter one (subsection 1.5 of this study).

McMillan and Schumacher (2014) define a research design as a plan, structure and strategy of investigation to obtain answers in a research study. In similar vein, Creswell and Poth (2018), Yin (2016) and Denzin and Lincoln (2015) state that it is a recipe or blueprint that describes the conditions to generate data. Thus, a research design shows how a researcher generates data (narrative methods), and how data is analysed (narrative analysis) and interpreted to answer the research questions. This qualitative study drew data from narratives shared by the two senior teachers, a health professional, a headman, six learners and six parents in a natural setting (a purposively selected rural secondary school). The research design was the roadmap I utilised to answer the research questions objectively, authentically and as truthfully as possible. This study

adopted a qualitative approach. Common research designs in qualitative research are narrative research, phenomenology, gounded theory, ethnographies and case studies (Hesse-Biber, 2017; Silverman, 2017; Patton, 2015). This study adopted a narrative inquiry in order to obtain unambiguous answers to the research questions that constituted what, where, when, how much, and by what means questions.

### 4.4.1 Conceptualisation of Narrative Inquiry

Clandinin and Connelly (2000), who developed narrative inquiry as a research methodology for qualitative studies, were influenced by twentieth-century philosopher, John Dewey's (1925, 1934, 1938) ideas about life, education and experience as well as those of educational philosophers Johnson (1990) and McIntyre (1991).

According to Estefan and Caine (2016), Clandinin (2013) and Heilmann (2018), narrative inquiry refers to spoken, written and visual stories that can be presented in different discursive formats. In this study, narratives and narrative reflections with two senior teachers, a health professional and six learners were written in prepared booklets with guiding prompts to answer the research questions. Narrative interviews were also conducted with the six parent participants and a headman as they possess narrative literacy. This resulted in the generation of rich data that assisted in achieving the study's objectives.

Dauite (2014) acknowledges that stories (narratives) constitute the heart of narrative inquiry that involves eliciting and documenting stories using unstructured interviews, storytelling, field notes of shared experiences, and autobiographies (Eliot, 2014). A narrative researcher systematically gathers, analyses and represents participants' stories (narratives) as told by them (Robert & Shanai, 2014). Narrative inquiry was found to have a number of advantages in this study. This qualitative methodology enables rich descriptions of experiences by participants and can be used an effective communication tool with a larger audience (other learners and the community). Narrative inquiry can reveal historically significant issues that are not recorded elsewhere (Creswell, 2014); hence, the use of narrative reflections in this study.

Furthermore, this methodology was relevant to this study as it catered for the level of literacy of each group of selected participants. Written narratives by the selected six gender-balanced learners, a nurse and two selected senior teachers provided rich information on the past and present in exploring health education promotion for sustainable learning in the rural ecologies of Zimbabwe. As highlighted by Clandinin and Caine (2013), the narrative researcher should be an effective listener who is able to establish a research relationship with the participants as both the researcher and the participants have a voice with which to tell their stories. I listened attentively to the narratives told by the selected participants and thoroughly studied their written narratives. The narratives were transcribed and a research relationship was established as the purpose and objectives of the study were explained to all the selected participants.

### 4.4.2 John Dewey's three dimensional narrative structure

Based on Deweyan theory (1938), Clandinin and Connelly (2000, 2010) proposed three aspects of the narrative approach, namely, interaction (personal and social), continuity (past, present and future), and situation (place). This three-dimensional narrative approach is central to Dewey's philosophy of experience in a personal and social context and has had a strong influence on narrative inquiry in many disciplines, including education. This study utilised narrative inquiry as its research design. Dewey argues that to understand people, one needs to not only examine their personal experiences but also their interactions with others. This study examined the personal experiences of the participants by means of my interactions with them through written narratives, narrative interviews and narrative reflections that explored health education promotion in the rural ecologies of Zimbabwe. These three pillars of the narrative approach and how they were applied in this study are discussed below.

#### 4.4.2.1 Interaction

Interaction involves both personal and social aspects of experiences. In this study, personal implies looking inward to the internal condition of the participants by exploring their feelings, hopes and moral disposition while social involves studying the external conditions in the environment with other people and their intentions, points of view and assumptions relating to the phenomenon under study (Clandinin, 2013). Using this

framework, a narrative researcher analyses the stories (narratives) of both the personal experiences of a storyteller and his/her interactions with other people (Clandinin, 2013; Clandinin, Murphy & Huber, 2013; Clandinin & Connelly, 2010). Other people (participants) may have different points of view and intentions which might inform the analysis. To answer the research questions, I interacted with all the selected participants before and during the data gathering phase in their natural setting (the rural secondary school) to explore health education promotion for sustainable learning in Zimbabwean rural ecologies through the three data generation methods, namely, written narratives, narrative interviews and narrative reflections. Written narratives were conducted with six learners, two senior teachers and a nurse; narrative reflections were conducted with six learners, two senior teachers and a nurse and narrative interviews were conducted with six parents and a headman. The data that was generated enabled in-depth analysis. Jones (2013) asserts that narratives (stories) used in narrative inquiry inform analysis.

#### 4.4.2.2 Continuity

Continuity, which is central to narrative inquiry, is achieved by thinking back to remembered feelings, experiences and stories from earlier times (the past). In this study, I also maintained continuity by looking at current experiences, feelings and stories as revealed in the responses of the selected participants (present). Looking forward to possible experiences from the participants' perspective further enhanced continuity and assisted in answering the research questions. Thus in this study, I unearthed the participants' past, present and possible future experiences to explore health education promotion in the rural ecologies of Zimbabwe using the research instruments used in this study. In analysing a story, a narrative researcher considers the past and present of the storyteller and what is likely to occur in the future (Estefan, Caine & Clandinin, 2018; Clandinin & Connelly, 2000, 2009; Clandinin & Caine, 2013). People shape their daily lives and interpret the past, present and future through stories. This study interrogated the selected participants' past experiences of health education promotion in Zimbabwean rural ecologies in order to understand the challenges from their perspective and to empower them (Asset Based Approach) to take control of their health and make informed

health decisions by utilising the principles of the two theories, namely, the Asset Based Approach and the Health Belief Model.

#### 4.4.2.3 Place

The place needs to be established and understood when analysing a story. Dauite (2014) defines a place as a specific concrete, physical topological boundary of a place where inquiry and events occur. It therefore refers to the context where a research study is conducted. It should be acknowledged that all events occur at some place (Clandinin & Caine, 2013). This study was conducted at a purposively selected rural secondary school in Masvingo province, Zimbabwe to explore health education promotion so as to enhance sustainable learning. Narrative inquiry advocates the use of a natural setting. Leedy and Omrod (2016) highlight that human identities are inextricably linked to experiences in a particular place or places and stories are told based on these experiences (Eliot, 2014). As a narrative inquirer, I interacted with the selected participants (six learners, six parents, a nurse, two senior teachers and a headman) at an appropriate place (the purposively selected rural secondary school) to explore how health education is accessed and promoted in rural ecologies in Zimbabwe. This was achieved by utilising the principles of the two theoretical lenses that underpinned this study, namely, the ABA and the HBM. The participants' contributions in the form of written narratives, narrative interviews and narrative reflections assisted in the development of this study and in answering the research questions.

##### 4.4.2.3.1 Strengths and limitations of Narrative Inquiry

Narrative inquiry has both strengths and limitations. Heilmann (2018) and Robert and Shanai (2014) note that one of its strengths is that that it is easy to get people to tell their stories and that they tend not to hide the truth when narrating them in a natural setting. This study was conducted in a rural context where the selected participants freely gave their narrative accounts of the phenomenon that was explored in a familiar environment. The data generation methods (written narratives, narrative interviews and narrative reflections) catered for different levels of literacy which generated relevant data to answer the research questions. Padgett (2012) asserts that narrative inquiry provides an in-depth, detailed view of a situation or experience, which is another strength of this qualitative

research methodology. Through the data generation methods, the selected participants revealed how health education is accessed and promoted, including its implementation challenges in rural ecologies. Robert and Shanai (2014) also note that narrative inquiry can reveal historically significant issues that are not recorded elsewhere. The narrative interviews and narrative reflections also revealed some of the participants' health beliefs (HBM) based on traditional culture, which originated in the past and persisted in the present. This made me conscious that talking about sex is considered taboo in most African cultures.

Liamputtong (2009) highlights that narrative inquiry allows participants to use their own words, which reduces the bias in data. The recognition of participants'' voices in this research methodology makes it a unique method as stories do not originate from nowhere. Rather, they are a means of accessing inner truths which is one of the greatest strengths of narrative inquiry. Furthermore, this research methodology gives more voice to marginalised communities in resolving their challenges which dovetails with the Asset Based Approach.

However, narrative inquiry is time consuming, making it difficult to have a large number of participants. To overcome this limitation, this study had a total of 16 participants who provided valuable data that enabled the research questions to be answered. Though time was a limiting factor, I worked long hours to ensure that the analysis was thorough and to come up with an informed position on the phenomenon that was explored. Narrative inquiry relies heavily on the participants' memory (Liamputtong, 2009); therefore, triangulation of information is recommended. I asked some additional questions to iron out issues that I had not fully comprehended. I also went back to the participants with the narrative draft which had a beginning, middle and an end in order to ensure that important details of their lived experiences were accurately captured (member checking).

### 4.5 RESEARCH CONTEXT

This study was conducted at a rural secondary school in Masvingo North District in Masvingo Province, Zimbabwe. This rural community consists of approximately 150 households. The learners' parents are not well educated and some are not aware of current developments in the health sector as the community has no access to electricity

and Internet connectivity and poor television signals, compromising access to current information. The community lacks adequate transport and poor road infrastructure compromises sustainable learning and social wellbeing. The community is highly traditional and tends to respect traditional structures when it comes to issues pertaining to health. Statistics indicate that a few of the parents studied up to Form 4. The secondary school is surrounded by a few feeder primary schools. Total learner enrolment is 382. There are 18 qualified teachers, 11 of whom hold degrees. These highly-qualified teachers were knowledgeable on health issues and their knowledge assisted in answering the research questions for this study. The school is under-resourced; teachers confirmed that there was acute shortage of learning resources (books). Furthermore, it has no electricity or Internet connectivity, compromising access to current health literature. From my informal interactions with the teaching staff, I gathered that the pass rate is low and the rate of learner absenteeism is high. Due to poverty, most parents are unable to pay school fees. Some learners stay away from school due to health related challenges as the health delivery centre is some distance away and is under resourced. In 1993, Guidance and Counselling was introduced as a compulsory subject in Zimbabwe in response to growing number of HIV/AIDS and other sexually transmitted infections among secondary school learners. Chief Education Circular Number 16 of 1993 (MoPSE, 1993) states that it should be taught by Guidance and Counselling teachers in secondary schools where health issues and life skills issues are engaged with.

## 4.6 SELECTION OF PARTICIPANTS AND SELECTION PROCEDURES

### 4.6.1 Participants in this study

The table shows that there were nine male participants and seven female participants. There was balanced gender representation among the parents, learners and senior teachers who participated in this study. Consistent with traditional leadership in many parts of Africa (Mpofu, 2008), including Zimbabwe, there was no female traditional leader in the area.

**Table 4.1: Pseudonyms, category and gender of participants**

| PSEUDONYM | CATEGORY | GENDER | NUMBER |
|---|---|---|---|
| Gushungo | Nurse | Male | 1 |
| Mai Kudzie | Senior teacher | Female | 1 |
| Mukanya | Senior teacher | Male | 1 |
| Grace | Learner | Female | 1 |
| Eusie | Learner | Female | 1 |
| Rumbie | Learner | Female | 1 |
| Mukudzeyi | Learner | Male | 1 |
| Taku | Learner | Male | 1 |
| Munashe | Learner | Male | 1 |
| Chihera | Parent | Female | 1 |
| MaMoyo | Parent | Female | 1 |
| MaNyoni | Parent | Female | 1 |
| Chitova | Parent | Male | 1 |
| Chirasha | Parent | Male | 1 |
| Chibwa | Parent | Male | 1 |
| WaMambo | Headman | Male | 1 |
| Total | | | 16 |

This study employed purposive selection which Fraenkel, Wallen and Hyun (2013) note is often preferred by qualitative researchers as they can use their personal judgement to recruit participants that they believe will provide the data they need. It entails selecting participants that are knowledgeable about the phenomenon under study. Six parents, six learners, two senior teachers, a health professional and a headman were purposively selected.

### 4.6.2 Selection of participants and procedures

Selection refers to the procedures and parameters used to choose participants for a research study (Crossman, 2017). Cohen, Manion and Morrison (2014) assert that selection refers to the procedure a researcher uses to select participants, places or things

to study. The selection criterion was participants who were knowledgeable on health education promotion for sustainable learning in Zimbabwean rural ecologies and I used my personal judgement in relation to the value they would bring to this study. Heterogeneous selection was adopted as it provides a diverse range of ideas and lived experiences of the phenomenon under study (Leedy & Omrod, 2016). This enabled a large volume of data to be gathered (Okessina, 2020) to achieve the study's objectives. A rural secondary school was selected since it is in a rural context which dovetailed with my study.

### 4.6.3 Profiles of the participants

There is no consensus in the literature on the number of participants adequate for research purposes, with different recommendations on the number required to reach saturation point. Patton (2015) recommends two to ten participants, while Creswell (2015) indicates ten. Merriam and Tisdell (2016) state that the number has to be manageable in order for the researcher to be able to thoroughly analyse the findings. With this in mind, a total of 16 participants was considered sufficient to reach data saturation. It is important to profile the participants in order to ensure that data generation produces desirable results. The following sub-section presents the profiles of participants and how and why they were selected.

#### 4.6.3.1 Mukanya - senior male teacher

As a gatekeeper, the head of school assisted in the selection of an experienced senior male teacher responsible for teaching Guidance and Counselling (a compulsory subject at secondary school). I secured an appointment with the school Head and explained the purpose of the study and why the school was selected. At our meeting, I handed him a copy of the letter of permission from the Ministry of Primary and Secondary Education to conduct the study. I requested that he sign a letter of consent, although he did not participate in the study. As the manager of the school, the Head facilitated the selection of the male senior teacher who was selected as he spends much time with learners addressing all issues pertaining to health, safety and academic issues and is also a link between learners and the school administration. I met with this teacher, and after I explained the purpose of the study, he agreed to participate. This participant provided

valuable information on how health education is accessed and promoted as well as challenges in the implementation of Guidance and Counselling and health education programmes.

#### 4.6.3.2 Mai Kudzie - female senior teacher

The Head of school also assisted in the selection of an experienced senior female teacher responsible for teaching Guidance and Counselling. The same process was followed as with the senior male teacher and the female senior teacher agreed to participate in the study. She provided valuable information with regard to how health education is accessed and promoted in rural ecologies and the challenges encountered in implementing Guidance and Counselling and health education programmes.

#### 4.6.3.3 Nurse

A health professional (nurse) who is responsible for promoting health at the health delivery centre was also selected. Nurses have different responsibilities and he specialised in the promotion of health in schools and communities. The Provincial Medical Director for Masvingo played a key role in the selection of a nurse for this study. I secured an appointment with the Provincial Medical Director and showed him the letter from the Ministry of Primary and Secondary Education granting me permission to conduct the study. He booked an appointment for me to meet the nurse responsible for health education in the community where this study was conducted. He attends to all issues regarding learners' health concerns and works collaboratively with senior teachers. At our meeting, I explained the purpose of the study and the nurse gave his consent to participate. The nurse provided valuable information on health education promotion programmes in schools and the community, as well as the challenges that hinder successful implementation of such programmes.

#### 4.6.3.4 Learners

Six Form 3 gender-balanced learners were selected to participate in this study. The Form 3 stream consisted of three classes, namely, Form 3A, 3B and 3C and two learners, a male and female, were selected from each class. Their ages ranged from 15 to 17. This

Form was chosen because it consisted of adolescents who had reached puberty and the girl learner dropout rate was somewhat high. Since teachers interact with learners on a daily basis, they selected learners whom they believed would provide relevant and valuable information on how health education is accessed and promoted, including the current state of health education promotion in the rural learning ecology. I met with the selected learners, explained the purpose and objectives of the study and addressed the issues they raised. I then gave the learners letters to take to their parents to read requesting their permission for their children to participate as they are still minors. These letters were returned to the Head of school. Once the parents consented, the learners signed letters of consent. These learners provided very useful information on how the school curriculum made them health conscious through Guidance and Counselling.

#### 4.6.3.5 Parents

| NAME OF PARENT | GENDER | NAME OF CHILD & CLASS | EDUCATIONAL LEVEL | CONTRIBUTION | METHOD |
|---|---|---|---|---|---|
| Chihera | Female | Eusie (3A) | Form 2 | Identified strategies utilised in accessing and promoting health education in rural ecologies including challenges in its implementation | Narrative interview |
| MaMoyo | Female | Munashe (3B) | Grade 7 | | Narrative interview |
| MaNyoni | Female | Taku (3C) | Grade 7 | | Narrative interview |
| Chitova | Male | Grace (3A) | Form 1 | | Narrative interview |
| Chirasha | Male | Mukudzeyi(3B) | Grade 7 | | Narrative interview |
| Chibwa | Male | Rumbie (3C) | Form 2 | | Narrative interview |

**Table 4.2 Profiles of parents**

Parents have faith and trust in teachers and treat strangers with suspicion, especially in rural areas. Because of his position, the Head of school knows most parents in the community through formal and informal interactions. He assisted by invited six parents to the school and explaining the purpose of my study and my intention to meet with them and invite them to participate. I then met the parents in the presence of the school Head and explained the purpose and objectives of my study and gave them letters of consent.

The parents' contributions added value to this study. The selected parents took part in narrative interviews. The parents were also important in this study as they gave consent for their children to participate.

#### 4.6.3.6 Headman

No programme can take place in the headman's area of jurisdiction without his approval. Furthermore, rural Zimbabwean communities adhere to traditional practices. It was thus important to involve the headman in this study. The Head of school assisted in the selection of the village headman for this study as, by virtue of his position, he knows the community leaders in the locality. He scheduled an appointment for me to meet the village headman. At the meeting, I informed the headman of the purpose of my study and why it was important for him to participate. The village headman also took part in narrative interviews.

### 4.6.4 Benefits of participants from heterogeneous backgrounds: a critical reflection

The motivation for a heterogeneous group of participants is to gain greater insight into the phenomenon under study from different angles (Polit & Beck, 2014) in a particular context. The 16 participants included senior teachers, parents, learners a nurse and a headman who provided valuable information through written narratives, narrative interviews and narrative reflections. The literature notes that a heterogeneous selection assists in capturing and describing themes that emerge in a research study, resulting in a high quality, detailed description of the phenomenon under study (Eitkan, 2016) which is this study was health education promotion for sustainable learning. It enabled in-depth understanding of how health education is accessed and promoted, as well as implementation challenges, thus enabling me to answer the research questions. The findings do not apply to a particular group of participants, but rather present a holistic understanding of health education promotion as experienced by participants from diverse backgrounds.

## 4.7 DATA GENERATION METHODS

This study utilised three data generation methods, namely, written narratives, narrative interviews and narrative reflections.

## 4.8 DATA GENERATION METHODS AND PROCEDURES

Data generation is an important aspect of research which enables a researcher to answer the critical research questions (Morgan, 2012). Polit and Beck (2013) acknowledge that data generation is a distinct and systematic method of gathering information relevant to the research purpose or to specific objectives and questions. Silverman (2017) states that the use of two or more data generation methods enhances understanding of the phenomenon under study. This study employed three methods applicable to narrative inquiries, dovetailing with the research design. As discussed below, written narratives, narrative interviews and narrative reflections were employed to generate data on health education promotion in Zimbabwean rural ecologies.

### 4.8.1 Written narratives

A narrative is a term assigned to any text within a mode of inquiry (Neuman, 2014) with a specific focus on stories told by participants. According to Eliot (2014) and Keats (2009), narratives can be both a method and a phenomenon. In this study, narratives were used as a methodology by two senior teachers, six learners, six parents, a headman and a health professional to generate data on health education promotion in rural ecologies in Zimbabwe to enhance sustainable learning. Narrative as a research methodology has been used in Sociology, Gender Studies and Education (McAlpine, 2016). Stories of experiences are shaped through discussions between a researcher and participants in a dialogue (Keats, 2009). The selected participants recounted their lived experiences by responding to the guiding prompts in booklets I prepared for each participant. The data was used in the analysis stage which revealed the current situation regarding health education promotion, including how it is accessed and promoted in the rural ecologies of Zimbabwe.

A synonym for the term “narrative” is “story” or history (Jovchelovitch & Bauer, 2000). Riessman (2008) states that a narrative connects ideas, concepts and events. It further connects events by showing patterns relating to each other or specific ideas, themes and

concepts (McAlpine, 2016). Clandinin and Connelly (2000) and Pineager and Dayness (2007) describe a narrative as a report of related events presented to listeners in a logical sequence. In this study, written narratives were conducted with two senior teachers, a nurse and six gender-balanced learners in a natural setting, that is, a rural secondary school. These narratives provided a clear picture of how health education is accessed and promoted, the current situation regarding health education promotion in the rural ecologies of Zimbabwe and challenges in implementing health education promotion strategies.

The literature identifies five types of narratives, namely, descriptive, view point, historical, linear and nonlinear narratives (McAlpine, 2016). Written narratives, which this study employed, offer a number of advantages. They provide a platform for interaction between a researcher and participants (McAlpine, 2016; Holstein & Gubrium, 2012) and a space to explain issues not fully understood by participants. Some individuals are not good at spoken utterances but good at expressing their ideas on paper (Riessman, 2008).

Since narratives are less frequently used as a data generation method and were not known to many of the participants, I met with them to explain the methodology and the procedures that would be used. I then gave the participants invitation letters and consent letters as well as in-depth information on how to respond. I began with written narratives as this gave me ideas on what and how to probe for information in the narrative interviews that followed. The narrative reflections came last. A schedule with guiding questions was prepared in booklets in which they wrote their responses. The six learners were given a week to respond and they went back and forth to questions while they were in still possession of the narratives. The two senior teachers and the nurse were given an hour to respond to written narratives and an opportunity was also offered to review the narratives at home. They were also given the option of adding any further information they thought of later to the narratives. I held two sessions with the two senior teachers and the nurse.

### 4.8.2 Narrative Interviews

Interviews are one of the staple techniques in qualitative research that provide access to what is in a person's mind and what he/she thinks (Adams, 2015, Flick, 2014). There are three types of interviews, namely, structured, semi-structured and unstructured (Silverman, 2017). In this study, semi-structured interviews were used. In addition,this study also utilised narrative interviews as one of its data generating methods. According to Kirkpatrick (2015), a narrative interview yields rich, complex data and the informant (interviewee) takes control of the interview and speak freely in an unguided manner. Narrative interviews are thus a means of collecting people's own stories about their experiences of a phenomenon (Herman, 2009). In this study the issue explored was health education promotion for sustainable learning in Zimbabwean rural ecologies. A narrative interview encourages and stimulates an interviewee (who in narrative interviews is called an informant) to tell a story about a significant event in their life with minimum intervention from the interviewer in a natural setting. The story is generated through an interview. Instead of placing emphasis on a question-answer format, the narrative interview provides an opportunity for the informant to narrate his/her experience for the researcher (Bauer, 1996; Ziebland, 2013). This represents a shift in the way roles are conceptualised from interviewer-interviewee to narrator-listener (Kirkpatrick, 2015). The narration schema substitutes the question-answer schema which characterises most interviews (Gubrium & Holstein, 2009).

In this study, the six parents and a headman narrated their experiences of health education promotion in Zimbabwean rural ecologies and they were audio-recorded with their consent. While the narration process was in progress I did not interfere, but listened attentively, jotting down notes which were later used to develop questions for clarification. I used non-verbal encouragement such as smiling and nodding to encourage the interviewee (informant) to talk freely. Informants were notified in advance of the date of the meeting and were informed of the context of the study and the procedure involved in a narrative interview. The narrative interview consists of four phases, with different rules on how to activate a story schema; how to elicit narrations from informants once narration has started; and how to keep the narration going (DominSoru, 2013, 2016; Riessman, 2008). The table below summarises the basic concept of the narrative interview and its rules and procedures.

| PHASE | | RULES |
|---|---|---|
| 1. | Preparation | Exploring the field |
| | | Formulating exmanent questions |
| 2 | Initiation | Formulating initial topic for narration |
| | | Using visual aids |
| 3 | Main narration | No interruptions |
| | | Only non-verbal encouragement to continue |
| | | story-telling . Wait for the code |
| 4. | Questioning phase | Only 'What happened then?' |
| | | No opinion and attitude questions |
| | | No arguing on contradictions |
| | | No why questions |
| | | Exmanent into immanent questions |
| 5. | Stop recording | Why questions allowed . |
| | | Memory protocol immediately after interview |

**Table 4.3 Basic phases of the narrative interview**

Following the above rules results in an informant being willing to tell his/her story freely and elicits rich narration on the topic. During preparation, which is time consuming, the researcher compiles “exmanent questions” that refer to research questions (Kirkpatrick, 2015). The exmanent questions reflect the interests of the researcher while immanent issues, that is, the themes and topics, appear in the narration by the informant (Kirkpatrick, 2015). This is when the interviewer informs the selected informants of the date of the interview and provides information on the narrative interview procedure. In phase one, the initiation phase, the context of the investigation is explained in broad terms to the informant (Riessman, 2008; Scarneci, 2012) and their consent to audio record is sought. The informants were made aware that the audio recording was solely for research purposes and would not be divulged to other persons (Silverman, 2017). I informed the

informants of the narrative interview procedure and also told them after establishing good rapport with them that I was not going to interrupt their narrations (Silverman, 2017).

The second phase is the narration phase (Riessman, 2008) where the informant takes control of the interview through personal narration (Bauer, 1996; Clandinin & Connelly, 2011). His/her perspective is best revealed through the use of language in giving a personal account of the issue being explored (Estefan, Caine & Clandinin, 2016). During the narration phase, I attentively listened to the narration and waited for informants to signal the end of the story, while I took notes for later questioning. I restricted myself to listening and used gestures as a sign of interest.

Phase three is the questioning phase where the narration comes to a "natural end", opening the window for questioning (Kirkpatrick, 2015; Ziebland, 2013). This was when I asked the immanent questions based on the issues narrated by the informants. I avoided cross-examining questions and did not point out contradictions noted. In this way, stage I elicited new and additional information beyond the self-generating schema of the stories ((Scarneci, 2012; Rosenthal, 2004). I audio recorded phases one, two and three and thereafter switched off the audio recorder. According to Clandinin, Murphy and Huber (2012), the fourth phase is known as "concluding talks" which interesting discussions may emerge in a relaxed atmosphere and informants are asked to shed light on issues noted.

Like any data generation method, narrative interviews have advantages and limitations. According to DominSoru (2013, 2016), they can be used to investigate how people interpret their own experiences in relation to broader social and cultural contexts. A major advantage is that they are suitable for people at all levels of literacy. Furthermore, they enable people to talk freely and enhance interaction between the informant and the interviewer (Herman, 2009). However, narrative interviews generate a lot of data and can be time consuming to collect and analyse (Clandinin & Connelly, 2011; Clandinin & Caine, 2013). Furthermore, the amount of data collected varies and less data may be gathered if the informant is reluctant to speak (Kirkpatrick, 2015). This might happen if the informant is not comfortable with the interviewer or is uncomfortable with being recorded. The narrative interviews lasted for 45 minutes to an hour and were conducted during

weekends to avoid disrupting the teaching and learning programme, with permission being sought from the gatekeeper to use the school premises.

### 4.8.3 Narrative reflections

Narrative reflections are memory based (recounting an experience) (Barkhuizen, 2012). Narrative reflection is a process of looking back to one's past, to reflect on it and narratively speak or write about it (Barkhuizen & Wette, 2008). Charon and Herman (2012) define narrative reflections as a piece of writing, or personal writing or a personal record that describes an experience. Most narrative reflections are in written form (Pennebaker & Evans, 2012). Reflective writing gives meaning to an experience as it links past and present experiences and prepares the individual for the future. Narrative reflections help one to reflect on where one came from, where one is and where one is going (Barkhuizen, 2014). They enhance sustainable learning as people are able to question some of their decisions. I began by explaining this research methodology to the selected participants and then gave each participant a prepared booklet with guiding prompts. The participants read the prompts individually and asked questions on issues they did not understand with an option of voluntary withdrawal. I then asked the participants to respond during their spare time at home or school. After a week, I collected the booklets for analysis.

## 4.9 DATA ANALYSIS AND PROCEDURES

Qualitative data analysis is defined by Polit and Beck (2013) as working with data, organising it, breaking it down into manageable units, coding, synthesising and searching for patterns. Crossman (2017) describes data analysis as the process of assessing and analysing data in order to reach conclusions. Thus, data analysis involves the systematic organisation and synthesis of research data. The process begins with categorisation and organisation of data in search of patterns, critical themes and meanings (Yin, 2014). In this study, narrative analysis was utilised to analyse complex data generated by means of written narratives, narrative interviews and narrative reflections. The narrative interviews were audio recorded with the permission of the selected participants. These

responses were analysed, compared and categorised, and subsequently triangulated and interpreted to draw conclusions.

### 4.9.1 Conceptualising narrative analysis

A narrative approach is associated with the constructivist/interpretive paradigm (Rodgriguez, 2016) that aims to understand how individuals interpret their everyday lived experiences (Riessman, 2008). The narrative approach best suited this study that was underpinned by the constructivist paradigm. Narratives/stories open windows into the individual and the social world (Pavlopoulos & Figgou, 2015). Stories are deeply ingrained in humans and humans are story telling animals. It is through narrativity that they come to know, understand and make sense of the social world (Elliot, 2014). Thus, narratives portray or represent life experiences in a transparent manner. In this study, written narratives were produced by six learners, a nurse and two senior teachers to generate data on health education promotion in Zimbabwean rural ecologies.

The literature offers several definitions of narrative analysis. As a point of departure, data analysis is the process in which the gathered data are structured and organised by labelling and coding (Best & Khan, 2014). This study utilised narrative analysis as its analytic framework. Creswell (2014) defines narrative analysis as a family of approaches to diverse kinds of text which have a common storied approach. According to Mey and Dermuth (2015), narrative analysis is a genre of analytic frames whereby researchers interpret stories that are told within the context of a research study or are shared in everyday life. Narrative analysis is therefore a method of interpreting stories in order to answer the research questions.

The narratives told by the selected participants in written and oral form assisted in establishing how health education is accessed and promoted in the rural ecologies of Zimbabwe. Furthermore, the written responses revealed the current situation in these ecologies, including challenges in implementing health education promotion strategies. Scholars who conduct narrative analysis make diverse yet substantial and meaningful interpretations and conclusions by focusing on different elements (Silverman, 2017; Dauite, 2014). These include how a story is structured, what the story serves to portray

and the substance of the story. Rodgriguez (2016) states that narrative analysis is a cluster of analytic methods to interpret texts and visual data that have a storied form.

In this study, the written narratives by the six learners, two senior teachers and a nurse were analysed. A common assumption of narrative methods is that people tell stories to organise and make sense of their lives and their stories are functional and purposeful (Dauite, 2014). As the main focus of narrative analysis is to analyse stories told and lived, Dauite (2014) highlights that the core activity is reformulation of stories based on their different experiences. As a narrative analyst, my main focus in this study was centred on the stories/narratives told by the selected participants and their lived experiences from the past to the present of health education promotion for sustainable learning in Zimbabwean rural ecologies. Even if individuals have little formal training and struggle with reading literacy (the six selected parents), they usually have narrative literacy and can tell a story of some kind if asked; hence, narrative interviews were included in this study.

#### 4.9.1.1 Narrative analysis framework and procedure

In narrative analysis, the participants' stories are analysed and then re-storied into a framework that will make sense to the reader (Silverman, 2017; Daiute, 2014; Riessman, 2008). In the process of re-storying, stories are examined for key elements such as time, place, plot and scene (Rodriguez, 2016; Riessman, 2008). The stories that people tell do not flow in chronological order; thus, they are re-written by placing them in such order (Flick, 2014; Bryman, 2012). This chronology, with its focus on sequence, differentiates narrative analysis from other types of data analysis (Dermuth & Mey, 2015). I followed this framework as in a chronology, narratives/stories have a beginning, middle and an end.

#### 4.9.1.2 The modes of narrative analysis

The literature identifies four modes of narrative analysis (Silverman, 2017; Dauite, 2014; Best & Khan, 2014), namely, thematic, structural, interactional and performance analysis. In thematic analysis, the emphasis is on the context of the text, that is, "what is said" more than "how" it is said; the "told" rather than the "telling" (Silverman, 2017). In structural

analysis, the emphasis shifts to the telling, the way a story is told (Riessman, 2008). By selecting a particular narrative device, the teller makes a story persuasive. Interactional analysis focuses on the dialogic process between the teller and listener. Narratives of experience are related in particular settings such as at schools or in court situations where the story teller and questioner participate in a mutual conversation (Dauite, 2014; Elliot, 2014). Attention to thematic content and narrative structure are not abandoned in the interactional approach, but the interest shifts to storytelling as a process of co-construction where a listener and a teller collaboratively create meaning (Riessman, 2008). Stories of experience are organised around the world of the teller, possibly in question and answer exchanges. This approach requires transcripts that include all participants in a conversation. The prepared booklets with guiding prompts facilitated responses from the participants that enabled me to come up with an informed position on the phenomenon under study. This study used Riessman (2008), thematic analysis to analyse the narratives written by the purposively selected participants.

#### 4.9.1.3 Practical steps in narrative analysis

In the analysis stage of this study, I familiarised myself with the data in the written narratives by the two senior teachers, a nurse and the six learners (Choy, 2015). Familiarisation means getting to know the data and taking initial notes. In reading and re-reading the written narratives, I looked for past and present experiences of health education promotion to establish whether rural ecologies in Zimbabwe were adequately health informed and health conscious from the past to the present. Most rural communities are marginalised and have limited access to health information; therefore, looking at past and present experiences from the participants' perspective enabled me to come up with an informed position.

The written narratives were transcribed immediately following their collection in order to avoid loss of focus and content (Silverman, 2017). Transcription began with narratives of the six learners, followed by those of the two senior teachers and the nurse.

The narrative data was then manually broken down and re-arranged to enable the examination of themes. Data for each data generating method, namely, written narratives,

narrative interviews and narrative reflections, was broken down separately. I also verified that the themes which emerged were present in the data (Elliot, 2014). Following examination of the ideas and themes that emerged, data coding was undertaken for each set of data. Data coding is the process of labelling and organising qualitative data in order to identify different themes and relationships between them (Braun & Clarke, 2019). I read through all the data to get a sense of it. I then proceeded line by line to code as much as possible. During coding, I identified important sections of text and attached a label to index them as they related to the theme or issue in the data. Thematic analysis, which was used in the analysis stage (Riessman, 2008) requires the use of transcripts and these were in the form of the booklets which I prepared and gave the participants to write their responses. The tellers (participants) and the listener (researcher) played a key role in the analysis stage. The participants and I jointly created meaning.

## 4.10 ETHICAL ISSUES

Ethics are indispensable in educational research. According to Mertens (2015), Elliot (2014), Stephens (2013) and De Vos et al. (2011), ethics are a set of moral principles which are suggested and subsequently accepted by an individual or group. In research, ethical principles set out rules, behavioural expectations and ideal conduct towards selected participants, employers, other researchers and students (learners).

Informed consent is critical and potential participants should agree to participate in a study and should be furnished with all the details about a study such as benefits and procedures (Cohen et al., 2017; Best & Khan, 2014; Stephens, 2013). Informed consent involves a participant's complete understanding of the procedures (Silverman, 2017; Denzin & Lincoln, 2015; Mertens, 2015; Best & Khan, 2014). The participants selected for this study were informed in advance before commencement of the study. I wrote letters to all the purposively selected participants, namely, two senior teachers, six parents, six learners, a nurse and a traditional leader (headman), providing details on the study and requesting that they consent to participate (Appendices E, F, G, H and I). I further sought permission from the learners' parents to allow their children to participate in the study since they are

minors. It is important to stress that participation is voluntary and that one has the choice of withdrawing at any stage (Creswell, 2014).

The principle of anonymity was observed by not disclosing the names of participants or that of the selected rural secondary school in the analysis and discussion of the findings (Cohen et al., 2017; O'Leary, 2014). Pseudonyms are used to protect the identity of the selected participants (Best & Khan, 2014). I informed the participants in writing and verbally that their right to anonymity was fully guaranteed (Choy, 2015; Creswell, 2014). Confidentiality involves protecting confidential information such as personal records or secrets (Mertens, 2015; Neuman, 2014; O'Leary, 2014). I ensured confidentiality by not divulging the names of participants (Crossman, 2017; Bell, 2012). I also abided by the principle of non-maleficence (Cohen et al., 2017; Leedy & Omrod, 2016) which holds that participants must not be subjected to any form of harm, be it physical, emotional or psychological. No form of harm was inflicted on the purposively selected participants. Beneficence refers to benefits that can be accrued from a research study (Akaranga & Ongang'a, 2013). All the participants were informed that there would be no financial benefit from participation in the study, but participation promised exposure to new research methodologies as well as empowerment on health issues. The study's results will also would benefit policy makers in crafting health-friendly legislation. Furthermore, beneficence means doing good while minimising the risk of harm to the individual (Mugenda, 2011). Upon completion of this study, I will inform the selected participants of the benefits of the research findings such as making them aware of health related issues and gaining more control of their health in a bid to enhance sustainable learning in the rural ecologies of Zimbabwe.

### 4.10.1 Permission to undertake the study

Permission to undertake this study was sought from the Research Ethics Committee of the University of KwaZulu-Natal (Appendix A), where I am registered as a PhD student. Permission was also obtained from the Ministry of Primary and Secondary Education through the Provincial Education Director (Appendix B), the District Education Office in Masvingo Province (Appendix C), and the Head of the selected school in Masvingo Province where the two teachers (male and female), and six learners were located. The

Head of school was particularly important as he is the gatekeeper of the selected school, Thealthough he was not a participant. All academic and non-academic activities should have his permission. He also assisted in selecting the two teachers, six learners and six parents who participated in the study

## 4.11 TRUSTWORTHINESS

Assessing the trustworthiness of qualitative findings is not an easy undertaking. However, strategies and criteria can be used to enhance their trustworthiness (Rossman & Rallis, 2017; Silverman, 2017; Clemens, 2011). Trustworthiness is the extent to which data and data analysis are believable and trustworthy (Yin, 2016; Creswell, 2014). It is also known as validity in qualitative research where it refers to the degree to which the interpretations of data have common meaning between the participants and the researcher. This study utilised written narratives, narrative interviews and narrative reflections and these data generation methods lead to trustworthiness. Data must authentic and should reflect the responses of the participants. The data was interpreted as per the responses of the purposively selected participants. Rahman (2017) and Creswell (2014) raise four issues in relation to trustworthiness, namely, credibility, transferability, dependability and conformability which are discussed below.

### 4.11.1 Credibility

In qualitative research, credibility is the extent to which data and data analysis are believable and trustworthy (Creswell & Poth; 2018, Yin, 2016). It revolves around the truthfulness of the research findings (Yin, 2016). This boils down to the question: “How does the researcher know that the research findings are true and accurate?” Furthermore, credibility is concerned with the research methodology and data sources used to establish a high degree of harmony between the raw data and the researcher’s interpretations and conclusions (O’ Leary, 2014). All the research participants were involved in data generation and interpretation throughout the study and triangulation was employed to ensure credibility. Hadi (2016) defines triangulation as the use of different sources of information to form themes or categories. This study utilised methodological triangulation which entails the use of either the same methods on different occasions or

different methods on the same objects of study (Hadi, 2016). Comparing the findings of the three data generation methods ensured credibility. Theoretical triangulation, which refers to the use of more than one theory to explain a single concept (Yin, 2016) was also achieved as the study employed the ABA and the HBM.

### 4.11.2 Dependability

Dependability is the consistency of the same findings under similar circumstances (Denzin & Lincoln, 2015). It is the extent to which research findings can be replicated in the same context with the same participants (Gunawan, 2015). Dependability is thus concerned with whether or not the same results would be obtained if one were to observe the same thing twice. The use of narrative inquiry and the constructivist paradigm ensured the dependability of this study's results. To further ensure dependability, I fully described the research procedure used in written narratives, narrative interviews and narrative reflections to the participants. I also used the services of an external person to review and examine the research process and data analysis in order to ensure that the research findings were consistent and could be repeated to establish dependability. Similar results have to be obtained if the work is repeated in the same context with the same methods (Denzin & Lincoln, 2015).

### 4.11.3 Transferability

Transferability refers to generalisation of a study's findings to other situations and contexts (Noble & Smith, 2015; Yin, 2016). This requires that the researcher provide a detailed, rich description of the study's setting and sufficient information to be able to judge the applicability of the findings to other settings that the reader is familiar with. I ensured transferability by triangulating the ABA and the HBM in the context of this study (Noble & Smith, 2015).

### 4.11.4 Conformability

Conformability is the degree to which the research findings can be confirmed and corroborated by others (Marshal & Rossman, 2016; Flick, 2014; Matthew & Ross, 2010). It is the extent to which the researcher is aware of his/her subjectivity or bias (Best &

Khan, 2014). In a nutshell, conformability is freedom from bias in the research procedures and results. It denotes that the researcher's interpretations and conclusions are grounded in data that can be verified. I used member checking to promote conformability. The participants reviewed the generated data and the way it was interpreted. I also ensured the highest degree of transparency. Hadi (2016) observes that conformability is achieved when the truth value, consistency and applicability have been achieved. The participants were also used to confirm the findings by describing the research steps taken from the beginning of the study, to its development and reporting on the data findings.

## 4.12 LIMITATIONS

A limitation is a restriction on a study that cannot be dismissed and can affect the results. In carrying out this study, I anticipated limitations in the form of time and financial constraints, as well as literacy levels.

Time constraints hindered the smooth flow of the study. The learners and the teachers had tight learning schedules. To avoid disrupting teaching and learning, the narrative interviews with the six parents were conducted during weekends at the selected rural secondary school after obtaining permission from the school Head, while the written narratives and narrative reflections with the six learners, two senior teachers and a health professional were held in the afternoon after school.

I also faced financial constraints as the participants were provided with refreshments during the afternoon sessions. To counter this, I prepared refreshments at home. To avoid financial costs in relation to transport, the study was confined to one school and the participants were selected from the village closest to the school.

Some participants were uncooperative, which probably impacted the results. However, I assured them that the study was solely for educational purposes and that the findings would remain confidential.

## 4.13 CHAPTER SYNTHESIS

This chapter presented the research design (narrative inquiry) and methodology utilised to generate data to answer the research questions. The constructivist paradigm was

employed as it was well suited to enable the participants to engage in written narratives, narrative interviews and narrative reflections. A qualitative approach was employed to answer the research questions. The chapter described the research context and the techniques employed to select participants. The tools employed to collect and analyse the data were discussed, as well as the ethical considerations taken into account in conducting this study. Finally, the study's limitations and how these were addressed were explained.

The following chapter presents, analyses and interprets the data.

# CHAPTER FIVE

# DATA PRESENTATION, ANALYSIS AND INTERPRETATION

## 5.1 INTRODUCTION

The previous chapter presented the research design and methodology employed to conduct this study. This chapter presents, analyses and interprets the data on health education promotion for sustainable learning in Zimbabwean rural ecologies. The analysis is presented in themes to respond to the following three critical research questions:

1. What is the current situation regarding health education promotion in Zimbabwean rural ecologies?

2. How is health education accessed and promoted in Zimbabwean rural ecologies and why is it done in this way?

3. What health education strategies are used in Zimbabwean learning ecologies in enhancing sustainable learning?

This data was sourced from written narratives, narrative interviews and narrative reflections (4.8.1; 4.8.2; 4.8.3). The themes that emerged from the findings are presented, capturing the collective voices of the 16 participants, namely, six learners, six parents, a nurse, two senior teachers and a headman (traditional leader) who were assigned pseudonyms. Both English and the home language (Shona) were utilised for the written narratives. Silverman (2017) and Peu van Wyk and Botha (2008) recommend that participants should use their preferred language so that they can express themselves fully. This ensures that language is not a barrier when narrating their stories.

## 5.2 PREPARING FOR DATA PRESENTATION, ANALYSIS AND INTERPRETATION

I identified significant ideas that were then arranged into themes. Creswell (2009, 2014) notes that each theme contains something important about the data. In this study, each theme captures important issues pertaining to health education promotion for sustainable learning in Zimbabwean rural ecologies. The themes are supported by verbatim quotes in italics. The themes that emerged were derived from the critical research questions. In

line with the ABA and HBM, the participants' different experiences were explored. These theoretical lenses called for careful choice of data generation methods.

In accordance with the ethical principles outlined in the previous chapter (4.10), an honest, accurate and transparent representation of the participants' viewpoints is presented. This was achieved by recording the narrative interviews with the consent of the participants. The narrative reflections, written narratives and narrative interviews (4.8.1; 4.8.2; 4.8.3) served as tools for meaning making of the participants' views. In presenting the data, I use verbatim quotes to capture the participants' precise voices, with translations (from Shona to English) where applicable.

The following sub-sections describe how each of the study's objectives was achieved.

### 5.2.1 To analyse the current situation regarding health education promotion in Zimbabwean rural ecologies

The data generated by means of the written narratives, narrative interviews and narrative reflections of the two senior teachers, the nurse, six learners and six parents revealed the current situation with regard to health education promotion in Zimbabwean rural ecologies.

### 5.2.2 To explore the strategies used to access and promote health education in rural ecologies in Zimbabwe and why these are used

Data generated from the senior teachers, a nurse and parents using written narratives, narrative interviews and narrative reflections was used to explore the strategies that are utilised in accessing and promoting health education promotion in Zimbabwean rural ecologies.

### 5.2.3 To identify the challenges (if any) faced in implementing health education promotion strategies for sustainable learning in Zimbabwean rural learning ecologies

Data generated through the written narratives and narrative reflections of the senior teachers and a nurse revealed the challenges confronted in implementing health

education promotion strategies for sustainable learning in Zimbabwean rural learning ecologies.

**Table 5.1 sets out the study's objectives, the data gathering instruments and the participants that were selected to generate the data.**

| **OBJECTIVE NO.1** | **INSTRUMENTS** | **PARTICIPANTS & ACTIVITIES** |
|---|---|---|
| *To analyse the current situation regarding health education promotion in Zimbabwean rural ecologies* | Written narratives<br>Narrative interviews<br>Narrative reflections | **Two senior teachers, six parents, a nurse, and six learners**<br>✓ Mapped assets and resources to utilise in exploring the current situation with regard to health education promotion (ABA).<br>✓ Utilised the three-tier framework to analyse health education promotion in Zimbabwean rural ecologies (ABA). |
| **OBJECTIVE No.2** | **INSTRUMENTS** | **PARTICIPANTS & ACTIVITIES** |
| ***To identify the strategies used to access and promote health education in Zimbabwean rural ecologies and why these are used.*** | Written narratives<br>Narrative interviews<br>Narrative reflections | **Two senior teachers, six learners, a nurse**<br>✓ Utilised the three-tier framework to explore the strategies used to access and promote health education (ABA).<br>✓ Assessed the applicability of the ABA to the strategies utilised to promote health education. |
| **OBJECTIVE No. 3** | **INSTRUMENTS** | **PARTICIPANTS & ACTIVITIES** |
| ***To identify challenges (if any) faced in the implementation of health education promotion strategies to enhance sustainable learning in Zimbabwean rural ecologies.*** | Written narratives<br>Narrative reflections | **Two senior teachers and a nurse**<br>1. Utilised the three-tier framework to identify the challenges faced in implementing health education promotion to enhance sustainable learning in Zimbabwean rural learning ecologies (ABA).<br>2. Assessed the applicability of the ABA to identify and mitigate these challenges |

Five themes emerged from the data analysis, namely, the participants' conceptualisation of health education; their understanding of sustainable learning; structures and

mechanisms to implement health education promotion; platforms that enhance access to and promotion of health education; and health education implementation challenges.

## 5.3 CONCEPTUALISATION OF HEALTH EDUCATION

As noted previously, while the terms health education and health promotion have been used interchangeably (Bezerra, 2014; Whitehead, 2008), they are two distinct terms. Kickbusch and Nutbeam (2017) contend that health education is a combination of planned experiences based on sound theories that provide individuals, groups and communities with the opportunity to acquire the information and skills required to make quality health decisions. It involves techniques such as preparation of information brochures, pamphlets and videos, participating and reflecting in groups, reading and computer-assisted learning (Kickbusch & Nutbeam, 2017; Hernandez, 2011). As noted in the literature, rural ecologies are marginalised in accessing health education due to multi-faceted challenges (Helsing & Rimer, 2011), including but not limited to a lack of adequate resources. This was one of the motivations for conducting this study on health education promotion in rural ecologies.

The following sub-section presents and analyses the data on the participants' conceptualisation of health education.

### 5.3.1 Perspectives of the senior teachers

In their written narratives and narrative reflections, the senior teachers' responses indicated that they understand the concept of health education and its value in enhancing sustainable learning. One said:

> *I understand health education as teaching and learning of health related issues in schools with the goal of empowering recipients to take an informed position on health issues* (Mukanya - senior teacher).

This suggests that health education is concerned with two important aspects, *teaching of health related issues and learning health related issues.* Such education is provided by someone *who has knowledge*. Therefore, for Mukanya, teaching and learning should be

a planned activity that is professionally delivered by people with knowledge to the targeted audience, for example, learners, with the goal of empowering them.

The other senior teacher concurred on the issue of teaching but, unlike the other senior teacher, she focused on the school:

> *Health education involves the teaching of particular health issues like menstrual hygiene and availing health knowledge. Further, it makes learners health conscious on different health issues that concern their health and its goal is to make individuals aware of health challenges* (Mai Kudzie - senior teacher).

Mai Kudzie's response acknowledged that health education involved teaching about health issues in particular contexts *in schools*. It is interesting to note that, as a female teacher, the example used targets only one gender. This suggests that health related issues are mainly for a certain gender. There is an element of gender bias in her mention of *menstrual hygiene* as her only example. The response further indicates awareness that there are health related challenges which communities are not aware of. Both the senior teachers' responses confirmed that health education involves teaching about health concerns in particular contexts, *schools.* Therefore, health education is a vehicle to transmit health knowledge in particular contexts to a particular target audience (learners), which confirms that it is a planned activity.

Research studies acknowledge that narrative reflections have some similarities and differences with written narratives. They can both be in written form. Narrative reflections are memory based (Barkhuizen, 2012) in that they recount past and present experiences either in written form or orally. In the narrative reflections, the two senior teachers had this to say with regard to their conceptualisation of health education.

Mai Kudzie said:

> *Health education is the teaching of preventative health approaches to diseases and increasing health awareness in learners through … school curricula. It involves the teaching of good habits and health practices* (Mai Kudzie - senior teacher).

This response highlighted that school curricula are important in the teaching of health education. Her response suggested that the purpose of health education is *teaching of preventative approaches* to health and increasing awareness. This confirms that health education is a broad learning area and is goal-focused.

The literature notes that one of the objectives of health education is to eradicate diseases in individuals and communities through health driven programmes (Rower, 2011). This calls for robust health education programmes to be rolled out in both rural and urban ecologies.

Mukanya remarked:

> *Health education specifically focuses on increasing awareness on HIV/AIDS, STIs and other sexually transmitted infections. This is achieved through the use of … school curricula and the media though rural schools have challenges in accessing the media (*Mukanya - senior teacher*).*

This response confirmed the importance of *school curricula* and the *media* in increasing health awareness as noted in *increasing awareness on HIV/AIDS.* Both responses acknowledge that school curricula are instrumental in increasing health awareness among learners, although Mukanya's response included strategies to enhance sustainable learning where he wrote *media*. Teaching emerged as one of the modes of health education transmission in both responses.

These two responses thus confirm that, as noted in the literature, health education has a multiplicity of purposes as it increases health awareness and adoption of preventative approaches.

In the following responses by learners, health education was perceived as a programme that teaches one how to avoid falling ill:

*Health education involves the teaching of health issues especially on diseases* (Rumbie - learner).

*I feel health education is a process of teaching on the ways of preventing harmful diseases like HIV/AIDS and sexually transmitted infections* (Taku - learner*).*

Another learner's narrative account noted that health education specifically focuses on bodily hygiene:

*Health education is about teaching on the importance of keeping our bodies healthy* (Munashe - learner).

These responses acknowledged that health education involves teaching and learning which concurs with the responses of the senior teachers, although the learners' responses differed with regard to what is taught by health education. The following sub-section discusses the nurse's perspectives.

### 5.3.2 Perspectives of the nurse

While the nurse agreed with the senior teacher (Mukanya) and learners that health education involves teaching and learning, in his narrative reflections, his conceptualisation shifted:

> *Health education is a pillar in promoting health awareness in individuals through using different strategies to drive home health related messages* (Gushungo - nurse).

In using the phrase *in promoting health awareness*, Gushungo acknowledged that health education is goal focused. Mukanya noted that the ultimate goal of health education is to empower the target audience, while the nurse felt that it is to promote health awareness. Gushungo's response further revealed that health education has a defined target population as suggested by *in individuals and communities*.

### 5.3.3 Perspectives of the learners

The learners' written narratives and narrative reflections showed deeper understanding of the concept of health education. A learner had this to say:

> *Health education is a field of study that mainly deals with the methods of teaching issues relating to the health of individuals to promote their well-being* (Eusie - learner).

Eusie's response suggests that health education is a broad learning area with multiple interwoven health related aspects, which is implicit in the phrase *is a field of study.* It would seem that she has a broad understanding of the concept under study. I further inferred from the response that health education covers multiple health related aspects as *methods* are utilised in its understanding. This also suggests that it is a well-planned activity rather than a haphazard undertaking. Methods are likely similar to the *strategies* mentioned by Gushungo. While Eusie seemed to have a broad understanding of health education, Munashe presented a different view:

*I understand health education as a programme that teaches about the state of avoiding to be ill and avoiding contracting diseases* (Munashe - learner).

This learner's response revealed that he understood health education as a tool that is utilised to prevent illness and is also specifically designed to avoid *contracting diseases*. This response did not shed light on how one avoids being ill but the aspect of *teaching* is implicit. It further suggests *fear* as the learner felt that one needs to avoid contracting disease(s), which is one of the principles implicit in the HBM. A person needs to feel threatened in order to change his or her behaviour. However, the response acknowledged that health education is a planned activity as a *programme* designed for any purpose involves careful planning. Munashe suggested that the goal of health education is avoiding becoming ill through teaching. Rumbie had totally different view:

*Health education means teaching of adulthood roles by grandparents or aunts* (Rumbie - learner).

Rumbie, a female learner, had probably undergone traditional initiation, a common occurrence in this rural area. Her understanding of health education has a traditional dimension and flavour which is totally different from the responses of the senior teacher, the nurse and other learners and her role models were *aunts and grandparents*. My inquiries with the traditional structures in the locality confirmed that initiation ceremonies were common in the area and I gathered that they also covered health issues. Rumbie felt that health education could be provided by adult relatives in preparation for adulthood.

In summary, the learners' responses acknowledged that health education involves teaching about health issues by teachers and parents, and at rural health delivery centres as well as learning ecologies. Furthermore, they indicated that health education aims to prevent the transmission of diseases and to promote knowledge about health issues. The responses also suggested that health education is a goal. The following sub-section discusses how the parents conceptualised health education.

### 5.3.4 Perspectives of the parents

The parents' narrative interviews suggested that they understand the concept of health education. The different responses acknowledged that health education involves a person with knowledge about health teaching others without such knowledge. This is very similar to the senior teachers' conceptualisation of health education. From the perspective of the ABA, those with knowledge are primary tier assets, that is, the nurse and the senior teachers, while those without health knowledge are rural communities and learners. For example, one of the parents remarked:

> *Idzidziso youtano inosanganisira kudzidzidza nyaya youtano pakati pane avo vane ruzivo rwezvirwere kuti vawane nzira dzokuzvidzivirira kuti vasarwara. [Health education involves teaching health related issues with the goal of capacitating people to be health conscious and to be knowledgeable on diseases]* (MaNyoni - parent).

Another parent concurred that health education is about learning and is taught by a professional at a specific institution:

> *Idzidziso yenyaya dzoutano zvikuru kudzivirira zvirwere zvinotapuriranwa pabonde. Dzidziso iyi inobva kunana mukoti. [Health education is about learning on ways of preventing sexually transmitted infections and this is taught by nurses at the local clinic]* (VaChihera - parent).

Chibwa stated:

> *Idzidziso inotipa simba kuti tizvidzivire uye kunzwisisa zvirwere zvakasiyana-siyana uye kuita bonde rakadzivirirwa kuti tisabatira zvirwere zvenjovhera zvakaita*

*somukondombera (HIV /AIDS). [Health education is learning about different diseases and to have protected sex to prevent contracting diseases like HIV/AIDS]* (Chibwa - parent).

Three parents, Chitova, Chirasha and MaMoyo said that health education involved engaging in health discussions so as to acquire the necessary knowledge to remain healthy and adopt a healthy lifestyle. They noted that family structures such as grandparents play a crucial role in imparting the necessary health knowledge to adolescents.

The parents revealed mixed understanding of the concept of health education, with some acknowledging that health education involved the teaching of *modern health practices* on issues pertaining to birth control, and acquiring knowledge of different diseases, including *COVID-19,* while others understood it from a more traditional perspective. However, they concurred that health education is target specific and goal focused.

The following sub-section highlights the key issues that emerged in the analysis and interpretation of the concept of health education.

### 5.3.5 Synthesis of the concept health education

What is implicit and evident in the participants' responses is that health education is a planned programme designed to impart health related information, with the clearly defined goals of *promoting health awareness, promoting the well-being of individuals and communities, avoiding to be ill* and *preventing health threatening infections*. The responses also revealed that health education involves *teaching.* According to MaNyoni, health education involves teaching on health related issues with the goal of developing health consciousness. Chitova's response revealed that one of the components of health education is *sexuality education* which probably confirms that he is aware of diseases such as HIV/AIDS and other STIs. For Chibwa, health education meant teaching a defined target audience, adolescents, about health issues in preparation for adulthood using traditional structures (grandparents). While the parents' understanding of the concept of health education had some commonalities and differences, to them health education involved teaching of modern and traditional health practices, and acquiring

knowledge of different diseases, including the current COVID-19 pandemic. The participants' understanding of the concept assisted them in establishing the current situation regarding health education promotion in Zimbabwean rural ecologies.

The following section discusses the participants' understanding of the concept of sustainable learning.

## 5.4 UNDERSTANDING OF SUSTAINABLE LEARNING

Sustainable learning is defined as learning that lasts and is retained after initial exposure to it (Pedler & Hsu, 2014). It is thus about acquiring knowledge and updating all types of learning, including skills, and it continues beyond the end of formal instruction. This study aimed to promote health education in order to enhance sustainable learning in Zimbabwean rural learning ecologies.

In his narrative reflections, a senior teacher remarked:

> *Sustainable learning involves equipping learners with knowledge, information and skills that are needed in their daily lives. Further, sustainable learning benefits learners as they will be able to use knowledge acquired for future use and this empowers individuals and learners with relevant health knowledge so as to enjoy healthy lifestyles* (Mukanya - senior teacher).

The response acknowledges that sustainable learning equips the target audience with relevant skills and knowledge as noted in the phrase *with knowledge, information and skills* for daily survival. It also notes that one of the benefits of sustainable learning is that the knowledge acquired during formal learning will be used in the future as revealed in the phrase *has benefits,* in overcoming health related challenges as the person will have been equipped with the relevant skills. Accordingly, sustainable learning facilitates the acquisition of relevant skills for use in the future to overcome challenges that, in this study, are health related issues.

The other senior teacher shared:

> *Sustainable learning refers to that learning which is beneficial to the recipients and it brings everlasting change in individuals in how they live. The acquired knowledge will be used in future long after leaving school* (Mai Kudzie - senior teacher).

This is similar to Mukanya's response in the sense that sustainable learning has *benefits.* The response also noted that sustainable learning involves acquisition of knowledge as revealed in the phrase *acquired knowledge*. Mai Kudzie further noted that sustainable learning enhances the use of acquired knowledge in the future, as revealed in the phrase *used in future*. Thus, her response suggests that sustainable learning has positive benefits and facilitates the acquisition of knowledge and skills for future use.

In similar vein, the nurse said:

> *Sustainable learning is a continuous learning process and it enables individuals of all ages to develop informed decisions and further, it is learning which engages one throughout his/her life* (Gushungo - nurse).

This response indicates understanding that sustainable learning is not a static process, as revealed in *continuous learning* and is not age specific, as acknowledged in *individuals of all ages*. According to Gushungo, sustainable learning assists in the development of skills that enable individuals to make informed *decisions.*

### 5.4.1 Synthesis of the theme

The responses show a deep understanding of the concept of sustainable learning as a lifelong process that involves the acquisition of knowledge and development of skills which enable people to make informed decisions. Furthermore, it is not age specific.

The following section discusses the responses on current health awareness programmes in rural learning ecologies.

## 5.5 STRUCTURES AND MECHANISMS TO ENHANCE HEALTH EDUCATION PROMOTION IN RURAL LEARNING ECOLOGIES

The participants' responses through narrative interviews (parents), and written narratives and narrative reflections (senior teachers and learners) revealed the visibility of health awareness programmes in the rural learning ecologies of Zimbabwe. Health awareness

campaigns, the immunisation drive, HIV/AIDS awareness programmes and sanitation provision emerged as some of the key drivers of health awareness and thus formed the sub-themes for this section.

### 5.5.1 Health awareness campaigns

The general view was that health awareness campaigns were instrumental in promoting health consciousness through collaboration between the Ministries of Health and Education.

A parent had this to say:

> *Ini somubereki pamwe nevamwe vabereki tinowana dzidzidziso yenyaya dzoutano nenguva apo* (*tionopota tichiunganidzwa pamba paSabhuku uye tinonzwa nevana vedu kuti vanopota vachidzidziswa nyaya dzoutano muzvikoro. Kune vanogona kuverenga, muchipatara chiri munharaunda medu, mune machati akanamirwa pamadziro anopa dzidzidziso. [As a parent including our school going learners, we periodically gather at the headman's residence and we are taught health issues by officials from the Ministry of Health and Child Care. We are also told that our children at school are periodically engaged on health issues by the staff from our local health delivery centre. To those parents who are literate, posters are displayed at the health delivery centre and they read for themselves. We were also made aware of the current global pandemic (COVID-19) and were taught how to protect ourselves*) (Chihera - parent).

Chihera acknowledged the presence of health education awareness campaigns as revealed in the phrase *taught health issues*. Collaboration was noted as these campaigns were spearheaded by the Ministries of Health and Education. The fact that parents were made conscious of the global pandemic, *COVID-19* indicated that they were equipped with relevant and current health knowledge which raised health consciousness.

Similarly, another parent remarked:

> *Bazi routano ndiro rinotidzidzisa pamagungano atinoita pamba pasabhuku zvichitungamirirwa nevashandi vanobva kubazi routano uye vanopota vachipa*

*dzidziso kuvana vedu vanopinda pasekondari iri munharaunda yedu. Gore rino ra2020 isu nevana vedu takadzidziswa nezvechirwere cheKorona (COVID-19). [The Ministry of Health and Child Care has the responsibility to engage us in our rural community on health issues at the headman's residence although this is done periodically. This year (2020), there was a wide and extensive health awareness campaigns on the COVID-19 pandemic and that is the reason why I am putting on a face mask. We also received health education on COVID-19 through radios and the programmes in different languages]* (Chirasha - parent).

Chirasha's response concurs with that of Chihera's, as both acknowledged that they received health knowledge on the *COVID-19 pandemic*. They also confirmed that the Ministry of Health and Child Care engaged them through awareness campaigns on health issues although the frequency is worrisome as they were *done periodically*.

The narrative interviews with parents confirmed that health awareness campaigns were being used as a platform to spread health knowledge in rural learning ecologies. The collaborative mechanism that was noted in most responses ensured that learners were exposed to relevant health knowledge. However, Chibwa acknowledged that he preferred political gatherings where he received free food handouts to health awareness campaigns, placing that responsibility on his wife.

The senior teachers' written narratives noted that health awareness campaigns were not a regular feature in the learning ecologies, suggesting that this could be due to the prevailing economic climate. However, they acknowledged that health education was visible in the learning ecologies, thus concurring with the parents. The one senior teacher said:

*Health awareness campaigns, though not done on a regular basis at our secondary school, complement our efforts to bring health consciousness awareness among learners. We collaboratively work with the Ministry of Health and Child Care and these campaigns target learners and parents. The health awareness campaigns centre on diseases like HIV/AIDS and other sexually transmitted infections, water borne and vector borne diseases and discussing other sexual health reproductive issues* (Mukanya - senior teacher).

The term *collaboratively* highlights that health education awareness campaigns were jointly implemented in the learning ecologies by the Ministries of Health and Education and they focused on diseases, as noted in *HIV/AIDS and other sexually transmitted infections.* Mukanya also revealed that the campaigns complemented their efforts through school curricula as reflected in *making health education relevant in the learning ecologies.* The other senior teacher's response was context specific:

> *The Ministry of Health and Child Care promotes health awareness at community gatherings and at schools utilising informative posters and pamphlets. Each year on the school calendar, a health theme is provided by the Ministry of Health and Child Care and schools engage in competitions in poetry and drama* (Mai Kudzie - senior teacher).

Mai Kudzie noted that the health awareness campaigns targeted a specific audience, *learners and the rural community* in their context, *schools.* Campaigns strategies included *educative posters* as well as engaging learners in drama and poetry, thus increasing health awareness among learners themselves and a larger audience, the community where they reside. The responses of the senior teachers and parents confirmed a collaborative approach in promoting health awareness through the two key Ministries**.**

The learners' responses confirmed a collaborative approach in enhancing health awareness through campaigns. One said:

> *We sometimes have visitors from the Ministry of Health and Child Care who come to our school to teach us on health issues in the presence of our Guidance and Counselling teachers including other interested teachers. These health awareness campaigns are not done regularly and I was pleased to share with you that we also were first educated on the COVID-19 disease by the staff from the Ministry of Health followed by our teachers (*Mukudzeyi - learner).

What is worrisome is that health education campaigns are irregular, perhaps due to limited funding from the government. Teaching about health issues in the presence of the *Guidance and Counselling teachers* points to further collaboration. Mukudzeyi also confirmed that they received education on the *COVID-19 pandemic* which confirmed that

health awareness campaigns also focus on current health issues. Another learner had this to say:

> *The nurses at our local clinic, normally when they visit our school, teach us on issues concerning STIs, dangers of early sex and other ways of ways on how to grow healthy. I enjoy some of the topics that we are taught by the nurse(s) as they are always friendly and they never hide anything from us, unlike our teachers who sometimes avoid answering our questions* (Munashe - learner).

The health awareness campaigns focused primarily on sexual reproductive issues, with Munashe mentioning the *dangers of early sex*. They centred on promoting healthy living. Munashe said that he preferred health issues to be handled by health professionals whom he described as *being friendly* and noted that his Guidance and Counselling teachers sometimes *avoid answering* learners' questions. This suggests that teachers do not always openly discuss health issues with learners, perhaps out of fear of cultural conflict or lack of knowledge on issues which might be sensitive. The responses of both the senior teachers and the learners revealed that health awareness campaigns are not conducted on a regular basis, which is worrisome.

For some learners, health awareness campaigns provided a platform to share their health concerns. Another learner commented:

> *The health awareness campaigns provide us with an opportunity to share our health concerns as our teachers and parents in most cases … fail to answer our health issues* (smiling broadly)*. My parents sometimes hide certain health issues from me and I may end up getting wrong information from my friends or other sources which might lead us to fall into serious problems. I am sometimes shy to talk to my parents or my teachers but the nurse(s) are very friendly and they honestly answer questions related to my health issues. These campaigns, though not done regularly, are very useful to me especially on sexuality issues* (Grace - learner).

According to Grace, her health concerns and those of her peers were properly and professionally handled by the health professionals as noted in *an opportunity to share*

and are addressed through health awareness campaigns. It is evident that parents and the teachers have a reserved approach in handling learners' health concerns, as reflected in *hide certain issues*. It was noted that they did not openly engage with learners, which could result in learners obtaining incorrect information from other sources. The health awareness campaigns were thus seen as an answer.

Other responses from learners confirmed that they were sexually active and needed help, and the health awareness campaigns provided a platform to address health concerns. They blamed their parents and teachers for not adequately addressing their health challenges in a transparent manner. The learners acknowledged that health awareness campaigns exposed them to current information on different diseases including the global COVID-19 pandemic.

In summary, health awareness campaigns were collaboratively undertaken by the Ministries of Health and Education and were beneficial to the target audience. It was noted that they provided a platform to acquire health knowledge and skills to further increase health awareness and consciousness, which are the goals of health education.

The following sub-theme discusses immunisation in learning ecologies.

### 5.5.2 Immunisation drive in rural learning ecologies

The written narratives acknowledged that the Ministry of Health and Child Care rolled out an immunisation and circumcision drive in learning ecologies that targeted female and male learners between the ages of 10 and 14.

A learner remarked:

> *At our school, girls are immunised against cervical cancer and this is done without paying anything. Our boys are taken to the nearest district hospital for what they call a male operation. They are provided with transport. My parents (mother) did not give me permission to be immunized though I wanted to. I did not want to disappoint my parents so I was not immunised* (Rumbie - learner).

This response shows that some parents did not want their daughters to be immunised as revealed in *did not give me permission.* This could be due to an autocratic attitude,

ignorance or a strong belief in traditional practices. Rumbie revealed that she was disappointed by this decision. It was also evident that Rumbie was unaware that *a male operation* is circumcision.

However, as highlighted by another learner, some parents/guardians adopted a more positive attitude:

> *Once a year, our school receives visitors from the Ministry of Health and Child Care in the company of a well-known nurse who operates at our clinic. We are first educated on the effects of cervical cancer and they give us letters to take to our parents to seek permission to be immunised against cervical cancer. I was pleased that both of my parents agreed that I could be immunised* (Grace - learner).

The fact that the female learners first received *education* acknowledged that this was a transparent programme.

While the male learners acknowledged that circumcision was a painful experience, they received medication to ease the pain. One remarked:

> *My teacher (Mr Mukanya) told me that circumcision was good for any boy's health but did not say why he said so. Once a year, boys who … have signed letters from their parents are circumcised at the nearest district hospital. My mother agreed and after the operation, days after, I felt some pain though the wound has now healed. I wonder if the girls feel the same pain after they are immunised* (Taku - learner).

The benefits of male circumcision were not explained to this learner by his teacher, as reflected in *did not say why*. Participation in the programme required parental consent through *signing of letters*. The response also confirms the need for intensive education as Taku was unaware of the experiences of girls which could result in him obtaining incorrect information from other sources. This confirmed a segregatory approach in the implementation phase.

Similar sentiments were echoed by the nurse who stated that immunisation was guided by policy circulars from the Ministry of Health and Child Care and required parental consent. He commented:

> *The immunisation programme is now on the school calendar and it targets both sexes between the ages of ten to fourteen in schools and is guided by policy circulars from the Ministry of Health and Child Care and is a voluntary exercise. This programme is the brain child of the First Lady of the Republic of Zimbabwe and is free and donor funded. Parents are first consulted to either allow or not allow their children to participate. When the programme was first introduced in 2018, some rural parents did not welcome it* (Gushungo - nurse).

As noted by the nurse, immunisation or circumcision of learners in rural learning ecologies *targets both sexes*. Gushungo's response confirmed its visibility in these learning ecologies where reference was made to *policy circulars* which guided its implementation. This response collaborated the responses of learners in that it required parental consent and acknowledged challenges when it was initially launched *in 2018*. The participation of the First Lady of the Republic of Zimbabwe indicates broad support from those in the corridors of power.

The senior teachers confirmed in their written narratives that immunisation was visible in learning ecologies and was backed by a legislative framework. The one said:

> *Immunisation (girl learners) and circumcision (boy learners) is done once a year and requires parental consent. It is a countrywide programme and is implemented in the schools either urban or rural by the Ministry of Health and Child Care health professionals. Not all learners are immunised as some parents are against the programme for reasons best known to them. As a school, we receive policy circulars from the Ministry of Health which are cascaded to us through our Ministry of Primary and Secondary Education* (Mukanya - senior teacher).

Mukanya's response revealed that immunisation of learners required parental permission, with reference made to *requires parental consent*. Thus, the programme adopted a bottom-up approach. The phrase *reasons best known to them* indicates that

some parents had negative attitudes towards this initiative, concurring with the responses of some learners who were given permission to participate in the programme, while others' parents refused. Like Gushungo, Mukanya confirmed that immunisation of learners was currently being implemented.

The other senior teacher noted:

> *Immunisation and circumcision of learners is a programme currently being implemented in the schools either urban or rural and is implemented by the Ministry of Health and Child Care health professionals. It is a responsibility between the Ministries of Health and Education for its implementation in the schools. The programme has the full support of the First Lady of the Republic of Zimbabwe who sourced its funding from local and foreign donors. I noted that some parents with low academic qualifications were not comfortable with the programme* (Mai Kudzie - senior teacher).

Unlike Gushungo and Mukanya, Mai Kudzie expressed her opinion on why some parents were reluctant to allow their children to participate in the immunisation programme, attributing it to low levels of literacy as acknowledged by the phrase *low academic qualifications.* A collaborative framework in the implementation of the immunisation of learners was noted, as in *responsibility between Ministries*. Concurring with the nurse, Mai Kudzie confirmed that the programme had the support of the powerful, as *the First Lady* was also involved in its implementation.

Drawing from the participants' verbatim responses, it is evident that the immunisation and circumcision programme was backed by a legislative framework through policy circulars and had the support and backing of those in the corridors of power. The narratives of some of the participants acknowledged that some parents, perhaps due to low levels of literacy, had a negative attitude towards the immunisation programme, thus acknowledging that the drive was being implemented in rural learning ecologies.

The following sub-section deliberates on HIV/AIDS awareness in rural learning ecologies.

### 5.5.3 HIV/AIDS awareness in the learning ecologies

The written narratives and narrative reflections of the senior teachers revealed that school curricula and the short messaging system (SMS) were the main modes of raising awareness of HIV/AIDS among learners. The responses acknowledged that there was evidence of promiscuity among learners and that they engaged in unprotected sex. One of the senior teachers had this to say:

> *I teach during Guidance and Counselling lessons on the dangers of pre-marital sex and the Ministry of Primary and Secondary Education has provided literature on HIV/AIDS from primary level upwards. The literature is in the form of books suitable for each grade or form* (Mukanya - senior teacher).

Mukanya confirmed that HIV/AIDS awareness campaigns were run in rural learning ecologies and the curricula and SMS were utilised to create awareness among learners as noted in the phrase *literature on*. However, the response revealed that there was a limited access to other technological platforms like the Internet and social media platforms like Facebook, WhatsApp, and Twitter to enhance access to information on HIV/AIDS, perhaps to the geographical location of the context.

The other senior teacher remarked:

> *I teach sexuality education with caution and sometimes I invite a local nurse to teach our learners on sexuality issues as this is one of the learning areas in our curricula* (Mai Kudzie - senior teacher).

The response from Mai Kudzie acknowledged a collaborative approach, in I *invite a local nurse*. The literature confirms that globally and regionally, health and education ministries raise awareness of HIV/AIDS among learners. The fact that Mai Kudzie approached sexuality education cautiously confirmed that sexuality education was a sensitive issue (Muguwe & Gwirayi, 2011). This response and Mukanya's narrative acknowledged that curricula enabled learners in rural ecologies to access information on HIV/AIDS.

The health professional (nurse) noted that evidence on the ground pointed to the fact that learners were highly sexually active and engaged in unprotected sex. This has led to campaigns to fight STIs being stepped up in learning ecologies. This is how he put it:

> *The situation has changed dramatically and gone are those days when HIV/AIDS education was for the adult domain only! Results on the ground reveal that the youths and the learners are engaging in unprotected sex and even some of the learners of both sexes have come for treatment for STIs and some have succumbed to HIV/AIDS and are on antiretroviral treatment (ART) though the information is highly confidential. We have stepped up campaigns in the schools in the fight against sexually transmitted infections. The status is only revealed to the victim including the parent(s) / guardian(s)* (Gushungo - nurse).

Gushungo noted that HIV/AIDS education was no longer for adults only through the phrase *for the adult domain.* He also acknowledged that learners were victims of STIs including HIV/AIDS. The response revealed that some learners were on anti-retroviral treatment (ART), which confirmed that they engaged in unprotected sex. Gushungo's narrative revealed that HIV/AIDS awareness programmes were being implemented as noted in the phrase *stepped up campaigns,* as learners engaged in risky sexual behaviours. It was also noted that the fight against HIV/AIDS was a collaborative approach; this concurs with the responses of the senior teachers.

The responses from the nurse and the senior teachers confirmed that HIV/AIDS education was being implemented in learning ecologies. They noted that learners engaged in risky sexual behaviour with some on ART. It can therefore be concluded that health awareness campaigns and the utilisation of Guidance and Counselling increased HIV/AIDS awareness in learning ecologies. The following sub-section discusses sanitation provision in rural learning ecologies.

### 5.5.4 Sanitation provision

Rural communities have been marginalised in terms of development by both the colonial government and Zimbabwe's post-independence government (Muguwe & Gwirayi 2011). However, the participants were of the view that, with the assistance of donors, the Government of Zimbabwe has brought about changes which have had a positive impact on their health education. This was evident in the narrative interviews with parents. One shared the following:

*Hurumende yedu nemadhona vava kukoshesha utano hwevana vedu muzvikoro nokuti vava kuchera zvibhorani pamwe nokuvakira vana vedu zvimbuzi (achinyemwerera). Vana vedu vava kuwana mvura yakachena uye havachabatiri zvirwere zvinobva musvina yavanhu. [We are grateful that our government and the donor community are drilling boreholes and providing building materials for free in the construction of blair toilets* (with a broad smile)*]* (MaNyoni - parent).

The sanitation programme has resulted in the community having access to safe drinking water. Chirasha concurred:

*Nokuda kwezvibhorani zvatakachererwa, tava kumwa mvura yakachena uye hatichabatiri zvirwere zvinobva mutsvina yavanhu, [We are now drinking clean and safe water and no longer contracting diseases transmitted through human excreta]* (Chirasha - parent).

One of the parents acknowledged receiving water purification tablets:

*Tiri kupihwa mapiritsi okuchenesa nokuuraya utachiona huri mumvura pachena zvichibva kuhurumende yedu pamwe nemadhona. [We are being supplied with aqua tablets for free to purify our drinking water]* (Chihera - parent).

Another noted:

*Pakuvaka zvimbuzi hapana chatinotenga asi tinopihwa zvokuvakisa pachena isu tichibhadhara nesimba redu sezvo tisinga sevenzi. [We only provide labour for the construction of blair toilets as we are poor and unemployed]* (Chitova - parent).

The responses from the parents acknowledged positive interventions in the provision of sanitation in rural learning ecologies. MaNyoni's response confirmed that sanitation provision was visible through the drilling of boreholes and construction of blair toilets with the assistance of *the government and the donor community*. Chitova acknowledged that they only contributed labour towards sanitation provision in learning ecologies as *they were poor.* While the health issue is to stop the spread of diseases because of unclean

and unsafe water sources and lack of toilets, the intervention also provided employment, thus addressing unemployment in rural communities. The learning ecologies were now safe as Chirasha acknowledged that their children were no longer susceptible to water-borne infections and other diseases transmitted through human excreta. Madyira confirmed that external assistance from the government and the donor community contributed to sanitation provision in rural learning ecologies. By showing a clenched fist, Madyira perhaps showed allegiance to his political party which was championing sanitation provision in the rural learning ecology.

The literature notes that, at independence, Zimbabwe inherited a world-class health delivery system characterised by state-of-the-art infrastructure, well-resourced health delivery centres, highly motivated and well remunerated health professionals and affordable health care services (Kidia, 2018; Todd, Ray & Madzimbamuto, 2010). When the participants were asked to assess the current health education promotion situation in rural ecologies, their written narratives and narrative reflections revealed that VHWs played a key role in enhancing health awareness and consciousness in rural communities, including learners. Guidance and Counseling emerged as being instrumental in bringing about behaviour change in learners in rural learning ecologies. The brain drain severely compromised health service delivery, especially in rural learning ecologies and negative economic growth probably compromised health education promotion in these ecologies. The following sub-section focuses on Guidance and Counselling in rural learning ecologies.

### 5.5.5 Guidance and Counselling in rural learning ecologies

In their written narratives and narrative reflections, the two senior teachers noted that health education awareness and consciousness among learners was facilitated through the utilisation of school curricula, although they faced challenges in implementing Guidance and Counselling. One said:

> *Guidance and Counselling is a behaviour intervention mechanism among the learners as it exposes them to positive healthy behaviours and … makes learners aware of preventing health threatening diseases like HIV/AIDS and other sexually transmitted infections (STIs). It teaches on sexual reproductive health. Guidance*

*and Counselling (G & C) is a compulsory subject at secondary school level (*Mai Kudzie - senior teacher).

This response confirmed that health education has a clearly defined purpose as noted *in behaviour mechanism and* Guidance and Counselling teaches learners about health threatening infections including STIs*.* The fact that it is *a compulsory subject* at secondary school level indicates that policy makers value the health of learners. Therefore, for Mai Kudzie, the school curriculum is currently being utilised to raise health consciousness and awareness and empower learners, thus enhancing sustainable learning.

The other senior teacher confirmed that Guidance and Counselling as well as other subjects were used to address health issues:

> *At the present moment, learners engage on health issues through Guidance and Counselling and other subjects like Combined Science, Human and Social Biology and Pure Biology. Guidance and Counselling seems to receive less attention though; it is … allocated a 40-minute lesson once a week. Schools in urban areas have many sources where learners acquire health education literature, unlike schools in the rural areas* (Mukanya - senior teacher).

Both senior teachers' responses acknowledged that learners were exposed to health issues through Guidance and Counselling, although Mukanya further noted that learners are also engaged in other *subjects like Human and Social Biology, Pure Biology and Combined Science,* pointing to cross-curricula implementation. Health education is thus visible, although Guidance and Counselling receives less attention from curriculum planners as it is only allocated *40* minutes per week. It is evident that urban schools have numerous advantages, as their learners have access to various sources of information on health issues, implying that the geographical location of rural learning ecologies puts learners at a disadvantage and confirming an urban-rural disparity.

While health education was being delivered through different platforms, it was noted that VHWs were playing a crucial role in promoting health education.

### 5.5.6 The role of village health workers

The parents' narrative interviews acknowledged the positive contributions made by VHWs, although some had different views. A parent shared the following:

> *Vana mbuya utano vane basa guru kwazvo rokutipa dzidziso yokuronga mhuri dzedu. Vanotipa mapiritsi okuronga mhuri pamwe nokutidzidzisa nzira dzokudzidzivirira zvirwere zvepabonde. [The village health workers though not very visible in our rural community assist us in a great way. They bring to our doorstep birth control devices like contraceptives and teach us ways of preventing sexually transmitted infections* (Chihera - parent).

Another said that VHWs taught them how to make water safe to drink:

> *Vana mbuya utano vane basa guru rokutidzidzisa kukosha kwekumwa mvura yakachena uye vanopota vachitipa mapiritsi okuchenesa mvura. [The VHWs teach us on ways to make water from unprotected sources safe to drink for our families and sometimes they give us water purification tablets (aqua tablets)]* (MaMoyo - parent).

Similar views were expressed by another parent who also raised an interesting point. He noted that VHWs were instrumental in alerting nurses to parents who shunned modern health practices:

> *Vanhu ava vane basa guru mumaruwa. Vanopota vachinyevera vana mukoti vabereki vasingadi kurapisa vana muzvipatara. [The village health workers sometimes act as whistle blowers. They inform the health officials on some parents who deny their children medical attention for reasons best known to them]* (Chirasha - parent).

One parent held more negative views on VHWs:

> *Vana mbuya utano nerimwe divi vanokurudzira upombwe! Vanotipa makondomu pamabhawa zvinokonzera pamwe kusanzwisisana mumhuri. Vana vechidiki vapanduka sezvo vava kukwanisa kuwana makondomu awa pachena. [These VHWs on the other hand have contributed to a rise in*

> *prostitution as they freely distribute condoms to patrons at beer halls without the knowledge of our spouses. The youths including secondary school learners have access to these condoms as they connive with some of the VHWs, giving … rise [to] … sexual misbehaviour]* (Chibwa - parent).

WaMambo (the headman), and Chitova (parent) concurred with MaNyoni and Chihera who acknowledged that VHWs were mainly responsible for teaching preventative measures, as expressed in *ways of preventing sexually transmitted diseases* and *teaching us ways of family planning.* However, some parents like Chibwa felt that VHWs encouraged promiscuity through *distributing condoms,* perhaps not knowing that these are life savers that prevented people from contracting STIs, including HIV/AIDS. Chibwa further had no kind words for the VHWs as he perceived that they were responsible *for sexual misbehaviour* among the youth and learners as they have access to condoms. On the whole, the responses acknowledged VHWs' positive contributions in promoting health education in rural communities, although the nurse noted that they have become less visible and that most of them are women:

> *The negative economic growth in this country has compromised the visibility of VHWs in the rural communities but [they] are very important people as they are a link between the rural communities and the health delivery centres. In most cases VHWs are women who are employed by the Ministry of Health and Child Care and receive allowances and these are very erratic. They primarily focus on disease prevention and educate rural communities on both communicable and non-communicable diseases and act also as whistle blowers as … some parents for reasons best known to them, deny their children modern medical attention* (Gushungo - nurse).

This response suggests that the low visibility of VHWs was due to low morale as they receive *allowances* that are not paid regularly. Like Chirasha, the nurse acknowledged that VHWs alerted health professionals to parents who deny their children modern health care. While the reason for this was not provided in the written narratives, on probing the nurse, he revealed that this was due to *their religious and cultural beliefs*. The nurse also noted that most VHWs were *women*. While the nurse and the parents' responses

confirmed that VHWs were actively promoting health awareness and consciousness in rural ecologies, their lack of visibility is worrisome.

While the parents and the nurse revealed that health education in rural ecologies was enhanced and made visible through VHWs, the senior teachers acknowledged that Guidance and Counselling (as a subject) raised health awareness and consciousness among learners in rural learning ecologies**.** The next sub-section discusses the effects of the brain drain on rural learning ecologies.

### 5.5.7 The negative effects of the brain drain

Research show that Zimbabwe's ailing economy (Gono, 2012; Biti, 2009) has negatively impacted health delivery in both rural and urban ecologies. The nurse traced this decline in his narrative reflections:

> *I vividly remember when I was a student nurse in the early eighties that the health delivery system in Zimbabwe was the envy of many nations globally and regionally. Things have dramatically changed as we now lack basic health necessities. There is an acute shortage of life saving drugs. Private hospitals have emerged which charge in forex so the poor and vulnerable are unable to access the services of the private health practitioners. There is infrastructural decay and a severe brain drain of qualified, skilled and competent health professionals to neighbouring countries and abroad in search of greener pastures. This has crippled health service delivery in public health delivery centres (*Gushungo - nurse).

Gushungo stated that the brain drain has compromised the delivery of health services. In comparing his past experiences with the present, he pointed to *infrastructural decay* and noted that *the poor and vulnerable* are worst affected, suggesting that the skeletal health workforce is unable to deliver health services effectively. This is likely to negatively affect programmes that promote health education.

The senior teachers' narrative reflections also pointed to a disturbing scenario in rural learning ecologies, noting that brain drain has not only affected the health sector, but the education sector. Mukanya observed:

> *The education ministry has been affected by a massive brain drain of experienced and hard to come by Mathematics and Science teachers to neighbouring countries due to low salaries and conditions of service. This has adversely affected both the urban and rural schools but most affected are the rural schools* (Mukanya - senior teacher).

The other senior teacher remarked:

> *The situation in the schools is disturbing to be honest. Many teachers are just absconding to seek for better opportunities elsewhere and mostly to our neighbours in the region. The economic decay has affected women most as they are left to look after children. Even reading materials are hard to come by. Rural communities have been hard hit most by brain drain* (Mai Kudzie - senior teacher).

Mukanya noted that Science subjects were affected, referring to *hard to come by Mathematics and Science teachers.* Mai Kudzie's use of the term *absconding* confirms the negative effects of the brain drain. She also stated that women are left to carry the burden as men *went to seek greener pastures*. It can therefore be concluded that both education and health are affected by the brain drain, compromising the acquisition of relevant health knowledge and skills, especially in rural ecologies.

### 5.5.8 Theme synthesis

This theme discussed current health awareness initiatives in rural learning ecologies. The participants confirmed that health promotion is visible through health awareness campaigns, immunisation campaigns, HIV/AIDS awareness through school curricula and provision of sanitation. Furthermore, the collaborative approach adopted by the Health and Education ministries and the policy framework for the implementation of health awareness programmes ensured that learners were made conscious of health challenges, enabling them to make informed decisions on issues concerning their health.

In their narratives, the parents expressed great appreciation for sanitation provision at the school and in the community by the government and through the donor community. They stated that they contributed their labour and felt that the school was now a safe and healthy learning zone for their children. The participants' written narratives, narrative interviews and narrative reflections confirmed that VHWs were responsible for teaching measures to prevent diseases, thus complementing health education promotion campaigns. However, some, like Chibwa, accused the VHWs of encouraging promiscuity among the youth and learners to whom they distribute condoms. Nonetheless, on the whole, the narrative interviews with parents confirmed that VHWs were making a positive contribution by providing health education in rural ecologies. The senior teachers' written narratives and narrative reflections confirmed that, through Guidance and Counselling, school curricula enhanced health education promotion in rural learning ecologies. They noted that Guidance and Counselling promotes health awareness and consciousness and equips learners with relevant skills to address health issues, although there could be some challenges in its implementation. Their responses inferred that the implementation of Guidance and Counselling in learning ecologies was supported by curriculum planners. Finally, it was stated that Zimbabwe's ailing economy compromised sustainable learning as it negatively affected both the health and education ministries that collaboratively implement health education programmes in learning ecologies. The loss of experienced, skilled and competent professionals has affected the visibility of health education programmes, compromising sustainable learning in rural learning ecologies.

The next theme discusses access and promotion of health education in rural learning ecologies.

## 5.6 PLATFORMS THAT ENHANCE ACCESS TO AND PROMOTION OF HEALTH EDUCATION

Communication is a key strategy to inform and educate individuals and communities on health issues as it enhances health awareness (Sharma, 2015). Research also confirms that school curricula are an effective tool for the acquisition of health knowledge and skills to develop sound habits and positive behaviours (Ngwu, 2016). The narrative reflections and written narratives by senior teachers and learners acknowledged that activities

defined and guided by school curricula enhanced the acquisition of health knowledge in rural learning ecologies.

### 5.6.1 School curricula

The senior teachers noted that school curricula were instrumental in promoting health education promotion activities. One said:

> *I utilise quiz competitions and debates as my tools in promoting health education as it involves a number of learners and they tend to enjoy debates most when topics are in their mother language (Shona). Debates in English are less lively* (Mai Kudzie - senior teacher).

This highlights the use of participatory approaches to enhance health awareness and consciousness in rural learning ecologies. However, the other senior teacher remarked:

> *Learners tend to enjoy participatory approaches in the teaching and learning context. At one stage I gave learners in groups health topics to research on so that in turn they would present their findings. This was a flop and I was very disappointed. Activity based learning has benefits to learners. Our school has resources challenges* (Mukanya - senior teacher).

While both teachers concurred that they use participatory approaches as noted in the phrases *quiz competitions, debates and presentations*, Mukanya noted that his attempt failed. This could have been because this was a new approach for learners. Mai Kudzie stated that her activities were successful when the *mother language* (Shona) was utilised. This is in line with the literature that recommends the use of the mother language in the teaching and learning context as it makes learning more meaningful. The fact that rural learning ecologies are under-resourced challenges the implementation of health education programmes. Therefore, it can be argued that diverse teaching methods enhance acquisition of health knowledge and promote sustainable learning.

The learners' narrative reflections expressed similar sentiments, although their responses revealed different areas of interest and preferences.

### 5.6.2 Art-Based Activities

One learner said that he enjoyed expressing himself through art and that his work was valued:

> *I really enjoy drawing and my teachers are very pleased with my work. They encourage me to draw posters with health messages though sometimes I lack paint or crayons. My work is usually displayed in the school notice board* (Munashe - learner).

Another pointed to the use of music to convey health messages:

> *Mai Kudzie, my Guidance and Counselling teacher is a good music teacher and she formed a school choir. She composes songs for our health competitions and I am part of the choir. I wish the school can also buy us some uniforms* (Eusie - learner).

A learner shared that drama was also used to spread health messages:

> *We have a drama club at our school. In 2019 our drama club won a floating trophy as we came first. Five secondary schools participated in the drama competitions on HIV/AIDS which was sponsored and adjudicated by the Ministry of Health and Child Care (*Mukudzeyi - learner).

Another learner remarked:

> *On assembly days or on parents' day our teachers give us an opportunity to have public speaking on health issues. Some of us who are good at poetry are also given a chance and in most cases poems are in Shona as our parents understand it better than English* (Taku - learner).

These responses noted that school curricula provided a variety of activities, including *quiz competitions, debates, art, music, drama* and *public speaking* with learners indirectly revealing different areas of interest, although Rumbie and Mukudzeyi concurred on one activity (drama). Despite challenges, teachers identify talent which they use to drive health messages home. The responses further revealed that learners are exposed to health threatening sexually transmitted diseases, as *HIV/AIDS* was mentioned. They point to collaboration as it was noted that the Ministry of Health and Child Care was

involved in *sponsoring and adjudication*. In summary, it is evident that different activities provided by curricula promote health education and thus enhance sustainable learning.

### 5.6.3 Peer educators

The written narratives of the two senior teachers and the nurse confirmed the utilisation of peer educators in promoting health education, although they were context specific. A senior teacher stated:

> *Peer educators are very effective in teaching other learners on different health issues, health threatening activities and different diseases but this needs careful planning on the part of the teachers. I normally use peer educators to teach other learners at the school on different diseases and other health related challenges and the learners seem to enjoy but time in most cases is a militating factor as the school timetable is overloaded. I take time and consult other teachers and health professionals on the content which the peer educators would teach others* (Mai Kudzie - senior teacher).

The other senior teacher stated that the teachers collaborated to identify talented learners to be peer educators:

> *As staff, we normally identify talented learners in different classes whom we feel have the capacity to educate others on health issues as defined in … school curricula. I carefully prepare the content to be taught with the assistance of other teachers and we normally have peer education sessions in the afternoons* (Mukanya - senior teacher).

Mai Kudzie pointed to collaboration by using the words, *take time and consult other teachers.* This was echoed by Mukanya who spoke of *talent identification*. Both responses revealed that peer educators were an effective strategy to promoting health awareness. However, it required careful planning, as noted in the phrases *carefully prepare* (Mukanya) and *needs careful planning* (Mai Kudzie). Further, Mai Kudzie's response indicated depth in the content taught, as revealed in the phrase *different diseases and health related challenges.* She also confirmed collaboration between the health and education ministries, with reference made to *health professionals*. However, Mai Kudzie

remarked that time was a challenge as the timetable *was overloaded*, while Mukanya indirectly corroborated this by stating that they *utilised afternoons* for peer education sessions.

In a similar vein, in his written narratives, the nurse shared:

> *The Ministry of Health and Child Care has trained peer educators who periodically visit rural communities, educating them on health issues and they use the language which is frequently used in a particular geographical context. The adult peer educators exploit social gatherings to educate rural communities on health issues. Mostly, these peer educators teach basic bodily hygiene, sexually transmitted infections and means of preventing diseases* (Gushungo - nurse).

This response points to the use of peer educators who have *received training.* It suggests that these peer educators could be trained health workers. Gushungo's response concurs with the responses of the senior teachers in pointing to the use of the mother language (Shona) which is the dominant indigenous language in this community, to convey health information as noted in *they use language which is used in a particular geographical context*. However, of concern is Gushungo's reference to the fact that peer educators *periodically visit rural communities*, inferring challenges. This could suggest that, as stated in the literature, Zimbabwe's economic challenges are negatively affecting health education activities and programmes.

### 5.6.4 Non-Governmental Organisations

This sub-section discusses health education promotion activities coordinated in rural ecologies by NGOs. In his written narratives and narrative reflections, the nurse remarked:

> *A number of Non-Governmental Organizations (NGOs) like World Vision, Family Aids Caring Trust (FACT) and World Food Programme (WFP) and Care International are actively involved in promoting health education in the rural communities. World Vision has successfully drilled boreholes in the rural communities while Family Aids Caring Trust has massively educated rural communities on sexually transmitted diseases with main focus on HIV/AIDS*

*awareness and prevention. Further, FACT has promoted and funded immunisation and circumcision of learners in the rural schools. Care International launched and monitors nutrition gardens in rural communities. Aquaculture (fish farming) is the brain child of Care International and rural communities are actively involved as it is an income generating project as the selling of fish brings money to the poor and vulnerable* (Gushungo - nurse).

Gushungo's response reveals that NGOs are engaged in health education promotion activities, with each having a clearly defined mandate. *Nutrition gardens* provide food security in rural households (Care International), while The Family Aids Caring Trust promotes *HIV/AIDS* awareness in rural ecologies through its health education programmes. The response shows that each NGO mentioned engaged this rural community in activities that promote health education. On probing, the nurse revealed that NGOs worked collaboratively with health professionals, teachers and traditional leadership in implementing health education programmes.

### 5.6.5 Synthesis of the theme

This theme discussed health education promotion activities in rural learning ecologies. The senior teachers' responses (written narratives and narrative reflections) acknowledged that school curricula provided a variety of activities that promoted health education, thus enhancing sustainable learning. The senior teachers revealed that they utilised quiz competitions, debates, and presentations as platforms to promote health awareness in the rural learning ecology. Learners acknowledged that the school engaged them in art-based activities like poetry, music, drama and public speaking which exposed them to health issues. The written narratives and narrative reflections of the senior teachers confirmed that peer educators were instrumental in promoting health awareness among a wider audience, that is, all the learners in a particular learning ecology and in communities (urban and rural). The nurse acknowledged that adult peer educators were trained, which probably suggests that the peer educators consisted of trained and well-equipped health professionals. The nurse also highlighted NGOs' coordinated health education activities in rural communities and that they engage communities in projects like fish farming and nutrition gardens. Some NGOs like FACT coordinated health

awareness campaigns on health threatening STIs like HIV/AIDS and other diseases. In their narrative interviews, the parents expressed diverse opinions, but it was evident that health education promotion campaigns were educative. The following section discusses the challenges in implementing health education in rural learning ecologies.

## 5.7 CHALLENGES IN IMPLEMENTING HEALTH EDUCATION PROMOTION

The findings revealed that teaching and learning resources and utilisation of technology emerged as key strategies in the implementation of health education promotion in rural learning ecologies. However, a number of challenges were revealed by the participants which hampered successful implementation to enhance sustainable learning. The current literature on the situation in Zimbabwean rural learning ecologies identifies a plethora of challenges in the implementation of health education promotion (Gudyanga, 2019). The written narratives and narrative reflections by the two senior teachers and the nurse revealed that Zimbabwean rural learning ecologies were characterised by inadequate teaching and learning resources, a lack of infrastructure, challenges in accessing the Internet, challenges in implementing sexuality education and inadequately capacitated teachers to handle health education; hence the need for professional development.

### 5.7.1 Access to and availability of resources in rural learning ecologies

This sub-section discusses the resource challenges revealed in the narrative responses of the two senior teachers. One remarked:

> *The government is failing to provide in time [a] per capita grant to enable the school to buy learning resources and we have inadequate reading material in Guidance and Counselling. Learners are engaged on health issues in Guidance and Counselling (subject). I rely mostly on the syllabus which only spells out the learning content and parents are unable to buy textbooks for their children which thus makes teaching of health education a big challenge* (Mai Kudzie - senior teacher).

It is evident that the learners are engaged on health issues through *Guidance and Counselling*. Mai Kudzie acknowledges that the government has an obligation to fund learning activities but is unable to timeously disburse funds through the appropriate

channels as noted *in failing to provide in time.* This suggests that the government is overwhelmed with responsibilities, or that it has revenue collection challenges which contribute to delayed disbursement of funding. The fact that parents are *unable to buy textbooks* for their children indicates that they are financially incapacitated. Mai Kudzie acknowledged that she relied on the *syllabus,* an indication that it is the official guiding document for the teaching of health education. Furthermore, it is evident that she has no supplementary literature to use in teaching Guidance and Counselling as she relies solely on the syllabus, implying an acute shortage of teaching and learning resources.

Appointment to teach Guidance and Counselling is not based on merit, but on seniority and moral standing. The other senior teacher remarked:

> *When the Head appointed me to be a Guidance and Counselling teacher, the only resource books that were availed to me for learners to use were titled "Let's Talk". These books specifically focus on HIV/AIDS awareness. These were a donation from UNICEF in the late 1990s. They are now torn and many have missing pages and they are not enough for all the learners. I rely on the syllabus to draw my teaching notes on Guidance and Counselling. I have made several requests through the Head of Department for onward transmission to school authorities but it is promises after promises* (Mukanya - senior teacher).

The response corroborates Mai Kudzie's response that Guidance and Counselling is a subject that engages learners on health issues and that it is under-resourced, as many of the books that are used *have missing pages.* The *donated books* focus on HIV/AIDS, disregarding other health issues, which suggests that learners might not be optimally benefitting from such old sources. It is evident that there are inadequate resources for Guidance and Counselling. Like Mai Kudzie, Mukanya stated that he relies on the syllabus, suggesting that learners might be receiving shallow information as the teacher has no alternative source.

The nurse had the following to say with regard to the issue of resources in rural learning ecologies:

> *We only give a few posters and pamphlets as the parent ministry is financially unable to supply all schools with adequate posters. The few that we give are inadequate and sometimes we distribute flyers in the rural communities when resources permit* (Gushungo - nurse).

This response confirms that rural communities are hard hit by inadequate resources, as revealed by the phrase *a few posters and pamphlets* which are not capable of fully addressing the health needs of learners in rural learning ecologies. It concurs with the responses of the senior teachers who acknowledged that the resources were inadequate to enhance sustainable learning. Collaboration between the Ministries of Health and Education was noted as revealed in, *unable to supply all schools*. In a nutshell, *posters, pamphlets and flyers* were inadequate in catering for learners' needs.

### 5.7.2 Access to and availability of infrastructure

This sub-section discusses infrastructure challenges in rural learning ecologies which the senior teachers' written narratives blamed on the low levies paid by parents to the School Development Committee. One stated;

> *The levies charged by the School Development Committee (SDC) compared to the prices of goods and services are too low. We have an acute shortage of furniture and the school has inadequate classrooms* (Mai Kudzie - senior teacher).

The other said:

> *The school has no library and a computer laboratory as there is no electricity at this school. Some of the classroom blocks are old and are in need of renovations. There is a shortage of staff accommodation as a majority of the teachers share accommodation which violates privacy in case of married couples* (Mukanya - senior teacher).

What is implicit in the responses of both senior teachers is *inadequate infrastructure* for both learners and teaching staff as revealed in *acute shortage of furniture and shortage of classroom blocks.* The absence of *a library* and *a computer laboratory* further paints a gloomy picture as learners are unable to access the Internet for current health literature.

Mai Kudzie's response acknowledges that *the low levies* paid by parents to the SDC contributed to infrastructure challenges in this rural learning ecology. This could also be attributed to economic decline in Zimbabwe, but on probing the senior teachers, they acknowledged that the ruling elite regarded rural ecologies as their stronghold and did not want lose votes come election time; hence the low levies.

### 5.7.3 Access to and availability of technology in rural learning ecologies

High quality and relevant health related information can be enhanced by embracing technology in learning ecologies (Aryee, 2014). The current literature confirms that ICT has been embraced in Zimbabwean learning ecologies, although there are challenges in rural learning ecologies (Ganyani, 2016). This sub-section explores technological challenges in rural learning ecologies that were revealed in the senior teachers and nurse's written narratives and narrative reflections. A senior teacher shared:

> *This school is located in a deep rural area and very far away from the nearest town which is one hundred and eighty (180) kilometres away. There is no electricity and we do not dream to have a computer laboratory in the near future at this school* (Mukanya - senior teacher).

Mai Kudzie concurred and pointed to the lack of electricity and Internet connectivity as challenges in accessing health education literature:

> *This school has no computer and not even a laptop. Everything here is done manually and the school cannot even afford to buy such gadgets. Due to the absence of electricity, there are no Internet facilities for both the learners and the teachers* (Mai Kudzie - senior teacher).

Both senior teachers note that the learning ecology is located in a remote area, as confirmed in the phrases *deep rural area* and *located one hundred and eighty kilometres away.* This suggests that the learning ecology cannot access technology due to its distance from the nearest town. The fact that the learning ecology has *no Internet connectivity* implies that learners cannot access current health education literature, which probably compromises sustainable learning. It further implies that it is hard to recruit teachers to teach computer skills in rural learning ecologies.

In similar vein, the nurse remarked:

> *The clinic has no electricity and there is poor signal network coverage from the service providers. We struggle to communicate with our provincial headquarters and even to secure the services of the ambulances to ferry seriously ill and expecting mothers to the next health referral centre. A donor promised to install solar electricity but this might take a long time* (Gushungo - nurse).

Overall, the nurse echoed the sentiments of the senior teachers on the *unavailability of electricity* but added the dimension of *poor signal network coverage* which is an impediment to communicating with the relevant authorities and to soliciting assistance with critical health cases. The current literature confirms that, due to their geographical location, rural communities experience communication challenges. The promise of *assistance* suggests that there are bureaucratic hurdles which hinder speedy installation of solar gadgets and solar panels. The findings under this sub-theme therefore confirm that rural ecologies, including rural learning ecologies, experience technological challenges.

### 5.7.4 Cultural barriers in the implementation of sexuality education in rural learning ecologies

This sub-section discusses cultural barriers to the implementation of sexuality education in rural learning ecologies as reflected in the narrative interviews (parents and the headman) and written narratives and narrative reflections (senior teachers, nurse). The responses reflect diverse opinions, with some parents adopting a conservative approach. One parent shared the following:

> *Chidzidziso ichi hachina kunakira vana vachiri kuyaruka sezvo vachizoita nyaya dzepabonde nguva isina kukwana. [Sexuality education is not good and appropriate for the adolescent learners. This can result them in engaging in intimate sexual activities]* (MaNyoni - parent).

This view was shared by another parent who stated that she was not comfortable with sexuality education in rural learning ecologies:

> *Chidzidziso ichi chinokonzeresa. Chinoita kuti vana vazive zvinhu zvavanga vasingangafaniri kuziva. Tsika nemagariro edu vanhu vatema haazvitenderi izvi VaChipato! [The teaching of sexuality education is a landmine field with serious consequences Mr Chipato! Our culture is totally against teaching of sexuality issues. The issue must not be handled by teachers in the schools* (Chihera - parent).

In contrast, a parent remarked:

> *Handioni chakashata kuti vana vazive chidzidzo chenyaya dzepabonde uye vabereki ngatifambiranei nenguva. Vana vazhinji vava kuziva nyaya idzi saka ngavadzidziswe muzvikoro nevadzidzisi. Mimba dzawandisa muzvikoro uye vanasikana vazhinji vari kusiira chikoro panzira. [I do not see anything wrong in the teaching of sexuality education in the schools and we as parents need to move with the trends of time. Most girl learners at the adolescent stage are dropping out of schools due to pregnancies hence the need for sexuality education]* (Chibwa - parent).

The headman added a traditional dimension in concurring with Chihera:

> *Chidzidziso ichi ngachidzidziswe nana tete naana sekuru kuvana vedu setsika yedu. Varaidzi vanogona kuchishandisa sechombo chokuita zvepabonde nevansikana vedu. [Sexuality education must be taught with aunts and grandparents to the youths and adolescent learners in accordance to our culture. Allowing teachers to implement it in schools is giving teachers, especially male teachers a passport to engage with girl learners into intimate sexual relationships]* (WaMambo - headman).

The parents had mixed reactions to the issue of sexuality education in rural learning ecologies. MaNyoni and Chihera perceived sexuality education as harmful to the youth and adolescent learners as it *initiated them into intimate sexual relationships* (MaNyoni) and was *against their culture* (Chihera). The literature concurs that sex is a taboo subject in most African cultures (Muguwe & Gwirayi, 2011). The reference to *culture* suggest that rural communities strongly believe in traditional structures, as the headman stated that

sexuality education ought to be the responsibility of *aunts and grandparents.* Another parent felt that sexuality education was *a landmine.* In contrast, Chibwa and Chitova supported sexuality education in rural learning ecologies, as confirmed in *moving with the trends of time* (Chibwa), while Chitova acknowledged that learners are sexually active, which necessitates its implementation by teachers. Furthermore, Chitova's narrative responses revealed that he regarded sexuality education as a tool that equips learners to adopt refusal skills and empowered them to make sexual health decisions. On the whole, only a few of the parents that participated in this study were in favour of the implementation of sexuality education in rural learning ecologies, with the majority being uncomfortable, suggesting that sexuality education implementation in these ecologies is a challenge.

In similar vein, a senior teacher said:

> *I want to honestly tell you Mr Chipato that sexuality education is a sensitive learning area, a component in Guidance and Counselling. We have a diversity of learners who come from different cultures. These differences in cultural backgrounds have placed me in a dilemma; hence in most cases I deliberately ignore the topic (*Mukanya - senior teacher).

However, the other senior teacher showed her resourcefulness:

> *I normally invite resource persons from our nearest health delivery centre (clinic) as I feel that I am not best trained to handle it. Most parents do not want their children to be exposed to sexuality issues. When it is handled by an outsider, I noted that the boy learners show a lot of enthusiasm while the girl learners show a reserved approach and are shy to ask questions. My teacher training did not expose me to health education as I specialised in Religious Studies and Shona as my main subjects; hence my invitation of the local health professionals with the permission of the school Head (*Mai Kudzie - senior teacher).

Acknowledging that sexuality education is *a sensitive learning area* and *inviting resource persons* suggests that the senior teachers find it very difficult to implement in rural learning ecologies. Mai Kudzie's areas of specialisation during teacher training, *Religious Studies*

*and Shona* failed to equip her with health education techniques, which made it difficult to provide sexuality education. Her invitation of a *resource person* demonstrated that she was resourceful. Mukanya's response concurred with Chihera who used the words, *a landmine,* confirming that sexuality education is a sensitive learning area. Furthermore, Mukanya stated that he feared cultural conflict, as noted in the phrase *a diversity of learners* from different cultures. The fact that boy learners showed *open enthusiasm,* suggests that they had reached adolescence as at this stage there is increased interest in the opposite sex; a view supported by the current literature. Probably because of culture and fear of being labelled, the girls showed less enthusiasm. From the perspective of the senior teachers, it was a challenge to implement sexuality education in rural learning ecologies.

### 5.7.5 The need for professional development

The narrative responses of the two senior teachers confirmed that Guidance and Counselling was a compulsory subject in Zimbabwean secondary schools, but it was noted that it had its fair share of challenges. Mai Kudzie remarked:

> *When I trained as a teacher in the late eighties, the teacher training curricula was silent on health education and there was no single module related to that. I specialised in two subjects namely Religious Studies and Shona and other courses like Educational Psychology, Philosophy of Education and Sociology of Education. I was appointed by the Head to teach Guidance and Counselling in addition to my subjects I specialised in. I am overwhelmed with my teaching load* (Mai Kudzie - senior teacher).

Mukanya presented similar views and revealed a number of challenges in teaching Guidance and Counselling in rural learning ecologies:

> *Guidance and Counselling is currently being taught by teachers who are not specialised in that discipline and who did not receive specialised training during the teacher training phase. The subject though very important, is only allocated one forty (40) minutes lesson once a week and is not examinable at the end of the*

*secondary school course that is at Ordinary Level (O Level) or at Advanced Level (A Level)* (Mukanya - senior teacher).

It is evident that there is a need to revisit teacher training curricula as both responses by the senior teachers confirmed that they did not receive *specialised training* and that teacher training curricula were silent on health education. I noted that Guidance and Counselling is not taken as seriously as it is *not an examinable subject*. Health education was not part of Mai Kudzie's teaching training as she *specialised in Religious Studies and Shona.* This suggests the need for in-serve training for Guidance and Counselling teachers to equip them with skills to teach Guidance and Counselling in learning ecologies. Mukanya also raised the small amount of time allocated to Guidance and Counselling (*forty minutes per week*) and curriculum planners should also consider revisiting the time allocated as it caters for the health needs of learners in rural and urban learning ecologies. In summary, the responses revealed the need to capacitate Guidance and Counselling teachers through in-service training to enhance sustainable learning in rural ecologies.

### 5.7.6 Synthesis of the theme

The responses from the purposively selected senior teachers and health professional - secondary tier assets) revealed that rural learning ecologies experience diverse challenges in implementing health education promotion. The senior teachers (Mukanya and Mai Kudzie) noted that rural learning ecologies were not adequately resourced. There was insufficient literature to teach Guidance and Counselling and the material provided was outdated. There is also shortage of infrastructure in rural learning ecologies and the school had no library or computer laboratory to enhance sustainable learning. It had not embraced ICT as it is in a deep rural context with virtually no Internet connectivity. Furthermore, there is poor signal network coverage which compromises effective communication. Sexuality education implementation also confronts challenges as it was noted to be a sensitive learning area. The senior teachers noted that there were challenges in implementing Guidance and Counselling as they were inadequately capacitated and their appointment to teach the subject was not based on merit but on

seniority. In summary, implementation of health education confronted a plethora of challenges.

## 5.8 CHAPTER SYNTHESIS

This chapter presented the study's findings on the participants' conceptualisation of health education and understanding of sustainable learning, and health awareness programmes in rural learning ecologies in Zimbabwe. It also discussed the current situation regarding health education promotion, health education promotion activities, the challenges confronting implementation of health education promotion and the need for professional development of teachers. Written narratives, narrative interviews and narrative reflections were utilised to answer the critical research questions.

The following chapter discusses the findings and conclusions on health education promotion for sustainable learning in Zimbabwean rural learning ecologies.

# CHAPTER SIX

# DISCUSSION OF FINDINGS

## 6.1 INTRODUCTION

The previous chapter presented, analysed and interpreted the data generated on health education promotion for sustainable learning in Zimbabwean rural ecologies in line with the themes that emerged. This chapter discusses the study's findings. A literature review, theoretical framework and research methodology were utilised to strengthen the participants' contributions presented in the previous chapter.

## 6.2 OBJECTIVES RESTATED

6.2.1 To analyse the current situation regarding health education promotion in Zimbabwean rural ecologies.

6.2.2 To explore the strategies used to access and promote health education in rural ecologies.

6.2.3 To identify the challenges (if any) faced by Zimbabwean rural learning ecologies in the implementation of health education strategies for sustainable learning.

## 6.3 HEALTH EDUCATION INVOLVES TEACHING HEALTH RELATED ISSUES AND IS GOAL FOCUSED

The findings (5.3.1; 5.3.2; 5.3.3; & 5.3.4) revealed that the participants' understanding of the concept of health education is consistent with the literature (1.9.1). Health education was understood as the teaching and learning of health related issues in schools and communities, as a pillar in promoting health awareness among individuals and communities through the utilisation of strategies, and a field that deals with methods to teach health issues. Health education was also described as teaching people to avoid illness so as to grow healthy, a person with knowledge of health passing it on to someone without such knowledge with the goal of making that person health conscious, and sexuality education to prevent the spread of STIs.

Felton and Chapman (2014) assert that the purpose of health education is to use the educational process (a planned activity) to positively influence the behaviour of individuals (learners) and, ultimately, the health of communities. The literature notes that health education is a combination of planned learning experiences based on theories that provide groups and communities with an opportunity to acquire the information and skills required to make quality health decisions (Kickbusch & Nutbeam, 2017; Hernandez, 2011; Sharma, 2016). The two senior teachers (primary tier assets ABA - 2.2) highlighted that health education involved the teaching of health issues in particular contexts (schools). As revealed in the narratives of the primary and secondary tier assets, it facilitates health knowledge acquisition by a desired target audience (learners), which validates that it is a planned activity. Teaching involves careful planning and utilising appropriate methodologies, which confirms that the empirical findings are consistent with the literature. The teaching commonality which emerged in most responses therefore confirms that health education is a planned activity. Health education promotion utilises techniques such as posters, pamphlets, and participating and reflecting in groups (Maphalala, 2016; WHO, 2015). In one of the responses the use of "strategies" was mentioned which shows a clear understanding that the participants had an understanding of the concept of health education.

The responses of the participants in sub-section 5.3.1 revealed that health education is goal focused as confirmed by studies by Doyle, Ward and Early (2015), and Gilbert, Sawyer and McNeill (2014) who acknowledge that the goal of health education is to impart health related knowledge that influences values, beliefs, attitudes and motivation, which dovetails with one of the theories of this study, the HBM (2.3). The findings (5.3.5) acknowledged that health education involved teaching of modern day practices which emerged as a commonality in most of the responses. A majority of the participants acknowledged through their narratives that health education is goal focused. What was also implicit in the participants' responses was teaching of health related issues by someone with knowledge to someone with less or no knowledge (asset utilisation in form of a nurse or the senior teachers), or to a particular target audience (learners and rural communities) with the goal of empowering individuals and rural communities to make informed decisions which, again, is consistent with the ABA (2.2), a theory which

underpinned this study whose goal is to empower communities and individuals. The main emphasis of the ABA approach is facilitating individuals and communities to achieve positive change using their own knowledge, skills and lived experiences of issues they encounter in their own lives (Foot, 2012; Chikoko & Myende, 2012). This empowers communities and individuals in decision making and being conscious of health threatening infections through the health education lens facilitated by utilising locally available assets (senior teachers, VHWs and health professionals).

I managed to obtain inside information from the participants with regard to their understanding of the concept of health education through the study's research instruments (4.8.1. 4.8.2. 4.8.3). This is corroborated by the constructivist paradigm which makes an effort to get into the heads of the subjects studied and to interpret and understand what the subject is thinking (Creswell, 2014, 2015; Denzin & Lincoln, 2015; O'Leary, 2014). This paradigm was utilised in this study (4.2.1.1). Data generation was conducted in a natural setting (a rural secondary school) as recommended by Denzin and Lincoln (2015), which enabled in-depth understanding of how the participants conceived of health education.

In summary, the findings on the concept of health education (5.3) are consistent with the current literature on health education as the participants clearly showed in-depth understanding of the concept and identified its goals, making one of the theories utilised in this study, the ABA ( 2.2) relevant to the study through the utilisation of available assets (nurse - secondary tier asset, two senior teachers -primary tier assets) to make learners and rural communities health conscious (through health awareness campaigns) and enable them to make informed health decisions (empowering learners and rural communities) which are implicit in the ABA ( 2.2). The utilisation of a natural setting (a rural secondary school) provided the participants with a platform to freely express their views through written narratives, narrative interviews and narrative reflections (4.8.1. 4.8.2. & 4.8.3) (Denzin & Lincoln, 2015). Ethical issues were also observed (4.10.1) (O'Leary, 2014; Best & Khan, 2014). The next section discusses the participants' understanding of the concept of sustainable learning.

## 6.4 PERCEPTIONS OF SUSTAINABLE LEARNING IN RURAL LEARNING ECOLOGIES

The narrative responses of the two senior teachers (primary tier assets) and a nurse (secondary tier asset), confirmed that they had a deeper understanding of the concept of sustainable learning than the other participants, perhaps due to their high level of literacy. The findings (5.4.1) showed that the two senior teachers defined sustainable learning as a process that involved equipping individuals (learners) with knowledge, skills and information to be used in the future. Furthermore, sustainable learning was understood as beneficial to recipients. The literature (1.9.2) highlights that in a teaching and learning context, sustainable learning can be achieved if the curriculum and teaching methods are compatible with and relevant to learners' culture and society (Pare et al., 2015). Therefore, the curriculum plays a pivotal role in enhancing sustainable learning, as do the teachers responsible for implementing it, an issue not raised by the participants. Overall, however, the study's findings are in line with the literature in the sense that learners can be equipped with health knowledge and skills through school curricula. The nurse (5.4.2) understood sustainable learning as an ongoing learning process that enables individuals to make informed decisions on, in this case, health related issues.

The findings are also consistent with the literature (1.9.2) that acknowledges that sustainable learning is not a static, but an ongoing process (Pedler & Hsu, 2014). Furthermore, sustainable learning involves acquiring knowledge, skills and information from pre-school to throughout adulthood (Gardiner & Rieckmann, 2015). It is thus a continuous, intentional lifelong learning process. This dovetails with the findings of this study.

The following section discusses the current state of health education promotion in Zimbabwean rural ecologies. The underperforming economy has compromised health education promotion programmes in rural ecologies although the programmes that exist are supported by sound legislative frameworks (5.5). The participants noted that VHWs were working in rural ecologies to promote health education promotion programmes, but were less visible than in the past. Health education campaigns complement the work of the VHWs, although challenges were revealed in this regard.

## 6.5 HEALTH EDUCATION PROMOTES HEALTH CONSCIOUSNESS THROUGH COLLABORATIVE APPROACHES

The participants' responses revealed the presence of structures and mechanisms guided by the Ministry of Health and Child Care (2014) with regard to the promotion of health education in rural ecologies, although it was noted that these need to be strengthened.

### 6.5.1 Promotion of health consciousness in rural ecologies

The literature (3.4.5, 3.7) identifies a number of strategies to provide health education, including health awareness campaigns. The media (print and electronic), videos, slides, posters, and the Internet are other sources of health information (Cicchino, 2013; Sharma & Gupta, 2016). In order to maximise effectiveness, posters, pamphlets and other material should be produced in the language best understood by the target audience (Sharma & Gupta, 2016).

The study revealed that health education promotion campaigns (5.5.1) run by staff (secondary tier assets) at the health delivery centre complemented the work of VHWs in providing health education in rural ecologies. This confirms the applicability of the ABA which was one of the theoretical lenses employed in this study. The ABA's (2.2) main principle is identifying individuals and community assets and utilising them to solve problems. Thus in this study, the health professionals (secondary tier assets) were instrumental in spearheading health awareness campaigns. The responses also revealed that health awareness campaigns run by staff from the health delivery centre were successfully used to educate Zimbabweans in rural ecologies on COVID-19. Some participants acknowledged that this led to the use of masks and sanitizers by community members. This dovetails with the HBM, the other theoretical lens used in this study.

The above findings confirm that health awareness campaigns enable the target audience (rural communities) to access health knowledge using locally available resources (health professionals - secondary tier assets) to achieve positive change. They further validate that the ABA (2.2) had relevance and applicability to this study which explored health education promotion to enhance sustainable learning with the goal of empowering communities to develop positive behaviours, which is also implicit in the HBM (2.3). Both

the HBM and the ABA have the capacity to transform learners and rural communities by motivating and empowering them to address the health challenges they encounter. It can further be argued that, as revealed in the participants' responses, health awareness campaigns facilitate access to health education by the desired target audience. thus enhancing sustainable learning.

The following sub-section discusses screening for cervical cancer and circumcision of learners in the learning ecologies of Zimbabwe, which are now part of the school calendar.

### 6.5.2 Cancer screening and circumcision

The data presented in sub-section 5.5.2 revealed that screening for and immunisation against cervical cancer and circumcision of learners between the ages of 10 and 14 was in place in the rural and urban learning ecologies of Zimbabwe. This concurs with the literature (1.4). The National Health Strategy 2016 to 2020 (3.10.3) states that, through provision of education (health awareness campaigns) and preventive methods (vaccination), equity and quality health are achieved irrespective of age or gender. The study established that parents had positive and negative views on these drives. The literature also confirms that the programme is implemented collaboratively by the Ministries of Health and Education (1.4). According to the HBM (2.3), individuals act if they feel that their health is threatened (perceived susceptibility (2.3.2.1)) and perceive the benefit of that activity (perceived benefits 2.3.2.3). The positive minded parents who consented to the programme had the welfare of their children at heart while negative attitudes could be attributed to ignorance or adherence to strict religious and cultural practices. Screening for and immunisation against cervical cancer, and circumcision of learners are thus in place in rural learning ecologies, positively contributing to learners' health, which is one of the goals of health education.

The literature on emerging economies (3.8.2) notes that sexual misbehavior, teenage pregnancies, high girl learner dropout rates, drug and substance abuse and an upsurge in STIs including HIV/AIDS (Muhanga & Malungo, 2017) are common problems among adolescent learners. Research studies acknowledge that HIV/AIDS awareness in most developing countries was introduced in learning ecologies in response to an upsurge in STIs among learners (UNESCO, 2009, 2010). The following sub-section discusses the

study's findings on health threatening STIs as revealed in the narrative responses of the six parents, the nurse and the two senior teachers.

### 6.5.3 Health threatening sexually transmitted infections

The narrative responses of the six parents in sub-section 5.5.3 revealed that HIV/AIDS and STI awareness was being facilitated through Guidance and Counselling (a compulsory subject at secondary schools in Zimbabwe). This is consistent with the literature which notes that Guidance and Counselling was introduced in Zimbabwean secondary schools through Chief Education Circular Number 16 of 1993 (MoESC) in response to an upsurge in HIV/AIDS in learning ecologies. Mthiyane (2014) states that Life Orientation, which engages learners on health issues, is a compulsory subject in South African secondary schools. She adds that all topics are age/grade relevant, which is consistent with this study's findings. Thus, school curricula were noted as instrumental in raising awareness of STIs. This is corroborated by the international literature (Erford, 2011; Lunerburg, 2010; Jacobs & Frantz, 2014). Due to economic decline and poverty (UNAIDS, 2014), there was an upsurge in health threatening STIs among secondary school learners, raising the need for health awareness through curricula and campaigns. This dovetails with the HBM (2.3). Therefore, the narrative responses of the six learners, the nurse and the two senior teachers show that HIV/AIDS awareness programmes were being run in rural learning ecologies.

The literature notes that the Government of Zimbabwe in partnership with NGOs has provided sanitation in rural communities. This is the subject of the following sub-section.

### 6.5.4 Sanitation visibility in rural learning ecologies

As shown in sub-section 5.5.4, the narrative responses of the six parents and the nurse pointed to positive change with regard to sanitation in Zimbabwean rural learning ecologies. This contradicts the literature which asserts that rural ecologies are persistently marginalised (Mangwaya & Ndlovu, 2013; UNAIDS, 2014). The current literature notes that the government and the donor community are focusing on improving sanitation facilities in rural learning ecologies through drilling boreholes and providing building material for the construction of blair toilets (Ministry of Health and Child Care, 2015). I

would argue that, while more needs to be done, positive developments in sanitation provision are visible in the country's rural learning ecologies.

The literature confirms that Guidance and Counselling engages learners on health issues. It is a compulsory subject in Zimbabwe (Muguwe & Gwirayi, 2011), although there are challenges in its implementation. The following sub-section (6.5.5) discusses the findings on Guidance and Counselling as revealed in the narrative responses of the senior teachers and learners.

### 6.5.5 Enhancing health knowledge and health literacy

Studies in Kenya (Abobo, 2012), Tanzania (Muhanga & Malungo, 2017), South Africa (Mthiyane, 2014) and other developing countries as well as developed countries acknowledge that health education is taught in subject form through school curricula. Mthiyane (2014) notes that in the South African education system, the learning content is age/grade relevant. The literature (3.9) also notes that health education implementation modalities in learning ecologies vary from country to country. In Zimbabwe, Guidance and Counselling is a compulsory subject which engages secondary school learners on health issues. This concurs with the findings of studies on other countries. The subject is taught in accordance with the Chief Education Officer's Circular Number 16 by a Guidance and Counselling teacher (MoESC, 1993). Guidance and Counselling was introduced in Zimbabwean learning ecologies in response to an upsurge in HIV/AIDS and other STIs. This is similar to trends in other different countries. Health education is taught in subject form (3.10.1) as communicable and non-communicable diseases and conditions continue to affect many people (UNAIDS, 2014) across the globe, with Zimbabwe one of the worst affected.

Health education programmes in schools are designed to promote refusal skills and effective health decisions around smoking, drug and substance abuse, HIV/AIDS, contraception, and perceptions about sexual activities (Givaudan et al, 2008), (perceived benefits - HBM, 2.3). Health education for learners tends to reduce misinformation and teenage pregnancies, increase health knowledge, clarify and solidify positive behaviours, increase communication, improve awareness of peer group norms and delay sexual debut (UNESCO, 2009, 2010).

Zimbabwe's Curriculum Framework for 2016-2022 sets out broad learning areas for primary and secondary school learners. Life Skills (primary school) and Guidance and Counselling (secondary school) engage learners on health issues (Manzira, 2014), although as noted, that there might be implementation challenges (3.9) This is consistent with Mthiyane's (2014) study that found that the South African education system engage learners on health issues through Life Skills (primary) and Life Orientation (secondary). Health education is taught in subject form in both developed and emerging economies (3.8). As noted in sub-section 5.5.5, the two senior teachers and six learners stated that Guidance and Counselling was used as a tool in the teaching and learning context for learners to access health knowledge through Guidance and Counselling teachers (primary tier assets, ABA, 2.2). It promotes health awareness and enables learners to make informed health decisions (5.5.5). This is consistent with the literature (3.9.1). Guidance and Counselling is complemented by other subjects in school curricula, namely, Human and Social Biology and Combined Science, further enhancing sustainable learning. However, the responses revealed that Guidance and Counselling is under-resourced and, as noted by Manzira (2014) and Muguwe and Gwirayi (2011), more needs to be done in terms of resource allocation (textbooks and current health literature) as the subject is not taken seriously.

The literature notes that VHWs play an instrumental role in raising health awareness in rural learning ecologies and rural communities. The following sub-section discusses the study's findings on VHWs.

### 6.5.6 Village health workers are a vital link between rural communities and health delivery centres

The narrative responses of the parents and the nurse revealed that VHWs (5.5.6) are currently responsible for promoting health education programmes in rural ecologies as well as health awareness following guidelines set by the Ministry of Health and Child Care (2014). According to the Ministry (2014), VHWs primarily focus on prevention of diseases through educating rural communities with the assistance of health professionals from their nearest health delivery centre. They are a link between the rural health delivery centre and the rural community (Ministry of Health and Child Care, 2014; Dieleman, Watson &

Sisimayi, 2012). The narrative responses from the nurse revealed that VHWs are raising awareness of health issues among communities, although they operate under difficult circumstances and there is a need to review their remuneration. The literature acknowledges that negative economic growth (Biti, 2009) has significantly impacted health service delivery in Zimbabwe (Todd, Ray & Madzimbamuto, 2010; 3.10.1 in Chapter three of this study). Indeed, this study found that VHWs are not as visible as they ought to be. The majority of the respondents' narrative responses acknowledged that VHWs were instrumental in health education promotion, thus making rural communities health conscious (5.5.6).

Research studies on the current situation in Zimbabwean rural ecologies confirm the negative effects of the brain drain of professionals which has compromised sustainable learning. The following sub-section (6.5.7) discusses the findings on the effects of the brain drain in implementing health education promotion in Zimbabwean rural ecologies.

### 6.5.7 Health delivery services compromised in rural learning ecologies

The literature notes that the brain drain of skilled and experienced health professionals (1.3) has compromised the delivery of health services in in Zimbabwe's rural ecologies (Nyazema, 2006; Chikanda, 2010; WHO, 2015). Biti (2009) observes that critical ministries have been affected. In my view, this probably created challenges in the implementation of health education programmes. The two senior teachers and the health professional (5.5.7) acknowledged that the brain drain compromised health education promotion programmes in rural ecologies, especially deep rural communities which Chikoko and Khanare (2009, 2012) note are marginalised and under developed.

While the participants acknowledged that health education campaigns are a feature of the rural landscape, they have been negatively affected by inadequate resources and a demotivated health workforce. This concurs with the literature that notes that when skilled, experienced professionals migrate to seek better working conditions, a vacuum is created which disrupts the implementation of health education programmes (Nyazema, 2010).

Research studies confirm that school curricula are effective in promoting behaviour change and increasing access to and promoting health education among learners. The

following section discusses the findings on how school curricula improve access to and promote health education.

## 6.6 SCHOOL CURRICULA ENABLE ACCESS TO AND PROMOTE HEALTH EDUCATION IN RURAL LEARNING ECOLOGIES

School curricula through Guidance and Counselling and Life Skills Education, collaboration between the Ministries of Health and Education and health education promotion activities in rural learning ecologies were (5.6 in Chapter five) found to enhance access to and promote health education. The health education promotion activities set out in the findings are consistent with the literature (1.2). These include health awareness campaigns, music, poetry and drama.

The findings (5.6) showed that in the teaching and learning context, a series of activities was utilised to promote health education in learning ecologies (5.6.1; 5.6.2; 5.6.3; 5.6.4). The participants noted that peer educators and health clubs under the supervision of teachers (primary tier assets) as well as drama and poetry competitions, promoted health awareness among learners. The literature points to the use of posters, pamphlets, audio visual support, computer-assisted learning, videos and software programmes to promote health awareness among learners (Cicchino, 2013) under the supervision of teachers (primary tier assets) and health professionals (secondary tier assets). The responses also revealed that, due to resource challenges, few posters were displayed at the school to promote health education (5.6.1) and there was a lack of other written material on health issues.

The following sub-section discusses school curricula to promote health education in rural ecologies.

### 6.6.1 School curricula are an effective tool to enhance and promote health education

Through health education subjects like Guidance and Counselling, Life Skills and Life Orientation, school curricula enhance health knowledge acquisition, develop positive behaviours and health consciousness and empower learners (ABA, 2.2) (Chikoko & Myende, 2014) through the utilisation of primary tier assets (senior teachers). In modern

times, especially in urban learning ecologies, learners in secondary schools have much freedom and exposure to technological platforms like the Internet and social media platforms like Facebook, WhatsApp and Twitter which probably contribute to them engaging in risky behaviours (Ganyani, 2016). This has resulted in an increased number of teenage pregnancies, alcohol and drug abuse, and sexual misbehaviour. This study posited that school curricula can modify learners' behaviour by teaching them the benefits of healthful behaviours (perceived benefits - HBM 2.3) (Abraham & Sheeran, 2009, 2014). The benefits of health education include improved academic performance, and the development of sound health habits as well as refusal skills which motivate learners to take action and prevent diseases. Jourdan (2011) also asserts that school curricula are an effective avenue for the transmission of health literature and skills that protect learners against risky behaviours, thus enhancing sustainable learning.

The participants agreed that school curricula (5.6.1) were utilised in the learning ecology to deliver health education to learners, thus enabling them to access health knowledge and literature. This is consistent with the literature (3.9.1) (UNICEF, 2012; Menrath et al., 2012). However, a shortage of reading material and lack of access to the Internet were identified as challenges in rural learning ecologies. The participants' responses revealed that health education is a crucial learning area that is implemented in Zimbabwe through Guidance and Counselling.

In accordance with the Chief Education Officer's circular number 16 of 1993 (MoESC, 1993), Guidance and Counselling is a compulsory subject in Zimbabwean secondary schools The implementation of health education in secondary schools was further complemented by the new Curriculum Framework of 2013. Thus, learners in urban and rural learning ecologies access health education through school curricula, although, as the findings show, more needs to be done in terms of resources. The findings also point to the need to revisit the amount of time allocated to Guidance and Counselling, as well as specialisation in Guidance and Counselling at teacher training institutions (outside tier assets), and Internet connectivity (physical assets) in rural learning ecologies. The results thus corroborate the ABA (2.2.) which was one of the theoretical lenses utilised in this

study. The findings show that Guidance and Counselling enhances access to health education in rural learning ecologies.

Zimbabwe's new Curriculum Framework of 2013 defines some of the activities that can be utilised to engage learners to enhance access to and promote health education through collaboration between the Ministries of Health and Education. The following sub-section discusses the findings on strategies utilised by educators to enhance access to and promote health education in rural learning ecologies.

### 6.6.2 Drama, quizzes, poetry, music and presentations may enhance access to and promotion of health education

In implementing health education promotion activities, consideration needs to be given to the literacy level of the target audience as well as the suitability of the activities. The narrative responses of the two senior teachers and six learners (sub-section 5.6.2) revealed that drama, music, quizzes and presentations enhanced access to and promotion of health education to enhance sustainable learning. This concurs with the literature (see Chapter three 3.4.5). Learners tend to understand a topic better when diverse approaches are used in teaching and learning as this caters for individual differences. In my view, the activities cited would motivate learners to develop sound health habits and positive behaviours. These are participatory approaches which would stimulate interest among learners who, in turn would educate other learners on health issues (vicarious learning). The cited activities are described by Ackerman and Eden (2011) and Jack (2015) as a series of actions provided by school curricula to achieve specific goals, in this case, enhancing and promoting health education.

Guided by the Education Act of 2013, Zimbabwean school curricula spell out activities that can be utilised to enhance health education promotion which dovetails with the findings. The literature also confirms that health education activities in learning ecologies are guided by policy circulars from the Ministry of Health and Child Care (Ministry of Health & Child Care, 2015). Thus, the activities identified in this study facilitate access to and promote health education through the primary tier assets (senior teachers and learners) to achieve positive change. This is in line with the ABA (2.2). Research studies also show that rural ecologies face a plethora of challenges ranging from marginalisation

to under development (Chikoko & Khanare, 2009, 2012), calling for resourcefulness. The study's results show that the activities used to promote health education utilise locally available resources. Again, this fits with the ABA. Furthermore, the findings point to strong collaboration between the Ministries of Health and Education as the Ministry of Health and Child Care provided themes which the senior teachers (primary tier assets) utilised in music, poetry and drama competitions. Ballan (2012) confirms that these activities enable acquisition of health knowledge. Therefore, it can be argued that the curricula activities discussed enhance access to and promotion of health education, enhancing sustainable learning. In my view, activity based learning enhances health knowledge acquisition, develops health consciousness, health literacy, and language skills and ultimately makes learners eager and willing to adopt positive behaviours. It also exposes them to information on different types of diseases.

Peer educators can also be used to spread health knowledge to a wider audience. The following sub-section discusses the study's findings on the use of peer educators to enhance access to and promotion of health education in rural learning ecologies.

### 6.6.3 Peer educators as influential behavioural change agents

Peer education is an approach, a communication channel, a methodology and a strategy that is widely used in health education (Tolli, 2012). It is described as a dialogue between equals, that is, between people of similar age or social group (Boler & Archer, 2008). Peer educators have the ability to create positive change (ABA - 2.2) when significant others (teachers - primary tier assets - ABA, 2.2) equip them with knowledge and skills. This is consistent with the findings in sub-section 5.6.3. Numerous studies have shown that the youth and adolescent learners find it difficult to obtain clear, correct information on issues such as sex, sexuality, substance abuse, reproductive health, HIV/AIDS and STIs (Abdi & Simbar, 2013). Based on the findings of this study, I argue that peer educators are key in addressing the health concerns of other learners in the teaching and learning context.

The narrative responses of the two senior teachers and the nurse (5.6.3) acknowledged that peer educators enhanced and promoted health education guided by their teachers and health professionals. The findings also showed that peer educators were not randomly selected; the educators collectively identified talent; hence it involved purposive

selection (4.6.4). Sidze et al. (2017) observe that peer educators have a strong influence on behavioural modification among other learners. The findings are thus consistent with the literature. They are also in line with the ABA (2.2) as assets (learners and trained health professionals) were used to solve problems (Myende, 2012; Chikoko & Khanare, 2009, 2012). I thus argue that peer educators are effective in promoting acquisition of health knowledge and developing health consciousness to enhance sustainable learning.

The current literature notes that some NGOs are promoting health education in rural and urban ecologies in Zimbabwe. The narrative responses of the health professional (nurse) provided details on these NGOs and the projects they are involved in. The following sub-section discusses the findings on how NGOs are enhancing access to and promoting health education in the rural learning ecologies of Zimbabwe.

### 6.6.4 Non-Governmental Organisations coordinate health education promotion in rural learning ecologies

The narrative responses of the nurse (5.6.4) confirmed the visibility of NGOs who have implemented a number of activities and income generating projects in Zimbabwean rural learning ecologies. The literature acknowledges that NGOs partner with teachers, health professionals and traditional structures in different contexts to promote health awareness and educate learners and rural communities on health threatening activities (perceived susceptibility - a construct in the HBM (2.3)). The study found that some NGOs actively promoted HIV/AIDS awareness in rural communities and learning ecologies and also funded other health education programmes like immunisation and circumcision of learners in both rural and urban ecologies (Chapter three 3.9). The Zimbabwe National Health Strategy 2016 - 2020 acknowledges that NGOs operate in learning ecologies and rural communities to promote health awareness and consciousness, further enhancing sustainable learning.

The literature observes that rural learning ecologies confront a plethora of challenges. The following sub-section discusses the study's findings on the challenges that hinder health education implementation in Zimbabwean rural learning ecologies.

## 6.7 NUMEROUS CHALLENGES HINDER HEALTH EDUCATION IMPLEMENTATION IN RURAL LEARNING ECOLOGIES

While the literature confirms the teaching of Guidance and Counselling in Zimbabwean secondary schools and the participants in this study affirmed that it is taught in rural learning ecologies, they identified a number of challenges. Despite the International Technical Guidance on Sexuality Education (UNAIDS, 2014) that proposes that Guidance and Counselling be infused in mainstream subjects in school curricula, in Zimbabwe, it is taught as a stand-alone subject. The literature also notes that Guidance and Counselling teachers are expected to enhance learners' health knowledge and skills as teachers are role models and influential behavioural and attitudinal change agents in a school setting (3.5.1) (Oyerinde, 2013; Ngwu, 2016).

The following sub-sections discuss the challenges faced in implementing Guidance and Counselling in Zimbabwean rural learning ecologies.

### 6.7.1 Inadequate teaching and learning resources

The two senior teachers and six learners (primary tier assets) stated that there were inadequate resources to teach Guidance and Counselling. Furthermore, it was not taken as seriously as it should be as it is not examinable at O Level. Again, the subject was only allocated 30 to 40 minutes once a week. Given that health is a basic human right and a constitutional right in Zimbabwe (Constitution of Zimbabwe, 2013), I am of the view that this time allocation is very inadequate.

The findings also revealed that Guidance and Counselling teachers were appointed by the school administration based on their moral standing and teaching experience rather than merit. This is in line with the literature. Manzira (2014) observed that Guidance and Counselling teachers in Zimbabwean secondary schools was taught by teachers who did not receive specialist training at teacher training institutions. They are thus not adequately capacitated to effectively to teach this subject. I am of the opinion that this compromises the implementation of health education promotion strategies.

The study further revealed that the teachers adopted a cautious approach and were reluctant to handle sexuality education, a component of health education because they

feared conflict as Zimbabweans belong to different ethnic groups. Poverty, which characterises most rural learning ecologies (Hlalele, 2012a; Chikoko & Khanare, 2012), meant that parents could not afford to buy books for their children. These negative factors have the potential to compromise the implementation of health education promotion strategies in rural learning ecologies.

### 6.7.2 Infrastructural challenges

The study also found that the rural learning ecology experienced infrastructural (physical assets) challenges (5.7.2). The teachers and learners noted that the rural secondary school had no library or computer laboratory, which, according to the findings, are key in enabling learners to engage in research and increase their knowledge base. Ganyani (2016) and Ndawi, Thomas and Nyaruwata (2013) concur, with the former noting that most rural learning ecologies in Zimbabwe suffer from infrastructural challenges as parents, most of whom are subsistence farmers, find it difficult to provide for the needs of their children. Indeed, many are unable to pay school fees due to poverty. This challenge compromises the implementation of health education promotion in rural learning ecologies.

### 6.7.3 Internet inaccessibility

The study found that technological challenges were a barrier in the implementation of health education promotion programmes in rural learning ecologies (5.7.3). Research shows that accessing the Internet is a challenge in rural learning ecologies despite the fact that most learning ecologies worldwide have embraced ICT (Ganyani, 2016). Weinstein and Lopez (2013) note that high quality, relevant and current health literature can be accessed on the Internet (physical asset - ABA, 2.2). However, they caution that learners need to be closely supervised by parents (secondary tier assets) and teachers (primary tier assets) as they might be tempted to explore undesirable websites which may contain health damaging literature like pornographic material. The participants revealed that the school had no computers, access to the Internet, or electricity and that due to the remoteness of the rural learning ecology, it was difficult to attract hard to come by

computer teachers. The finding is consistent with the literature (3.11.2). Musingafi and Zebron (2014) and Ndawi, Thomas and Nyaruwata (2014) note that, worldwide, most schools have embraced ICT to promote research and learners' exposure to current issues, including health related ones. Konjana and Konjana's (2013) study in Zimbabwe identified an acute shortage of computer teachers, which is also consistent with the findings. They add that those that are available are normally absorbed into urban ecologies which are better resourced and have few technological challenges. The findings thus showed that rural learning ecologies experience technological challenges which most likely affect the implementation of health education promotion programmes.

### 6.7.4 Cultural beliefs on sexuality education

The participants expressed diverse views on the implementation of sexuality education in rural learning ecologies (5.7.4). While they understood sexuality education as mainly centred on sexual intimacy, in reality it covers aspects such as stages in human development from childhood to adulthood, STIs including the deadly HIV/AIDS and hygiene issues, to name but a few. The learning content is guided by Zimbabwe's new Curriculum Framework of 2013 and is age/grade relevant. The literature states that sexuality education is a component of health education (Muguwe & Gwirayi, 2011).

The findings revealed that sexuality education was very sensitive terrain, with many parents and the headman of the view that it should be implemented through traditional structures (aunts and grandparents). Fears were expressed that male teachers might sexually exploit female learners if sexuality education was implemented in school curricula. The literature acknowledges that sexuality education is a sensitive issue (Mangwaya & Ndlovu, 2013: Manzira, 2014).

Muguwe and Gwirayi (2011) note that girl learners are more vulnerable than boy learners and they became parents earlier. The parents that participated in the current study seemed to concur with this point of view. However, I inferred that they were probably not aware of the effects of technology. Living in a rural ecology does not mean that there is a total absence of technological devices which learners might access and they might be exposed to incorrect, harmful information on sexuality. The findings also suggest that sexuality education programmes in rural learning ecologies have the potential to trigger

cultural conflict. The two senior teachers said that they adopted a cautious approach to sexuality education for this reason. Indeed, they utilised resource persons in the form of health professionals from their nearest health delivery centre who had received specialist training (5.7.4). This seems to have been a tactful approach to avoid triggering cultural conflict. The findings (5.7.4) also revealed that the two senior teachers did not receive specialist training to teach Guidance and Counselling, not did their teacher training course content include health education modules as their areas of specialisation were totally different from what they were teaching at the time of the study. Muguwe and Gwirayi (2011) also noted that Guidance and Counselling teachers in Zimbabwe did not receive specialist training on the subject. This compromises the implementation of health education promotion programmes in rural learning ecologies.

Successful implementation of health education programmes requires competent, well-trained professionals. The findings of this study suggest the need for educators to receive specialist training to deliver health education to learners. The following sub-section raises the need for Guiding and Counselling teachers in learning ecologies to receive in-service training.

### 6.7.5 In-service training for educators is required to implement health education promotion

The literature states that educators are influential attitudinal and behavioural change agents (UNAIDS, 2014) that play a facilitating role in the acquisition of health knowledge and skills to enhance learners' health consciousness (Oyerinde, 2013; Ngwu, 2016) (3.5.1 Chapter three). The study's findings (5.7.5) revealed that Guidance and Counselling was taught by educators who were not trained to teach the subject and who were appointed by school heads based on seniority as opposed to merit. This is in line with Muguwe and Gwirayi's (2011) findings. Inadequately capacitated Guidance and Counselling teachers cannot effectively implement health education. This points to the need for in-service training for educators.

In short, the challenges confronting rural learning ecologies in implementing health education promotion strategies to enhance sustainable learning include implementing

Guidance and Counselling, technological challenges, infrastructural challenges, the brain drain and implementing sexuality education.

## 6.8 CONCLUSIONS

This study raised a number of fundamental issues with regard to health education promotion in Zimbabwean rural learning ecologies. Health education exposes individuals and communities to various health issues. The participants acknowledged that health education involved the teaching and learning of health issues and that it is a pillar to promote health awareness. Their responses acknowledged the efforts of the Ministry of Health and Child Care (2014) to promote health education in rural ecologies, but also pointed to the need for VHWs to be fully capacitated and to be more visible. Health education promotion campaigns need to be stepped up despite the current economic challenges confronting Zimbabwe.

School curricula were identified as instrumental in the implementation of health education promotion in the learning ecologies, although a number of challenges were noted. These included inadequate material resources, a lack of qualified specialist teachers to teach Guidance and Counselling and lack of access to the Internet. Guidance and Counselling is under-resourced. Furthermore, more time needs to be allocated to this subject and Guidance and Counselling teachers should be appointed on merit. Health education promotion strategies in the form of drama, quizzes, music, poetry, group discussions, peer educators, the usage of posters and health awareness campaigns were noted as effective instruments in raising health awareness in rural learning ecologies.

Although this study was conducted in Zimbabwe, its findings could also benefit other countries in Africa and beyond. There is a need to implement health education in rural learning ecologies to fully capacitate learners and a need to strengthen collaborative efforts among government ministries and stakeholders to enhance sustainable learning.

In conclusion, the study identified a number of challenges confronting Zimbabwean rural learning ecologies which compromise the implementation of health education promotion strategies to enhance sustainable learning. These included the implementation of

Guidance and Counselling, technological and infrastructural challenges, the effects of the brain drain and the challenges of implementing sexuality education.

## 6.9 CHAPTER SYNTHESIS

This chapter discussed the findings presented in Chapter five in relation to the study's objectives. The discussion was based on the data, the methodology adopted, the literature and the two theoretical lenses, namely, the HBM and the ABA. It discussed the participants' understanding of the concepts of health education and sustainable learning; and their views on the structures, mechanisms and activities used to implement health education promotion in learning ecologies. Finally, the findings on the challenges that hindered health education promotion implementation in rural learning ecologies were discussed.

The following chapter sets out a proposed framework for health education promotion in Zimbabwean rural ecologies.

# CHAPTER SEVEN

# PROPOSED FRAMEWORK FOR HEALTH EDUCATION PROMOTION FOR SUSTAINABLE LEARNING IN ZIMBABWEAN RURAL ECOLOGIES

## 7.1 INTRODUCTION

The previous chapter discussed the study's findings in relation to the literature, the theoretical lenses (the HBM and the ABA) and the research methodology (narrative inquiry). This chapter draws on the findings and those from other studies to propose a health education promotion framework for sustainable learning in Zimbabwean rural ecologies. It also discusses the monitoring and evaluation mechanisms and implementation strategies that will be required. Finally, the chapter discusses the study's contributions to the body of knowledge and offers suggestions for future research and recommendations to stakeholders.

In exploring health education promotion in Zimbabwean rural earning ecologies, this study was underpinned by the following research questions: 1. What is the current situation regarding health education promotion in Zimbabwean rural ecologies? 2. How is health education accessed and promoted in Zimbabwean rural ecologies? 3. What health education promotion strategies are used in Zimbabwean rural learning ecologies to enhance sustainable learning?

## 7.2 AIM OF THE STUDY

The aim of this study was to explore health education promotion in Zimbabwean rural ecologies to enhance sustainable learning. Based on the participants' responses through written narratives, narrative interviews and narrative reflections, it explored the current situation regarding health education promotion in rural ecologies of Zimbabwe; how health education is accessed and promoted in these ecologies and the challenges faced in implementing health education promotion strategies in rural learning ecologies to enhance sustainable learning. This was achieved utilising narrative inquiry (research design), and the two theoretical lenses (the ABA and the HBM). The study found that

while health education is visible in Zimbabwean rural learning ecologies, there is a need to strengthen implementing mechanisms and to ensure evaluation and monitoring in order to enhance sustainable learning.

## 7.3 RESPONDING TO THE RESEARCH QUESTIONS

Drawing on the data analysis, this section sets out the findings for each of the research questions.

### 7.3.1 Current situation of health education promotion in Zimbabwean rural ecologies

With regard to the first research question on the current situation regarding health education promotion in rural learning ecologies in Zimbabwe, the findings showed that structures and mechanisms were in place that rendered health education visible in rural learning ecologies. The parents acknowledged (6.5.1) that VHWs were promoting health education, thus developing health consciousness and knowledge acquisition in rural communities in Zimbabwe. Despite the challenges currently affecting the health sector in Zimbabwe, the health professional (nurse) noted that health awareness campaigns enhanced access to health related literature, complemented by the utilisation of posters and pamphlets. The senior teachers pointed to screening and vaccination for cervical cancer among female learners and circumcision for male learners as positive interventions. They also stated that Guidance and Counselling (6.5.5) (a compulsory subject in Zimbabwean secondary learning ecologies) promoted health literacy, knowledge acquisition, and positive behaviours and empowered learners to make quality health decisions. Therefore, although constraints were noted in implementing health education promotion, health awareness campaigns are visible in rural ecologies.

### 7.3.2 Accessing and promoting health education

Concerning the second research question, the senior teachers asserted that school curricula (6.6.1) effectively facilitated access to and promotion of health education in learning ecologies, although rural learning ecologies faced challenges in this regard. The learners (6.6.2) acknowledged that art-based activities (music, art, quiz competitions and poetry) were used to increase access to and promotion of health education. These

participatory approaches enhanced access to and promotion of health education. The senior teachers (6.6.3) utilised peer educators to enhance access to and promotion of health education, as did the health professional. Furthermore, the health professional (nurse) acknowledged that NGOs facilitated promotion of health education by collaboratively working with traditional structures, teachers and health professionals, thus enhancing sustainable learning.

### 7.3.3 Challenges that hinder health education implementation in rural learning ecologies

With respect to the third research question, rural ecologies faced a plethora of challenges (section 6.7) that hindered implementation of health education, thereby compromising sustainable learning. As confirmed by the senior teachers, rural learning ecologies had inadequate teaching and learning resources which compromises the teaching of Guidance and Counselling (6.5.5). Furthermore, the senior teachers acknowledged that infrastructural challenges (lack of computer laboratories and a library as well as classrooms and adequate furniture (6.7.2)) were a barrier in implementing health education in rural learning ecologies. Technological challenges (lack of electricity, Internet connectivity and computers and laptops) in rural learning ecologies (6.7.3) were noted by both the senior teachers and learners as a barrier in accessing current health education literature, compromising sustainable learning.

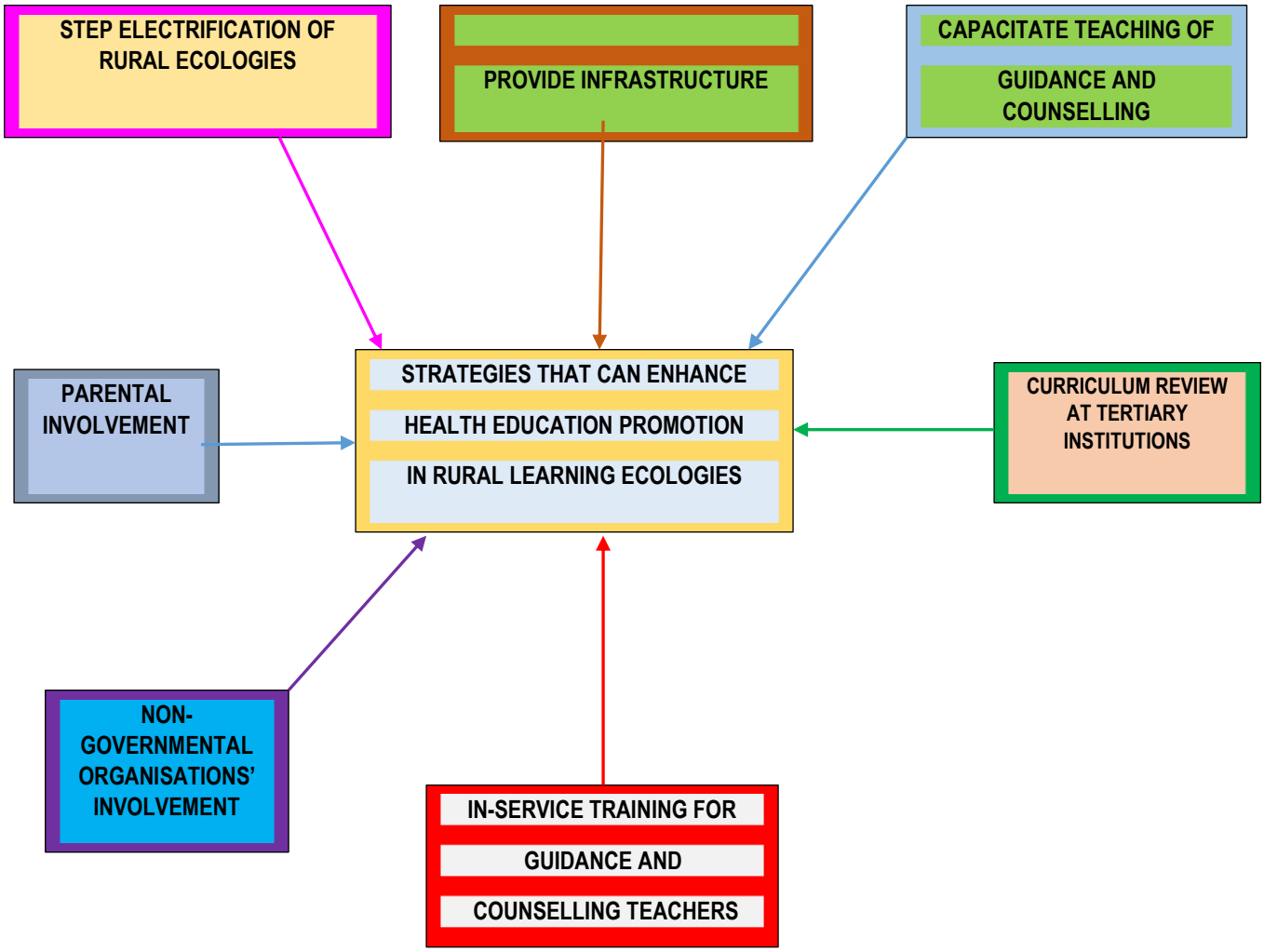
Parents noted that sexuality education was a sensitive issue and many felt it should be dealt with in their traditional structures. Senior teachers affirmed that sexuality and sexual reproductive education (6.7.4) was a potential source of cultural conflict. Of concern is the fact that the senior teachers revealed that they were not adequately capacitated to teach Guidance and Counselling and that their appointment to teach this subject was not based on merit but on seniority and moral standing.

The following section presents proposed strategies to enhance health education promotion implementation.

## 7.4 PROPOSED STRATEGIES TO ENHANCE HEALTH EDUCATION PROMOTION IMPLEMENTATION

The strategies proposed to enhance health education promotion in Zimbabwean rural ecologies are based on the findings discussed in Chapter six. Porter (2008) describes a strategy as a plan, method or a series of actions designed to achieve a specific goal while Ackerman and Eden (2011) view a strategy as the skill of making or carrying out plans to achieve a goal. Figure 7.1 below outlines strategies that can be utilised in the proposed health education framework to enhance sustainable learning in rural learning ecologies. The goal of this framework is to holistically develop learners in rural ecologies in terms of knowledge acquisition, and the development of health consciousness and literacy with the goal of empowering them.

**Fig. 7.1 Strategies to Enhance Health Education Promotion Implementation**



### 7.4.1 Step up electrification of rural ecologies

Electrification of rural learning ecologies would provide a more conducive learning environment for learners, thereby enhancing sustainable learning. Aryee (2014) observes that health education can be enhanced by embracing ICT. Weinstein and Lopez (2014) concur and highlight that the Internet offers learners a platform to access current health literature. Electrifying rural ecologies would improve the learning environment. This strategy has positive benefits (perceived benefits - HBM section 2.3), including narrowing the rural-urban divide in accessing current health literature on both communicable and non-communicable diseases. Furthermore, it would motivate hard to come by computer science teachers to offer their services in rural learning ecologies.

### 7.4.2 Parental engagement

Sapungan and Sapungan (2014) and Kwatubana and Makhalemele (2015) note that parents are important stakeholders in their children's academic achievement, as well as the development of positive behaviours and social skills among learners. The issue of cultural conflict, which was noted in this study, can be avoided by means of parental engagement as it promotes regular updates on curricula issues through open engagement during School Development meetings. Using the services of external agencies (outside tier assets - ABA, 2.2) like counsellors and police officers during meetings with parents could also be an effective strategy in the proposed framework for health education promotion in the rural ecologies of Zimbabwe. Constructive engage on curricula issues with parents would result in a decline in teenage pregnancies and could also develop consciousness on health threatening activities like drug and substance abuse. Parents play a significant role in supporting and promoting the health of their children and learners are likely not to engage in health threatening activities once they realise that their parents/guardians are involved in school activities with regard to health issues.

### 7.4.3 Curriculum review in tertiary institutions

A review of the curriculum at tertiary institutions in Zimbabwe to align it with Zimbabwe's new Curriculum Framework of 2013 which has been implemented in primary and secondary schools is a prerequisite and is one of the strategies proposed for the framework. Little has been done in this regard, which suggests that graduates might be ill-equipped as there is now a strong emphasis on health issues. The international literature notes (6.6.1) that school curricula are utilised to enhance and promote health education (WHO, 2015; Jourdan, 2011). Aligning the curricula of tertiary institutions with those of primary and secondary schools would equip trainee teachers with appropriate teaching methods, expand the knowledge base on health issues and promote healthier behaviour amongst learners, thus enhancing sustainable learning.

### 7.4.4 In-service training for Guidance and Counselling teachers

Scholarly evidence suggests that health behaviour changes can be enhanced if educators (primary tier assets - ABA 2.2) are adequately capacitated to teach Guidance and Counselling (Manzira, 2014). Educators are viewed as role models and behaviour and attitudinal change agents. Muguwe and Gwirayi (2011) and Manzira (2014) assert that Guidance and Counselling, which engages learners on health issues, is currently being taught by non-specialist teachers in both rural and urban Zimbabwean learning ecologies. Furthermore, Muguwe and Gwirayi (2011) argue that expository rather than participatory approaches are utilised in the teaching of Guidance and Counselling, pointing to the need for in-service training for practicing educators.

### 7.4.5 Non-Governmental Organisations' involvement

The study findings (sub-section 6.6.4) showed that NGOs coordinate health education programmes in Zimbabwe, although the ruling elite consider some of them as agents that promoting opposition politics with the goal of dislodging them from power. Given the limited fiscal space, the government of the day cannot address the health challenges of its citizens on its own (Biti, 2009); hence the need for external agencies (outside tier assets - ABA 2,2) to assist in adequately address health challenges in the country. Most of these organisations are funded by global organisations such as the UN through its various branches like UNICEF that seek to address health issues that have a global impact (WHO, 2015; UNICEF, 2012), for example, the current global COVID-19

pandemic. The health community has acknowledged the need for partnerships to disseminate information on diseases and how to avoid them (Hogan, 2011; Helsing & Rimer, 2011); hence, working with NGOs without politicising their involvement could an effective strategy to promote health education in the proposed framework.

In conclusion, this section discussed strategies that can considered for implementation of health education promotion in the rural learning ecologies of Zimbabwe to enhance sustainable learning. I propose stepping up rural electrification, parental engagement, aligning tertiary curricula to primary and secondary schools' curricula, in-service training for practicing educators and involvement of external agencies in the form of NGOs as strategies for health education implementation in the proposed framework.

The following section discusses implementation of health education promotion for sustainable learning in the rural learning ecologies of Zimbabwe.

## 7.5 IMPLEMENTATION OF HEALTH EDUCATION PROMOTION FOR SUSTAINABLE LEARNING IN RURAL LEARNING ECOLOGIES IN ZIMBABWE

As noted previously, this study was not disease specific, but adopted a holistic approach to explore health education promotion with a focus on rural ecologies. Rural learning ecologies in most developing countries have historically been and remain marginalised. As noted in Chapter five of this study, they thus confront a plethora of challenges. However, this research study found that health education promotion is an important learning area in school curricula through Guidance and Counselling (a compulsory subject in secondary schools), while Life Skills Education is taught in primary schools. Furthermore, these subjects are complemented by health education promotion activities in the form of drama, poetry, music, and health awareness campaigns through collaborative mechanisms between the Ministries of Health and Education. Village Health Workers also engage in health promotion in rural ecologies in the form of health awareness campaigns that use informative and educative posters and pamphlets, although challenges were noted in this regard. There is a need to improve and strengthen health education initiatives so as to enhance acquisition of health knowledge and skills, raise health awareness and consciousness and improve health literacy so as to enable

individuals (learners and individuals in rural ecologies) to make health informed decisions, thus enhancing sustainable learning.

This study was the first to adopt a holistic approach to explore health education promotion in rural learning ecologies in Zimbabwe utilising two theoretical lenses, namely, the HBM and the ABA. Many studies have focused on HIV/AIDS and STIs in developing and developed countries (see, for example, Tungwarara, 2018; Moyo, 2016; Chikonzo, 2018; Chiwara, 2017). This study was not disease specific but was anchored on health knowledge acquisition and the development of positive behaviours in learners, and health consciousness and health literacy in the defined target populations. The proposed framework therefore qualifies to be titled “Holistic approach to health education promotion in the rural ecologies of Zimbabwe”.

Given that this study focused on rural ecologies, narrative inquiry was adopted as the research design. Narratives (stories) are at the heart of this approach. People are by nature story telling animals; hence the utilisation of written narratives, narrative interviews and narrative reflections as data gathering tools. These tools facilitated the collection of data relevant to the proposed framework as story telling in written or oral form is associated with rural contexts in most African cultures.

The study also reviewed how health education is accessed, promoted and implemented in other countries. The main commonality that emerged is that it is implemented through school curricula, but implementation mechanisms vary from country to country. Furthermore, in most countries collaborative mechanisms between the health and education ministries facilitate the implementation of health education promotion. Therefore, this study’s proposed framework is a holistic approach to the implementation of health education promotion in Zimbabwean rural ecologies utilising primary tier assets (senior teachers), secondary tier assets (parents, a nurse) and NGOs (outside tier assets) (Chikoko & Myende, 2012; ABA - 2.2).

The study revealed that health education is visible in the rural ecologies of Zimbabwe. Furthermore, it found that health education promotion is mainly accessed through the services of VHWs, school curricula, and health awareness campaigns using various strategies. Challenges in implementing health education promotion strategies were noted

and discussed. There is a need for on-going monitoring and evaluation of emerging challenges to identifying practical solutions so that the aims and objectives of this study are achieved. Therefore, planning, application and evaluation are among the major issues pertaining to implementation.

### 7.5.1 Planning

The literature notes that health education promotion is not a haphazard activity, but requires expert planning and effective strategies for its implementation. The success of any framework is anchored on careful planning and in a research study this is guided by a research design (blueprint). McMillan and Schumacher (2014, 2016) and Denzin and Lincoln (2015) acknowledge that without expert planning, a research design is bound to fail. Hence, there is a need for proper planning aimed at establishing new facts and information about a particular phenomenon using appropriate methods. In this study, narrative inquiry was used as the research design to explore health education promotion for sustainable learning in Zimbabwean rural ecologies and the study was also informed by two complementary theoretical lenses, namely, the HBM (2.3) and the ABA (2.2).

The data presented and analysed in Chapter five and the discussion of the findings in Chapter six revealed that health education promotion was visible in Zimbabwean learning and rural ecologies (5.5.1 & 6.5.1), but barriers were noted to its full implementation to enhance sustainable learning. While Guidance and Counselling is taught in Zimbabwean secondary schools, it was noted that it was inadequately resourced and did not receive the attention it deserved as it is not examinable at O Level. It was only taught once a week for 30 to 40 minutes. Furthermore, the findings (5.5.5 & 6.5.5) showed that Guidance and Counselling was taught by teachers who did not receive specialist training and these teachers were appointed based on their moral standing (very subjective) and seniority rather than merit. Learners did not have access to the Internet and the rural learning ecology did not have library facilities, which promote further independent research. Potential cultural conflict was also noted as some participants preferred a traditional approach to education on sexuality. Therefore, it can be argued that the implementation of health education promotion strategies was compromised in rural learning ecologies.

The findings pointed to effective collaboration between the Ministries of Health and Education to implement health education programmes. However, other ministries like the Ministry of Home Affairs which has a Child Friendly Victims Unit should be included. This would assist in making learners aware of different forms of abuse that they may encounter. The utilisation of police officers (secondary tier assets) confirms the use of locally available resources which dovetails with the ABA (2.2) (Chikoko & Myende, 2012). It is thus recommended that stakeholders and policy makers (outside tier assets - ABA 2.2) identify and incorporate other relevant ministries to enhance the implementation of health education promotion in learning and rural ecologies and enhance sustainable learning.

Zimbabwe's 2013 Constitution guarantees all citizens' the right to health (see Chapter 3). Whilst the implementation of Guidance and Counselling is guided by a legislative framework, policy makers and other stakeholders need to craft policies that further enhance the implementation of health education promotion through consulting grassroots structures (the bottom-up approach) which is implicit in the ABA (2.2). This could reduce cultural conflict on issues, for example, sensitive issues such as sexuality education. It would also create a sense of ownership of the health promotion programme, thus obtaining the full support of the target audience during the implementation phase.

The following sub-section focuses on enhancing health education promotion in rural learning ecologies.

### 7.5.2 Enhancing health education promotion in rural learning ecologies

The participants noted that, learners access health education through Guidance and Counselling (Manzira, 2014), a compulsory subject in Zimbabwean secondary schools which is informed by the Chief Education Officer's Circular Number 16 of 1993 (MoPSE, 1993) and complemented by the new Curriculum Framework of 2013. The findings revealed (6.5.5) that Guidance and Counselling has its own challenges, ranging from being taught by non-specialist teachers, to inadequate material resources, and not being allocated sufficient time in the school timetable (Muguwe & Gwirayi, 2011; Manzira, 2014). The participants therefore suggested the need to adequately resource Guidance and Counselling and to capacitate teachers during teacher training so as to equip them

with skills that will enable them to fully integrate health related issues in teaching and learning contexts. Therefore, the findings showed that school curricula are utilised to enhance access to and promote health education in rural and urban ecologies in order to enhance sustainable learning.

The findings also revealed that VHWs enabled access to and promotion of health education in rural ecologies. This took the form of health awareness campaigns supported by the use of informative posters and pamphlets (6.6.2), thus developing health knowledge acquisition. This enhances health literacy and consciousness, enabling individuals to make informed health decisions (perceived benefits) which is implicit in the HBM (2.3). However, the findings point to the need to fully capacitate and motivate VHWs and health professionals in order for rural ecologies to reap the benefits of health education (perceived benefits - HBM 2.3). The government should prioritise rural development by adequately funding health education programmes as rural ecologies have historically been and still are marginalised by those in the corridors of power due to misplaced priorities (Chapter three). There is also a need to strengthen the collaborative mechanism as this develops health awareness, health knowledge acquisition, health literacy and consciousness in rural ecologies and results in the development of positive health behaviours.

The following section evaluates health education promotion in rural ecologies.

### 7.5.3 Evaluation of health education promotion in rural ecologies

The findings revealed that VHWs, health professionals (secondary tier assets) and teachers (primary tier assets) were instrumental in promoting health education in rural learning and rural ecologies drawing on the strategies identified in this study (6.5.6). However, as noted previously, VHWs need to be materially and financially capacitated so as to enable the benefits of health education to be realised (3.6). There is a need to revisit the curricula of teacher training institutions with respect to the teaching of Guidance and Counselling. This should be a collaborative effort between the Ministries of Higher Tertiary Education, Primary and Secondary Education and Health and Child Care. There is need to capacitate teachers who teach Guidance and Counselling through workshops and in-service training as the subject is currently taught by teachers with no specialist training

(Muguwe & Gwirayi, 2011). Furthermore, consideration should be given to allocating more time to the teaching of Guidance and Counselling and to making it an examinable subject, as it is relevant to learners who might seek to pursue careers in health related fields.

Ongoing evaluation of health education promotion in rural learning and rural ecologies is essential and this could be enhanced by well-planned workshops and collaborating with NGOs (outside tier assets - ABA 2.2) like World Vision who are currently visible in rural ecologies and sponsor sanitation programmes in rural ecologies. There is need to involve rural communities in the planning, implementation and evaluation process to avoid triggering cultural conflict (5.7.4). When there is community involvement, which is implicit in the ABA (2.2), community ownership is enhanced and a programme's chances of succeeding are enhanced. My own evaluation of the findings on the promotion of health education is that there is a top-down approach with no consultation with grassroots structures; this could explain the cautious and reserved approach adopted in the implementation of sensitive health education topics like sexuality education (6.7.4). Ongoing, regular evaluation of health education programmes should be conducted, with the government providing the necessary material and financial resources.

The following section discusses the study contributions.

## 7.6 CONTRIBUTIONS OF THE STUDY

This study adds to emerging knowledge on health education promotion in rural ecologies. It contributes to the literature on health education promotion in developing countries in sub-Saharan Africa and Zimbabwe and provides a thorough exploration of the concepts of health education, sustainable learning and rural ecologies.

The study also contributes to the educational psychology literature on the use of the HBM and the ABA. Furthermore, the methodology utilised (narrative inquiry) using written narratives, narrative interviews and narrative reflections (4.8.1; 4.8.2; & 4.8.3) is likely to inform future research studies on health education promotion in rural learning ecologies. Finally, this study contributes to the practice and enhancement of sustainable learning

among learners and rural communities, including those who did not participate in the study. These contributions are discussed below.

### 7.6.1 Contributions to theory

The literature review noted that most studies on health education focus on specific aspects of health such as HIV/AIDS prevention, sexual reproductive health, violence and drug abuse, and early pregnancies (see, for example, Tungwarara, 2018; Chikonzo, 2018; Chiwara, 2017; Moyo, 2016). This study was not disease specific but adopted a holistic approach to explore health education promotion in the rural ecologies of Zimbabwe utilising the HBM and the ABA as theoretical lenses. None of the studies listed above combined these lenses, nor did they focus on health education promotion in either rural or urban ecologies. The contemporary literature on health education mainly focuses on peri-urban and urban contexts (Pedrinah, 2019; Ngundu, 2018). In short, no previous study on health education promotion in rural ecologies has utilised the HBM and the ABA as theoretical lenses and adopted a holistic approach. This study thus makes a major, unique contribution in the field of educational psychology and demonstrates how the HBM and the ABA can be utilised to explore health education promotion in rural ecologies to enhance sustainable learning. Essentially, this study adds a rurality perspective (Hlalele, 2012a) to health education promotion in Zimbabwe utilising the ABA and HBM as theoretical lenses.

This study utilised locally available assets (senior teachers, a nurse, parents, a traditional leader and learners) to explore health education promotion in the learning and rural ecologies of Zimbabwe with the goal of empowering learners and rural communities to make health informed decisions and develop literacy skills, which dovetails with some of the principles that are implicit in the ABA. Furthermore, the participants' perceptions of health related challenges (perceived barriers - HBM, 2.3) in the implementation of health education promotion strategies were amplified through the use of the HBM. It can thus be argued that this study makes a significant contribution in utilising the ABA and the HBM to explore health education promotion in rural ecologies, further enhancing sustainable learning.

The following section (7.6.2) discusses the study's contributions to methodology.

### 7.6.2 Contributions to methodology

In broad terms, a methodology refers to a research design, a method, procedure and an investigation that is well planned to establish something or study a phenomenon (Silverman, 2017; O'Leary, 2014) (4.2.1.4). Narrative inquiry is defined as spoken, written and visual stories (narratives) that can be presented in different discursive formats (Clandinin, 2013; Heilmann, 2018). This research study on health education promotion for sustainable learning in Zimbabwean rural ecologies was guided by narrative inquiry as a research methodology. Narratives (stories) which lie at the heart of this methodology, enabled me to solicit the participants' perceptions and experiences of health education promotion in the rural ecologies of Zimbabwe and contributed to deeper understanding of health education promotion. The use of written narratives, narrative interviews and narrative reflections yielded rich data as they created a platform for the selected participants to freely express their views and relate lived experiences in a natural setting (a rural secondary school). These instruments also offered an opportunity for full participation, thus enabling health education promotion to be more visible in the learning and rural ecologies to enhance sustainable learning. Therefore, this study was based on the participants' real life experiences of health education promotion.

It was not easy to conduct a narrative research study as large volumes of data were collected. However, the study contributed to changing the participants' mindset as the focus was on developing health literacy and consciousness and adopting positive behaviours, thus empowering the participants to make informed health decisions in rural ecologies. This was achieved by ensuring that the participants were fully engaged throughout the data gathering process. While the degree to which the participants were empowered cannot be measured, I am confident that through the use of narrative inquiry, the participants were exposed to different research procedures. The study provided an opportunity for participants to freely express their views through narratives (stories); hence, the findings are relevant to them and the context.

I should add that these data gathering methods gave me a clear picture of the current situation with regard to health education promotion in the rural ecologies of Zimbabwe. The study thus contributes to narrative research studies as the research methods catered

for each group of participants. Their level of literacy was also considered as some, like the parents, expressed their opinions and experiences in their home language (Shona) and the verbatim quotes were provided in this language.

### 7.6.3 Contributions to practice

This study contributed to practice in enhancing sustainable learning through health education promotion in rural ecologies. It highlighted how health education promotion is accessed and promoted and the current situation with regard to health education promotion in rural ecologies, and revealed the challenges in the implementation of health education promotion strategies to enhance sustainable learning in such ecologies. The engagement and contributions made by all stakeholders as participants (senior teachers, a nurse, the learners, parents, a headman) showed that health education promotion is visible in learning and rural ecologies and that it is facilitated through Guidance and Counselling (in learning ecologies) and through health awareness campaigns and utilisation of posters and pamphlets (in rural ecologies), although a number of challenges were revealed. It was noted that health education enhanced the acquisition of health knowledge, developed health consciousness and literacy and facilitated the development of positive behaviours in both learners and rural communities. Implementation of the proposed framework is not limited to paper based instructions but contributes to practice that calls for change in individuals in learning and rural ecologies.

The study enabled me to explore health education promotion in rural ecologies through the utilisation of assets (ABA) in the form of the participants (senior teachers, a nurse, parents, a headman, learners) to develop positive behaviours, acquire health related knowledge and health literacy, and develop health consciousness through the health education promotion strategies identified in this study, although a number of challenges were noted such as the lack of Internet connectivity and of specialist teachers in Guidance and Counselling. Acknowledgement of the challenges contributed to practice in order to identify solutions that enhance health education promotion in rural ecologies.

The study identified activities that facilitated and promoted health awareness and these can be utilised to enhance access to and promotion of health education, resulting in the development of positive behaviours and healthy lifestyles. Guidance and Counselling

seems not to be receiving due attention in learning ecologies. Given that it makes a positive contribution to promoting learners' health, there is a need to capacitate Guidance and Counselling teachers. Successful health education promotion depends on active participation by all stakeholders (teachers, health professionals, traditional leaders within a community). This could assist policy makers to craft policies that are health friendly. Furthermore, active participation is an indicator of a framework's success and it shows people's willingness to assist in promoting health education among learners and rural communities in order to develop positive health behaviours.

The data generated by this study indicated that the implementation of health education promotion confronts numerous challenges. Teachers are not fully capacitated to teach Guidance and Counselling and there is a lack of material resources. Guidance and Counselling is not allocated sufficient time in the school timetable, and there is a lack of Internet connectivity (Ganyani, 2016). Infrastructural challenges are also a barrier to the implementation of health education promotion. This study therefore contributes to practice by identifying the need for teacher capacity development to ensure that teachers in all schools (rural and urban) have the requisite skills and knowledge to enhance sustainable learning for all learners irrespective of the ecology. This would equip them to address challenges in the implementation of health education promotion and result in the development of positive behaviours and improved lifestyles. Furthermore, the study contributed suggestions to resolve possible cultural conflict with regard to sexuality education, a component of health education, by adequately equipping parents with health education knowledge.

### 7.6.4 Reflections on my learning journey

This narrative qualitative study explored health education promotion in the rural ecologies of Zimbabwe utilising narrative inquiry (Bezeera, 2014) as a research design. It was an educative experience as it exposed me to new data elicitation methodologies, namely, written narratives, narrative interviews and narrative reflections. It was the first time in my academic journey that I used these data gathering methodologies. The study showed that narratives enable active and meaningful participation by participants, thereby resulting in the generation of rich data. The parents freely expressed their lived experiences in their

indigenous language (Shona) as they possess narrative literacy (Peu van Wyk & Botha, 2008). This exciting educative experience made me conscious of the need to implement health education promotion in rural learning ecologies through school curricula and the other strategies highlighted despite a multitude of challenges. Learners at the global, regional and local levels need access to health education to enhance sustainable learning. Health education expands the health knowledge base, facilitates the acquisition of skills and enables learners to apply their acquired knowledge to make informed health decisions using primary tier assets (senior teachers), secondary tier assets (health professionals) and outside tier assets (NGOs) (Myende & Chikoko, 2012). The proposed health education promotion framework stands to inform practicing teachers, parents, learners, policy makers and other stakeholders of the need to establish vibrant collaboration between the Education and Health and other Zimbabwean ministries.

This study was informed by two theoretical lenses, namely the ABA and the HBM. The ABA proposes the use of locally available assets to find solutions to problems in order to achieve positive change (Myende & Chikoko, 2012); hence, the utilisation of two senior teachers and a health professional in developing health consciousness and adoption of positive behaviours among learners in rural learning ecologies. On the other hand, the HBM is employed to understand human behaviour (Glanz, Rimer & Viswanath, 2008). It motivates and empowers individuals, including learners, to adopt preventative health actions. Drawing on the principles of these two theoretical lenses made me more knowledgeable on the health issues among learners in rural ecologies. The use of the participants' lived experiences is likely to bring about positive change in behaviour patterns and make learners more conscious of the severity of different diseases as well as the benefits of positive living, further enhancing sustainable learning in rural learning ecologies.

With this in mind, I argue that both learners and rural communities can benefit from adequate health information. Health education implementation in learning ecologies and rural communities develops health literacy and improved lifestyles. Given that this study was context specific, there is need for further research on strategies that can be utilised to implement health education programmes in rural learning ecologies.

The following section offers suggestions for further research and recommendations to stakeholders.

## 7.7 SUGGESTIONS FOR FURTHER RESEARCH AND RECOMMENDATIONS TO STAKEHOLDERS

Based on the study's findings and conclusions, the suggestions for further research and recommendations to stakeholders are as follows:

- Further narrative studies need to be conducted on how the principles of the HBM and the ABA could be integrated into education so as to enhance health education promotion among learners and rural communities and thus enhance sustainable learning in learning and rural ecologies.
- The Ministry of Primary and Secondary Education should adopt and fully implement policies on health education promotion in learning ecologies so as to develop health literacy and consciousness in learners, resulting in the adoption of positive health behaviours.
- There is a need to strengthen collaboration in the implementation of health education by including other Ministries (for example the Ministry of Home Affairs) and NGOs so that health education becomes more visible and relevant to learners and rural communities.
- There is need for further narrative research studies within rural ecologies on the effectiveness of the strategies suggested to implement health education promotion in rural ecologies to enhance sustainable learning.
- Trainee teachers in tertiary institutions and practicing teachers need to be capacitated on the implementation of Guidance and Counselling through in-service training and a review of tertiary institutions' curricula on the implementation of health education in schools.
- Given the paucity of research studies on health education promotion in rural ecologies, further studies are required.
- Future studies could investigate implementation mechanisms for health education promotion and come up with other strategies to enhance promotion of health education in learning and rural ecologies

## 7.8 CHAPTER SYNTHESIS

This chapter drew on the study's findings and those of other studies to propose a framework for health education promotion for sustainable learning in Zimbabwean rural ecologies. It discussed the implementation of health education promotion in terms of planning, enhancing health education promotion and monitoring and evaluation. The study's contributions to theory, methodology and practice were highlighted. Following reflections on my learning journey, the chapter concluded with suggestions for further research and recommendations to stakeholders.

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# APPENDICES

## APPENDIX A:

## ETHICAL CLEARANCE FROM THE UNIVERSITY


02 June 2020

**Mr Andrew Hamandishe Chipato (218085865)**
**School of Education**
**Edgewood Campus**

Dear Mr Chipato,

**Protocol reference number : HSSREC/00000785/2019**
**Project title:** Health promotion for sustainable learning in Zimbabwean rural ecologies. A narrativ e inquiry
**Degree : PhD**

### Approval Notification – Full Committee Reviewed Protocol

This letter serves to notify you that your response received on 01 June 2020 to our letter of 22 January 2020 in
connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee
(HSSREC) and the protocol has been granted **FULL APPROVAL**.

**Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Sche dule, Informed**
**Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be**
**reviewed and approved through the amendment/modification prior to its implementatio n. In case you**
**have further queries, please quote the above reference number. PLEASE NOTE: Rese arch data should**

**be securely stored in the discipline/department for a period of 5 years.**

**This approval is valid until 05 June 2021.**
To ensure uninterrupted approval of this study beyond the approval expiry date, a progre ss report must
be submitted to the Research Office on the appropriate form 2 - 3 months before the expir y date. A close-
out report to be submitted when study is finished.

All research conducted during the COVID-
19 period must adhere to the national and UKZN guidelines.

HSSREC is registered with the South African National Research Ethics Council (REC-040414-040).

Yours sincerely,

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**Professor Dipane Hlalele (Chair)**

**/ms**

**Humanities & Social Sciences Research Ethics Committee**
**UKZN Research Ethics Office Westville Campus, Govan Mbeki Building**
**Postal Address: Private Bag X54001, Durban 4000**
**Tel: +27 31 260 8350 / 4557 / 3587**
**Website:** http://research.ukzn.ac.za/Research-Ethics/

# APPENDIX B

## REQUREST FOR PERMISSION TO CONDUCT A RESEARCH T0 THE PERMANENT SECRETARY

[redacted] Primary School

Private Bag 9038

Masvingo

22 July 2019

The Director

Policy Planning Research and Development

Ministry of Primary and Secondary Education

Post Office Box CY 121

Causeway

Harare

Dear Sir / Madam

**Requesting permission to conduct a research**

My name is Andrew Hamandishe Chipato 218085865. I am a PhD Student School of Education (Educational Psychology) at the University of KwaZulu Natal, Edgewood Campus), Pinetown. I am requested to conduct a research as part of my degree fulfilment. My study topic is **Health education promotion for sustainable learning in the Zimbabwean rural ecologies.** I therefore kindly ask permission from you to conduct my research at Kushinga Secondary School in Masvingo province in Masvingo district.

The study focuses on health promotion for sustainable learning in rural ecologies and the purpose is to explore how health promotion in the Zimbabwean rural ecologies could enhance sustainable learning. In this study the targeted research participants are two senior teachers, six learners (gender balanced), six parents, a nurse and a village headman. The study will use one – on - one semi structured interviews, focus group discussions, and narratives.

Participation is voluntary and any participant can withdraw any time without any form of reprisal. Aspects of confidentiality and anonymity will be observed in this study. There will be no financial benefits that participants will accrue as a result of being participants in the study. Information generated will not be divulged to anybody thus upholding confidentiality and anonymity. Data generated shall solely be used for study purposes only. Ethical issues will also be observed.

I commit to share the report of my research upon completion.

For further information on this research project, please feel free to contact my supervisor Dr N. P. Mthiyane. Tel; +27 31 260 3424. Cell: +27 82 5474 113. E- mail: mthiyanen1@ukzn.ac.za.

In addition, should you have any queries, please feel free to contact me using the following details. Andrew Hamandishe Chipato. Cell: +263 772 958 401. E- mail: andrew.hamandishe@gmail.com.

Research tools are attached herewith for your perusal.

Your anticipated response in this regard is highly appreciated.

Thanking you in advance.

Yours sincerely

Mr A. H. Chipato

## DECLARATION

I……. (Full names) hereby confirm that I have been in informed about the nature, purpose and procedures of the study **Health education promotion for sustainable learning in the Zimbabwean rural ecologies.**

I have also received, read and understood the written information about the study. I understand everything that has been explained to me and I consent that the study be conducted at Kushinga Secondary School.

I understand that participants are at liberty to withdraw from the research project anytime should they so desire.

Signature of the Permanent Secretary ……..
Date ……..

Signature of Witness……
Date…….

Thanking you in advance.

Ms. …… (Name and surname).

# APPENDIX B:

# CONSENT LETTER FROM THE PERMANENT SECRETARY MINISTRY OF PRIMARY AND SECONDARY EDUCATION

All communications should be addressed to "The Secretary for Primary and Secondary Education"
Telephone: 794855, 795211
Telegraphic address: "EDUCATION"
Fax: 794505

ZIMBABWE

**Reference:** C/426/MSVG
Ministry of Primary and Secondary Education
P.O Box CY 121
Causeway
**HARARE**

24 June 2019

Chipato Andrew H
Chamarare Primary School
P Bag 9038
Masvingo

Re: **PERMISSION TO VISIT A SCHOOL IN MASVINGO PROVINCE: MASVINGO DISTRICT; KUSHINGA SECONDARY SCHOOL**

Reference is made to your application to collect data for research purposes from the above stated school in Masvingo Province on the research titled:

**"HEALTH PROMOTION FOR SUSTAINABLE LEARNING IN ZIMBABWEAN RURAL ECOLOGIES. A NARRATIVE INQUIRY."**

Permission is hereby granted. However, you are required to liaise with the Provincial Education Director Masvingo Province, who is responsible for the school which you want to involve in your research. You should ensure that your research work does not disrupt the normal operations of the school. Where students are involved, parental consent is required.

You are also required to provide a copy of your final report to the Secretary for Primary and Secondary Education.

MIN. OF PRIMARY EDUCATION POLICY PLANNING RESEARCH AND DEVELOPMENT 02 JUL 2019 P.O. BOX CY 121, CAUSEWAY ZIMBABWE

[redacted]
T. Thabela (Mrs)
**SECRETARY FOR PRIMARY AND SECONDARY EDUCATION**

Cc: PED - Masvingo Province

# APPENDIX C

## REQUEST FOR PERMISSION TO CONDUCT A RESEARCH TO THE PROVINCIAL EDUCATION DIRECTOR.

[redacted] Primary School

Private Bag 9038

Masvingo

Zimbabwe

22 July 2019.

The Provincial Education Director

Ministry of Primary and Secondary Education

Post Office Box 89

Masvingo

Zimbabwe.

Dear Sir / Madam

**Requesting for permission to conduct a research**

My name is Andrew Hamandishe Chipato. I am a PhD student School of Education (Educational Psychology) at the University of KwaZulu Natal (Edgewood Campus), Pinetown. I am requested to conduct a research as part of my degree fulfilment. My study topic is **Health education promotion for sustainable learning in the Zimbabwean rural ecologies.** I therefore kindly ask for permission from you to conduct my research at Kushinga Secondary School in Masvingo province in Masvingo district.

The study focuses on health promotion for sustainable learning in rural ecologies and the purpose is to explore how health promotion in the Zimbabwean rural ecologies could enhance sustainable learning. In this study, the targeted research participants are two senior teachers, six learners (gender balanced), six parents, a nurse and a village headman. The study will use one- on-one semi-structured interviews, focus group discussions and narratives.

Participation is voluntary and any participant can withdraw anytime without any form of reprisal. Aspects of confidentiality and anonymity will be observed in this study. There will be no financial benefits that participants will accrue as a result of being participants in this study. Further the study aims to empower learners, parents and teachers in an effort to transform them. Information generated will not be divulged to anybody thus upholding confidentiality and anonymity. Data generated shall solely be used for study purposes only. Ethical issues will be observed.

I commit to share the full report of my research upon completion.

For further information on this research project, please feel free to contact my supervisor Dr N. P. Mthiyane on Tel: +27 31 260 3424. Cell: +27 82 5474 113. E- mail: mthiyanen1@ukzn.ac.za.

In addition, should you have any queries, please feel free to contact me using the following details. Andrew Hamandishe Chipato. Cell: +263 772 958 401. E- mail: andrew.hamndishe@gmail.com.

Research tools are attached herewith for your perusal.

Your anticipated response in this regard is highly appreciated.

Thank you in advance.

Yours sincerely

Mr A. H. Chipato.

## DECLARATION

I …… (full name) hereby confirm that I have been informed about the nature, purpose and procedures of the study **Health education promotion for sustainable learning in the Zimbabwean rural ecologies.**

I have also received, read, and understood the written information about the study. I understand everything that has been explained to me and consent that the study be conducted at Kushinga Secondary School.

I understand that participants are at liberty to withdraw from the research project anytime should they so desire.

Signature of the Provincial Education Director …… Date ……...

Signature of Witness …… Date ……

Thanking you in advance.

Ms. …… (Name and surname).

# APPENDIX D

# CONSENT LETTER FROM THE PROVINCIAL EDUCATION DIRECTOR MINISTRY OF PRIMARY AND SECONDARY EDUCATION

*ALL communications should be addressed to*
*"The Provincial Education Director for Primary and Secondary Education"*
***Telephone: 263585/264331***
**Fax: 039-263261**

ZIMBABWE

Ministry of Primary and Secondary Education
P. O Box 89
Masvingo

19 July 2019

Chipato Andrew H
Chamarare Primary School
P Bag 9038
Masvingo

**RE: PERMISSION TO CARRY OUT RESEARCH IN MASVINGO PROVINCE: MASVINGO DISTRICT: KUSHINGA SECONDARY SCHOOL**

Reference is made to your application to carry out a research at the above mentioned schools in Masvingo District on the research title:

**"HEALTH PROMOTION FOR SUSTAINABLE LEARNING IN ZIMBABWEAN RURAL ECOLOGIES A NARRATIVE ENQUIRY."**

Please be advised that the Secretary for Primary and Secondary Education has granted permission to carry out your research.

You are also advised to liaise with the District Schools Inspector who is responsible for the schools which are part of the sample for your research.

MIN. OF PRY. & SEC. EDUCATION
PROVINCIAL EDUCATION DIRECTOR
MASVINGO PROVINCIAL OFFICE
19 JUL 2019
P.O. BOX 89, MASVINGO
ZIM. TEL: 0392-264331
FAX: 039-263261

[redacted]
Z. M. Chitiga
Provincial Education Director
**MASVINGO PROVINCE**

MINISTRY OF PRIMARY & SECONDARY EDUCATION
DISTRICT
19 JUL 2019
MASVINGO DISTRICT
P. O. BOX 89
MASVINGO

# APPENDIX E

# REQUEST LETTER TO THE PRINCIPAL/HEAD

[redacted] Primary School

Private Bag 9038

Masvingo

Zimbabwe

22 July 2019

The Principal / Head

[redacted] Secondary School

Private Bag

Masvingo

Zimbabwe

Dear Sir / Madam

**REQUEST FOR PERMISSION TO CONDUCT RESEARCH.**

My name is Andrew Hamandishe Chipato (218085865). I am a PhD student School of Education (Educational Psychology) at the University of KwaZulu Natal, School of Education (Edgewood Campus) Pinetown. I am required to conduct a research as part of my degree fulfillment. Please be informed that I have sought the necessary permission in advance from the Ministry of Primary and Secondary Education (Zimbabwe) and has been granted (See copy attached). I therefore kindly seek permission to conduct research in your school. The title of my study is **Health education promotion for sustainable learning in Zimbabwean rural ecologies.**

This study aims to explore how health promotion in Zimbabwean rural ecologies could enhance sustainable learning. This planned study will focus on teachers, a nurse, learners and a village headman. This study will use semi-structured one-on-one interviews, focus group interviews and narratives.

One – on- one semi-structured one-on-one interviews will be conducted with the teachers and a nurse focus group interviews will be held with learners and parents and narratives shall be held with learners, teachers and a nurse. Participants will be interviewed for approximately 30 – 40 minutes and will be voice recorded with their permission.

**PLEASE TAKE NOTE THAT**: The head is not participating in the study I suppose so the wording should show that ….

- There will be no financial benefits that the participants may accrue as a result of their participation in this research project.

- Their identity and that of the school will not be divulged under any circumstances, during research, in conferences and after the reporting process.
- All of their responses will be treated with strict confidentiality.
- Pseudonyms will be used to represent your names.
- Participation is voluntary, therefore, they are free to withdraw at any time they wish without incurring any negative or undesirable consequences /penalty on your part.
- The interviews with all participants will be voice recorded to assist me in concentrating on the actual interview.
- Learners, parents, teachers, a nurse and a village headman will be contacted in time about the interviews.

For further information on the research project, please feel free to contact my supervisor, Dr N. P. Mthiyane Tel: +27 31 260 3424. Cell: +27 82 5474 113. E- mail: mthiyanen1@ukzn.ac.za.

In addition, should you have any queries contact me using the following contact details. Andrew Hamandishe Chipato. Tel: N / A. Cell: +263 772 958 401. E-mail: andrew.hamandishe@gmail.com.

Research tools are attached herewith for your perusal.

Your anticipated positive response in this regard is highly appreciated.

Thanking you in advance.

Yours sincerely

Mr A. H. Chipato.

.

## DECLARATION

I …… (Full name of participant) hereby confirm that I have been informed about the nature, purpose and procedure of the study: **Health education promotion for sustainable learning in Zimbabwean rural ecologies.**

I have also received, read and understood about the written information about the study. I understand everything that has been explained to me and consent voluntarily that the research be conducted at this school.

I understand participants are at liberty to withdraw from the research project any time they so desire.

I consent that the study be conducted at this school.

Signature of the Principal / Head …….. Date ……..

Signature of witness ……Date ……

# APPENDIX F

# CONSENT LETTER FROM THE PRINCIPAL/HEAD

**DECLARATION**

I Simbarashe Tsvuura (Full names) do confirm that I understand the content of this document and the nature of the research project. I have been informed about this study **Health promotionfor sustainable learning in Zimbabwean rural ecologies. A narrative inquiry.**

I have also received, read and understood about the written information about the study. I fully understand that was explained to me and I consent voluntarily that the study be conducted at this school. I am aware that participation is voluntary and the selected participants can withdraw from the research study if they so wish any time they desire or feel like so.

I am aware that if I have any further questions / concerns I may contact the researcher on Mobile number +263 772 958 401, E mail andrew.hamandishe@gmail.com. My supervisor is Dr Ncasimile P. Mthiyane Mobile Number +27825474113, E mail mthiyane1@ukzn.ac.za.and my Co Supervisor is Prof Dipane J. Hlalele Mobile number +27 833799328 E mail hlaleled@ukzn.ac.za.

I understand if I have any further questions or concerns about any aspects of the study or the researcher, I may contact the Humanities and Social Sciences Research Ethics Office, Westview Campus, Govan Mbeki Building, Private Bag X 54001, Durban, 4000, KwaZulu Natal, South Africa, Tel +27 312 604 557, Email HSSREC@ukzn.ac.za.

I consent do not consent that the study be conducted at this school.

Signature of the Principal / Head [redacted] 23/07/19 Date

Signature of witness [redacted] Date

23/07/19

THE HEAD
KUSHINGA SECONDARY SCHOOL
23 JUL 2019
PRIVATE BAG 9016
MASVINGO

# APPENDIX E

# CONSENT LETTER TO THE TEACHER

[redacted] Primary School

Private Bag 9038

Masvingo

Zimbabwe

22 July 2019

Dear Participant

**REQUESTING INFORMED CONSENT FOR PARTICIPATION**

My name is Andrew Hamandishe Chipato (218085865). I am a PhD student School of Education (Educational Psychology) studying at the University of KwaZulu Natal, Edgewood Campus, Pinetown. I am required to conduct a research as part of my degree fulfilment. Please be informed that I have sought the necessary permission in advance from the Ministry of Primary and Secondary Education (Zimbabwe) and has been granted permission (See copy attached). The title of my research is: **Health education promotion for sustainable learning in Zimbabwean rural ecologies.** As senior teachers, you will be required to assist in the selection of six learners (gender balanced) in Form three after getting authorization from the Principal / Head. The data generation methods that will be used shall be focus group discussions, one – one semi structured interviews and narratives.

This study focuses on health promotion for sustainable learning in rural ecologies. The purpose of this study is to explore how health promotion in the Zimbabwean rural ecologies could enhance sustainable learning. This planned study will focus on teachers, learners, a nurse, parents and a village headman. The study will use one – one semi structured interviews and narratives with you the selected teachers. Further .semi structured interviews will be conducted with teachers and a nurse, focus group interviews shall be held with learners and parents and narratives shall be held with learners, teachers and a nurse. You will be required to participate in narrative writing which will be given to you to work on in three days. After the narratives then we will engage in a one-on-one semi structured interviews which will last for approximately 30 to 40 minutes and will be voice recorded with your permission.

**PLEASE TAKE NOTE THAT:**

- There will be no financial benefits that the participant may accrue as a result of their participation in this research project.
- Your identity will not be divulged under any circumstances, during and after the reporting process.
- All your responses will be treated in strict confidentiality.
- Pseudonym of your choice will be used to represent your name.
- Participation is voluntary, therefore, you will be free to withdraw at any time you wish without incurring any negative or undesirable consequences / penalty on your part.
- The interview will be voice recorded to assist me in concentrating on the actual interview.
- You will contacted on time about the scheduled interviews.

| | YES | NO |
|---|---|---|
| **AUDIO RECORDING** | | |

For further information on this research project, please feel free to contact my supervisors Dr N. P. Mthiyane at +27 31 260 3424/+ 27 82 5474 113 E-mail mthiyanen1@ukzn.ac.za. and Prof D. J. Hlalele at Cell +27 31 260 385 88 E mail hlalele@ukzn.ac.za

In addition, should you have any queries, please feel free to contact me using the following contact details Andrew Hamandishe Chipato Tel N/A, +263 772 958 401, E-mail andrew.hamandishe@gmail.com.

If you have any questions or concerns about the rights of participants or if you are concerned about any aspects of the study or the researcher, then you may contact the Humanities & Social Sciences Research Ethics. Administration Research Office, Westville Campus, Govan Mbeki Building Private Bag X54001 Durban, 4000, KwaZulu Natal, SOUTH AFRICA;

Tel +27 31 2604557. Fax +27 31 31 260 4609. E- mail: HSSREC@ukzn.ac.za

Research tools are attached herewith for your perusal.

Your anticipated response in this regard is highly appreciated.

Thanking you in advance.

Yours sincerely

Mr A. H. Chipato

**DECLARATION**

I…… (Full name of participant) hereby confirm that I have been informed about the nature, purpose and procedures of the study: **Health education promotion for sustainable learning in Zimbabwean rural ecologies.**

I have also received, read and understood the written information about the study. I understand everything that has been explained to me and I consent voluntarily to take part in the study.

I understand that I am at liberty to withdraw from the research project any time should I so desire.

Signature of Participant …….. Date ……

Signature of Witness…….Date ……...

Thanking you in advance.

Ms…… (Participant's name and surname).

# APPENDIX F

## LEARNER INFORMED CONSENT AND DECLARATION

**(Child participant)**

**Project Title:** *Health education promotion for sustainable learning in Zimbabwean rural ecologies.*

**Researcher's name:** *Andrew Hamandishe Chipato.*

**Name of participant:** ……

1. Has the researcher explained what s/he will be doing and wants you to do?

| YES | NO |
|---|---|

2. Has the researcher explained why s/he wants you to take part?

| YES | NO |
|---|---|

3. Do you understand what the research wants to do?

| YES | NO |
|---|---|

4. Do you know if anything good or bad can happen to you during the research?

| YES | NO |
|---|---|

5. Do you know that your name and what you say will be kept a secret from other people?

YES NO

6. Did you ask the researcher any questions about the research?

YES NO

7. Has the researcher answered all your questions?

YES NO

8. Do you understand that you can refuse to participate if you do not want to take part and that nothing will happen to you if you refuse?

YES NO

9. Do you understand that you may pull out of the study at any time if you no longer want to continue?

YES NO

10. Do you know who to talk to if you are worried or have any other questions to ask?

YES NO

11. Has anyone forced or put pressure on you to take part in this research?

YES NO

12. Are you willing to take part in the research?

YES NO

**Signature of Child** **Date**

| | YES | NO |
|---|---|---|
| **AUDIO RECORDING** | | |

# APPENDIX G

# CONSENT LETTER TO THE PARENT / GUARDIAN

[redacted] Primary School

Private Bag 9038

Masvingo

Zimbabwe

22 July 2019

Dear Participant

**REQUESTING INFORMED CONSENT FOR PARTICIPATION**

My name is Andrew Hamandishe Chipato (218085865). I am a PhD student School of Education (Educational Psychology) at the University of KwaZulu Natal, Edgewood Campus, Pinetown. I am required to conduct a research as part of my degree fulfilment. Please be informed that I have sought the necessary permission in advance from the Ministry of Primary and Secondary Education (Zimbabwe) and has been granted (See copy attached). As parents you will be required to participate in focus group discussions and also consent that your children who are minors can participate in this study. The title of my research is: **Health education promotion for sustainable learning in Zimbabwean rural ecologies.** I kindly ask you to be participants in this study.

This study focuses on health promotion in rural ecologies. The purpose being to explore how health promotion in Zimbabwean rural ecologies could enhance sustainable learning. . Further, this planned study will focus on parents, teachers, learners, a nurse and a village headman. The study will use semi structured interviews, focus group interviews and narratives.

Semi structured interviews will be conducted with teachers, a nurse and a village headman, focus group interviews shall be held with learners and parents and narratives shall be held with learners, teachers and a nurse. The focus group discussion you will be asked to participate in will last 40 minutes and will be voice recorded with your permission.

**PLEASE NOTE THAT:**

- There will be no financial benefits that the participant may accrue as a result of their participation in this research project.
- Your identity will not be divulged under any circumstances, during and after the reporting process.
- All your responses will be treated in strict confidentiality.
- Pseudonyms will be used to represent your names.
- Participation is voluntary, therefore you are free to withdraw at any time you wish without incurring any negative or undesirable / penalty on your part.
- The interview will be voice recorded to assist me in concentrating on the actual interview.
- Learners, parents, teachers and a village headman will be contacted in time about the interviews.

| | **YES** | **NO** |
|---|---|---|
| **AUDIO RECORDING** | | |

| | | |
|---|---|---|

For further information on this research project, please feel free to contact my supervisor, Dr N. P. Mthiyane at +27 31 260 3424. Cell: +27 82 5474 113. E- mail: mthiyanen1@ukzn.ac.za.

In addition, should you have any queries, please feel free to contact me using the following contact details. Tel: N/ A. Cell; +263 772 958 401. E- mail: andrew.hamandishe@gmail.com.

Research tools are attached herewith for your perusal.

Your anticipated positive response in this regard is highly appreciated.

Thanking you in advance.

Yours sincerely

Mr A. H. Chipato.

## DECLARATION

I …… (Full name of participant) hereby confirm that I have been informed about the nature, purpose and procedures of the study: **Health education promotion for sustainable learning in Zimbabwean rural ecologies.**

I have also received, read and understood the written information about the study. I understand everything that has been explained to me and I consent voluntarily to take part in the study.

I understand that I am at liberty to withdraw from the research project at any time I so desire.

Signature of Participant …… Date ……

Signature of Witness ……Date……

Thanking you in advance.

Ms. …… (Participant's name and surname).

# APPENDIX H

# CONSENT LETTER TO THE NURSE

[redacted] Primary School

Private Bag 9038

Masvingo

Zimbabwe

22 July 2019

Dear Participant

**REQUESTING INFORMED CONSENT FOR PARTICIPATION**

My name is Andrew Hamandishe Chipato (218085865). I am a PhD candidate studying at the University of KwaZulu Natal, Edgewood Campus, Pinetown. I am required to conduct a research as part of my degree fulfilment. Please be informed that I have sought relevant permission in advance from the Ministry of Primary and Secondary Education (Zimbabwe) and has been granted (See copy attached). The title of my research is: **Health education promotion for sustainable learning in Zimbabwean rural ecologies.**

The focus of this study is on health promotion for sustainable learning in rural ecologies and the purpose is to explore how health promotion in Zimbabwean rural ecologies could enhance sustainable learning. This planned study will focus on teachers, a nurse, learners, teachers and a village headman. The study will use semi structured interviews, focus group interviews and narratives. In this study you will be required to participate in narrative writing and one- on one semi structured interviews. You will be required to work within three days in narrative writing and one- on one semi structured will be between 30 to 40 minutes. I kindly ask you to be a participant in this study.

Semi structured interviews will be conducted with teachers and a nurse, focus group interviews will be held with learners and parents and narratives shall be held with learners, teachers and a nurse. Participants will be interviewed for approximately 30 -40 minutes and each interview will be recorded with their permission.

**PLEASE TAKE NOTE THAT:**

- There will be no financial benefits that the participants may accrue as a result of their participation in this research project.
- Your identity will not be divulged under any circumstances, during and after the reporting process.
- All your responses will be treated in strict confidentiality.
- Fictious names will be used to represent your names.
- Participation is voluntary, therefore, you are free to withdraw at any time you wish without incurring any negative or undesirable consequences / penalty on your part.
- The interview will be voice recorded to assist me in concentrating on the actual interview.
- Learners, parents and a nurse, headman and a nurse will be contacted in time about the interview.

| | YES | NO |
|---|---|---|
| **AUDIO RECORDING** | | |

.

For further information about this research project, please feel free to contact my supervisor, Dr N. P. Mthiyane at +27 31 260 3424 / +27 82 5474 113. E- mail mthiyanen1@ukzn.ac.za.

In addition, should you have any queries, please feel free to contact me using the following contact details. Andrew Hamandishe Chipato Tel N / A, Cell +263 772 958 401. E- mail: andrew.hamandishe@gmail.com.

Research tools are herewith attached for your perusal.

Your anticipated positive response in this regard is highly appreciated.

Thank you in advance.

Yours sincerely

Mr A. H. Chipato.

## DECLARATION

I ……. (Full name of participant) hereby confirm that I have been informed about the nature, purpose and procedures of the study**: Health education promotion for sustainable learning** i**n Zimbabwean rural ecologies.**

I have also received, read and understood the written information about the study. I understand everything that has been explained to me and I consent voluntarily to take part in the study.

I understand that I am at liberty to withdraw from the research project any time should I so desire.

Signature of Participant …….. Date ……..

Signature of Witness…….Date……

Thanking you in advance.

Ms. ……. (Participant's name and surname).

# APPENDIX H

# CONSENT LETTER FROM THE NURSE

## CONSENT LETTER FROM THE RURAL HEALTH DELIVERY CENTRE

I Mr Allen Mutenguma (full names) do confirm that I understood the content of this document and the nature of the research project. I have been informed about this study Health education promotion for sustainable learning in the Zimbabwean rural ecologies utilizing a narrative inquiry.

I have read and understood about the written information about the study. I fully understand that everything was explained to me and I consent voluntarily that part of the study will be conducted at this rural health delivery center. I am aware that participation is voluntary and the selected participant can withdraw anytime from the research study if they wish lie so.

I am aware that if I have any questions / concerns I am contact the researcher on Cell + 263 772 958 401. E - mail andrew.hamandishe@gmail.com You may also contact my supervisors Dr N. P. Mthiyane on Cell +27 825 474 113 E - mail mthiyanenl@ukzn.ac.za and Prof D. J. Hlalele at Cell +27 833 799 328 at E- mail hlaleled@ukzn.ac.za

I understand that if I have any further queries about the aspects of the researcher, I may contact the Humanities & Social Sciences Research Ethics Office, Westview Campus, Govan Mbeki Building, Private Bag )(54001 Durban, 4 000, KwaZulu Natal, South Africa. Tel + 27 31 260 4557, E – mail: HSSREC@ukzn.ac.za

I do /do not consent that part of the study be conducted at this rural health delivery center.

Signature of the nurse. [redacted] Date 25/02/20

Signature of the witness. [redacted] Date 25/02/20

# APPENDIX I

# CONSENT LETTER FOR THE HEADMAN (VILLAGE)

[redacted] School

Private Bag 9038

Masvingo

Zimbabwe

22 July 2019

Dear Participant

**INVITATION FOR PARTICIPATION IN THIS STUDY**

My name is Andrew Hamandishe Chipato (218085865). I am a PhD candidate studying at the University of KwaZulu Natal, Edgewood Campus, Pinetown. I am required to conduct a research as part of my degree fulfilment. I have sought the necessary permission in advance from the Ministry of Primary and Secondary Education. (Zimbabwe) and has been granted. (See copy attached). The title of my research is**: Health education promotion for sustainable learning in Zimbabwean rural ecologies.** I therefore kindly invite you to participate in this study.

The study focuses on health promotion for sustainable learning and the purpose is to explore how health promotion in Zimbabwean rural ecologies could enhance sustainable learning. This planned study will focus on sustainable learning on parents, teachers, learners, a nurse and a village headman. The study will use research methods including one- on one semi-structured interviews, focus group interviews and narratives.

One- on one semi-structured interviews will be conducted with the teachers and a nurse, focus group interviews shall be held with learners and parents and narratives shall be held with learners, teachers and a nurse. You will be required to engage in a one-on- one semi structured interview which will last for approximately 30 -40 minutes and will be recorded with your permission.

**PLEASE NOTE THAT**

- There would be no financial benefits that participants may accrue as a result of their participation in this research project.
- Your identity will not be divulged under any circumstances during and after the reporting process.
- All your responses will be treated in strict confidentiality.
- Pseudonyms will be used to represent your names.
- Participation is voluntary, therefore, you are free to withdraw without any negative consequences / penalty on your part.
- The interview will be voice recorded to assist me in concentrating on the actual interview.
- Learners, parents and a nurse will be conducted in time about the interviews.

| | **YES** | **NO** |
|---|---|---|
| **AUDIO RECORDING** | | |

For further information on this research project, please feel free to contact my supervisor, Dr N. P. Mthiyane at +27 31 260 3424. Cell: +27 82 5474 113. E – mail: mthiyanen1@ukzn.ac.za

In addition, should you have any queries, please feel free to contact me using the following contact details. Andrew Hamandishe Chipato. Tel: N / A. Cell: +263 772 958 401. E- mail: andrew.hamandishe@gmail.com.

Research tools are attached herewith for your perusal.

Your anticipated positive response in this regard is highly appreciated.

Thank you in advance.

Yours sincerely

Mr A. H. Chipato.

## DECLARATION

I ……. (Full name of participant) hereby confirm that I have been informed about the nature, purpose and procedures of the study**: Health education promotion for sustainable learning in Zimbabwean rural ecologies**.

I have also received, read and understood the written information about the study. I understand everything that has been explained to me and I consent voluntarily to take part in the study.

I understand that I am at liberty to withdraw from the research project any time should I so desire.

Signature of Participant……. Date ……

Signature of Witness……Date……

Thanking you in advance.

Ms. …… (Participant's name and surname)

# APPENDIX J

## PROMPTS FOR WRITTEN NARRATIVES WITH SENIOR TEACHERS

I acknowledge that some co-researchers may not have enough understanding of the concepts health education, sustainable learning and rural ecologies to adequately participate in written narratives. In order to facilitate co-researchers participation in written narratives, aiming to respond to research questions, a nurse and a psychology university lecturer will be invited as facilitators giving education on the mentioned concepts.

**Study topic:** Health education promotion for sustainable learning in the Zimbabwean rural ecologies.

**PROMPTS**

1. One of the learning areas as spelt out in the curriculum framework of 2016 to 2022 (Zimbabwe) is health education where Life Skills Orientation and Guidance and Counselling (G & C) are seen as vehicles used in the acquisition of skills, health knowledge to enable learners to be health conscious. What is your understanding of the concepts health education and sustainable learning?

2. Health education aims to develop health consciousness in schools and communities and eradicate diseases through health driven programmes. Please share your assessment on the current situation regarding health education promotion in the rural ecologies of Zimbabwe.

3. Health education involves consciously constructed opportunities for learning involving some form of communication so as to improve literacy, enhance knowledge acquisition and develop life skills. Drawing from your lived experience, share some of the health education programmes currently being utilized in the Zimbabwean rural ecologies to enhance sustainable learning.

4. Health education increases an individual's capacity to access health and health information in order to make appropriate health decisions. In your own view, which strategies are utilized by a classroom practioneer to facilitate accessing health education literature by learners in the rural learning ecologies?

5. The collaborative mechanism between the Education and Health ministries (Zimbabwe) was established to ensure that learners at different levels of education develop positive behaviours they will carry throughout life and also promote a framework for health education. Please share your evaluation on the effectiveness of this mechanism in regards to promoting health education in learners.

6. Health education can be enhanced through drama and poetry, reading and interacting with computer assisted learning with the aim of encouraging individuals and communities to want to stay healthy, know how to stay healthy and seek medical attention when

needed. Please share the activities which are done at your school to facilitate the promotion of health education.

7. Effective health education promotion programmes reduce misinformation, slows down issues of immorality, clarifies and solidifies positive behaviours and delays sexual activities. Guidance and Counselling was introduced as one of the learning areas in the Zimbabwean curriculum. From your experience of Guidance and Counselling as a learning area, please share the challenges you encounter in its implementation in the rural learning ecologies.

8. Sexuality education is one of the components of health education. In most African cultures, sexuality education tends to clash with cultural values and beliefs as sex is a taboo to talk about. In your opinion, what do you think are some of the challenges in its implementation in the rural learning ecologies?

9. Resources are key in the implementation of any programme health education promotion included. From your own perspective, do you feel rural ecologies are adequately resourced in terms of health literature to enhance sustainable learning?

Thank you for taking part in this study.

# APPENDIX K

## PROMPTS FOR WRITTEN NARRATIVES WITH THE NURSE

I acknowledge that some co-researchers might not have enough understanding of the concepts health education, sustainable learning and rural ecologies to adequately participate in written narratives. In order to facilitate co-researchers participation in written narratives, aiming to respond to research questions, a degreed secondary school teacher and a psychology university lecturer will be invited as facilitators giving education on the mentioned concepts.

**Study topic:** Health education promotion for sustainable learning in the Zimbabwean rural ecologies.

**PROMPTS**

1. Health education provides individuals, communities and groups with the opportunity to acquire skills and to make quality health decisions. Please share your understanding of the concept health education.

2. Literature reveals that Zimbabwe inherited a world class health delivery system at independence but the gains that have been made, have been eroded. Please, share about the current situation regarding health education promotion in the Zimbabwean rural ecologies.

3. Furthermore, the health delivery system has been hard hit by severe brain drain as specialist health professionals have left to seek greener pastures elsewhere on the globe. What are your observations in regards to the issue as it might have negatively affected the implementation of health education promotion programmes in the rural ecologies?

4. Some of the objectives of health education are informing people, motivating people and guiding people into action. Communication is thus a key strategy utilized to inform individuals and communities about health concerns. Please, can you share how health education is accessed and promoted in the rural ecologies of Zimbabwe.

5. Health education develops health consciousness in the learning ecologies and rural ecologies and provides a healthful environment for physical and mental growth. Which are some of the activities that you utilize to enhance the acquisition of health education programmes taking into account that most rural ecologies are characterized by low levels of literacy?

6. Lack of health education can impact negatively on the acquisition of skills and knowledge to enable individuals and communities to make informed health decisions and this can further be worsened by poverty. In your opinion, what can be the challenges that may compromise the implementation of health education promotion programmes in the rural ecologies so as to enhance sustainable learning?

7. Exposure of learners through technological devices to sexually sensitive literature has done more harm than good and has brought its own fair share of problems to most adolescent learners and youths. Please, share your views on the challenges that technology has brought which probably may inhibit successful implementation of health education strategies in the learning ecologies.

Thank you for taking part in the study.

# APPENDIX L

## PROMPTS FOR WRITTEN NARRATIVES WITH THE LEARNERS

I acknowledge that some co-researchers may not have enough understanding of the concepts health education, sustainable learning and rural ecologies to adequately participate in written narratives. In order to facilitate co-researchers participation in written narratives, aiming to respond to the research questions, a nurse and a psychology university lecturer will be invited as facilitators giving education on the mentioned concepts.

**Study topic:** Health education promotion for sustainable learning in the rural ecologies of Zimbabwe.

**PROMPTS**

1. Health education seeks to achieve health or illness related learning through acquisition, assimilation and dissemination. In your own view, what is your understanding of the concept health education?

2. The updated curriculum of 2013 seems to address the issue of health education to learners at both primary and secondary school levels as it is now a compulsory learning area. Please, share your experiences on the current situation regarding health education promotion in the rural ecologies.

3. Health driven programmes develop health consciousness, acquisition of knowledge and sound habits. Health education can be seen as a vehicle to achieve these. Please, share your experiences on the methods that are utilized by your teachers and other resource persons to promote health education at your school so as to enhance sustainable learning.

4. Computer assisted learning enables individuals to access current health literature thus keeping you informed on current health related issues. Please share how health education is accessed and promoted at your school highlighting also the activities you do to promote awareness to peers at your school.

5. Rural ecologies are characterized by negative factors that affect health education programmes. Please, share some of the challenges that you encounter that probably inhibit you to make you fully health conscious and acquire health knowledge to enable you to make informed health decisions.

6. The term strategy refers to a means an individual uses to achieve his / her objectives. In your opinion, share some the strategies that can be utilized by the Ministry of Primary and Secondary Education to overcome health related challenges in the rural learning ecologies.

Thank you for taking part in this study.

# APPENDIX L

## MIBVUNZO YEVADZIDZI MAERERANO NEZVINYORWA ZVENGANO DZOKUNYORA

Ndinoziva kuti vatambi vari muchidzidzo chino havana ruzivo rwakakwana pamashoko edzidziso youtano, kudzidzidza kunoendera mberi uye maruwa kuti vanyatsoita basa rezvinyorwa zvedzidziso youtano kuri kuedza kudavidza mibvunzo yechidzidzo chino. Nokudaro, mukoti nemudzidzisi anodzidzisa payunivhesiti achakokwa kuzopa dzidziso yakakwana pamashoko awa.

**Musoro webasa:** Dzidziso yezveutano mumaruwa omuZimbabwe.

**MIBVUNZO**

1. Chinangwa chedzidziso youtano ndechekuti vanhu vanhu vakwanise kuva noutano pamwe nokudzivirira zvirwere. Ungatsanangura semanzwisisiro ako zvinoreva dzidziso youtano.

2. Bumbiro rezvidzidzwa zvegore ra 2013 rinoita sokuti riri kugadzirisa nyaya yokuti uve noruzivo rwakakwana maererano nedzidziso youtano kuzvikoro zvepuraimari nesekondari. Semaonero ako ezviri kuitika mumaruwa nyora zviri maererano nedzidziso yenyaya dzoutano.

3. Zvidzidziso zvenyaya dzoutano zvinovandudza pfungwa dzako pamwe nokuti uve netsika dzakanaka. Zvidzidzo zvoutano imotokari inoita kuti uve noruzivo urwu. Tipe nzira dzinoshandiswa nevarairidzi vako nevamwe vanodzidzisa zveutano kuti kurudziro iyi pachikoro paunodzidza.

4. Zvidzidzo zvemakamboita zvinoita kuti uwane ruzivo runenge rwuchangoburwa maererano nezvenyaya dzoutano. Ipa tsanangudzo maererano okuti dzidziso youtano inowanikwa sei pamwe nokukurudzirwa  sei uchidoma zvimwe zvamunoita kuti vamwe vako vawane dzidzidziso yenyaya dzoutano.

5. Maruwa inzvimbo ine zvipingamupinyi zvakawandisa zvinogona kuti dzidziso yenyaya dzoutano dzisanyoita zvakanakisa. Ipa tsanangudzo yezvigozhero zvaunosangana nazvo kuti usawana ruzivo rwakakwana kuti ukwanise kuzvimiririra kuti uwana ruzivo hwakadzama panyaya iyi ugokwanisa kuzvimiririra.

6. Chinangwa inzira yokuti ukwanise kuwana nzira yokuzvimiririra.Mukuona kwako dzedzipi nzira dzingashandiswa nebazi reDzidzo kuti zvipingamupinyi zvawasangana nazvo zvikundwe.

Ndatenda nekuva kwako muchidzidzo chino.

# APPENDIX M

## PROMPTS FOR NARRATIVE INTERVIEWS WITH THE PARENTS

I acknowledge that some co-researchers may not have enough understanding of the concepts health education, sustainable learning and rural ecologies to adequately participate in narrative interviews. In order to facilitate co-researchers participation in narrative interviews, aiming to answer research questions, a nurse and psychology university lecturer will be invited as facilitators giving education on the mentioned concepts.

**Study topic**: Health education promotion for sustainable learning in the rural ecologies of Zimbabwe.

**PROMPTS**

1. Health education and health promotion are two terms which are different and have been used interchangeably in literature. Please, share your understanding of the concept health education.

2. One of the goals of health education is to develop sound habits and develop health consciousness in schools and communities. Please give your views on the current situation on health education promotion in the Zimbabwean rural ecologies basing on your experiences in the community where you are residing.

3. Rural ecologies are faced with multi-faceted challenges like lack of skilled health professionals and inadequate resources which may impede health education promotion in the rural ecologies. From your personal experiences, what are your opinions regarding the current status of health education promotion in your community so that sustainable learning can be enhanced?

4. In accessing and promoting health education practices, one of the objectives of health education is that of appreciating health programmes undertaken by the school and community. Please share your experiences of how health education is accessed and promoted in the rural ecologies.

5. Health education programmes promote health awareness, health consciousness and acquisition of knowledge to enable one to make informed decisions. Please share your views on the activities that are undertaken in your community to promote health awareness, consciousness and acquisition of knowledge highlighting those who are responsible for facilitating those activities.

6. Literature reveals that health delivery centres, community and school settings enhance teaching and learning of health education practices thus expanding the knowledge base and skills acquisition to enable one to make informed health decisions further enhancing sustainable learning. Which platforms are availed to you to enable you to access health education in your community?

7. Health education when intensively administered in school environment positively contributes to the health of the learners and their welfare. As parents, can you share some of the challenges faced in the rural ecologies in the implementation of health education promotion strategies to enhance sustainable learning.

8. Sexuality education is one of the components of health education and can be a potential source of conflict between parents and the school as issues of sex are regarded as a taboo in most African cultures. Please, share your views on whether you are comfortable with sexuality education being handled by teachers at the secondary school where your children are learning.

Thank you for taking part in this study

# APPENDIX M

## MIBVUNZOYEVABEREKI MAERERANO NENHAURWA YEDZIDZISO YOUTANO

Ndinoziva kuti vatambi vari muchidzidzo chino havana ruzivo rwakakwana pamashoko edzidziso youtano, kudzidza kunoenderera mberi uye maruwa kuti vaite nhaurwa dzedziso youtano kuri kuedza kudavidza mibvunzo yechidzidzo chino. Nokudaro, mukoti nemudzidzisi wepayunivhesiti vachakokwa kuzopa dzidziso yakakwana pamashoko awa.

Musoro webasa: Dzidziso youtano mumaruwa omuZimbabwe.

**MIBVUNZO**

1. Dzidziso youtano nekurudziro youtano zvinhu zviviri zvakasiyana sezvinobuda muzvinyorwa. Tipe ruzivo rwako maererano nedzidziso youtano maererano nezvaunoziva.

2. Chimwe chinangwa chedzidziso youtano ndechekuva netsika dazkanaka nokuva noruzivo rwakakwana muzvikoro nemunharaunda. Tipe muono wako maererano nemamiriro nenyaya yedzidziso youtano muruwa rwamuri kugara.

3. Maruwa ari kusangana nezvipingamupini zvakasiyana-siyana muenzaniso uri wekushomekara kwaana mazvikokota uye kushomekara kwezvikwanisiro zvakakwana zvinoita kuti dzidziso iyi isabudirira zvakanaka. Mukuona kawako somubereki dzidziso youtano yakamira sei mumaruwa?

4. Mukuwana dzidzidziso youtano nokukurudzira utano chimwe chezvinangwa kuda zvidzidzo zvekurudziro youtano. Jekesa kuti dzidziso youtano nekurudziro youtano zvinowanikwa sei mumaruwa mamugere.

5. Dzidziso youtano inokurudzira ruzivo zvakajeka uye kuwana ruzivo. Tsanangurai zviito mumaruwa zvamunoita kuti izvi zveutano zvibudirire.

6. Zvinyorwa zvinotaura kuti pazvikoro nepazvipatara panodzizdzisa kurudziro youtano zvichiwedzera ruzivo kuti munhu akakwanise kufunga achizvimiririra. Titsanangurire urongwa hunokupai dzidziso youtano mumaruwa.

7. Zvidzidzo zvoutano kana zvikabatitiswa muzvikoro zvinopa pundutso kuvadzidzi. Savabereki, tsanangurai zvipinga mupinyi zvamunosangana mukuedza kupa dzizdziso youtano.

8. Dzidziso yenyaya dzepabonde chimwe chezvidzidzo zvekurudziro nedzidziso youtano uye inyaya isingataurwi taurwi mutsika nemagariro edu. Mungapa pfungwa dzenyu pakusunguka kwenyu kuti vana vadzidzidziswe nyaya idzi pachikoro penyu.

Ndatenda nokuva kwenyu muchidzidzo chino.

# APPENDIX N

## PROMPTS FOR NARRATIVE INTERVIEWS WITH THE HEADMAN

I acknowledge that some co-researchers may not have an understanding of the concepts health education, sustainable learning and rural ecologies to adequately participate in narrative interviews. In order to facilitate co-researchers participation in narrative interviews aiming to respond to research questions, a nurse and a university psychology lecturer will be invited as facilitators giving education on the mentioned concepts.

**Study topic:** Health education promotion for sustainable learning in the rural ecologies of Zimbabwe.

**PROMPTS**

1. Effective health education increases an individual's capacity to access and use health information in order to make appropriate health decisions. Please, share your understanding of the concept health education.

2. Health education seeks to impart health related information that influences beliefs, values, attitudes and motivations. What are your observations which you can share in regards to the current situation regarding health education promotion in the rural ecologies?

3. Health education programmes facilitate in the eradication of both communicable and non-communicable diseases. Please share the programmes that are availed in your community that promote health education.

4. A variety of platforms exist that facilitate accessing and promoting health education to individuals and communities. Which activities are done and facilitated by whom that enable accessing and promoting health education in your community?

5. Health education is enhanced through posters, drama and poetry competitions just to mention a few activities with the aim of promoting awareness to individuals and communities. Please share the strategies that are utilized to promote health awareness in your community.

6. The prevailing negative macroeconomic climate in this country probably impacted negatively on the health sector and the implementation of health education campaigns. Please share the challenges in the rural ecologies and learning ecologies that hinder the full implementation of health education promotion programmes.

7. Sexuality education being a component of health education is a potential source of cultural conflict as issues of sexuality are a guarded constituency in most African cultures. Talking about sex in African cultures is a taboo. As a custodian of traditional values and customs, can share your views whether you are comfortable in its implementation in the learning ecologies.

Thank you for taking part in the study.

# APPENDIX N

## MIBVUNZO NASABHUKU MAERERANO NENHAURWA DZEDZIDZISO YOUTANO

Ndinoziva kuti vatambi vari muchidzidzo chino Havana ruzivo rwakakwana pamashoko edzidziso youtano, kudzidza kunoenderera mberi uye mumaruwa uye vaite nhaurwa yedzidziso youtano kuri kuedza kudavidza basa mibvunzo yechidzidzo chino. Nokudaro, mukoti nomudzidzisi anodzidzisa payunivhesiti vachakokwa kuzopa dzidziso yakakwana pamashoko awa.

**Musoro webasa**: Dzidziso youtano mumaruwa omuZimbabwe.

**MIBVUNZO**

1. Zvidzidzo zvakasimba zvedzidziso youtano zvinowedzera ruzivo uye kukwanisa kuti munhu awane nzira dzokuwana ruzivo urwu. Mungapavo here nzwisiso yenyu maererano nedzidziso youtano.

2. Dzidziso youtano inopa ruzivo maerarano noutano uye ruzivo rwakadzama.Mungapa maonero enyu here maererano emamiriro akaita nyaya yedzidziso youtano mumaruwa mazuvano.

3. Zvidzidzo zvinodzidzisa utano zvinodzidzisa zvirwere zvinotapuriranwa nezvisingatapuriranwi. Tipei urongwa huri mumaruwa somukuru wenharaunda zvinodzidzisa nyaya dzoutano.

4. Pane nzira dzakawanda dzinopa mawanirwo nemakuridzirwe ezveutano kuvanhu nomunharaunda. Tipei zviitwa zvinopa dzidzidziso yekukurudzira utano mumaruwa.

5. Zvidzidzo zveutano zvinodzidziswa nezvinyorwa, nhetembo uye mitambo zvine chinangwa chokupa kurudziro yenyaya dzoutano. Dururai ruzivo rwenyu yenzira dzinoshandiswa kupa dzizdziso yenyaya dzoutano mumaruwa.

6. Mamiriro enyaya dzoupfumi munyika ino zvikuru munyaya dzoutano uye kuzadzisa kurudziro youtano zvinenge zvisina kumira zvakanaka. Tsanangurai zvipingamupinyi zviri mumaruwa maererano nokuzadziswa kwekurudziro kwenyaya dzoutano mumaruwa.

7. Zvidzidzo zvepabonde zvinogona kusawirirana netsika nemagariro edu isu vanhu. Nyaya dzepabonde muchivanhu chedu hadzingotaurwi taurwi. Ipai maonero enyu panyaya iyi kukodzera kwayo uye kusakodzera kwayo kuti vana vechikoro vave neruzivo rwayo.

Ndatenda nokuva kwenyu muchirongwa chino.

# APPENDIX O

## PROMPTS FOR NARRATIVE REFLECTIONS WITH THE NURSE

I acknowledge that some co-researchers may not have an enough understanding of the concepts health education, sustainable learning and rural ecologies to adequately participate in narrative reflections. In order to facilitate co-researchers participation in narrative reflections aiming to respond to research questions, a secondary school teacher and a psychology university lecturer will be invited as facilitators giving education on the mentioned concepts.

**Study topic**: Health education promotion for sustainable learning in the Zimbabwean rural ecologies.

**PROMPTS**

1. Literature reveals that at independence Zimbabwe inherited a world class health delivery system characterized by well-resourced health delivery centres, highly motivated health professionals and affordable health care services. Please share your observations about the current situation in regards to offering health education in the rural ecologies.

2. Challenges characterizing the health sector landscape needs intervention measures in form of health education in the rural learning ecologies and rural ecologies. Please, share some of the activities in both ecologies that are utilized in enabling health education to be accessed to enhance sustainable learning.

3. Currently Zimbabwe faces a double burden of communicable and non-communicable diseases which might compromise sustainable learning in the rural ecologies which thus necessitates health education promotion programmes to be implemented. From your point of view, please share the strategies that can be utilized to promote health education in the rural ecologies.

4. Poor health negatively contributes towards academic performance in learners thus compromising sustainable learning. To overcome this hurdle, learners need exposure to health education literature. From health professional perspective, how best can learners and rural communities access health related knowledge so as to enhance sustainable learning?

5. One of the goals of health education is to equip learners and individuals with knowledge, skills on most aspects of health including issues on sexual reproductive health. Please, share how you handle sexuality health education as it has a potential of cultural conflict.

6. The health sector landscape seems to be characterized by a plethora of challenges which may impede successful implementation of health education promotion strategies in the rural learning and rural ecologies thus probably compromising sustainable learning.

Can you share the current challenges in offering health education in the rural ecologies and what do you think can be done to overcome these challenges?

Thank you for taking part in this study.

# APPENDIX P

## PROMPTS FOR NARRATIVE REFLECTIONS WITH THE SENIOR TEACHERS

I acknowledge that some co-researchers may not have enough understanding of the concepts health education, sustainable learning and rural ecologies to adequately participate in narrative reflections. In order to facilitate co-researchers participation in narrative reflections aiming to respond to the research questions, a nurse and a psychology university lecturer will be invited as facilitators giving education on the mentioned concepts.

**Study topic:** Health education promotion for sustainable learning in the Zimbabwean rural ecologies.

**PROMPTS**

1. Currently the economy is recording a negative growth which probably might affect the implementation of health education programmes in the rural ecologies further compromising sustainable learning. Drawing from your personal observations, what is the current situation in regards to health education programmes in the rural ecologies?

2. Prevalence of HIV / AIDS in the sexually active group and a spike in teenage pregnancies has resulted in high girl learner dropout in the rural learning ecologies as revealed in both print and electronic media which thus necessitates health education among learners. Please share your experiences on what you think are the causes of high teenage pregnancies in the rural learning ecologies.

3. The school curricula is an effective tool in the acquisition of health related knowledge, skills, developing sound health habits and behaviours. Please share how the curriculum framework of 2013 has enabled health education to be visible in the learning ecologies to enhance sustainable learning thereby promoting health education in learners.

4. Health education increases awareness, health consciousness and the ability to make informed decisions so as to develop positive health behaviors. Please share some of the activities that you utilize in the teaching and learning context to promote health awareness in learners so as to enhance sustainable learning.

5. Health education involves consciously constructed learning opportunities with the goal of developing health literacy, knowledge acquisition and also involves a set of techniques that facilitate in the acquisition of positive behaviours. Drawing from your teaching experiences, share some of the strategies that you utilize to enable learners to be health conscious so as to acquire health related knowledge.

6. Rural ecologies face a myriad of challenges that probably hinder successful implementation of health education promotion programmes thus compromising sustainable learning. Please share some of the challenges that you face in the

implementation of health education promotion programmes at your school and your suggestions to overcome these challenges.

Thank you for taking part in this study.

# APPENDIX Q

## PROMPTS FOR NARRATIVE REFLECTIONS WITH THE LEARNERS

I acknowledge that some co-researchers may not have enough understanding of the concepts health education, sustainable learning and rural ecologies to adequately participate in narrative reflections. In order to facilitate co-researchers participation in narrative reflections aiming to respond to research questions, a nurse and a psychology university lecturer will be invited as facilitators giving education on the mentioned concepts.

**Study topic**: Health education promotion for sustainable learning in the rural ecologies of Zimbabwe.

**PROMPTS**

1. Health education offers you learners with opportunities to successfully overcome health challenges and enables to make informed decisions on aspects concerning your health. From your experience, share your overall assessment of the current situation regarding health education promotion at your school.

2. Health education involves a set of techniques in accessing and in implementing it. Drawing from your learning experiences, share some of the methods that are utilized by your teachers to enable you to access health education promotion programmes at your school.

3. Health education increases awareness and knowledge acquisition to individuals and communities. Which are some of the activities that you do to increase awareness of health issues to your peers and to what extent is the effectiveness of these activities?

4. Sexuality education is a component of health education and is in your curricula. Can you share some of the challenges that you encounter in its implementation at your school.

5. Rural learning ecologies face a myriad of challenges one of them being resources availability which may probably affect the implementation of health education promotion programmes. In terms of health related resources, do you think your school is adequately resourced also sharing your views why you say so?

Thank you for taking part in this study

# APPENDIX Q

## NGANO DZEVANA MAERERANO NENHAURWA YEDZIDZISO YOUTANO

Ndinoziva kuti vatambi vari muchidzidzo chino Havana ruzivo rwakakwana pamashoko edzidziso youtano, kudzidza kunoendera mberi uye maruwa kuti vaiite nhaurwa dzavanotarisa kumashure kuri kuedza kudavidza mibvunzo yechidzidzo chino. Nokudaro, mukoti nemudzidzisi anodzidzisa payunivhesiti vachakokwa kuzopadzidziso yakakwana pamshoko awa.

**Musoro webasa:** Dzidziso youtano mumaruwa omuZimbabwe.

**MIBVUNZO**

1. Dzidziso youtano inopa imi mikana yokukunda zvipuingamupini uye kuti muve noruzivo rwakakwana rwekuzvidzivirira panyaya dzoutano. Kubva mumaziviro ako, tipe zvinyorwa zvizere maererano nemamiriro akaita zvinhumumaruwa mudzidziso youtano pachikoro chako.

2. Dzidziso youtano inosanganisira nzira kana udobidobi rwekuti uwane dzidziso youtano kuti kudzidzisa kweupenyu kuenderere mberi. Kubva mune zvaunodzidza, tsanangura nzira dzinoshandiswa kuti uwane dzidzidziso yokurudzira utano.

3. Dzidziso youtano inowedzera ruzivo maererano noutano kuvanhu nemumaruwa. Ndezvipi zvimwe zvamunoita zvamunoita kuti kurudziro iyi iwanikwe nevaunopinda navo chikoro uye nzira idzi dzinoshanda here?

4. Dzidziso yenyaya dzepabonde chimwe chidzidzo chezvedzidziso youtano muzvidzidzwa zvenyu. Nyora zvimwe zvigozhero zvaunoasngan nazvo pakudzidza chidzidzo ichi.

5. Maruwa ane zvigozhero zvakawanda chimwe chazvo iri nyaya yezvikwanisiro zvinogona kukanganisa mazadzisiro edzidzisoyoutano. Munyaya yezvikawnisiro, unoona here kuti chikoro chako chine zvikwanisiro zvakakwana?

Ndatenda hangu nokuva kwako muchidzidzo chino.

# APPENDIX R

# TURNITIN REPORT

Thesis

ORIGINALITY REPORT

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# APPENDIX S

# EDITOR'S CERTIFICATE

**62 Ferguson Road**
**Glenwood**
**DURBAN 4001**
**Tel: 072 442 7896**
**Email: deanne.collins30@gmail.com**

28 November 2021

This serves to confirm that I have edited the thesis, "Health Education Promotion for Sustainable Learning in Zimbabwean Rural Ecologies", by Andrew Hamandishe Chipato, student number 218085865, excluding the List of References and Appendices.

**DISCLAIMER: The editor cannot be held responsible for any errors introduced due to changes being made to the document after the editing is complete.**

Yours sincerely,

[redacted]

(Ms) Deanne Collins (MA)