**TITLE OF THESIS**

# AN ANALYSIS OF THE INFLUENCE OF MULTILEVEL LEADERSHIP ON THE EFFECTIVENESS OF PROVINCIAL HOSPITALS IN THE KWAZULU/NATAL PROVINCE.

SUBMITTED BY

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In fulfilment of the requirements for the degree of Doctor of Philosophy

(Nursing)

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**DEDICATION**

**To my loving Husband, the late Somfana Petrus Mabaso**
**and my dear late parents Eleonor Servious-Moale and A.B. Peter Moale**
**who gave me moral support and taught me how to live by precept and by example**
**until their demise.**

***And***

***My three lovely daughters Penny , her husband Sifiso Kunene and my grandson Aphiwe***
***Zamantungwa, her husband Mathemba Mosery and my grandson Rabotsĕ***
***Ayanda, Nokukhanya and my dear-mother-in law, Merica***
***THANK YOU KINDLY for your sacrifice and moral support.***
***YOU HAVE A SPECIAL PLACE IN MY HEART.***

DECLARATION

I HEREWITH DECLARE THAT THIS THESIS IS THE PRODUCT OF MY OWN INVESTIGATION. IT IS NOT BEING SUBMITTED CONCURRENTLY IN CANDIDATURE FOR ANY OTHER DEGREE OR EXAMINATION. ALL SOURCES OF REFERENCE HAVE BEEN ACKNOWLEDGED.

SIGNED BY.....Mabaso.....
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## ABSTRACT

**The purpose of this study was to describe and identify the leadership style that prevails in health care institutions, in order to establish the influence of multilevel leadershipon the effeciveness of hospitals in KwaZulu/Natal. Hunt's extended multilevel leadership Model was used as a conceptual framework.**

**Six institutions were selected by random sampling, categorised into three sizes i.e. large institutions with number of beds above 400, midddle sized between 200-400 and smaller institutions with a bed state below 200.**

**Three categories of leaders were as top, middle and operational leadership. The 8 leaders included the chief medical superintendent, the hospital secretary, the chief nurse manager, two area nurse managers and the three operational nurse managers in each of the six institutions. A total of 48 MLQ instruments designed by Bass and Avolio (1989) focused on leadership style was used to identify transformational, transactional and non-leadership styles. 121 Questionnaires were distributed to staff and community to measure hospital effectiveness. Interviews were carried out on patients and visitors to establish patients' satisfaction. The effectiveness of health care services was described by goal attainment, level of support and system's achievement. The instruments to measure goal attainment and level of support were designed by the researcher. The 6 institutions were measured for system's achievement by using the instrument designed by Beattie, Rispel and Cabral (1995). The criteria used to assess infrastructure, access to the institution, management of personnel, management of resources, patient satisfaction, community outreach programmes and the process of care, was based on the criteria developed by**

**Beattie, Rispel, and Cabral (1995) . A correlation was done to establish the relationship between leadership style and hospital effectiveness.**

**Findings; the area manager exhibited the leadership style that is predominantly Transformational, the other four categories identified in the study, revealed a leaderhip style that was predominently Transactional. Of the six institutions two revealed a transfomational leadership style and three revealed a transactional leadership style. One institution reflected a Laissez-Faire leadership style. The overall leadership style was transactional. On comparing the three effectiveness criteria goal attainment was identified as the most effective area of achievement followed by system's achievement and the least being level of support.**

**A MANOVA multivarate analysis of variance revealed that the relationship between leadership style and goal attainment was not significant. The relationship between leadership style and level of support was significant. On further analysis using the Sheffé test, it was found that the level of support was significantly related to transformational leadership. The relationship between leadership style and stystem's achievement was not established, because the sample size of six institutions was too small. The overall relationships between leadership style and hospital effectiveness was significant at $p < 0.01$ level.**

**Recommendations; included that all all categoties of leadership at institutions are to increase their diagnostic level of awareness of their leadership styles. Rigorous education and training on leadership and support were essential. A further recommendation was**

**that the methodology used in this study to measure hospital effectiveness be used more widely as a management tool. A common instrument used to evaluate acceptable standards of health care assessment should be used to ensure comparison between and within institutions in KwaZulu/Natal.**

**There was a need for further research to establish the influence of leadership style on hospital effectiveness in order to ensure quality care by health care providers and to increase professional efficiency and effectiveness in the hospitals of KwaZulu/Natal.**

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# CHAPTER 1: INTRODUCTION

## 1.1 RESEARCH PROBLEM STATEMENT

Good leadership is an essential part of a health care system. Swansburg (1990) states that nursing plays an integral part in the complex, dynamic process of providing health care for patients, families and communities. Nurses utilise their own professional standards and body of knowledge, and work in cooperation with other disciplines to maximise potential for the achievement of positive health status.

Due to the numerical strength of the nursing profession in the South African health care system, nursing leadership plays an important role in the future of health care policy and management in this country. However, there has been no research done locally to establish the quality of leadership in health care delivery. The influence therefore of nurse leadership on the quality of service is not known. Some of the reasons may be the limited ways of measuring (1) the effectiveness of leaders and (2) the effectiveness of health care delivery organisations and systems.

According to Manfredi & Valiga, (1990, p 90). Leadership is " : *An interactive process directed toward mutual goal achievement of leader and follower. Leadership occurs within any setting and is not tied to an organization. Its emphases are on goal achievement and change. The leader assumes the role of facilitator to influence others, shape the future, exercise power, mentor others, and promote the growth and personal development of group members".*

These writers distinguish leadership from management as follows ; Management is :

" *A process directed toward organizational maintenance. Management occurs within the context of an organization, and its emphasis is on achievement of organizational goals. A manager assumes the role of decision maker to manage subordinates, direct others, maintain the present, exercise authority, be a role model for others, and promote the development of personnel.*"

Manfredi and Valiga(1990, p 29). describes the nurse manager as : "*A registered nurse holding twenty-four-hour accountability for the management of a unit(s) or area(s) within a health care organization*"

There are some indications that there is a problem with nursing leadership in South Africa. Firstly, health care is in transition and nurse leaders are not appropriately prepared to meet this challenge. Langley (1993), speaking from the information obtained when reviewing conflict and motivational theories and models, and the experience she gained over twenty years of managing a nursing service, stated that the phenomenal political changes that have taken place in South Africa in the past three years have had a ripple effect on health services of the country. She identified that trade unionism, which had previously been active in many other spheres, entered the hospital with a vengeance, leaving many services crippled. Langley believed that new and different approaches had to be found to deal with this upheaval, which was affecting patient care. She indicates that the nursing services manager, especially in the public sector, was not equipped to handle the crisis associated with industrial action. She believed that legal limitations such as those included in the new Labour Relations Act (Act No. 66 of 1995), aggravated the situation.

Secondly, there has been widespread labour unrest experienced over the last ten years. Shabalala (1994) in a survey on strikes in the nursing profession, during the period from June 1993 to June

1994, analysed a series of eight strikes amongst nurses in the Pietermaritzburg and Durban area which covers approximately 53% of the KwaZulu/Natal region indicating a radical change in philosophy and focus, and the nature and extent to which labour issues are beginning to affect the effectiveness and efficiency of health care delivery.

Thirdly, at national and provincial forums, nurses who participate as leaders to give input in the new health care dispensation do not necessarily originate from the established nursing management cadre. For instance, in the group referred to as Concerned Nurses of South Africa (CONSA), the nurse leader who played a major role in restructuring the nursing profession, was not a nurse manager functioning at executive level. Leaders who are seen to be actively participating are often community health nurses and nurse educators who operate at functional or operational level and are not managers in their own field.

Fourthly, there are no professional organisations in existence to discuss matters of common interest among nurse managers as leaders at local, regional or national levels. In contrast, professional societies for other specialisations are increasingly being formed with enthusiastic nurse leaders, e.g. Nursing Education Association, South African Society for Nurse Researchers, Paediatrics Nurses, Orthopaedic Nurses, the South African Theatre Sisters discussion group and Community Health nurses organisations which are SANA affiliated, to name a few.

Lastly, not much has been written, nor has there been much research carried out by nurse managers. For instance, of the 105 articles which appeared in the " Nursing RSA Verpleging" in 1993, only 12 dealt with management and only one was written by a nurse manager.

In order to increase an understanding of the state (of the art)of nursing leadership in hospitals, an effort will be made to identify the prevailing leadership styles with a focus on transformational and transactional leadership. An attempt to establish the link between leadership style and hospital effectiveness of provincial hospitals in KwaZulu/Natal will be made to identify to what extent multi-level nursing leadership influences the actual delivery of care to the people in this province.

## 1.2 BACKGROUND

There have been some studies which describe nurse leadership, although no studies have yet been carried out in South Africa. Dunham and Klafehn (1990) indicate that all excellent nurse executives in their study were predominantly transformational leaders, but they also possessed transactional leadership skills. Additionally, when comparing this data with the studies of world leaders, administrators and managers carried out by Bass in 1985, the nurse executives' scores were relatively higher than those achieved by leaders in other areas studied. The research undertaken by Bass suggests that combined scores of charisma, individualised consideration and intellectual stimulation indicate that the excellent nurse executives who participated in this study were predominantly transformational leaders. Further study needs to be undertaken on a cross section of all nurse executives to determine if the transformational leadership style is predominant with everyone in this role. The study undertaken by Bass (1985) has not answered that question.

Barker (1989) theoretically explored the role of the leader as a social architect. This includes assessing, building, maintaining and revising organisational designs. Trust is considered the foundation upon which organisational relationships thrive. The importance of trust to organisational functioning, the devastation of distrust and practical ways to build and enhance organisational trust are reviewed. A discussion on how leaders use themselves for organisational

success reveals that the most important leadership trait is positive self-esteem, which creates an environment for creativity, enhances the performance of the leader and results in the leader's positive regard for other people. Methods to increase one's own esteem and the self esteem of others are explored. Good decision making, which is a result of the way the leader thinks and leads to action, is the hallmark of successful leadership.

Some studies link leadership style and certain organisational indicators: McDaniel and Wolf (1992) examined leadership dimensions that result in low turnover or work satisfaction. Intellectual stimulation, charisma and individual consideration constitute aspects of transformational leadership that are suggested to enhance retention and staff satisfaction. Transformational factors are similar to leadership qualities described in " magnet" hospitals, offering positive implications for nursing administration and professional nursing practice.

According to Dunham and Klafehn (1990) organisations cannot afford to support non-productive employees. It is important that all employees achieve their full potential. The transformational leader is able to take the employee beyond the level of performance achieved by the more traditional, transactional leader.

In the USA a major study linking leadership with effectiveness in attracting and keeping nursing staff was done in the 1980's. "Magnet" hospitals were identified and leadership style and strategies were then analysed in 1987. It was found that what McClure & Paulin in their study in (1983) referred to as "transformational leadership", was effective in these hospitals. The leader is however most successful when both transformational and transactional characteristics are present. There are similarities between the magnet studies and this proposed study, since both link

leadership style with certain criteria for effectiveness.

Replicating this study in South Africa is problematic for the following reasons;

- in a country like South Africa, with extremely high levels of unemployment, measuring the effectiveness of a health care organisation by the level of nurse shortage accentuate the existing problems. In the recent unrest in hospitals like King Edward VIII in Durban, with 100% post occupancy, shortage of nursing personnel was forwarded as one of the grievances. A much more comprehensive measure of hospital effectiveness is therefore needed.

- secondly, the "magnet" hospital study looked very narrowly at organisational efficiency. Many aspects of leadership within the organisation were left out of the analysis; for instance, the influence of different levels of nursing leadership (top, middle and operational leaders) on outcomes was not analysed; neither was there any attempt to look at the influence of nursing leadership as opposed to the other two components of top management (medical and administrative leadership) that complements the triad formed at the top level.

If one accepts that it is important to establish the influence of leadership style on the effectiveness of hospitals, the question that still remains is 'how does one measure effectiveness in the health care system?' This is the central question which is the focus of this study.

In the USA, effectiveness of health care internal control is measured through quality assurance programmes, whilst the external control is carried out through the accreditation system which is nationally controlled by the Joint Commission on Accreditation of hospitals.

The audit system, the nursing process, the monitor, monthly and quarterly or half yearly inspection may be used as tools for internal measures of control. Quality assurance programmes offer another way of looking at effectiveness, in which internal control may be applied. The limitation of measuring effectiveness only by using the Quality Assurance cycle, is due to the fact that there are no standardised and comprehensive ways of measuring effectiveness of hospitals. Each hospital designs its own tool resulting in different standards of measurement in the various institutions of health care delivery in KwaZulu Natal.

Dienemann (1990) states that since 1983 the Joint Commission Accreditation Hospital Organisation (JCAHO) published a guide for nursing service standards. The manual is used to survey all participating hospitals in a variety of settings from 50-bed rural community facilities to 1000-bed urban teaching hospitals. The standards which are reviewed in general terms and in terms of goals and objectives are designed to achieve the required internal and external characteristics of the effectiveness measure of the institutions.

The Natal Provincial Administration and other health departments have always conducted their own service inspection to ensure that a high standard was maintained in clinical care. Each institution was responsible for implementing internal control measures that were appropriate to their own local needs. There was no standardised tool which was used to measure the effectiveness of health care delivery, nor were any general objectives or standards set. Inspection reports were never published or accessible to the public, therefore the question about the effectiveness of the KwaZulu/Natal hospitals remains unanswered.

In South Africa and the former self-governing territories the South African Nursing Council

(SANC) inspected the training schools to ensure that training facilities were available and adequate to meet the requirements laid down. In this way the SANC acted as an external control to the health care system. However, only institutions that were involved in the training of nurses were inspected by the SANC, leaving the non training schools and health care hospitals and the health care institutions without this external watchdog. Furthermore, this process lacked the rigour possessed by the health system's own process, in the sense that the inspections are superficial and not comprehensive.

In this research, therefore, the focus will be on describing nursing leadership in KwaZulu/Natal in terms of transformational vs transactional leadership styles in an endeavour to establish the relationship between nursing leadership and the effectiveness of hospitals.

## 1.3 RESEARCH OBJECTIVES

i) To describe the leadership at different levels of the nursing hierarchy in these institutions; in order to have an overview of the leadership styles as perceived by nurses in leadership positions and follower positions operating in large, medium and small hospitals, in both rural and urban hospitals in KwaZulu/Natal.

ii) To describe the leadership styles of the three components of the top level management team of the institution (nursing, medicine and administration) in large, medium and small hospitals in the urban and rural areas, of Kwazulu/Natal.

iii) To develop comprehensive criteria for the measurement of effectiveness of health care organisations, specifically community and regional hospitals.

iv) To analyse the influence of leadership, at different levels and in different components, on health care effectiveness in the regional and community hospitals of KwaZulu/Natal.

## 1.4 RESEARCH QUESTIONS

### OBJECTIVE 1 and 2

1.4.1 What are the leadership styles of the top, middle and operational leaders in the hierarchy of the nursing division of an institution in terms of the Multiple Leadership Questionnaire (MLQ) devised by Bass (1987) as seen by leaders and followers?

1.4.2 What are the leadership styles of the three components of top management, namely nursing, medical and administrative structures, in terms of the Multiple Leadership Questionnaire (MLQ) Bass,(1987) as seen by leaders and followers?

### 0BJECTIVE 3

1.4.3 What are the levels of goal attainment of each of the provincial hospitals selected in this study, as defined by two stake holder groups (staff and community)?

1.4.4 To what extent does the strategic management team as members of staff and the strategic constituency namely head office staff, staff of the hospital, patients and civic leaders support or approve of the institution in their community as an effective health care facility?

1.4.5 What is the level of strategic system functioning of each of the provincial hospitals according to selected indices such as goal attainment, level of support and system's achievement?

1.4.6 What are the comparable effectiveness indices for each of the hospitals identified in the province of KwaZulu/Natal?

OBJECTIVE 4.

1.4.7 What is the relationship between the leadership style of the available leadership at all domains and levels of the hierarchy, and of effectiveness measures of the hospital?

## 1.5: THEORETICAL FRAMEWORK

Hunt's proposed Leadership, a new synthesis, will be used as a theoretical basis for this study. The Extended Multilevel Leadership Model by Hunt (1991) will be modified and adapted for practical reasons for the purpose of this study. See fig. 3.1.

## 1.6: DEFINITIONS OF RELEVANT TERMS

The following terms will be defined; leadership styles, leadership levels and hospital effectiveness.

### 1.6.1 LEADERSHIP STYLE

According to Hersey and Duldt (1993) a style is a pattern of behavior that is consistent as perceived by others. Leadership style is the consistent behaviour patterns leaders use when they are working with and through other people as perceived by those people. The followers can come to know the leader well enough so that they can predict how the leader will behave in particular situations. Style may be considered as synonymous with personality.

In this study, the focus will be on transformational, transactional and non- leadership styles. In this study these three leadership styles will be described in detail in chapter two under literature

review. Leadership style will therefore refer to a relative constant tendency towards behaving in a manner that will be consistent with the criterion to describe either transformational, transactional or non-leadership styles as defined by Avolio and Bass (1989).

## 1.6.2. LEADERSHIP LEVELS

**Top level leadership** in health care management generally consists of members of a team who form a triad as the chief medical superintendent, the chief matron and the hospital secretary.

**Nursing leadership** in a provincial hospital is seen as being exercised on three management levels; namely,

i) top management

ii) middle management

iii) operational management.

**TOP MANAGEMENT LEVEL** (Systems Leadership)

This refers to the executive manager in the highest post in the institutional organisation. In the context of KwaZulu/Natal health services, this will include the chief medical superintendent, the chief matron as chief nurse manager and the hospital secretary or director of administrative personnel in that institution. The nurse manager is in overall charge of nursing management. Systems leadership is applicable to this level. Head Office management was included as management support available in the Province of KwaZulu/Natal.

**MIDDLE MANAGEMENT LEVEL** (Organisational Leadership)

This refers to the executive nurse managers whose main function is management, although they are not in positions of overall charge. They manage several sections or wards. In larger hospitals

they are referred to as area managers in smaller hospitals they may be section heads.

**OPERATIONAL MANAGEMENT LEVEL.** ( Direct [production] Leadership ]

This refers to executive nurses managing patient care units. These are the nurses in charge of wards. They are also called first line managers. They are responsible for the direct care of the patient.

In smaller hospitals one or more of these levels may be absent.

1.6.3 HOSPITAL EFFECTIVENESS

According to Hunt (1991), the effectiveness of an institution is the ability to acquire resources, maintain itself internally as a social system and interact successfully with the external environment to increase the organisation's long term survival potential.

Effectiveness ensures that demands of strategic constituencies from whom support is required for continuing existence are satisfied, critical constituencies are determined, various expectations are identified and compared, common and incompatible ones are assigned weights, and that preference weighting for the various goals developed.

A summary of the effectiveness perspectives according to Hunt's model is carried out as follows;

- **Goal Attainment;** measured by ends rather than means. This entails efficient and effective patient care to the satisfaction of all the stakeholders involved. With regard to bed state i.e. officially assigned number of beds in that institution, bed occupancy, cost per day, patient stay and

patient statistics are used as some of the indicators.

- **Systems perspective;** based on the organisation's ability to acquire resources, maintain itself internally as a social system and interact successfully with the external environment. An emphasis was on systems-orientated criteria which is believed to increase organisation's long term survival potential.

Key indicators are outputs/inputs (return on investment); transformations/input (inventory turnover),transformations outputs (sales volume) and changes in inputs/outputs (changes in working capital). In this study the researcher will not deal with the indicators in detail.

- **Strategic Constituency;** satisfying the demands of strategic constituencies from whom support is required for continuing existence (those who can threaten an organisation's survival). This entails determining critical constituencies, comparing various expectations and determining common and incompatible ones, assigning weights to constituencies and developing a preference weighting for the various goals. This process involves considering owners( and their return on their investment); employees (compensation); customers (quality, service);government (compliance with laws); etc.

Effectiveness criteria in this context will be based on Hunt's model and will be measured by end results, for example efficient patient care and professional accountability rather than means; such as procedures carried out as treatment programmes by both the doctors and the nurses. To be

consistent with practical realities Hunt's model (1991) will be adopted and adapted to suit the South African situation.

To adapt Hunt's model two other variables were included in this study as level of support and systems achievement. Level of support was obtained from a questionnaire developed by the researcher whilst systems achievement was obtained from an instrument designed by the researcher adapted from the instrument designed by Beattie, Rispel and Cabral (1995).

- Effectiveness has to be distinguished from efficiency which means maximising work output with minimal effort at a given time, yet maintaining acceptable standards of performance within reasonable limits. Since leadership and management are intertwined in successful managers, these two concepts will be discussed separately in chapter 2, but will both be seen as part of the study. However only leadership style will be measured .

## 1.7 SIGNIFICANCE OF THE STUDY

If this study is done, the results/findings could be implemented in several ways; to increase the effectiveness of the hospital and to diagnose and increase leadership effectiveness.

### 1.7.1 General implications of the study:

Firstly, nurse executives might examine their own leadership style and develop particular transformational characteristics that need to be enhanced. As a result of an insight knowledge base it is hoped that the successful pursuit of a master's degree and/or a doctoral degree in nursing may strengthen the individual's transformational qualities.

Secondly, if transactional leadership qualities are dominant, reducing their dominance, by

increasing transformational leadership qualities, would enable the nurse executive to make an orderly transition to a transformational leadership style. Research has identified that transactional leadership is necessary to strengthen transformational leadership (style).

Thirdly, when nurse executives conduct job searches they might want to relate transformational traits they possess to the needs of the job. This could impress the chief executive officer who is interviewing them since they will be able to reveal these qualities during the interview if they know them and recognise the importance of implementing them in their daily practice.

Fourthly, nurse leaders would become aware that leadership is most successful when both transformational and transactional characteristics are present. Nurse executives need to be able to adjust accordingly to the most appropriate leadership style for specific situations.

17.2 Implications in regard to increasing effectiveness of hospitals:

Self-evaluation will be possible for management of the hospital if each manager is able to evaluate the leadership style she/he tends to adopt at the workplace.

Bargaining for resources will be effective if sound leadership strategies are applied as a means to an end. Improvement of services will be possible for executive managers when they have clearly defined their goals and have clear vision and direction.

It will be possible to compare problem hospitals with those that are not functioning effectively, if the same standard is applied as a criterion for assessment of hospital effectiveness and as an overall control measure.

Resource allocation will be more effectively distributed, if nursing leadership can bargain rigorously and effectively by using specific guidelines based on policies, principles and clearly identified guidelines.

1.7.3 Implications in regard to Leadership:

Understanding leadership behaviour by both the leader and the led will be possible at various levels of the hierarchy. It will assist in constructing greater efficiency in the leadership team.

If the leader understands the led, and the led is aware of the leadership style applied by the leader, and approves of it; motivation will be high, conformity voluntary and consistent with maximising goal attainment.

Knowledge of leadership style by managers will assist in evaluating of personnel and making promotion decisions. If leadership criteria are identified, it will be possible to match them with the critical tasks, individual capabilities, organisational culture, organisational climate in a given environment for the specific level of leadership, namely top, middle or operational level to maximise their professional effectiveness in their workplace. This will enable those who select personnel for promotion purposes to do so within reasonable parameters of certainty and precision.

Skilful application of leadership styles by managers will assist leadership personnel to develop and change to more applicable and practicable styles, thus maximising flexibility. The leader who is aware of his/her leadership skills as well as the styles preferred by the followers in a goal directed institutionalised group activity, will be able to adjust her/his leadership style to ensure that the goals/missions are developed, and operating strategies or principles are adhered to. The leaders

will ensure that, strategic planning is undertaken on long, intermediate and short term levels, maximising efficiency and effectiveness.

Information control and utilising personnel/human and available material resources will maximise motivation, productivity, efficiency and effectiveness.

## 1.8 SUMMARY AND SCHEDULING

Chapter one deals with the introduction and the research problem statement, the background of the study, research objectives, questions and the significance of the study was given. Chapter two deals with the outline and literature review. Chapter three examines the methodology and data collection technique. Chapter four reports the results and data analysis. Chapter five deals with the discussion of the results, findings of the study, conclusion and recommendations.

# CHAPTER 2: LITERATURE REVIEW

## 2.1: INTRODUCTION

The area covered in this study touches on leadership and management in a wide range of topics .To focus the literature survey the following aspects will be dealt with,

- comprehension and reason
- the meaning of leadership and management and
- the difference between leadership and management will be highlighted.

Many and most studies in the area of leadership and management in nursing administration were carried out in the United States of America. Few studies have been undertaken and published in South Africa.

According to Hunt (1991) of the 10,000 leadership studies done almost all have been done at the bottom of the organisation. Many authorities believe that there must be differing leadership requirements depending on the nature of leadership required and the levels of the hierarchy obtained in the organisation. The leadership required in any institution therefore will depend on the type of institution and the nature of leadership required in that institution. Namely, top-leadership must be different in important ways from that of the bottom-leadership level in the same institution thus an increasing interest in the study of leadership at the chief executive officer level (CEO) as well as at other levels in the organisation namely in the health care system the levels and requirement of leadership will differ from that of the education system or in industry. Therefore, the requirements of leadership skills will be different at the different levels of the hierarchy in any organisation.

Hunt (1991) in his ideas of 'LEADERSHIP A New Synthesis", presents the concept of 'Leader

Knowledge Content' and 'Knowledge Orientation' in Part I and continue to explore the Multilevel Model in part II. Hunt explains that leadership knowledge content and leadership knowledge orientation involves how we gain, use and assess leadership knowledge.

In the Knowledge-content aspect of this synthesis Hunt's proposal goes beyond what he refers to as the "Overwhelming majority of leadership studies that view leadership as simply face-to-face influence at the bottom of the organisation. He explains that the knowledge-content component included a comprehensive conceptual framework that can be used for the systematic investigation of leadership at multilevel organisation levels, across organisations.

In Hunt's synthesised Model much emphasis is on various temporal aspects including differences by organisational level. He lays much stress on dynamic changes across time. Hunt states that since the focus in most of these studied was at a lower level and face to face, most have neglected time or dealt with it only in passing. Unlike these studies Hunt in his Multilevel approach has given time the emphasis it deserves. In this study therefore in addition to time dimension taken into consideration level of support and system's achievement be taken into consideration. The researcher design a questionnaire to collect data to analyse level of support and modified an instrument a questionnaire for assessment the institutional leadership by both staff and other stake holders. Information on system's achievement will be collected by using an instrument designed By Beittie Rispel and Cabral in a research conducted and supported by the Health system's Trust on evaluating the effectiveness of health care delivery in primary health care clinic delivery. (See annexure for data collection instrument)

Hunt refers to the way in which we obtain, use, and evaluate such Knowledge content as the 'knowledge orientation' aspect of synthesis. A framework that looks at underlying leadeship reality assumptions along with the specific purposes the specific way in which leadership is

defined, and the specific stakeholders involved. In this study therefore the underlying assumption is that leadership is something that is 'out there' and 'real' akin to pysical science phenomena it is something largely seen as largely the product or hospital effectiveness can be measured, and it is possible to establish a relationship between leadership style and hospital effectiveness. Specific stakeholders will be members of the staff and community leaders such as principals of schools, religous leaders, businessmen Hunt believes that these assumptions will impact on the way these individuals go about attaining, using, and evaluating leadership knowledge.

In this study therefore a questionnaire designed by Bass and Avolio (1989) will be used to collect data that will enable the researcher to draw generalisations. These basic assumptions are seen as a core aspect of people's leadership 'Knowledge orientation.' Joining these assumptions as part of this orientation are three other aspects as follows:

1) The purpose for which the leadership knowledge is used.
2) How broadly or narrowly the purposes define leadership concept.
3) Stakeholders involved with the knowledge are a part of this leadership knowledge orientation.

However Hunt further admits that studies on leadership already done has not tended to be very systematic and mostly has not had much of a conceptual base. In this day and age of knowledge explosion coupled with a dynamic social economic and political changes in the environment there is a need for an open-minded approach to leadership knowledge content and leadership knowledge orientation. The focus should be on multilevel leadership as much as it is on the environmental and organisational factors.

According to Heinmann (1976) many authors in the disciplines of Sociology, Psychology and Anthropology have defined leadership, how to become a leader, how to be select leaders and

how leaders can be made effective yet, problems in selecting and utilising effective leaders remain. Extensive work on leadership has been empirically explored for decades in various disciplines. Argyris and Schon (1981) presented the 'espoused theories' and 'theories in use' and stated

*"It is the basis of all the theorising about organisational learning ever since - was a radical cleavage between the beliefs of people professed ('espoused theory) and the beliefs people actually acted out in the moment of truth (theories in use) "*

In theories of leadership Argyris argue that whatever a leader genuinely believe they believe, in practice at the first sign of embarrassment or threat, they would fall back on a deeply ingrained master programme of behaviour which is strikingly similar across cultures and classes.

Boshoff, A. (1987) discusses management style of the 90's. The writer identifies some elements of a scenario of the future and investigates characteristics of management styles for the 1990s required by these circumstances. The writer concludes that in order to survive, management will have to adapt to change and changing circumstances.

Coster A. (1988) investigated the relationship between the perceived distribution of influence and leadership. Research suggests that the distribution of a specific type of influence may be associated with particular hierarchical level. The result of the study indicated that differences in the perception of influence exist. Further analysis of the relationship between the hierarchical levels and influence domains showed that the top echelons perceive themselves to have the most influence over all domains of influence. The results indicate that other variables need to be included to determine the association between leadership and the association of between leadership and the distribution of influence.

Hill A. And Archer A.A. (1988) in the descriptive model on developing and implementing communication strategies identified that the world wide environment today has created a growing need for businesses to communicate effectively with their stakeholders. According to these researchers, the number of stakeholders interacting with companies has burgeoned, their demands have become greater and the need for change is critical. As these pressures increase, the need for companies to communicate effectively, will grow. In South Africa the possibility for mis understanding is compounded by communication barriers such as the socio-political system, diversity of cultures and languages as well as the many different levels of education. In an environment such as this the need for effective communication is so great that a company can clearly no longer rely on *ad hoc* reactive communication to facilitate the achievement of cooperate goals. In order to ensure effective communication companies need to have an overall communication strategy which has its roots in cooperative goals and strategies. Developing and implementing communications strategies involve many complex consideration such as the identification and analysis of stakeholders and their power bases.

Chitayat and Venezia (1988) published a paper on leadership styles of senior executives in business and government organisations as a comparative study. An analysis to what extent organisational difference affect the basic relationship between style of leadership and power, and information. The writer investigates whether the information on leadership style for middle and lower management also holds true for senior executives and, if not, how these styles should be modified. More specifically the effects of power and information on the leadership styles of senior executives are examined and compared with those found for lower level managers. Styles chosen for analysis were directive, negotiative, consultative, participative and delegative. In this case he writes:

*"Leadership is a dynamic process. A person may change his style as a result of climbing the*

*managerial ladder. The senior vice-president is more directive than his boss, but he may also be more participative relative to his subordinate executives."*

In this study it is shown that the effect of power and information on leadership style of executives power is positively correlated with directiveness in business organisations but slightly negatively correlated with directiveness in non-business organisation. This author hypothesised that a manager who wields his power but lacks information is likely to be consultative. If on the hand he has access to information he tends to be participative or negotiative. The frequency of usage of certain leadership styles are shown to vary across organisations, the implication of these variation are discussed. It is also demonstrated that the effects of power and information on leadership styles of senior executives do not differ considerably from the comparable effects found on lower level management.

Wilhite, J.O (1989) published an article in which toughness and true leadership in the 1990's, is discussed. The writer contends that companies will only survive when managers and leaders focus on the importance of encouraging the growth of its people. In another paper on 'THE FRESH MANAGEMENT' the writer gives an overview of participative management and maintains that it rests on two important fundamentals namely participating in decision-making and the direction of task execution. He identifies pressing issues to include new management policies in view of changing economic, social political and technological conditions.

With reference to the training needs of manager Bird, C. (1989) writes as follows;
Middle managers in South Africa face a unique set of pressures as follows;

1) there is the pervasive anxiety about the countries political and economic future

2) a greater degree of conflict management experienced by both the western and the Eastern

counterparts.

The needs of people in organisations are not adequately addressed giving rise to worker management conflict. Therefore there is a need to design a special training programme to increase the awareness among the managers, of the needs of individuals in their organisations.

Gluckman, S. (1992) in his article 'when giants learn to crawl' explores the concept empowerment, the role of leadership styles and organisational structures play in empowering and disempowering employees and the importance of empowering employees in a rapidly changing world.

Van der Bank, A.J. (1992) compared the perceptions regarding the leadership of departmental heads at universities and indicates that most heads of departments have a good understanding of the needs of members of their departments and an insight into their own leadership styles.

Baker and Bender (1992) gives a guide for managers and explains that women and men often compete in different ways in terms of both when and how. Whatever they did , many agreed that the competition had more of negative than the positive effects. According to this writer competition made them uncomfortable, apprehensive and withdrawal was an instinctive first reaction. These results are supported by research studies in which women report more anxiety in competitive situations than men.

Studies done in South Africa by Smith (1993) at the Randse Afrikaans Universiteit, presented and published an ethnographic perspective of leadership. Indications for future guidelines are identified. These guideline should be relevant to our local needs since they were carried out in the context of the South African environment.

Govender, D (1993) discussers leadership style the gender issue. Govender examines the notion

that women leaders behave differently from traditional male leaders, in the way that will be detrimental to themselves and their organisations. The writer focuses on two specific leadership styles examines available literature to determine whether men and women led differently, That is whether there is a tendency for men to follow one style of leadership and women another, or whether both men and women follow both leadership styles and conclude that much depends on the personality of the individual .

According to Jaco, Price and Davidson (1994) Nurse executives are expected to lead and manage using innovative and dynamic strategies to stimulate the development of the of organisational vision. The question leaders in the profession should ask in introspection is; "Does the profession of nursing have capacity for the current expected leadership in the context of the dynamic changing environment?". If the answer is "no" "must the leadership sit back and be onlookers on this issue? or, is there something that can be done about it? Should current leadership not adopt a position as a standpoint and find a way forward?" The question to be answered is " Is it not time that, every nurse leader at institutional level should identify their own strengths, weaknesses, threats and opportunities?"

Mampuru, K.C. (1994) In the paper on leadership style as organisational culture in school management identifies and discusses culture in schools and factors influencing such culture, and outlines the different leadership styles as power culture (authoritative style), role culture (consultative style), Task culture (delegative style), person culture(facilitative style).

Mol, A (1995 ) argues that the confusion that exists about the responsibilities of the worker, the supervisor and the manager leads to the lack of empowerment of supervisor which is one of the causes of poor labour relations.

Levitz, E. (1995) gives a practical range of ideas of how to ensure efficiency and effectiveness

in an organisation; thus improving management styles, via a quiz based on chapters in Mathew Archer's book ' ideas for enterprising managers. The health care system's managers and leaders must consistently engage in self evaluation with the ultimate goal of increasing their professional efficiency and effectiveness.

Manfredi C. M. (1996)carried out a descriptive study. This study was designed to examine the leadership activities of nurse managers. Through the use of an open-ended questionnaire, 42 nurse managers were asked to describe how they operationalized seven leadership concepts identified through a literature search: goals, change, influence, power, growth, Mentoring, and vision. Findings indicate that the leadership activities described by the nurse managers were congruent with the descriptions in the leadership literature. Given the complex nature of the role of the nurse manager, leadership skills are essential for survival.

Long (1997) in management today states that there are challenges ahead for business leaders. In the paper on a tourism perspective the writer argues that the future success of tourism lies heavily in the hands of today's business leaders. This does not only apply to business as a profit making concern but to health care service as well.

Roodt A (1997) published an article in: Management today. In the paper on leader development: In learning to fly; the writer describes in the Leaders Mentor programme, devised by the institute for Mentoring in Randburg, the value related issues addressed.

Sharman, C. (1997, p5). In his paper on looking for tomorrow's leaders writes;

*"In this environment of internal and external change, a new set of leadership skills have come to the fore. I believe that the three skills and attributes in particular are critical: learning, openness and team work. We cannot expect our people to learn, to be open and work as a team if we as leaders do not demonstrate these skills."*

One of the imperatives he suggests is that within organisations, structures are flatter, staff are more mobile and power and authority are vested in the person not in the position.

The leader is able to induce compliance or to influence behaviour of others, to the degree that others perceive his power. If a leader is to avoid an eroding power base, and to increase the chances of successfully influencing others' behaviour, then the leader needs information about the sources of power he/she is perceived by others as having. If a leader communicates the power he or she possesses, the others will tend to perceive it.

Caulkin (1997, p58 ). has this to say about Chris Argyris, the gently-spoken optimist has a robust massage: *"if managers do not like their environment, they should blame themselves."* and believes that many students and managers find the relentless logic of his teachings uncomfortable, even stressful.

## 2.2 LEADERSHIP THEORIES

Many theories have been dealt with in literature, e.g. Great-Man theory, Charismatic theory, Trait theory, Contingency theory, Path-Goal theory, Life-Cycle theory, Integrative Leadership model, interaction theory and Contingency theory, to name a few. However, the following relevant leadership theories selected for the purposes of this study; the Extended Multilevel Leadership Model, Transformational Leadership, Charismatic Theory of leadership, Transactional Leadership,

Non-Leadership or Laissez-faire leadership, and the situation theory of Leadership will be discussed. These theories are relevant because they relate directly to the concepts being studied.

Secondly, literature review will also be carried out on hospital effectiveness to ensure a balanced baseline for this research.

## 2.2.1 EXTENDED MULTILEVEL LEADERSHIP MODEL

Hunt (1991) discusses the core concepts of a Multi organisational Level Leadership Model as levels of domains and leader cognitive complexity or cognitive power. Cognitive complexity focuses at both organisation and personal levels. With the emphasis on the process of differentiation and integration. Differentiation is separation of cognition or structures and integration is their combination. A cognitively complex individual will be capable of maximizing both differentiation and integration than a less cognitively complex person.

Jaques (1989) uses a deterministic approach and argue that a person develops over a life time within a cognitive power mode but basically cannot move to a higher-level one. If this argument is true this would be a variation of the born-leader argument

A third aspect of determinism namely flexibility determinism on the flip side argue that the managers frequently function under condition where dynamic plans and actions call for a rapid succession of sequential decisions or where long-range plans are not appropriate because of uncertainty and rapid change. Such conditions are especially important in time-compressed management situations and flexibility in dealing with them is argued to be representative of successful managers (Streufert & Swezey, 1986).

According to Hunt the system's model developed by Katz and Kahn (1966, 1978) is the model widely cited and is arguably the most conceptually elegant of these frameworks. According to Hunt its authors contend that three basic types of leadership occur in organisational hierarchies as follows:

1) Origination of structure; namely introduction of structural change or policy formulation.

2) interpolation of structure; piecing out the incompleteness of existing formal structure via implementation of policies to deal with immediate problems.

3) Applying existing structure (Administration); using structure formally provided to keep the organisation moving and in effective operation or in other words, the routine application of prescribed remedies for predicted problems.

Katz and Kahn assume that the amount of freedom or discretion to supplement existing structure decreases as we grow in the hierarchy, and that the freedom to originate and substantially alter organisational structure is less at the intermediate than at the top levels. They also suggest that some general leadership ability and skill are necessary to deal with hierarchical requirements.

Some writers Katz (1955)and Mann (1965) on leadership by level argue for the differences in the three required skills by levels as technical, (performing technical activities) human(understanding and motivating (individuals and groups) conceptual ( coordinating/ integrating organisational activities towards common objectives ) Both these writers contend that the skill mix will differ by level with the importance of technical skill decreasing by level while conceptual skill becomes increasingly important. Although Kahn's work does not use data; Mann findings, using empirical data with a very general conceptual base, are consistent with the arguments raised by Katz and

Kahn.

## 2.2.2 TRANSFORMATIONAL LEADERSHIP

The concept was first identified by Burns (1978) broadening the concept of leadership by looking more at its political aspects. Burns describes the transformational leader as follows;

- they have a vision of what could be accomplished ;
- this vision is created while talking to others in the business environment;
- the vision is dynamic;
- the leader is able to accomplish more; this is particularly helpful in times of declining resources;
- the leader shows an overt commitment to this vision as well as being committed to the organisation;
- much responsibility is given to members of the team, at all levels in management to make the most of whatever talents they have. Learning, exploration and creativity is encouraged.
- they act as change agents, they are courteous, they believe in people, they have the ability to deal with complexity, ambiguity and uncertainty; they are life-long learners, they have a strong belief in themselves, being aware of personal strength and weaknesses, they have a strong belief in the success of the organisation.

A transformational leader has charisma, a quality that enables the leader to effectively communicate the vision to staff members, so that they can understand the direction to take in their work. Staff identify the meaningful interrelationship of both the vision and their work, and understand how their work contributes to the successful accomplishment of this vision. Staff members are committed to both the leader and the vision and are willing to transcend their agenda to accomplish this vision, This commitment is mobilised by both the leader and the members of

the team, so that the vision becomes a reality. When the leader communicates the vision, he/she empowers the staff members so that all can achieve their potential.

Bass (1985) refers to this as individualised consideration. He combines the importance of communicating the vision and values which he defines as intellectual stimulation. Intellectual stimulation includes "arousal and change in followers of problem awareness, and problem solving, of thought and imagination, and of belief and values. Members are encouraged to try something and to take a risk even if they fail".

Bass, Avolio (1990) believe that transformational leadership is not effective, if it stands alone. Transformational leadership augments the effects of transactional leadership.

According to Jaco, Price and Davidson (1994) transformational leadership is more complex. Such leadership occur when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality. Through this transformational process the motives of the leader and followers become identical. This relationship transforms both parties by raising the level of human conduct and the ethical aspirations of both leader and led.

Transformational leadership shapes and alters the goals and values of followers to achieve a collective purpose that benefits the organisation, profession and ultimately society. Followers are led to transcend the own self- interest to reach for higher goals. They have the ability to clearly articulate a vision of the future. Like story tellers they capture our imagination with vivid

descriptions of the wonderful future we will build together. The picture they describe and the values they emulate are so exciting that and meaningful that they cause strong commitment by others, as their vision often reflects the aspiration of their followers. They are myth makers.

Transformational leaders are able to see situations from a new perspective that questions basic assumptions. This perspective provides them with a new way of viewing the environment. There is value congruence between the leader and the led. Transformational leadership develop end values that transcend their own agenda and loyalty. Examples of end values could be excellence or quality. The leader meshes with followers on deeply held values.

According to Bass and Avolio (1990) a transformational leader has a sense of mission. Gains respect, trust and confidence. Acquires strong individual identification from followers. Gives pep talks, increases optimism and enthusiasm. Communicates his or her vision with fluency and confidence. A transformational leader actively encourages a new look at old methods, fosters creativity and stresses the use of intelligence. A transformational leader provokes rethinking and reexamination of assumptions and contexts on which previous assessments of possibilities, capabilities, strategies and goals were based. This leader gives personal attention to all members, making each individual feel valued and each individual's contribution important. The leader coaches , advises and provides feedback in ways easiest for each group member to accept, understand and to use for personal development.

When leadership is transformational leaders and followers raise one another to higher levels of motivation and morality. Staff members understand and support the values coupled with the vision so they even alter their decision making criteria to correspond with the values.

Chief executive officers (CEO's) establish an excellent position in the market place which in turn, generates the trust of employees within the organisation. According to Wolf (1986) nursing leaders communicates trust through decentralisation and a participatory management style.

Transformational leadership accomplishes second order change, where there is a change in the system. Second-order change gives answers to the question 'WHAT?' It lifts the solution out of the paradox and reframes the situation. It looks at effects, not causes. It fits the same facts but changes the meaning of the facts by refraining them.

In the third developmental stage, the leader becomes more transformational when end values are developed. The end values become more important than the individual group agenda and loyalties. The leader makes decisions based on end values instead of group allegiance.

Two studies found that staff members judged transformational leaders to be more effective than transactional leaders. Staff members preferred working with leaders who were more transformational. Since charisma is an integral aspect of transformational leadership, it will be necessary to briefly discuss charisma.

### 2.2.3 CHARISMATIC THEORY

This theory argues that a person may be a leader because he or she possesses charisma. Very little is known about charisma. This intangible characteristic is generally agreed to be an inspirational attribute which some people possess, that makes others feel better in their presence. The charismatic leader inspires others by obtaining emotional commitment from followers, and by arousing strong loyalty feelings and enthusiasm. Under charismatic leadership, one may overcome

obstacles thought intractable. Most political leaders are often associated with the concept of charisma e.g. the South African president the Honourable president Nelson Mandela. However charisma is so illusive that some may sense it, whilst others may not.

According to Yura, Ozimek and Walsh (1976) "In Stogdill's superb text on leadership, any data about the charismatic leader has been omitted, stating that although there are many studies about charismatic leaders; comparatively little information is provided that adds to the understanding of leadership. The fact that no studies are available should not act as a deterrent but should stimulate scholars to delve into this unknown area. However, charisma must be combined with a firm grasp of reality and a clear understanding of what is going on for it to be effective. Charisma must blend with pragmatism. If charisma is a trait that improves interpersonal relations, then let it be studied in the laboratory and in the field, to determine what it is and why it works."

## 2.2.4 TRANSACTIONAL LEADERSHIP

Burns (1978) describes the transactional leader to be more like the traditional manager concerned with day to day operations. This person is in a care taker role and has no vision of what could be. There is little or no inspiration conveyed to others. Instead the transactional leader makes an exchange or trade off with followers to meet stated goals based on exchange for some resource that the follower values. Shared values are not identified. Interaction between leaders and follower is usually short-lived, episodic and limited to the exchange transaction. This leader is concerned with first order change in operation. In a first order change a method or person changes but the system does not change. The change occurs when the question WHY? is asked. The solution is based on common sense. In the second order change will be more successful since not only the method and the operation changes but the system of operation also changes.

According to Bass and Avolio (1990) transactional leadership contracts exchange of rewards for effort and agreed upon levels of performance. Gives individuals a clear understanding of what is expected of them. Intervenes only when standards are not met or if something goes wrong.

Transactional and transformational leaders view a change in operation differently. Bass (1985) expanded on Burn's definition by stating that to maximise effectiveness, both characteristics need to be present in the same individual in varying degrees.

### 2.2.5 NON-LEADERSHIP/LAISSEZ-FAIRE LEADERSHIP

This leadership theory was included by was Bass and Ovalio (1989) as a baseline measure of leadership effectiveness. This will therefore be discussed later as a leadership style.

### 2.2.6 SITUATION THEORY OF LEADERSHIP

The above theory became popular in the 1950 s, The protagonists of this theory suggest that the traits, required of a leader differ according to varying situations. Hersey and Duldt (1989) state "-A person may be a leader in one situation and a follower in another or a leader at one time and a follower at another." The type of leadership needed is dependent upon a situation. The focus is on the followers' behaviour. The leader is to be continually attentive to developmental and regressive cycles in followers' behaviour.

This theory Supporters, argue that among the variables which determine the effectiveness of this leadership style are such factors as the personality of the leader, the performance requirements of

the leader and followers attitudes, the needs and expectations of the leader and followers, the degree of interpersonal contact possible, time pressures, physical environment, organisational structure, nature of the organisation, stage of organisation, stage of organisational development and the influence of the leader outside of the group.

Protagonists of this theory holds that a leader is the individual who happens to be in a position to institute change when history is ready for change. The leader is in the right group at the right time and place. Leadership is a function of the situation, culture, context and custom of the group. The situation must be correct if leadership is to be effective.

Situation theory is seen to be concerned with needs of the group. Group performance is related with leadership style, and to the degree to which the situation provides the leader with an opportunity to exert influence on the group. The structure of the situation, and how the group views the leader will influence the perception of leadership. The better he is liked; the more favourable the perception will be. Situation leadership can either be task-orientated or relationship orientated. Group leadership is fluid. A leader in one situation may not be the same in the next situation.

According to Hersey and Duldt (1993) " In situational leadership theory, leadership styles refer primarily to a set of patterns of communication the leader may choose in talking to the follower: telling, selling, participating and delegating."

Telling and selling are both leader-orientated, primarily monological or one directional communication. Telling involves low socio emotional support and selling involves high degree of

support. The leader makes a unilateral decision about the task.

Participating and delegating are both follower-orientated and primarily dialogical or two-directional communications. There is a high degree of socio emotional involvement on the part of the leader in participating, in delegating, support, and involvement decreases. The followers make task-related decisions. Therefore, the four basic patterns of communicating become useful for the leader in making "on-the-run" diagnostic judgements in a practical sense. Situation theory is also inadequate. It does not provide an explanation for the influence of the leader's personality. It focuses only on one component - situation.

This theory would be more acceptable than the theories that have been discussed in literature. In principle, all these theories discussed above will be inadequate if applied singly. Cumulatively however, each of these theories and styles has a contribution to make. It will be the personality of the leader, the management style and the situation presenting that will either increase or decrease the effectiveness of leadership depending on the interpretation and implementation of leadership style in a situation.

## 2.3 LEADERSHIP STYLE

Style is the manner in which leadership is carried out. Research has shown many different styles which leaders use; the best known being Autocratic, democratic and laissez-faire and less well known but worth discussing are the partenalistic and partcipative styles.

**Autocratic leadership style** is also known as the authoritarian leadership style. The autocratic

leader is task-oriented and seeks obedience from the group so that goals can be accomplished. The leader not only decides on the goals for the group to accomplish but also on the methods and stages of goal attainment. The leader orders the stages deciding which comes first, which second, and which last. Leaders identify when the group has reached their goal. The autocratic leader determines policy for the group. He/she leads in terms of his/her own wishes and desires without consulting group members. The leader is the initiator and author of activities.

Since the autocratic leader respects and needs power this type of leader is willing to submit to it. At the same time also expecting the surbodinates to submit. The leader dominates the group by being firm and insistent and by actively directing the interactions as well as the actions of the group. The autocrat is an order-giver. This type of leader tends to use non-constructive criticism and praise for personal traits of members rather than for work performed. Using these methods the leader creates fear among his followers and then meets the resulting regressive needs. As a result of these actions the autocrat creates hostility and rivalry among the group. Identification is with the leader role rather than with the group. Anxiety about the future, aggression towards others, the need for scape goats within the group and rigid behavior is common when the leadership is democratic. Communication patterns in the group are generally member to leader, rather than member to member. There is less group cohesion decreased individual morale, and lower group productivity,

The autocratic leader feels justified in assuming this role by virtue of his "superior " birth, experience or because of an existing crisis situation. He believes himself to be a leader and rarely acknowledges his own doubts or mistakes. He may be ruthless and without consideration for the feelings of group members. The two most positive statements made about the autocratic style of

leadership is that it is used fairly widely and it is generally effective in crisis situations. It has been the leadership pursued historically and it still has room for application in health services but the question is "How do you apply this leadership style and let it be acceptable?

**Paternalistic Leadership style**

This leadership style is closely related to the autocratic style. The group is dependent on the leader who takes all decision. The leader does this as a person responsible for group actions and wants to prevent mistakes thus protecting leadership and the group. The paternalistic leader considers the welfare of the group more than the autocrat does. This consideration is the main distinction between autocratic and paternalistic styles of leadership.

Sullivan and Decker(1985) refer to this style as the parental style. This leader never discipline and are too good to their staff. Staff dependent and obedience are fostered and rewarded. Communication usually occurs in a downward direction, but some upward communication occur. Controls are loose when all goes well but, when problems occur, the nurse managers are ineffective.

**Democratic Leadership Style**

A democratic leader is often appointed by the group. Theoretically every member can be a leader, depending on the situation and the type of leadership required for it. This leadership style implies maximum freedom for the group members. The group reserves the right to final authority to make decisions. These decisions arise from the needs of the group and are freely discussed by the members. The group has two rights: self-direction and self-actualization. With the help of the leader, the group sets policies, establishes goals and decides on steps towards goal achievement.

The group members are free to initiate tasks and interactions independently of the leader except perhaps at the initial stages of the group. It is the group and not the leader that decides when goals have been accomplished. Leadership is seen as a set of functions which are the property of the group. Leadership grows from the needs of the group rather than the needs of the leader. The democratic leader draws ideas and suggestions from the group by consultation and discussion. He suggests but does not order. His main function is to stimulate the group to find satisfaction for themselves. He does not try to provide satisfaction for the group nor do the group members try to satisfy him instead of the group. The democratic leader trains others in the group to lead rather than trying to keep leader role for himself. The leader must have patience to have the group function at its pace. If he attempts to push the group to move faster or in another direction the leader ceases to be a democratic leader. The group must be educated for the process to work. The group must have the basic understanding of group dynamics as well as the knowledge of the work which they are performing. This knowledge is necessary so that the group can decide which goals are realistic and of high priority.

The **democratic leader** is egalitarian, permissive, group-oriented and considerate. When members are praise it is for the work performed rather than for personal traits. When member are criticised, it is done matter-of-fact way, in an attempt to aid, not destroy, the person.

Generally, **a democratic leadership style** is characterised by the following criteria; a creation of increased feelings of cohesiveness among the group, increased productivity whether or not the leader is present, greater job satisfaction and group morale, a broader time perspective, more flexible behaviour of members, fewer feelings of hostility, frustration and submission, a decrease in the number of complaints, less of a need for scapegoats, Work produced may be

more original, the group itself tends to be spontaneous friendly, liable to make suggestions to each other and the leader. The **main problem** with democratic leadership occurs when the group members are not educated and cannot function in a manner described. Both the leader and follower must be able to perceive the common ultimate goal, for democratic leadership to succeed. This type of leadership is ideal for long term strategic planning and when the is no crisis involved as an emergency

**Participative Leadership style**

This leadership is similar to democratic leadership except that the leader ultimately makes decisions for the group. The members are allowed and encouraged to make suggestions, discuss issues and participate in problem-solving. Participants may include all ancillary personnel or nurses only. The problem-solving process can be formal or informal and may entail intellectual, emotional, and physical involvement. Information involving numerous personnel, is often of higher quality and more complete when brought to bear on the selection of alternatives, but, the leader makes the ultimate decision which is carried out without hassle from the followers.

**Laissez-faire Leadership style**

This is free-rein leadership. It lies between autocratic and democratic in terms of control by leader. It is individual-entered, while the autocratic style is leader-centered and democratic style is group-centered. The laissez-faire leader provides information and material to the group, while exercising minimal control. The leader serves basically as an information booth, answering questions only when asked. He makes no attempt to evaluate the work performed either by praise or criticism. The group has freedom of action.

According to Bass and Avolio (1995) this leader is indecisive, uninvolved, withdraws when needed, reluctant, to take a responsible stand point and believes that the best leadership is the least leadership.

The laissez-faire style creates tension and anxiety because subordinates are frustrated by lack of leadership. The result is chaos confusion and uncertainty. The group is disorganised and its members feel dissatisfied with group performance. Less work is done and that work is of poor quality, than under another style of leadership. Some literature often equated democratic leadership to laissez-faire. These two leadership styles are not the same. In democratic leadership, the leader is an active member of the group; In laissez-faire the leader is an inactive resource person. These styles are not however mutually exclusive, in the sense that every leader masters only one style. All these styles can be used depending on the conditions present and the people being led.

Sullivan and Decker (1985)agrees with Avolio and Bass on certain issues namely that this leader tend to create a permissive environment. There are no established goals or policies of the institution. The leader deliberately abstain from leading the staff. There is no central direction or control. The leader wants everyone to feel good, fosters freedom for everyone and avoids responsibility by relinquishing power to the staff. but gives the opposite view as follows:" The effectiveness of this style depends on the people within the group. In some instances an informal leader takes over the unit and it runs smoothly. Permissive leaders assume workers are ambitious responsible dynamic flexible intelligent creative and accepting organisational goals. This leader is said to be ideal for a highly motivated professional group, but is not generally useful in a highly structured health care delivery system comprised of people from a variety of professions and para-

professions in which organisation and control form the basis of operations.

**Multicratic style**

According to Sullivan and Decker (1985) this leadership combines the best point of the three traditional styles; autocratic democratic and laissez-faire leadership. The multicratic leader combines flexibility of approach and concern for people to achieve the ultimate goal of effective administration.

## 2.4 MANAGEMENT STYLE

According to Thomas, Ward, Chorba and Kumiega (1990) a quantitative approach to measuring and interpreting organisational culture, based on established norms and expected behaviour is possible by using the Organisational Culture Inventory (OCI). This involves measuring organisational culture by using qualitative methods, which are conducive to statistical analysis, and allow the responses of deferent individuals, and subgroups to be profiled. Results of different groups can be statistically compared with each other as well as to an ideal nursing culture.

In management the following cultural styles can be identified:

### 2.4.1 CONSTRUCTIVE STYLE

The constructive style consist of the following cultures: achievement culture, self-actualising culture, humanistic encouraging culture and affiliative culture. The emphasis is on satisfying the member needs: specifically, higher order needs for achievement and affiliation and encourage members to interact with people and approach tasks in ways that will help the team meet those needs. A brief overview of the subunits of constructive culture will be carried out in order to

throw some light on management culture:

**Achievement Culture**

These are organisations that do things well, and value members who set and accomplish their own goals. Members are encouraged to set challenging but realistic goals, establish plans to reach these goals and pursue them with enthusiasm.

**Self-Actualising Culture**

These are organisations that value creativity, quality over quantity, and both task accomplishment and individual growth. Members are encouraged to gain enjoyment from their work, develop themselves, and take on new and interesting activities.

**Humanistic-Encouraging Culture**

These are organisations that are managed in a participative and person-centered way. Members are expected to be supportive, constructive and open to influencing each other in their dealings with one another in the group.

**Affiliative Culture**

These are organisations that place high priority on constructive interpersonal relationships. Members are expected to be friendly, open and sensitive to the satisfaction of their work group.

2.4.2 PASSIVE/DEFENSIVE STYLES

These consists of approval culture, conventional culture, dependent culture and avoidance culture. They promote the security needs of members, namely lower order needs for acceptance and

avoiding failure, and implicitly require members to interact with people in self-protective ways to meet those needs.

**Approval Culture**

These are organisations in which conflicts are avoided and interpersonal relationship are pleasant at least superficially. Members feel that they should agree, and gain the approval of and be liked by, others.

**Conventional Culture**

These are organisations that are conservative, traditional and bureaucratically controlled. Members are expected to conform, follow rules and make a good impression.

**Dependent Culture**

These are organisations that are hierarchically controlled and non participatory. Centralised decision- making in such organisations leads members to do only what they are told, and clear all decisions with superiors.

**Avoidance culture**

These are organisations that fail to reward success, but nevertheless punish mistakes. This negative reward system leads members to shift responsibilities to others and avoid any responsibility or blame for a mistake.

2.4.3 AGGRESSIVE/DEFENSIVE STYLES

These styles consist of oppositional culture, power culture, competitive culture and perfectionist

culture. These styles tend to promote members' security needs; namely the need for power, and require them to approach tasks in forceful ways to protect their status and position.

**Oppositional Culture**

These are organisations in which confrontation prevails and negativism is rewarded. Members gain status and influence by being critical and thus are reinforced to oppose the ideas of others.

**Power Culture**

These are non-participatory organisations structured on the basis of authority inherent in members' positions. Members believe that they will be rewarded for taking charge, controlling subordinates and at the same time, being responsive to the demands of superiors.

**Competitive Culture**

In these organisations winning is valued, and members are rewarded for outperforming one another. Members operate in a

" win-lose" framework, and believe they must work against, rather than with their peers to be noticed.

**Perfectionist Culture**

These are organisations in which perfectionism persistence and hard work are valued. Members feel they must avoid any mistakes, must keep track of everything, and must work long hours to attain narrowly defined objectives.

According to Thomas, Ward, Chorba and Kumiega (1990)the OCI has been used in various health

care organisations including a metropolitan communities hospital with approximately 225 nursing personnel. Fifty-six nurses at this site completed the inventory. These responses, while not intended to provide a complete picture, illustrate how norms can be measured and interpreted. In this research therefore, this method will be used to survey and analyse cultural styles identified in nursing management and leadership.

## 2.5 DECISION MAKING STYLE

Managers who increase effectiveness by emphasizing the qualitative issues in organisations apply the type theory.

According to Freud (1988) Jung's theory as operationalised by Isabel Myers and Kathrine Briggs in the Myers-Briggs Type Indicator (MBTI). The MBTI is useful not only in identifying individual preferences, but also in developing effective managerial and working terms. It is an instrument designed to test type theory and put it to practical use.

Myer and Briggs identified four dimensions of psychological type.

- **a perception function:**-Sensing (S)

  -Intuition(I)

- **a judgement function:** - Thinking (T)

  - Feeling (F)

- **an attitude towards life** and:- extraversion (E)

  - introversion (I)

**- an orientation to the outer world:-** Perceptive (P)

- Judging (J)

Jung observed patterns in the way people prefer to perceive and make judgements, and called these patterns 'Psychological types' According to Jung, all conscious mental activity involves four cognitive processes:

-two perception functions; sensing and intuition and

-two judgement functions; thinking and feeling.

Every one uses all four processes but individuals differ in their preference for and skill in each process and function, as well as in the attitude with which they use each process.

2.5.1 A PERCEPTION FUNCTION

**Perception** is the process of becoming aware of something: people, things, events or ideas. It includes gathering information and choosing the information to which attention will be paid. It is the process of taking information into consciousness, either by sensing or by intuition.

**Sensing** is the perception of the observable by use of the senses; sight, hearing, touch and other senses. Managers who use sensing as their predominant perception process (sensing types) focus on the present and have acute powers of observation, a memory for details, a desire for accuracy, a sense of realism and common sense.

**Intuition** is the perception of meanings, possibilities and relationships by way of insight. Managers who use intuition as their predominant perception process, focus on future possibilities rather than the present. They have the capacity to deal with complex and abstract relationships. The second dimension of psychological type is the judgement function. The process of making

a decision about what has been perceived. This involves analysis, evaluation, choice and selection of an action. The two processes of judgement are thinking and feeling

2.5.2 A JUDGEMENT FUNCTION

**Judgement** function is either thinking or feeling to decide on the appropriate action or arrive at a conclusion. It is one of the critical elements of managerial and executive responsibilities.

**Thinking** involves coming to conclusions on the basis of logic. Decisions are made by ordering choices in terms of cause and effect, logical connections and impersonal analysis. Thinking type managers are objective , analytical and critical. They value fairness and justice.

**Feeling** involves coming to conclusions on the basis of relative values. Decisions are made by ordering choices in terms of personal values and the effects of decisions on others. Feeling type managers are warm and compassionate, and attend to what matters to others. They value harmony and affiliation with others.

2.5.3 AN ATTITUDE TOWARDS LIFE

According to Jung this represents a third dimension of personality structure. It is one of the four combinations referred to as " types", and reflects basic differences in the cognitive styles of individuals, managers and executives.

**Extroverted attitude** means outward turning. Attention and energy flow out to the objects and the people of the environment. There is a desire to act on and in the world. Managers who prefer the extroverted attitude are action-orientated, get their stimulation and energy from events and

people in the environment, and tend to be social. Extroverts use their dominant process in the outer world and consequently show their best to the world.

**Introverted attitude** means inward turning. Attention and energy are focused on the inner world of ideas and concepts. There is a desire to turn into oneself and reflect. Managers who prefer the introverted attitude are contemplative, get their energy from their own inner world of thoughts and ideas, and enjoy privacy and solitude. They show their second best, their auxiliary process, to the world, reserving their best for their most preferred place: their own inner world.

Knowledge of one's own type and the type of others can help managers motivate others , maximise human resources, persuade others, and gain cooperation.

2.5.4 ORIENTATION TO THE OUTER WORLD

This is the fourth dimension of personality or type structure, which reflects a preferred way of dealing with the outer world. Individuals live in the outer world with either a perceptive orientation or a judging orientation.

**Perceptive orientation** is used to run one's outer life. One strives to keep things open, to receive. new and additional information. Regardless of the favoured perception process: (sensing and/or intuition); managers with a perceptive orientation are characteristically spontaneous, flexible and adaptable. They strive to keep plans to a minimum and they are always open to new ideas.

**Judging orientation** is used to run one's outer life. One seeks organisation and closure. Managers with a judging orientation, whether they are of the thinking or feeling type, desire plans,

organisation, order, purposefulness and decisiveness. They want to regulate and control situations and events. Sixteen combinations can be identified to reflect the valuable differences among people (individual differences).

An article in the January (1989) issue of JONA, the author discusses the author's use of the MBTI to assess decision-making styles and the compatibility of hospital chief nursing officers and executive officers as follows;

2.6 POWER

According to Webster dictionary of the English "power influence and authority can be used synonymously". According to Yura Ozimak and Walsh "Authority" is defined as the power or right to give commands and enforce obedience; the power or influence resulting from knowledge or experience in some field whose opinion is considered expert.

It is an interpersonal relationship in which one person is capable of satisfying or not satisfying the needs of another person and as a result capable of affecting other person's behaviour. According to McFarland Leonard and Morris (1984), in nursing; leadership and management, "power" is defined as influence or the ability to induce compliance. The right to give command. Top management of an institution has the delegated authority to give command on issues regarding health matters in an institution.

**2.6.1 POWER BASES**

According to Hersey and Blanchard (1982); **Coercive power** is based on fear. A high degree of coercive power is seen as inducing compliance, because failure to comply will lead to punishment

such as undesirable work assignments, reprimands or dismissal.

**Legitimate power** is based on the position held by the leader. The higher the position, the higher the legitimate power tends to be. A leader high in legitimate power induces compliance or influences others because they feel that this person has the right, by virtue of position in the organisation, to expect that suggestions will be followed.

**Expert power** is based on the leader's possession of expertise, skill and knowledge, which, through respect, influence others. A leader high in expert power is seen as possessing the expertise to facilitate the work behaviour of others. This respect leads to compliance with the leader's wishes.

**Reward power** is based on the leader's ability to provide rewards for others people who believe that compliance will lead to positive incentives such as pay, promotion or recognition.

**Referent power** is based on the leader's personality traits. A leader high in referent power is generally liked and admired by others because of personality. This liking and admiration for, and identification with, the leader influences others.

**Information power** is based on the leader's possession of or access to information that is perceived as valuable by others. This power base influences others because they need this information or want to be "in on things".

**Connection power**

This is based on the leader's " connections" with influential or important persons inside or outside the organisation. A leader high in connection power induces compliance from others because they aim at gaining the favour or avoiding the disfavour of the powerful connection.

2.6.2 POWER BASES AND STYLE

Power bases refer to the sources or means of influence one possesses. According to Hersey and Duldt (1989), if the power bases available to the leader are consistent with leadership style(s) appropriate to the readiness level of the follower, then the leader will tend to be successful and effective.

Studies done in South Africa by Smith (1993) at the Randse Afrikaans Universiteit, presented and published an ethnographic perspective of leadership. Indications for future guidelines are identified. These guideline should be relevant to our local needs since they were carried out in the context of the South African environment.

In this study therefore, transformational leadership will be studied in an environment of situational theory of leadership.

For a long time leadership styles in health care has continued unchallenged and the do as you are told type of leadership follower relationship has developed. However, considering the transformational environment in which democratic openness aught to prevail there is a need for a dramatic change in the thinking and implementation of leadership style in performance terms. Openness, aught to prevails as a result of the concept of transparency. A leader with a vision is the most appropriate leadership by today's standards it is therefore necessary for leaders in the

nursing profession to focus attention on knowledge orientation with purpose on stake holders leadership that is goal orientated and community orientated.

Blanchard stated this succinctly when he stated that in any institutionalised goal orientated group activity "followers must not be under the impression that they are working for the leader or manager; when the best leader's work is done followers must be able to say we deed it ourselves." Blanchard (1986)

According to Jaco, Price and Davidson (1994) Nurse executives are expected to lead and manage using innovative and dynamic strategies to stimulate the development of the of organisational vision. The question leaders in the profession should ask in introspection is; "Does the profession of nursing have capacity for the current expected leadership in the context of the dynamic changing environment?". If the answer is "no" "must the leadership sit back and be onlookers on this issue? or, is there something that can be done about it? Should current leadership not adopt a position as a standpoint and find a way forward?" The question to be answered is " Is it not time that, every nurse leader at institutional level should identify their own strengths, weaknesses, threats and opportunities?"

By virtue of their structure position; Nurses deal with both life threatening and life saving situations; from before the birth of the individual, during the life time and until after death, therefore; nurse leaders should adopt an effective leadership position and be leaders on issues involving leadership throughout an individual's life-span . All nurses are leaders whether they are on duty or in the community. On duty they lead the patients they nurse and in the community they are perceived to adopt a leadership position by virtue of their knowledge base.

Stogdill (1974) compared all surveys of leadership characteristics from 1948 to 1970 and drew the following conclusions related to social factors;

I) High socio-economic status is an advantage in attaining leadership status.

ii) Leaders who rise to high level positions in industry tend to come from lower socio-economic strata of society at present then they did half a century ago. From observation however, this picture is now changing

iii) they tend to be better educated than the former. However, these studies are on male population and from industrial setting.

Stogdill further elaborates that a person's place in society should be determined by talent, knowledge, capacity and inclination rather than by simplistic gender stereotypes.

Leadership is not something you do to people or for people it is something you do with people. In this literature review, research studies carried out in the area of leadership were highlighted, examined and analysed, with a focus on transformational and transactional leadership styles. The discussion was on studies carried out, related to the concepts of leadership styles, empowerment in leadership, power and power bases, power bases and style, and leadership theories were discussed. Management, management style and management culture, and decision-making styles in nursing administration were pursued and a section dealing with hospital effectiveness and unit management was also highlighted. " LEADERSHIP a New Synthesis" by James G.Hunt(1991) was adopted as a theoretical basis for this study. Some overview of studies in hospital effectiveness was touched upon.

Table 2.1 gives an outline and semantic clarity between the two concepts of leadership and management. Swansburg (1990):

## 2.1 TABLE

**DIFFERENCE BETWEEN LEADERSHIP AND MANAGEMENT:** Swansburg (1990)

| LEADERS | MANAGERS |
|---|---|
| 1. Are not always performing those functions required by the organisation. They are often not part of the organisation. | 1. They come from headship (power position). They hold appointive positions; directive post in formal organisations. |
| 2. They understand the power of groups. They empower their constituents, making their subordinates strong. | 2. They can be appointed for both technical and leadership competency. |
| 3. Mistakes are tolerated by managers who are leaders. They challenge constituents to stretch their potentialities. | 3. They are delegated authority including the power to reward or punish. |
| 4. Successful managers are successful leaders. Successful leaders focus intense attention on important issues. | 4. Managers focus inward but add to the leadership dimension of connecting their group to the outside world. |
| 5. Leadership is a desirable and prominent feature of the direct function of nursing management. | 5. Managers are problem solvers who succeed because of persistence, tough-mindedness hard work, intelligence, analytic ability, tolerance and good will. |
| 6 . Managers who are leaders focus on creating a spirit, and in doing so they develop committed followers. | 6. Managers focus on results, analysis of failure and tasks. managers who are leaders choose and limit goals.. |

This table shows clearly the need for nurse managers to understand the semantic distinction which surrounds their leadership and management skills by appropriately channelling them to enable them to manage health care services professionally and with meaning.

Nursing service does not function in isolation. It is influenced by a multitude of factors originating from the community. This study will therefore not perceive the issue of leadership in isolation but in the environment in which it operates.

## 2.7 EFFECTIVENESS OF HOSPITAL INSTITUTIONS

With reference to hospital effectiveness Everson-Bates and Fosbinder (1994)writes "the Webster Dictionary of the English Language explains "Effectiveness" as follows ..."it is producing a desired result." The precise definition of desired result or outcome may vary according to the organization's culture or mission. However to be effective, nurse managers must accomplish outcomes such as customer satisfaction, quality care and cost containment."

Van Heule (1998) argues that such attribute as Self confidence, crisis management peoples skills, such as organisational skills, Communication skills, and financial managerial skills are important for management. According to this author "All of the managers have considerable self-confidence. without it, he believes that a person cannot even be considered for a management position. He continues to explain that sometimes confidence can be a hindrance, especially for those who have trouble admitting their weaknesses. On this issue he argues that if a confident manager steadies the storm during rough times, facilitated team spirit and got the job done

correctly and on time, such a manager might seem to live for a crisis. The danger occurs when there is Insufficient planning results when the job has to be done at the last minute. The best of these managers can get the project done in the eleventh hour, which makes the person look like a hero who, everyone knows they can count on in a crisis. However, this can be dangerous when managers start seeking out crisis situations to feed their egos so they can play the hero again. This creates a cycle in which the manager does not feel effective until he or she is in crisis-management mode. The manager starts to work from crisis to crisis, instead of planning to prevent these extreme situations from occurring.

Van Heule (1998) concludes "All good leaders handle an emergency well and, consequently, get the highest praise and, many times, the highest pay, but he warns that care is to be exercised that managers are not to nurture crisis management skills so much that the manager cannot use any other management skills to prevent the problem."

Van Heule states that most of the best managers have excellent people skills. These are the ones who know how to motivate their people to do whatever it takes to get the job done and work independently. Although being liked helps, what counts more than being liked is being respected. With respect comes trust. If managers are respected and trusted, they can get personnel to go the extra mile for them.

A popular manager might, but a respected and trusted one usually gets the job done. Organizational skills can make or break even the best managers. Every workplace should have systems that make things run efficiently. Personal management style with organizational skills will constantly mould a system to change as necessary, making it flexible enough to bend when it

needs to, but keeping it rigid enough to stay on course. A person with only good organizational ability does not necessarily make a good manager; however, a good manager learns that solid organizational skills make a better manager. A good manager will not rise to the occasion when necessary can lead to a loss in sales, even though the date is running more efficiently than ever .

Van Heule continues to state that communication skills is one of the best qualities for a manager to have is to have good communication skills, yet few people actually possess this skill. This is someone who consistently gets the right information to the right people at the right time. A good communicator can also take complicated issues and convey them simply and accurately so that anyone can understand them. He continues to state that financial management is a skill often-overlooked and believes that basic schooling in this area would help any manager to understand the line and what the budget is that he or she works with. The best leaders are confident, good crisis managers, organized, excellent communicators, respected and trusted. A manager who was well-rounded and possessed a little bit of each of these attributes to someone who was strong in a few. He concludes good managers know their weaknesses and surround themselves with people who have the skills they lack. This creates a team that works well together and makes each person feel that he or she is necessary for the team's success. Over time, all of the team members should absorb the other skills, and they become the new, multidimensional leaders. As we knock on the door of the next millennium, these managers will become more important and if we are to succeed. You must have a great team to lead you into the next century.

In a study on 'USING AN INTERVIEW GUIDE TO IDENTIFY EFFECTIVE NURSE MANAGERS' Everson-Bates and Fosbinder (1994)indicates that despite the current emphasis on restructuring care delivery, the role of the first-line nurse manager remains of critical importance.

To select an appropriate candidate to fill a nurse manager position is complex, time consuming, and if an error occurs, costly to correct. The conducting of the interview must be such that pertinent and accurate data are gathered, as key to identifying a good fit between candidate and the job. Ineffective nurse managers are passive and reactive and used blaming language. They are powerless to influence events to meet their desired goal. Unlike the one-to-one interactions common in the care giver role, much of the nurse manager's work is done in groups. Effective nurse managers and successful nurse manager candidates articulated the standards they wanted to establish and described a management position as the vehicle necessary to accomplish their goal. In this study five categories of competencies that were identified as key indicators of effectiveness these are communication, which is critical. Secondly, the core of the nurse manager's role requires expertise in interpersonal interaction. The third competency is problem-solving. The fourth competency is interest in staff development; and the final competency is ability to see the whole. Although the fundamental nurse manager's role can be taught in an undergraduate programme and polished by staff developers, the depth necessary for the future can best be addressed in an advanced academic program.

Mark (1992) Basing his work on a field study of nurses at three hospitals with differences in size, and operational characteristics, identified three major nursing practice models, namely: team management, case management and total patient care. Few differences were found and similarities between models indicated the design of a change resolution style. Withdrawal was the most frequently used conflict resolution style. Re-definition of the working environment can be accomplished by giving nurses a greater voice in determining their work activities, and by using a more participative style of management in health care institutions. These two adjustment strategies, taken together, should improve handling of job-related conflict, and substantially

reduce turn-over of nursing staff.

Chase (1995) based the findings on 211 (two hundred and eleven) responses to a questionnaire which comprised response rate of 70.3%. Of the 211 respondents (27%)were from small hospitals (36.5%) were from medium sized hospitals and (36.5) were from large sized hospitals. 86% of the nurse manager who respondents had a baccalaureate or higher-level degree; 102 respondents (48%) had a baccalaureate degree; 79 respondents (37.5%) had master's degrees, and 1 (0.5%)had a doctorate. Most of the respondents(3%) were in the 55% and older group (82%) were between 35-54 years of age (15%)in the 25-34 (91%) of the respondents had practised nursing for 10 or more years. 79% had been in management positions for more than 5 years. (59%) had been in current nurse manager positions for 5 years. (80%) had been in their nurse manager positions for 3 years. Nurse managers in the study were an experienced group of nurses in both clinical and management areas. Advanced education is indicated for nurse managers to carry out the wide variety of skills needed for their positions. All the above factors will be taken into consideration when in the study design , to maximise relevant data collection.

According to Barton (1994) nurse executives in acute care hospitals make decisions in a rapidly changing environment and require timely information concerning: epidemiology demography, referral patterns ,case mix of patients; resource availability, allocation and use; performance measures, including output, outcome, quality and consumer feedback; skill maintenance of staff; monitoring and maintenance of morale; shaping and maintenance of organisation culture.

To plan effectively, nurse executives require data from several sources. Once these data are available, they must be organised in an effective and efficient manner to assist the nurse executive

with decision making. Information on:

1) epidemiology/ demography, referral patterns, and case mix of patients;

2) resource availability, allocation and use;

3) performance measures including output, outcome, quality, and consumer feedback;

4) skill maintenance of staff;

5) monitoring and maintenance of morale; and

6)shaping and maintenance of organisation culture. To plan effectively, nurse executives require data from several sources. Once these data are available, they must be organised in an effective and efficient manner to assist the nurse executive with decision-making.

According to Barton (1994) a descriptive, comparative study design, using the Delphi technique, a study sample, selected from 5067 chief nurse executives of non-federal acute care hospital, listed in the associations directory, and had a title of vice president of nursing and patient services a stratified random sample was compiled from a computerised version. Service categories contains the following items; unique facility number, unique health record number, unique number of principal registered nurse providers, episode admission or encounter date, discharge or termination date, disposition of patient and expected payer for most of the bill. Elements focused at an institutional levels included the following:

**Nursing unit.** type of nursing unit, method of care delivery, nurse manager characteristics, unit of service or workload unit, size of unit, cost, nursing resources, nursing unit budget and average intensity of nursing care. From an **institutional unit,** Medicare case mix, occupancy, intensity of nursing care, staff mix, budget, revenues, satisfaction, achievement of accrediting body standards nursing administration complexity and nursing demographic elements across the institution.

In these studies it was concluded that information needs for strategic planning must be addressed pro actively. Information technology is viewed as a resource in the business community. Hospitals and other health care institutions should recognise the value of the information they collect to maximise its availability and usability for decision-making purposes. The involvement of the chief nurse executive and nurse analyst will facilitate with collecting data to answer questions pertinent to the delivery of patient care. The outcome of this study was a compendium of data elements for use by chief nurse executives.

According to Triolo, Allgeier and Shwartz (1995), hospitals have responded to the dynamic market forces of health care reform with efforts to streamline services, increase customer satisfaction, and reduce costs while improving quality.

According to Cloete (1981) The internal environmental factors in the South African context of Public Administration includes the five elements as follows: political supremacy, public accountability, Administrative law; with its legality, impartiality, integrity, and honesty , respect for societal values and efficiency.

Nursing has a long history of powerlessness therefore a critical challenge facing nursing even today is to acquire a solid resource and power base upon which to move the profession forward. Some writers on nursing leadership have indicated the absence of such a power base and that this has been the most crucial limiting force towards maximising the potential of nursing.

Health care indicators that are accepted the world over the standards of which are defined by the World Health Organisation, e.g. the infant mortality rate, early neonatal deaths, still birth rate,

maternal mortality rate and the number of theatre deaths (to name a few), were used as basic information collected on each institution, to give some idea of the context within which they function.(see table 4.1).

## 2.8 CONCLUSION

This literature review has covered a wide area of problems encountered in the field of leadership and management. Inadequate preparation of manger in leadership positions is not a feature that is unique to health care. It is a problem that has a long history and occurs not only in most disciplines but nationally and internationally as well. Lack of adequately prepared leadership adversely affects productivity and hampers increased efficiency and effectiveness in health services.

# CHAPTER 3: METHODOLOGY

## 3.1 INTRODUCTION

In this chapter the theoretical framework on which the study is based will be described first. The the methodology followed in the study will be described step by step.

## 3.2 THEORETICAL FRAMEWORK

### 3.2.1 Hunt"s Extended Multilevel Leadership Model

The Extended Multilevel Leadership Model by Hunt (1991) was adopted for the purposes of this study. See fig 3.1

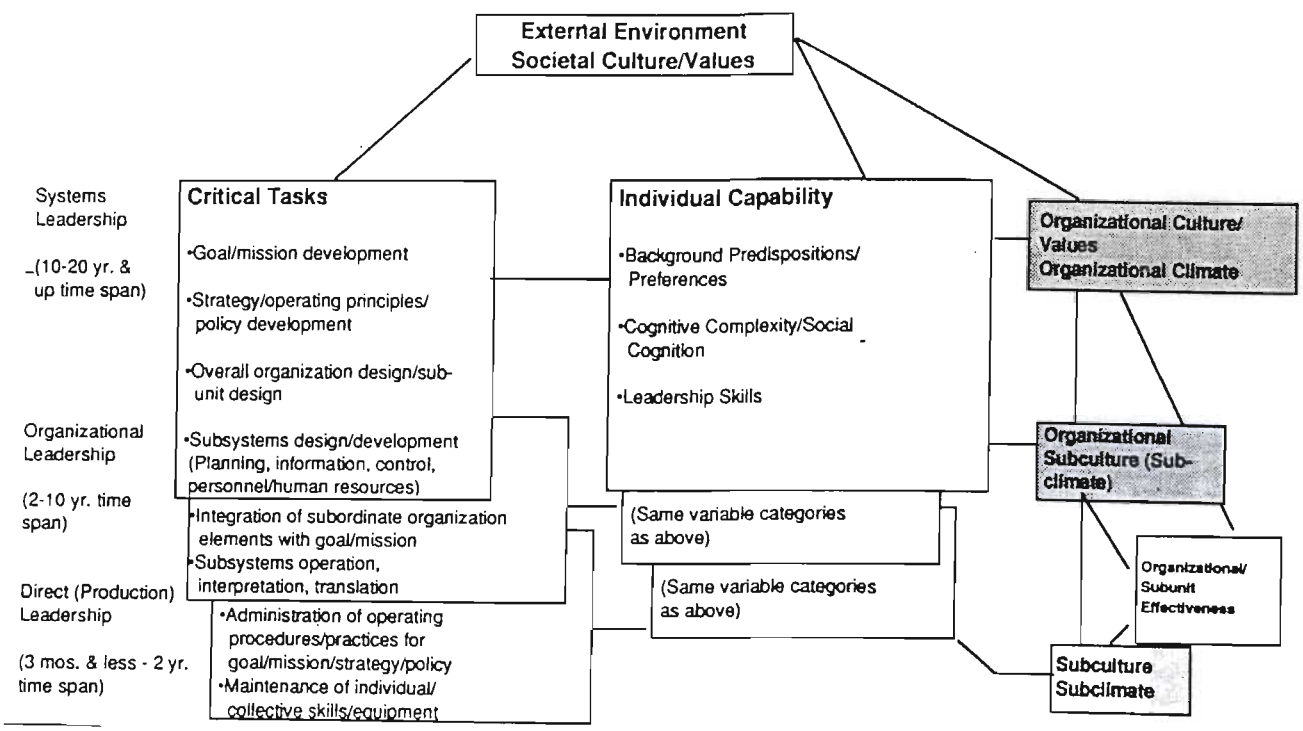



**Fig 3.1 EXTENDED MULTIPLE-ORGANISATIONAL LEVEL LEADERSHIP MODEL**

BY:HUNT (1991)

This model provides an integrating framework for the wide range of literature relevant to a multilevel, system-orientated leadership perspective. The Extended Multi Level leadership Model By Hunt(1991) was described in the his text book entitled "LEADERSHIP A New Synthesis" which was adopted as a theoretical basis for this study. The theory as espoused by Hunt's extended multilevel leadership model focuses on multilevel leadership components, and predicts interrelationships among these and other variables. According to Hunt's model, the following variables are highlighted: time horizon, cognitive power, the system's leadership domain, leadership critical tasks and shared assumptions with the organisational members, namely beliefs, values, underlying assumptions, and patterns of behaviour. The instrument developed by Bass and Avolio (1989) was used to measure transformational leadership style.

### 3.2.2 Instrument to measure leadership styles

The Multi factor Leadership Questionnaires by ( Bass and Avolio 1989) was used as the instruments to collect data that will analyse leadership styles as perceived by nurses in leadership positions and follower positions. This instrument consisted of the Self- Rater Multi factor leadership Questionnaire to be completed by the leadership of the institution, and the Rater Multi factor Leadership questionnaires, to be completed by the staff of the institutions selected to identify, classify and categories the leadership styles in the institutions identified in the study.

In this study the following categories of leadership style have been used namely; Transformational, Transactional and Non-leadership.

According to Ovalio and Bass(1989) **transformational leadership style** is present when the following criteria are met:

a) Idealised influence, characterised by a vision, a sense of mission, the ability to gain respect, have trust and confidence and acquire strong individual identification from followers.

b) Inspirational motivation which is characterised by the leader who gives pep talks, increases optimism and enthusiasm and communicates his or her vision with fluency and confidence.

c) Intellectual stimulation characterised by a leader who actively encourages a new look at old methods, fosters creativity, and stresses the use of intelligence. This will be the leader who provokes re-thinking and re-examination of the assumptions and the contexts on which previous assessments of possibilities, capabilities, strategies and goals were based.

d) Individualised consideration and the giving of personal attention by the leader to all members, making each individual feel valued and each individual's contribution important. The leader coaches, advises and provides feedback in ways easiest for each group member to accept, understand and use for personal development.

**2) Transactional leadership** is present when the following criteria are met:

a) Contingency reward, characterised by a leader who contracts exchange of rewards for effort and agreed levels of performance. This leader gives individuals a clear understanding of what is expected of them;

b) Management by Exception characterised by leaders who intervene only if standards are not met, or if something goes wrong.

**3) Non-leadership style** is present when the following Laissez-faire criteria are met: leadership is characterised by indecisive, uninvolved leaders who withdraw when needed, are reluctant to take a responsible stand and believe that the best leadership is the least leadership.

These three leadership styles are not necessarily mutually exclusive. This is because critical tasks, individual capabilities and organisations or hospitals are not the same. A leader may find that there is a need to use a transformational leadership style with one group of followers a transactional leadership style with another group, and a non-leadership style in yet in a third group. A leader may also need to use one style on certain parts of the unit under supervision, another style on other parts of the unit, etc; depending on the need and the environmental situation present at that time. The ability to diagnose and apply one's leadership skills appropriately will determine the potential and capacity to lead.

The above criteria will be adopted as the basis for classification of leadership styles based on the leadership model developed by Avolio and Bass (1989), and classified the five categories of leadership in each of the six institutions participating in the study. The five categories included top management, middle management and operational management echelons. The top management consist of the chief medical superintendent, the chief nursing services manager, and the hospital secretary; Middle management consist of the area nurse managers; and the operational nurse managers consist of managers who are in the ward or unit.

### 3.2.3 Instruments to measure hospital effectiveness

Hospital effectiveness was measured by **goal-attainment** as defined from a single question, by the staff and strategic community, **level of support** as defined in the questionnaire by the researcher and data collected from the respondents, and **systems achievement**, as indicated in the instrument to check the quality of care designed by the researcher, from seven categories which are namely infrastructure, access, personnel management, resource management, patient environment. Community outreach programmes and available treatment programmes designed by Beattie Rispel and Cabral 1994. Each category contained several individual criteria related to that category see annexure. Data has been collected from six institutions. The association between leadership style and hospital effectiveness was explored using correlation analysis. A correlation analysis was done to establish the influence of leadership on hospital effectiveness.

Measurement of goal attainment

In this study, these constituencies were involved in the two phase survey. The first phase constituted asking one question,

***"What do you think are the goals of your institution?"***

Input from the respondents were analysed. Goals were developed from this input. In the second phase an evaluation of the goals level of support was undertaken, and evaluated using a six point Likert-type scale to measure goal attainment.

The term **specific environment** refers to the level of support which exists for the organisation, how well it fits in with the culture of the constituents, and the prestige it has in the eyes of the public. This joins with the general environment to make up a second important portion of the external environment which influences organisations.

The external environment of societal culture and value include critical tasks and, individual capability as measured by the model developed by Avolio and Bass (1989). This model classifies leadership styles into Transformational, Transactional and Non-leadership. Leaders create and manage the culture characteristic of the system's leadership. Organisational effectiveness is linked with the clusters classified in the leadership categories identified such as transformational, transactional and non- leadership.

Organisational culture and values as well as organisational climate recognises their interrelatedness as well as the existence of different groups of strategic constituencies. Organisational climate is the message provided by organisational policies, practices, rewards etc, namely what happens, whereas culture reflects the underlying values and assumptions i.e, why things happen the way they do. Whilst leaders create and manage culture in the system's leadership, it is necessary that this culture is created and managed as a joint effort between the leaders and the followers. Leaders and followers need to complement one another.

Measurement of level of support

The notion of **Level of support** in this study was measured through the questionnaire developed by the researcher. This consisted of two questions to identify whether support was possible, with a focus on strength and direction. The first question is designed to focus on approval of the staff and community, of the hospital and the second on specific approval where the respondent would support the institution if threatened in any way. In this context, level of support included support by head office personnel as leadership representing the region, support from institutional leadership at the five levels of operation, and the staff functioning at the operational level of the institution responsible for utilising of the available resources for institutional use. Support from

the community in the vicinity where the institution was located included cultural issues and the prestige and respect the institution enjoyed from the perception of the members of the public.

Measurement of system's achievement

**System's achievement** refers to the extent to which systems and subsystems that allow the organisation to function have been put in place. In this study, system's achievement was measured with a quality assurance instrument developed by the researcher based on the theoretical framework of a study by Beattie, Rispel and Cabral(1995), yielding seven categories of assessing the level of health care effectiveness. These are, access, process of care, community out-reach, infrastructure, personnel management, resource management and patient satisfaction.

Hunt's model (1991) is applicable to the South African health care system in as far as teasing out the basic principles relevant for the application of the skills that can be functional for health care delivery. From the external environment of societal culture/values, critical tasks, individual capabilities, organisational culture, organisational climate, and organisational subculture, a simplification and adaptation into units and subunits to ensure assessment of effectiveness in the institutions was made.

In Hunt the measurement of organisational effectiveness involves the following components: goal attainment, strategic systems, strategic constituencies and competing values. In this study the measure of strategic constituency and competing values were done by measuring the level of support from strategic constituency. Strategic constituencies, in the study, were identified from the community where the institution is located. Strategic constituencies in this study were identified as head office staff, personnel of the hospital and the community served, namely leaders

such as principals of schools in the vicinity, business people, ministers of religion, and civic leaders. The views of patients and their families were also taken into consideration in the form of interviews. The loyalty and support of all three groups i.e. head office personnel, the institutional personnel, patients and their families, as well as the views of strategic community members, was deemed to be essential for the survival of a hospital in today's climate .

Since hospitals are not uniform, it was important that each institution identify and develop its own unique goals. Available resources will differ in a larger sized hospital from smaller hospitals. Large hospitals tend to be situated in a central urban area characterised by an affluent and sophisticated community whereas smaller hospitals are situated in a predominantly remote rural area consisting of a relatively poor and sparsely populated community, characterised by a low level of literacy. The organisational climate and culture will also differ between different sizes.

## 3.3 RESEARCH DESIGN

This is a partial correlation study. This study will examine the relationship between leadership styles and hospital effectiveness. The purpose of a correlation design in this study is to predict the value of leadership style as a variable based on values obtained from hospital effectiveness.

According to Grove and Burns (1987) the aim of an associative design is to predict the level of the association of variables. In this study the focus was therefore on the level of association of variables that were investigated, and not on the dependent/independent variables.

A partial correlation design can eliminate the influence of a third variable called the intervening variable and determine the magnitude of the relationship between the two remaining variables.

Correlation research is often only to detect the existence of a relationship between variables (co-variance) which suggests a possible base for causality. Correlation does not necessarily imply causation, but causation necessarily implies correlation. In this study therefore the relationship between leadership style and hospital effectiveness will not necessarily be a cause-effect relationship. A correlation method allows for diverse ways of collecting data. Therefore the method used included questionnaires, interviews and observations in the case if filling the instrument designed to collect data for analysis of system's achievement.

Correlation research is often the only possible research method that can assess the type and the strength of the relationship between two variables . In this study the two variables namely , leadership styles which are transformational, transactional and non-leadership will be correlated with hospital effectiveness which includes goal attainment, level of support and system's achievement. The strength and the relationship between the two variables was determined at the various levels and hierarchy of the management levels within the institutions, e.g. between the top level management, the middle level of management and at the operational level of management within the institution.

Each of these factors contributed to a certain extent, to the variation of hospital effectiveness. A correlation study allows for an evaluation of the importance or strength of the relationship of each factor with productivity and this is of great practical relevance. It will also indicate whether the factors correlated promote productivity ( positive correlation ) or inhibits productivity ( negative correlation). Positive productivity is indicative of effectiveness. The problem is to find some criteria to determine which one of the alternative is appropriate. The reliability and validity were

to be established. Reliability is the extent to which the observable measures that represent a theoretical concept are accurate and stable when used for the concept in several studies. In this study, The instrument used to identify leadership style had been used by counselling Psychologists severally to identify transformational , transactional and non leadership styles. Although marking in the original instrument was done by a computer in this study it was time consuming and slower to mark the scores which identified leadership styles into the categories as identified as the three leadership styles.

Validity is concerned with just how accurately the observable measure actually represented the concept in question or whether it represented something else. The instrument used by Beattie Rispel and Cabral (1995) was developed implemented and tested by organising stake holders and role players to identify the reliability and validity of the instruments through workshops and seminars. One of the chief nurse managers was requested to act as an inter-rater for the goals developed by the institutions.

The researcher used this baseline information and organised similar workshops with the chief nurse managers one of the functional Regions of KwaZulu/Natal to ensure the validity and reliability of the instrument used to assess systems achievement.

One of the institutions was used to test the validity and the reliability of the instrument developed by the researcher. After the instrument was modified and refined the researcher used these criteria, adapted from the clinic setting, in the hospital.

### 3.3.1 Design Validity

According to Smith (1981) sources of invalidity may cause problems of interpretation in any research setting. They offer plausible, rival interpretations to the researcher's findings if they are unaccounted for in the study design. Validity of a research tool is its ability to measure what the researcher intends to measure. To test the measuring ability of a tool is to establish its content validity, to do this the investigator points out the authority for the use of the content in questions, check list or other type of tool.

Validity is considered to be more important criterion than reliability. A high reliability may exist with little or no validity. If a design has no validity then there is no use for it because other researchers will not be able to establish the reliability of the association between the assessment obtained in leadership style of the leadership in the institution and the results obtained on the effectiveness of the hospital.

The chief problem in drawing conclusions from correlational research is that it cannot give conclusive information about the causal relationships between variables. The fact that there is no random sampling, no control and no manipulation of variables make this impossible. This factor needs to be taken into consideration.

In this study, during the analysis of the results, it will be difficult to show causal relationships between the leadership styles, namely transformational, transactional and non-leadership, and hospital effectiveness with regard to goal attainment, level of support and system's achievement, therefore a correlation will be made between the leadership style and indicators of hospital effectiveness as defined in the instrument designed for this study.

Furthermore, variables in correlational studies tend to be organismic variables. Measures of

organismic variables are always confounded by other organismic variables. Where one variable in a hypothesis is organismic in the study, all correlates of this variable are extraneous variables. Each can potentially be used to suggest an alternative explanation. This factor will have to be kept in mind in this study.

Burns and Grooves (1987) further indicates that if the researcher is studying humans in an uncontrolled or natural setting it is impossible to control all the extraneous variables. Since this study will be carried out in a natural uncontrolled environment, in a variety of hospitals, each with a unique environment, it will not be possible to have a tool to control the influence of extraneous factors.

Internal validity concerns the question 'Would different results have been received if different methods had been used?' By asking this intervening variables may be identified. According to Smith (1981) nine different causes of internal validity problems have been identified to be due to intervening variables. Intervening variables tend to relate to the following attributes: history, maturation, testing, instrumentation, statistical regression, deferential selection of subjects and differential mortality, selection maturation interaction effects and instability.

History involves the effect on the variable over the time span of data collection from the beginning of the study to the end of the study. There is a possibility that any one of the events other than the hypothesised variable might have caused the observed changes. This factor will not be applicable in this study because this is not an experimental method which necessarily use the dependent independent variable, and the events in the external environment are as likely to affect one group as another.

Maturation effects are changes in the internal conditions of the class of objects being studied. These effects are systematic with the passage of time. Although this study does not involve data collection over a long time span, a period of two weeks was allowed between distribution of the questionnaire and the collection thereof. The maturation factor is not seen as being relevant in this study since the study does not use the dependent independent variable. It uses the element of association.

Testing effects are reactive effects which occur any time the subject suspects or knows, that he/she/they are being observed. These affect the subject and there is a change in behaviour. This factor will not be applicable in this study since observation will not be an important part of the study.

Instrumentation changes in the measurement process may spuriously be attributed to the dependent variable. Where interviewers or observers become increasingly sloppy, fatigued or more competent and experienced, the study results may be slightly changed if the subjects suspect or know that they are being observed. In this study however, this should not necessarily influence the assessment of leadership style or effectiveness of the hospital significantly, because no repeated measures are taken.

Experimental mortality occurs when participants drop out of the study. A few participants dropped out when they retired, were on leave or ill during data collection. In this study therefore, only minimal loss was experienced.

Differential selection of subjects refers to a bias or non random selection of participants or units

of analysis. This may also contribute to spurious interpretation of findings. In this context bias was eliminated by random sampling. Random selection was carried out when the hospitals were selected, and when the area managers and operational managers were selected in the hospital situation.

Statistical regression refers to a fact well known among statisticians, that quantitative measurements taken at two points in time are subject to misinterpretation if participants were either initially selected or are compared on the basis of the extremity of their scores. This is not applicable in this study. A regression analysis is not anticipated in this study.

Selection maturation interaction effects occur with differential sample selection which often works in conjunction with maturation, history, or testing to produce spurious results. The respondents in the six hospitals selected would not be affected by this factor since the factor of maturation, history and post tests will not be carried out.

Instability refers to fluctuations in measures, sampling units or repeated or "equivalent" measures which might give results different from what would have occurred without those chance fluctuations. Statistical tests of significance are typically used to assess the chance that we can accept or reject data as fluctuating from its true value. In this context, leadership style and hospital effectiveness were associative variables to be examined. The researcher intends to explain the response outcome. Changes in one variable are presumed to be related, but not necessarily causal.

According Burns and Grooves (1987) the disadvantage of this partial correlation design is that

researchers tend to make two serious errors:

i) Firstly they often attempt to establish causality by reasoning that if two variables are related one must cause the other.

ii) They tend to confuse studies in which differences are examined with studies in which relationships are examined. Examining differences and examining relationships are two sides of the same coin with important distinctions such as in the case of this study if the relationship between leadership style and hospital effectiveness was measured this would be different from when the investigated two groups focusing on how these two groups were similar and how they were different. A mistake occurs when the existence of a difference assumes the existence of a relationship.

Burns and Grooves (1987) further explains that when one is designing a study and when conducting data analysis, the researcher must clearly understand whether differences or relationships are being examined. When the researcher is examining two or more groups in terms of one or more variables one is examining differences between groups as reflected in scores on the identified variables. In a correlation study, the relationship examined is that between two research variables within an identified situation.

### 3.3.2 External Validity

According to Burns and Grooves (1987) external validity refers to the extent to which the study findings can be generalised beyond the sample used in the study. This study is a multiple replication using six different samples from six different populations in six different settings.

Therefore in terms of study design it will probably be liable to generalisation. However, the settings will be carefully described to allow readers to judge generalisation to specific populations.

## 3.4 SAMPLING

### 3.4.1 Population

The population consisted of all provincial general hospitals in the KwaZulu/Natal province excluding academic hospitals. The steps in the sampling procedure will be described in more detail below.

### 3.4.2 Hospital Selection

A list of all the regional and community hospitals in the area of KwaZulu/Natal excluding academic hospitals was made. All the hospitals available were categorised into large, medium and small according to their bed state. Two hospitals were selected from each of the three categories. A sample of six hospitals was selected by random numbers for the purpose of the study as indicated in **TABLE 3.1.**

TABLE 3.1 Hospital sample

| HOSPITAL | BED STATE | NUMBER | SAMPLE |
|---|---|---|---|
| Category | | | |
| LARGE | 400 and over | 14 | 2 |
| MEDIUM | 200- 399 | 21 | 2 |
| SMALL | Under 200 | 18 | 2 |
| | TOTAL | 53 | 6 |

### 3.4.3 Sampling for measurement of leadership style

Sampling for measure of leadership style was carried out for two groups, namely self-rating by the leaders and rating by the followers who were rating their leaders.

#### 3.4.3.1 Self -Rater form

Eight Self -Rater questionnaires were issued to persons in top leadership positions of each hospital: one to each of the top managers, two to the area managers and three to the operational managers.

**Top management**

i) the chief medical superintendent

ii) the nurse manager-chief matron

iii) the hospital administrator

**Middle management**

iv) Two area managers : nurses who are responsible for several wards, selected by random sample from the allocation list.

**Operational management**

v) Three operational managers: nurses who are unit or ward managers, selected by random sample from the allocation list.

### 3.4.3.2 Rater form

**Top Management**

Ten respondents working under each of the following institutional leaderships i) the chief medical superintendent, ii) the nurse manager - chief matron, iii) the hospital administrator or hospital secretary, were selected by random sampling from a list of personnel available at that time. For the chief medical superintendent this included doctors, paramedical, phamarcists , nurses and other personnel employed at the institution.

**Middle management**

Five respondents were purposefully selected to assess each of the two area managers, giving a total of 10 raters for the two area managers in each institution. Professional nurses and enrolled nursing personnel and other personnel were included in this list.

**Operational management**

Five respondents from the category of professional nurses, enrolled nurses and other personnel were purposefully selected to assess each of the three operational managers: A total of 15 rater forms administered at each institution for the operational managers.

A total of 8 rater forms was administered in each institution for all the leaders, resulting in 48 self-rater forms for the six institutions and 330 rater forms for the six institutions.

(See table 3.2)

TABLE 3.2 SAMPLE LEADERSHIP AND STAFF COMPLETING MLQ PER HOSPITAL

| HOSPITAL MANAGEMENT (Self- Raters) | NUMBER OF PERSONNEL RATERS |
|---|---|
| Chief Medical Superintendent | 10 |
| Hospital Administrator | 10 |
| Chief Nurse Manager | 10 |
| Two area Nurse Manager | 5X2=10 |
| Three operational Nurse Manager | 5X3=15 |
| TOTAL LEADERSHIP = 8x6=48 | RATERS = 55x6=330 |

### 3.4.4.Sampling for Measurement of goal attainment

The sample of strategic constituencies was used for the goal development and goal achievement phases of the study. The sample of strategic constituency drawn was made up of 10 members of staff of the institution and 10 members of the community as follows:

**Head Office staff**

Members of head office staff who were responsible for supervising each of the specific hospitals had input from the head office supervisors. Each of the six institutions had their head office supervisor who acts as an advisor and overseer for problem solving.

**Personnel of the hospital**

Members of the hospital staff, selected conveniently on the day of data collection consisted of

1 medical superintendent

1 matron as a nurse manager

2 members of the administrative staff

1 doctor

1 member of the operational area

2 nurses and

2 other health workers

There was a total of 10 people in this group selected by random sampling from the staff list.

**Members of the community**

**Community Leaders:**

Four community leaders were identified by hospital management and these included 1 school principal, 1 civic leader, 1 businessman

and 1 religious leader. The above leaders were from the area of the institution and were selected purposefully by being in close association with the institution included in the study

**Consumers of health care**:

Three patients and three family members were selected conveniently on the day of data collection for interviews. A total of ten members of the community.

These respondents were not the same people for the goal development and goal achievement phases. Goal development was carried out by the researcher who analysed the input and developed goals for each of the institutions included in the study. An inter rater was asked to assess and confirm the goals developed. The interviews carried out on patients admitted were used to evaluate patient satisfaction in system's achievement.

**3. 4.5 Sampling for level of support**

Twenty four questionnaires were distributed to each of the six institutions doctors, nurses and other members of staff were selected by random sampling to respond to the questions designed by the researcher. The instrument was tested through a pilot study and found to be able to surface

the intended responses. (See annexure)

### 3.4.6 Sampling for system's achievement

The researcher completed for each institution with the assistance of hospital staff in the sample a modified quality assurance instrument originally designed by Bettie Rispel and Cabral (1995) to measure the quality of care offered at the Primary Health Centres (See Annexure. )

## 3.5 DATA COLLECTION INSTRUMENTS

### 3.5.1 MEASURING LEADERSHIP

The Multifactor Leadership Questionnaire (MLQ) consisting of the Self-Rater and Rater forms developed by Bass and Ovalio (1989) was used. Both forms consisted of 80 questions. Questions in the Self-Rater form are asked in the first person whilst the same questions are stated in the third person in the Rater forms. The 80 questions are a combination of elements/characteristics of transformational and transactional leadership, non-leadership and organisational effectiveness.

Transformational leadership was measured by elements referring to idealised influence, inspiration, intellectual stimulation and individualised consideration. Transactional Leadership was measured by elements referring to contingent reward and management by exception. Non-leadership questions were related to laissez-faire issues. This leader is indecisive, uninvolved, withdraws when needed, reluctant to take a responsible stand and believes that the best leadership is the least leadership. Organisational effectiveness was answered by items designed to tap the amount of extra effort, while relations to seniors, unit effectiveness, job effectiveness, organisational effectiveness and satisfaction was calculated.

The mean score was calculated. The leader rated her/himself on a Likert-type five to seven point scale to establish a self-rating score. The mean of the followers was calculated for each item.

The 80 questions were arranged such that the three leadership styles, namely transformational, transactional and non-leadership, were developed. The same 80 questions were asked for self-rating by the leaders and rating by the followers. A rating scale of 0-4 was used as follows;

0= Not at all
1= Once in a while
2= Sometimes
3= Fairly often
4= Frequently if not always
5= No response (NR)

Individuals were categorised as transformational, transactional and non-leader based on how they responded to the ratings (self-ratings and ratings by others) on the scale developed by Bass and Avolio(1989).

Orientation, distribution and collection of questionnaires lasted for a period of two weeks in each institution. Each of these institutions were visited at least four times to ensure that the questionnaires were all collected.

Under transformational leadership there were ten items for each of the following categories: idealised influence questions, intellectual stimulation and individualised consideration and there were seven items for inspirational items. There were ten items for the transactional leadership style and ten items for non-leadership laissez-faire questions. There were three extra effort items, four effectiveness items and two satisfaction items to assess how satisfied the supervisors and co-

workers were with the leadership style of the leadership being assessed, with regard to the group's goals being achieved. The mean scores (number) of responses and the percentage of responses was calculated.

The validity and reliability of the instrument designed to measure leadership style has been tested in several research projects. This instrument was used with some modification, since items that dealt with effectiveness of organisations was not addressed in this context. The focus on effectiveness was addressed as goal attainment, level of support and systems achievement.

There was a problem with marking of the instrument by computer. This is an instrument which is sold per copy at $9 each. Marking is then done in the U.S.A by the company marketing the instrument. Since this would have amounted to a cost of R14,000.00 for the instruments used in this study, this could not be done. Although several efforts were made to negotiate a different deal with the author, nothing was achieved. Since the same approach is followed with regard to other instruments measuring leadership style, it was decided to mark the scales manually based on the classification of items given by Bass and Ovalio (1989). This decision was taken by the investigator and her supervisor. This was and time consuming exercise lengthy procedure as the results had to be typed into the computer first before analysis.

### 3.5.2 MEASUREMENT OF HOSPITAL EFFECTIVENESS

The measurement of hospital effectiveness was determined by the development of theoretical effectiveness of goals and subsystems. This was carried out in two phases, namely Phase 1, which was goal development followed by Phase 2 which was goal achievement.

### 3.5.2.1 PHASE 1: Goal Development

The hospital goals were identified as follows;

Goals of the institution were developed from a single question which was asked as follows:

***"What do you think are the real goals of this institution ?"***

This questionnaire with a single question was distributed to the respondents in the strategic constituency (See Annexure 2)

A content analysis, was achieved by inputs categorized into separate goals or objectives. This process was checked by two registered nurses to ensure that all inputs from respondents were reflected and whether the inputs of respondents were accurately reflected in the final goals for each hospital. A summary of all the goals was carried out and discussed in chapter four in detail.

### 3.5.2.2 Phase 2: Goal Achievement

A second questionnaire was then developed. This listed all identified goals and asked respondents to firstly rank them in order of importance and then to rate level of achievement of each goal on a six point Likert-type scale to evaluate how well the goal was met at the institution; from "poor/very unsatisfactory" to "totally" when the respondents were of the opinion that the goal was met very well. This questionnaire also measured aspects of specific environment by including six other questions addressing the following items:

i) Available resources

ii) Levels of support

iii) Cultural issues

iv) Prestige and respect of the institution in the public eye v) Demographic data of

respondents was also collected

The focus was on level of support.

(See Annexure 3 )

### 3.5.2.3 Level of support

Two question were asked under level of support. The focus of this question was at two levels namely support in general and support when there is a threat. The prestige enjoyed by the institution and the respect of the institution by members of the public is enhanced if the philosophy, the mission the objectives and the goals of the institution are met effectively.

### 3.5.2.4 System's Achievement

For Measurement of Subsystem Arrangement

A quality assessment tool to determine hospital effectiveness was developed from the Extended Multiple-Organisational-Level Leadership Model designed by Hunt (1991) and from a study on the quality and cost of Primary Health Care in South Africa by Beattie, Rispel and Cabral; (1995).

Seven categories were used to assess quality of care at each health facility according to Beattie et al (1995) the following guidelines aim to clarify the assessment scores. The seven categories identified in general quality assessment and their percentage allocation in the total score of 100 are;

| | |
|---|---|
| i) Infrastructure | 10% |
| ii) Access | 12.5% |
| iii) Personnel management | 15% |
| iv) Resource management | 10% |

v) Patient environment 15%

vi) Outreach and 12.5%

vii) Available treatment programmes 25%

Each category contained several individual criteria related to that category. Each criterion was scored out of 10. These scores were combined to produce the total score for that category, also out of 10. According

According to Beattie, Rispel and Cabral (1995, P.78) the reliability and validity was tested for the development of the quality of care methodology as follows;

Phase 1: Identification of essential issues for measuring quality of care . Theoretical approach and criteria to be measured agreed upon.

Phase 2 : Development of a series of individual studies each of which assessed some aspects of quality of care identified in phase 1. Individual studies were designed to collect a broad range of qualitative information.

Phase 3: development of a method of combining the individual composite score. Selected criteria were drawn from the individual studies to be evaluated quantitatively.

The method described above was again followed after the instrument was modified and adapted First by the matrons of the Durban Functional Region and the group of Master's group of students in the academic year ( 1995)

The method used to combine the individual criteria scores into the final score for that category was the geometric mean rather than the arithmetic mean.

According to Beattie, Rispel and Cabral (1995) the advantages of using the geometric mean are as follows;

i) It is not overly influenced by high values.

ii) It is not susceptible to masking the presence of very low overall scores and

iii) It reflects the compounding effects of quality short falls and allows the definition of "essential" criteria, whose absence would produce a very low overall score.

The best score was always 10 out of 10. The poorest score was from 0 to 8 out of 10 depending on how important the criterion was judged to be in relation to overall quality, e.g. the total absence of reliable drinkable running water supply had a score of .01, while the absence of a suggestion box for patients' comments received a score of 8. Beattie Rispel and Cabral (1995).

This instrument was used as the basic model, but extensive additions and changes were made to adapt it from evaluating clinics to evaluating hospitals. This was done by a working group of 36 nurse administrators meeting over a period of two months.

Hospital records, interviews with nursing staff and observations were used to obtain data to complete the tool. The final instrument had seven Categories and 52 Items.

(SEE ANNEXURE: ON SYSTEMS ACHIEVEMENT page 210)

## 3.6 PILOT STUDY

A pilot study was conducted in one institution to refine the methodology. Using similar subjects, namely hospital personnel leadership and the led, a strategic constituency from the local community, patients and visitors. A purposive sample of respondents as leaders and self-raters, a random sample of respondents as raters and as evaluators of hospital effectiveness was drawn as proposed. The sampling plan was found to work well. The instruments were also found to be able to give a measure of the effectiveness of the hospital expressed in percentages.

At the beginning of September, 1995, the researcher commenced to implement the instrument in order to collect data for the proposed study, after some modifications to the original proposal were carried out.

## 3.7 THE PROCESS OF DATA COLLECTION.

Each institution was visited five times. A full day was spent at the institution with the three top level leaders or managers, namely the medical superintendent, the chief nursing services manager and the hospital administrator, to enable a verbal explanation of the study to be made, and to meet with them and obtain consent to undertake the study at the institution and to ensure their co-operation in the study project. Only one institution offered some resistance. With persuasion, however, there was some attitude change. Permission was granted for the study to be carried out at the institution.

Five visits were made as follows:

First visit:

The first instrument on goals was distributed to all the six institutions over a period of two weeks at the rate of three institutions per week. A period of two weeks was allowed at each of the six institutions for completion and collection of data.

Second visit:

When the responses of the institution on goals were collected the Self-Rater and the Rater instruments were distributed to the relevant respondents. The goals of the institution were then developed and the second questionnaire prepared for distribution on the third visit to the institution.

Third visit:

The responses on the Self-Raters and Raters were collected for analysis whilst the developed goals of the institutions were distributed for ranking and rating by the selected respondents. During this visit the evaluation of strategic functioning of the institution using the quality care instrument modified from Beattie Rispel and Cabral (1995) was also done and completed by the researcher in the form of observations and interviews with the nursing services manager in each of the six institutions.

Fourth visit:

This visit to the institutions was for the purpose of collecting

completed evaluation questionnaires on goals of the institutions.

Fifth visit:

This visit to the institution was for the purpose of collecting outstanding data and to complete

outstanding interviews with the patients and visitors.

The exercise of distribution and collection of questionnaires lasted six weeks per institution.

## 3.8 ETHICAL ISSUES

Permission was obtained from the Chief Director of the KwaZulu/Natal Health Services for the research to be carried out at the six institutions in the area of KwaZulu/Natal.(See enclosed copy)

Permission was again sought from the head of each of the six institutions and this was granted. Each of the heads of the sections, namely the medical superintendent, the matron-in-charge and the hospital administrator, was approached for permission to enable the staff in their sections to respond to the questionnaires.

Respondents were given the opportunity to choose whether or not they would participate in the research. An explanation was also extended to the strategic constituencies and informed consent was obtained verbally. Each institution was visited by the researcher. The research activities was explained to each of the three members of the top level management.

A letter was addressed to each of the participating members to

ask them to participate voluntarily in the study. Informed consent was given verbally by the patients and visitors before the interviews were carried out. Essential information for consent included a statement of the research purpose; details of the selection of the research participants; an explanation of procedures, a description of the potential risks or discomfort; a description of the potential benefits; assurances of confidentiality; and offers to answer any questions. An

explanation was made to clarify that refusal to participate in the study is voluntary. An option to withdraw was offered.

The researcher undertook to adhere to the principle of confidentiality relevant to the conduct of research involving human subjects; the principle of respect for persons, the principle of beneficence, and the principle of justice.

## 3.9 SUMMARY

The Extended Multilevel Leadership Model by Hunt(1991) was adopted as a theoretical framework for the purposes of this study. The instrument to categorise leadership styles of the institutional leadership into transformational, transactional and non-leadership was adapted from the instrument originally designed by Bass and Avolio (1989). A questionnaire was designed by the researcher to assess the effectiveness with a focus on goal attainment, level of support of the six institutions identified. An instrument originally designed by Beattie, Rispel and Cabral (1995) was adapted to assess the quality of comprehensive health care in the clinic services . A partial correlation was selected as a method of choice for data collection and analysis. A detailed description of the procedure of how data collection will be carried out, was given. A sample description was made.

# CHAPTER 4: RESULTS

## 4.1:INTRODUCTION

This chapter discusses the results obtained in the study. It starts with a sample description, followed by an analysis of the leadership style dealt with in relation to, hospital effectiveness and finally, the relationship between leadership and hospital effectiveness. The questions raised under each aim will be covered in the broad headings.

## 4.2: SAMPLE DESCRIPTION

According to the World Health Organisation, Health care indicators the standards of which are accepted the world over e.g. the infant mortality rate, early neonatal deaths, still birth rate, maternal mortality rate and the number of theatre deaths (to name a few) are used as basic information collected on each institution, to give some idea of the context within which they function.(see table 4.1).

Six institutions constituted the universe of the study. These institutions were further classified according to size based on the bed numbers. Two institutions with a bed number above 400 were located within an urban setting, two with between 200 and 400 beds in the peri-urban centres, and two with fewer than 200 beds in the deep rural setting. The homogeneity of size was derived from administrative elements which include management, planning and resource allocation. All six institutions were non-training hospitals.

**TABLE 4.1: STATISTICS ABOUT INSTITUTIONS** : JANUARY TO DECEMBER 1996

| INSTITUTION | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| **SERVICES** | **URBAN** | | **SEMI-RURAL** | | **RURAL** | |
| Bed state | Above 400 | | 200-400 | | Below 200 | |
| % Bed occupancy | 82 | 89 | 109 | 77 | 96 | 70 |
| Patient cost per day (Rand) | 193 | 371 | 148 | 234 | 134 | 238 |
| Total theatre cases/year | 530 | 1206 | 170 | 2974 | NA | NA |
| **MATERNAL/CHILD HEALTH** | | | | | | |
| Total live births | 3500 | 2121 | 488 | 3508 | 35 | Nil |
| Still births/year | 97 | 38 | 1 | 78 | Nil | Nil |
| Early neonatal deaths/year | 51 | NRK | 10 | 60 | Nil | Nil |
| Maternal deaths/year | 2 | NRK | NRK | NRK | Nil | Nil |
| **GENERAL PATIENT CARE** | | | | | | |
| Sepsis figure/months) | NRK | 4/12 | 9/12 | 3/12 | Nil | Nil |
| Bed sore ratio/months) | NRK | 9/12 | Nil | 2/12 | Nil | Nil |
| Theatre deaths/month | NRK | 11/12 | Nil | Nil | Nil | Nil |
| **STAFFING** | | | | | | |
| Nursing intake/ month | 4/12 | 7/12 | 2/12 | 6/12 | 12/12 | 3/12 |
| staff leaving /year | 4/12 | 7/12 | 1/12 | 6/12 | 6/12 | 3/12 |
| Reasons for leaving | Given | Given | Given | Given | Given | Given |
| Vacant doctors posts | 1/17 | 6/10 | 1/5 | 1/6 | 0/1 | 0/1 |
| Vacant nurses posts | 59/322 | 20/730 | 12/210 | 2/195 | 6/87 | 15/42 |
| Absenteeism/in days for total staff component | Nil | 10/yr | Nil | Nil | Nil | Nil |
| Grievances | Nil | Nil | 10 | Nil | Nil | Nil |
| Number of personnel injured on duty (I.O.D.) | Nil | 6 | 6 | 10 | 2 | Nil |
| Days off duty due to injury on duty (I.O.D.) | Nil | 21 | 118 | Nil | Nil | Nil |
| TOTAL staff days lost/year due to injury on duty (I.O.D.) | Nil | 21 | 220 | Nil | Nil | Nil |
| Disciplinary hearing | 1 | Nil | 1 | 1 | Nil | Nil |
| Total court cases | Nil | Nil | Nil | Nil | Nil | Nil |
| Total nursing staff | 322 | 730 | 210 | 195 | 87 | 42 |

**Key:**

Given = Information is given in the discussion

NA = Service not available

Nil = Service available but incident not occurring in the institution.

NRK = incident occurs but no record is kept at the institution..

Table 4.1 indicates statistics about the six institutions. This data was collected by each institution on a daily basis from January to December 1996 from hospital records, through an instrument designed by the researcher. This was provided by the institution's top management as a record kept by the institutions. Columns 1-6 indicate the six hospitals selected in the study.

The above indices differed per institution. Institution 6 had the lowest bed occupancy at 70%. Institution 3 reported the highest bed occupancy at 109%. In institution 3 floor beds were unavoidable in some cases.

The lowest cost per day was in institution 5, at R134.00 and the highest cost was in institution 2 at R 371.00; more than twice the cost in the lowest institution. This difference occurs because of the differences in the cost of living in these institutions. The larger hospitals are in the urban areas, whilst the smaller hospitals are situated in rural areas.

Institution 3 had poor theatre facilities whilst institutions 5 and 6 did not have theatre facilities. These institutions generally refer patients to neighbouring bigger centres for surgical interventions. Only one out of the five institutions reported live births without a single still birth. Institution 3

reported only one still born baby in a year as against 488 live births. No early neonatal deaths were reported in institutions 2, 3 and 5 in a year.

Only institution 6 had no births recorded. This is because the institution does not provide a maternity service. All six institutions did not report any court cases. Only institution 3 reported a disciplinary hearing and 10 grievance procedures on labour matters at the institution. The same institution reported a total of 220 staff days lost in a year. Only one institution reported absenteeism as a problem. Absenteeism refers to personnel not coming on duty and not reporting the reason why the person is not on duty. If a person is off sick or reported that she/he is not able to come on duty for whatever reason that person is considered to be officially off duty. Injury on duty (I.O.D.) was reported in institution 2 to 5. Staff leaving per month was reported in every institution . Staff turnover was used as an indicator for apparent job satisfaction.

Judging from the staff turnover, institution 2 had a high turnover at 7 nurses per twelve month period. Institution 3 reported only one member leaving in a year . An average of two to three nurses leave service in institution 2, 4 and 5 for various reasons, per month. Reasons for leaving service were diverse. All six institutions gave transfer to other institutions as the reason for leaving service. Institution 1 stated that the reason for transfer is given as husband's transfer rather than own transfer. Four institutions (1-4) gave the reason for leaving the service to be sick pension, while another two institutions (1 and 3) gave retirement as a reason for leaving public service.

Two institutions (5 and 6) gave transfer to other hospitals as the only reason for leaving service. Institution 1 was the only one that stated better financial offer as the reason for leaving service. Institution 2 gave the temporary nature of posts as the reason for leaving service and, institution

4 gave personal reasons for leaving service.

Only one institution did not experience a shortage of doctors. Although institution 5 and 6 shared a doctor with the hospital acting as a overseer these two institutions reported that there was a need for a residential doctor who should be specifically assigned for all their problems. All institutions indicated a shortage of nurses.

Although it would seem that the data in the sample includes a fair reflection of the types of hospitals in KwaZulu/Natal and perhaps even in South Africa, it would be necessary to compare data from other hospitals before such a claim could be made.

## 4.3 LEADERSHIP STYLES

McDaniel and Wolf (1992) identified, in a hospital based study, that an ideal leadership pattern is a transformational score of 3.0 or higher. This score must be supported by a relatively high transactional score namely, above 2.0 and laissez-faire that is lower than the transactional score i.ē.; a score of less than 2.0. An ideal pattern will consist of a transformational leadership style that is higher than the transactional leadership style and the non-leadership style that is lower than the other two respectively. According to these authors a high transactional score without transformational leadership components is a prescription for mediocrity. This will be used in this study as a reference standard.

**TABLE 4.2: STATISTICS SR AND R CORRELATION CATEGORIES** (n=48)

| Style | Transformational | | | | Transactional | | | | Non-Leadership | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Manlevl | $\bar{x}$ | SD | P | Cor | $\bar{x}$ | SD | P | Cor | $\bar{x}$ | SD | P | Cor |
| Med Sup | 2.8 | .44 | .81 | - *.05 | 2.3 | 0.5 | .06 | .35 | 1.7 | 1.1 | .26 | .21 |
| Chief NM | 2.7 | .76 | .47 | .14 | 2.3 | .69 | .12 | .29 | 1.4 | .45 | .51 | 23 |
| Hos Adm | 2.9 | .88 | .07 | .33 | 2.6 | .75 | .41 | .16 | 1.7 | .59 | .28 | .21 |
| Areaman | 3.0 | .77 | .18 | | 2.7 | .68 | .3 | | 1.8 | 0.5 | -*0.2 | |
| Opsman | 2.8 | .77 | .4 | | 2.5 | .77 | .1 | | 2.0 | 0.7 | .13 | |

**Key:** will be used consistently

SR = Self-Rating

R = Subordinate rating.

Manlevl = Management level

Med Sup = Medical Superintendent

Chief N M = Chief Nurse Manager

Hos. Adm = Hospital Administrator

Areaman = Area nurse manager

Opsman = Operational nurse manager

A Pearson correlation analysis was performed to correlate the total scores of raters and self-raters values to establish internal consistency of the instrument. No significant differences between self-raters and raters were found except in two cells. Confirming the fact that there is internal consistency (See table 4.2)

**TABLE 4.3: LEADERSHIP STYLE BY INSTITUTION** (n=48)

| | TRANSFORMATIONAL | | TRANSACTIONAL | | NON-LEADERSHIP | | |
|---|---|---|---|---|---|---|---|
| INST | MEAN | S-R | MEAN | S-R | MEAN | S-R | STYLE |
| 1 | 2.8 | 0.5 | 2.4 | 0.0 | 1.7 | -1 | TS |
| 2 | 3.0 | .80 | 2.5 | 0.3 | 1.7 | -1 | TF |
| 3 | 3.1 | 0.4 | 2.4 | 0.0 | 1.9 | -1 | TF |
| 4 | 2.9 | 0.5 | 2.3 | 0.2 | 1.5 | 0.0 | TS |
| 5 | 2.3 | 0.9 | 2.3 | 0.9 | 1.6 | 0.0 | TS |
| 6 | 2.7 | 0.5 | 2.5 | 0.0 | 2.1 | 0.0 | NL |
| TOTAL | 2.8 | 0.6 | 2.4 | 0.1 | 1.7 | 0.4 | TS |

Key: Will be used consistently.

MEAN= Average of self rating and rating by subordinate score.

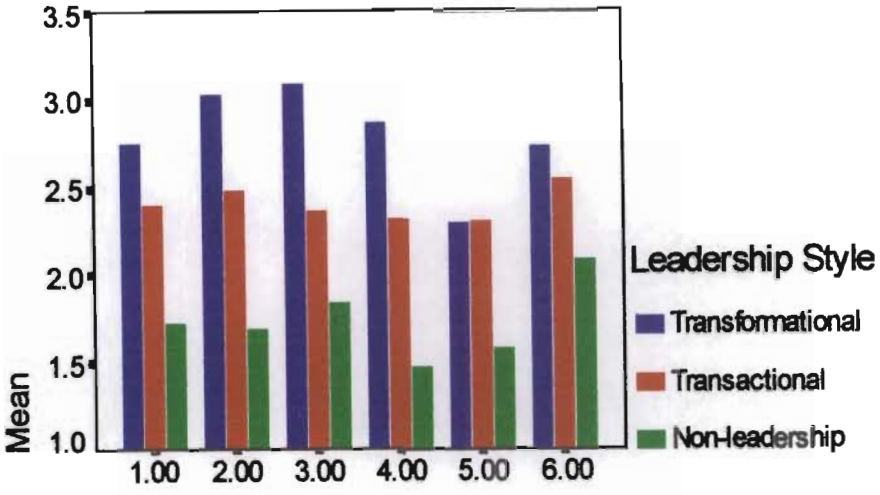
S-R =Difference between self-rating and subordinate rating.

TF = Transformational leadership style.

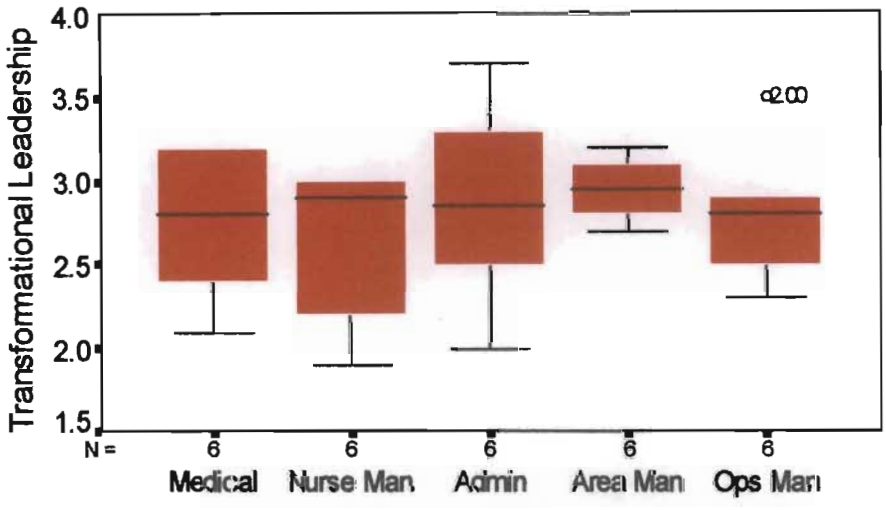
TS = Transactional leadership style.

NL = Non-leadership style.

The overall mean score for the institutions in the sample was 2.8 for transformational, 2.4 transactional and 1.7 for laissez-faire leadership respectively(See table 4.3). Although the pattern is ideal, the mean of the transformational score is less than 3.0 This does not qualify the entire leadership in the sample as transformational on the average. Considered singly however, institutions 2 and 3 qualify as revealing an acceptable pattern and score. Of the two institutions, institution 2 was relatively lower in the transformational but relatively higher in the transactional score and has a relatively lower score for the non-leader when compared with institution 3. Considering that a transactional score usually increases the strength of a transformational




Graph 4.1: Leadership Style by Institution




Graph 4.2: Transformational Leadership by Management Level

leadership; that the non-leadership in institution 2 is lower than that of institution 3 and that, institution 2 was bigger than institution 3 in size; it was apparent that the leaders of institution 2 would be regarded to have a better leadership style than that of the leaders in institution 3.

Institution 5 had the lowest mean transformational score of 2.3, which was equal to the transactional score. Although the mean of the non-leader score was under the score of 2.0, this is not an ideal pattern. Institution 6 had the highest mean non-leadership score of 2.1 which was higher than the acceptable norm. The total overall mean was 2.8 for all the six institutions in the sample which is below the expected score of 3 to be rated as transformational leadership in outlook.

Institution 2 and 3 revealed an overall transformational leadership, institutions 1,4 and 5 revealed a transactional leadership style. Institution 6 had a non leadership style. The overall leadership style in the six institutions was perceived to be transactional.

The t-test was used to compare the means of each type of leadership style of each institution with that of other institutions. The only statistically significant differences were found between institution 3 and 5 in the transformational style ($t=2.79$; $df=8$; $p=0.012$) significant at the 0.01 level and institution 2 and 5 ($t=2.8$; $df=8$; $p=0.023$) significant at the 0.05 level. An outlier is in institution 5. (See figure 1)

4.3.1 Leadership Styles by Category

The chief medical superintendent, the chief nurse manager, the hospital secretary, the area manager and the operational manager form a team of five with the chief medical superintendent

assuming the leadership role in the institution. This leadership will be looked into jointly and separately.

**TABLE 4.4: LEADERSHIP STYLE BY CATEGORY** ( n=48)

| STYLE | TRANSFORMATIONAL | | TRANSACTIONAL | | NON-LEADER | |
|---|---|---|---|---|---|---|
| CATEGORY | $\bar{x}$ | S-R | $\bar{x}$ | S-R | $\bar{x}$ | S-R |
| Chief Med. Super | 2.8 | 1.1 | 2.2 | 0.1 | 1.9 | 0.2 |
| Chief Nurse Man | 2.6 | 1.4 | 2.3 | 0.0 | 1.4 | -0.2 |
| Hospital Administrator | 2.9 | 0.6 | 2.6 | 0.2 | 1.7 | -0.8 |
| Area manager | 3.0 | 0.6 | 2.6 | 0.1 | 1.8 | -0.2 |
| Oper. manager | 2.8 | 2.2 | 2.5 | -0.1 | 2.0 | -0.2 |
| Total | 2.8 | 0.6 | 2.4 | 0.06 | 1.7 | -1.2 |

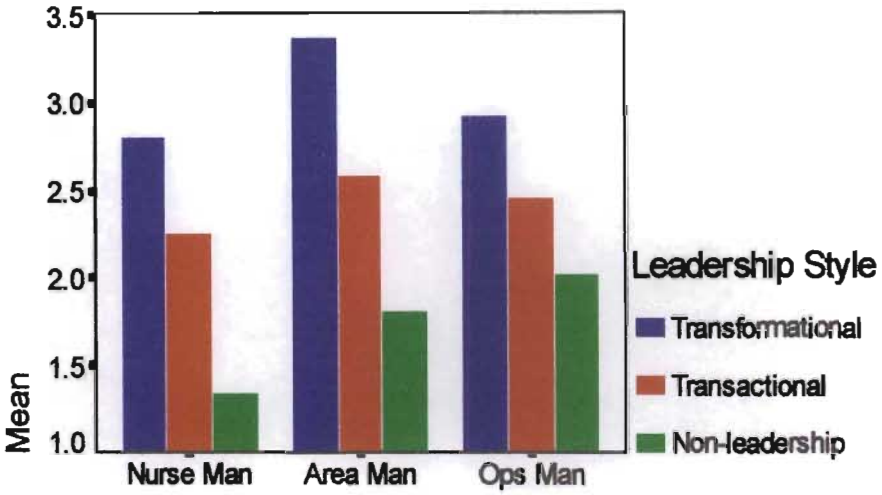
**Table 4.4** shows that middle managers of institutions were perceived to exhibit a transformational leadership style. They revealed the best pattern with a mean score of 3.0 for transformational leadership, 2.6 for transactional leadership and 1.8 for non-leadership style respectively. This group also showed the least variance (see figure 2). All the other transformational leadership scores were below the mean score of 3.0 for transformational leadership style. The second best leadership category was that of hospital secretaries, with a mean transformational score of 2.9, a mean transactional score of 2.6 and a mean non-leadership score of 1.7. This group was followed by the operational nurse manager and the chief medical superintendent categories respectively.

The chief nurse managers had the lowest transformational score mean (2.6) but also the lowest non-leadership score mean (1.4). Although the mean of the non-leadership score was relatively low, the mean transactional leadership score was not high enough to strengthen the already low mean transformational score for this category of institutional leader to be regarded as having an

acceptably transformational leadership style. Judging from the mean therefore, the score of the chief nurse managers was neither rated as transformational nor was it rated as transactional. The mean of the transactional score, although relatively low, was acceptable. The non-leadership score was, however, too low for this category to be regarded as predominantly non-leader. These results are a matter for concern, because she is the appointed leader of the nursing division. If leadership is to be a shared responsibility reflected from the centre and source of authority, the chief nurse manager in the nursing hierarchy aught to have the highest score in the three levels of nursing. Secondly according to McDaniel and Wolf (1992) in a similar study, it was identified that nurses performed better than non-nurses and that as one moves down the hierarchy of the institutional structure it is anticipated that transformational scores will decrease slightly, with a concomitant emphasis on the transactional scoring representing the daily management in an organisation. The scores in this sample has however, not confirmed this hypothesis and the theoretical assumption for transforming leadership.

The chief nurse manager had an ideal pattern i.e. higher transformational score of 2.6 with relatively low transactional and non-leader scores respectively. However, the mean transformational score of the category of the chief nurse manager as a nurse leader, was the lowest of the five categories of leadership. It was therefore lower than the two nurse leader categories that were operating at a relatively lower level in the hierarchy, and lower than the two other non-nursing leadership levels of the hierarchy operating in the top level triad.

A t-test was conducted to compare the leadership style of different categories of top management and no significant difference was found. A second t-test was carried out to compare the different levels of nurse managers. Here a statistical difference was found between top and operational




Graph 4.3: Levels of Management, Nurses Only

managers in the non-leadership category at the 0.05 level (t= -2.35; df= 10; p= 0.041)

**TABLE 4.5 STATISTICS CORRELATING TOP LEVEL**

**MANAGEMENT BETWEEN AND WITHIN GROUPS:** (n=30)

| Style | Transformational | | | | Transactional | | | | Non-Leadership | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Manlevl | Mn | SD | p | r | Mn | SD | p | r | Mn | SD | p | r |
| Med Sup | 2.8 | .44 | .65 | .24 | 2.3 | 0.5 | .56 | -.30 | 1.9 | 1.1 | .50 | .34 |
| CNM | 2.6 | .76 | .16 | .66 | 2.2 | .69 | .71 | -.20 | 1.4 | .45 | .11 | .72 |
| Hos Adm | 2.9 | .88 | .33 | .48 | 2.6 | .75 | .43 | .48 | 1.7 | .59 | .37 | .44 |
| Areaman | 3.0 | .77 | .47 | .37 | 2.7 | .68 | .45 | -.38 | 1.8 | 0.5 | .18 | .63 |
| Opsman | 2.8 | .77 | .47 | .37 | 2.5 | .77 | .31 | .50 | 2.0 | 0.7 | .24 | .55 |

TABLE 4.5 show statistics correlating top level management between and within groups. There was a significant difference within the various leadership styles, but none that can be explained by differences in leadership positions.

4.3.2 Leadership styles of top level managers

The three top level management categories consisted of the chief medical superintendent, the chief matron and the hospital administrator. The mean of the leadership style of the hospital secretaries in the three styles of focus was the highest, with a score of 2.9 for transformational leadership score. The hospital administrator scored 2.6 for transactional and 1.7 for non-leadership.

The mean of the leadership styles of the medical superintendents was the highest with a score of 2.8 for transformational leadership style, 2.2 for transactional leadership style and 1.9 for laissez-faire leadership style. However, the score of both these non-nursing leaders were too low to be rated as transformational (See table 4.4). The higher level of non-leadership style in medical

superintendent and administrators is noticeable (See table 4.5)

The mean of the top level nurse manager was the lowest in the three leadership styles, namely 2.7 for transformational leadership style, 2.3 for transactional leadeship style and 1.4 for the non-leadership score. The non-leadership score of the chief nurse managers was the lowest score of the three levels and the three styles.

If the non-leadership score of the chief nurse manager had been higher, this might have been regarded as a strength rather than a weakness, since some writers have indicated that the non-leadership style was ideal for a more mature group. For instance, a leader of professors at a university is not expected to monitor closely every movement of other professors in the same way which a sister in charge of the team she is leading in a ward situation.

The chief medical superintendent had the highest mean score in the non-leadership category (1.9), which may be acceptable since they work with high level managers.

Although the top level nurse manager scored the lowest in the transformational and transactional leadership styles, their non-leadership score was also the lowest. Therefore, the chief nurse did not qualify as a leader in any of the three styles dealt with in this study.

On doing a Levene's test for equality of means, there was a statistically significant difference between the nurse manager and the hospital administrator: two tail significance P=0.02 which is significant at the 0.05 level yielding a 95% confidence.

ANOVA F= 2.671 P= 0.051

A t-test indicates the difference to be predominantly between the nurse manager and the hospital administrator (P=0.01), not on the other relationships.

4.3.2.1 Leadership styles of all Medical Superintendents

This category of personnel carries the overall accountability for the institution, as joint manager with a team at top level management. Their leadership and management styles can be expected to influence the institution and colour its functioning. The scores of all medical superintendents are shown in the table 4.6.

Although the pattern for the whole group was ideal, the transformational score was too low.

**TABLE 4.6: LEADERSHIP STYLES OF ALL MEDICAL SUPERINTENDENTS** (n=6)

| STYLE | TRANSFORMATIONAL | | | TRANSACTIONAL | | | NON-LEADERSHIP | | |
|---|---|---|---|---|---|---|---|---|---|
| INST | Mean | S-R | p | Mean | S-R | p | Mean | S-R | p |
| 1 | 2.4 | 0 | 0.9 | 2.3 | 0 | 1.0 | 1.6 | 1.3 | 1.7 |
| 2 | 2.8 | 1 | 0.8 | 2.0 | 1 | .85 | 1.9 | -1 | 1.1 |
| 3- | 3.2 | 2 | 0.8 | 2.2 | -1. | 1.2 | 0.1 | -2 | 1.8 |
| 4 | 2.8 | 1 | 0.9 | 1.7 | 1 | .71 | 1.8 | 0.5 | 0.8 |
| 5 | 2.1 | 2 | 0.5 | 2.4 | 2 | .61 | 0.6 | 0.1 | 3.0 |
| 6 | 3.2 | 1 | 0.9 | 2.8 | -1. | 1.1 | 3.1 | 1.3 | .78 |
| MEAN | 2.8 | | | 2.2 | | | 1.8 | | |
| SD | 0.51 | | | 0.6 | | | 1.1 | | |

Institution 3 appeared to have the most ideal pattern of chief medical superintendent's leadership style (3.2, 2.2 and 0.1), with a transformational leadership style that was higher than the transactional leadership style and the non-leadership styles respectively. The transactional leadership was high enough to be effective when combined with the transformational style, with

a score of 3 or more. Institutions 1, 2 and 4 had a relatively acceptable pattern, with a score that was not high enough to be rated as transformational leadership . Institution 5 had a higher score in the transactional leadership style than in the transformational style. Institution 6 appeared to be anomalous with a very high score for all categories of leadership styles (3.2, 2.8, 3.1).

4.3.2.2: Leadership styles of all hospital secretaries

**TABLE 4.7: LEADERSHIP STYLES OF ALL HOSPITAL SECRETARIES** (n=6 )

| STYLE | TRANSFORMATIONAL | | | TRANSACTIONAL | | | NON-LEADERSHIP | | |
|---|---|---|---|---|---|---|---|---|---|
| INST | Mean | S-R | p | Mean | S-R | p | Mean | S-R | p |
| 1 | 3.3 | 1.3 | 0.79 | 2.6 | 0.7 | 0.85 | 1.8 | -.3 | 1.1 |
| 2 | 3.3 | 1.3 | 0.8 | 3 | -0.6 | 0.9 | 2.3 | -1.3 | 1.1 |
| 3 | 3.4 | -.5 | 1.1 | 2.9 | -0.2 | 1.03 | 1.9 | -1.5 | 1.4 |
| 4 | 2.8 | 0.6 | 0.89 | 2.7 | 0.3 | 0.93 | 0.9 | 0.1 | 1.4 |
| 5 | 2 | 1.1 | 0.7 | 1.8 | 1.3 | 0.6 | 1.2 | 0.1 | 0.9 |
| 6 | 2.5 | -0.1 | 1.0 | 2.5 | -0.4 | 1.1 | 1.9 | -1.6 | 1.4 |
| MEAN | 2.9 | | | 2.6 | | | 1.6 | | |
| SD | 0.88 | | | 0.75 | | | 0.59 | | |

Hospital secretaries form part of the triad of the top level management of the hospital. There is a joint responsibility and accountability to ensure effective management of members of all levels of management. The overall score in this category was ideal but just not high enough to be regarded as transformational (see table 4.7).

Institution 3 had the highest transformational score of 3.4, 2.9 transactional and 1.9 laissez-fare. Institution 1 appeared to have the most ideal pattern of leadership style. It is however noteworthy that self-rating are consistently higher than ratings by subordinates.

In institution 2 the mean of the transactional score was too high (3) and the laissez-faire score

of 2.3 was higher than the norm set in this study. For both categories the mean of raters was higher than the mean of self raters. In institution 4 the transformational score was not high enough to be rated as a transformational leadership style and the rater in the laissez-faire was higher than the self-rater. Institution 5 appeared anomalous. All scores are very low (2.0, 1.8 and 1,2).

In institution 6 the transformational score was below 3.0 and both the raters of the transformational leadership and the transactional leadership had equal scores of 2.5.

4.3.2:3 Leadership styles of all the chief nurse managers

The chief nurse manager is the overall manager of all nursing interventions. This leader is a member of the top level management team and usually controls the largest number of workers.

**TABLE 4.8: LEADERSHIP STYLES OF ALL CHIEF NURSE MANAGERS** (n=6)

| STYLE | TRANSFORMATIONAL | | | TRANSACTIONAL | | | NON-LEADERSHIP | | |
|---|---|---|---|---|---|---|---|---|---|
| INST | Mean | SR-R | P | mean | SR-R | p | Mean | SR-R | P |
| 1 | 2.9 | 0.1 | .42 | 2.5 | 0.3 | 1.04 | 0.9 | -1.1 | 1.6 |
| 2 | 2.3 | 0.0 | .88 | 2.3 | 0.2 | 1.08 | 1.7 | -0.2 | 1.05 |
| 3 | 2.9 | 0.5 | .89 | 1.9 | -1 | 1.16 | 1.1 | -1.3 | 1.3 |
| 4 | 2.3 | 0.5 | .85 | 2.4 | 0.2 | 1.0 | 1.3 | -0.2 | 1.3 |
| 5 | 1.9 | 0.9 | .32 | 1.8 | 1.4 | 0.6 | 1.3 | 0.0 | 1 |
| 6 | 2.2 | -0.3 | .96 | 2.6 | 0.3 | 1.04 | 1.8 | 0.1 | .9 |
| MEAN | 2.65 | | | 2.2 | | | 1.4 | | |
| SD | 0.76 | | | 0.7 | | | 0.5 | | |

In none of the six institutions was the chief nurse manager ( leadership) score high enough to be rated as either transformational or transactional(see table 4.8). Institution 1 fared the best in this section although scores were not high enough to be rated either as transformational or transactional leadership styles.

However, the trend seems to be that the raters accorded chief nurse managers higher scores in the non-leadership style than the chief nurse managers rated themselves (institutions 1,2,3,4) and the balance between the transformational and transactional leadership is not ideal (institutions 2, 4 and 6).

4.3.3 Leadership styles of nursing middle managers

The middle management of the hospital consisted of the area managers, the deputy to superintendents, and other senior officials in personnel. In this study only nurse middle managers were included.

**TABLE 4.9: LEADERSHIP STYLES OF ALL MIDDLE NURSE MANAGERS** (n=6)

| STYLE | TRANSFORMATIONAL | | | TRANSACTIONAL | | | NON-LEADERSHIP | | |
|---|---|---|---|---|---|---|---|---|---|
| INST | Mean | S-R | p | Mean | S-R | p | Mean | S-R | p |
| 1 | 2.7 | 0.4 | .93 | 2.4 | -0.5 | 1.1 | 1.9 | 0.1 | 1.0 |
| 2 | 3.0 | 0.3 | .9 | 2.5 | 0.7 | .84 | 1.1 | 0.0 | 1.0 |
| 3 | 3.0 | 0.2 | .93 | 2.6 | 0.3 | .92 | 2.1 | 0.7 | 1.05 |
| 4 | 3.2 | 0.5 | .84 | 2.3 | 0.2 | 1.7 | 1.9 | 0.5 | 1.11 |
| 5 | 3.3 | 0.5 | .91 | 2.9 | -0.3 | .90 | 2.3 | 0.3 | .87 |
| 6 | 3.1 | 1.0 | .78 | 2.7 | -0.2 | 1.0 | 1.8 | 0.3 | 1.1 |
| MEAN | 3.0 | | | 2.6 | | | 1.8 | | |
| SD | 0.8 | | | 0.68 | | | 0.5 | | |

In institution 1 the pattern was ideal, but the score was too low to be regarded as a transformational leadership style (see table 4.9).

From institutions 2-6, all patterns were ideal and high enough to be regarded as transformational leadership with a correspondingly high score in the transactional leadership style to be regarded as effective. In the transactional scores of institutions 1, 5 and 6, the raters had higher scores than their self-raters. In institution 3 and 5 the non-leadership scores were relatively high (2.1 and 2.3). Institution 5 had the highest scores in all three styles of leadership.

4.3.4 Leadership style of all operational nurse managers

This category consists of the single unit management cadre of nurses. The overall mean was 2.8

**TABLE 4.10: LEADERSHIP STYLES OF ALL OPERATIONAL NURSE MANAGERS** (n=6)

| STYLE | TRANSFORMATIONAL | | | TRANSACTIONAL | | | NON-LEADERSHIP | | |
|---|---|---|---|---|---|---|---|---|---|
| INST | Mean | S-R | P | Mean | S-R | P | Mean | S-R | P |
| 1 | 2.7 | 0.4 | .85 | 2 | -0.6 | .89 | 2 | -0.3 | 1.1 |
| 2 | 3.5 | 0.3 | .94 | 2.8 | 0.3 | .93 | 1.5 | -1.3 | 1.4 |
| 3 | 2.9 | 0.0 | 1.0 | 2.3 | 0.1 | .96. | 3.2 | 0.4 | .94 |
| 4 | 2.9 | 0.4 | .94 | 2.6 | 0.2 | .96 | 1.6 | 0.3 | .94 |
| 5 | 2.3 | 0.0 | 1.0 | 2.8 | -0.5 | .93 | 1.9 | 0.5 | .84 |
| 6 | 2.7 | 1.2 | .78 | 2.1 | 0.1 | 1.0 | 1.9 | 0.3 | 1.2 |
| MEAN | 2.8 | | | 2.5 | | | 2.0 | | |
| SD | 0.77 | | | 0.7 | | | 0.7 | | |

for transformational leadership style, 2.5 for transactional leadership style and 2.0 for non-leadership style. A transformational score of 2.8 is lower than the accepted norm of 3, whereas a non-leadership score of 2.0 is too high. This category would, on the whole, be regarded as

having a non-leadership style. Institution 2 displayed the most ideal pattern of leadership style (3.5, 2.8 and 1.5), with a transformational leadership value that was above the score of 3, and higher than the transactional and the non-leadership styles respectively. The transactional leadership style was high enough to be effective when combined with the transformational leadership style. Institutions 1, 4 and 6 appear to be ideal but the transformational score was not high enough for the leadership to be regarded as transformational. The non-leadership scores were higher in institutions 1, 3, 5 and 6 than in institution 2 and 4. In institution 3 the non-leadership score was the highest at 3.2. This was anomalous and would generally be indicative of a predominant non-leadership style. In institution 2 the transformational leadership score was the highest.

## 4.4 EFFECTIVENESS OF INSTITUTIONS

Effectiveness in this context was given by the results of;

i) goal attainment as indicated by the respondents selected by random sampling in that particular institution;

ii) level of support for the institution, by members of staff and members of the community; and

iii) the systems achievement, as assessed by the instrument designed by the researcher, the instrument initially designed by Beattie, Rispel and Cabral (1995).

The rating scale developed by the researcher and assessed by the staff and community.

1.4.1 Summary of goals of the institution

A content analysis of the types of goals identified by constituencies delivers 32 goals as set out in TABLE 4.11. The numbers inside the columns represents the goal number of the institution that has identified the goal it as important for the institution. Some goals are almost universally mentioned e.g., goal 1 while others are very unique e.g. goals 7, 14, 15 and 25 stated by one institution only. (See A Summary of Goals ).

TABLE 4.11: A SUMMARY OF GOALS OF ALL THE SIX INSTITUTIONS

| INSTITUTIONS | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| GOALS | | | | | | |
| 1 To ensure an effective and comprehensive holistic optimal total patient care accessible, appropriate, accessible, affordable for acutely ill patients | 1 | 1 | 1 | 1 | 1, 2 | 1, 9 |
| 2.To ensure improving the existing proposed goals in order to maintaining a high standard of care. | 5 | | | 7 | 3 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 3. Lndividualising patient welfare and compassion satisfying the basic needs at a physical, psychological, social and spiritual level. | 1, 7 | 6, 7 | 7 | 6, 12 | 3 | |
| 4. Human resource development and training to ensure continued testing and improvement of existing skills to ensure safe and professional practice. | 3 | 2 | 2 | 2 | 5 | 7 |
| 5.Health education to ensure meaningful input towards achieving National objectives for health. | 2, 5 | 2 | 2 | 2 | 5 | 2 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 6.Safe therapeutic environment conducive to speedy recovery of patients offering shelter to the destitute and stray psychiatric patients. | 6 | | | | 9 | |
| 7. To ensure transparency in the selection for employment and promotion avoiding discrimination | 6 | | | | | |
| 8 Staff essential needs e.g.social and spiritual support e.g. crèche or baby sitters and nurses' home. | 8 | | | | 6 | |
| Control of finance and hospital supplies and prevent abuse of state funds. | 9 | | | 5 | | |
| 10. to act as a referral base | 10 | 10 | 10 | 3, 10 | 10 | 12 |
| 11. Effective communication. | 11 | 9, 10 | 5 | 9 | 4 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 12.Increased staffing, ratios with adequate remuneration to enable a highly motivated staff in order to increase productivity | 12, 5 | 7 | 12 | 7 | 12 | |
| 13.Research resource, laboratory, radiology and high technology and ICU. | | 11, 3 | 9,11 | 5, 9 | 5 | 3 |
| 14. To ensure a well organised burns unit to maximise care for severely burnt cases admitted . | | 5 | | | | |
| 15. Disciplinary , grievance and conflict resolution mechanism. | 4 | | | | | |
| 16. Quality assurance program and service of excellence upholding human dignity . | 5 | 8 | 8 | 8 | 2 | 6 |
| 17. Team approach with the institution at community and regional levels | 2 | 9 | 10 | 1 | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 18 Striving to become a user friendly hospital by keeping abreast with the legislation affecting the practice of nursing and providing facilities for effective training of enrolled nurses. | 3 | 9 | | | | |
| 19. counselling and emotional mental support to patients with suicidal tendencies e.g. H.I.V. etc | | 11 | 4 | | | |
| 20. Emergency trauma, CCU, high technology | | 12 | | | 7 | |
| 21. Reduction of infant mortality rate | | | 6 | | | 2 |
| 22. Primary Health care, mobile units , home based care including traditional healers at district and community levels. | | 10 | 3 | | | 8 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 23. Equality for all better social life to ensure good quality of life regardless of race | 2 | 1 | 8 | | | |
| 24. Community participation and out-reach programmes for self help | | | | 4 | 8 | 4, 5, 7, 12 |
| 25.Improved transport from the community to the centre and to the referral hospital. | | | | | 4 | |
| 26. Dispel impression that all government services are corrupt. | | | | 12 | | |
| 27. To ensure welfare of personnel who will attend to the complaints of staff and the public in order to maintain good interpersonal and interdepartmental relationships. | 11 | 6 | | 4 | 3 | |
| 28. Stress and negative effects of drug abuse and alcoholism. | | | 5 | | 11 | 10 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 23. Equality for all better social life to ensure good quality of life regardless of race | 2 | 1 | 8 | | | |
| 24. Community participation and out-reach programmes for self help | | | | 4 | 8 | 4, 5, 7, 12 |
| 25.Improved transport from the community to the centre and to the referral hospital. | | | | | 4 | |
| 26. Dispel impression that all government services are corrupt. | | | | 12 | | |
| 27. To ensure welfare of personnel who will attend to the complaints of staff and the public in order to maintain good interpersonal and interdepartmental relationships. | 11 | 6 | | 4 | 3 | |
| 28. Stress and negative effects of drug abuse and alcoholism. | | | 5 | | 11 | 10 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 29. Occupational therapy and rehabilitation | 1 | 11 | 11 | 11 | 1,11 | 11 |
| 30.Haven for the sick destitute and less fortunate. | | | 1 | | 10 | |
| 31. Job opportunity, secure work and job satisfaction with a high staff morale. | 2 | 4 | 12 | 7 | 3, 8 | 4 |
| 32. Accepting the principle of equality for all and better social life to ensure good quality of life regardless of race accepting cultural differences of the communities. | 1, 2 | 1 | 8 | | | |

Goals of each of the six institutions were developed by members of staff as well as members of the community. Twelve goals were developed in each of the six institutions. However these goals were not necessarily the same goals in each of the six institutions. The goal were broad and encompasses many different aspects.

**TABLE: 4.12: GOAL ATTAINMENT AS RATED BY STAFF AND COMMUNITY** (n =121)

| INST. | STAFF% | SD | COMMUNITY% | SD | MEAN |
|---|---|---|---|---|---|
| 1 | 74 | 4.4 | 71 | 10.4 | 73 |
| 2 | 68 | 6.5 | 76 | 1.1 | 72 |
| 3 | 74 | 7.8 | 72 | 2.1 | 73 |
| 4 | 68 | 6.2 | 74 | 1.9 | 71 |
| 5 | 65 | 7.5 | 68 | 9.6 | 67 |
| 6 | 69 | 8.5 | 68 | 3.1 | 69 |
| MEAN | 70 | 6.8 | 72 | 4.7 | 71 |
| SD | 3.6 | | 3.2 | | |

Assessment of goal attainment

The level of goal attainment in each of the six provincial hospitals was rated by the two stake holder groups; namely the staff, i.e personnel working in that institution and the community represented by community leaders, namely the principals of schools, ministers of religion, businessmen and civic leaders in the area where the institution is located (see table 4.11).

The average rating for goal attainment overall by the staff was 70% and by the community was 72%. There was no statistically significant difference between the ratings of the staff and the community.

Institutions 1 and 3 obtained 74% and were the best according to the staff assessment. According to the assessment by the community, institution 2 was the best with 76%, followed by institution 4 with 74%. The assessment by the community was relatively higher than the assessment by the staff.

The lowest institution was institution 5 with 65% as assessed by the staff while institution 5 and 6 had 68% as assessed by the community. Both these institutions were the smaller institutions with a bed state of less than 200 patients; and they were in a deep rural setting. This situation is characterised by limited resources, poor transport and other communication facilities such telephones, limited technology such as X-Ray facilities, and lack of doctors and nursing personnel. There is however a high degree of interpersonal and interdependent interaction and proximity as these institutions operate as a close family unit.

The larger institutions (1 and 2) appeared to be performing better than the smaller institutions (5 and 6) in terms of goal attainment. The community gave a higher rating of effectiveness than the staff (see table 4.11). This implies that whilst the staff members perceive their performance of health care delivery available as less than what it should be for goal attainment to be achieved adequately, the community perceived health care delivery as being reasonably offered.

All institutions indicated the importance of: patient care; quality assurance; human resource development; health education; rehabilitation and occupational therapy; the institution acting as a referral base; as well as job opportunity; secure work environment; and job satisfaction with a high staff morale.

Only institution 1 had more than 3 goals not indicated by all five other institutions. This institution was the only one to include the issue of transparency on selection procedure, employment and promotion, avoiding discrimination; the welfare of personnel; adequate remuneration for staff; and the need for disciplinary and grievance procedures and conflict resolution mechanisms.

Institutions 2 and 5 each had one unique goal not mentioned by any of the other five institutions. These were as follows: institution 2 was the only one that raised the issue of the burns unit,(goal number 6) and patients with suicidal tendencies (goal number 11). Institution 3 highlighted the institution as a haven for the sick and destitute (goal number 1). Institution 4 stressed the importance of creating an image that will dispel the impression that all government service are corrupt (goal number 12). Institution 5 highlighted transport problems for patients (goal number 4).

Five out of six institutions indicated the importance of individualising patient care, being compassionate and aiming at satisfying the basic needs at the psychological social and spiritual levels; effective communication; increased staffing ratios; and research.
Smaller and more rural institutions laid a lot of emphasis on community participation, the use of mobile units, and deployment of mutual and self-help groups as out-reach programmes.

The assessment of the effectiveness with which the needs of these institutions are met was made. The differences in the assessment between staff and community may be because the staff tends to be aware of some problems inherent in the system, based on the ability to acquire resources, maintain itself internally as a social system, and interact successfully with the external environment. The community may not be aware of these internal problems, hence the relatively higher score in rating by the community than by the staff. (See table 4.12)

It is however interesting to note that goal number one was noted as patient care in all the six institutions. Health education, human resources development and training, the institution acting as a referral base, occupational therapy, job opportunity for members of the local community, and

the importance of quality assurance, that is seven out of twelve goals or some 58% of the total goals mentioned were common to all institutions.

A t-test was conducted to identify if there was significant correlation of staff and community assessment . The difference between the mean assessment and the community was not significant. ( t= .79, df= 10 , p=.429)

**TABLE 4.13: MEAN GOAL ATTAINMENT AS ASSESSED**

**BY STAFF AND COMMUNITY PER INSTITUTION SIZE** staff (n = 99) community (n=22 )

| INSTITUTION | Staff | | | Community | | |
|---|---|---|---|---|---|---|
| | Cases | Mean | SD | Cases | Mean | SD |
| Above 400 | 34 | 71 | 6.2 | 7 | 74 | 7.7 |
| 200-400 | 32 | 71 | 7.6 | 8 | 71 | 3.9 |
| Below 200 | 33 | 67 | 8.2 | 7 | 67 | 6.0 |
| Mean | 99 | 70 | 7.5 | 22 | 71 | 6.5 |
| SD | | 1.9 | | | 2.5 | |

Larger institutions had higher scores than smaller institutions in both staff and community scores. Cases in this context refer to the number o respondents. However a t-test yielded no statistically significant differences. (See table 4.13)

Looking at the achievement of each institution with regard to individual goals , the variance was large (see Table 4.13). No institution received a rating of above 50% for all goals.

Institution 1

Goal no 2 achieved the highest score of 88%. This goal dealt with the team approach to health education for staff and community. A well informed health team is a prerequisite that provides basic education and offers on-going knowledge and skills to ensure improvement in the quality of life for the whole community in the region. Goal number 9 scored lowest with a score of 28%. This goal dealt with proper utilisation of available resources and financial control, to avoid fruitless expenditure.

**TABLE 4.14: MEAN GOAL ATTAINMENT PER INSTITUTION PER GOAL**

As assessed by staff and community (n =121)

| INST | 1 | 2 | 3 | 4 | 5 | 6 | | |
|---|---|---|---|---|---|---|---|---|
| GOALS | % | % | % | % | % | % | MEAN | SD |
| 1 | 83 | 64 | 68 | 42 | 61 | 56 | 62 | 13.5 |
| 2 | 88 | 54 | 56 | 63 | 71 | 46 | 63 | 14.8 |
| 3 | 72 | 54 | 74 | 69 | 36 | 68 | 62 | 14.6 |
| 4 | 47 | 46 | 46 | 47 | 31 | 33 | 42 | 7.5 |
| 5 | 65 | 36 | 46 | 43 | 29 | 50 | 45 | 12.4 |
| 6 | 38 | 36 | 58 | 45 | 29 | 47 | 42 | 9.8 |
| 7 | 51 | 31 | 40 | 36 | 35 | 41 | 39 | 7.0 |
| 8 | 53 | 33 | 38 | 21 | 32 | 55 | 39 | 13.1 |
| 9 | 28 | 32 | 39 | 28 | 28 | 27 | 30 | 4.6 |
| 10 | 36 | 31 | 35 | 28 | 34 | 36 | 33 | 3.2 |
| 11 | 43 | 19 | 43 | 18 | 30 | 34 | 31 | 11.1 |
| 12 | 28 | 24 | 23 | 12 | 18 | 17 | 20 | 5.9 |
| Mean | 53 | 38 | 47 | 38 | 36 | 42 | 42 | 6.4 |
| SD | 20.3 | 13.4 | 14.4 | 17.4 | 14.8 | 14.2 | | |

Institution 2

Goal number 1 achieved the highest with a score of 64%. This goal dealt with maintenance of optimal comprehensive health care which is affordable, accessible and most appropriate and possible for clientele, providing a high standard of patient care to all categories regardless of colour, creed or race. Goal no 11 scored the lowest, with a score of 19%. It dealt with rehabilitation , physiotherapy , occupational health and counselling by religious leadership and offering family support to members with suicidal tendencies.

Institution 3

Goal no 3 achieved the highest with a score of 74%. This goal dealt with a high standard of primary health care referring patients to traditional healers if necessary at district and community level. Goal number 12 scored the lowest, with a score of 23%.This goal dealt with increasing staffing of all categories to ensure coping with the increasing health needs.

1nstitution 4

Goal no 3 achieved the highest with a score of 69%. This goal dealt with the fact that the centre must be utilised for data gathering, for research and monitoring all referrals. Goal no 12 scored the lowest, with a score of 12%. This goal dealt with creating a good impression to the local community so that they sense that they are getting the best possible treatment, and dispelling the impression that all government services are corrupt.

Institution 5

Goal no 2 achieved the highest with a score of 71%. This goal dealt with the provision of efficient and effective quality basic nursing care to bed-ridden patients who are discharged and could be

nursed in their own homes with some guidance. Goal no 12 scored the lowest with a score of 18%. This goal dealt with increases in staff establishment with the view to avoid over-crowding and long queues.

Institution 6

Goal no 3 achieved the highest with a score of 68%. This goal dealt with laboratory utilisation by the institution e.g. the offer of diagnostic blood, urine and other tests carried out by the institution as diagnostic facility. Goal no 12 scored the lowest, with a score of 17%. This dealt with community involvement in order to produce the highest possible quality of care by developing social and emotional support for crisis interventions, which will ultimately decrease prolonged stays in hospital, and encourage home-based care through social workers' interventions.

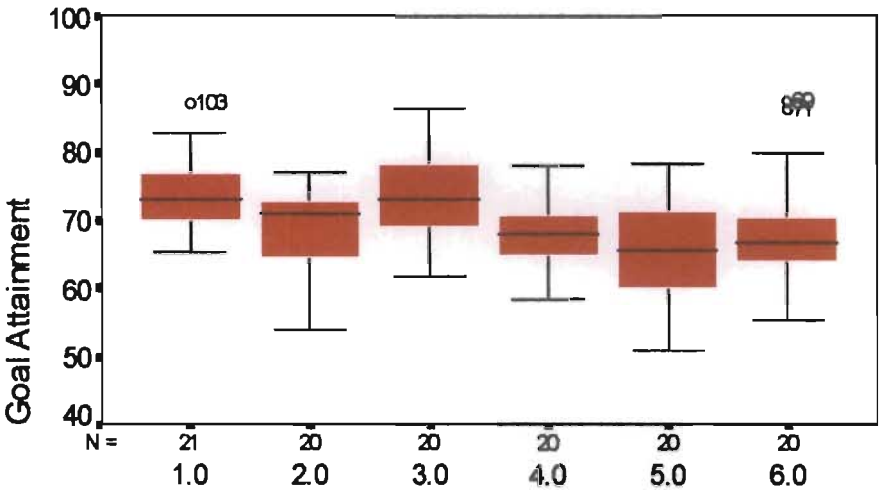
Five out of six institutions identified the following common goals in their institutions: individualising patient care, the need for increasing staffing ratios, the need for effective communication, the need for a research resources laboratory, the need to provide radiology service, the need for high technology and the need for establishing an I.C.U facility

Four out of the six institutions indicated that team approach and welfare of personnel which included attending to the complaints of staff and the public in order to maintain good interpersonal and interdepartmental relationships. This indicated that more than 60% of the needs were common goals to 4 out of 6 institutions, reflecting that more than 50 % of the goals are held in common. Therefore improving the existing proposed goals in order to maintain a high standard of care; primary health care; mobile units; and home-based care, including traditional healers at district and community levels; equality for all; a better social life to ensure a good

quality of life regardless of race; community participation; and out-reach programmes for self help, stress and negative effects of drug abuse and alcoholism will improve health care standards upheld.

Two out of six i.e. 33% of the institutions had the following goals held in common: safety of the environment; promoting a therapeutic environment offering shelter to the destitute and stray psychiatric patients; staff essential needs such as a créche or baby sitter, nurses' homes and church facility; control of finance and hospital supplies and prevention of abuse of state funds; reduction of infant mortality rate; striving to become a user-friendly hospital by keeping abreast with the legislation affecting the practice of nursing; and providing facilities of effective training of enrolled nurses; counselling and offering emotional support to patients with suicidal tendencies eg patients with H.I.V; the need for emergency trauma, CCU and high technology; providing a haven for the sick, destitute and less fortunate.

In a further break down 32 other units of analyses were identified as unique and important to specific institutions depending on their local needs of the institution as such. (See table 4.11) The above goals reflect a fair view of goals common in health services in KwaZulu/Natal and indeed in South Africa generally, because it indicates the basic requirements for meeting the needs for health care, which covers the planning requirements for dire needs for during an emergency and for short and long term strategic planning .




Graph 4.4: Goal Attainment by Institution

4.4.2 LEVEL OF SUPPORT FROM STRATEGIC CONSTITUENCY.

According to the Multiple-Organisational Level Leadership Model (Hunt, 1991), the level of support from strategic constituencies, its resources and prestige, and its cultural fit are important aspects of effectiveness.

**TABLE 4.15: GOAL ATTAINMENT AND SUPPORT PER INSTITUTION** (n=121)

| INSTITUTION | GOAL ATTAINMENT% | SUPPORT LEVEL% |
|---|---|---|
| 1 | 72 | 64 |
| 2 | 67 | 58 |
| 3 | 77 | 52 |
| 4 | 68 | 51 |
| 5 | 64 | 56 |
| 6 | 69 | 61 |
| MEAN | 70 | 57 |

With reference to the level of support (see table 4.15), institution 1 scored the highest, followed by institution 6. Institution 4 had the lowest support level compared to the other institutions. There is no relationship between level of support and goal attainment as calculated by a Pearson correlation, (r= .05, df= , p= .56).

**TABLE 4.16: LEVEL OF SUPPORT ACCORDING TO INSTITUTION SIZE**(n= 3)

| INSTITUTION SIZE | LEVEL OF SUPPORT% | GOAL ATTAINMENT |
|---|---|---|
| Above 400 beds | 56.10 | 69.5 |
| 200-400 beds | 53.33 | 67.5 |
| below 200 beds | 57.64 | 66.5 |

Goal attainment was higher in large institutions than in the smaller institutions (see table 4.16) but

differences were not significant. Although the level of support was highest in the smaller institutions the goal attainment was the lowest . Variables used as a measure of support were orientated around the following; available human and material resources, prestige held in the form of respect the institution enjoys from the members of the public, the image the hospital reflects to the members of the public and cultural issues surrounding health care generally as reported by members of staff as well as members of the public. Support levels included the head office; top level managers in the institutions, highest nursing management in the institution, support services in health care and support from staff and the community. Health care is a team effort by all stake holders.

### 4.4.3 SYSTEM'S ACHIEVEMENT

This section essentially deals with the extent to which systems and subsystems have been put into place to allow the institutions to function. This was measured according to seven categories as set out in the table 4.17 for all the institutions, while the performance of individual institutions are reflected in table 4.18.

**TABLE 4.17: SYSTEMS ACHIEVEMENT MEAN OF ALL INSTITUTIONS** (n=6)

| VARIABLES | MEAN% | SD | MINM% | MAXMM % |
|---|---|---|---|---|
| Access to institution | 60 | 4.3 | 55 | 67 |
| Community-out-reach programmes | 68 | 7.0 | 60 | 76 |
| Resource management | 68 | 8.8 | 61 | 85 |
| Personnel management | 69 | 21.2 | 41 | 91 |
| Patient satisfaction | 69 | 10.6 | 50 | 80 |
| Process of care | 71 | 6.9 | 60 | 80 |
| Infrastructure | 83 | 6.9 | 74 | 92 |
| Average Total | 59 | 9.3 | 44 | 71 |

The mean of infrastructure was the highest with a score of 83% whilst the mean of access at institutional level was the lowest with 60%. This indicates that on the average quality care offered at institutions is acceptable.

**TABLE 4.18: CATEGORIES PER INSTITUTION**

| Inst | Cat 1 | Cat 2 | Cat 3 | Cat 4 | Cat 5 | Cat6 | Cat7 | Mean | SD |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 76 | 66 | 73 | 61 | 50 | 74 | 77 | 68 | 9.1 |
| 2 | 87 | 59 | 91 | 85 | 80 | 76 | 70 | 75 | 10.2 |
| 3 | 92 | 58 | 41 | 70 | 72 | 46 | 64 | 63 | 15.9 |
| 4 | 74 | 71 | 46 | 62 | 72 | 60 | 70 | 65 | 9.1 |
| 5 | 86 | 56 | 90 | 65 | 66 | 72 | 60 | 71 | 11.9 |
| 6 | 84 | 44 | 70 | 67 | 76 | 66 | 80 | 70 | 12 |
| Mean | 83 | 59 | 69 | 68 | 69 | 65 | 70 | 69 | 11.3 |
| SD | 6.3 | 8.4 | 19.4 | 9.6 | 10.3 | 6.9 | 8.4 | 9.9 | 11.4 |

**Key**

Cat1= INFRASTRUCTURE

Cat2= ACCESS TO INSTITUTION

Cat3= MANAGEMENT OF PERSONNEL

Cat4= MANAGEMENT OF RESOURCES

Cat5= PATIENT SATISFACTION

Cat6= COMMUNITY OUTREACH PROGRAMMES

Cat7= PROCESS OF CARE

The assessment of the seven categories is indicated as follows:

Category 1: INFRASTRUCTURE

This category dealt with clean drinkable water, bath water facilities, energy, structure of the

building, toilet facilities, washing facilities for staff, functioning refrigerators (electricity or gas) , emergency resuscitation kit, and nutritional needs. The highest score was in institution 3, with a mean score of 92%. The lowest score was in institution 4, with a mean score of 74% (table 4.18).

**TABLE 4.19: INFRASTRUCTURE AND INSTITUTION BY SIZE** (n= 6)

| Variable | Mean | SD | Cases |
|---|---|---|---|
| Above 400 | 81 | 7.8 | 2 |
| Between 200-400 | 83 | 12.73 | 2 |
| Below 200 | 85 | 1.4 | 2 |
| Total | 83 | 6.9 | 6 |

The highest score was in the smaller institutions, followed by the medium sized institutions. The large institutions had the lowest score at 81%. The average score was 83%. (See table 4.18)

Category 2 :ACCESS TO INSTITUTION

This category dealt with the size of the building for patient load, access by disabled patients and the range of routine services available in the area. Services available included the following; 24-hour emergency care, trauma, surgery, orthopaedics; curative (acute and chronic) medical conditions. Community outreach programmes included : Immunisation, Family Planning, Mental Health, H.I.V and STD treatment, Ophthalmology, E.N.T. Surgery, Gynaecology, Ante-Natal Care, Obstetrics and Post Natal Care . Ambulance services available were evaluated for position in relation to the community served, emergency instructions after-hours and outpatients facility availability.

The highest score was in institution 4 with a mean of 71%. The lowest score was in institution

6 with a mean 44%. The score of access assessed by institution size given in table 4.20.

**TABLE 4.20 : ACCESS TO INSTITUTION BY INSTITUTION SIZE** (n=6)

| Variable | Mean | SD | Cases |
|---|---|---|---|
| Above 400 | 62 | 4.9 | 2 |
| Between 200-400 | 64 | 9.2 | 2 |
| Below 200 | 50 | 8.5 | 2 |
| Total | 59 | 9.3 | 6 |

The highest score was in the medium sized institutions followed by the large institutions. The small institutions were the lowest with a score of 50%. The average total was 59%.

Category 3: MANAGEMENT OF PERSONNEL

This category included continuing education (seminars, conferences, courses); standard up-to-date health reference materials; job description; visits by or meetings with supervisors; infection control programmes; quality assurance at the hospital; and crèche facilities for personnel.

The highest score was in institution 2 with a mean score of 91% and the lowest score was in institution 3 with a mean score of 41% revealing a large variation between institutions. Institution 2 is categorised as a large institution whilst institution 3 is in the medium sized hospital setting.

**TABLE 4.21: PERSONNEL MANAGEMENT AND INSTITUTION SIZE** (= 6)

| Variable | Mean | SD | Cases |
|---|---|---|---|
| Above 400 | 82 | 12.7 | 2 |
| Between 200-400 | 44 | 3.5 | 2 |
| Below 200 | 80 | 14.1 | 2 |
| Total | 69 | 21.2 | 6 |

The highest score was in large hospitals followed by smaller hospitals by a narrow margin. A large difference occurred between the medium sized institutions and the other institutions. The medium sized institutions had the lowest score of 44%. The average was 69% (See table 4.21).

Category 4: MANAGEMENT OF RESOURCES

This category included storage of drugs; drug supply; patients' records; fire exit; fire extinguishers; x-ray facility; storage of waste; removal of toxic waste; hygiene and cleanliness; laundry facilities; stores and mortuary facility.

The best score was in institution 2 with a mean of 85% and the lowest score was in institution 1 with a mean of 61%

**TABLE 4.22: RESOURCE MANAGEMENT AND INSTITUTION SIZE** (n=6)

| Variable | Mean | SD | Cases |
|---|---|---|---|
| Above 400 | 73 | 17.1 | 2 |
| Between 200-400 | 66 | 5.7 | 2 |
| Below 200 | 66 | 1.1 | 2 |
| -Total | 68 | 8.0 | 6 |

The highest score was in the larger institutions. The medium sized and smaller institutions had tally scores of 66%. (See table 4.22)

Category 5: PATIENT SATISFACTION.

Five patients and five visitors were interviewed in each of the six institutions; a total of 60 respondents. This category included time spent waiting to be attended to; waiting area; patients' complaints or suggestions; patients' privacy; and health education material. The best score was

in institution 2 with a mean of 80%. The least score was in institution 1 with a mean score of 50 %.

**TABLE 4.23: PATIENT SATISFACTION AND INSTITUTION SIZE** (n=60

| Variable | Mean | SD | Cases |
|---|---|---|---|
| Above 400 | 65 | 21.2 | 2 |
| Between 200-400 | 72 | 0.0 | 2 |
| Below 200 | 71 | 7.1 | 2 |
| Total | 69 | 10.6 | 6 |

The highest score was in the medium sized institutions, followed by the smaller institutions. The lowest score was in the larger institutions. The average score was 69%, confirming consistency in patient's realistic perception of satisfaction in a health care institution given the constraints and the fact that resources are generally limited.

Category 6: COMMUNITY OUTREACH PROGRAMMES

This category dealt with community participation, integration with the community (intersectoral co-operation), outreach activities; frequency of outreach activities; and social work. Outreach services included: Maternal and child health, Ante-Natal and Post-Natal care; Immunisation; Child Health and Growth Monitoring; Family Planning; Psychiatric care; Curative care, Geriatric care, Chronic care and others.

The highest score was in institution 2 with 76% and the lowest score was in institution 3 with 46%.( See table 4.18)

**TABLE 4. 24: COMMUNITY OUT REACH PROGRAMMES AND INSTITUTION SIZE** (n=6)

| Variable | Mean | SD | Cases |
|---|---|---|---|
| Above 400 | 75 | 1.4 | 2 |
| Between 200-400 | 60 | 0.0 | 2 |
| Below 200 | 69 | 4.2 | 2 |
| Total | 68 | 7.0 | 6 |

The larger institutions had a higher score. The lowest score was in medium sized institutions. The average total was a score of 68%. (See table 4.18)

Category 7: PROCESS OF CARE

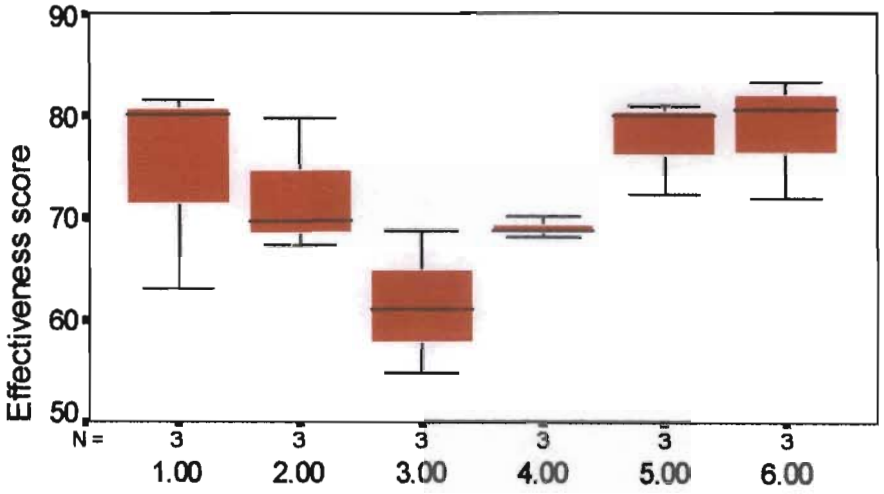
The process was measured in at least four of the sites available for chronic disease attendance, the number of visits attended and the proportion of patients under control.

The highest score was in institution 6 with a mean score of 80% and the lowest score was in institution 5 with a mean score of 60%. ( See table 4.18).

**TABLE 4.25: PROCESS OF CARE BY INSTITUTION SIZE** (n=6)

| Variable | Mean | SD | Cases |
|---|---|---|---|
| Above 400 | 74 | 4.9 | 2 |
| Between 200-400 | 70 | 0.0 | 2 |
| Below 200 | 70 | 14.1 | 2 |
| Total | 71 | 6.9 | 6 |

The highest score was in the larger institutions. Each of the medium sized and smaller institutions had tally marks of 70%. The average mean was 71% ( See Table 4.24).




Graph 4.5: Effectiveness of Institutions

The overall quality effectiveness with regard to all seven categories in the six institutions was 69%

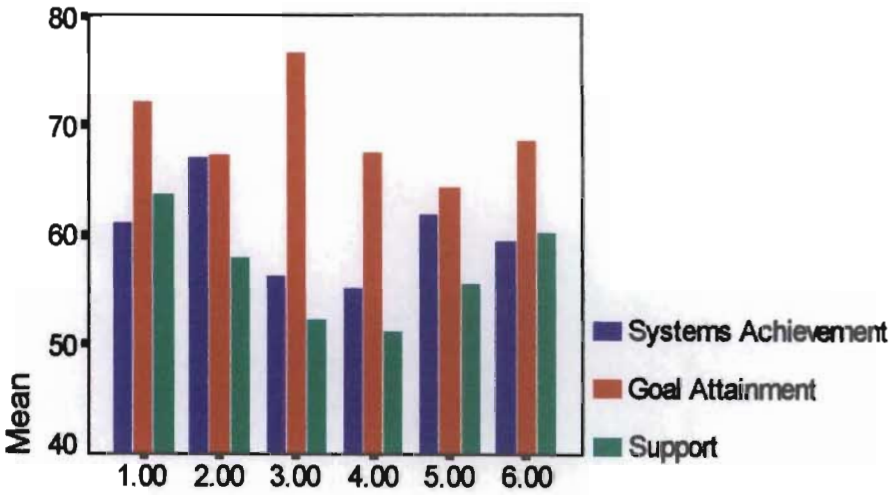
Institution 2 was the best in 4 categories namely, community out-reach, resource management, personnel management and patient satisfaction ( categories 2, 3, 4 and 5) Institution 1 had the lowest score in 3 categories, namely categories 1, 4 and 5. Category 4 and 5 dealt with management of resources and patient satisfaction respectively. Both institutions 1 and 2 were large institutions.

#### 4.4.4 OVERALL HOSPITAL EFFECTIVENESS

**TABLE 4.26: COMPARISON : HOSPITAL EFFECTIVENESS SUB-UNITS**

| Inst. | Goal attainment | L evel of support. | System's achievement | TOTAL |
|---|---|---|---|---|
| 1 | 73 | 64 | 68 | 68 |
| 2 | 72 | 58 | 75 | 68 |
| 3 | 73 | 52 | 63 | 63 |
| 4 | 71 | 51 | 65 | 62 |
| 5 | 67 | 56 | 71 | 65 |
| 6 | 67 | 61 | 70 | 66 |
| Mean | 71 | 57 | 69 | 65 |
| SD | 2.8 | 5.1 | 4.3 | 2.5 |

The effectiveness subunits are namely goal attainment, level of support and system's achievement as indicated in table 4.25. The overall total effectiveness across all six institutions was 65%. The highest mean was in goal attainment, it was 71%, followed by systems achievement 69%. The lowest score was in level of support as a subsystem.The largest standard deviation was in level of support. (5.1). The differences summarised in table 4.26 is illustrated in figure 6. In institutions




Graph. 4.6: Effectiveness Indices by Institution

3 and 4 the difference between indices seem greater than in the other institutions. If one looks at figure 5, the patterns of variance is very different.

## 4.5: RELATIONSHIP BETWEEN LEADERSHIP AND HOSPITALEFFECTIVENESS

The relationship between leadership style and hospital effectiveness was investigated using a MANOVA analysis. This type of analysis is used when there are more than one dependent variable influenced by a set of independent variables (Dillion and Goldstein, 1984). The aim is to test for significant differences in the dependent variables due to changes in one or more of the independent variables. In this study, leadership style was treated as an independent variable to establish whether changes in leadership style make a significant difference to hospital effectiveness as measured by two components (level of support and goal attainment). The measure of systems achievement could not be included in the statistical analysis because data was summarised to a sample size of 6 institutions. However, as a component of support, prestige involving the respect enjoyed by the institution and the image projected by the institution to the public was used as a measure of system's achievement.

In order to do this analysis, the total sample of 122 respondents was used. The leadership style per hospital is reflected in table 4.3. This was generalised to every respondent representing that institution.

In the analysis, levels of support was broken down into its components to explore the influence of each variable. The following components were identified: general support and support when threatened; available resources; respect by members of the public; and respect by individuals.

A MANOVA analysis showed a significant relationship between leadership style and hospital effectiveness, as reflected in Table 4.27

**TABLE 4.27: MANOVA LEADERSHIP STYLE AND HOSPITAL EFFECTIVENESS**

| TEST | VALUE | APPROX. F | HYPTH.D F | ERROR DF | SIG. OF F |
|---|---|---|---|---|---|
| Pillais | .31009 | 2.98835 | 14.00 | 228.00 | ** .000 |
| Hotellings | .39307 | 3.14455 | 14.00 | 224.00 | ** .000 |
| Wilkis | *.70617 | 3.06709 | 14.00 | 226.00 | ** .000 |
| Roys | .24325 | | | | |

N.B. *F statistics for Wilkis Lambda is exact.

** Significant at less than 0.01 level

The relationship was further explored by breaking down the leadership style namely transformational, transactional and non-leadership styles of the six institutions into its five component levels namely:

1) the chief medical superintendent,

2) the chief nursing service manager

3) The hospital administrator

4) the area managers and

5) the operational managers.

The results of this MANOVA calculation is reflected in Table 4.28.

**TABLE 4.28:MANOVA OF LEADERSHIP STYLE AND COMPONENTS OF HOSPITAL EFFECTIVENESS**

| VARIABLES | Hyp.SS | Err.SS | Hyp. MS | Err.MS | F | Sig.of |
|---|---|---|---|---|---|---|
| General approval. | 21.61 | 157.71 | 10.80 | 1.33 | 8.15 | **.000 |
| Support when threatened. | 4.54 | 129.47 | 2.27 | 1.09 | 2.08 | .129 |
| Available resources | 1.44 | 160.22 | 0.72 | 1.35 | 0.53 | .588 |
| Goal attainment | 0.54 | 54.58 | 0.27 | 0.46 | 0.59 | .558 |
| Respect by the public | 47.47 | 250.23 | 23.74 | 2.10 | 11.29 | **.000 |
| Respect of individuals | 3.53 | 411.39 | 1.77 | 3.46 | .51 | .601 |
| Cultural issues | 1.23 | 236.61 | 0.61 | 1.99 | .31 | .735 |

** = Significant at less than 0.01 level.

Hyp. SS = Hypothesised sum of squares

Err. SS = Error Sum of squares

Hyp. MS = Hypothesised mean squares

Err. MS = Error mean squares

F = F-ratio

Sig. Of F = Significance of F

The Sheffé test was used to further explore the relationship. This is a post hoc test used to clarify which of the leadership styles differ from each other in terms of the significant variables. The Sheffé was used only for the two components i.e. goal attainment and level of support that were significant on the initial MANOVA (Table 4.27). System's achievement was not included because the sample size of only 6 institutions was too small. The Roy-Bargman step down F-test was

carried out to correct for the unequal cell sizes. The results are shown in Table 4.29.

**TABLE 4. 29: CORRECTED MANOVA OF LEADERSHIP STYLE AND COMPOSITION OF HOSPITAL EFFECTIVENESS**

| Variables | Hyp MS | Err. MS | Stp.dwn F | Hyp. DF | Err.DF | Sig. Of F |
|---|---|---|---|---|---|---|
| Gen.approval | 10.81 | 1.33 | 8.15 | 2 | 119 | ** .000 |
| Support when threat | 5.05 | .98 | 5.17 | 2 | 118 | ** .007 |
| Av. resources | .99 | 1.35 | .74 | 2 | 117 | .480 |
| Goal att. | .177 | .42 | .42 | 2 | 116 | .657 |
| Respect by public | 10.52 | 1.67 | 6.29 | 2 | 115 | ** .003 |
| Respect of indiv. | 1.28 | 2.57 | .50 | 2 | 114 | .608 |
| Cultural issues | 2.49 | 1.37 | .18 | 2 | 113 | .834 |

** = Significant at less than 0.01 level

Var. = Variables - See questionnaire on effectiveness instrument.

Hyp. MS = Hypothesised Mean Square

Err.MS = Error Mean Square

Stp Dwn f tst = Stepdown F-test

Hyp. DF = Hypothesised Degrees of Freedom

Err DF = Error Degrees of Freedom

Sig. Of F = Significance of Freedom

Goal attainment was not significant while general approval and respect by the members of the public showed significant relationships in both MANOVA'S. In the refined Roy-Barman results support when threatened, and respect by the members of the public was also significant. This means that level of support is an important component of the three subunits of effectiveness.

In looking at transformational leadership style differed significantly from transactional leadership in its influence on the general level of support, while the transformational leadership style differs significantly from transactional and the non-leadership in relation to respect by members of the public. This means that the members of the public does support available health care services. This implies that the health care services are effective.

## 4.6 CONCLUSION

Differences in the various levels of leadership in the six institutions have been established. Treated in isolation goal attainment was not significant but level of support was strongly significant. It was not possible to establish the relationship between leadership style and system's achievement because the sample size of six institutions was too small.

Effectiveness was describe and the relationship between the two variables, namely leadership style and hospital effectiveness have been identified on the overall to be significant at less than 0.01 level.

# CHAPTER 5: DISCUSSION

## 5.1 INTRODUCTION

Data was obtained from each of the six institutions selected, and the relationship between multilevel leadership style and hospital effectiveness was established. Selected indices in this study included, leadership styles with a focus on transformational, transactional and non-leadership styles. Effectiveness indices included goal attainment, level of support and system's achievement. The relationship envisaged was successfully established.

## 5.2 LEADERSHIP STYLE

Five categories of leadership, namely chief medical superintendent, the chief nurse manager, the hospital secretary, the area managers and the operational managers, were identified to form a multilevel leadership model of the institution. Non-nursing leadership levels included the chief medical superintendent and the hospital secretary, whilst the nursing leadership consisted of three categories, namely the chief nurse manager, the area nurse managers, and the operational nurse managers. Management at the three levels of operation in the institution consisted of the top level management, namely the chief medical superintendent, the chief nurse manager and the hospital secretary; the middle manager namely the area manager; and the operational nurse manager at unit or ward level.

Leadership styles were evaluated using a separate instrument with 80 questions developed by Bass and Avolio (1995). Forty-eight leaders were identified and assessed in the six institutions. Three hundred and thirty respondents assessed the 48 leaders identified in the study.

With reference to leadership style the main findings were that the transactional style is the most common style in the sampled hospitals. Two institutions were identified to have a transformational leadership style, whilst three institutions had a transactional leadership style and one institution had a non-leadership style.

According to Dunham-Taylor (1995) four levels of transformational leadership may be identified:

i) the balanced transformational leadership style characterised by a lower transformational-higher transactional group. This leader inherently knows what to do at any given time;

ii) the analytic transformational leadership, lower transformational-lower transactional group. These individuals enjoy analysing day to day problems;

iii) rational transformational leadership, characterised by a higher transformational-higher transactional group, where the leader relies on common sense to deal with issues;

iv) influencing leadership group characterised by a, higher transformational-lower transactional group. This is a leadership developmental phase in which executives are concentrating on personal mastery.

If one looks at the leadership scores of managers by category (Table 4.2) and by institution (Table 4.3), it is clear that using McDaniel and Wolf's (1992) classification, only two institutions and one category qualify as transformational leadership. However, using Dunham-Taylor's (1995) classification, one might classify five of the institutions and all categories as belonging to

the influencing leadership group.

This is not ideal, since this should be a transitory stage in leadership development. The personal or inward focus of the leader in this influencing leadership group does not promote effective leadership in the long run.

For nursing, the comparatively low scores of the nurse executives are particularly worrying. There could be a few reasons for this pattern: Their role is not clearly described or recognised by their followers and therefore does not receive recognition from the appropriate authority. This may also be a gender issue. The chief nurse manager is usually a female working with males. She is then put into the traditional subservient female role. The transformational leadership style of visionary and dynamic leadership does not fit in with this female stereotype. The status of the profession of nursing as compared with the medical profession may also put the chief nurse manager constantly into an inferior position. This is not the ideal position for transformational leader to flourish.

This interpretation is supported by Dednam's study (1985), which concluded that nurse managers cannot function effectively due to their poor power base and limited authority.

One may argue that although the chief nurse manager's leadership style was not clearly distinguished as neither transformational, transactional or the non-leadership style, the style that would be attributed to this nursing service manager comes closest to a balanced transformational style as categorised by Dunham-Taylor (1995), since transformational and transactional leadership styles complement one another to increase professional efficiency and effectiveness.

The combined scores may indicate an effective manager.

In contemplating the position or leadership style of each of the nursing categories, the chief nurse manager has been appointed in a position as leader and manager, and occupies the most senior position in the nursing division of the institution. There is a need therefore to ensure that some steps are taken, to strengthen their leadership role so that professional efficiency and effectiveness in the services can be enhanced.

Of the five categories of leaders, only the middle managers i.e. nursing area managers, were perceived and rated to reveal a transformational leadership style. This contradicts prior findings on world leaders carried out by Bass (1985), which indicates that the nurse executives' scores were relatively higher than those of other categories.

This may be because the chief nurse manager plays a consultative role for functional work, on nursing issues at the institution. An appeal is made to her when there is a crisis, a problem is to be solved or when direction is needed in decision making, by the operational unit managers. They correspond to Dunham-Taylor's (1995) classification as belonging to an analytic transformational group. They do not share the problems of the nurse executive, since their role is clear and concrete and they work predominantly only with female nurses.

It may be that the operational nurse manager was perceived more as a member of the team, and as a co-worker in the team and operating at functional level. This leader was therefore not perceived as a leader but as a colleague and a member of the team, who shares similar experiences, which become a problem . The area manager is perceived to be the consultant.

Operational leadership in this study was predominantly transactional in style, since this nurse leader had a score of 2 in the non-leadership category as well. This group therefore exhibited qualities of non leadership as well. According to Sullivan and Decker (1985) " The permissive or laissez-faire leadership style often assumers] workers are ambitious, responsible, dynamic, flexible, intelligent, creative, and accepting of organisational goals."

This style can sometimes be effective in highly motivated staff but is generally not useful in a highly structured health care delivery system, comprising of people from a variety of professions and para-professions. Organisation and control form the basis of most operations, therefore, a non-leader may be an effective leadership style, depending on the situation and the maturity of the group, in any setting.

A cascading effect was identified between the area managers and the operational manager as leaders at their levels of control. According to McDaniel and Wolf (1992) "a cascading effect occurs when higher(est) scores are found amongst the top echelons of administrators, with a slightly declining score moving down the administrative hierarchy. This creates a multidimensional or shared relationship of the leader and the led." This author also states that transformational leadership will also be found in sites reporting work satisfaction and low turnover, implying effectiveness of the group leader in influencing the group to achieve their goal.

According to McDaniel and Wolf (1992) "The successful transformational leader builds on the transactional qualities found in day-to-day management." These are managers who solve day to day problems by advising and effectively communicating both their leadership as well as management skills to their followers.

In this study however, a cascading effect was not confirmed between the chief nurse manager and the area manager. The chief nurse manager was not perceived as a transformational leader, nor was this manager perceived as a non-leader. The score of 2.6 in the transformational category was too low for this leader to be regarded as a transformational leader, whilst the score of 2.2 was not high enough to be regarded as a transactional leader, yet the score of 1.4 is not regarded as a non-leadership score. This gives cause for concern.

One may argue that although the chief nurse manager's leadership style was not clearly defined, the style that would be attributed to this nursing service manager is a transactional leadership style, as a transformational and transactional leadership style complement one another and the transactional leadership style was not high enough to be regarded as a transformational leadership style. Although, transformational and transactional leadership styles compliment one another to increase professional efficiency and effectiveness, and the combined scores may indicate an effective manager and leader, the score of this manager as a leader was the lowest of the other five different categories of personnel as managers and leaders. There is a need therefore for in service education for this leader to be upgraded in so far as improving his or her leadership skills.

The overall health services leadership in KwaZulu/Natal reflected a predominantly transactional leadership style, followed in significance by the non-leadership style and then the transformational styles as established in the five different categories of management personnel.

5. 3 HOSPITAL EFFECTIVENESS

Indices used to measure effectiveness included **goal attainment , level of support and system's achievement.**

In terms of **goal attainment** the average score obtained was 70% with no significant difference between the rating of the community and the staff. Although this looks reasonable, it should be noted (Table 4.13) that amongst the three top priority goals identified for different institutions, scores as low as 36% and 42% were obtained. This would mean that managers should pay particular attention to high priority goals, especially where their attainment is at a low level.

In this case, it is less important what the average score is, and more important to look at the individual goal and its level of attainment. For example, for institution 4 the first priority goal is "To offer the best possible effective and efficient comprehensive health care service by rendering basic and therapeutic needs to all patients who present themselves at this institution from Port Shepstone to Durban; at community and hospital levels. This care must be acceptable, equitable, affordable and user friendly particularly to mothers and babies." For level of attainment this goa l was judged to be 42%. Clearly this kind of goal attainment measurement can assist in directing management attention appropriately.

The level of support for these institutions was 57%. It is interesting that while the larger hospitals are seen to have higher goal attainment, smaller hospitals have higher levels of support. There is not a statistically significant difference between leadership style and hospital effectiveness, however, since there are no norms in this field. It is difficult to interpret whether a score of 57% reflects a level of support that will not only ensure survival of the institution, but also adequate

growth. It would also have been interesting to include head office staff in this part of the measurement, since their support for any institution is crucial. However, as a result of some practical difficulties in data collection from head office personnel during the amalgamation period, some head office personnel had retired from service, it was not possible to collect information from personnel at head office.

The six institutions achieved an average of 70% with a standard deviation of 9,3 across different components of system's achievement. The infrastructure achieved the highest score (83%) in a province which has traditionally been under-funded. The lowest score of 60% was related to the problems of accessing hospitals. Two of the lowest scores (in the 40's) are in relation to resource management, while two of the four lowest scores were in a single institution. Again this type of measurement could usefully focus management attention.

No measurement of hospital effectiveness was found in the literature. The methodology followed in this study was based on a theoretical model Hunt (1991) and further developed by the researcher. This methodology allows one to give a single numerical score for the effectiveness of a health care institution. In this study, the average total effectiveness of the sampled institutions was 65%.

The benefits of this approach, and the factors which support the validity of this measure, are as follows:

(1) The process of involving all stakeholders allows for participation and the inclusion of the contributions of a wide variety of people. This prevents a one sided view of effectiveness. It has the added benefit of increasing the awareness of both the community and the health workers.

This in itself may increase the support for the institution.

(2) The validity is increased because three different measures are used to make a composite evaluation. Each aspect measured makes a contribution to the final score. This allows for a multi-faceted picture of the functioning of the institution.

(3) The results of this study shows that this approach to the measurement of effectiveness gives the management of the institution a clear indication of aspects which need attention. Goals which score was low on attainment, constituencies which show limited support, and system components which show poor performance, can be identified, and remedial actions can be implemented.

(4) The methodology makes it possible to compare the effectiveness of very different institutions. This allows managers within one institution to compare their performance with that of others. It also allows regional and provincial managers to compare institutions.

(5) This method is less expensive, will be more feasible and of utility value compared with the accreditation system as a measure of effectiveness of hospitals. The accreditation system may be reserved for institutions used as training centres and schools of nursing education.

## 5.4: RELATIONSHIPS BETWEEN LEADERSHIP STYLE AND HOSPITAL EFFECTIVENESS

For this analysis only the components of goal attainment and leadership style were used. It was found that a relationship does exist between these two concepts. Further analysis showed that this relationship was caused by the level of support component and not by goal attainment ( see table 4.27), and that it was related to high transformational leadership and not to

transactional leadership or non leadership.

This finding supports the descriptions of transformational leadership reflected in the literature. It is important because according to the theoretical framework Hunt (1991), the level of support of an institution actually predicts its survival, especially in times of crisis, such as shrinkage of resources. The fact that a transformational leader has a way with people increases commitment and support. Increased involvement increases professional efficiency and effectiveness. The fact that transformational leadership can be linked to this crucial concept, means that leadership itself becomes important to the survival of the institution.

The implication then is that increasing transformational leadership could improve institutional survival. The question is whether one can teach transformational leadership? One answer is 'yes' as suggested by refuting the great-man theory with the premise that leadership can be taught: whilst in the case of 'charisma' the answer will be 'no' and debatable, since charisma is an elusive characteristic that cannot be taught. Charisma is relevant and highly associated with transformational leadership characterised by having a vision for the future and capable of ensuring commitment from the follower about how to get there.

## 5.5: LIMITATIONS OF THE STUDY

The components of achievement could not be used in the calculations of the relationship between leadership styles and hospital effectiveness, since the sample size of 6 hospitals was too small for calculations. This problem undermines the premise of the study that hospital effectiveness can be measured by the three components since only two were then used. This then undermines the use of the theoretical model envisaged by the researcher. However, if a larger sample of hospitals was

used, calculation of this component would have been possible. This limitation could perhaps have been overcome by innovative statistical analysis, but the researcher could not find a statistician who could solve the dilemma.

Another limitation is that head office staff were not involved in the level of support measurement. This was due to the state of transition in the province which meant that it was not clear who at Head Office were involved with which institution. No body were therefore willing to get involved in the study.

## 5. 6: RECOMMENDATIONS

The following recommendations are made: changes in educational requirements and further research.

1) CHANGES IN EDUCATIONAL REQUIREMENTS

The following recommendations were made:

1) Staff development aimed at transformational leadership should be promoted.

2) A method of measuring hospital effectiveness should be used to increase dialogue between leadership style and hospital effectiveness. There is a need to target more attention to problem areas, in order to improve hospital effectiveness.

3) The operational manager needs to be more clearly identified as a leader.

WITH REFERENCE TO RESEARCH: AS ABOVE

1) There is a need for **research on a larger scale** in order to increase the sample and to ensure generalisability of the research findings in this study. This can only be possible if there is a research department established at provincial level, to plan in a scientific and strategic manner. This may include South Africa as a whole.

2) If professional development of nursing is to meet the felt needs of its fast growing population in terms of size and knowledge explosion, there is a need for a research department to be developed at the provincial level of KwaZulu/Natal to enable effective scientific strategic planning for health care, ~~which in the long run will be cost effective and efficient~~.

## 5.7: CONCLUSION

This study has established that there is a persistent problem with the leadership cadre, particularly with the top level leadership, of nursing in this province.

According to Charlton (1992), transformational leadership requires fundamental change. A competitive environment demands that leaders enable employees to choose to be productive. Any attempt to improve quality, productivity, customer care or training must be accompanied by leadership that creates an environment where the inherent skills of all the organisation's people can be utilised effectively.

Nurses have not only a numerical strength in the delivery of health care, but they also have a responsibility to lead in health care and are expected to cope as leaders in the rural health care services, these responsibilities include primary health care and acting as regional directors of the

province.

Each member of the team should make a contribution which will additively support the others in goal attainment at all levels of care, from within the home to the most well-developed tertiary and academic health care centres.

The emphasis should be on training personnel for human research development and for communication, leadership and management skills that have not been effectively tapped and explored.

Planning for short-term and long-term health care, should be done professionally and in as cost effective a manner as possible. If planning for health care is to be nurse-driven and the future directed with a clear vision, to meet the health needs consistent with the national and international standards of health care, training and education of the available person-power on issues related to research for health planning, leadership and management should be made a priority, in order to increase professional efficiency and effectiveness.

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## Annexure 1 : RATING SCALE MLQ'S FOR SELF- RATERS AND RATERS

Dear colleaugue /Respondent,

I am currently involved with a research project in my Doctoral studies through the University of Natal at the Department of Social Sciences (Nursing) . My research is on leadership and hospital effectiveness in the KwaZulu/Natal region. This project has been approved by Dr C McKenzie (Director) at KZN Health services branch.

As a supervisor of one of the hospitals included in the random sample, you have been selected to assist in this project. The success of this study will only be possible if input is obtained from people with your background and experience. Kindly oblige by taking a few minutes of your time to assit by completing this questionnaire.

You need not state your name or any other identification.

PLEASE indicate by marking with an (x) in the space provided for the response you have chosen. WHERE indicated NUMBER your points and TABULATE them.

You may continue in the separate sheet provided if the space provided is not adequate.
When you have filled this questionnaire, kindly leave it in the box provided.

THANK YOU in advance for your collaboration.

# MLQ Multifactor Leadership Questionnaire — Self-Rating Form

Bernard M. Bass and Bruce J. Avolio

PREPAID REPORT

**MARKING INSTRUCTIONS**

- Use a soft (No. 2) black lead pencil.
- Make dark, heavy marks that fill the oval.
- Mark ONLY the oval areas.
- Make no stray marks.
- Erase completely any answer you wish to change.
- Do not fold or staple answer sheet.

EXAMPLES: Proper Mark ● Improper Marks ⊘ ⊗

RATER: Please read the marking instructions above and turn to the second page to begin.

MLQ COORDINATOR: FILL OUT YOUR INSTITUTIONAL ADDRESS BELOW.

NAME

INSTITUTION

ADDRESS

CITY STATE ZIP CODE

(PLEASE DO NOT USE ADDRESS STICKER)

RO # CODE

MARK IN THIS AREA



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## TO BE FILLED OUT BY MLQ COORDINATOR

ORGANIZATION NAME: Print the name of the organization, one letter per box, in the boxes below. Skip a box between words. Fill in the appropriate ovals below each box, including blank ovals for skipped boxes. (The organization is the name of the largest organization or institution appearing on the organization's letterhead. If the person being rated works for the government, "organization" refers to the agency or department.)

LEADER SEX

○ MALE
○ FEMALE

ORGANIZATION I.D.# (OPTIONAL)

LEADER I.D.# (OPTIONAL)

LEADER NAME: Print his/her name, one letter per box, in the boxes below. Print the last name first, skip one box, and print as much of the first name as possible. Fill in the appropriate oval below each box, including the blank ovals for skipped boxes. Create a unique code name if the leader chooses to remain anonymous.

DO NOT MARK IN THIS AREA

115630

Use this key for the five possible responses to items 1–70.

| 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Not at all | Once in awhile | Sometimes | Fairly often | Frequently, if not always |

| | |
|---|---|
| ⓪①②③④ | 31. I emphasize the use of intelligence to overcome obstacles. |
| ⓪①②③④ | 32. I find out what they want and help them to get it. |
| ⓪①②③④ | 33. When they do good work, I commend them. |
| ⓪①②③④ | 34. I avoid intervening except when there is a failure to meet objectives. |
| ⓪①②③④ | 35. If they don't contact me, I don't contact them. |
| ⓪①②③④ | 36. I have their respect. |
| ⓪①②③④ | 37. I give encouraging talks to them. |
| ⓪①②③④ | 38. I require them to back up their opinions with good reasoning. |
| ⓪①②③④ | 39. I express my appreciation when they do a good job. |
| ⓪①②③④ | 40. I see that they get what they want in exchange for their cooperation. |
| ⓪①②③④ | 41. I focus attention on irregularities, mistakes, exceptions, and deviations from what is expected of them. |
| ⓪①②③④ | 42. My presence has little effect on their performance. |
| ⓪①②③④ | 43. I show enthusiasm for what they need to do. |
| ⓪①②③④ | 44. I communicate expectations of high performance to them. |
| ⓪①②③④ | 45. I get them to identify key aspects of complex problems. |
| ⓪①②③④ | 46. I coach individuals who need it. |
| ⓪①②③④ | 47. I let them know that they can get what they want if they work as agreed with me. |
| ⓪①②③④ | 48. I do not try to make improvements, as long as things are going smoothly. |
| ⓪①②③④ | 49. I am likely to be absent when needed. |
| ⓪①②③④ | 50. I have a sense of mission which I communicate to them. |
| ⓪①②③④ | 51. I get them to do more than they expected they could do. |
| ⓪①②③④ | 52. I place strong emphasis on careful problem solving before taking action. |
| ⓪①②③④ | 53. I provide advice to them when they need it. |
| ⓪①②③④ | 54. They have a clear understanding with me about what we will do for each other. |
| ⓪①②③④ | 55. A mistake has to occur before I take action. |
| ⓪①②③④ | 56. I am hard to find when a problem arises. |
| ⓪①②③④ | 57. I increase their optimism for the future. |
| ⓪①②③④ | 58. I motivate them to do more than they thought they could do. |
| ⓪①②③④ | 59. I make sure they think through what is involved before taking action. |
| ⓪①②③④ | 60. I am ready to instruct or coach them whenever they need it. |
| ⓪①②③④ | 61. I point out what they will receive if they do what needs to be done. |
| ⓪①②③④ | 62. I concentrate my attention on failures to meet expectations or standards. |
| ⓪①②③④ | 63. I make them feel that whatever they do is okay with me. |
| ⓪①②③④ | 64. They trust my ability to overcome any obstacle. |
| ⓪①②③④ | 65. I heighten their motivation to succeed. |
| ⓪①②③④ | 66. I get them to use reasoning and evidence to solve problems. |
| ⓪①②③④ | 67. I give newcomers a lot of help. |
| ⓪①②③④ | 68. I praise them when they do a good job. |
| ⓪①②③④ | 69. I arrange to know when things go wrong. |
| ⓪①②③④ | 70. I don't tell them where I stand on issues. |

Use this key for the five possible responses to items 71–74.

| 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Not effective | Only slightly effective | Effective | Very effective | Extremely effective |

| | |
|---|---|
| ⓪①②③④ | 71. The overall effectiveness of the group made up of yourself, your supervisees, and/or your co-workers can be classified as _____. |
| ⓪①②③④ | 72. How effective are you in representing your group to higher authority? |
| ⓪①②③④ | 73. How effective are you in meeting the job-related needs of supervisees and/or co-workers? |
| ⓪①②③④ | 74. How effective are you in meeting the requirements of the organization? |

CONTINUE ON BACK

# Multi-Rater Questionnaire Record Sheet

MLQ Coordinator _____ Phone (  ) _____

Organization Name _____ Fax (  ) _____

Organization ID # _____

| | Leader Name | Leader ID# | # of Raters |
|---|---|---|---|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
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| 11 | | | |
| 12 | | | |
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| 19 | | | |
| 20 | | | |
| 21 | | | |
| 22 | | | |
| 23 | | | |
| 24 | | | |
| 25 | | | |

**Please send a copy of this form along with your answer sheets for scoring.**

P1

# MLQ Multifactor Leadership Questionnaire — Rater Form

Bernard M. Bass and Bruce J. Avolio

● PREPAID REPORT

**MARKING INSTRUCTIONS**

Use a soft (No. 2) black lead pencil.
Make dark, heavy marks that fill the oval.
Mark ONLY the oval areas.
Make no stray marks.
Erase completely any answer you wish to change.
Do not fold or staple answer sheet.

Proper Mark  Improper Marks

EXAMPLES: ● ⊘ ⊠ ✓

RATER: Please read the marking instructions above and turn to the second page to begin.

CONSULTING PSYCHOLOGISTS PRESS, INC.



| RO | # | CODE |
|---|---|---|
| 0 0 | 0 0 0 0 | 0 0 0 0 0 |
| 1 1 | 1 1 1 1 | 1 1 1 1 1 |
| 2 2 | 2 2 2 2 | 2 2 2 2 2 |
| 3 3 | 3 3 3 3 | 3 3 3 3 3 |
| 4 4 | 4 4 4 4 | 4 4 4 4 4 |
| 5 5 | 5 5 5 5 | 5 5 5 5 5 |
| 6 6 | 6 6 6 6 | 6 6 6 6 6 |
| 7 7 | 7 7 7 7 | 7 7 7 7 7 |
| 8 8 | 8 8 8 8 | 8 8 8 8 8 |
| 9 9 | 9 9 9 9 | 9 9 9 9 9 |

DO NOT MARK IN THIS AREA

## TO BE FILLED OUT BY MLQ COORDINATOR

**ORGANIZATION NAME:** Print the name of the organization, letter per box, in the boxes below. Skip a box between words. Fill in the appropriate ovals below each box, including blank ovals for skipped boxes. (The organization is the name of the largest organization or institution appearing on the organization's letterhead. If the person being rated works for the government, "organization" refers to the agency or department.)

**LEADER SEX**

● MALE
○ FEMALE

**ORGANIZATION I.D.# (OPTIONAL)**

**LEADER I.D. # (OPTIONAL)**

**LEADER NAME:** Print his/her name, one letter per box, in the boxes below. Print the last name first, skip one box, and print as much of the first name as possible. Fill in the appropriate oval below each box, including the blank ovals for skipped boxes. Create a unique code name if the leader chooses to remain anonymous.

DO NOT MARK IN THIS AREA

137046

Use this key for the five possible responses to items 1–70.

| 0 Not at all | 1 Once in awhile | 2 Sometimes | 3 Fairly often | 4 Frequently, if not always |
|---|---|---|---|---|

| | |
|---|---|
| 0 1 ● 3 4 | 31. emphasizes the use of intelligence to overcome obstacles. |
| 0 1 2 ● 4 | 32. finds out what I want and helps me to get it. |
| 0 ● 2 3 4 | 33. commends me when I do good work. |
| 0 1 ● 3 4 | 34. avoids intervening except when I fail to meet objectives. |
| 0 1 2 3 ● | 35. doesn't contact me if I don't contact him or her. |
| 0 1 2 3 ● | 36. has my respect. |
| 0 ● 2 3 4 | 37. gives me encouraging talks. |
| 0 1 2 ● 4 | 38. requires that I back up my opinions with good reasoning. |
| 0 ● 2 3 4 | 39. expresses appreciation when I do a good job. |
| 0 1 ● 3 4 | 40. sees that I get what I want in exchange for my cooperation. |
| ● 1 2 3 4 | 41. focuses attention on irregularities, mistakes, exceptions, and deviations from what is expected of me. |
| 0 1 2 3 ● | 42. has little effect on my performance, whether he or she is present or not. |
| 0 1 ● 3 4 | 43. shows enthusiasm for what I need to do. |
| 0 ● 2 3 4 | 44. communicates expectations of high performance to me. |
| 0 1 ● 3 4 | 45. gets me to identify key aspects of complex problems. |
| 0 ● 2 3 4 | 46. coaches me if I need it. |
| 0 1 ● 3 4 | 47. lets me know that I can get what I want if we work as agreed. |
| 0 1 2 ● 4 | 48. does not try to make improvements as long as things are going smoothly. |
| 0 ● 2 3 4 | 49. is likely to be absent when needed. |
| 0 1 ● 3 4 | 50. has a sense of mission which he or she communicates to me. |
| ● 1 2 3 4 | 51. gets me to do more than I expected I could do. |
| 0 1 ● 3 4 | 52. places strong emphasis on careful problem solving before taking action. |
| 0 1 ● 3 4 | 53. provides advice to me when I need it. |
| 0 1 ● 3 4 | 54. gives me a clear understanding of what we will do for each other. |
| 0 ● 2 3 4 | 55. a mistake has to occur before he or she takes action. |
| 0 1 ● 3 4 | 56. is hard to find when a problem arises. |
| 0 ● 2 3 4 | 57. increases my optimism for the future. |
| 0 ● 2 3 4 | 58. motivates me to do more than I thought I could do. |
| ● 1 2 3 4 | 59. makes sure I think through what is involved before taking action. |
| ● 1 2 3 4 | 60. is ready to instruct or coach me whenever I need it. |
| 0 ● 2 3 4 | 61. points out what I will receive if I do what needs to be done. |
| 0 1 ● 3 4 | 62. concentrates his or her attention on failures to meet expectations or standards. |
| 0 1 ● 3 4 | 63. makes me feel that whatever I do is okay with him or her. |
| 0 ● 2 3 4 | 64. has my trust in his or her ability to overcome any obstacle. |
| ● 1 2 3 4 | 65. heightens my motivation to succeed. |
| 0 ● 2 3 4 | 66. gets me to use reasoning and evidence to solve problems. |
| 0 1 ● 3 4 | 67. gives newcomers a lot of help. |
| ● 1 2 3 4 | 68. praises me when I do a good job. |
| 0 ● 2 3 4 | 69. arranges to know when things go wrong. |
| 0 ● 2 3 4 | 70. doesn't tell me where he or she stands on issues. |

Use this key for the five possible responses to items 71–74.

| 0 Not effective | 1 Only slightly effective | 2 Effective | 3 Very effective | 4 Extremely effective |
|---|---|---|---|---|

| | |
|---|---|
| 1 ● 3 4 | 71. The overall effectiveness of the group made up of the leader and his or her supervisees, and/or co-workers can be classified as _____. |
| ● 2 3 4 | 72. How effective is the leader in representing his or her group to higher authority? |
| ● 2 3 4 | 73. How effective is the leader in meeting the job-related needs of supervisees and/or co-workers? |
| ● 2 3 4 | 74. How effective is the leader in meeting the requirements of the organization? |

*CONTINUE ON BACK*

MULTIFACTOR LEADERSHIP QUESTIONAIRE (MLQ)

ORGANISATION C

*NAME OF LEADER:* *SUPERINTENDENT* *SEX:* *FEMALE*

N=7

TABLE:

| LEADERS'S FACTOR PROFILE | SELF | | RATER 1 | RATER 2 | RATER 3 | RATER 4 | RATER 5 | RATER 6 | RATER 7 | MEAN | MEANSR | MEANR | S-R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4 | | 3 | 3 | 2 | 0 | 3 | 4 | 3 | 2.57 | | | |
| 8 | 4 | | 3 | 3 | 2 | 1 | 2 | 4 | 2 | 2.43 | | | |
| 15 | 4 | | 4 | 3 | 0 | 3 | 2 | 4 | 1 | 2.43 | | | |
| 22 | 3 | | 1 | 1 | 1 | 0 | 1 | 3 | 1 | 1.14 | | | |
| 29 | 4 | | 2 | | 1 | 1 | 1 | 4 | 1 | 1.67 | | | |
| 36 | 4 | | 4 | 4 | 2 | 2 | 2 | 4 | 2 | 2.86 | | | |
| 43 | 4 | | 2 | 4 | 0 | 0 | 2 | 4 | 3 | 2.14 | | | |
| 50 | 4 | | 2 | 2 | 1 | 2 | 1 | 4 | 3 | 2.14 | | | |
| 57 | 4 | | 1 | 0 | 1 | 0 | 0 | 4 | 2 | 1.14 | | | |
| 64 | 3 | | 1 | 1 | 1 | 2 | 1 | 3 | 3 | 1.71 | 3.80 | 2.02 | 2.91 |
| 2 | 4 | | 4 | 3 | 2 | 2 | 4 | 4 | 1 | 2.86 | | | |
| 9 | 4 | | 2 | 4 | 1 | 0 | 2 | 4 | 1 | 2.00 | | | |
| 16 | 4 | | 2 | 3 | 1 | 2 | 2 | 4 | 3 | 2.43 | | | |
| 23 | 4 | | 2 | 2 | 1 | 0 | 2 | 4 | 2 | 1.86 | | | |
| 30 | 4 | | 2 | 3 | 0 | 0 | 2 | 4 | 3 | 2.00 | | | |
| 37 | 4 | | 2 | 4 | 2 | 2 | 1 | 4 | 2 | 2.43 | | | |
| 44 | 4 | | 2 | 2 | 0 | 3 | 2 | 4 | 2 | 2.14 | 4.00 | 2.24 | 3.12 |
| 3 | 2 | | 3 | 2 | 1 | 0 | 3 | 2 | 3 | 2.00 | | | |
| 10 | 4 | | 2 | 3 | 1 | 1 | 2 | 4 | 3 | 2.29 | | | |
| 17 | 4 | | 2 | 3 | 1 | 1 | 3 | 4 | 1 | 2.14 | | | |
| 24 | 4 | | 1 | 1 | 0 | 2 | 1 | 4 | 1 | 1.43 | | | |
| 31 | 4 | | 3 | 3 | 2 | 2 | 3 | 4 | 2 | 2.71 | | | |
| 38 | 4 | | 2 | 3 | 2 | 4 | 1 | 4 | 2 | 2.57 | | | |
| 45 | 4 | | 2 | 4 | 0 | 1 | 0 | 4 | 2 | 1.86 | | | |
| 52 | 4 | | 2 | 3 | 2 | 0 | 2 | 4 | 3 | 2.29 | | | |
| 59 | 4 | | 2 | 2 | 0 | 2 | 2 | 4 | 2 | 2.00 | | | |
| 66 | 4 | | 1 | 1 | 1 | 2 | 1 | 4 | 4 | 2.00 | 3.80 | 2.13 | 2.96 |
| 4 | 3 | | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 2.43 | | | |
| 11 | 4 | | 3 | 3 | 0 | 1 | 3 | 4 | 2 | 2.29 | | | |
| 18 | 4 | | 2 | 1 | 2 | 0 | 1 | 4 | 2 | 1.71 | | | |
| 25 | 4 | | 4 | 4 | 2 | 2 | 4 | 4 | 4 | 3.43 | | | |
| 32 | 3 | | 3 | 2 | 0 | 0 | 1 | 3 | 2 | 1.57 | | | |
| 39 | 4 | | 3 | 3 | 2 | 0 | 1 | 4 | 3 | 2.29 | | | |
| 46 | 4 | | 3 | 3 | 0 | 0 | 2 | 4 | 2 | 2.00 | | | |
| 53 | 4 | | 4 | 2 | 1 | 4 | 2 | 4 | 4 | 3.00 | | | |
| 60 | 4 | | 1 | 3 | 0 | 0 | 3 | 4 | 4 | 2.14 | | | |
| 67 | 4 | | 2 | 1 | 1 | 1 | 1 | 4 | 2 | 1.71 | 3.80 | 2.26 | 3.03 |
| 5 | 2 | | 2 | 3 | 1 | 0 | 2 | 2 | 0 | 1.43 | | | |
| 12 | 4 | | 2 | 3 | 3 | 0 | 1 | 4 | 3 | 2.29 | | | |
| 19 | 4 | | 1 | 2 | 2 | 4 | 2 | 4 | 0 | 2.14 | | | |
| 26 | 0 | | 1 | 1 | 2 | 0 | 1 | 0 | 0 | 0.71 | | | |
| 33 | 4 | | 2 | 2 | 2 | 0 | 1 | 4 | 3 | 2.00 | | | |
| 40 | 0 | | 2 | 3 | 1 | 0 | 2 | 0 | 0 | 1.14 | | | |
| 47 | 0 | | 2 | 3 | 0 | 0 | 2 | 0 | 0 | 1.00 | | | |
| 54 | 1 | | 1 | 3 | 0 | 0 | 1 | 1 | 0 | 0.86 | | | |
| 61 | 1 | | 2 | 2 | 0 | 0 | 1 | 1 | 4 | 1.43 | | | |
| 68 | 4 | | 1 | 2 | 2 | 0 | 0 | 4 | 3 | 1.71 | 2.00 | 1.47 | 1.74 |
| 6 | 4 | | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 3.86 | | | |
| 13 | 4 | | 2 | 4 | 3 | 4 | 3 | 4 | 1 | 3.00 | | | |
| 20 | 0 | | 2 | 3 | 4 | 4 | 2 | 0 | 4 | 2.71 | | | |
| 27 | 0 | | 2 | 2 | 0 | 0 | 2 | 0 | 2 | 1.14 | | | |
| 34 | 0 | | 3 | 3 | 2 | 4 | 3 | 0 | 4 | 2.71 | | | |
| 41 | 3 | | 3 | 2 | 0 | 4 | 3 | 3 | 3 | 2.57 | | | |
| 48 | 0 | | 1 | 2 | 3 | 4 | 3 | 0 | 2 | 2.14 | | | |
| 55 | 0 | | 2 | 2 | 3 | 4 | 2 | 0 | 4 | 2.43 | | | |
| 62 | 0 | | 1 | 2 | 3 | 4 | 1 | 0 | 4 | 2.14 | | | |
| 69 | 3 | | 2 | 2 | 1 | 4 | 2 | 3 | 4 | 2.57 | 1.40 | 2.53 | 1.96 |
| 7 | 3 | | 3 | 3 | 4 | 3 | 2 | 3 | 4 | 3.14 | | | |
| 14 | 0 | | 0 | 3 | 4 | 4 | 2 | 0 | 3 | 2.29 | | | |
| 21 | 0 | | 2 | 2 | 4 | 0 | 1 | 0 | 0 | 1.29 | | | |
| 28 | 0 | | 1 | 2 | 3 | 4 | 2 | 0 | 2 | 2.00 | | | |
| 35 | 0 | | 3 | 2 | 3 | 4 | 0 | 0 | 4 | 2.29 | | | |
| 42 | 0 | | 3 | 2 | 3 | 4 | 1 | 0 | 3 | 2.29 | | | |
| 49 | 0 | | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0.57 | | | |
| 56 | 0 | | 1 | 2 | 3 | 0 | 2 | 0 | 3 | 1.57 | | | |
| 63 | 0 | | 2 | | 1 | 0 | 2 | 0 | 2 | 1.17 | | | |
| 70 | 0 | | 1 | 2 | 1 | 4 | 1 | 0 | 3 | 1.71 | 0.30 | 1.83 | 1.07 |
| 51 | 3 | | 1 | 3 | 3 | 2 | 0 | 3 | 2 | 2.00 | | | |
| 58 | 4 | | 1 | 2 | 1 | 0 | 2 | 4 | 3 | 1.86 | | | |
| 65 | 4 | | 2 | 1 | 1 | 0 | 1 | 4 | 4 | 1.86 | 3.67 | 1.90 | 2.79 |
| 72 | 4 | | 2 | 2 | 1 | 2 | 1 | 4 | 3 | 2.14 | | | |
| 71 | 3 | | 2 | 2 | 1 | 2 | 2 | 3 | 2 | 2.00 | | | |
| 73 | 4 | | 2 | 2 | 0 | 2 | 2 | 4 | 2 | 2.00 | | | |
| 74 | 4 | | 3 | 2 | 1 | 4 | 2 | 4 | 3 | 2.71 | 3.75 | 2.21 | 2.98 |
| 75 | 4 | | 4 | 1 | 1 | 2 | 2 | 4 | 3 | 2.43 | | | |
| 76 | 4 | | 3 | 1 | 1 | 2 | 1 | 4 | 3 | 2.14 | 4.00 | 2.29 | 3.14 |
| 77 | 6 | | 1 | 3 | 3 | 6 | 3 | 6 | 5 | 3.86 | | | |
| 78 | 6 | | 1 | 2 | 4 | 3 | 4 | 6 | 5 | 3.57 | | | |
| 79 | 4 | | 4 | 4 | 5 | 1 | 3 | 4 | 4 | 3.57 | | | |
| 80 | 2 | | 2 | 3 | 2 | 1 | 3 | 2 | 2 | 2.14 | | | |

**MULTIFACTOR LEADERSHIP QUESTIONAIRE (MLQ)**

**ORGANISATION C**

***NAME OF LEADER:*** *CHIEF NURSE MANAGER* ***SEX:*** *FEMALE*

**TABLE:** N=10

| LEADERS'S FACTOR PROFILE | SELF | RATER 1 | RATER 2 | RATER 3 | RATER4 | RATER5 | RATER6 | RATER7 | RATER8 | RATER9 | RATER10 | MEAN | MEANSR | MEANR | S-R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 4 | 1 | 4 | 2 | 1 | 2 | 2 | 2 | 2.50 | | | |
| 8 | 2 | 2 | 4 | 4 | 0 | 4 | 2 | 3 | 2 | 3 | 2 | 2.60 | | | |
| 15 | 4 | 4 | 4 | 4 | 0 | 4 | 3 | 2 | 3 | 3 | 3 | 3.00 | | | |
| 22 | 3 | 3 | 3 | 3 | 2 | 4 | 2 | 1 | 3 | 4 | 0 | 2.50 | | | |
| 29 | 2 | 3 | 3 | 4 | 0 | 4 | 3 | 2 | 2 | 4 | 3 | 2.80 | | | |
| 36 | 3 | 4 | 4 | 4 | 0 | 4 | 2 | 4 | 3 | 4 | 4 | 3.30 | | | |
| 43 | 4 | 3 | 3 | 3 | 0 | 3 | 3 | 2 | 2 | 2 | 4 | 2.50 | | | |
| 50 | 4 | 3 | 3 | 3 | 2 | 4 | 1 | 2 | 2 | 4 | 3 | 2.70 | | | |
| 57 | 2 | 0 | 3 | 3 | 1 | 3 | 2 | 1 | 2 | 3 | 4 | 2.20 | | | |
| 64 | 4 | 3 | 3 | 4 | 2 | 4 | 2 | 2 | 2 | 4 | 4 | 3.00 | 3.00 | 2.71 | 2.86 |
| 2 | 4 | 4 | 4 | 4 | 1 | 4 | 1 | 1 | 2 | 3 | 2 | 2.60 | | | |
| 9 | 2 | | 3 | 4 | 0 | 4 | 2 | 0 | 2 | | 4 | 2.38 | | | |
| 16 | 4 | 3 | 3 | 3 | 2 | 4 | 0 | 3 | 3 | 3 | 3 | 2.70 | | | |
| 23 | 2 | 4 | 2 | 3 | 0 | 4 | 3 | 2 | 2 | 3 | 2 | 2.50 | | | |
| 30 | 2 | 2 | 3 | 3 | 0 | 4 | 1 | 3 | 2 | 3 | 3 | 2.40 | | | |
| 37 | 3 | 4 | 4 | 4 | 0 | 4 | 3 | 2 | 2 | 4 | 3 | 3.00 | | | |
| 44 | 4 | 3 | 3 | 4 | 1 | 3 | 0 | 1 | 2 | 3 | 4 | 2.40 | 3.00 | 2.57 | 2.79 |
| 3 | 2 | 3 | 3 | 3 | 1 | 4 | 2 | 2 | 2 | 3 | 1 | 2.40 | | | |
| 10 | 3 | 3 | 4 | 3 | 1 | 4 | 1 | 1 | 2 | 3 | 3 | 2.50 | | | |
| 17 | 4 | 3 | 3 | 3 | 1 | 4 | 1 | 1 | 2 | 3 | 4 | 2.50 | | | |
| 24 | 3 | 2 | 2 | 4 | 2 | 4 | | 0 | 2 | 4 | 3 | 2.56 | | | |
| 31 | 2 | 3 | 3 | 4 | 0 | 3 | 1 | 0 | 2 | 3 | 3 | 2.20 | | | |
| 38 | 4 | 3 | 3 | 3 | 2 | 4 | 1 | 2 | 2 | 3 | 3 | 2.60 | | | |
| 45 | 4 | 4 | 3 | 4 | 2 | 3 | 1 | 2 | 2 | 4 | 2 | 2.70 | | | |
| 52 | 3 | 3 | 2 | 3 | 2 | 4 | 2 | 2 | 2 | 4 | 4 | 2.80 | | | |
| 59 | 2 | 2 | 2 | 4 | 1 | 4 | 1 | 1 | 2 | 3 | 4 | 2.40 | | | |
| 66 | 4 | 3 | 3 | 3 | 1 | 4 | 2 | 1 | 2 | 4 | 3 | 2.60 | 3.10 | 2.53 | 2.81 |
| 4 | 3 | 3 | 4 | 3 | 0 | 4 | 1 | 3 | 2 | 3 | 4 | 2.70 | | | |
| 11 | 4 | 4 | 3 | 3 | 1 | 4 | 2 | 2 | 2 | | 2 | 2.56 | | | |
| 18 | 3 | 3 | 3 | 4 | 1 | 4 | 2 | 3 | 3 | 2 | 4 | 2.90 | | | |
| 25 | 4 | 4 | 4 | 4 | 0 | 4 | 4 | 4 | 1 | 4 | 3 | 3.20 | | | |
| 32 | 3 | 3 | 3 | 3 | 0 | 4 | 2 | 2 | 3 | 3 | 4 | 2.70 | | | |
| 39 | 4 | 3 | 4 | 3 | 0 | 4 | 4 | 3 | 3 | 4 | 4 | 3.20 | | | |
| 46 | 3 | 3 | 4 | 4 | 0 | 4 | 1 | 2 | 2 | 3 | 4 | 2.70 | | | |
| 53 | 4 | 3 | 3 | 4 | 0 | 4 | 3 | 1 | 2 | 3 | 4 | 2.70 | | | |
| 60 | 2 | 1 | 3 | 4 | 1 | 4 | 0 | 2 | 2 | 3 | 3 | 2.30 | | | |
| 67 | 3 | 3 | 3 | 3 | 0 | 4 | 1 | 3 | 3 | 4 | 3 | 2.70 | 3.30 | 2.77 | 3.03 |
| 5 | 4 | 2 | 3 | 3 | 0 | 4 | 0 | 3 | 2 | 3 | 0 | 2.00 | | | |
| 12 | 3 | 3 | 4 | 4 | 1 | 4 | 1 | 3 | 2 | 3 | 4 | 2.90 | | | |
| 19 | 2 | 3 | 3 | 3 | 1 | 4 | 0 | 1 | 2 | 2 | 3 | 2.20 | | | |
| 26 | 0 | 2 | 4 | 2 | 1 | 4 | 0 | 1 | 2 | 3 | 2 | 2.10 | | | |
| 33 | 4 | 3 | 4 | 4 | 0 | 4 | 2 | 1 | 3 | 3 | 4 | 2.80 | | | |
| 40 | 4 | 2 | 3 | 1 | 0 | 4 | 0 | 0 | 2 | 2 | 3 | 1.70 | | | |
| 47 | 0 | 2 | 3 | | 2 | 3 | 0 | 1 | 2 | 2 | 3 | 2.11 | | | |
| 54 | 0 | 2 | 4 | 1 | 1 | 4 | 1 | 2 | 0 | 2 | 4 | 2.10 | | | |
| 61 | 0 | 2 | 3 | 0 | 0 | 4 | 0 | 1 | 2 | 3 | 3 | 1.80 | | | |
| 68 | 4 | 2 | 4 | 3 | 1 | 4 | 3 | 1 | 4 | 4 | 4 | 3.00 | 2.10 | 2.27 | 2.19 |
| 6 | 3 | 2 | 4 | 2 | 0 | 4 | 3 | 2 | 3 | 3 | 4 | 2.70 | | | |
| 13 | 4 | 1 | 3 | 3 | 1 | 4 | 2 | 3 | 3 | 2 | 0 | 2.20 | | | |
| 20 | 0 | 2 | 3 | 4 | 1 | 4 | 2 | 3 | 2 | 3 | 2 | 2.60 | | | |
| 27 | 0 | 2 | 2 | 2 | 1 | 4 | 0 | 4 | 2 | 4 | 4 | 2.50 | | | |
| 34 | 4 | 2 | 2 | 3 | 1 | 4 | 0 | 1 | 2 | 3 | 2 | 2.00 | | | |
| 41 | 0 | 1 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 4 | 4 | 2.60 | | | |
| 48 | 0 | 1 | 3 | 1 | 1 | 3 | 1 | 1 | 2 | 2 | 0 | 1.50 | | | |
| 55 | 0 | 2 | 2 | 0 | 3 | 0 | 1 | 1 | 0 | 3 | 4 | 1.60 | | | |
| 62 | 0 | 2 | 3 | 2 | 3 | 0 | 1 | 1 | 0 | | 3 | 1.67 | | | |
| 69 | 0 | 2 | 3 | 4 | 2 | 4 | 3 | 2 | 0 | 3 | 3 | 2.60 | 1.10 | 2.20 | 1.65 |
| 7 | 1 | 0 | 4 | 3 | 4 | 4 | 0 | 2 | 2 | 0 | 0 | 1.90 | | | |
| 14 | 0 | 2 | 3 | 2 | 1 | 4 | 2 | 1 | 2 | | 0 | 1.89 | | | |
| 21 | 0 | 0 | 0 | 0 | 0 | 4 | 3 | 0 | 3 | 0 | 0 | 1.00 | | | |
| 28 | 0 | 0 | 0 | 2 | 4 | 4 | 2 | 2 | 3 | 3 | 0 | 2.00 | | | |
| 35 | 2 | 2 | 3 | 2 | 0 | 2 | 3 | 2 | 3 | 1 | 0 | 1.90 | | | |
| 42 | 0 | 3 | 0 | 2 | 0 | 0 | 2 | 1 | 2 | 3 | | 1.44 | | | |
| 49 | 4 | 1 | 0 | 0 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0.60 | | | |
| 56 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 4 | 0.60 | | | |
| 63 | 0 | 1 | 3 | 0 | 2 | 0 | 0 | 2 | 2 | 3 | 2 | 1.50 | | | |
| 70 | 0 | 2 | 2 | 0 | 2 | 0 | 0 | 1 | 0 | 3 | 2 | 1.20 | 0.70 | 1.39 | 1.05 |
| 51 | 2 | 3 | 2 | 4 | 0 | 0 | 2 | 1 | 2 | 0 | 3 | 1.70 | | | |
| 58 | 3 | 3 | 3 | 3 | 0 | 4 | 1 | 2 | 2 | 3 | 3 | 2.40 | | | |
| 65 | 3 | 3 | 4 | 4 | 0 | 4 | 1 | 1 | 2 | 4 | 3 | 2.60 | 2.67 | 2.23 | 2.45 |
| 72 | 3 | 3 | 3 | 4 | 1 | 4 | 1 | 1 | 3 | 4 | 3 | 2.70 | | | |
| 71 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 2.60 | | | |
| 73 | 2 | 3 | 3 | 4 | 2 | 3 | 2 | 1 | 4 | 4 | 4 | 3.00 | | | |
| 74 | 3 | 3 | 4 | 3 | 2 | 4 | 3 | 2 | 3 | 4 | 3 | 3.10 | 2.50 | 2.35 | 2.59 |
| 75 | 3 | 4 | 4 | 4 | 1 | 4 | 0 | 4 | 3 | 4 | 4 | 3.20 | | | |
| 76 | 3 | 3 | 4 | 4 | 1 | 4 | 2 | 4 | 3 | 4 | 4 | 3.30 | 3.00 | 3.25 | 3.13 |
| 77 | 3 | 1 | 2 | 2 | 8 | 2 | 8 | 6 | 6 | 1 | 1 | 3.30 | | | |
| 78 | 4 | 4 | 4 | 8 | 6 | 4 | 5 | 4 | 4 | 4 | 4 | 4.50 | | | |
| 79 | 4 | 4 | 4 | 2 | 4 | 4 | 4 | 5 | 3 | 5 | 5 | 4.00 | | | |
| 80 | 1 | 2 | 2 | 2 | 1 | 3 | 1 | 3 | 2 | 3 | 3 | 2.30 | | | |

**MULTIFACTOR LEADERSHIP QUESTIONAIRE (MLQ)**

**ORGANISATION C**

***NAME OF LEADER:*** *ADMINISTRATOR* ***SEX:*** *FEMALE*

**TABLE:**

| LEADERS'S FACTOR PROFILE | SELF | RATER 1 | RATER 2 | RATER 3 | RATER 4 | RATER 5 | RATER 6 | RATER 7 | RATER 8 | RATER 9 | MEAN | MEANSR | MEANR | S-R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4 | 4 | 3 | 0 | 2 | 4 | 3 | 4 | 3 | 1 | 2.67 | | | |
| *8* | *4* | *4* | *2* | *3* | *3* | *3* | *2* | *3* | *3* | *3* | *2.89* | | | |
| 15 | 3 | 4 | 2 | 3 | 2 | 3 | 2 | 4 | 3 | 3 | 2.89 | | | |
| 22 | 3 | 4 | 3 | 3 | 1 | 3 | 2 | 0 | 2 | 2 | 2.22 | | | |
| 29 | 3 | 4 | 3 | 1 | 3 | 3 | 2 | 3 | 4 | 3 | 2.89 | | | |
| 36 | 4 | 4 | 2 | 2 | 4 | 4 | 2 | 4 | 4 | 3 | 3.22 | | | |
| 43 | 4 | 4 | 4 | 4 | 2 | 3 | 2 | 3 | 4 | 3 | 3.22 | | | |
| 50 | 4 | 4 | 2 | 4 | 3 | 3 | 2 | 4 | 3 | 4 | 3.22 | | | |
| 57 | 3 | 4 | 0 | 3 | 2 | 4 | 2 | 2 | 3 | 3 | 2.56 | | | |
| *64* | 3 | *4* | *2* | *3* | *2* | *4* | *2* | *2* | *3* | 3 | *2.78* | *3.50* | *4.00* | *3.75* |
| 2 | 3 | 4 | 1 | 2 | 1 | 3 | 2 | 4 | 3 | 3 | 2.56 | | | |
| 9 | 3 | 4 | 3 | 4 | 2 | 3 | 2 | 2 | 3 | 3 | 2.89 | | | |
| 16 | 4 | 4 | 2 | 3 | 3 | 4 | 2 | 4 | 3 | 3 | 3.11 | | | |
| 23 | 4 | 4 | 3 | 3 | 2 | 3 | 2 | 4 | 3 | 2 | 2.89 | | | |
| 30 | 3 | 4 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 2.89 | | | |
| 37 | 3 | 4 | 1 | 3 | 3 | 3 | 2 | 2 | 3 | 4 | 2.78 | | | |
| 44 | 4 | 4 | 2 | 2 | 2 | 4 | 2 | 4 | 3 | 3 | 2.89 | 3.43 | 4.00 | 3.71 |
| *3* | *2* | *3* | *1* | *1* | *0* | *3* | *2* | *0* | *3* | 3 | *1.78* | | | |
| 10 | 2 | 3 | 0 | 4 | 2 | 2 | 2 | 3 | 4 | 4 | 2.67 | | | |
| 17 | 2 | 4 | 1 | 3 | 2 | 3 | 1 | 4 | 3 | 2 | 2.56 | | | |
| 24 | 3 | 3 | 0 | 2 | 1 | 3 | 2 | 2 | 4 | 3 | 2.22 | | | |
| 31 | 3 | 4 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 3 | 2.78 | | | |
| 38 | 3 | 3 | 3 | 2 | 2 | 4 | 2 | 4 | 3 | 4 | 3.00 | | | |
| 45 | 4 | 4 | 2 | 2 | 4 | 3 | 2 | 4 | 4 | 4 | 3.22 | | | |
| 52 | 2 | 4 | 2 | 3 | 4 | 3 | 2 | 4 | 2 | 3 | 3.00 | | | |
| *59* | *3* | *4* | *2* | *3* | *3* | *4* | *2* | *2* | *3* | 3 | *2.89* | | | |
| 66 | 3 | 4 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 4 | 3.00 | 2.70 | 3.60 | 3.15 |
| 4 | 4 | 4 | 2 | 3 | 3 | 3 | 2 | 4 | 4 | 3 | 3.11 | | | |
| 11 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 4 | 3 | 2 | 3.00 | | | |
| 18 | 4 | 4 | 2 | 3 | 2 | 3 | 2 | 1 | 2 | 3 | 2.44 | | | |
| 25 | 4 | 4 | 2 | 0 | 4 | 4 | 3 | 4 | 4 | 3 | 3.11 | | | |
| 32 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 3.44 | | | |
| 39 | 4 | 4 | 3 | 2 | 3 | 4 | 3 | 4 | 4 | 3 | 3.33 | | | |
| *46* | *3* | *4* | *3* | *3* | *2* | *3* | *2* | *4* | *4* | *4* | *3.22* | | | |
| 53 | 4 | 4 | 4 | 0 | 3 | 4 | 4 | 4 | 3 | 2 | 3.11 | | | |
| 60 | 4 | 4 | 3 | 3 | 3 | 4 | 3 | 4 | 2 | 4 | 3.33 | | | |
| 67 | 4 | 4 | 4 | 3 | 2 | 4 | 2 | 3 | 4 | 1 | 3.00 | 3.90 | 4.00 | 3.95 |
| 5 | 4 | 4 | 2 | 0 | 3 | 3 | 2 | 2 | 3 | 2 | 2.33 | | | |
| 12 | 4 | 4 | 2 | 2 | 4 | 3 | 2 | 2 | 3 | 3 | 2.78 | | | |
| 19 | 3 | 4 | 0 | 3 | 1 | 4 | 2 | 4 | 2 | 3 | 2.56 | | | |
| 26 | 2 | 3 | 0 | 0 | 2 | 0 | 2 | 2 | 3 | 1 | 1.44 | | | |
| *33* | *4* | *4* | *3* | *3* | *2* | *3* | *2* | *3* | *3* | *3* | *2.89* | | | |
| 40 | 2 | 3 | 2 | 1 | 3 | 2 | 2 | 4 | 3 | 4 | 2.67 | | | |
| 47 | 1 | 2 | 2 | 3 | 1 | 4 | 2 | 3 | 3 | 4 | 2.67 | | | |
| 54 | 3 | 4 | 2 | 3 | 3 | 3 | 2 | 4 | 2 | 4 | 3.00 | | | |
| 61 | 2 | 0 | 0 | 3 | 0 | 4 | 2 | 1 | 2 | 3 | 1.67 | | | |
| 68 | 4 | 4 | 2 | 3 | 2 | 3 | 4 | 2 | 2 | 4 | 2.89 | 2.90 | 3.20 | 3.05 |
| 6 | 3 | 4 | 3 | 3 | 3 | 3 | 2 | 4 | 4 | 3 | 3.22 | | | |
| 13 | 3 | 4 | 0 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 2.44 | | | |
| *20* | *2* | *4* | *2* | *2* | *3* | *4* | *2* | *4* | *2* | *3* | *2.89* | | | |
| 27 | 2 | 3 | 0 | 4 | 4 | 3 | 2 | 4 | 3 | 2 | 2.78 | | | |
| 34 | 4 | 4 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 3 | 2.33 | | | |
| 41 | 4 | 4 | 4 | 4 | 1 | 4 | 2 | 4 | 3 | 4 | 3.33 | | | |
| 48 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 2 | 2 | 1.11 | | | |
| 55 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 1 | 2 | 0 | 0.78 | | | |
| 62 | 3 | 0 | 0 | 0 | 1 | 4 | 2 | 1 | 3 | 1 | 1.33 | | | |
| 69 | 4 | 4 | 4 | 3 | 2 | 4 | 2 | 2 | 3 | 4 | 3.11 | 2.70 | 2.70 | 2.70 |
| *7* | *2* | *3* | *0* | *0* | *0* | *1* | *4* | *0* | *2* | *3* | *1.44* | | | |
| 14 | 1 | 4 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 3 | 1.11 | | | |
| 21 | 1 | 4 | 0 | 4 | 0 | 0 | 2 | 0 | 2 | 2 | 1.56 | | | |
| 28 | 2 | 3 | 0 | 0 | 0 | 0 | 4 | 0 | 2 | 1 | 1.11 | | | |
| 35 | 2 | 4 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 3 | 1.44 | | | |
| 42 | 1 | 4 | 0 | 2 | 1 | 3 | 4 | 4 | 2 | 4 | 2.67 | | | |
| 49 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 3 | 0.56 | | | |
| 56 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0.33 | | | |
| *63* | *1* | *0* | *0* | *2* | *3* | *0* | *2* | *2* | *2* | *4* | *1.67* | | | |
| 70 | 1 | 4 | 0 | 1 | 1 | 0 | 2 | 0 | 2 | 4 | 1.56 | 1.10 | 2.60 | 1.85 |
| 51 | 3 | 0 | 4 | 0 | 2 | 3 | 2 | 4 | 0 | 4 | 2.11 | | | |
| 58 | 4 | 4 | 3 | 3 | 3 | 4 | 2 | 2 | 4 | 3 | 3.11 | | | |
| 65 | 4 | 4 | 2 | 2 | 1 | 3 | 2 | 2 | 3 | 4 | 2.56 | 3.67 | 2.67 | 3.17 |
| 72 | 3 | 4 | 2 | 1 | 1 | 3 | 3 | 2 | 3 | 1 | 2.22 | | | |
| 71 | 3 | 4 | 2 | 0 | 3 | 3 | 3 | 4 | 4 | 2 | 2.78 | | | |
| 73 | 3 | 4 | 2 | 2 | 2 | 3 | 2 | 2 | 4 | 2 | 2.56 | | | |
| *74* | *3* | *4* | *2* | *4* | *3* | *3* | *2* | *4* | *4* | 3 | *3.22* | *3.00* | *4.00* | *3.50* |
| 75 | 4 | 4 | 3 | 3 | 4 | 3 | 2 | 4 | 3 | 3 | 3.22 | | | |
| 76 | 3 | 4 | 3 | 4 | 2 | 3 | 2 | 2 | 3 | 3 | 2.89 | 3.50 | 4.00 | 3.75 |
| 77 | 4 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 3 | 1.56 | | | |
| 78 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4.11 | | | |
| 79 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4.89 | | | |
| 80 | 2 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 2.78 | | | |

MULTIFACTOR LEADERSHIP QUESTIONAIRE (MLQ)

ORGANISATION C

*NAME OF LEADER: AREA MANAGER 1* *SEX: FEMALE*

TABLE:

| LEADERS'S FACTOR PROFILE | SELF | RATER 1 | RATER 2 | RATER 3 | RATER 4 | RATER 5 | MEAN | MEANSR | MEANR | S-R |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4 | 2 | 4 | 3 | 4 | 3 | 3.2 | | | |
| 8 | 4 | 3 | 4 | 2 | 4 | 3 | 3.2 | | | |
| 15 | 4 | 3 | 4 | 1 | 4 | 2 | 2.8 | | | |
| 22 | 3 | 2 | 2 | 2 | 4 | 3 | 2.6 | | | |
| 29 | 3 | 2 | 3 | 2 | 3 | 3 | 2.6 | | | |
| 36 | 4 | 4 | 4 | 3 | 4 | 3 | 3.6 | | | |
| 43 | 4 | 3 | 3 | 2 | 3 | 4 | 3 | | | |
| 50 | 4 | 2 | 3 | 1 | 4 | 4 | 2.8 | | | |
| 57 | 3 | 3 | 3 | 0 | 3 | 3 | 2.4 | | | |
| 64 | 4 | 3 | 4 | 1 | 4 | 4 | 3.2 | 3.70 | ERR | ERR |
| 2 | 4 | 3 | 4 | 2 | 4 | 3 | 3.2 | | | |
| 9 | 3 | 2 | 4 | 1 | 4 | 3 | 2.8 | | | |
| 16 | 4 | 3 | 1 | 2 | 3 | 2 | 2.2 | | | |
| 23 | 4 | 2 | 3 | 2 | 2 | 3 | 2.4 | | | |
| 30 | 2 | 2 | 2 | 2 | 4 | 3 | 2.6 | | | |
| 37 | 3 | 3 | 2 | 2 | 3 | 4 | 2.8 | | | |
| 44 | 3 | 2 | 3 | 2 | 3 | 3 | 2.6 | 3.29 | ERR | ERR |
| 3 | 3 | 2 | 2 | 1 | 2 | 3 | 2 | | | |
| 10 | 3 | 2 | 3 | 1 | 2 | 4 | 2.4 | | | |
| 17 | 2 | 2 | 2 | 2 | 4 | 3 | 2.6 | | | |
| 24 | 3 | 2 | 2 | 2 | 3 | 4 | 2.6 | | | |
| 31 | 1 | 2 | 2 | 2 | 4 | 3 | 2.6 | | | |
| 38 | 3 | 2 | 3 | 3 | 3 | 3 | 2.8 | | | |
| 45 | 2 | 2 | 2 | 1 | 2 | 4 | 2.2 | | | |
| 52 | 3 | 3 | 2 | 2 | 2 | 3 | 2.4 | | | |
| 59 | 3 | 3 | 4 | 0 | 4 | 3 | 2.8 | | | |
| 66 | 4 | 2 | 2 | 2 | 4 | 3 | 2.6 | 2.70 | ERR | ERR |
| 4 | 4 | 2 | 3 | 1 | 2 | 3 | 2.2 | | | |
| 11 | 3 | 2 | 4 | 3 | 2 | 3 | 2.8 | | | |
| 18 | 3 | 1 | 3 | 0 | 4 | 4 | 2.4 | | | |
| 25 | 4 | 3 | 4 | 2 | 4 | 3 | 3.2 | | | |
| 32 | 3 | 2 | 3 | 0 | 3 | 3 | 2.2 | | | |
| 39 | 4 | 4 | 4 | 1 | 4 | 4 | 3.4 | | | |
| 46 | 4 | 4 | 4 | 3 | 4 | 3 | 3.6 | | | |
| 53 | 4 | 4 | 3 | 3 | 4 | 4 | 3.6 | | | |
| 60 | 4 | 4 | 4 | 3 | 4 | 4 | 3.8 | | | |
| 67 | 4 | 4 | 4 | 3 | 4 | 3 | 3.6 | 3.70 | 3.08 | 3.39 |
| 5 | 3 | 3 | 2 | 3 | 2 | 4 | 2.8 | | | |
| 12 | 3 | 3 | 4 | 1 | 3 | 3 | 2.8 | | | |
| 19 | 3 | 0 | 2 | 0 | 3 | 2 | 1.4 | | | |
| 26 | 0 | 0 | 0 | 0 | 3 | 3 | 1.2 | | | |
| 33 | 4 | 3 | 4 | 0 | 4 | 3 | 2.8 | | | |
| 40 | 3 | 0 | 1 | 0 | 2 | 3 | 1.2 | | | |
| 47 | 0 | 0 | 0 | 2 | 1 | 3 | 1.2 | | | |
| 54 | 4 | 0 | 1 | 1 | 4 | 3 | 1.8 | | | |
| 61 | 0 | 0 | 3 | 0 | 0 | 3 | 1.2 | | | |
| 68 | 4 | 4 | 2 | 0 | 4 | 4 | 2.8 | 2.40 | 1.92 | 2.16 |
| 6 | 2 | 2 | 4 | 3 | 2 | 3 | 2.8 | | | |
| 13 | 2 | 1 | 3 | 4 | 2 | 3 | 2.6 | | | |
| 20 | 3 | 2 | 3 | 4 | 3 | 3 | 3 | | | |
| 27 | 2 | 0 | 0 | 2 | 4 | 3 | 1.8 | | | |
| 34 | 2 | 2 | 3 | 3 | 4 | 4 | 3.2 | | | |
| 41 | 3 | 0 | 2 | 1 | 4 | 4 | 2.2 | | | |
| 48 | 1 | 0 | 2 | 3 | 1 | 4 | 2 | | | |
| 55 | 0 | 0 | 0 | 2 | 0 | 3 | 1 | | | |
| 62 | 1 | 0 | 2 | 1 | 2 | 3 | 1.6 | | | |
| 69 | 3 | 0 | 3 | 1 | 2 | 4 | 2 | 1.90 | 2.22 | 2.06 |
| 7 | 2 | 1 | 2 | 2 | 4 | 4 | 2.6 | | | |
| 14 | 2 | 2 | 2 | 1 | 3 | 4 | 2.4 | | | |
| 21 | 0 | 0 | 0 | 0 | 1 | 3 | 0.8 | | | |
| 28 | 0 | 0 | 1 | 1 | 2 | 3 | 1.4 | | | |
| 35 | 0 | 2 | 2 | 0 | 2 | 3 | 1.8 | | | |
| 42 | 1 | 2 | 3 | 4 | 0 | 3 | 2.4 | | | |
| 49 | 0 | 1 | 0 | 0 | 4 | 3 | 1.6 | | | |
| 56 | 0 | 0 | 0 | 0 | 0 | 4 | 0.8 | | | |
| 63 | 0 | 1 | 3 | 1 | 0 | 3 | 1.6 | | | |
| 70 | 0 | 2 | 1 | 3 | 0 | 4 | 2 | 0.50 | 1.74 | 1.12 |
| 51 | 4 | 2 | 4 | 2 | 4 | 3 | 3 | | | |
| 58 | 3 | 2 | 3 | 2 | 4 | 4 | 3 | | | |
| 65 | 3 | 2 | 3 | 0 | 4 | 4 | 2.6 | 3.33 | 2.87 | 3.10 |
| 72 | 3 | 2 | 3 | 1 | 3 | 3 | 2.4 | | | |
| 71 | 2 | 2 | 3 | 2 | 3 | 3 | 2.6 | | | |
| 73 | 3 | 3 | 2 | 2 | 3 | 3 | 2.6 | | | |
| 74 | 2 | 3 | 2 | 2 | 3 | 3 | 2.6 | 2.50 | 2.55 | 2.53 |
| 75 | 3 | 3 | 3 | 1 | 3 | 2 | 2.4 | | | |
| 76 | 3 | 3 | 3 | 1 | 3 | 2 | 2.4 | 3.00 | 2.40 | 2.70 |
| 77 | 2 | 1 | 1 | 2 | 2 | 3 | 1.8 | | | |
| 78 | 4 | 4 | 4 | 4 | 4 | 3 | 3.8 | | | |
| 79 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| 80 | 2 | 1 | 3 | 1 | 2 | 2 | 1.8 | | | |

MULTIFACTOR LEADERSHIP QUESTIONAIRE (MLQ)

ORGANISATION C

NAME OF LEADER: AREA MANAGER 2 SEX: FEMALE

N=5

TABLE:

| LEADERS'S FACTOR PROFILE | SELF | RATER 1 | RATER 2 | RATER 3 | RATER 4 | RATER 5 | MEAN | MEANSR | MEANR | S-R |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | 3 | 3 | 3 | 3 | 2 | 2.8 | | | |
| 6 | 3 | 3 | 3 | 4 | 3 | 2 | 3 | | | |
| 15 | 3 | 4 | 3 | 3 | 3 | 3 | 3.2 | | | |
| 22 | 3 | 3 | 3 | 4 | 3 | 2 | 3 | | | |
| 29 | 3 | 2 | 2 | 4 | 3 | 3 | 2.8 | | | |
| 36 | 3 | 2 | 2 | 3 | 4 | 3 | 2.8 | | | |
| 43 | 3 | 2 | 2 | 3 | 3 | 4 | 2.8 | | | |
| 50 | 4 | 2 | 3 | 2 | 2 | 4 | 2.6 | | | |
| 57 | 3 | 3 | 2 | 3 | 2 | 3 | 2.6 | | | |
| 64 | 3 | 4 | 2 | 2 | 3 | 4 | 3 | 3.10 | 2.86 | 2.98 |
| 2 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| 9 | 4 | 4 | 2 | 3 | 3 | 3 | 3 | | | |
| 16 | 4 | 3 | 3 | 3 | 2 | 2 | 2.6 | | | |
| 23 | 2 | 3 | 3 | 3 | 2 | 3 | 2.8 | | | |
| 30 | 3 | 3 | 3 | 3 | 2 | 2 | 2.6 | | | |
| 37 | 4 | 2 | 3 | 2 | 2 | 3 | 2.4 | | | |
| 44 | 3 | 2 | 3 | 2 | 2 | 4 | 2.6 | 3.43 | 2.71 | 3.07 |
| 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| 10 | 3 | 3 | 3 | 3 | 2 | 2 | 2.6 | | | |
| 17 | 3 | 3 | 2 | 4 | 3 | 3 | 3 | | | |
| 24 | 3 | 3 | 2 | 4 | 3 | 3 | 3 | | | |
| 31 | 3 | 2 | 3 | 3 | 3 | 3 | 2.8 | | | |
| 38 | 3 | 3 | 2 | 3 | 2 | 3 | 2.6 | | | |
| 45 | 4 | 2 | 3 | 3 | 2 | 4 | 2.8 | | | |
| 52 | 3 | 3 | 3 | 2 | 3 | 2 | 2.6 | | | |
| 59 | 3 | 3 | 2 | 2 | 2 | 3 | 2.4 | | | |
| 66 | 3 | 4 | 3 | 2 | 3 | 2 | 2.8 | 3.20 | 2.78 | 2.98 |
| 4 | 3 | 4 | 3 | 3 | 4 | 2 | 3.2 | | | |
| 11 | 4 | 3 | 3 | 4 | 3 | 3 | 3.2 | | | |
| 18 | 4 | 3 | 2 | 3 | 2 | 2 | 2.4 | | | |
| 25 | 2 | 3 | 3 | 3 | 2 | 3 | 2.8 | | | |
| 32 | 4 | 3 | 2 | 2 | 3 | 3 | 2.6 | | | |
| 39 | 4 | 4 | 2 | 2 | 2 | 3 | 2.6 | | | |
| 46 | 4 | 3 | 3 | 2 | 3 | 4 | 3 | | | |
| 53 | 3 | 3 | 2 | 2 | 3 | 3 | 2.6 | | | |
| 60 | 3 | 3 | 3 | 3 | 4 | 3 | 3.2 | | | |
| 67 | 3 | 3 | 2 | 2 | 4 | 2 | 2.6 | 3.40 | 2.82 | 3.11 |
| 5 | 4 | 3 | 3 | 4 | 3 | 2 | 3 | | | |
| 12 | 3 | 4 | 3 | 2 | 3 | 2 | 2.8 | | | |
| 19 | 3 | 3 | 2 | 3 | 3 | 3 | 2.8 | | | |
| 26 | 3 | 2 | 3 | 4 | 3 | 2 | 2.8 | | | |
| 33 | 4 | 2 | 3 | 3 | 4 | 3 | 3 | | | |
| 40 | 3 | 2 | 3 | 3 | 3 | 2 | 2.6 | | | |
| 47 | 3 | 4 | 2 | 3 | 3 | 3 | 3 | | | |
| 54 | 3 | 3 | 3 | 2 | 3 | 3 | 2.8 | | | |
| 61 | 4 | 4 | 3 | 2 | 2 | 3 | 2.8 | | | |
| 68 | 3 | 4 | 2 | 3 | 3 | 2 | 2.8 | 3.30 | 2.84 | 3.07 |
| 6 | 3 | 3 | 2 | 2 | 3 | 2 | 2.4 | | | |
| 13 | 4 | 3 | 4 | 4 | 3 | 3 | 3.4 | | | |
| 20 | 3 | 4 | 2 | 4 | 2 | 2 | 2.8 | | | |
| 27 | 3 | 2 | 2 | 3 | 2 | 3 | 2.4 | | | |
| 34 | 4 | 3 | 2 | 3 | 3 | 3 | 2.8 | | | |
| 41 | 4 | 4 | 3 | 2 | 2 | 4 | 3 | | | |
| 48 | 3 | 3 | 3 | 2 | 2 | 2 | 2.4 | | | |
| 55 | 3 | 3 | 2 | 3 | 3 | 4 | 3 | | | |
| 62 | 3 | 3 | 2 | 3 | 3 | 3 | 2.8 | | | |
| 69 | 4 | 3 | 3 | 2 | 3 | 3 | 2.8 | 3.40 | 2.78 | 3.09 |
| 7 | 4 | 2 | 2 | 4 | 2 | 2 | 2.4 | | | |
| 14 | 3 | 4 | 2 | 3 | 2 | 2 | 2.6 | | | |
| 21 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| 28 | 3 | 2 | 3 | 3 | 2 | 2 | 2.4 | | | |
| 35 | 4 | 2 | 3 | 2 | 3 | 3 | 2.6 | | | |
| 42 | 3 | 2 | 3 | 3 | 3 | 2 | 2.6 | | | |
| 49 | 4 | 2 | 2 | 3 | 2 | 3 | 2.4 | | | |
| 56 | 2 | 4 | 3 | 2 | 2 | 3 | 2.8 | | | |
| 63 | 3 | 3 | 3 | 2 | 4 | 3 | 3 | | | |
| 70 | 3 | 3 | 2 | 3 | 3 | 4 | 3 | 3.10 | 2.68 | 2.89 |
| 51 | 4 | 3 | 2 | 3 | 3 | 3 | 2.8 | | | |
| 58 | 3 | 3 | 3 | 2 | 2 | 3 | 2.6 | | | |
| 65 | 4 | 3 | 2 | 3 | 3 | 3 | 2.8 | 3.67 | 2.73 | 3.20 |
| 72 | 3 | 3 | 2 | 2 | 3 | 3 | 2.6 | | | |
| 71 | 4 | 3 | 3 | 2 | 4 | 3 | 3 | | | |
| 73 | 3 | 3 | 2 | 2 | 4 | 3 | 2.8 | | | |
| 74 | 4 | 2 | 3 | 2 | 3 | 3 | 2.6 | 3.50 | 2.75 | 3.13 |
| 75 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| 76 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3.50 | 3.00 | 3.25 |
| 77 | 2 | 3 | 3 | 4 | 2 | 1 | 2.6 | | | |
| 78 | 3 | 4 | 3 | 3 | 3 | 3 | 3.2 | | | |
| 79 | 4 | 4 | 4 | 2 | 4 | 4 | 3.6 | | | |
| 80 | 3 | 3 | 3 | 2 | 3 | 2 | 2.6 | | | |

MULTIFACTOR LEADERSHIP QUESTIONAIRE (MLQ)

ORGANISATION C

NAME OF LEADER: OPERATIONAL MANAGER 1 SEX: FEMALE

TABLE:

| LEADERS'S FACTOR PROFILE | SELF | RATER 1 | RATER 2 | RATER 3 | RATER 4 | RATER 5 | MEAN | MEANSR | MEANR | S-R |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | 3 | 4 | 3 | 2 | 2 | 2.80 | | | |
| 8 | 2 | 3 | 3 | 2 | 3 | 3 | 2.80 | | | |
| 15 | 2 | 4 | 4 | 2 | 3 | 2 | 3.00 | | | |
| 22 | 2 | 1 | 1 | 1 | 3 | 2 | 1.60 | | | |
| 29 | 2 | 3 | 3 | 2 | 2 | 3 | 2.60 | | | |
| 36 | 4 | 3 | 3 | 3 | 3 | 2 | 2.80 | | | |
| 43 | 3 | 4 | 3 | 3 | 3 | 2 | 3.00 | | | |
| 50 | 2 | 2 | 2 | 2 | 2 | 2 | 2.00 | | | |
| 57 | 3 | 3 | 2 | 2 | 2 | 3 | 2.40 | | | |
| 64 | 2 | 3 | 4 | 4 | 3 | 3 | 3.40 | 2.50 | 2.64 | 2.57 |
| 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3.00 | | | |
| 9 | 2 | 2 | 2 | 2 | | 3 | 2.25 | | | |
| 16 | 2 | 0 | 2 | 3 | 3 | 3 | 2.20 | | | |
| 23 | 2 | 3 | 4 | 4 | 3 | 3 | 3.40 | | | |
| 30 | 3 | 2 | 3 | 2 | 2 | 2 | 2.20 | | | |
| 37 | 3 | 3 | 4 | 4 | 3 | 2 | 3.20 | | | |
| 44 | 3 | 3 | 4 | 4 | 3 | 3 | 3.40 | 2.57 | 2.81 | 2.69 |
| 3 | 2 | 2 | 2 | 2 | 3 | 2 | 2.20 | | | |
| 10 | 4 | 3 | 3 | 4 | 3 | 3 | 3.20 | | | |
| 17 | 2 | 2 | 2 | 2 | 2 | 3 | 2.20 | | | |
| 24 | 3 | 2 | 4 | 4 | 3 | 2 | 3.00 | | | |
| 31 | 2 | 4 | 4 | 4 | 3 | 3 | 3.60 | | | |
| 38 | 3 | 3 | 3 | 3 | 3 | 3 | 3.00 | | | |
| 45 | 1 | 3 | 3 | 3 | 3 | 2 | 2.80 | | | |
| 52 | 2 | 4 | 4 | 4 | 2 | 2 | 3.20 | | | |
| 59 | 3 | 3 | 3 | 3 | 3 | 2 | 2.80 | | | |
| 66 | 3 | 3 | 3 | 3 | 3 | 3 | 3.00 | 2.50 | 2.90 | 2.70 |
| 4 | 4 | 3 | 4 | 4 | 3 | 3 | 3.40 | | | |
| 11 | 3 | 2 | 3 | 3 | 3 | 3 | 2.80 | | | |
| 18 | 2 | 4 | 2 | 2 | 3 | 3 | 2.80 | | | |
| 25 | 4 | 4 | 4 | 4 | 2 | 3 | 3.40 | | | |
| 32 | 3 | 3 | 3 | 3 | 3 | 2 | 2.80 | | | |
| 39 | 3 | 2 | 2 | 2 | 2 | 3 | 2.20 | | | |
| 46 | 3 | 4 | 4 | 4 | 3 | 3 | 3.60 | | | |
| 53 | 4 | 4 | 4 | 4 | 3 | 3 | 3.60 | | | |
| 60 | 2 | 4 | 4 | 4 | 2 | 3 | 3.40 | | | |
| 67 | 2 | 4 | 3 | 3 | 2 | 2 | 2.80 | 3.00 | 3.08 | 3.04 |
| 5 | 2 | 2 | 2 | 2 | 3 | 2 | 2.20 | | | |
| 12 | 4 | 2 | 4 | 4 | 3 | 3 | 3.20 | | | |
| 19 | 2 | 3 | 3 | 3 | 3 | 3 | 3.00 | | | |
| 26 | 3 | 3 | 0 | 0 | 3 | 2 | 1.60 | | | |
| 33 | 2 | 2 | 2 | 2 | 3 | 3 | 2.40 | | | |
| 40 | 2 | 0 | 0 | 0 | 2 | 2 | 0.80 | | | |
| 47 | 1 | 0 | 0 | 0 | 2 | 2 | 0.80 | | | |
| 54 | 3 | 3 | 3 | 3 | 3 | 2 | 2.80 | | | |
| 61 | 2 | 0 | 0 | 0 | 3 | 3 | 1.20 | | | |
| 68 | 3 | 1 | 2 | 2 | 3 | 3 | 2.20 | 2.40 | 2.02 | 2.21 |
| 6 | 2 | 3 | 2 | 2 | 3 | 3 | 2.60 | | | |
| 13 | 2 | 4 | 2 | 2 | 2 | 3 | 2.60 | | | |
| 20 | 2 | 3 | 3 | 3 | 2 | 3 | 2.80 | | | |
| 27 | 2 | 3 | 2 | 2 | 3 | 2 | 2.40 | | | |
| 34 | 0 | 0 | 3 | 3 | 2 | 3 | 2.20 | | | |
| 41 | 2 | 4 | 4 | 4 | 3 | 2 | 3.40 | | | |
| 48 | 2 | 0 | 0 | 0 | 3 | 3 | 1.20 | | | |
| 55 | 0 | 3 | 0 | 0 | 2 | 3 | 1.60 | | | |
| 62 | 3 | 2 | 2 | 2 | 3 | 2 | 2.20 | | | |
| 69 | 3 | 4 | 4 | 4 | 2 | 3 | 3.40 | 1.80 | 2.44 | 2.12 |
| 7 | 0 | 4 | 0 | 0 | 3 | 3 | 2.00 | | | |
| 14 | 0 | 0 | 0 | 0 | 2 | 3 | 1.00 | | | |
| 21 | 2 | 0 | 0 | 0 | 3 | 3 | 1.20 | | | |
| 28 | 0 | 0 | 0 | 0 | 2 | 2 | 0.80 | | | |
| 35 | 1 | 3 | 0 | 0 | 3 | 3 | 1.80 | | | |
| 42 | 1 | 3 | 1 | 1 | 3 | 3 | 2.20 | | | |
| 49 | 0 | 0 | 0 | 0 | 3 | 3 | 1.20 | | | |
| 56 | 0 | 3 | 0 | 0 | 3 | 2 | 1.60 | | | |
| 63 | 1 | 3 | 4 | 4 | 2 | 3 | 3.20 | | | |
| 70 | 2 | 0 | 0 | 4 | 3 | 2 | 1.80 | 0.70 | 1.68 | 1.19 |
| 51 | 2 | 1 | 1 | 1 | 3 | 3 | 1.80 | | | |
| 58 | 3 | 4 | 3 | 3 | 3 | 2 | 3.00 | | | |
| 65 | 3 | 3 | 3 | 3 | 2 | 2 | 2.60 | 2.67 | 2.47 | 2.57 |
| 72 | 2 | 2 | 2 | 2 | 3 | 3 | 2.40 | | | |
| 71 | 3 | 2 | 3 | 3 | 2 | 3 | 2.60 | | | |
| 73 | 1 | 3 | 3 | 3 | 2 | 3 | 2.80 | | | |
| 74 | | 3 | 3 | 3 | 3 | 3 | 3.00 | 2.00 | 2.70 | 2.35 |
| 75 | 3 | 4 | 4 | 4 | 2 | 2 | 3.20 | | | |
| 76 | 1 | 3 | 3 | 3 | 0 | 2 | 2.20 | 2.00 | 2.70 | 2.35 |
| 77 | 2 | 4 | 2 | 4 | 2 | 3 | 3.00 | | | |
| 78 | 4 | 4 | 4 | 4 | 3 | 3 | 3.60 | | | |
| 79 | 4 | 2 | 4 | 4 | 4 | 4 | 3.60 | | | |
| 80 | 2 | 3 | 3 | 3 | 1 | 2 | 2.40 | | | |

MULTIFACTOR LEADERSHIP QUESTIONAIRE (MLQ)

INSTITUTION: C

NAME OF LEADER: OPERATIONAL MANAGER 2 SEX: FEMALE

N=5

TABLE:

| LEADERS'S FACTOR PROFILE | SELF | RATER 1 | RATER 2 | RATER 3 | RATER 4 | RATER 5 | MEAN | MEANSR | MEANR | S-R |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | 0 | 4 | 2 | 2 | 4 | 2.40 | | | |
| 8 | 2 | 1 | 3 | 4 | 0 | 4 | 2.40 | | | |
| 15 | 2 | 0 | 4 | 3 | 4 | 4 | 3.00 | | | |
| 22 | 3 | 0 | 2 | 1 | 4 | 4 | 2.20 | | | |
| 29 | 3 | 0 | 4 | 3 | 0 | 4 | 2.20 | | | |
| 36 | 3 | 2 | 4 | 4 | 4 | 4 | 3.60 | | | |
| 43 | 3 | 0 | 4 | 1 | 3 | 2 | 2.00 | | | |
| 50 | 3 | 0 | 3 | 2 | 3 | 4 | 2.40 | | | |
| 57 | 3 | 0 | 3 | 2 | 2 | | 1.75 | | | |
| 64 | 3 | 0 | 2 | 3 | 3 | 4 | 2.40 | 2.80 | 2.44 | 2.62 |
| 2 | 4 | 0 | 4 | 4 | 2 | 4 | 2.80 | | | |
| 9 | 2 | 0 | 4 | 4 | | 3 | 2.75 | | | |
| 16 | 3 | 2 | 4 | 2 | 4 | 4 | 3.20 | | | |
| 23 | 3 | 0 | 4 | 1 | 3 | 3 | 2.20 | | | |
| 30 | 2 | 0 | 3 | 1 | 0 | 3 | 1.40 | | | |
| 37 | 1 | 0 | 4 | 1 | 3 | 4 | 2.40 | | | |
| 44 | 3 | 0 | 4 | 1 | | 3 | 2.00 | 2.57 | 2.39 | 2.48 |
| 3 | 3 | 0 | 2 | 2 | | 3 | 1.75 | | | |
| 10 | 3 | 0 | 4 | 2 | | 3 | 2.25 | | | |
| 17 | 3 | 0 | 4 | 2 | 2 | 4 | 2.40 | | | |
| 24 | 2 | 0 | 4 | 1 | 2 | 3 | 2.00 | | | |
| 31 | 4 | 0 | 3 | 4 | 0 | 4 | 2.20 | | | |
| 38 | 4 | 0 | 3 | 3 | 4 | 4 | 2.80 | | | |
| 45 | 2 | 0 | 3 | 1 | 0 | 4 | 1.60 | | | |
| 52 | 4 | 0 | 2 | 1 | 4 | 4 | 2.20 | | | |
| 59 | 2 | 0 | 4 | 1 | 4 | 4 | 2.60 | | | |
| 66 | 3 | 2 | 2 | 3 | 4 | 4 | 3.00 | 3.00 | 2.28 | 2.64 |
| 4 | 2 | 2 | 4 | 1 | 3 | 4 | 2.80 | | | |
| 11 | 3 | 2 | 3 | 2 | 2 | 3 | 2.40 | | | |
| 18 | 3 | 2 | 4 | 1 | 1 | 2 | 2.00 | | | |
| 25 | 2 | 4 | 4 | 3 | 4 | 4 | 3.80 | | | |
| 32 | 2 | 0 | 2 | 2 | 2 | 4 | 2.00 | | | |
| 39 | 4 | 0 | 4 | 1 | 2 | 3 | 2.00 | | | |
| 46 | 1 | 0 | 4 | 2 | 1 | 4 | 2.20 | | | |
| 53 | 2 | 0 | 4 | 1 | 1 | 4 | 2.00 | | | |
| 60 | 2 | 2 | 4 | 2 | 1 | 4 | 2.60 | | | |
| 67 | 2 | 0 | 4 | 1 | 2 | 4 | 2.20 | 2.30 | 2.40 | 2.35 |
| 5 | 3 | 0 | 4 | 2 | 4 | 4 | 2.80 | | | |
| 12 | 3 | 1 | 4 | 3 | 1 | 4 | 2.60 | | | |
| 19 | 2 | 0 | 0 | 1 | 4 | 4 | 1.80 | | | |
| 26 | 1 | 0 | 0 | 0 | 2 | 3 | 1.00 | | | |
| 33 | 4 | 2 | 4 | 2 | 2 | 4 | 2.80 | | | |
| 40 | 1 | 2 | 0 | 0 | 0 | | 0.50 | | | |
| 47 | 1 | 0 | 0 | 0 | 0 | | 0.00 | | | |
| 54 | 3 | 0 | 3 | 1 | 0 | 0 | 0.80 | | | |
| 61 | 1 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | |
| 68 | 4 | 0 | 4 | 1 | 1 | 4 | 2.00 | 2.30 | 1.43 | 1.66 |
| 6 | 4 | 3 | 4 | 4 | 4 | 4 | 3.80 | | | |
| 13 | 4 | 3 | 4 | 4 | 4 | 4 | 3.80 | | | |
| 20 | 3 | 4 | 4 | 4 | | 4 | 4.00 | | | |
| 27 | 3 | 2 | 1 | 1 | | 3 | 1.75 | | | |
| 34 | 4 | 2 | 3 | 3 | 0 | 4 | 2.40 | | | |
| 41 | 3 | 2 | 2 | 2 | 4 | 2 | 2.40 | | | |
| 48 | 2 | 4 | 2 | 0 | 0 | 4 | 2.00 | | | |
| 55 | 1 | 2 | 2 | 3 | 1 | 0 | 1.60 | | | |
| 62 | 3 | 2 | 0 | 3 | 0 | 0 | 1.00 | | | |
| 69 | 2 | 2 | 4 | 3 | 0 | 4 | 2.60 | 2.90 | 2.54 | 2.72 |
| 7 | 3 | 3 | 1 | 4 | 4 | 4 | 3.20 | | | |
| 14 | 1 | 4 | 3 | 2 | 0 | 4 | 2.80 | | | |
| 21 | 1 | 3 | 3 | 0 | 0 | 0 | 1.20 | | | |
| 28 | 3 | 3 | 3 | 1 | 4 | 3 | 2.80 | | | |
| 35 | 3 | 2 | 3 | 4 | 0 | | 2.25 | | | |
| 42 | 2 | 4 | 2 | 1 | 4 | 3 | 2.80 | | | |
| 49 | 0 | 2 | | 0 | 4 | 0 | 1.50 | | | |
| 56 | 0 | 2 | 1 | 0 | 4 | 0 | 1.40 | | | |
| 63 | 0 | 2 | 2 | 2 | 0 | 2 | 1.60 | | | |
| 70 | 0 | 0 | 1 | 3 | 0 | 0 | 0.80 | 1.30 | 2.02 | 1.66 |
| 51 | 3 | 0 | 1 | 3 | 0 | 4 | 1.60 | | | |
| 58 | 2 | 0 | 4 | 2 | 1 | 4 | 2.20 | | | |
| 65 | 3 | 0 | 3 | 3 | 3 | 4 | 2.60 | 2.67 | 2.13 | 2.40 |
| 72 | 2 | 0 | 4 | 2 | 2 | 4 | 2.40 | | | |
| 71 | 3 | 2 | 3 | 2 | 3 | 2 | 2.40 | | | |
| 73 | 3 | 0 | 4 | 2 | 3 | 2 | 2.20 | | | |
| 74 | 2 | 1 | 4 | 3 | 2 | 4 | 2.80 | 2.50 | 2.45 | 2.48 |
| 75 | 3 | 1 | 4 | 3 | 3 | 4 | 3.00 | | | |
| 76 | 3 | 1 | 4 | 2 | 3 | 4 | 2.80 | 3.00 | 2.90 | 2.95 |
| 77 | 3 | 6 | 1 | 4 | 1 | 1 | 2.60 | | | |
| 78 | 5 | 3 | 3 | 5 | 3 | 3 | 3.40 | | | |
| 79 | 3 | 5 | 5 | 2 | 4 | 4 | 4.00 | | | |
| 80 | 3 | 2 | 3 | 1 | 2 | 4 | 2.40 | | | |

**MULTIFACTOR LEADERSHIP QUESTIONAIRE (MLQ)**

**ORGANISATION C**

***NAME OF LEADER:*** *OPERATIONAL MANAGER 3* ***SEX:*** *FEMALE*

**TABLE:**

| LEADERS'S FACTOR PROFILE | SELF | RATER 1 | RATER 2 | RATER 3 | RATER 4 | RATER 5 | MEAN | MEANSR | MEANR | S-R |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | 4 | 3 | 2 | 3 | 3 | 3 | | | |
| 8 | 4 | 3 | 2 | 2 | 3 | 2 | 2.4 | | | |
| 15 | 4 | 3 | 3 | 3 | 2 | 3 | 2.8 | | | |
| 22 | 3 | 2 | 2 | 3 | 3 | 3 | 2.6 | | | |
| 29 | 0 | 3 | 2 | 3 | 3 | 3 | 2.8 | | | |
| 36 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | | | |
| 43 | 4 | 3 | 3 | 3 | 2 | 2 | 2.6 | | | |
| 50 | 3 | 2 | 2 | 3 | 3 | 3 | 2.6 | | | |
| 57 | 3 | 3 | 3 | 4 | 2 | 3 | 3 | | | |
| 64 | 3 | 2 | 2 | 3 | 2 | 2 | 2.2 | 3.10 | 2.60 | 2.85 |
| 2 | 4 | 3 | 3 | 2 | 4 | 2 | 2.8 | | | |
| 9 | 3 | 2 | 4 | 3 | 4 | 2 | 3 | | | |
| 16 | 4 | 2 | 2 | 2 | 4 | 2 | 2.4 | | | |
| 23 | 3 | 3 | 2 | 2 | 3 | 3 | 2.6 | | | |
| 30 | 3 | 2 | 3 | 2 | 2 | 2 | 2.2 | | | |
| 37 | 4 | 3 | 3 | 3 | 2 | 3 | 2.8 | | | |
| 44 | 4 | 2 | 2 | 3 | 2 | 3 | 2.4 | 3.57 | 2.60 | 3.09 |
| 3 | 3 | 3 | 4 | 3 | 4 | 2 | 3.2 | | | |
| 10 | 3 | 2 | 3 | 4 | 3 | 3 | 3 | | | |
| 17 | 4 | 3 | 3 | 3 | 2 | 3 | 2.8 | | | |
| 24 | 4 | 3 | 2 | 3 | 2 | 2 | 2.4 | | | |
| 31 | 3 | 3 | 3 | 3 | 2 | 3 | 2.8 | | | |
| 38 | 4 | 2 | 2 | 3 | 3 | 2 | 2.4 | | | |
| 45 | 4 | 3 | 3 | 4 | 3 | 3 | 3.2 | | | |
| 52 | 3 | 2 | 2 | 3 | 3 | 2 | 2.4 | | | |
| 59 | 3 | 3 | 3 | 4 | 2 | 3 | 3 | | | |
| 66 | 3 | 2 | 2 | 3 | 2 | 2 | 2.2 | 3.40 | 2.74 | 3.07 |
| 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3.2 | | | |
| 11 | 3 | 3 | 3 | 2 | 3 | 2 | 2.6 | | | |
| 18 | 3 | 3 | 2 | 2 | 2 | 2 | 2.2 | | | |
| 25 | 4 | 3 | 3 | 2 | 3 | 3 | 2.8 | | | |
| 32 | 3 | 3 | 2 | 1 | 2 | 2 | 2 | | | |
| 39 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| 46 | 3 | 2 | 2 | 3 | 3 | 3 | 2.6 | | | |
| 53 | 4 | 3 | 3 | 4 | 3 | 3 | 3.2 | | | |
| 60 | 3 | 2 | 3 | 3 | 3 | 2 | 2.6 | | | |
| 67 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3.40 | 2.72 | 3.06 |
| 5 | 4 | 3 | 4 | 3 | 3 | 2 | 3 | | | |
| 12 | 4 | 2 | 2 | 3 | 3 | 2 | 2.4 | | | |
| 19 | 3 | | 3 | 2 | 4 | 3 | 3 | | | |
| 26 | 0 | 3 | 2 | 3 | 2 | 2 | 2.4 | | | |
| 33 | 4 | 3 | 2 | 3 | 2 | 3 | 2.6 | | | |
| 40 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | | | |
| 47 | 0 | 3 | 3 | 4 | 3 | 2 | 3 | | | |
| 54 | 3 | 2 | 2 | 3 | 3 | 2 | 2.4 | | | |
| 61 | 1 | 3 | 3 | 4 | 2 | 3 | 3 | | | |
| 68 | 4 | 2 | 2 | 3 | 2 | 2 | 2.2 | 2.60 | 2.60 | 2.60 |
| 6 | 4 | 4 | 3 | 4 | 3 | 3 | 3.4 | | | |
| 13 | 4 | 3 | 3 | 3 | 2 | 3 | 2.8 | | | |
| 20 | 4 | 3 | 2 | 2 | 2 | 2 | 2.2 | | | |
| 27 | 2 | 2 | 2 | 2 | 2 | 3 | 2.2 | | | |
| 34 | 4 | 2 | 2 | 2 | 3 | 2 | 2.2 | | | |
| 41 | 2 | 3 | 3 | 4 | 3 | 3 | 3.2 | | | |
| 48 | 4 | 2 | 2 | 3 | 3 | 3 | 2.6 | | | |
| 55 | 0 | 3 | 3 | 4 | 2 | 3 | 3 | | | |
| 62 | 3 | 2 | 2 | 3 | | 3 | 2.5 | | | |
| 69 | 4 | 3 | 3 | 3 | 3 | 1 | 2.6 | 3.10 | 2.67 | 2.89 |
| 7 | 4 | 3 | 3 | 2 | 4 | 2 | 2.8 | | | |
| 14 | 3 | 3 | 2 | 3 | 2 | 2 | 2.4 | | | |
| 21 | 1 | 3 | 3 | 2 | | 3 | 2.75 | | | |
| 28 | 3 | 2 | 3 | 2 | 3 | 2 | 2.4 | | | |
| 35 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| 42 | 2 | 2 | 2 | 3 | 3 | 2 | 2.4 | | | |
| 49 | 0 | 3 | 2 | 3 | 3 | 2 | 2.6 | | | |
| 56 | 0 | 2 | 2 | 3 | 3 | 3 | 2.6 | | | |
| 63 | 0 | 3 | 3 | 4 | 3 | 2 | 3 | | | |
| 70 | 4 | 2 | 2 | 3 | 2 | 3 | 2.4 | 2.00 | 2.64 | 2.32 |
| 51 | 3 | 3 | 3 | 4 | 2 | 2 | 2.8 | | | |
| 58 | 3 | 2 | 2 | 3 | 3 | 2 | 2.4 | | | |
| 65 | 3 | 3 | 3 | 4 | 3 | 2 | 3 | 3.00 | 2.73 | 2.87 |
| 72 | 4 | 2 | 2 | 3 | 3 | 2 | 2.4 | | | |
| 71 | 3 | 3 | 3 | 3 | 3 | 2 | 2.8 | | | |
| 73 | 2 | 3 | 3 | 3 | 2 | 3 | 2.8 | | | |
| 74 | 2 | 2 | 2 | 3 | 3 | 2 | 2.4 | 2.75 | 2.60 | 2.68 |
| 75 | 4 | 2 | 2 | 3 | 2 | 2 | 2.2 | | | |
| 76 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3.50 | 2.10 | 2.80 |
| 77 | 1 | 1 | 1 | 2 | 1 | 6 | 2.2 | | | |
| 78 | 2 | 4 | 3 | 3 | 3 | 3 | 2.8 | | | |
| 79 | 4 | 4 | 4 | 5 | 5 | 5 | 4.6 | | | |
| 80 | 2 | 2 | 2 | 1 | 2 | 2 | 1.8 | | | |

| 7 | G1RANK | G1ASS | G2RANK | G2ASS | G3RANK | G3ASS | G4RANK | G4ASS | G5RANK | G5ASS | G6RANK | G6ASS | G7RANK | G7ASS | G8RANK | G8ASS | G9RANK | G9ASS | G10RANK | G10 ASS | G11RANK | G11ASS | G12RANK | G12ASS | AVRE | LESU1 | LESU2 | CULIS | PRRE1 | PRRE2 | AGE | QUAL | OCC | MARST | GENDER | WKEXP | INSTA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GROUP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NURSES 1 | 1 | 1 | 3 | 4 | 2 | 2 | 5 | 3 | 7 | 4 | 4 | 4 | 6 | 3 | 8 | 4 | 11 | 3 | 10 | 4 | 9 | 2 | 12 | 4 | 2 | 2 | 1 | 2 | 2 | 2 | 6 | 4 | 2 | 2 | 2 | 16 | 3 |
| NURSES 2 | 4 | 3 | 1 | 4 | 3 | 1 | 12 | 5 | 10 | 4 | 11 | 1 | 2 | 5 | 5 | 6 | 7 | 4 | 9 | 5 | 8 | 6 | 6 | 6 | 2 | 4 | 3 | 6 | 6 | 4 | 6 | 3 | 6 | 1 | 2 | 9 | 3 |
| NURSES 3 | 1 | 2 | 3 | 2 | 2 | 2 | 8 | 2 | 10 | 3 | 6 | 1 | 11 | 3 | 4 | 2 | 7 | 2 | 5 | 3 | 9 | 3 | 12 | 2 | 2 | 3 | 2 | 4 | 3 | 2 | 6 | 3 | 4 | 3 | 2 | 14 | 3 |
| NURSES | 1 | 2 | 2 | 3 | 6 | 4 | 4 | 5 | 8 | 6 | 3 | 3 | 2 | 4 | 3 | 4 | 11 | 3 | 12 | 6 | 7 | 6 | 1 | 3 | 5 | 3 | 1 | 3 | 3 | 2 | 7 | 4 | 5 | 3 | 2 | 12 | 3 |
| NURSES 5 | 1 | 3 | 3 | 4 | 4 | 4 | 5 | 3 | 8 | 3 | 2 | 4 | 8 | 3 | 8 | 3 | 12 | 4 | 10 | 3 | 11 | 2 | 7 | 3 | 3 | 2 | 3 | 1 | 1 | 2 | 3 | 1 | 6 | 2 | 2 | 9 | 3 |
| NURSES 6 | 2 | 3 | 1 | 4 | 5 | 5 | 3 | 3 | 2 | 3 | 4 | 2 | 4 | 2 | 2 | 2 | 8 | 5 | 5 | 4 | 3 | 2 | 1 | 5 | 3 | 3 | 1 | 3 | 3 | 2 | 6 | 4 | 5 | 2 | 2 | 4 | 3 |
| NURSES 7 | 2 | 4 | 1 | 3 | 5 | 4 | 3 | 5 | 4 | 3 | 1 | 4 | 6 | 3 | 2 | 4 | 7 | 4 | 8 | 3 | 3 | 4 | 1 | 3 | 3 | 3 | 1 | 3 | 3 | 2 | 7 | 4 | 6 | 2 | 2 | 10 | 3 |
| NURSES 8 | 3 | 4 | 5 | 3 | 6 | 2 | 4 | 3 | 5 | 3 | 1 | 1 | 5 | 3 | 3 | 3 | 1 | 1 | 1 | 4 | 4 | 3 | 6 | 4 | 4 | 4 | 3 | 2 | 4 | 3 | 7 | 3 | 6 | 2 | 2 | 12 | 3 |
| NURSES 9 | 1 | 1 | 4 | 3 | 5 | 1 | 7 | 1 | 8 | 2 | 6 | 1 | 2 | 2 | 3 | 2 | 11 | 3 | 9 | 4 | 10 | 3 | 12 | 3 | 2 | 3 | 1 | 2 | 3 | 2 | 3 | 5 | 4 | 1 | 2 | 15 | 3 |
| NURSES 10 | 1 | 3 | 9 | 4 | 3 | 6 | 10 | 4 | 8 | 5 | 7 | 3 | 6 | 6 | 11 | 4 | 2 | 3 | 12 | 3 | 5 | 6 | 4 | 3 | 4 | 6 | 1 | 4 | 7 | 7 | 9 | 5 | 6 | 1 | 1 | 7 | 3 |
| ADMIN 11 | 6 | 4 | 1 | 3 | 2 | 3 | 3 | 4 | 5 | 4 | 4 | 4 | 12 | 4 | 11 | 3 | 8 | 2 | 7 | 2 | 9 | 4 | 10 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 6 | 1 | 1 | 11 | 3 |
| ADMIN 12 | 3 | 2 | 2 | 3 | 4 | 2 | 9 | 4 | 11 | 5 | 10 | 2 | 3 | 3 | 5 | 3 | 6 | 2 | 12 | 4 | 7 | 5 | 8 | 4 | 2 | 3 | 1 | 1 | 5 | 6 | 4 | 3 | 3 | 1 | 2 | 14 | 3 |
| ADMIN 13 | 2 | 5 | 1 | 4 | 6 | 3 | 10 | 4 | 8 | 2 | 12 | 1 | 3 | 1 | 5 | 2 | 11 | 5 | 7 | 2 | 5 | 6 | 4 | 3 | 6 | 4 | 4 | 7 | 4 | 5 | 8 | 3 | 6 | 2 | 2 | 12 | 3 |
| ADMIN 14 | 3 | 2 | 2 | 3 | 4 | 2 | 9 | 4 | 11 | 5 | 10 | 2 | 6 | 3 | 1 | 3 | 7 | 2 | 5 | 3 | 6 | 3 | 12 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 7 | 3 | 2 | 1 | 2 | 5 | 3 |
| STRCN 15 | 1 | 2 | 4 | 2 | 5 | 2 | 7 | 3 | 6 | 3 | 8 | 2 | 3 | 3 | 2 | 3 | 11 | 2 | 9 | 4 | 12 | 3 | 10 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 7 | 3 | 6 | 1 | 1 | 13 | 3 |
| STRCN 16 | 1 | 1 | 4 | 3 | 3 | 2 | 6 | 3 | 8 | 3 | 7 | 3 | 2 | 2 | 9 | 4 | 12 | 3 | 10 | 4 | 11 | 3 | 5 | 2 | 4 | 1 | 2 | 2 | 2 | 2 | 2 | 5 | 6 | 2 | 1 | 10 | 3 |
| STRCN | 7 | 2 | 6 | 2 | 3 | 3 | 2 | 1 | 11 | 3 | 1 | 1 | 5 | 3 | 8 | 2 | 9 | 3 | 12 | 2 | 10 | 3 | 4 | 4 | 2 | 3 | 2 | 1 | 3 | 2 | 9 | 4 | 6 | 2 | 2 | 2 | 3 |
| STRCN 18 | 1 | 1 | 4 | 3 | 2 | 2 | 5 | 4 | 7 | 3 | 3 | 2 | 6 | 2 | 6 | 2 | 9 | 3 | 10 | 4 | 11 | 3 | 12 | 3 | 2 | 2 | 1 | 2 | 3 | 1 | 4 | 4 | 6 | 1 | 1 | 15 | 3 |
| DRS 19 | 1 | 2 | 2 | 4 | 3 | 3 | 4 | 3 | 6 | 5 | 5 | 4 | 1 | 4 | 1 | 3 | 2 | 1 | 1 | 1 | 3 | 6 | 4 | 2 | 3 | 3 | 1 | 6 | 4 | 3 | 5 | 5 | 6 | 3 | 2 | 19 | 3 |
| DRS 20 | 1 | 3 | 10 | 3 | 11 | 3 | 9 | 2 | 12 | 3 | 3 | 2 | 5 | 4 | 2 | 2 | 6 | 3 | 7 | 2 | 8 | 5 | 4 | 4 | 4 | 2 | 1 | 3 | 4 | 6 | 6 | 1 | 6 | 1 | 2 | 25 | 3 |
| MEAN | 2.15 | 2.5 | 3.4 | 3.2 | 4.2 | 2.6 | 8.25 | 3.3 | 7.85 | 3.85 | 5.4 | 2.35 | 5.1 | 3.15 | 5 | 3.05 | 7.8 | 2.9 | 8.05 | 3.35 | 7.55 | 3.9 | 8.75 | 3.4 | 3.05 | 2.85 | 1.8 | 3 | 3.45 | 3.05 | 6.1 | 3.65 | 3.15 | 1.7 | 2.05 | 13.8 | |
| 1 | 11 | 4 | 5 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 3 | 6 | 1 | 1 | 2 | 0 | 1 | 2 | 2 | 1 | 0 | 0 | 3 | 0 | 0 | 2 | 11 | 4 | 2 | 2 | 0 | 1 | 0 | 9 | 6 | 0 | |
| 2 | 3 | 7 | 4 | 3 | 4 | 6 | 1 | 2 | 1 | 2 | 1 | 6 | 4 | 4 | 4 | 7 | 2 | 5 | 0 | 4 | 0 | 3 | 0 | 3 | 8 | 4 | 3 | 5 | 2 | 9 | 1 | 0 | 2 | 8 | 14 | 2 | |
| 3 | 3 | 5 | 3 | 10 | 5 | 5 | 3 | 7 | 0 | 10 | 3 | 3 | 3 | 9 | 3 | 7 | 0 | 8 | 0 | 5 | 3 | 8 | 0 | 9 | 6 | 9 | 5 | 5 | 7 | 3 | 2 | 8 | 1 | 3 | 0 | 0 | |
| 4 | 1 | 3 | 4 | 7 | 3 | 3 | 3 | 6 | 1 | 3 | 3 | 5 | 1 | 4 | 1 | 5 | 0 | 3 | 0 | 8 | 1 | 2 | 5 | 8 | 4 | 4 | 1 | 3 | 6 | 2 | 2 | 7 | 2 | 0 | 0 | 1 | |
| 5 | 0 | 1 | 1 | 0 | 4 | 1 | 3 | 3 | 2 | 3 | 1 | 0 | 3 | 1 | 3 | 0 | 0 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 4 | 2 | 0 | 0 | 1 | |
| 6 | 1 | 0 | 1 | 0 | 3 | 1 | 1 | 0 | 3 | 2 | 2 | 0 | 3 | 1 | 1 | 1 | 3 | 0 | 0 | 1 | 1 | 5 | 2 | 1 | 1 | 1 | 0 | 2 | 1 | 2 | 4 | 0 | 13 | 0 | 0 | 0 | |
| 7 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 3 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 5 | 0 | 1 | 0 | 3 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | |
| 9 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | |
| 10 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 5 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 4 | 0 | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | |
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## Annexure 2 : QUESTION ON GOALS

Dear colleaugue /Respondent,

I am currently involved with a research project in my Doctoral studies through the University of Natal at the Department of Social Sciences (Nursing) . My research is on leadership and hospital effectiveness in the KwaZulu/Natal region. This project has been approved by Dr C McKenzie (Director) at KZN Health services branch.

As a supervisor of one of the hospitals included in the random sample, you have been selected to assist in this project. The success of this study will only be possible if input is obtained from people with your background and experience. Kindly oblige by taking a few minutes of your time to assit by completing this questionnaire.

You need not state your name or any other identification.

PLEASE indicate by marking with an (x) in the space provided for the response you have chosen.
WHERE indicated NUMBER your points and TABULATE them.

You may continue in the separate sheet provided if the space provided is not adequate.
When you have filled this questionnaire, kindly leave it in the box provided.

THANK YOU in advance for your collaboration.

**STEP 1**
**QUESTIONNAIRE ON GOALS**

What do you think are the real goals of this hospital ?
(Please TABULATE and NUMBER your points in the descending order of priority)

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INSTITUTION
PLEASE CHECK ONE

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|---|---|---|
| A - ESHOWE | [ ] | 1 |
| B - R. K. KHAN | [ ] | 2 |
| C - CHRIST THE KING | [ ] | 3 |
| D - G.J. CROOKES | [ ] | 4 |
| E - St FRANCIS | [ ] | 5 |
| F - THULASIZWE | [ ] | 6 |

## ANNEXURE 3: GOALS OF THE SIX INSTITUTIONS

For Pilot study

| GOALS | ASSESSMENT OF ACCOMPLISHMENT |
|---|---|
| 1. To serve and care for the sick of the Marrianhill, greater Pinetown area in a holistic way: carring for the body and soul. This care should be unconditional, without making distictions between people, and should include the poor, children adults and mothers. | |
| 2. To give health education and counselling to the patients and the community on the prevention of illness and coping with acute and longterm illnessess, especially communicable diseases, in order to upgrade the standard of living and ensure physical psychosocial and spiritual well being. | |
| 3. To provide training and education for health care workers, especially nurses. This includes providing clinical experience to students from outside the institution as well as students training at the institution. | |
| 4. To create create job opportunities for the local population. | |
| 5. To offer emergency services to schools and industries in the area. | |
| 6. to promote Christian teachings and evangelisation through all activities in the hospital. Christian ethics should be upheld and spiritual care given. A spirit of service should be fostered in the community. | |
| 7.To provide the health care, characterised by compassion, respect for each other and given in a Christian way. Nurses and other health care workers see the care as a vocation and communicate effectively with patients and visitors. | |

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| 8. To provide quality care in which high standards are maintained. Staff is kept up to date by in-house and external continuing education. | |
| 9. To promote Primary Health Care by transforming the service to be in line with the Health care plan, working closely with the clinics and strenghtening ties with the communities. | |
| 10.To co-operate with other hospitals to facilitate referrals and transfares for specialised care. | |
| 11. To provide optimal rehabilitation for the injured. | |
| 12 To maintain good management in the hospital so that commitees work well, discipline is maintained and patient safety is ensured and good interpersonal relationships between staff is promoted. | |

| INSTITUTION 1 : GOALS | ASSESSMENT OF ACCOMPLISHMENT |
|---|---|
| 1. To provide and maintain adequate optimal total health service, which is holistic, comprehensive , accessible, appropriate, cost effective and efficient for all patients at a general practitioner level and satisfy the basic needs at a physical, psychological social and spiritual level; accepting cultural differences of the community of the greater Eshowe and surrounding areas within the limits of manpower, finances and related support offered by the municipality and telcom etc. This can be achieved by stabilising chronically ill patients, preventing complications and eliminating infectious illnesses and by obtaining adequate facilities for emergency management namely; resuscitation of babies and operation of babies and operations. | |
| 2. To ensure an efficient and well informed health team by providing basic health education to different categories of staff by providing facilities to patients and the general public offering on-going knowledge and skills to ensure improvement in the quality of life for the whole community in the region. Through in-service education and updating courses, continuing education, a co-operative assertive staff with a high morale in manner and appearance be provided with opportunities in the areas of primary health care, maternal and child care including breast feeding, immunisation, family planning, nutrition, A.I.D.S, cancer and other chronic conditions. Counselling offered to relatives to participate in patient care matters emphasising their responsibility for thier own health. | |
| 3. To endevour to become a user friendly metropolitan training hospital especially for enrolled nurses. By keeping abreast with legislation affecting practice of nursing and providing facilities for effective training such as a larger and proper theater, Intensive care, Psychiatric ward Medical, Geriatric Obstetric and Gynaecology. | |

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| 4. To ensure participation of personnel in decision making and negotiation in despute setlling mechanisms to ensure appropriate disciplinary and grievance procedures. This will be possible if causes and symptoms of impending conflict identified meetings held between management and different categories of staff when there are problems and complaints fowarded for solutions 5tobe sought. | |
| 5. To strive toward sachieving service excellence and to ensure that persons entering the hospital are treated with due respect, upholding human dignity; by maintaining a high standard of care to improve productivity adminsteringhuman and physical resources, such that overcrowding and floor beds are eliminated. continued testing and improving of existing skills, adequate remuneration of staff and continuous evaluation of proposed goals will enable a more highly motivated staff and a continued meaningfull input towards achieving national objectives for health. | |
| 6. To provide a safe and therapeutic environment conducive to speedy recovery of patients whilst providing an acceptable working environment and a center where the 560 employees can obtain fulfilment in a secure employment which offers job satisfaction for all personnel at all levels. Transparency in the selection for employment, promotion and specific courses for staff development should avoid descrimination. | |
| 7 To ensure that tradition and habits are up-held by maintaining what has become "old fashioned values" i.e patient welfare and compassion; nurses aught to show more concernfor the patient as an individual. | |
| 8. To build more facilities for staff for staff to meet some of their essential needs such as a creche for children of nurses and othe health care workers ; to avoidd absenteeism for reasons such as " the baby was sick" or There was no baby sitter; a chapel to caiter for nurses and patients spiritual needs; a nurses home for nurses with accommodation problems and other social support systems. | |

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| 9. To maintain sufficient hospital supplies with adequate equipment available at all times. Proper utilisation and control of finaces in order to avoid fruitless expenditure, preparing estimates for budgeting for the ensuing financial year and keeping control over state equpment and property will avoid abuse whilst maintaining efficiency, cleanliness and order. | |
| 10. To act as a referral base from peripheral hospitals and clinics where follow-up is done and defaulters counselled for different illness, patients not stabilised are admitted for various conditions managed at this institution e.g medical, surgical and orthopaedic etc. | |
| 11. To ensure involvement and commitment of all personnel; by adopting an open door policy, encouraging a well informed health and well motivated health team with a good spirit effective communication which adheres tocorrect channels of communicationwill reinforce and maintain good interpersonal as well as interdepartmental relationship. competent staff who render appropriate service accept the responsibility as personnel welfare and attend tothe complaints of staff and the public. | |
| 12. to strive to increase staffing ratiosin the categories of medicals, paramedicals, I.C.U technicians specialists in different clinical areas, clinical instructors, infection control officers, receptionists, porters for x-Rays, mortuary and casualty as well as night relief staff. | |

| INSTITUTION 2: GOALS | ASSESSMENT OF ACCOMPLISHMENT |
|---|---|
| 1. To provide and maintain optimal comprehensive health care which is affordable accessible and most appropriate and possible for clientele. This will be possible by meeting individual needs and setting all time example providing a high standard of patient care to all categories regardless of colour, creed or race; minimising patient stay in the hospital and having consideration for budgetory constraints . | |
| 2. To offer training and staff development at all levels; namely basic and post basic for nurses, doctors, paramedicals and other health care workers, in the form of continuing education in- service education and on the job training.In this context patients are entrusted with the responsibility for their own health and staff are educated to cope with the changing needs of the diverse population it serves. | |
| 3. To act as a resource center for staff and patients facilitating research progammes by keeping accurate records in computers and providing records of services rendered in clinical practice there by facilitating National health in-put for future planning | |
| 4. to offer job opportunities and provide employment for members of theneighbouring communitiesy at all levels by promoting job satisfaction from doctors to the lowest rank. | |
| 5. To provide staff and control sick rooms in all local schools and look up private wards. | |
| 6.To create a safe environment which will promote to a good and effective working relationship for all categories of staff; conducive to a speedy recovery, which is free from medico-legal risks for clientele. | |

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| 7.To improve staffing at all levels including medical, pharmaceutical, general assistants, porters in order to enable structures that will promote maximising quality care, respect of the basic human rights including theright to a good name,respect of cultures of all races. This will also eliminate waiting periods. Appropriate staffing adjustment and financial budget is solicited. | |
| 8.To promote total quality patient care through quality assurance programmes and controls; to ensure physical and mental care where the patient is percieved as a biological, psychological, social and spiritual being operating within a family environment | |
| 9. To eventually play an equal role with other regional hospitals in the Durban Functional Region in the delivery of the best possible second and third tier medical needs and operate in harmony and as a team with the neighbouring health care providers by serving as a fully fledged regional hospital servicing a number of appropriate and strategically placed peripheral clinics within a well defined geograhic area. | |
| 10. To plan , co-ordinate and administer health policies facilitate referrals and ensure optimum health care at all levels of primary secondary and tertiary health care | |
| 11. To provide rehabilitative services to the communities which should include physiotherapy, occupational health and counselling by religious leadership, social workers to stress psychological and spiritual aspects making life as meaningful as possible especially in the hospice programme offerring family | |

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| 12. To provide a 24hour emergrncy or trauma unit in the casualty department for critically ill patients as a result of accidents. I.C.U; C.C.U, Theater and an appropriate Burns unit can be achievedd by upgrading in patient care facilities to includde high technology equipment to speed up services. | |

| INSTITUTION 3: GOALS | ASSESSMENT OF ACCOMPLISHMENT |
|---|---|
| 1. To provide comprehensive holistic health care service at preventive, promotive, curative and rehabilitative, general practitioner levels; ensuring a rapid and complete recovery for the consumer of health care and that the hospital is a haven for the sick and destitute in the community of Ixopo, especially those who are less fortunate. | |
| 2. To provide appropriate human resource development, by increasing the staff and upgrading their expertise in new medical technology. By stressing healthy habits in health education, in-service and continuing updating knowledge and ensure that staff have apropriate skills; emphasising preventive rather than curative health care; and encouraging that staff is familiar with modern trends; thus, avoiding outdated practices. | |
| 3. To offer a high standard of Primary health care service, and refer patients to traditional healers at district and community levels; where relevant and necessary. Cleanliness and minimising infection; paying special attention to such projects as, tubal ligations done once a month by a visiting doctor in the maternity wards; on a long term, is percieved as a step towards reducing over population; to ensure a healthy nation. | |

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| 4.To offer counselling in, emotional and mental support by upholding christian duties; a calm, peaceful spiritual atmosphere especially to A.I.D.S. patients, offering equal treatment regardless of race religion and nationality, to reduce all pressures and tension which develops when a person is separated from his/her family. | |
| 5.To stress the ill effects of drug abuse and misuse; effective communication will ensure improvement in social life and a better future health care for all patients. | |
| 6.To reduce infant mortality rate through health education, nutrition, immunisation. Free health care and treatment of pregnant mothers and children under six years of age is percieved to facilitate this. | |
| 7. To create a good working atmosphere for all categories of staff to be able to motivate staff, providing work satisfaction by having a good working relationship between management and staff; and reflect this to patients, in order to achieve real total patient care and<br>to ensure high productivity. | |
| 8. To provide quality care by maintaining effective nursing care and a high standard of medical care, offering equal treatment regardless of race, religion and nationality. Better health care leads to a better social life. | |

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| 9. To provide improved basic laboratory and radiological facilities for prompt diagnostic and treatment services. This can be possible with appropriate collection of fees and avoiding friutless expenditure and by ensuring that stores provide what is available for health requirements to all wards and departments. | |
| 10. To provide a refferal services for treatment by staff with improved communication skills to enable transfare of patients to relevant institutions and correct centers for their specific needs; particularly those whose literacy level is questionable. | |
| 11. To offer rehabilitative services to bed ridden paraplegics and depressed patients; applying the social and behavioural sciences such as Sociology and Psychology to prepare them to accept their role in the community and ensuring that team work is upheld amongst staff, the patient the family and community. | |
| 12.To increase staffing of all categories of personnel to enable coping with the increasing health needs of the population and uplift the standard of health care by ensuring that the quality of care given is high even to the destitute by efficient handling accidents and emergency services of patients from admission to discharge. | |

| INSTITUTION 4:GOALS | ASSESSMENT OF ACCOMPLISHMENT |
|---|---|
| 1.To offer the best possible effective and efficient comprehensive health care service by rendering basic and therapeutic needs to all population groups and all patients who present themselves at this institution from Port Shepstone to Durban; at community and hospital levels. This care must be acceptable equitable, affordable and user friendly particularly to mothers and babies. | |
| 2. To ensure human resource training to all levels of personnel and staff by offering training for nurses, medical practitioners and other staff members; by creating a climate conducive to learning. This could be possible through in-service education and by encouraging staff to attend siminars nurses meetings and congresses in order to update themselves in their areas of expertise; so as to provide health education, social work services, counseliing and physiotherapy treatment. | |
| 3.To serve as a health information resource centre for data gathering and research monitoring for all referrals. | |
| 4. To reflect a positive image within the public and to ensure community participation in outreach programmes such as the community based outreach service club. | |
| 5. To endevour to improve outdated hospital facilities so that modern sophisticated and updated equipment are used to provide diagnostic, laboratory and X-Ray services that are consistent with the changing times. | |

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| 6. To offer a safe environment for all categories of staff and a safe practice, and a feeling of accountability for patients recovery in order to reduce medico legal risks and a safe environment for all categories of staff eg acomfortable and pleasant rest and change rooms. | |
| 7. To ensure adequate staffing which will address and foster the highest standard nursing care possible. This in turn will instill adeep sense of compassion, understanding, sympathy and a feeling towards the patient and respect for human life. | |
| 8. To offer quality nursing care physically psychologically socially and spiritually through total quality control implemented in every department of the hospital by all members of staff from management to worker. | |
| 9. To encourage good communication and staff development by recognising the needs, hopes and aspirations by honouring them with the praise they deserve and effective laison and communication system between the hospital and the local community served by encouraging local leadership to establish an effective transport systems. | |
| 10.To encourage good communication and staff self development by recognising the needs, hopes and aspirationshonouring them with the praise they deserve and offer referrals to the other hospitals with advanced medical technology and expose such as King Edward VIII hospital and Fort Napier to ensure that the patients needs are met in a totality. | |

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| 11.To offer physiotheraphy for promotion of health and rehabilitation which shall include sound mental health for all individuals, families and communities. Motivation of patient towards realisation of the need to take total and individual responsibility for their own health will be encouraged. District health services will enhance home based care and pre primary teachers encouraged for long stay patients in paediatric wards. | |
| 12. To create a good impression to the local community that if they attend this institution they are getting the best possible treatment and to dispellthe impression that all government services are corrupt. | |

| INSTITUTION 5:GOALS | ASESSMENT OF ACCOMPLISHMENT |
|---|---|
| 1. To admit acutely ill patients mainly those with psychiatric, epileptic and T.B. problems and provide a comprehensive preventive, promotive, curative and rehabilitative health service to the community of Mahlabathini including Jikaza, Vuthela, Xolo, Xasana and Okhukho;who take transport to Mashona; then walk to St Francis hospital; especially pregnant mothers and children under 5 years of age, long term patients who are admitted up to 6 months for P.T.B's. and S.T.D's. | |
| 2. To provide efficient and effective quality basic nursing care to bed ridden patient namely changing of positions feeding and back and pressure parts and home based care to patients who are discharged and could be nursed in their own home with some guidance and adaptation. | |
| 3. To revive St Francis community clinic as a hospital and re-establish the greater independence the institution enjoyed in terms of service to the community; to ensure meeting the health needs of the patients and Job satisfacion for the staff. | |
| 4. To efficiently transport patients independent of Nkonjeni hospital. Some patients have to take public transport twice to reach the major hospital. | |

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| 5. To ensure that health education and adequate training of nursing assistants, other nursing students and "Onompilo". Health education should be given to patients on the basics of health care such as personal hygiene, good nutrition and a well balanced diet, the importance of hospitalisation until the sputum is cleared of micro organisms, correct taking of treatment before discharge to home based care; with a focus on preventive, promotive, curative and rehabilitative health aspects including family planning. | |
| 6. To provide an orphanage for abandoned children from Nkonjeni hospital, mentally retarded patients and a creche facility in the hospital premesis for children of hospital workers | |
| 7. To render services that will be able to focus on emergencies, the day and night problems; a residential hospital manager, or superintendent is required as well as a psychiatrist offering monthly visits. | |
| 8. To offer consultancy to community projects and groups and to be supportive to the families by offering sheltered employment for psychiatric patients who need supervision; a play house with appropriate material to assist handicapped children; participating in self help projects such as gardening and shoe repairing. Nurses should offer consultancy to community projects and to promote job opportunity for the local population. | |
| 9. To offer psychiatric, paediatric and maternity services so that male and female patients are accommodated separately. | |

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|---|---|
| 10. To offer shelter to the destitute and co-operate with the other hospitals after the patients have been assessed for admission, transfare or refferal to other centers. | |
| 11. To offer rehabilitation, counselling, physiotherapy, occupational therapy and recreation; especially for T.B.; Psychiatric patients, alchohol and Dagga abusers; home based care for A.I.D.S patients and retarded children. Sporting activities to prevent boredom and a beauty pallour to boost self esteem for patients especially females. There is a need for equipment for soccer, basket ball, netball, table tennis and a tennis court. | |
| 12. To highlight the need for revision of staff establishment carried out with a veiw to increase the staff, avoid overcrowding and long ques. | |

| INSTITUTION 6:GOALS | ASSESSMENT OF ACCOMPLISHMENT |
|---|---|
| 1. To serve as a healing center of the Ngalonde rural community of Ceza, by providing total health care admitting patients sufferring from T.B ; H.I.V. babies and pregnant mothers from KwaZulu/Natal health care region "D" and from areas outside; until they recover fully, when offered nursing care. | |
| 2. To give health education geared at reduction of the number of deaths due to T.B. as a result of ignorance about the causes signs and symptoms and prevention of T.B. Patients. Relatives and other members of the community are taught the importance of maintaining basic hygiene e.g.washing of hands and eating a well balanced diet; they are encouraged to make vegetable gardens at home, to build toilets and use them. | |
| 3. To offer laboratory diagnostic blood urine and other tests. | |
| 4. To render/provide job opportunities to the rural community in order to facilitate development of a health community. Patients and community members are sent to KwaZisize (meaning help your self) where they become certificated with self-help skills that will enable them to create their own job opportunities. The institution acts as a link with outside sources which might be relevant for theirjob opportunity needs. | |

| | |
|---|---|
| 5. To act as a source of inspiration and general upliftment for the community; offering social, emotional support to boost patients self-esteem and remove the stigma attached to the immunosupressed conditions. Visiting patients and attending social gathering such as sunday evening services which is attended by all health workers including the security guard, the garden attendant and nursing personnel. The serenity which is sensed even from the trees and the well groomed lawn, epitomises Godliness. | |
| 6. To demonstrate, develop the highest quality of patient care designed at assisting the patient to regain and maintain a maximum degree of health upon return to the home environment for home based care resulting in decongesting and releaving the burden of overcrowding at Ceza hospital. | |
| 7.To serve as a teaching center for health professional education and to motivate patients to develop sustained trust in the community has about the health care center. This can be carried out by encouraging them to bring forth disabled children and handicapped adults who can be taught new skills of on how to improve their health by increasing their knowledge about diet, family planning and maternal and child care; practicing what they were taught whilst they were admited to enable them to help themselves. | |

| | |
|---|---|
| 8. To facilitate home based care by offering field work which will enable assessment of home conditions of the communities within reach. This would enable screening of contacts who are family members and friends of affected persons. Mobile clinic teams offer primary health care to reletives and friends and members of the surrounding communities whether they are they are infected or not. Early diagnosis and admission minimises patient hospital stay, and government expenditure ultimately reducing the numbers of people who could be affected. | |
| 9. To provide after discharge follow-up clinic<br>with the purpose of supervising treatment in order to prevent relapse and to identify defaulters in order to ensure that treatment is taken for the required period of probable effectiveness. A dayclinic for primary prevention of T.B; family planning, a maternal and child care clinic for the under 5 years old is also conducted. | |
| 10. To isolate patients and stress the negative effects of alchoholism, drug abuse, long stay in hospital as well as repeated admissions due to relapse. | |
| 11. To offer rehabilitation, recreation occupational therapy and counselling by social workers and other skilled personnel, to all patients especially those that are immunosuppressed; advising them to use their residual energy to maximise their efforts. Adequate rest and relaxation is encouraged. The services of the social worker are solicited to address social problems and relevant other social activities. | |

| | |
|---|---|
| 12. To ensure community involvement in the case of these patients in order to produce the highest possible quality of care by developing social and emotional support which is necessary for crisis intervention. This will ultimately decreasethe prolonged stay in hospital and encourage home based care through social workers' interventions. | |

## Annexure 4: RATING SCALE TO MEASURE LEVEL OF SUPPORT

Dear Colleague/Respondent,

My name is Susan Mabaso. I am currently involved with a research project in my Doctoral studies through the University of Natal at the Department of Social Sciences (Nursing). My research is on leadership and hospital effectiveness in the KwaZulu/natal Region.

You have been selected by random/purposive sampling to assist in this project.The success of this study will only be possible if input is obtained from people with your background and experience. Kindly oblige by taking a few minutes of your time to assist in supporting in this study, by completing the questionnare attached. This questionnare is annonymous. You need not state your name or any other identification.

When you have filled this questionnare, kindly leave it in the box provided. Thank you in advance for your collaboration.

## QUESTIONNAIRE ON HOSPITAL GOALS

The goals listed in the table have been identified for this hospital.

1. Please indicate which of these goals you consider to be the most important, and which you think are less important by numbering in the second column. For instance if you think goal number 6 is the most important, you put a 1 in the second column across from goal 6. Use increasing numbers to show decreasing importance.

2. After you have rated the importance of goals, Please give your opinion on how well the hospital currently achieves each goal. Insert in column 3 your assessment of accomplishment of each goal.

KEY: (Mark one)

TOTALLY (Everything, all the time) = 1

VERY WELL

(Almost everything, most of the time) = 2

TO SOME EXTENT (It is variable) = 3

THE ARE SOME PROBLEMS = 4

NOT VERY WELL = 5

(Very seldom; lots ofproblems)

NOT AT ALL = 6

(Poor/ very unsatisfactory)

For each goal listed below, use one of the numbers set out in the above KEY, to describe how well that goal is achieved.

QUESTION 1 ON GOAL DEVELOPMENT

QUESTION 2 ON GOAL ASSESSMENT

3. AVAILABLE RESOURCES

To what extent is this hospital able to acquire resources successfully from the Head Office.

TOTALLY ( Every thing all the time) [ ] 1

VERY WELL [ ] 2

(Almost everything, most of the time)

TO SOME EXTENT [ ] 3

(Some things, some times)

THERE ARE SOME PROBLEMS [ ] 4

NOT VERY WELL [ ] 5

(Very seldom/very few resouces)

NOT AT ALL [ ] 6

4 LEVELS OF SUPPORT

4.1To what extent do you approve in general, with regard to suppot, of this hospital?

EXCELLENT [ ] 1

(Very great approval)

GREAT APPROVAL [ ] 2

SOME APPROVAL [ ] 3

NEUTRAL [ ] 4

LIMITED APPROVAL [ ] 5

NO APPROVAL [ ] 6

4.2To what extent can this hospital depend on your support if it is threatened in any way?

| | | |
|---|---|---|
| TOTALLY | [ ] | 1 |
| TO SOME EXTENT | [ ] | 2 |
| NEUTRAL | [ ] | 3 |
| VERY LIMITED SUPPORT | [ ] | 4 |
| NO SUPPORT AT ALL | [ ] | 5 |

5. CULTURAL ISSUES

Would you agree to the statement that you share common values with the public your institution is serving?

| | | |
|---|---|---|
| VERY STRONGLY AGREE | [ ] | 1 |
| NOT SO STRONGLY AGREE | [ ] | 2 |
| AGREE | [ ] | 3 |
| NEUTRAL | [ ] | 4 |
| AMBIVALENT | [ ] | 5 |
| DISAGREE | [ ] | 6 |
| STRONGLY DISAGREE | [ ] | 7 |

6. PRESTIGE AND RESPECT FOR THE INSTITUTION IN THE PUBLIC EYE

6.1Would you agree to the statement that your institution enjoys a lot of repect from the members of the public it serves?

| | | |
|---|---|---|
| VERY STRONGLY AGREE | [ ] | 1 |
| NOT SO STRONGLY AGREE | [ ] | 2 |
| AGREE | [ ] | 3 |
| NEUTRAL | [ ] | 4 |
| AMBIVALENT | [ ] | 5 |
| DISAGREE | [ ] | 6 |
| STRONGLY DISAGREE | [ ] | 7 |

6.2With reference to the members of the public how would you describe the prestige and image of your hospital? Would you describe it as positive/negative as follows;

(check one)

| | | |
|---|---|---|
| STRONGLY POSITIVE | [ ] | 1 |
| POSITIVE | [ ] | 2 |
| NOT SO POSITIVE | [ ] | 3 |
| NEUTRAL | [ ] | 4 |
| AMBIVALENT | [ ] | 5 |
| NEGATIVE | [ ] | 6 |
| STRONLGLY NEGATIVE | [ ] | 7 |

DEMOGRAPHIC DATA

I AGE

| | | |
|---|---|---|
| Above 65 | [ ] | 1 |
| 61- 65 | [ ] | 2 |
| 56- 60 | [ ] | 3 |
| 51- 55 | [ ] | 4 |
| 46- 50 | [ ] | 5 |
| 41- 45 | [ ] | 6 |
| 36- 40 | [ ] | 7 |
| 31- 35 | [ ] | 8 |
| below- 30 | [ ] | 9 |

II QUALIFICATIONS

PROFESSIONAL [ ]

NON-PROFESSIONAL [ ]

III OCCUPATION

( Please check ONE)

| | | |
|---|---|---|
| Chief Medical Superintendent | [ ] | 1 |
| Chief Nursing Services Manager | [ ] | 2 |
| Hospital Administrator | [ ] | 3 |
| Area Manager | [ ] | 4 |
| Operational manager | [ ] | 5 |
| OTHER:Please state | [ ] | 6 |

IV GENDER

| MALE | FEMALE |
|---|---|
| [ ] | [ ] |

V NUMBER OF YEARS WORK EXPERIENCE

(Since leaving shool)

Give a figure in; YEARS MONTHS WEEKS

[ ] [ ] [ ]

INSTITUTION

PLEASE CHECK ONE

| | | |
|---|---|---|
| A- ESHOWE | [ ] | 1 |
| B- R.K.KHAN | [ ] | 2 |
| C- CHRIST THE KING | [ ] | 3 |
| D- G.J.CROOKES | [ ] | 4 |
| E- St FRANCIS | [ ] | 5 |
| F- THULASIZWE | [ ] | 6 |

## ANNEXURE 5

## SYSTEMS PERSPECTIVE

( To be filled by researcher)

### FORM B: THE QUALITY OF CARE COMPOSITE SCORE ASSESSMENT

Seven criteria are used to assess quality of care at each healthy facility. according to Beatie A. Rispel L. Cabral J et. al.(1995); the following guidelines aim to clarify the assessment scores

1. Seven " categories" identified in general quality assessment include
   i) Infrastructure
   ii) Access
   iii) Personnel management
   iv) Resource management
   v) Patient environment
   iv) Outreach and
   iiv) Available treatment programmes

2. Each category contain several individual criteria related to that category.

3. Each criteria was scored out of 10. These scores were combined to produce the total score for that category also out of 10. The method used to combine the individual criteria scores into a final score for that category was the geometric mean rather than the arithmetic mean.
   The advantages of using the geometric mean are as follows;
   i) it is not overly influenced by high values
   ii) it is not as susceptible to masking the presence of very low scores.
   iii) itreflects the compouding effect of quality short falls and allows the definition of "essential" criteria, whose absence would produce a very low overall score.

4. The best score was always 10 out of 10.
   The poorest score was from .01 to 8 out of 10 depending on how important the criterion was judged to be overall quality score e.g. Total absence of reliable drinkable running water supply got a score of .01 while; the absence of a suggestion box for patient comments recieved a score of 8.

SYSTEMS PERSPECTIVE

( To be filled by researcher)

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CATEGORY 1: Infrastructure

| | TOTAL Score: |
|---|---|
| **1. Clean drinkable running water** | |
| a) None/daily problems with supply | 0 |
| b) Weekly supply problem (3-6 times per month) | 2 |
| c) Monthly supply problem (6-12 x per year) or | 4 |
| d) Problems in the dry season only | 5 |
| e) Fully reliable supply | 10 |
| **2. Bath water facility** | |
| a) No Warm water for bathing | 3 |
| b) Warm water available but not all the time | 5 |
| c) Warm water available but not sufficient for end-users particularly in winter | 7 |
| d) Warm water available and sufficient for end-users even in winter months | 10 |
| **3. Energy** (gas, solar, generator, electricity and oil) | |
| a) None | 0 |
| b) Power fails more than 6x/year (with no back up system) | 2 |
| c) Power failure up to 6x/year (With no back up stystem) | 4 |
| d) Power failures occur (manual backup) | 8 |
| e) Reliable power supply or (automatic backup system) | 10 |
| **4. Structure of Building** | |
| a) Beyond repair | 0 |
| b) Serious repairs required in 50% of building | 3 |
| c) Serious repairs in less than 50% of building | 5 |
| b) Minor repairs | 8 |
| c) Sound - no immediate repairs required | 10 |
| **5. Toilet** | |
| a) 3 functioning flush toilets for patient and staff per ward of 40 patients | 2 |
| b) 6 functioning flush toilets for patients and staff per ward of 40 patients | 6 |
| c) 6 functioning flush toilets for patients and staff per ward of 40 patients with back up e.g. commode. | 8 |
| d) 6 separate flush toilets for patients and two staff toilet per unit or ward of 40 patients with back up.e.g. an extra outside toilet | 10 |

**6. Washing facilities for staff**

a) None 0
b) Hand washing facilities for staff available but not functioning adequately 2
c) Facilities available and functioning adequately with backup 7
d) Other washing facilities for staff available outside consulting room 8
e) Other washing facilities for staff available inside consulting room 10

**7. Functioning refrigirator** (electricity or gas)

a) None 0
b) Alternative fuel supply, no spare cylinder 1
c) Alternative fuel supply with spare cylinder; power failure from time to time. 5
d) Electric/gas with frequent power failure and no back up system 8
e) Electric with minimum power failure and a good back up system 10

**8. Emergency/Resuscitation kit**

a) No emergency kit available 0
b) Emergency kit available but inaccessible at times 1
c) Emergency kit available, accessible but incomplete from time to time 5
d) Emergency kit available complete and accessible 10

**9. Nutritional needs**

a) Dietician not available 4
b) Dietician available on part time basis only 7
c) Full time dietician available 8
d) Demonstration gardens available 10

## CATEGORY 2. Access

**1. Size of building for patient load**

a) Over crowded every day some patients sent home without being attended at outpatients 0
b) Over crowded but patients always attended to 3
c) Over crowded on peak days only 5
d) Over crowded on peak days but rarely overcrowded at other times. 8
e) Steady state, facility never overcrowded unless there is a disaster or an unfortunate incident 10

**2. Access by disabled patients**

a) Disabled cannot enter or move around independently 0
b) Disabled can enter but cannot move within facility independently 2
c) Disabled cannot enter facility alone but once in, can move freely or vice versa 5
d) Disabled have free access to entry and movement within the facility 10

**3. Range of Routine Services**

a) Facility offers 5 or less scheduled services (curative, preventive etc.) 5
b) Facility offers 6-8 services 7
c) Facility offers more than 8 scheduled services 10

**SERVICES: Please Check those available with [X].**

| | |
|---|---|
| 24-hour emergency care | H.I.V. and STD treatment |
| Trauma | Ophthalmology |
| Surgical | E.N.T. Surgery |
| Orthopaedics | Gynaecology |
| Curative;Acute and | Ante-natal Care |
| Chronic Medical conditions | Obstetrics ward |
| Community outreach; | Post Natal Care |
| Immunisation | Family Planning |
| Mental health | |

**4. Transport**

a) Not available at all whether private or official 0
b) Available but poor ( only in the mornings) due to dirt roads or poor facilities 2
c) Available at least 3x a day or more if required 5
d) Available within (less than) 10 minutes on demand for 24 hours in a day on week days only 7
e) Available within (less than) 10 minutes for 24 hours during the week ends 10

**5. Ambulance service; Availability and response.**

a) Available for 24 hours service but poor response, (takes longer than one hour) 0
b) Ambulance readily available but staffed inadequately.(Response more than an hour, up to 3 hours) 3
c) Response takes more than half an hour to an hour 6
d) Response takes less than half an hour 8
e) Response in less than 15-10 minutes 10

**6. Position in relation to community served**

a) Facility within 5km in an urban area or 10 km in a rural area for less than 40% of the population 1

b) Facility within 5km in an urban area or 10km in a rural area for 40- 80% of population served. 6

c) Facility is within 5km in an urban area or 10km in a rural area of 80% of population served 10

**7. Emergency instructions after-hours**

a) No after hour or weekend instruction possible 0

b) No possible contact/phone 2

c) Possible contact telephonically with major break downs of the telephone from time to time 3

d) Possible contact telephonically with clear instructions 8

e) Possible contact telephonically with instructions which are also clearly visible 10

**8. Outpatients facility opening time**

a) Facility open less than 40 hours over fewer than 5 days 3

b) Facility open less than 40 hours (over less than 40 hours) but over five days 6

c) Facility open at least 40 hours over five days or more 8

d) Facility open more than 40 hours over six days and/or including some evenings 10

**9. Security personnel**

a) Not available at all 0

b) Available but not effective 2

c) Available and effective with losses of expensive items 3

d) Available and effective to some extent linen losses relatively high 4

e) Available, effective with minimal losses 5

f) Available, effective with no losses at all 10

## CATEGORY 3. Management of Personnel

**1. Continuing education (seminars, conferences, courses)**

a) No formal continuing education programme available 1

b) Informal, infrequent (every 2 months or longer), continuing education programe, or only for certain staff categories 5

c) Formal, structured continuing education programme available to all categories of staff 10

**2. Standard, up-to-date health reference materials**

a) No reference material available on understanding and managing common primary care conditions 1

b) Limited range of up-to-date health reference materials available for managing common primary care conditions 5

c) Full range of up-to-date health reference materials available on understanding and managing primary care. 10

**3. Job Description**

a) Absence of job descriptions for all personnel 0

b) Job descriptions are unclear incomplete or inapropriate 3

c) Clear appropriate job descriptions for certain categories of staff only 6

d) Existence of clear appropriate job descriptions for all staff 10

**4. Visits by or meetings with supervisors**

a) No visits or meetings at the facility in the last two months 1

b) One meeting at the site in the last two months 4

c) Monthly meetings held with supervisors at the site 8

d) Weekly meetings held with supervisor at site 10

**5. Infection Control programe**

a) No infection control policy in units/Departments 0

b) Unit policy available in units/Departments but no specialised nurse available 5

c) Infection control programme available with a clearly defined policy. All workers au fait with the policy 9

d) Specialised trained officer on infection control acting as a co ordinator 10

**6. Quality Assurance at the hospital**

a) No mechanism for quality assurance at the hospital 2

b) Informal or ad-hoc approach to quality assurance 4

c) On-going development of quality control tool 6

d) More than one quality control tool used at the hospital 8

e) Comprehensive approach to quality control 10

**7. Creche facilty for personnel**

a) No facility available 0

b) Facilty available but resources inadequate 3

c) Facility available with no trained teacher and 24 hour service not available 6
d) Adequate facility available on a 24 hours basis with the services of an adequately trained teacher available 10

CATEGORY 4. Management of resources

**1. Drug storage**
a) No drug cabinet 0
b) No drug cabinet room 4
c) Drug cabinet room but not locked 5
d) Locked cabinet and room 10

**2. Drug supply**
a) No regular stock taking in the dispensary 0
b) No stock taking, but regular purchasing 4
c) Stock taking/purchasing system in place but problems identified 10

**3. Patient Records in relation to visits**
a) Not possible to link patients visits 0
b) System in place relies on patient-held card or number to function - no backup 5
c) Patient held records with back up, dependent on patient's carried card 7
d) Efficient retrieval of patient file even without record number 10

**4. Fire Exit**
a) No additional fire exits from 100% of units 0
b) No additional fire exits from 80% of units or not clearly marked 2
c) No additional fire exits from 50% of units or not clearly marked 4
d) No additional fire exits from 20% of units or not clearly marked 6
e) All units have at least one clearly marked additional fire exit 10

**5. Extinguisher**
a) No fire extinguishers anywhere 0
b) Fire extinguisher available at strategic points outside the wards only 4
c) One fire extinguisher only per ward 5
d) Two fire extinguisher for each ward 8
e) Two fire extinguishers for each ward as well as at stratergic points outside the ward 10

**6 X-Ray facility**
a) No X- Ray facility available at all 0
b) X-Ray facility available but not functioning adequately 2

c) Facility available but staff available not competent 3
d) Facility available and competent staff available on week days but only for 1/2 the day 5
e) Facility available and competent staff available on week days only for one full day 6
f) Facility available and competent staff available for 24 hours everyday even on weekends 10

**7. Storage of waste**
a) No safe storage of medical/toxic waste 1
b) Safe storage of medical/toxic waste but adequate precautions not necessarily observed 3
c) Safe storage of medical/toxic waste with adequate precuations strictly observed 10

**8. Removal of toxic waste**
a) Appropriate handling of waste 3
b) Special precautions taken and appropriate disposal of refuse observed at all times 5
c) Toxic waste removed with normal waste 6
d) Toxic waste removed separately 10

**9. Frequency of removal of toxic waste**
a) Removal at random, sometimes less than once a week 0
b) Weekly removal 3
c) Removal bi- weekly 6
d) Daily removal 8
e) Removal twice a day or more 10

**10. Hygiene and Cleanliness**
a) All areas of facility are very dirty 0
b) More than one area of facility is very dirty e.g. (toilets, floors etc) 2
c) One area of facility is dirty 5
d) Some areas of facility are clean 7
e) All areas in facility are sparkling clean 10

**11. Laundry facilities**
a) No special laundry facilities, done in sluice rooms by General Assistants 0
b) Special laundry facility and staff, but many problems are experienced 3
c) Special laundry facility and staff, with few problems 7
d) Special laundry facility and staff with no problems 10

**12. Stores**
a) No trained storeman; consistent long delays of 2 weeks or more with certain items consistently out of stock 0

b) No trained storeman, but stock levels are maintained at a reasonably satisfactory level 5
c) Trained storeman able to acquire stock within 24 hours 8
d) Trained storeman. Control of stock computirised, with up to date maintanance of acceptable stock levels within 24 hours 10

**13.Mortuary facility**
a) None 0
b) Inadequate for size of hospital or electricity failure up to 6 x per year with no back up 3
c) Mortuary adequate, but staffing and provision for privacy inadequate. 7
f) Facility working well 10

CATEGORY 5. Patient satisfaction

**1. Waiting Time before treatment**
a) Over 30 minutes 3
b) 20-30 minutes 5
c) 15-20 minutes 8
d) Under 15 minutes 10

**2. Waiting area**
a) Some patients have to wait outside with no shelter from su or rain no seating 2
b) Some patients wait outside but with shelter and seating 7
c) Patients are all acommodated inside but some have to stand/sit on floor 8
d) Patients are seated inside on most days 10

**3. Patient complaints/suggestions**
a) No mechanism for complaints or suggestions 0
b) Possible to complain but barriers occur and anonymity not ensured 5
c) Clear system for complaints/suggestions 10

**4. Staff Privacy**
a) No privacy for breaks 1
b) No privacy for admin work 2
b) Use of patient area by locking out patients 5
c) Separate area for exclusive staff use 8
d) Separate area for exclusive administrative work 10

**5. Health education materials**
a) None available 0
b) None on display 2
c) Inapropriate materials availabl 3
d) Apropriate materials on display only 8

e) Apropriate materials available on display and available to take home 10

CATEGORY 6. Community Outreach Programmes

**1. Community Participation**

a) There is no identifiable community associated with the hospital 1
b) There is no participation by the community in activities of the hospital 2
c) There is some evidence of community involvement in the hospital through consultation, etc. 5
d) There are well structured and organised mechanisms for community participation 8
e) There are well organised and synchronised clinics co-ordinating with the hospital and the community 10

**2. Intergration with community (Intersectoral co-operation)**

a) The hospital does not participate in any community development activities 0
b) The hospital does occassionally participate in community development activities 5
b) The hospital participates in an ad hoc way in community development activities 8
c) The hospital is involved in a structured way in community development 10

**3. Outreach activities**

a) There is no outreach service associated with the hospital 0
b) There is an outreach service that offers 2 or fewer services 3
c) There is an outreach service that offers 3-4 services 6
d) There is an outreach service that offers more than 4 services 8
e) There is an outreach service that offers all the services listed below 10

OUTREACH SERVICES

I MATERNAL AND CHILD HEALTH
- i - Ante-Natal and Post-Natal care
- ii - Immunisation/Child Health and
- iii- Growth Monitoring
- iv - Family Planning

II - Psychiatry

III i - Curative Care
- ii - Geriatric and chronic care

IV - Other

**4. Frequency of outreach activities**

| | |
|---|---|
| a) Outreach service not available | 0 |
| b) Outreach service (I only) is available once in three months or less frequently | 3 |
| c) Outreach service available (I-III) once in 6 weeks | 5 |
| d) Outreach service available (I-IV) once a month or less frequently | 7 |
| d) Outreach service available (I-IV) at least every two weeks | 8 |
| e) All the above outreach service available at least weekly | 10 |

**5. Social worker**

| | |
|---|---|
| a) Social worker is not available in the community | 2 |
| b) Social worker available in the community but not used | 4 |
| c) Social worker available for referrals | 7 |
| d) Social worker on site part time | 8 |
| e) Full-time social worker available on site | 10 |

**CATEGORY 7 Process of care**

Process to be measured at (at least four of the sites available)

**1. Chronic Disease Attendance**

| | |
|---|---|
| a) Less than 20% attend regularly | 4 |
| b) Less than 40% attend regularly | 6 |
| c) 40-60% attend regularly | 8 |
| d) 60-80% attend regularly | 9 |
| e) Over 80% attend regularly | 10 |

**2. Proportion of visits attended**

| | |
|---|---|
| a) Fewer than 20% of visits | |
| b) Fewer than 40% of visits | 4 |
| c) 41-60% visits | 6 |
| d) 61-80% visits | 7 |
| e) 81-100% visits | 10 |

**3. Proportion of patients under control**

| | |
|---|---|
| a) Fewer than 20% of patients well controlled | 1 |
| b) Fewer than 40% of patients well controlled | 3 |
| c) 41-60% well controlled | 5 |
| d) 61-80% well controlled | 8 |
| e) 81- 100% well controlled | 10 |

NB

Method of Analysis

Expected attendance in twelf month period was determined at clinic through an interview with medical manager in charge of the chronic disease clinic. The manager reported that the chronic disease patientis expected to returnevery 28 days for a check up and a new supply of medicines. This study considered any patient who did not return within two weeks of the appointment day of return to have missed a visit. It was possible for a patient to arrange to miss an appointment by paying extra and collecting a double supply of medicines. In this case they were not judged to have missed a a visit. The study considered an attendance of 80% to be acceptable.

111 HOSPITAL

ISIFUNDAZWE
SAKWAZULU-NATALI
UMNYANGO WEZEMPILO

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DEPARTEMENT VAN GESONDHEID

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952111

(031 - 426744

Private Bag X9051
Pietermaritzburg
3200

ENQUIRIES: Dr C.G.H.Mackenzie
EXTENSION: 2779
REFERENCE: 66/1

1995 06 01

Professor L.R. Uys
Head of Department
University of Natal
Faculty of Social Science
Private Bag X10
DALBRIDGE
4014

PERMISSION FOR RESEARCH

Your letter dated 19 May 1995 refers.

It would appear from the attached documentation that the research projects of Ms.M.S.Mabaso and Ms.A.S.Van Der Merwe both involve primarily one-on-one interviews written questionnaires, or both.

As such they are approved in principle.

It is noted however that Ms.Mabaso refers to the study of hospital records in certain instances, confidentiality must be preserved, the authority of the institutional Superintendent sought in each instance and specific authority sought should there be intended use of any information or material which could be deemed confidential.

Should your initial paragraph stating "permission to use your services in different ways" imply other than the above, you are requested to again approach this office.

SECRETARY: DEPARTMENT OF HEALTH
KWAZULU-NATAL

AJK/uys

PROVINCE OF
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24 JUL 1995
Reference: 55/1
Enquiries: Dr Blackland
Extension: 2763

Mrs M S Mabaso
King Edward VIII Hospital
Private Bag
CONGELLA
4013

Dear Mrs Mabaso

CONSENT FOR RESEARCH

It is with pleasure that consent is given for you to approach senior management of the Hospitals listed below to obtain the information required for your research.

As you research course leadership and hospital effectiveness, the findings emanating therefrom is considered to be of value to the Administration.

You are wished well for the research being undertaken.

Yours sincerely

SUPERINTENDENT GENERAL: DEPARTMENT OF HEALTH

BDTblackland_j.cor

N B. Institutions were omitted for ethical reasons.