

**PROFESSIONAL NURSES KNOWLEDGE AND UNDERSTANDING OF AIDS/HIV
INFECTION.**

BY

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DECLARATION

I declare that this is my own original work, unless specifically indicated to the contrary in the text. The sources used have been indicated as references and or quotations. I am solely responsible for the opinions, interpretations and conclusions done in this study.

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DECEMBER : 1993

THE ABSTRACT

This study examines the Professional nurses' knowledge and understanding of AIDS/HIV infection. The Professional nurses that participated in the study, are those working in a specialised institution which caters for tuberculosis and psychiatric patients, and those suffering from oesophageal and lung cancer; and the patients with orthopaedic problems.

Knowledge explored is specifically related to AIDS/HIV infection, which includes the causes, mode of spread of infection, symptoms, diagnostic tests available, prevention, complications and identification of high risk groups.

The sample was formed by 53 Professional nurses; 27 being those that have done the AIDS counselling course, and 26 who have not done the course.

To collect data, questionnaires were sent to the participants. Apart from the questionnaires, focus group interviews (21 participants) were done to elicit any information that may not be obtained through the use of a questionnaire.

The theoretical framework used is a combination of two theories, Cognitive Dissonance Theory and Fear of Contagion Theory. Cognitive Dissonance Theory assumes that people want to maintain consistency with their beliefs, attitudes, values and behaviour. People confronted with examples of their own inconsistency in these areas, will experience psychological discomfort and be motivated to eliminate the inconsistency. Fear of Contagion Theory developed as a response to perceived threat of catching the disease/infection. Three behaviours characterise this fear:- avoidance, taking extreme precautions,
and verbal expression of fear regarding the disease.

As a result, apart from looking at factual knowledge, one had to identify the behaviors that relate to this theoretical framework. These included fear, avoidance, taking extreme precautions and dissonance/discomfort. These areas are covered in the questionnaire as well as in the interview with the focus group.

The results show high knowledge of general information, including the mode of spread. Lack of knowledge in identification of high risk groups, symptoms, diagnostic tests and use of universal precautions in specific areas was identified.

Fears and dissonance are found to be caused by lack of knowledge, aggravated by the fact that the disease is incurable, as it was expressed by the focus groups.

Uncertainty was marked with regard to the use of protective clothing. Some participants responded in a manner that showed the use of extreme precautions, while others were unsure in such a way that in the end they identified different protective clothing for the similar situations.

In areas where knowledge deficit was identified, it was discovered that the Trained AIDS Counsellors had better knowledge than those that have not done the course except for universal precautions. On looking at the programme it was discovered that the use of universal precautions was not included in the programme and this might be the cause for the uncertainty. The difference between the two groups might have been in the understanding gained from knowledge acquired during the counselling course, since both groups were exposed to the same environment, policies and circulars regarding caring for HIV infected patients.

Although the results showed the numerical differences, it was surprising that in certain sections when these differences were tested statistically, no statistical difference was shown between the two groups. This might have been due to the small sample used.

There are respondents that showed a negative attitude towards caring for AIDS/HIV infected patients; unfortunately no further questions were asked to explore this aspect. This is a shortfall of this study.

It is clear that AIDS/HIV infection is a challenge to all professionals, since it has become one of the leading causes of death. It is then believed that nurses should be equipped with adequate knowledge so as to be able to care for those suffering from AIDS/HIV infection.

In conclusion it was clear that AIDS/HIV infection is a challenge for all professionals.

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1
CHAPTER 1

1.1 INTRODUCTION

The focus of this study is on professional nurses' knowledge and understanding of AIDS and HIV infection. King George V Hospital is used as a centre where the study is carried out.

1.2 DESCRIPTION OF THE HOSPITAL

King George V Hospital is a specialist hospital dealing with psychiatry, tuberculosis, and cancer of the oesophagus and the lung. It has a total bed state of 1426. Geographically, it is situated between Asherville and Sydenham in Durban, Natal. These are Indian and Coloured townships respectively. On a motor vehicle it is 5 minutes away from central Durban. It is a referral hospital with a wide catchment area from all over Natal, and areas outside Natal like Transkei.

1.3 PROBLEM STATEMENT

The study focuses on the specialised hospital's professional nurses' knowledge and understanding of AIDS and HIV infection. What triggered the researchers interest in such a study is the rate of HIV infection amongst patients in King George V hospital as indicated in the following statistics. In 1990 there were 89 cases diagnosed as HIV positive. In 1991 and 1992 the number increased to 125 and 145 respectively.

One finds that there are wards that have an average of 30 percent of HIV positive patients. Looking at the general picture of HIV infection, one finds that the infection spreads quickly. Since early 1980, the number of HIV infection has grown tremendously. It is now a threat to the country's health and economic system. This is supported by the statistics below:-

1990 = 74000 - 102000

1991 = 191926 - 201617

1992 = 18412 (for the Natal/KwaZulu)

It is estimated that there will be 38 - 110 million of HIV infection by the year 2000. (AIDS Bulletin; December 1992; vol 2; AIDS Training and Information Centre publication 31.01.93.; Odendaal, H.F. & Kruger, T.F. 1990, p8, 123; Ijsselmuiden, C.B., 1988, p. 218).

The whole picture shows that HIV infection is such a disaster that needs intersectoral action, especially since there is no cure available at this juncture. The professional nurse has a big role to play in the prevention of spread of this infection, whose actions will be based on the knowledge and understanding of Aids and HIV infection which is explored in this study.

What further motivated the researcher to do a study of this nature is the fact that the researcher has not yet come across a published study of the same type in South Africa; although Aids /HIV is so well documented locally and internationally.

1.4 RESEARCH QUESTIONS

1. What is the level of knowledge held by Professional nurses about AIDS /HIV infection, in a specialised hospital ?
2. What is the number of AIDS /HIV infected patients in each ward ?
3. What is the degree of exposure to AIDS / HIV infected patients as determined by the activities undertaken by professional nurses?

1.5 THE AIM/ PURPOSE OF THE STUDY.

The main aim of the study is to explore the knowledge held by the professional nurses ,in a specialised hospital setting , about Aids/ HIV infection.

To elicit the number of Aids/HIV positive patients, that the professional nurses deal with in each ward, so that the intensity of exposure can be measured.

1.6 DEFINITION OF TERMS

The concepts that are defined below, will be used throughout the topic under study and will be used in the context in which they are defined.

HIV- HUMAN IMMUNE VIRUS INFECTION

This is the state when an individual is found to be having human -immune virus in his body system. The HIV is a retrovirus. This is an irreversible virus that attacks the immune system

of an individual, depresses it, resulting in the affected person being immuno-compromised.

Theoretically HIV infection is divided into four stages ;-

- Acute phase.
- Asymptomatic phase.
- Aids Related Complex.
- Full blown Aids. (Moss, 1992; p.10 -13 & Van Dyk, P.J., 1992, p.2 -9)

VIRUS

This is a term used for a group of extremely small micro - organisms that cannot live or reproduce outside the living cells. Such micro - organisms must enter a host cell in order to use much of the cell's biosynthetic machinery for their own replication. This is called viral infection. (Cong, 1985, p. 41)

AIDS

This is an acronym meaning Acquired Immune Deficiency Syndrome. As the name spells out, AIDS is a syndrome of opportunistic diseases, infections, and certain cancers which eventually kill the patient. It is further defined as a reliably diagnosed disease that is at least moderately indicative of an underlying cellular immune deficiency in a patient with no known cause of cellular immune deficiency or any other cause of reduced resistance reported to be associated with the disease. (Moss, 1992, p.14 & Van Dyk, 1992, p. 3-9)

Acquired - means that it is not inherited but the virus is contracted from outside ones body.

Immunity - refers to the body's natural defence system which protects it against infection or disease.

Deficiency - means lack or inadequate or insufficient; scarce.

-Syndrome is a group of specific signs and symptoms that occur together and are characteristics of a particular pathological condition. AIDS is a collection of a number of signs and symptoms that signify damage to the immune system.

(Van Dyk, 1992, p. 9)

ACCIDENTAL EXPOSURE

It is when one is put at risk of contracting a blood-borne disease by exposure to blood or body fluids of a patient. This may be through a cut from a sharp instrument or a needle prick which has been used on an infected patient, or through a splash of blood /body-fluid into eyes or mouth, or through the broken skin.

(Oakley, 1992, p.40 & Cong, 1985, p.166 -173 ; Van Dyk, 1992, p. 18)

PROFESSIONAL NURSE

A person who is registered with the South African Nursing Council, and has undergone training as a nurse for a diploma or a degree in nursing, taking 3 - 4 years respectively.

SPECIALISED HOSPITAL

This is a type of institution/hospital that does not treat all types of diseases/illnesses but targets at specific diseases or specific illnesses. In this case the institution/hospital admits patients suffering from tuberculosis, mental disturbances and cancer of the lung or oesophagus.

AIDS COUNSELLING

According to WHO (WORLD HEALTH ORGANISATION) this is a process of dialogue and interaction aimed at facilitating problem - solving, understanding; and increasing motivation amongst AIDS sufferers, their families and communities they live in. Counselling is designed to provide support at times of crisis, promote change when change is required ; propose realistic action in the context of different life situations, and assist individuals to accept information on health and well- being and adapt to its implications . (Van Dyk, 1992, p. 63)

COPING

This is a combination of intra - psychic processes and direct psychomotor behavior, the outward display of coping. This includes the effort for both action - oriented and intra - psychic, to manage environmental and internal demands or conflicts, that tax or exceeds a person's resources. (Seaman, 1987, p. 80-82)

KNOWLEDGE

This means what someone knows or what is generally known.

To know is - to be well informed about something which should be generally known ;

- to have something in your mind because of learning or experience;
- to recognise ;
- to be acquainted with ;
- to have personal experience of something ;
- understanding something. (De Jager, 1990, p. 246)

UNDERSTANDING

To understand :-

This means to know or to see the meaning of something ;

- to be an expert in something;
- to have an impression of/about something ;
- to know why something is done and accept it .

therefore understanding means to be able to comprehend the meaning of something or why things are done in a certain way. (De Jager, 1990: p. 500) The concepts that have been defined will be used throughout the topic under study.

ACTIVITIES OF NURSES LEADING TO EXPOSURE:

- A. Blood: - taking of blood specimen
- cutting of an episiotomy during a delivery
 - giving of an injection
 - surgery [theatre nurses] and minor incision
 - assisting in thoracic intubation, for aspiration or
insertion of intercoastal drain.
 - wound dressing

- B. Exposure to body fluids containing visible blood, like in patients with-pyo/haemothorax [changing of an underwater-seal drain]
- C. Vaginal secretions: - delivery, vaginal swabbing and examinations
- D. Semen: - male genital examination and procedures [catheterisation].
- E. Tissues: - biopsy.
- F. Amniotic fluid: - during delivery and amniocentesis
- G. Urine: - blood-stained urine testing.
- H. Mouth wash: - oral thrush that bleeds [patients with full blown AIDS]

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CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

This review of literature focuses on issues related to AIDS/HIV infection, knowledge and the beliefs laid out by various people about AIDS /HIV infection. All this is then applied and evaluated in relation to the theoretical framework that is used. The theoretical framework used is COGNITIVE DISSONANCE and FEAR OF CONTAGION theories. The tool that will be used in data gathering will therefore be based on this approach

2.2 WHAT IS AIDS ?

AIDS has been defined earlier on briefly as the end result or last stage of HIV infection. Since the meaning of this acronym shows that the infection is acquired, one will then have to look at various phases that the client pass or go through before reaching this last stage. AIDS is caused by a virus called Human Immuno - Virus. This is an irreversible virus (retro -virus), which means that once it enters the body it cannot be destroyed by the body's defence mechanisms, but will fight the body's immune system. This renders the individual immunocompromised. (Van Dyk, 1992, p.6)

2.3 THE HISTORY OF AIDS

The oldest case of AIDS was discovered by John P. Wyatt of St. Louis in 1952. At this juncture the person that had this "typical" infection was diagnosed as having a viral infection, but could not respond to any treatment until an exploratory operation was done. A biopsy showed an unusual infection. This person continued to have recurring infections with the scar getting septic until death in 1970. Wyatt and colleagues did an autopsy. Few years later a German pathologist, Herwig Hampel took another slide which showed a retrospective

diagnosis of pneumocystis carinii which is common in AIDS. The material was re-examined in 1982 and it resembled the picture of acquired immune deficiency. This was done by Peter Nichols of Los Angeles. (GRMEK, 1990, p.121 -122). The term (GRID) Gay -Related Immune Deficiency was given to immunocompromised clients, but this had a stigma since the gay people are associated with socially unacceptable sexual behaviour. In 1982 the scientists at Centre for Disease Control (CDC) found a neutral word (AIDS) which took out the sexual stigma and only showed that the illness is acquired, and attacks the immune system thus rendering one immune deficient. [Shilts, 1987, p. 171]

2.4 HIV INFECTION

The virus responsible for Aids was discovered in 1984 by two scientists, Dr Luc Montagnier, a French scientist and Dr Robert Galo, an American scientist. The virus was earlier on named (LAV) Lymphadenopathy -Associated Virus, because of its prominent feature of swollen lymph glands . It was also called Human Leukemia Virus (HTLV-III) since it causes cell destructive changes in the blood system. Due to controversial issues, both names were later changed by the international committee Human Immune -Virus (HIV). (Shilts, 1987, p. 593; Flaskend, 1989, p. 1 ; Van Dyk, 1992, p. 6; Kelly & Laurence, 1988, p. 2; Sacho & Schoub, 1990, p.619-622)

2.5 PATHOPHYSIOLOGY

The HIV infects the primary cells in the immune system of an individual. The virus attacks the special white cells in the body, called T-helper or T-4 cells. On destruction of these cells the HIV then multiplies replacing the white cells. The the white cells' function of protecting the body against diseases fail and the affected individual becomes prone to various various infections, starting from mild flu to severe pneumonia. (Population Reports 1986 : 198). HIV is an RNA virus which possesses an unusual enzyme called " reverse transcriptase". This enzyme enables the HIV to incorporate itself into the DNA. Once it has incorporated itself to T-helper lymphocytes it is able to replicate thus impairing the immune function especially that of the T-cell-mediated immunity. (Moss, 1992, p. 10 -11 ; Van Dyk, 1992, p. 8)

2.6 STAGES OF HIV INFECTION

There are four stages of infection which vary with different individuals :-

ACUTE INFECTION

This occurs two to six weeks after acquiring the infection. The individual will present with mild fever, rigors, general body malaise, painful joints and muscles, rash and at times meningitis. This may last 2 -3 weeks. This particular individual's blood will be seronegative for HIV infection. (Flasked, 1989, p. 3 & Moss, 1992, p. 12). This stage precedes seroconversion which occurs at almost 12 weeks.

ASYMPTOMATIC INFECTION

This is a dangerous stage since on doing the blood test the results are positive but the individual is healthy, bearing no symptoms that will make one suspect infection. It is at this stage that individuals deny having the infection inspite of documented results. It is then important to inform the individual how accurate the tests are (99 %). (Flaskend, 1989, p.3 & Moss, 1992, p.12). Some individuals remain in this stage for many years even for life without progressing to full blown AIDS stage. What is bad about this stage is that, the individual is asymptomatic but infectious. (Van Dyk, 1992, p.10)

PERSISTENT GENERALISED LYMPHADENOPATHY (PGL)

This is also called Lymphadenopathy Syndrome (LAS). This is a chronic diffuse, non cancerous lymph node enlargement. Both terms are used when lymph nodes in at least two extrainguinal sites are swollen to a size of more than 1 cm, and remain swollen for three months or more. These nodes are sometimes painful, accompanied by fever, night sweats and weight loss which also makes the disease to be mistaken for tuberculosis. (Flaskend, 1989, p. 4 & Moss, 1992, p. 13 -14)

AIDS -RELATED COMPLEX (ARC)

The ARC may be a precursor to AIDS, although some people proceed to a stage of Full blown AIDS direct from PGL. One is said to be in ARC phase if one has got well developed

symptoms of immunodeficiency, and at least two abnormal laboratory blood results. The symptoms may include severe weight loss, night sweats, fever and lymphadenopathy fungal rash on the skin and throughout the mucous membrane. (Flaskend, 1989, p.4 ; Moss, 1992, p.14 - 15 & Van Dyk, 1992, p.10)

AIDS -(FULL BLOWN AIDS)

This is the most threatening stage .One is said to be having AIDS when one is at least having the indications of underlying cellular deficiency like Karposi' sarcoma, Pneumocystis carinii pneumonia, dementia and gross emaciation. (Flaskend, 1989, p. 4 & Moss, 1992, p. 15 -16). Most people die within 2 years after entering this stage, but treatment may prolong this stage. (Van Dyk, 1992, p. 11)

PROGNOSIS

This varies from place to place and person to person. Some individuals stay in the asymptomatic stage up to 15 years before entering the last stage which is that of full blown AIDS. Others after being diagnosed as being HIV, just deteriorate and die soon. Most people die within 2 years of entering the stage of full blown AIDS. (Van Dyk, 1992, p. 11 -12)

2.7 PREVENTION

Up to this moment AIDS is incurable. There is no vaccination, as is the case with other blood-related infections like hepatitis. The drugs that are available, like azidothymidine (AZT) do not cure AIDS but delay the progress by boosting the immunity. Another way of intervention includes treating the complications and symptoms. The most interesting thing about AIDS is that it is preventable. The following principles should be followed :-

- practise safer sex by using condoms.
- avoid promiscuity.
- avoid sharing the injection needles.
- avoid sharing razors (traditional healers).

At work place; use the universal precautions of preventions as recommended by CDC .These includes wearing of protective devices like :-masks, gloves, gowns, goggles, boots when

working with body fluids ; use disposable sharp containers. (Van Dyk, 1992, p.12)

2.8 THEORETICAL FRAMEWORK

Two theories are used to form a framework. These are :-

COGNITIVE DISSONANCE THEORY

FEAR OF CONTAGION THEORY

COGNITIVE DISSONANCE

This theory assumes that people want to maintain consistency in their beliefs, attitudes, values and behaviour. If individuals confront examples of their own inconsistency in these areas ; they will experience psychological discomfort and be motivated to eliminate the inconsistency. (Wicklund & Brehim,1976)

FEAR OF CONTAGION

This is an affective stress response to illness. Fear of contagion is an anxious response to the perceived threat of catching the disease. Three behaviours characterise this fear :-

- avoidance
- taking extreme precautions
- verbal expression of fear regarding the disease

(Meisenhelder & La Charite,1989).

2.9 DISCUSSION OF LITERATURE RELATED TO THE STUDY

Both theories appear to be of value in assessing knowledge and understanding of AIDS /HIV infection. According to literature AIDS /HIV infection still appears as the most feared disease, because of its incurability. This type of illness is always associated with death because of its prognosis. (Akisanta & Rouse, 1992). Both theories are stress - coping responses. In Cognitive Dissonance there is a state of disequilibrium whereby the nurse attending to the patient is not free being afraid of being exposed to the disease. This affects her values as a nurse and tends to indicate an attitude towards caring for this patient. On the other hand the patient being cared for is anxious, wanting to know what the nurse thinks about him as a person and whether the necessary care can be rendered. This would be worse if one does not have adequate knowledge and understanding of such an illness. The most fear will be that

of catching the disease, and that of spreading it to others. All these are further aggravated by the values and beliefs one has, and at the end of the day all these things end up influencing behaviour towards AIDS /HIV positive patients. (Wicklund & Brehm, 1976, p. 252 -254)

Both theories clearly indicates that individuals try by all means to maintain equilibrium or eliminate dissonance by either :-

- avoiding the situation that causes disequilibrium,
- engaging in behaviours that are directed at reducing the inconsistency. (like acquiring more knowledge if they are having inadequate knowledge).

(Wicklund & Brehm, 1976, p.254 ; Meisenhelder & La Charite, 1989, p. 29 - 33)

Although cognitive dissonance is looked upon as a bad thing, Festinger (1957) views this as a need since it has got its own positive and motivating characteristics just as other needs do. Festinger assumes that the simultaneous existence of two cognitions that in one way are different, "do not fit together" (dissonance) leads to efforts by the responsible individual to make them fit better (dissonance reduction). This is further supported by Heider (1968) who supports disequilibrium in a sense that it is a stimulus that makes an individual to seek for cognitive balance. (Wicklund & Brehm, 1976, p. 243 -255.)

Fear of contagion is a result of the cognitive dissonance. Fear is one of the behaviours to cope with stress. It also happens as a response to environmental/ situational stimuli. When looking at AIDS /HIV infection , the disease itself is threatening and the it is believed that when one is unsure of knowlegde or lacks understanding, fear will be worsened. (Eysenck, 1992, p. 3-6)

In the study some of the questions will be measuring fear in relation to the condition under study. This will be applied in relation to the stress - coping model displayed below. Seaman (1987) has also looked at adaptation and homeostasis theories in nursing research, and complemented them on the role they played in adjusting the individuals' behaviour to particular situations , so as to maintain normal functioning and survival. This is achieved through using compensatory mechanisms in the physiological and psychological structures or through negative feedback. (Seaman, 1987, p.72 -74)

This is found to be applicable to the study at hand since if one finds oneself lacking knowledge and understanding, one will be in a state of discomfort thus will try to correct the situation by acquiring more knowledge. On the other hand this will influence behaviour in rendering of the nursing care to AIDS / HIV +ve patients .

(Moss, 1992, p.10 - 14 & Van Dyk, 1992,)

In England, between 1988 and 1990 (Akisanya & Rouse, 1992) a study on knowledge and attitude of nurses to people with AIDS / HIV infection, was done. This survey revealed that nurses had limited knowledge base about AIDS /HIV infection. The findings led to a judgemental attitude towards AIDS /HIV infected patients. This then put a challenge to educational programme planners, in a sense that they should have a systematic and sensitive approach when designing such programmes.

It was emphasised that the knowledge base for practice should be strengthened. Further recommendation was made on the need for intensive AIDS /HIV infection education, and training programmes. To ensure quality care it was suggested that the currently available educational materials on AIDS/HIV infection should be evaluated against the recent developments in general for their effectivity and appropriateness.

Managers should be supportive to their staff, by ensuring that the staff had access to training programmes and information materials. The managers also had to develop programmes for diverse nursing groups like theatre nurses, midwives and all those who handle the body fluids. It was further recommended that there should be regular updating courses on local epidemiology and medical advances. It was discovered that a judgemental attitude was directly related to lack of knowledge. It was then believed that educational intervention to improve knowledge would also lead to attitudinal change. (Akisanya & Rouse, 1992, p. 400-402)

In 1991, in England a study was done to evaluate the relationship between knowledge, attitude and level / rate of contact with AIDS / HIV infected patients. This study was done on nurses,

psychology and design students .

The results were directly opposite to the above study (Akisanya & Rouse) which showed a relationship between knowledge and attitude. In this study there was no relationship found to be existing between knowledge and attitude amongst the three groups. Instead there was a strong relationship found to be existing between the rate /degree of contact and attitude. Other findings revealed homophobia, anxiety and fear of contagion. It was then discovered that nurses had the highest level of knowledge because they had undergone specific educational sessions with regard to AIDS /HIV infection. This did not lead to positive attitude .It was then recommended that educational intervention should not only address knowledge but should also target at specific areas like anxiety and fear reduction, and attitudinal change .

(Robbins et al, 1992, p. 198 - 203)

Bond et al (1990) did a survey to explore the experience, knowledge and intentions of community nursing staff, in England. This study, like that of Akisanya & Rouse (1992), showed low level of knowledge ; and lack of confidence in doing tasks / procedures for AIDS /HIV infected patients. The nurses lacked confidence in providing health education, counselling and rendering terminal care. This was found to be related to lack of experience, since most of them had less contact with AIDS /HIV infected patients.

(Bond et al, 1990, p. 249-255)

The recommendation made by Akisanya and Rouse (1992) ,of creating special programmes for diverse nursing groups, tied up with the study on "critical care nurses concerns". This study was initiated by the fact that the number of AIDS'clients admitted in critical care units was increasing. This was because of the improvement shown by patients on mechanical ventilation. The critical care nurses like the community nurses (Bond et al 1992), showed fear of contracting the disease; and also felt that caring for AIDS patients would affect their relationship with the significant others. Fear as shown in the theoretical framework is related to lack of knowledge. Although the perceived competence was high, this study also elicited that nurses had a low ability to deal with patients' psychological needs which were believed to

be related to their high technological orientation. It was then decided that psychiatric nurses could be of help in guiding the critical care nurses in this criteria. It was further discovered that critical care nurses were not comfortable in caring for AIDS patients, thus a recommendation was made for educational programme that would target at specific areas. (Schererer et al, 1992, 23 - 29)

In 1989, Meisenhelder & La Charite (1989) did an intensive study to explore the fear of contagion, a stress - coping model. Various studies were reviewed in relation to fear of contagion. Like the above studies (Bond et al; Schererer et al; Simirnoff et al) it was discovered that the majority of nurses had fear of contacting the disease. It was further discovered that this fear was related to the symbolic meaning of the disease rather than the statistical chances of acquiring the infection. The same study also elicited that the nurses that had had more contact with AIDS / HIV positive patients, had decreased / lesser fear, than those with lesser contact. (Meisenhelder & La Charite, 1989, p.29 -37)

Reports of fear and psychological distress on the part of nurses, when caring for AIDS /HIV infected patients, has drawn attention to many researchers. In USA a study was done to explore the attitude of nurses to AIDS patients. This showed that the attitude was strongly related to the stigma attached to the disease (sexual transmission and drug use), which lead to "victim - blaming". The psychological distress was found to be further aggravated by the increasing number of HIV positive patients, which in return meant that there would be an increased demand for more nursing staff to care for such patients (which seem to be in need of 40 % more nursing care, when compared with the terminally - ill cancer patients). Like (Bond et al, 1990; Schererer et al, 1992; Akisanya & Rouse, 1992, ; Robins et al, 1992), this study showed a strong relationship between "anxiety and fear "and nurses lack of accurate knowledge about AIDS. It was then recommended that nurses should have inservice and or continuing education to ensure that they have accurate and current information on which to base the patient care .It was further recommended that the nursing curricula should be improved and expanded to provide more content concerning HIV infection.

(Siminoff et. al, 1990, p. 262 -267)

CHAPTER 3

METHODOLOGY

3.1 RESEARCH DESIGN

This is an exploratory study, whereby one uses a questionnaire and a focus group interview.

An exploratory survey is recommended when little is known about the phenomenon of interest.

It is then recommended that a literature survey be done prior to the study, so as to guide the researcher on the questions to ask in the study. A flexible rather than the structured approach is preferred in data gathering. In the topic under study the focus group interview will be done, to elicit the information that may not be gathered through the use of a questionnaire.

(Nieswiadomy, 1987, p.43 & Polit and Hungler, 1991, p.29 & Burns & Grove, 1987, p.58-59)

Survey studies are described as the investigations in which self-reported data is collected from the sample to describe the entire population on some variables of interest. (Nieswiadomy, 1987, p.144 & Treece and Treece, 1989, p.138)

The commonly used data gathering methods are questionnaires and interviews. These data collection methods have the advantages of providing accurate information on population using a relatively small sample. The other advantage is that of collecting a large amount of data with minimal cost. (Nieswiadomy, 1987, p.144)

3.2 HYPOTHESIS

There is no hypothesis in this study since it is an exploratory survey, and little is known about the topic. (Treece & Treece, 1989; Nieswiadomy, 1987)

3.3 THE POPULATION

This consists of 192 professional nurses, working in a specialised hospital setting .

3.4 SAMPLE AND SAMPLING METHODS

A sample of 60 professional nurses will be drawn from a total of 192 professional nurses working in various wards in this specialised hospital. 50% will be formed by the Trained AIDS counsellors (30), and the other 50% will be randomly selected from the rest of the professional nurses that have not done the AIDS counselling course, but working in the same setting.

3.5 VERIFICATION OF THE SAMPLING METHOD

A sample is a portion of the population which represent the total population. This is done because it is not possible or rather difficult and expensive to study the total population. To ensure representation the sample must be reliable, and every respondent should have an equal chance of being chosen. This is what has been applied in the above sample, when one looks at the random selection done on the second 50% of the sample which is formed by the professional nurses that have not done the AIDS counselling course.

(Polit & Hungler, 1991, p. 59 - 62 ; Treece and Treece, 1989, p.43 ; Nieswiadomy, 1987, p. 4.)

3.6 METHODOLOGICAL ISSUES

3.6.1 THE ETHICAL ASPECT

On designing the research study, it is important that every nurse researcher stick to ethical principles, which include respect for the human rights of the respondents. This includes the fact that the study disrupts the daily routine or life of the respondent, thus one needs to get a permission/consent (informed consent) which clearly states the rights of the respondent, and highlighting the fact that it is voluntary to participate in the study.

(Polit & Hungler, 1991, p.29 - 48 ; Burns & Groove 1987, p.335 - 357)

The above was taken care of as seen in annexure 1. Participants in the pilot study also had a letter of consent that was sent to them, in order to get their permission to participate in the study. In the pilot study further explanation was given as for the purpose of the study and what was expected of the respondents. Confidentiality and anonymity were assured to all the

respondents. It was further stated that the respondent had a right to withdraw from the study even if one has already started to participate. (see annexure 1.)

Prior to conducting the study, the Ethics Committee screened the project and permission was applied for from NPA (Natal Provincial Administration). Permission was also sought from the Superintendent and the Chief Nursing Service Manager of the hospital where the study was to take place. (see annexure 2.)

3.6.2 VALIDITY AND RELIABILITY

This is both a qualitative and a quantitative type of study. This is seen in the approaches used in data gathering which yield both qualitative and quantitative characteristics.

3.6.3 TRIANGULATION

This is when the researcher uses the different measures to determine the validity of the study findings, like questionnaire and interview to collect data. (Burns & Groove, 1987, p. 298)

This has been taken care of in the study under discussion, since exploration has been approached from various angles. Apart from the questionnaire, the group interview has been used in order to elicit information that could not be revealed/covered by the questionnaire. (Stewart, 1990, p. 15 -16 & Burns & Groove, 1987, p.298).

The study is said to both qualitative and quantitative because:-

1. THE TOOL - QUESTIONNAIRE

The questions asked yield both qualitative and quantitative data. There are close - ended questions (structured) which gather quantitative data, and open - ended questions which give qualitative data, as the respondents are allowed to answer as they feel without being restricted to 'yes/no; or agree/disagree' type of answer.

2. THE FOCUS GROUP INTERVIEW

This is also an additional approach to elicit quality information that could not be gathered through the use of a questionnaire. (Stewart, 1990, p.15)

3.6.4 CONTROLLING BIAS

SAMPLING METHOD

This was taken care of as early as during sampling since a random sample was used in order to ensure that all respondents had equal chance of being chosen.

AVOIDING CONTAMINATION OF THE MAIN STUDY

The participants of both pilot study and focus group interview are not included in answering the questionnaire of the main study. This ensures that the results of the main study are not influenced by prior information.

THE CONCEPTUAL FRAMEWORK

The conceptual framework used is that of COGNITIVE DISSONANCE & FEAR OF CONTAGION THEORIES. Both theories are reflected in the data gathering approaches used. There are questions that are directed at gathering the information that show dissonance / discomfort, and those questions that show fear of contacting the disease. (see annexure 3.)

3.7 CONTENT VALIDITY

A. THE TOOL

The content of the tool is valid in a sense that it is based on the literature studied (Eusenck, 1992, p. 3 - 6; Meisehelder & La Charite, 1989, p. 30), as well as the theoretical framework.

There are questions that look at fear of contagion and the behaviours associated with fear like avoidance, use of extreme precautions, and verbalisation of fear. (see annexure 3.)

There are also questions that look at the actual knowledge and understanding of the disease as the topic under study demands. This includes the insight about the disease, its prevention and spread / transmission. (Akisanya & Rouse, 1992, p. 400 - 401). Also see section 4. of Annexure 3.

Other questions explore attitude and behaviours caused by discomfort / dissonance due to lack of knowledge as far as the disease is concerned. This is found in sections:- 2 ; 3; 4 & 5(b)

(Robbins et.al,1992, p. 198 - 203)

In addition to the above, the structured questions have some sort of flexibility ,since in addition to 'yes /no'questions a third option is given for " other", and the respondent is asked to specify the "other" alternative. The same applies to "agree / disagree" questions , there is an option to state if unsure / undecided. At the end the answers will be grouped analysed and interpreted accordingly.

There are also open - ended questions, whereby the respondent is not restricted to specific ideas but is free to express ones' views.

3.8 THE PILOT STUDY

After sampling and selection of focus group members, six members were randomly selected from the remaining population, to form the pilot study respondents. This is the mini study which is a trial run to assess the feasibility of the study .

3.8.1 THE AIMS OF THE PILOT STUDY

This mini study was directed at two main goals :-

1. - to check how long one takes to answer the questionnaires.

In the letter to the respondents, that was attached to the research proposal it was estimated that the respondents were going to take +/- 10 minutes to complete the questionnaire.

2. - to check if all the questions in the tool were clearly stated and easily understood, so that the ambiguous or unclear questions could be corrected or excluded from the main study.

NB! -the mini study respondents were informed of the purpose of the study, so that they could assess the time taken to fill the questionnaire and give comments on the unclear questions.

3.8.2 THE RESULTS OF THE PILOT STUDY

Out of the 6 questionnaires only 5 were returned ; but the respondent that did not return the questionnaire gave an excuse of having forgotten the questionnaire at home, thus gave the verbal feedback.

1. RESPONDENT 1 (unreturned questionnaire)

- time taken to complete the questionnaire = 15 minutes.
- comment on questions = all questions were clear but the respondent felt a lack of knowledge.

2. RESPONDENT 2

- time taken to complete the questionnaire = 12 minutes.
- comment on questions = all questions were clear.

3. RESPONDENT 3

- time taken to complete questionnaire = 10 minutes.
- comment on questions = all questions were clear.

4. RESPONDENT 4

- time taken to complete the questionnaire = 12 minutes.
- comment on questions = all questions were clear, those that were unanswered were due to lack of knowledge.

5. RESPONDENTS 5 & 6

- time taken to complete the questionnaire = 15 minutes.
- comment on questions = unclear questions on section: 3 (b)

this was due to lack of vertical lines to form squares, where one would be able to fit in answers :-

22
agree, unsure, disagree or
yes, unsure, no respectively.

3.8.3 SUMMARY AND CONCLUSION OF THE PILOT STUDY

1. It was decided that 10 minutes that was estimated for the completion of the questionnaire was inadequate thus had to be increased to 15 minutes in the major study. This was decided because the maximum time taken by the pilot study respondents was up to 15 minutes, as indicated by respondent 5&6.
2. The vertical lines were drawn for questions on section 3(b) and 4 in order to form the squares.
3. There were places where the respondents contradicted themselves, like section 2 number 4 & 5, this will be validated in the major study.

3.9 THE LIMITATIONS OF THE STUDY

The results of the study may not reflect the total population in a sense that the degree of exposure between the professional nurses of TB section and that of those on the psychiatric section is not the same. This has been taken care of since the questions look for general / basic knowledge that every professional nurse is expected to have acquired about AIDS.

The AIDS counselling course done in both sections, (Psychiatric and General) differ. The GENERAL / TB section follows a programme that is comprehensive, taking three days. This programme covers areas from diagnosis of the disease, transmission, prevention and all levels of counselling (pre-post - test and continuous counselling until discharge or death.) This programme differs from that done in the psychiatric section lasting one day and which is not so comprehensive. As a result the professional nurses from the psychiatric side were not taken as Trained AIDS counsellors.

DATA ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

The data gathered is presented in a manner that relates to the theoretical framework used. This theoretical framework organises the questionnaire used and explores knowledge and understanding of AIDS/HIV infection. From the same questionnaire it is easy to elicit the fears and dissonance, especially where knowledge and understanding is lacking.

Apart from the questionnaire the Focus group interview was done to elicit information that may not be available through use of a questionnaire.

The study does not only explore the knowledge of Professional nurses of a specialised hospital setting on AIDS, but also explores the difference in knowledge between those that have done the AIDS counselling course, and the ordinary Professional nurses working in the same institution.

The results of raw data will be shown in annexure 8, which is printed in quattro pro spreadsheet. This will be made available for referral purposes since some of the diagrams will only indicate variables above "0". This means that variables like -1 which stands for none response and/or missing information will not be shown.

Data obtained from the Focus group shall receive attention first before that obtained from the questionnaire.

4.2 THE FOCUS GROUP INTERVIEW

This interview was done prior to the questionnaire study. The participants were formed by the respondents who were not going to be included in the questionnaire data-collecting method. Initially the Focus group had to be formed by 24 participants (12,5%), which were randomly selected; but at the end only 21 (11%) turned up.

4.2.1 REALISATION OF THE STUDY

Three groups were interviewed. Two groups were formed by 8 participants, and the third group was formed by 5 participants since the date during which it was held coincided with the pay day, and people were rushing to go to town during their lunch hour.

Prior to the interview, verbal consents were obtained from all participants. The purpose of the study was explained, and the reason for doing the focus group interview was further explained; which was directed at gathering data that may not be elicited through the use of a questionnaire

The tape recorder which is recommended by Stewart (1990), was not used. This is because of the political situation and the general instability, that the whole community is undergoing during this transitional period, during which the study is undertaken. Instead; through the participants permission, a paper was used to write down the key words used during the discussion. Total confidentiality was assured, since the results will under no circumstances state the participants name.

4.2.2 THE RESULTS FROM THE INTERVIEW

KNOWLEGDE

The discussion focussed on the Professional nurses knowledge/perceptions re-AIDS/HIV infection. It is difficult to put results in a numerical form since the interviews were in group form, thus the words like majority, some and few will be used. The majority of the nurses

could differentiate between AIDS and HIV infection, although there were some that could not clearly state the different stages of infection.

FEARS

Almost all the participants expressed fear of contracting the disease. The expressed fear was three-fold:-

- more than half had fear of contracting the infection from the workplace.
 - all had fear of contracting the infection from the sexual partner since ones' general/physical appearance cannot tell if one is sero-positive or not, especially during the early stage.
 - all expressed fear of undergoing the test which makes one "know" of ones sero-positivity.
- All three groups believed that people do not die because of advancement of the disease but because of "knowing" and the depression associated with the disease.

DISSONNANCE

The discussions revealed uncertainty and discomfort as far as the universal precautions are concerned. The participants excused themselves by the fact that they have not yet done the course. But further to that they expressed further confusion that is perpetuated by the new discoveries that come up now and again. The discomfort is further increased by the fact that the virus lives even on the dead body.

On exploring the use of the plastic bags for the deceased, the majority felt uncomfortable as far as that aspect is concerned since this is seen as interference with the socio-cultural factors of the family concerned. It was also felt that this could actually mean disclosure of ones' diagnosis. This is an area of further research.

CONFIDENTIALITY

All were worried and uncomfortable about the use of plastic bags as they felt that this raises suspicion from the people because corpses are usually not wrapped in plastic bags. Some did not agree with the use of the plastic bags for the deceased since it was felt that, this interferes with the so called "confidentiality".

SEARCH FOR THE CURE

There was a number of participants that believed that there is a herbal cure for the disease. It was felt that the traditional healers should be encouraged to come forward with their herbal treatment. Participants felt that although the herbal treatment is said to be available, it is difficult for the traditional healers to come forward because they are not consulted and involved in healthcare.

An aspect of exploitation was also raised; whereby it was felt that the traditional healers have in the past discovered herbs that are used to cure certain diseases, and these have been translated to Western medicine with no recognition given to the traditional healer concerned. This is another area for further research.

THE DILEMMA

The dilemma that could not be resolved was that of rape victims that end up testing positive. The nurses felt helpless as far as that is concerned.

The second dilemma was that of sero-positive patients who get discharged still bearing the "revenge" attitude, therefore continue spreading the disease since they "do not want to die alone".

The third dilemma was about those that live on casual sex and the risks associated with such practices.

The fourth dilemma was about blood transfusion, everybody felt threatened about the unreliable screening that is done in the blood banks, which is further complicated by the window period.

THE USE OF CONDOMS

On exploring the beliefs and attitudes about the condom use, it was further discovered that condoms have not yet gained total acceptability, even amongst the nursing staff. There was a strong cry for female condoms (ephidom) to be made available in South Africa. There seems to be a problem as far as the female condom is concerned, since apart from the expense and the unavailability of this condom, the partner needs to be informed of such a condom.

4.2.3 RECOMMENDATIONS FROM THE THREE GROUPS

All groups recommended:-

- breaking the confidentiality issues. It was felt that if HIV infection could be taken like all other infections it will be easy to render the necessary care, and the affected will have more guts of coming forward for help.
- notification of the disease. It was felt that if the disease could be notifiable in one way or the other, management would be easier although it is known that such a matter is difficult, since the cure is not available yet.
- conscientising the community at large re- condom use.
- setting a campaign recruiting the traditional healers to come forward in curing the killer disease.
- trying of various methods to ensure acceptability of the disease since there are people who still deny the existence of the disease.
- an intensive education programme on AIDS/HIV infection to the community at large.
- the inclusion of counselling in the curriculum for basic nurse training.

4.3 THE QUESTIONNAIRE

4.3.1 SAMPLE REALISATION

Originally, according to the plan (sampling in chapter 3), the respondents had to be formed by 30 Professional nurses that are trained in AIDS counselling, 30 Professional nurses that had not done the course. Unexpectedly one out of those participants listed as untrained in counselling had done the course outside the hospital, thus marked herself as trained AIDS counsellor. This gave the total sum of 31 trained AIDS counsellors and 29 ordinary Professional nurses.

4.3.2 THE RESPONSES

Out of 60 questionnaires that were sent to the participants, 55 were returned, but two (2) of these were found to be blank (without responses). This led to the total returned sum to be 53 which is 88%.

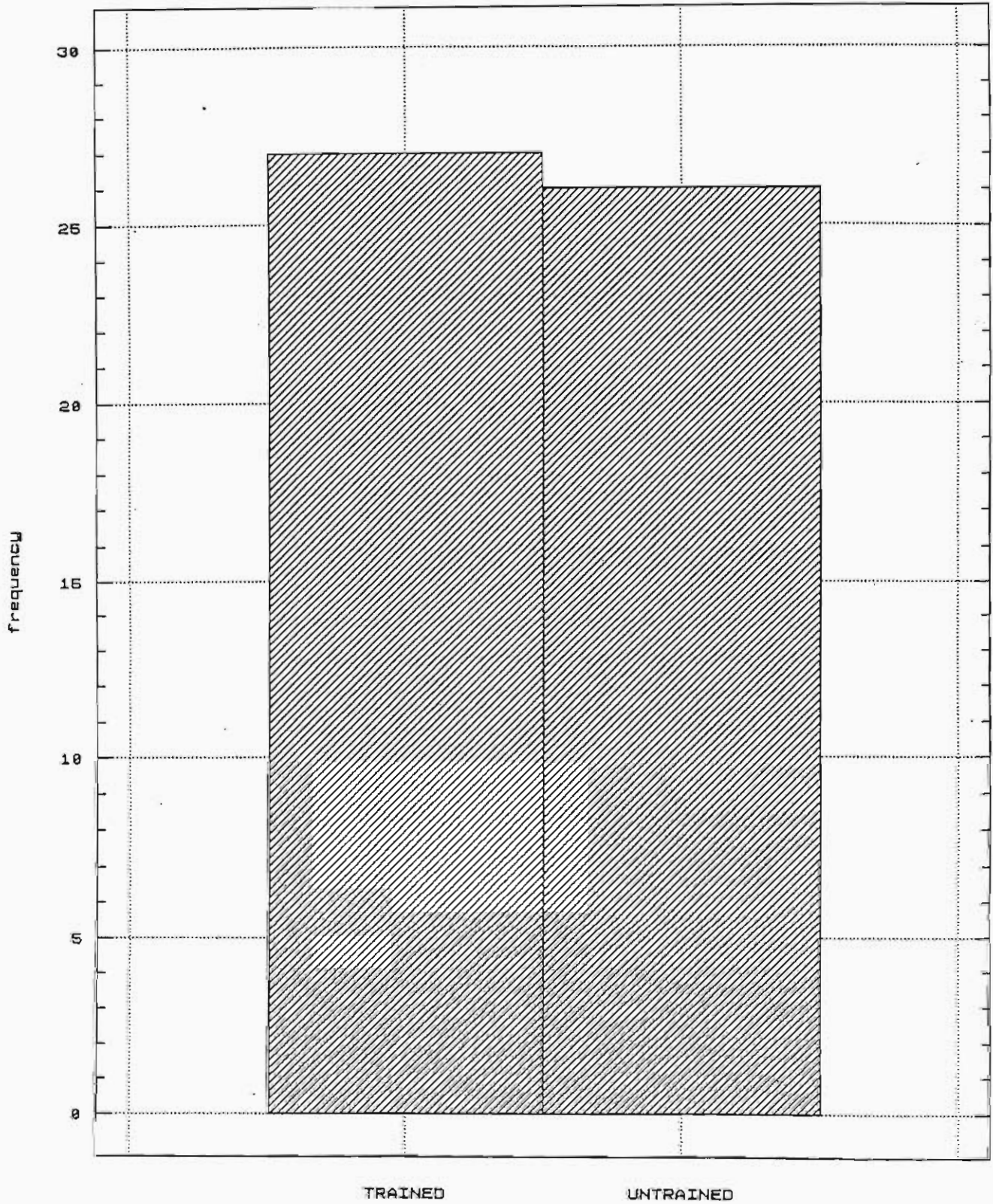
Such a good response was difficult to achieve but an intensive follow up had to be made. The first 60 distributed questionnaire had 40% response. A follow up letter was then sent to the respondents, which was accompanied by the questionnaire; should it happen that the respondent lost the first copy. That too did not yield good results since some of the respondents were busy writing UNISA examinations. Further, telephonic and personal follow up was done until one reached the total response of 88%.

4.3.3 TRAINED VERSUS UNTRAINED AIDS COUNSELLORS

Out of 53 respondents, 27 were trained AIDS counsellors, and the rest 26 were Professional nurses that have not done the course.

(see figure 1 in the following page)

Frequency Histogram of TRAINED AND
UNTRAINED AIDS COUNSELLORS



Trained and untrained aids Counsellors

Figure 1:

4.3.4 RESULTS OF THE QUESTIONNAIRE

The results obtained will not only look at global picture, but further exploration will be made to detect the differences or similarities in knowledge between the two groups. The same will apply to fears and discomfort.

TABLE 1:

AGE DISTRIBUTION OF RESPONDENTS

<u>AGE IN YEARS</u>	<u>NUMBER OF RESPONSES</u>	<u>PERCENTAGE</u>
21 - 30	8	15,1
31 - 40	24	45,3
41 - 50	17	32,1
51 - 60	4	7,5
TOTAL	<u>53</u>	<u>100</u>

(also see Annexure 7)

4.3.5 THE RATE OF INFECTION AND CONTACT IN EACH WARD

Out of 53 respondents, 45 (84,9%) had HIV positive patients in their wards. Out of the 8 (15,1%) remaining respondents, some indicated no positive patients whilst others left the space blank, and it was difficult to further explore since in the consent letter it was clearly stated that one has a right to omit the sensitive question, and as the participation was voluntary, one was not forced to answer all questions.

Those that did not have such patients, some are from the psychiatric section; and others are from theatre where it is difficult to state about the presence of infection in patients since patients only come for operation.

The number of patients with HIV infection, ranged from 1 - 14 in each ward during the month of the study. This gave an average of 4 in each ward, although it is known that this is not a true picture due to under-reporting all over the world. (Epidemiology comments: Aids in Africa : 1991, p.47)

All the respondents had daily contact, which is determined by the nursing procedures done on daily bases as shown in chapter 1. The exception was with the matrons, whose job description is different from ward Professional nurses. The same applies to theatre and intensive care nurses whose contact ranges from weekly to monthly, depending on the intake and operation rate.

4.3.6 KNOWLEDGE

The knowledge questions needed specific answers. In some areas one had to respond with yes/no, or agree/disagree. But all the answers needed a clear understanding of the disease. All respondents knew that AIDS is caused by a virus, although some could not give correct full name of HIV. Out of 53 respondents the results were as follows:-

- 13 were blank (without responses)
- 17 were incomplete, written as (human immune virus)
- 23 were correctly written as - human immunodeficiency virus.

About the window period, 36 got this right and 17 got this wrong. When asked about the risk of contracting AIDS from the following variables, the response was good, as shown in the next page:-

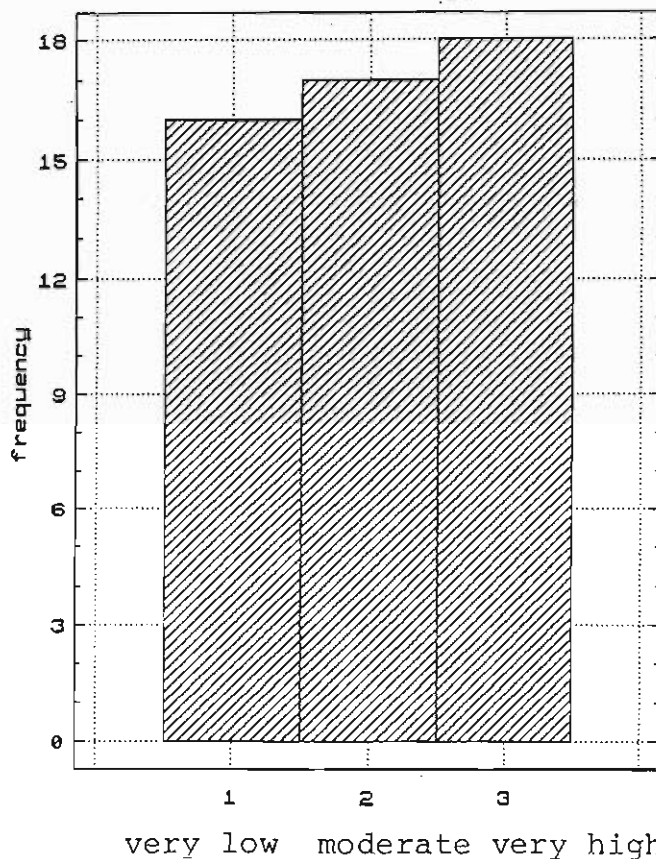
TABLE 2 :**KNOWLEDGE RE RISK OF CONTACTING AIDS**

<u>THE VARIABLE</u>	<u>CORRECT RESPONSE</u>	<u>PERCENTAGE</u>
- mosquito bite	44	83%
- donating blood	34	64%
- new hepatitis B vaccine	42	79%
- nursing HIV infected	50	94%

On exploring the beliefs about the rate of risk associated with nursing the HIV infected patients, the result was as follows:-

TABLE 3 :**PERCEIVE RISK OF GETTING INFECTION**

<u>RATE OF RISK</u>	<u>NUMBER</u>	<u>PERCENTAGE</u>
very low	16	31,4
moderate	17	33,3
very high	18	35,3
TOTAL	51	100%

**Figure 2 : Perceived risk of getting infection**

This was a poor response, but it actually yields the feeling that the disease is still perceived as very dangerous, whilst there is literature evidence which states that the occupational risk is very low (1%), since there are universal precautions used. (Siminoff: 1990, p.264) And in fact only about a third of the respondents were correct in their assessment of this risk.

BLOOD TRANSFUSION

On exploring the risk of contracting AIDS/HIV infection from blood transfusion, the results were as follows:-

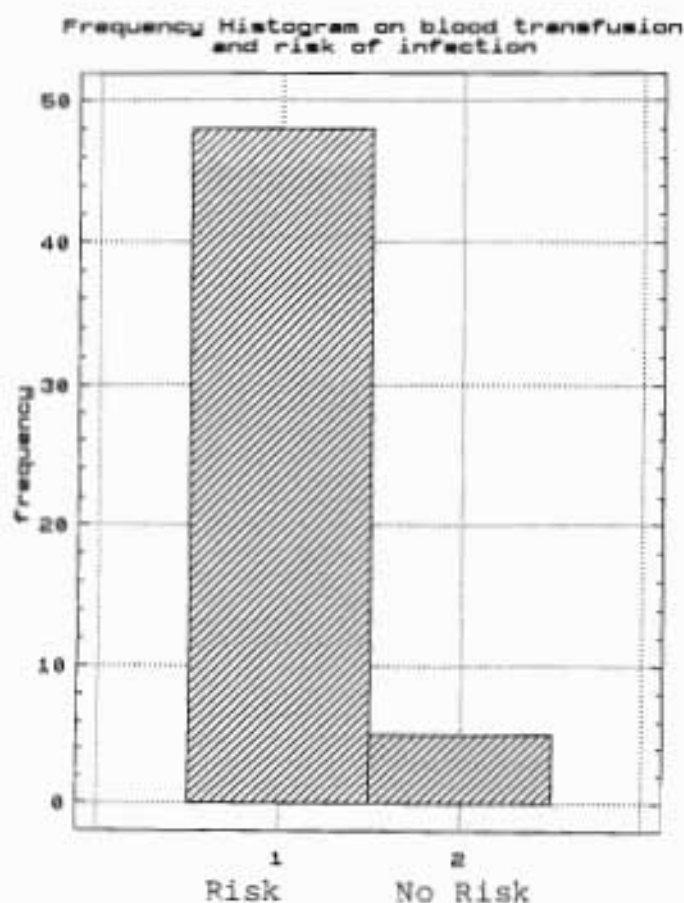


Figure 3 :

Perceived Risk of getting infection through blood transfusion

- only 5 (9%) out of 53 believed that one cannot get infection from blood transfusion.

- as high as 48(91%) respondents believed that one can get the infection from blood transfusion.

This result was also elicited in the Focus group discussion whereby people strongly believed that inspite of the screening that is done, there is still a high risk of getting the infection, and the window period makes it difficult for one to be sure of the accuracy of the screening test.

4.3.7 KNOWLEDGE AND BELIEFS

This portion looked at various variables to explore knowledge and beliefs. These include the following:-

- sero-negativity.
- use of condoms.
- vaginal douche.
- clients physical appearance.

All respondents believed that the use of a condom during sexual intercourse can reduce the risk of getting the infection. Out of 53 respondents, 83% knew that one antibody test cannot conclusively establish sero-negativity, otherwise the rest 17% got the answer wrong. Almost all (51 out of 53) respondents, which is 96,2%, believed that douching before and after sexual intercourse is not sufficient to reduce the risk of HIV infection.

Pertaining to the physical appearance of a client; 87% of the respondents believed that the general physical appearance cannot provide evidence of ones HIV status. Out of the 7 respondents that had the opposite response, 2 highlighted that it is only in the advanced stage that ones' physical appearance can provide his/her HIV status.

4.3.8 FEARS AND ATTITUDE

On exploring fears (sect.2 ques.4), the response was as follows:-

TABLE 4:

FEARS

<u>RESPONSE</u>	<u>NUMBER</u>	<u>PERCENTAGE</u>
fear	15	30,6
no fear	34	69,4

This percentage has been calculated out of 49 responses, because 4 questionnaires had no responses on that question. This response shows that about a third of the respondents perceive the HIV positive patients as threatening and dangerous.

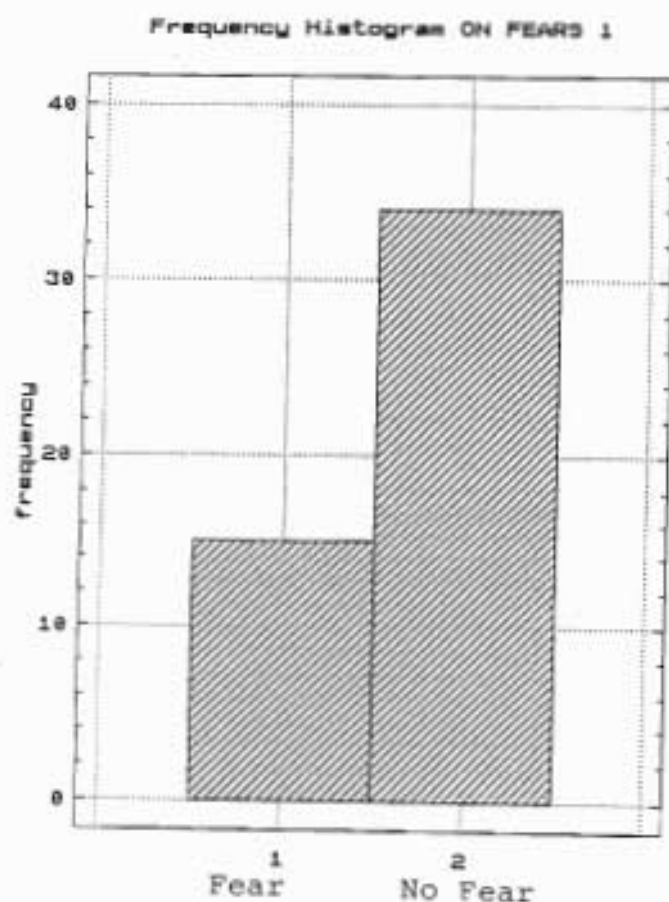


Figure 4: Rate of fears

The same question of fears was repeated in section 4 question 3, to countercheck the above responses. The result was as displayed in the figure:-

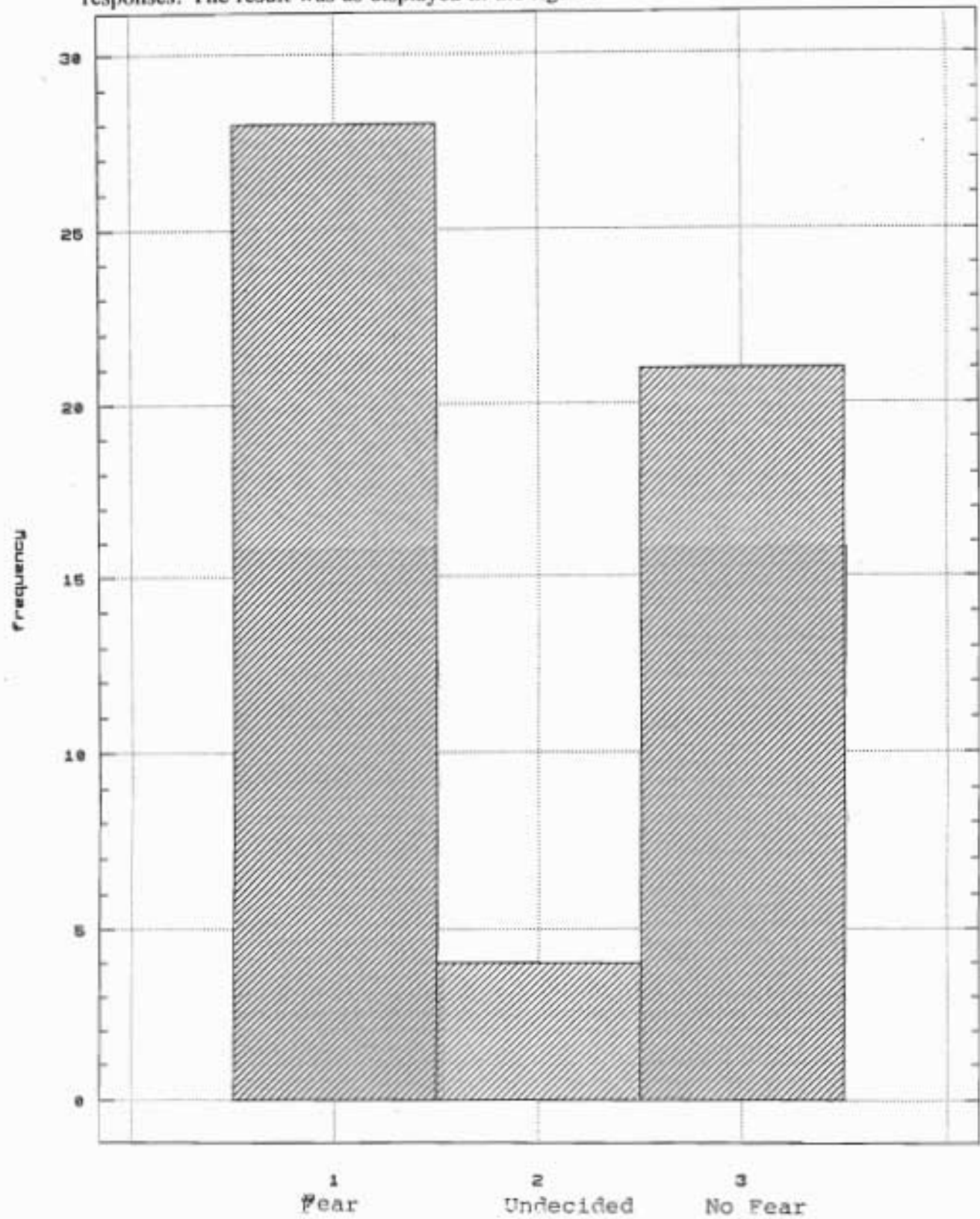


Figure 5: Rate of fears - countercheck

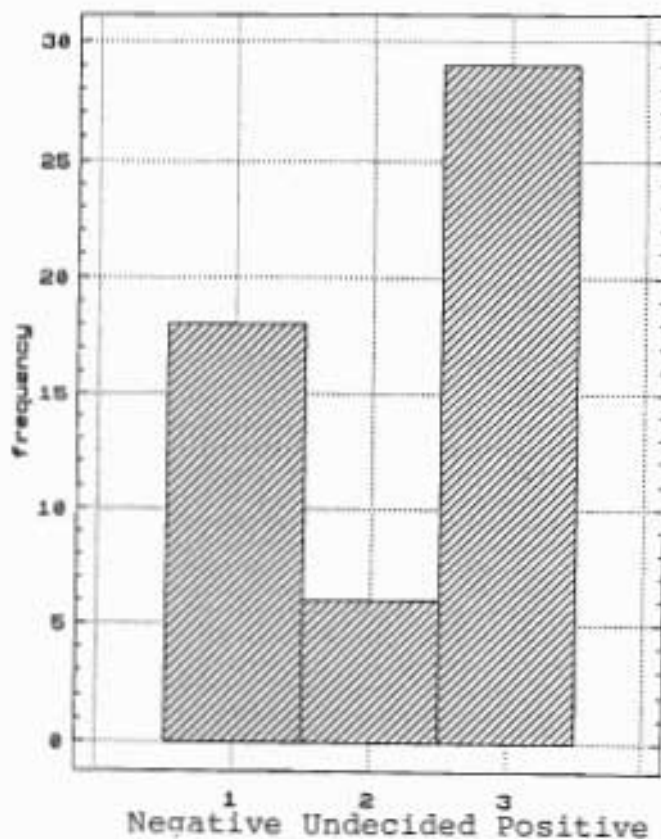
Out of 53 respondents, more than 50% (28) showed fear, 4 respondents were undecided, and 21 respondents reported no fears. This response contradicts the first response.

4.3.9 EXPLORING ATTITUDES

This explores whether one has positive or negative attitude towards caring for AIDS/HIV infected patients. Out of 53 respondents, 15 would refuse to care for HIV positive patients, if given a chance, whilst 30 would not refuse even when given a chance, and 8 respondents were undecided. The analysis does not look at one response.

Key:	1	=	negative attitude	= 28,3%
	2	=	undecided	= 15,0%
	3	=	positive attitude	= 56,7%

Frequency Histogram ON VOLUNTARY CARE



See Figure 6 : Attitude

The same question was counterchecked in section 4 (question 1&2). The respondents were asked to indicate if they felt they should have a right to refuse to care for HIV positive patients:-

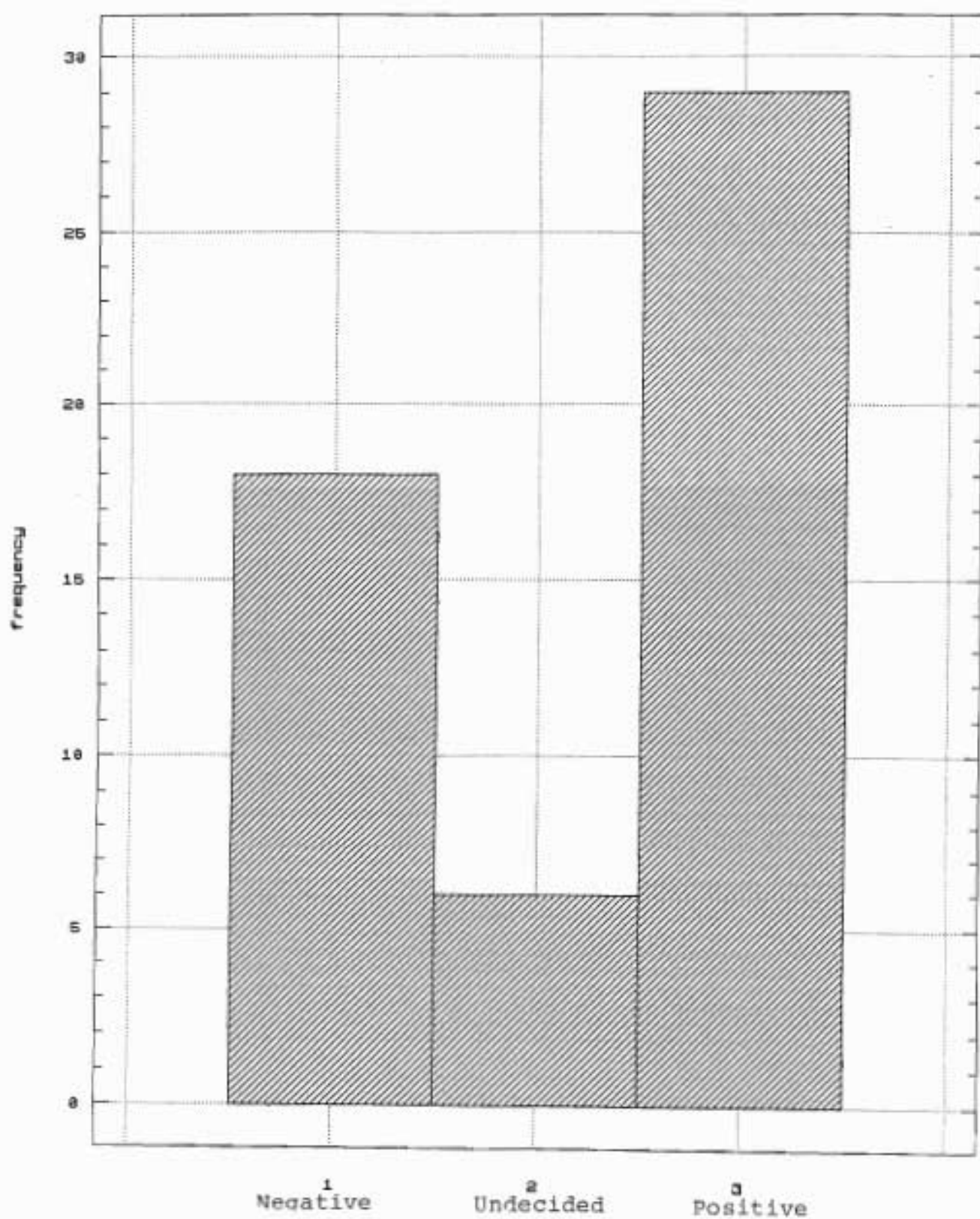
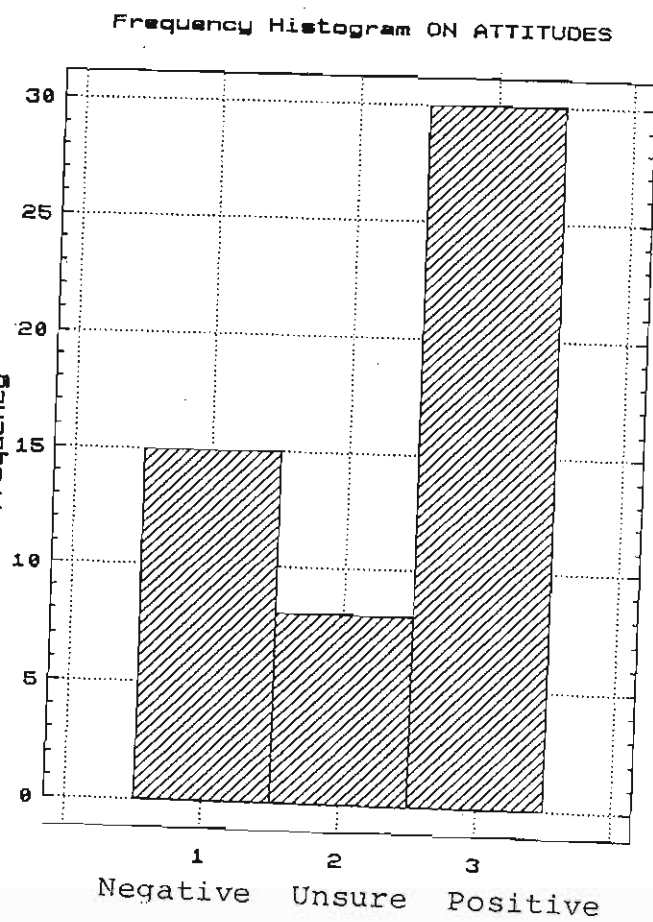


Figure 7 : Attitude - countercheck

Both attitudes are contradictory to each other because the number of positive and negative attitudes does not match in the two questions. Although the questions appeared different, the interpretation of response is the same.

Frequency Histogram ON ATTITUDES



Frequency Histogram ON VOLUNTARY CARE

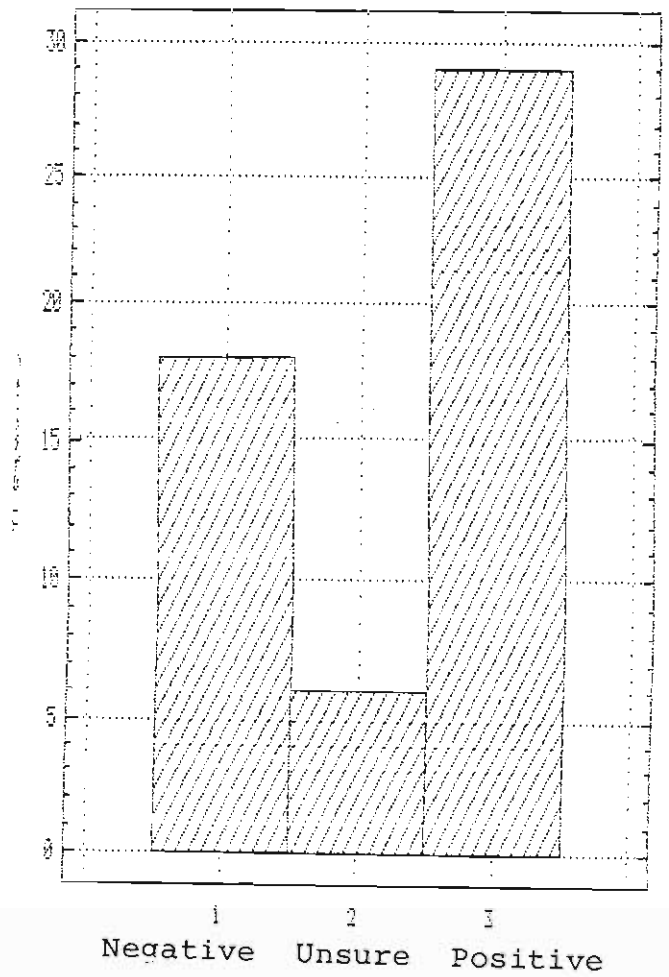


Figure 8 : Comparison of Attitudes

4.3.10 EXPLORING DISSONANCE (DISCOMFORT)

This was explored under two sections that were directed to elicit competency and confidence, as far as physical and psychological care for HIV infected patients, is concerned. The results were as follows:-

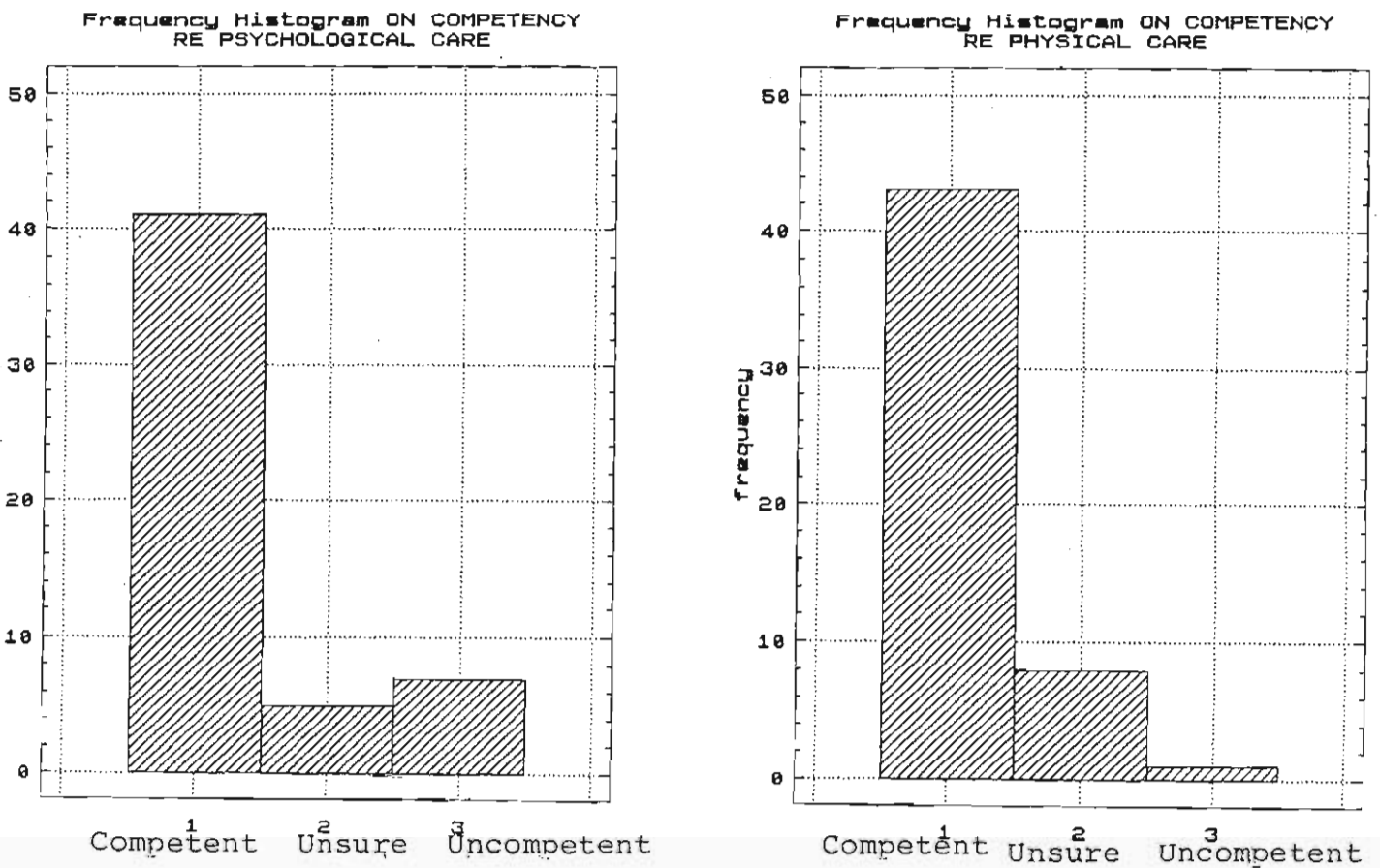


Figure 9 : Competency re-psychological and physical care

Key: - 1 = Competent
 2 = Unsure
 3 = Not competent

4.3.11 ATTITUDE TOWARDS ISOLATION

Almost all (49 out of 53) respondents felt that the HIV infected patients should not be isolated.

The reasons for none isolation were stated as follows:-

- 1 = disease spread is preventable.
- 2 = to avoid psychological trauma.
- 3 = to avoid stigma and labelling.
- 4 = to ensure moral support.
- 5 = to ensure acceptability.
- 6 = to ensure maintenance of confidentiality.
- 7 = no isolation except on request.

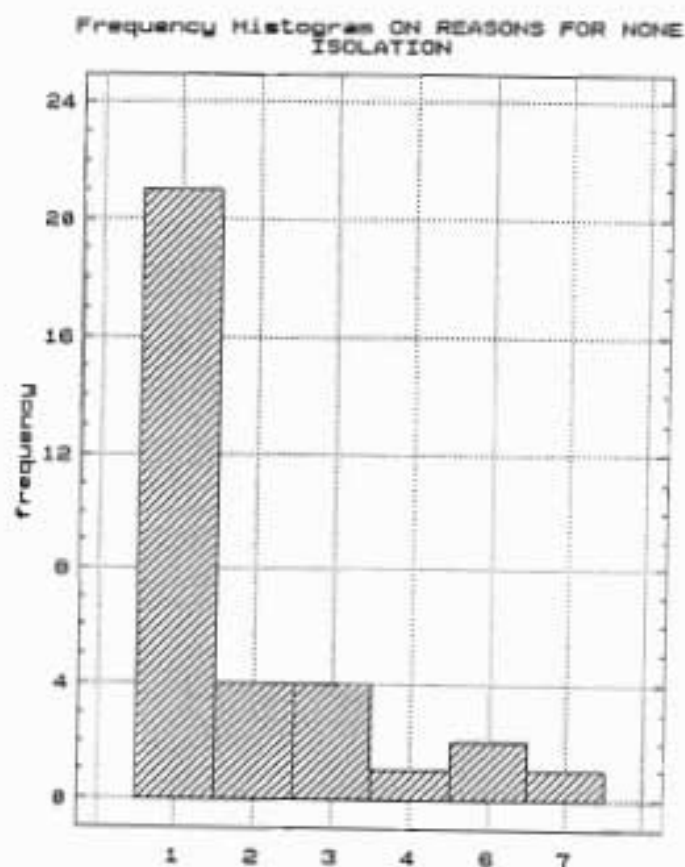


Figure 10 : Reasons for Non-isolation

4.3.12 ASSESSING SPECIFIC KNOWLEDGE

This was done in section 5b. Specific knowledge pertained to naming the groups of people at high risk of getting the infection, knowing symptoms and signs, diagnostic tests, body fluids with high concentration of infection, and naming at least two opportunistic infections. The response was as follows:-

4.3.12.1.HIGH RISK GROUPS

- 0 = wrong answer
- 1 = drug addicts
- 2 = homosexuals
- 3 = prostitutes
- 4 = adolescents/teenagers
- 5 = promiscuous people
- 6 = truck drivers
- 8 = haemophylia
- 9 = laboratory technicians
- 10 = surgeons
- 11 = health personnel

See Figure 11 attached :

Global Knowledge of High Risk Groups

NB: This picture is a global response for both groups, which are trained AIDS counsellors, referred to as Counsellors; and those that have not done the AIDS counselling course, thus referred to as Untrained Counsellors. In the key number 7 is missing because during the final analysis it was decided that, this particular response fell under the wrong answers.

FREQUENCY HISTOGRAM OF GLOBAL KNOWLEDGE
OF HIGH RISK GROUPS

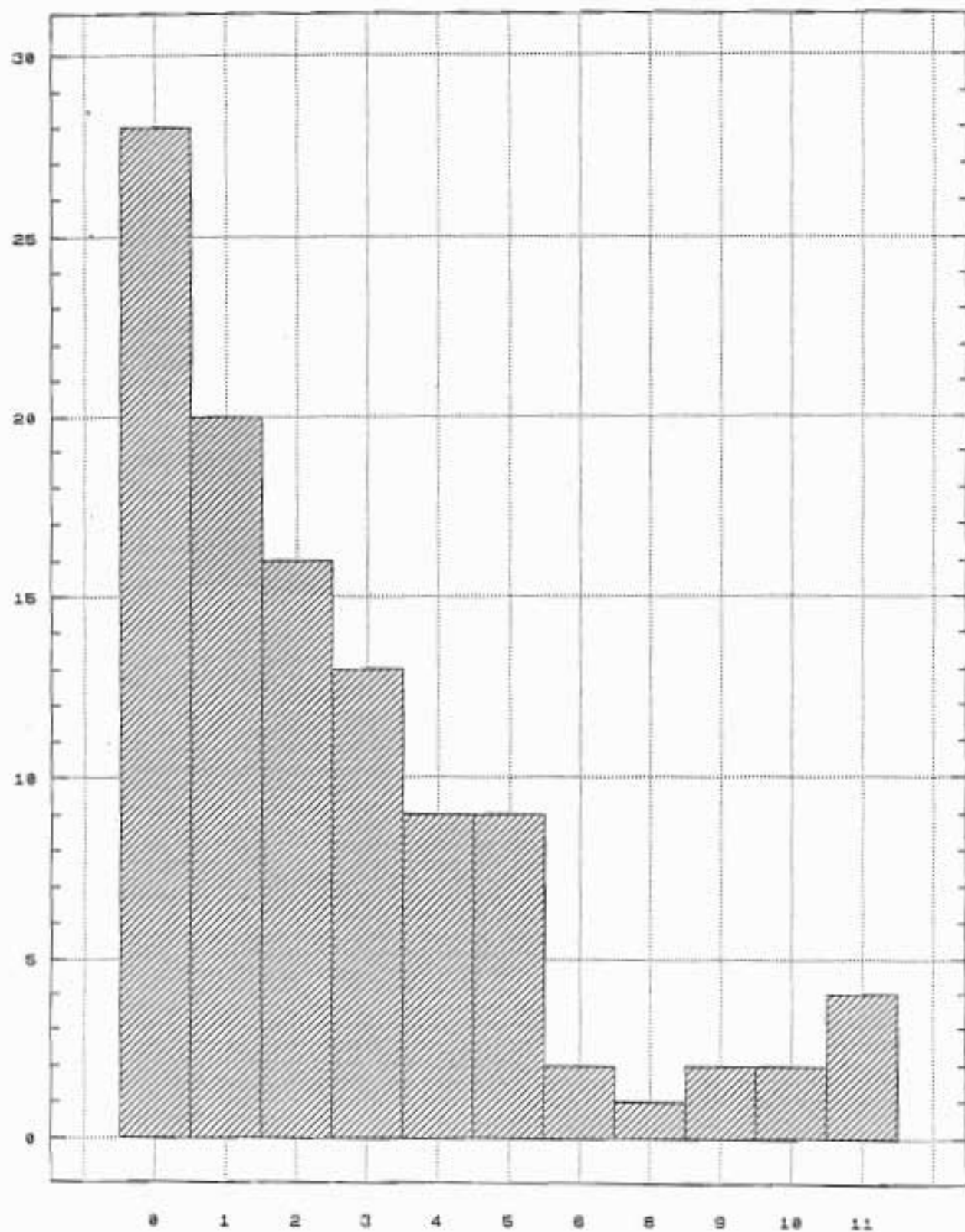


Figure 11: Global Knowledge of High Risk Groups

Each respondent was asked to mention at least two high risk groups. What came out of that is that drug addicts, homosexuals and prostitutes are high on the list. These groups are followed by adolescents and promiscuous people; and to ones' surprise the haemophiliacs were down on the list, inspite of the strong belief (96%) respondents, that blood transfusion puts one at risk of getting the infection. This would be perpetuated by the high incidents of violence and trauma that would expose one to blood transfusion. The same applies to truck drivers (long distance) that are prone to casual sex and therefore at risk of infection. This question was not well answered looking at the fact that out of 106 expected responses 28 were wrong or left unanswered, which is a sign of lack of knowledge.

4.3.12.2.SYMPTOMS OF AIDS

Like the previous question the respondents were asked to list at least two symptoms. The response too was not of high standard, since 30 responses were wrong. The common symptoms are as follows:-

KEY:-

- 0 = wrong answer
- 1 = severe weight loss
- 2 = skin lesions/cancers
- 3 = lymphadenopathy
- 4 = persistant diarrhoea
- 5 = fungal infections/thrush
- 6 = unresolving/recurring flu/infections

Also see Figure 12, in relation to the above key.

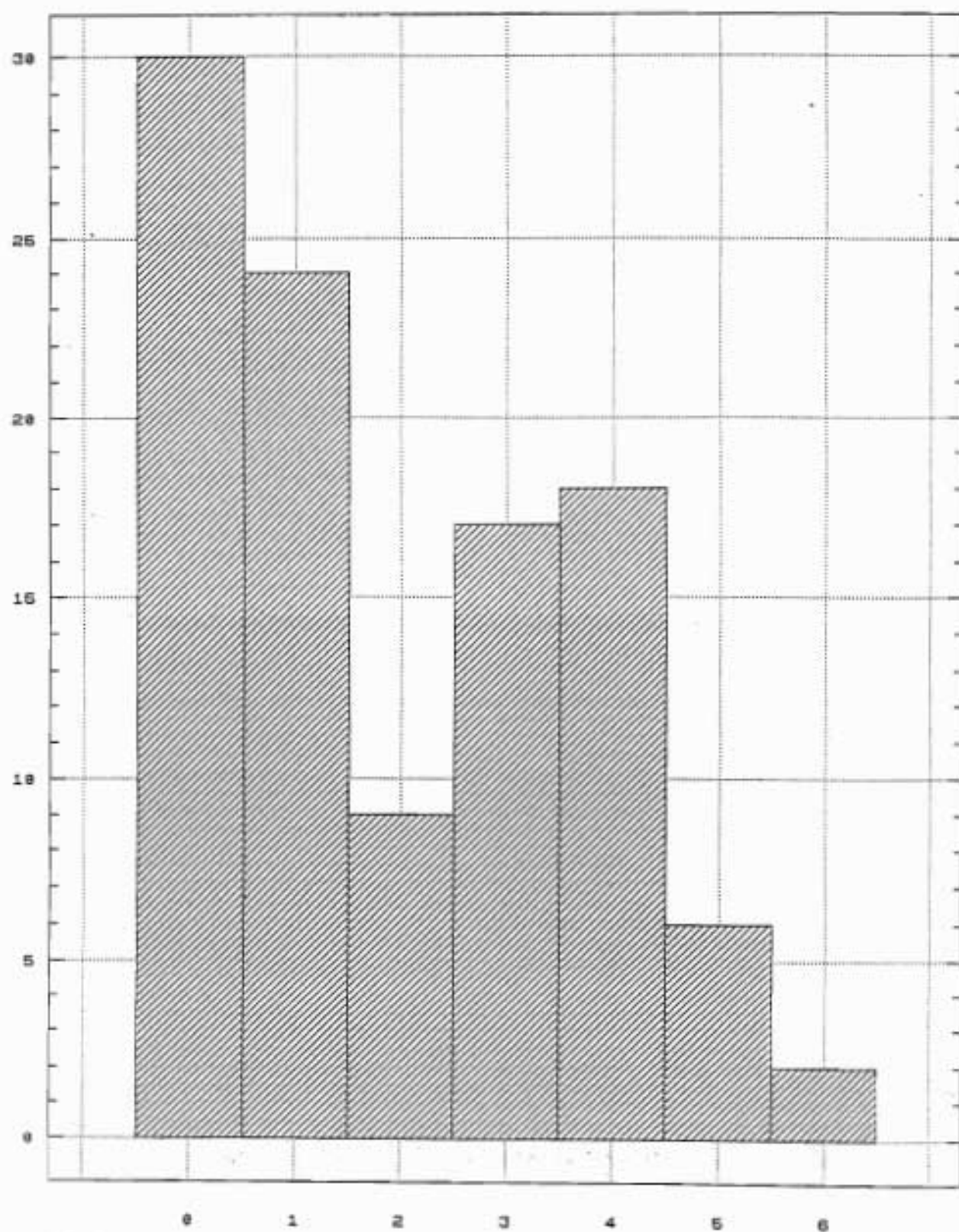
FREQUENCY HISTOGRAM OF GLOBAL KNOWLEDGE
OF SYMPTOMS

Figure 12: Global Knowledge of Symptoms

4.3.12.3.DIAGNOSTIC TESTS

This question had the worse response, 44 responses(nearly half) were wrong. Most respondents were merely mentioning blood, without specifically mentioning the type of blood test done. The respondents were asked to mention two out of the three blood tests that are done. Any two of the following tests were given:-

1 = ELISA = Enzyme

= Link

= Immuno

= Sorbent

= Assay

This is a preliminary test.

2 = IFA = Immune

= Flouroscent

= Assay

This is a confirmatory test, should the Elisa test be positive.

3 = WESTERN BLOT. This is the final test which is done if ELISA is positive but IFA comes back being negative.

Also see Figure 13 , using the key below:-

Key: - 0 = wrong answer or no response

1 = Elisa

2 = Ifa

3 = Western Blot

Frequency Histogram ON GLOBAL KNOWLEDGE
OF DIAGNOSTIC TESTS

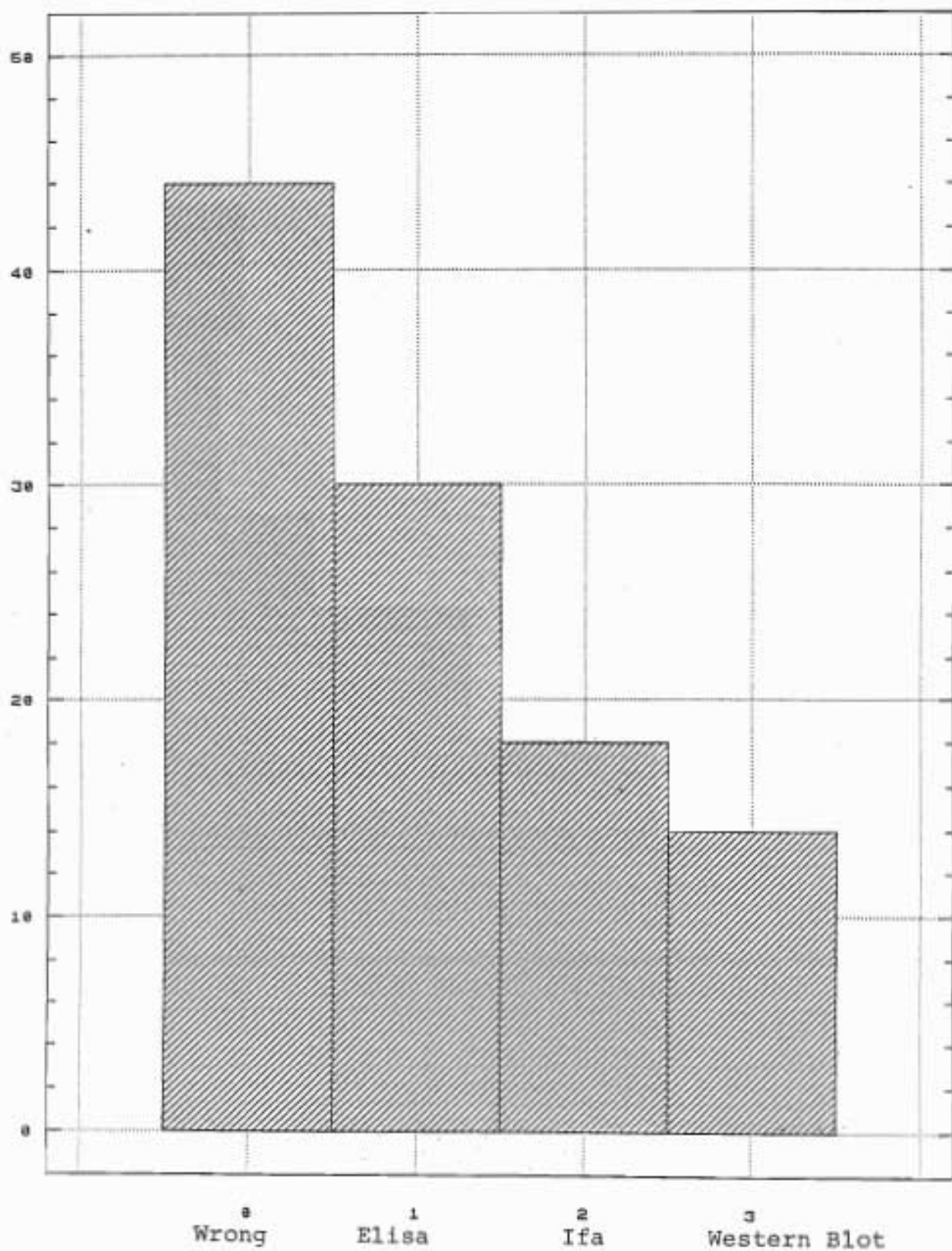


Figure 13: Global Knowledge of Diagnostic Tests

4.3.12.4. BODY FLUIDS WITH HIGH CONCENTRATION OF INFECTION

Each respondent was asked to mention three body fluids. This question too was not well answered. The expected response was :-

0 = wrong answer

1 = blood

2 = semen

3 = vaginal secretions

On top of the above three, some respondents mentioned lymphatic fluid as the 4th fluid.

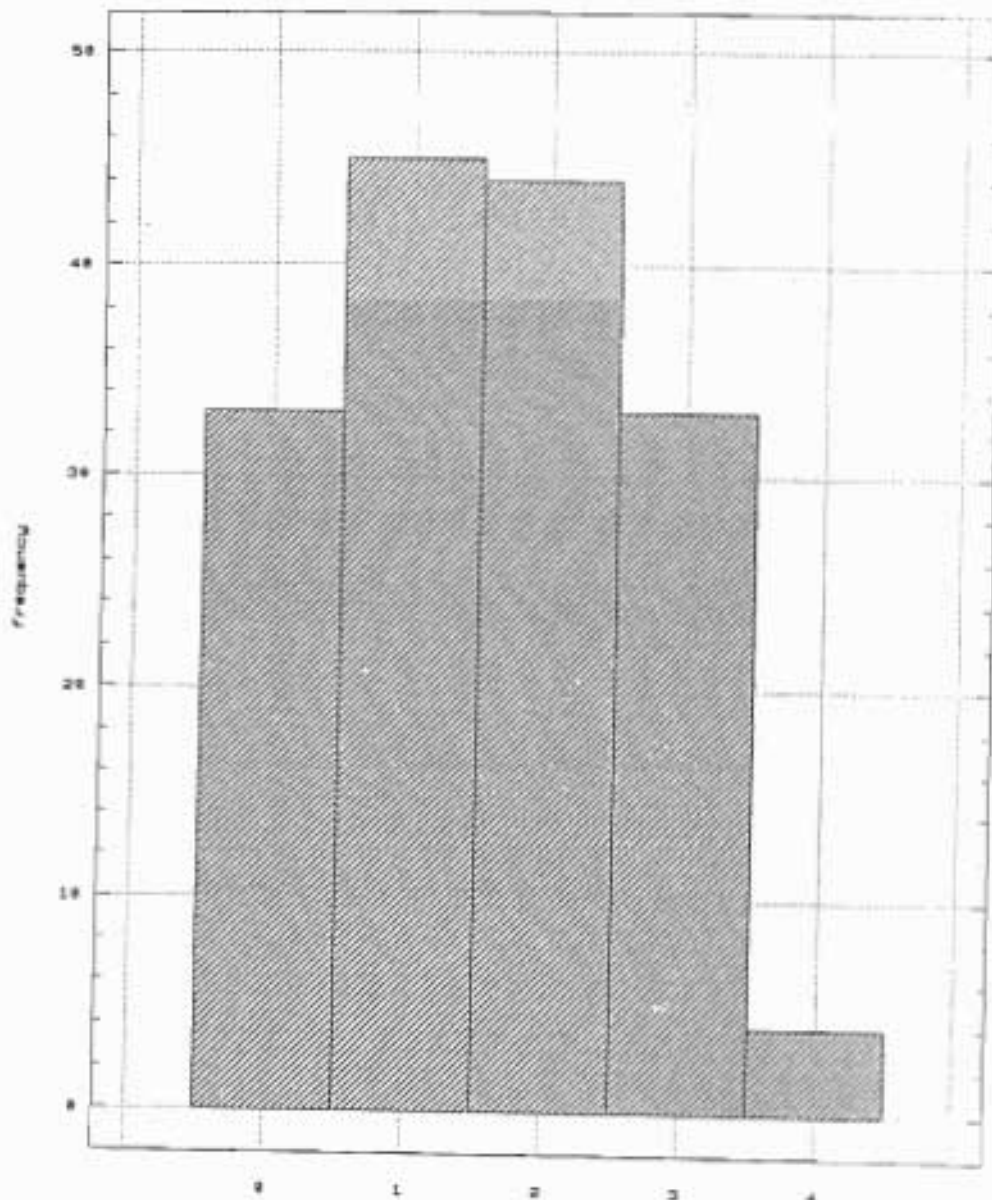


Figure 14 : Global Knowledge of Body Fluids

4.3.12.5. OPPORTUNISTIC INFECTIONS

Two opportunistic infections were required from each respondent and any of the following would be correct:-

- 0 = wrong answer
- 2 = pneumocystic carinni
- 3 = fungal infections(thrush/candida albicans)
- 4 = skin lesions/cancers
- 5 = carposi sarcoma
- 6 = tuberculosis

Please note that " 1" is missing because during the final analysis it was discovered that this grouping also belonged to the wrong answers.

Also see Figure 15 and use the above key:-

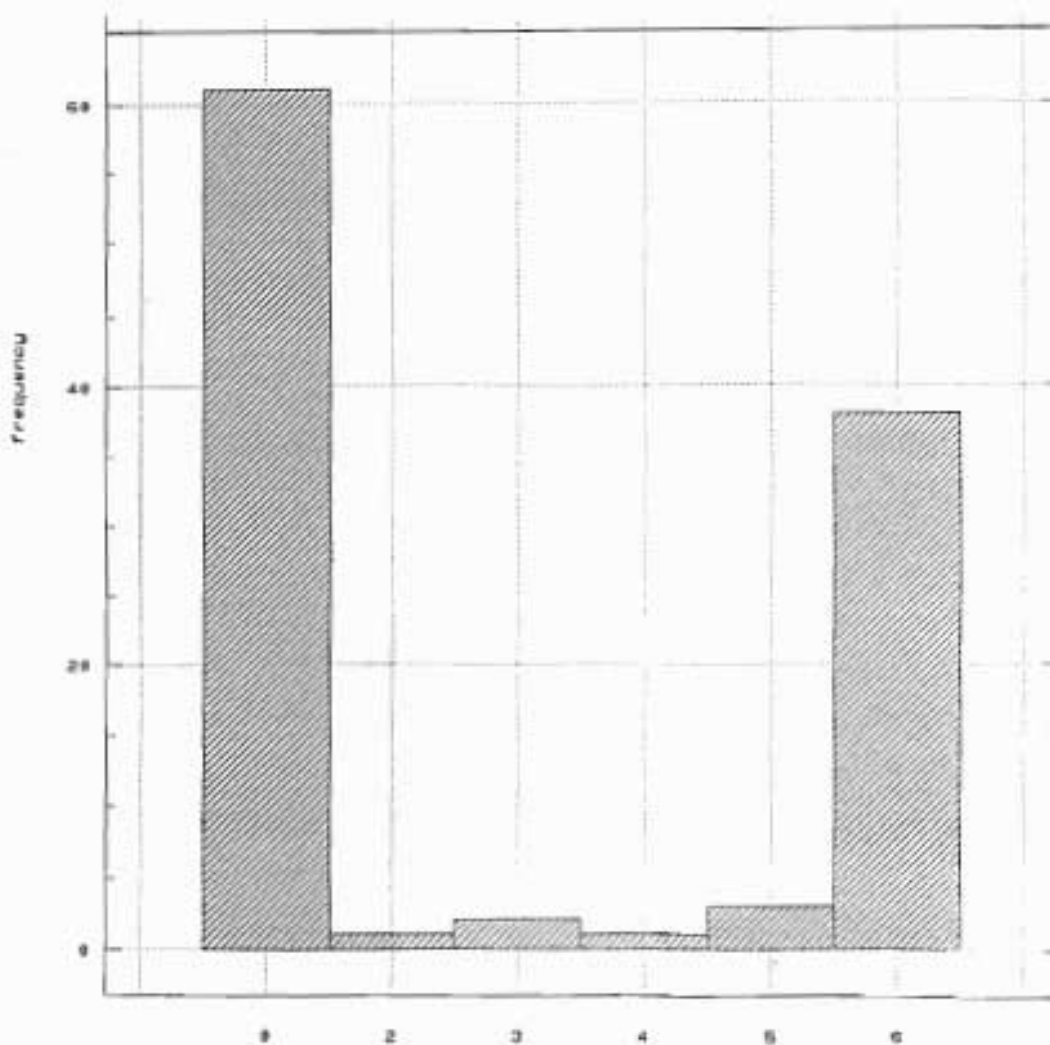


Figure 15: Global Knowledge of opportunistic Infections

This was the most poorly done out of the five specific knowledge questions. More than 50% responses were wrong. Most respondents had general knowledge like pneumonia instead of stating the specific type of pneumonia, thus were marked wrong. The most mentioned response was tuberculosis, which is common in the respondents' working area.

4.3.13 UNIVERSAL PRECAUTIONS

The universal precautions looked at the use of protective clothing, like glove; gown; mask; eyewear, in order to prevent the spread of infection, either to oneself or to the next patient/individual.

The use of protective clothing is seen as the most effective way of preventing the spread of infection in an occupational/work area, together with safe practice methods.

There are statements given in a questionnaire whereby one is expected to indicate protective clothing to be worn in the event of certain circumstances. The respondents are expected to put a "yes" when agreeing to wear an item and a "no" when disagreeing to wear an item. (see section 3B in annexure 3)

THE RESULTS

The respondents showed uncertainty as far as the use of protective clothing is concerned. This is seen in their contradictory response in directly related statements that would need use of the same universal precautions. (Also see Annexure 8)

An example would be the following:-

question 1 - "bleeding control with spurting blood"

question 3 - "child birth"

Both questions need the use of all protective clothing that is listed (glove, gown, mask, eyewear); but the respondents have reacted differently in the two questions.

The same applies to the following:-

question 2 - "bleeding control with minimum blood"

question 4 - "blood drawing"

Only a glove needs to be worn for both nursing activities, but the respondents have shown different reactions. This shows dissonance/uncertainty which compares favourably with the FOCUS GROUP results whereby the respondents expressed uneasiness as far as the universal precautions are concerned.

(see Annexure 8) 1 = yes

0 = no

-1 = no response/blank)

This is a picture for lack of knowledge for both groups. It highlights the need for education to eliminate the dissonance. Since such an aspect is not covered in the programme for AIDS counselling it would be recommended that such an area be included.

4.3.14. THE KNOWLEDGE DIFFERENCE BETWEEN TWO GROUPS

This has been evaluated according to difference in knowledge questions especially the last section (5B) which looks at specific knowledge. This has been done in page 33-36 of this study.

- HIGH RISK GROUPS

Knowledge of such groups was poor in both groups, as shown in figure 11. The Trained AIDS Counsellors showed a better knowledge than the other group that has not done the course.

This was seen in their responses. The trained counsellors had 14 wrong responses whilst the other group had 16 wrong answers, which makes a difference of 4, in figure 16 which displayed difference in knowledge pattern. When this difference was tested statistically, it showed no statistical significance. Also see Annexure 9 for Statistical Difference.

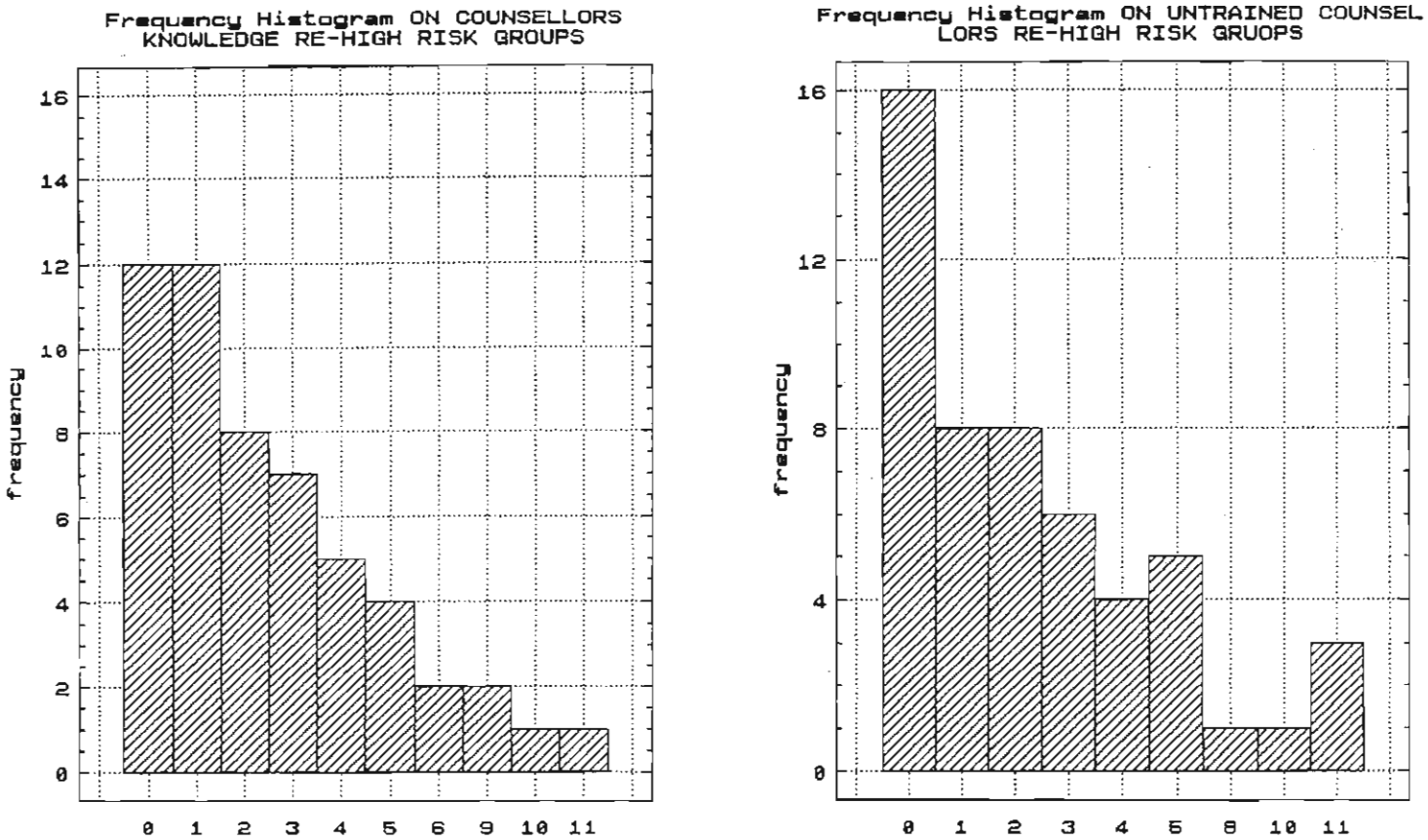


Figure 16 : Knowledge difference re-High Risk Groups

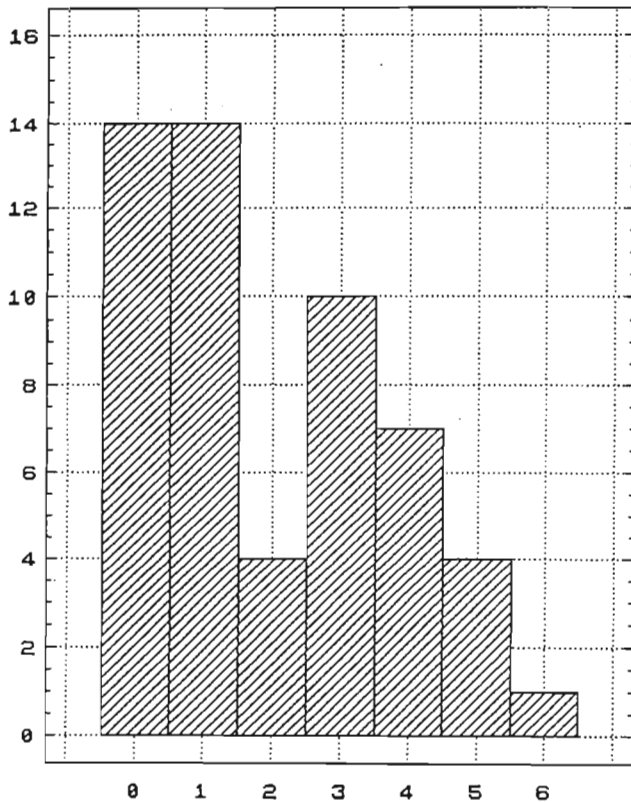
This question was poorly answered by both groups as discussed above, although the trained counsellors show better knowledge that the other group 'O' stands for wrong answers, then 1,2,3,4,5,6,9,10,11 is the same as figure 11.

- SYMPTOMS OF AIDS

As shown in figure 12, this was done in much the same way as the above question, with 30 wrong responses which is 31%. Like the above question there is a knowledge gap between the

two groups. The trained counsellors had 40 correct answers, while the other group had 36 correct answers. This shows a numerical difference of 4, which can be easily identified in annexure 12 attached. Although there is visual difference when one compares the histograms of the two groups, when the results were tested statistically, they showed no statistical difference.

Frequency Histogram ON COUNSELLORS
KNOWLEDGE RE-SYPTOMS



Frequency Histogram ON UNTRAINED AIDS
COUNSELLORS RE-SYPTOMS

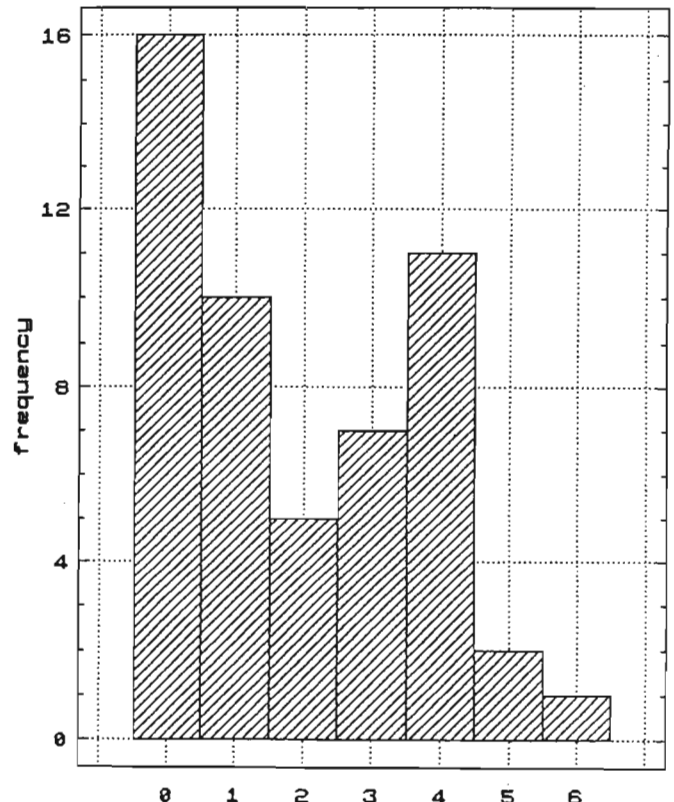


Figure 17 Knowledge difference re-symptoms

- Key:
- 0 = wrong answers
 - 1 = severe loss of weight
 - 2 = skin lesions/cancers
 - 3 = lymphadenopathy
 - 4 = persistant diarrhoea
 - 5 = fungal infections/thrush
 - 6 = unresolving/recurring flu/infections

- DIAGNOSTIC TESTS

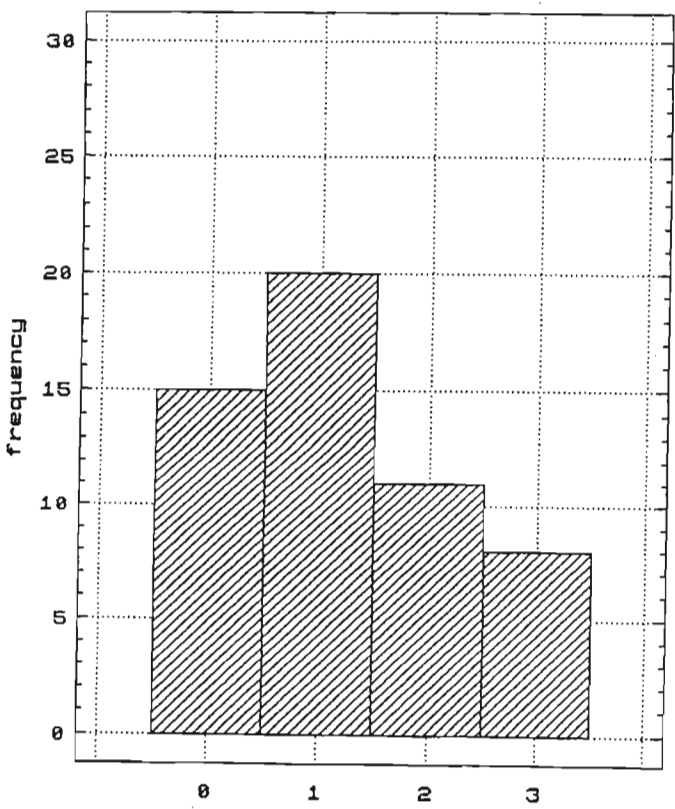
This question was poorly done like the above two. As shown in figure 13, (44 out of 106 responses were wrong). The knowledge gap is even wider than in the previous two questions. Annexure 13 is attached. This was further tested statistically, the tables below show a vast difference between correct and wrong answers:-

TABLE 5:
KNOWLEDGE DIFFERENCE

	TRAINED	UNTRAINED	DIFFERENCE
CORRECT ANSWERS	39	23	16
WRONG ANSWERS	15	29	14

Apart from the differences noted in the table and the histogram displayed, further exploration was made whereby a statistical difference was tested ; which showed a high statistical

Frequency Histogram ON COUNSELLORS
KNOWLEDGE RE-DIAGNOSTIC TESTS



Frequency Histogram ON UNTRAINED COUNSELLORS
KNOWLEDGE RE-DIAGNOSTIC TESTS

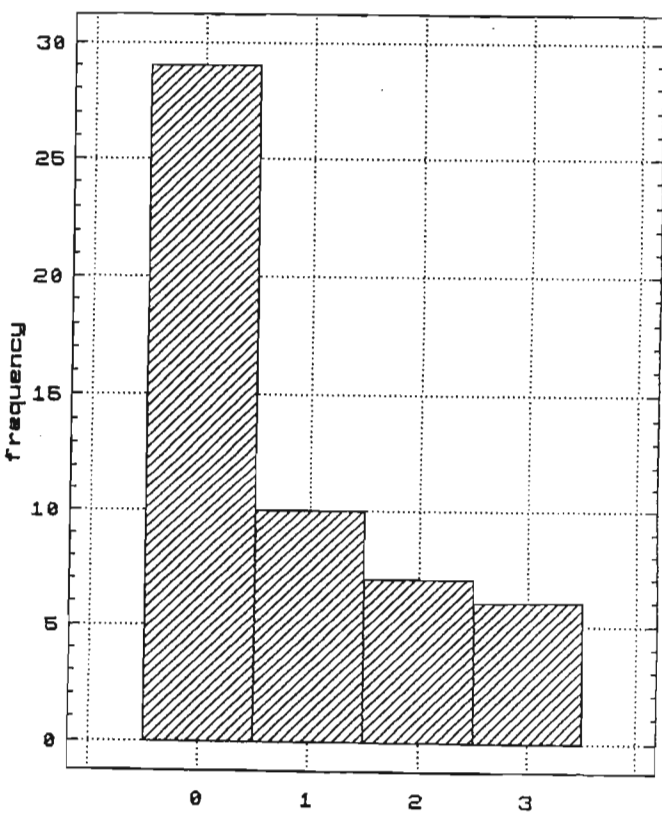


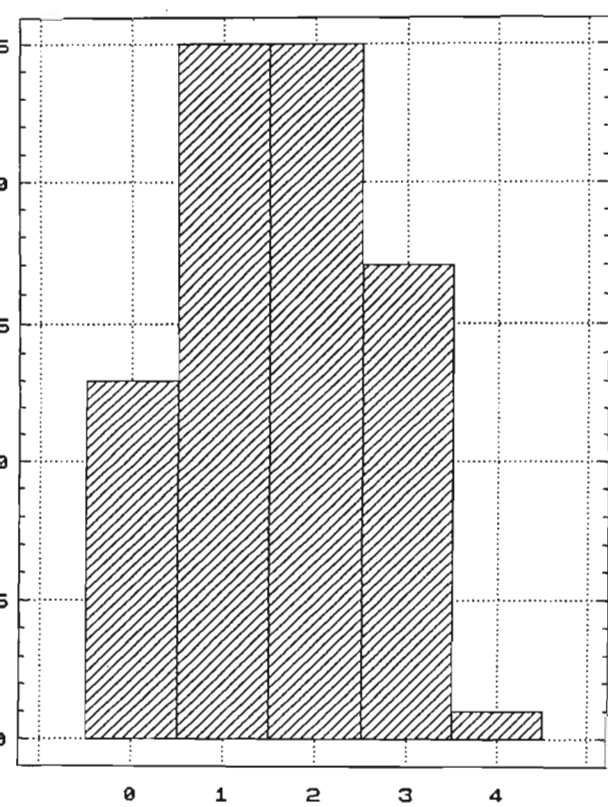
Figure 18 : Knowledge difference re-diagnostic tests

- Key:
- 0 = wrong
 - 1 = Elisa
 - 2 = Ifa
 - 3 = Western blot

- BODY FLUIDS WITH HIGH CONCENTRATION OF INFECTION

This area was better known in all the five areas, as shown in figure 14. But there is a difference in knowledge pattern between the two groups as shown in the attached figure 19, which shows the distribution pattern in a histogram. Looking at the correct versus wrong answers, the trained group had more; 68 : 58 with a difference of 10, the same applies to wrong answers; 20:13, the difference is 7. This was tested statistically but showed no statistical difference. Also see Annexure 12 attached.

Frequency Histogram ON KNOWLEDGE FOR TRA
INED RE-BODY FLUIDS



Frequency Histogram ON COUNSELLORS
KNOWLEDGE RE-BODY FLUIDS

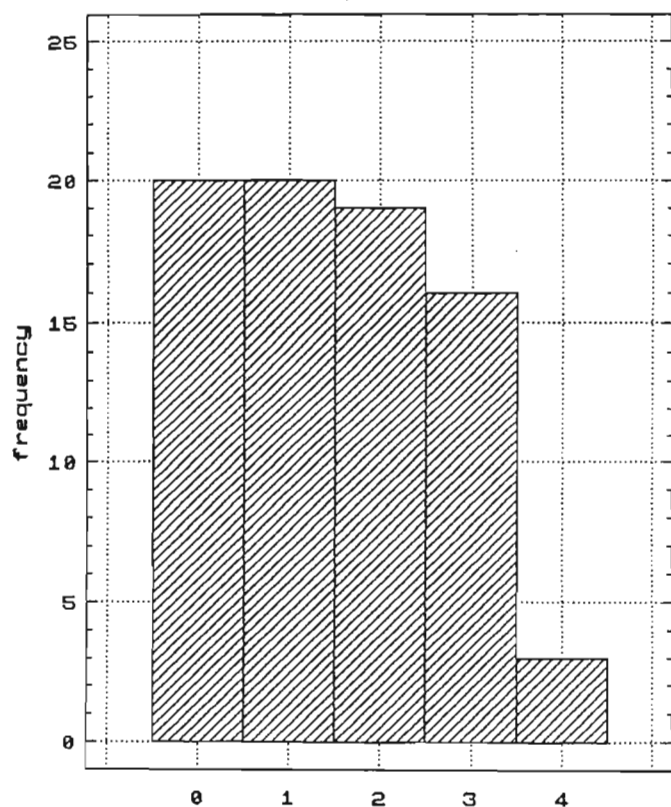


Figure 19 : Knowledge difference re-body fluids

- Key
- 0 = wrong answers
 - 1 = Blood
 - 2 = Semen
 - 3 = Vaginal fluids/Secretions
 - 4 = lymph fluid

- OPPORTUNISTIC INFECTIONS

This was the most poorly done out of the five answers as shown in figure 15. The knowledge difference for the two groups is so little and the group that has not done the course had less wrong answers than the group that has done the course. When the difference was tested statistically, it showed no statistical difference. Also see Annexure 13 attached.

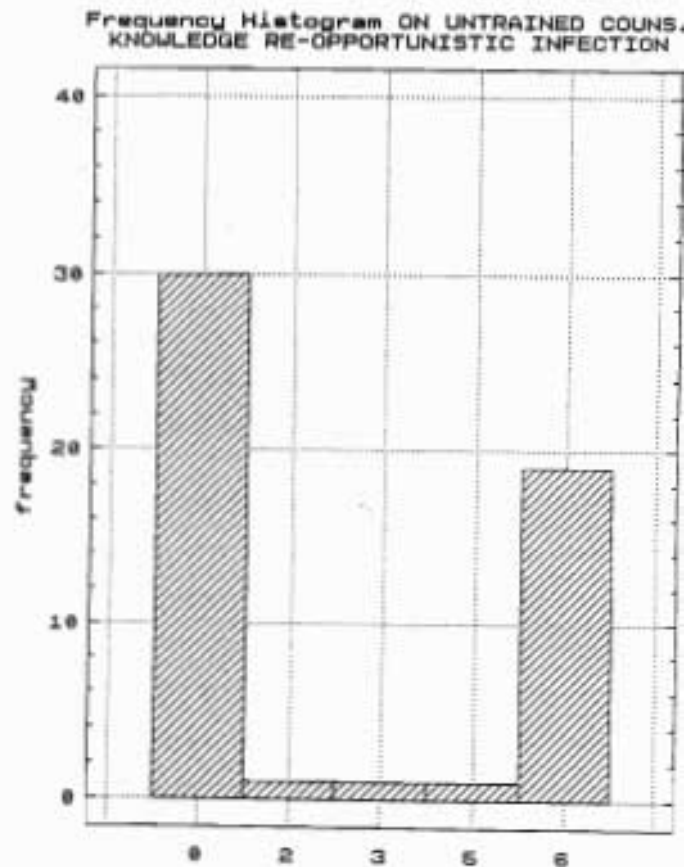
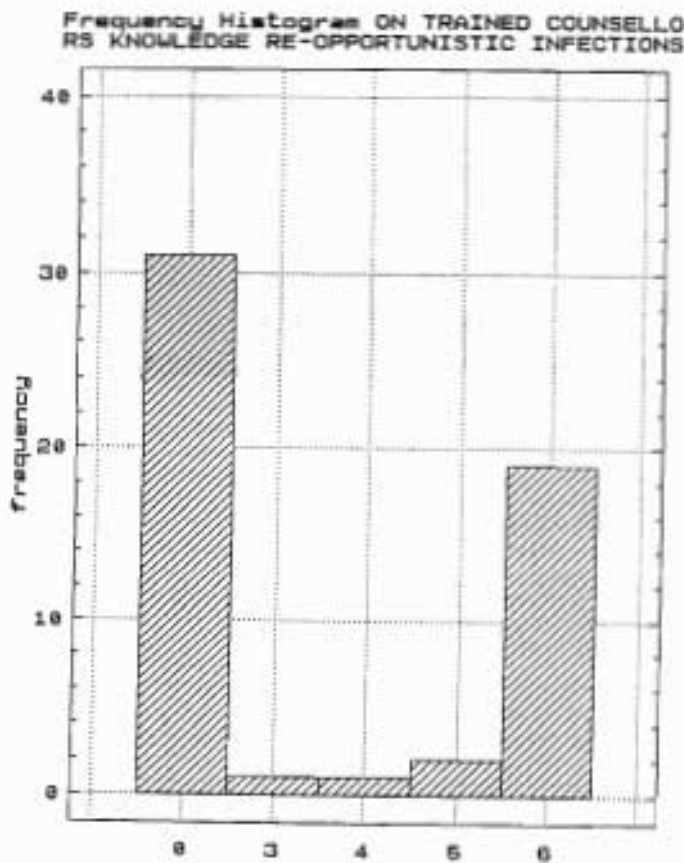


Figure 20 : Knowledge difference re-opportunistic infections

Key	0 = wrong answers
	2 = pneumocystic carinni
	3 = fungal infections (thrush/candida albicans)
	4 = skin lesions/cancers
	5 = carposi sarcoma
	6 = tuberculosis

DISCUSSION

The results of this study were supported by the previous studies, to a certain extent.

KNOWLEDGE AND ATTITUDE

This study showed limited knowledge base, like the studies done in England in 1988 & 1990; which showed limited knowledge that lead to judgemental attitude towards AIDS/HIV infected patients. Even in this study 22% of respondents showed a negative attitude towards such patients. (Akisanya & Rouse, 1990, p. 400-402).

RATE OF CONTACT AND ATTITUDE

The rest of 78% respondents, showed a positive attitude, and it is believed that this did not happen by chance but is supported by the study that was done in England, in 1991. This previous study showed (England 1991), no relationship between knowledge and attitude, instead a relationship between rate of contact and attitude. (Robbins et.al, 1992, 198-203). The same applies to the study under discussion, in which almost 95% of wards had the HIV infected patients. The same applies to the study under discussion, in which almost 95% of wards had the HIV infected patients. This increases the degree of contact with such patients, and apparently making the staff face the realities of life; get used to these people and eventually accept or develop a positive attitude towards these patients.

KNOWLEDGE AND FEAR

It is a common trend that most nurses lack knowledge thus present with fears, as reflected in this study. This is further supported by the study done in England in 1991, which showed lack of knowledge resulting in an increase fear thus suggests that educational interventions should not only be directed at knowledge, but should target target at specific areas like anxiety and fear reduction and attitudinal change.

LACK OF CONFIDENCE (DISSONANCE/DISCOMFORT)

This showed up in this study, especially lack of confidence with counselling and psychological care. It was then suggested that there should be educational programmes that are directed at the application of skills which build confidence in the nursing of HIV infected patients. (Robbins, 1992, p 203 & Schere et. al. 1992.p29).

STATISTICAL CHANCES OF GETTING THE INFECTION IN RELATION TO FEAR.

According to Van Dyk (1992), the chances of getting the infection are approximately 1% if the universal precautions are correctly observed. In this study 68,6% respondents believed that one has got a moderate to high chances of getting the infection when nursing the HIV infected patients. It is then believed that this is what promotes fears, and such fears are further worsened by the symbolic meaning of the disease and the stigma attached to it. This was elicited from the focus group, and further supported by previous studies. (Siminoff, 1990, 262-267).

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The purpose of this study was to determine Professional nurses' knowledge and understanding of AIDS/HIV infection. The study took place in August to November 1993. The focus group interviews were done, and the questionnaire data-collecting method was used, to collect data. The theoretical framework used is a combination of Cognitive Dissonance and Fear of Contagion theories.

These theories are used to elicit fears and dissonance (discomfort), which would be the characteristics of lack of knowledge and understanding of the disease, which is being explored.

The sample was formed by two groups of Professional nurses:-

- those that have done the AIDS counselling course.
- those that have not done the course.

But both groups are working in the same specialised hospital setting, which would make the rate of exposure to the HIV infected patients, the same.

5.2 SUMMARY OF RESULTS

5.2.1 KNOWLEDGE AND UNDERSTANDING

The general knowledge of all the Professional nurses was found to be fairly high, this included the causes, predisposing factors and the mode of spread. Although there is marked lack of knowledge on specific areas like those looking at identifying the high risk groups, highly infectious body fluids, tests available to detect the infection, symptoms and signs, and identifying opportunistic infections. Uncertainty was also seen in the use of universal precautions, which form the major aspect in preventing the spread of infection.

5.2.2. FEAR OF CONTAGION

As shown in chapter 4, there is a marked fear of contracting the disease inspite of the knowledge pattern and experience, and the fact that almost all the wards had the infected patients which increases the experience per se. It is also noted that the staff get rotated to different wards. One may argue that this interferes with experience for the staff but the researcher thinks this increases the experience since one gets exposed to various procedures that may not be available in the previous ward. Fear is perpetuated by the fact that the disease is incurable. The study revealed that fear is multiangled. It is not only work-related but goes further to fear of contracting the disease from the partner whos' general appearance does not show whether has the infection or not, especially during the early stages.

Fear is aggravated by the fact that the condoms have not yet gained total acceptability even amongst the nurses. This makes things to be even more difficult for people at grassroots level who are not medically-oriented. The highly perceived fear; is fear of "knowing" that one has got the infection. This happens after the blood test results which declare one as having the infection, and the participants believed/felt that people do not die of AIDS and its complications per se, but die more of "knowing" and the depression associated with this incurable monster.

To allay such fears people end up taking extreme precautions, verbalising their fears or avoiding the challenging situation as indicated in our theoritical framework.

In the focus group discussion the participants were verbalising their fears, and this appears to be a problem since it is thee! nurses that should be allaying such fears to the sick.

All participants were interested to know more about the disease so as to be able to face these challenges.

5.2.3. COGNITIVE DISSONANCE

In practice, people want to maintain consistency in their beliefs, attitudes, values and behaviours. If individuals are confronted with examples of their inconsistency ; they experience psychological discomfort and are motivated to eliminate the inconsistency.

This has been discovered in the study under discussion. Due to lack of knowledge , fears and the incurability of the disease (AIDS), the participants have expressed discomfort/dissonance, as they lack competency in rendering physical and psychological care to their patients. This was worse with the nurses that have not done the AIDS counselling course.

Nurses expressed their belief that one should be comfortable with oneself so as to be able to care for the next individual; but found that to be difficult with HIV infection. They saw this discomfort to be the cause them take unnecessary precautions, trying to allay the psychological discomfort and fears. Some even expressed (questionnaire) the wish for care to be given or rendered on voluntary basis for such patients.

5.2.4. ATTITUDE

More than 60% of the participants showed a positive attitude towards the HIV infected patients. Apart from this questionnaire result this was also explored in the focus group interview. Although nurses felt helpless, frustrated and scared; the focus group highlighted that "if nurses cannot care for such patients, who then should render such care!". This is reinforced by the fact that the community -at-large is expected not only to accept these patients but to support and care for them as well.

There were those that showed a negative attitude towards caring for such patients (more than 30%), but no further questions were asked to find out the reasons for such an attitude. This is part of the limitation of the study.

The same applies to those that believe that AIDS/HIV infected patients should be cared for by the specially trained staff. The question would arise as to what about the people at grassroots level that are expected to care for such patients, and they are not nurses.

There are participants that perceived AIDS/HIV infected patients as being a threat, and would refuse to care for such patients if given a chance. This needed further exploration but apparently there was no question directed to that area.

5.3. ADDRESSING THE RESEARCH QUESTIONS

5.3.1. KNOWLEDGE

The first question was directed at assessing the level of knowledge held by Professional nurses in a specialised hospital setting. This appeared to be the main theme of the study, since knowledge and understanding is seen as the driving force in determining care to be rendered to HIV infected patients.

The study showed high level in general knowledge, which includes the mode of spread and how one could acquire the infection. This may be related to experience, since it is claimed that experience increases knowledge (Bond, 1990, p.249-255).

Lack of knowledge was seen in relation to specific information. This includes areas like :-

- knowing the high risk groups.
- diagnostic tests
- highly infectious fluids
- signs of AIDS
- opportunistic infections

This section was poorly done by both groups although the group that have not done the course was on the extreme side. This appears to be the cause of dissonance that has been seen to be ruling both groups.

5.3.2. THE NUMBER OF INFECTED CLIENTS IN EACH WARD

This question was directed to identify the number of infected patients in each ward during the months of the study. The results showed that more than 80% of the wards had HIV positive patients in their wards. The number ranged from 1-14 in a 30-52 bedded ward. Although this is seen to be a high number, it is not true picture because of the general high rate of under reporting. It is then clear that this is just the tip of an iceberg.

5.3.3. THE DEGREE OF EXPOSURE TO AIDS/HIV INFECTED PATIENTS

This was going determined by the the above question (5.3.2) which looks at the presence or the number of infected patients in each ward, and also the nursing procedures that are done to such patients.

The presence of such patients would increase experience since the nurses would be having a chance of caring for these patients, unlike nurses with none of such patients and only depending on theoretical knowledge.

Looking at the nursing procedures, to determine the rate of exposure; it was discovered that these patients are treated the same way as other patients depending on the degree of illness. These procedures vary from ward to ward, be it a medical, surgical, psychiatric, adult or paediatric ward respectively.

It was hoped that the number of infected clients would influence the experience, since there would be greater exposure in a ward with many affected patients. This did not work out due to the fact that the staff gets rotated from one ward to the other.

Although one would see this as the limitation of the study, the researcher argues this point as a non-limitation since on rotation one gets exposed to different wards with various nursing procedures; and the type of care that one may not have had experience in, such as care specially designed to suit that particular type of a patient. Instead this increases experience and knowledge. (researchers opinion)

5.3.4. UNIVERSAL PRECAUTIONS

This section is directly related to the first research question that looks at knowledge. The universal precautions are seen to be of great importance because they are the main strategies for preventing the spread of infection in the work area.

The question was explored in the use of protective clothing which includes gloves, gown, mask and protective eyewear. The boots were not included because they are not commonly used except in theatre and/or maternity which is not as busy as in the general hospitals.

There is knowledge deficit in this field since the questionnaire respondents showed uncertainty, this applies to both groups although the group that has done the AIDS counselling course had better results. This result coincides with the focus group respondents that expressed uncertainty in this aspect.

Knowledge of universal precautions is seen to be of high importance, since the universal precautions have a two-fold function:-

- to protect the nursing staff from contracting the infection.
- to prevent the spread of infection from patient to patient.

5.4. THE RECOMMENDATIONS

5.4.1. AIDS COUNSELLING COURSE

It is recommended that all the Professional nurses undergo the AIDS counselling course. This would create awareness and broaden their knowledge base so as to enable them to cope with challenges associated with this disease.

5.4.2. UNIVERSAL PRECAUTIONS

Looking at the lack of knowledge in this aspect, it is recommended that this section be included in the counselling programme, irrespective of the fact that there are policies that act as guidelines in this aspect.

5.4.3. AIDS RESOURCES AND LEGAL RIGHTS FOR PATIENTS AND NURSES

Although this appears in the programme it has been discovered in this study that this is not effectively done, since almost all participants highlighted these areas as areas which the respondents feel need more information in them.

5.4.4. CURRICULUM FOR BASIC TRAINING

The nurses need to possess the necessary communication skills, so as to be able to fulfil the roles of :

- counsellor
- health educator
- referral agent
- patient advocate

(Webb, 1987, p.213)

This is evident in the study under discussion, that the counselling skills are such that there is a need for the entire health care team, to be trained are seen as the effective tools in changing behaviour of all individuals, both patients and care-givers. It is then recommended that all health professionals possess such skills. This can be achieved by inclusion of the counselling skills in the curriculum.

5.4.5. AIDS EDUCATION PROGRAMME

The problem of AIDS is a challenge for everybody. The fact that AIDS is incurable, further complicates the problem. AIDS education should be promoted for all individuals, that is those in healthcare and the population in general. Emphasis should be on the prevention of spread. Further research is invited in this aspect.

This need was proved by the study under discussion which showed knowledge gap and uncertainty especially in prevention of spread of the infection. This ties up with recommendations by Akisanya and Rouse (1992) in their study which did not only recommend Educational programmes but the evaluation of materials used during such programmes so as to ensure their effectiveness and appropriateness. (Akisanya a& Ruse, 1992, p.400-402)

5.4.6. AIDS UPDATE

This should be done on weekly, monthly, quarter or yearly bases in all institutions. The frequency will depend on needs for various institutions. It would help in keeping every individual with up to date information. This should include the the information on epidemiological studies, and new findings re-disease in general. This would be of help to those that have not done the course in a sense that it would furnish them with up to date information. The same applies to those that have done the course since apart from giving them first hand information, it would act as a refresher course to ensure reinforcement of known information.

This does not necessarily pertain to the institution where the study was done but is recommended for all institutions, as AIDS is not a dilemma of a particular institution but for everybody. Since the institution where the study was done is a referral hospital. Some patients are admitted being already HIV positive. The common problem is that most of them are never receive the pre or post test counselling, which is a sign for a need of AIDS update/education for the general nursing staff that is responsible for caring for HIV infected patients in all hospitals.

5.4.7. AIDS CONSULTANTS

It is recommended that every institution, should have a consultant, with specific reference to AIDS as a disease. This was suggested by the focus group participants. This should be a person with an indepth knowledge of AIDS and an exploring mind. Such a person would be consulted, should there be problems pertaining to the disease and or unanswered questions. The same person should do research about the disease and its impact to the profession and the entire population on a continuous bases.

5.4.8. AREAS FOR FURTHER RESEARCH

These are areas highlighted in the results of the study, and do not only apply to the institution where the study was done. All nurses that are for the growth of the profession, and upliftment of the nursing care standards should benefit from these results. These include the following:-

- 1.- the perception of the nursing staff re-confidentiality in AIDS management.
- 2.- Traditional healers and AIDS. This should include knowledge, beliefs, attitudes, and prevention of spread and treatment if any.
- 3.- nurses attitudes, and reasons for such attitudes towards the AIDS/HIV infected patients
- 4.- strategies to allay fears and dissonance re-AIDS/HIV infection.
- 5.- evaluating the effectiveness of programmes that are directed at initiating community involvement in caring for AIDS/HIV infected clients.

According to the latest AIDS Bulletin (July 1993), AIDS is continuing to multiply, with the total estimation of affected people in the world 200,000. This is a sign that instead of AIDS statistics going down; the numbers are increasing with an alarming speed. (Aids Bulletin: 1992)

The nurses are seen as forming the frontline defence for AIDS patients as they are the contact point for all other departments, and are available throughout the day. To meet the demands associated with caregiving, nurses need to be knowledgeable, not only about the pathology of the disease; but also organisations of referral. (Benner P. & Wrubel T., 1989, p. 372 - 387)

When one looks at AIDS/HIV infection, one feels that this knowledge challenge is even doubled, especially when one looks at a fact that the disease is incurable. What is of interest is the fact that the disease is at least preventable to a certain point, and it would be an advantage for everybody if the knowledge base for prevention could increase.

This study is seen to be of importance to the nursing profession, since it identifies the knowledge level for the professional nurses and highlighted the areas that need attention. It would then be easy to bridge the gap. It is believed that if nurses can have adequate knowledge, the standard of nursing care would be uplifted.

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King George V Hospital
P O Domerton
4015

30 July 1993

The Respondent
King George V Hospital
P O Domerton
4015.

STATEMENT OF CONSENT

I am presently a Master of Curationis Student at the University of Natal and I am doing research as part of the course.

You will be asked to complete a questionnaire, taking +- 10 minutes, during your off-duty time. This will not be a difficult questionnaire, your current knowledge base and experience will be sufficient.

You were randomly selected as you are part of the professional nurses/staff in the specialised institution. By mere completion of the questionnaire you will be giving consent.

The participation is voluntarily done. You have the right to refuse to participate, or answer any specific questions. You can withdraw from the study even when you have started to participate, and if you want to do so, just quote the number that appear on the right hand side of your questionnaire. You do not have to state your name.

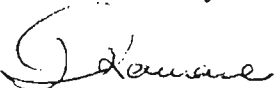
No reports of this study will identify the respondent. Your participation or refusal will not affect your work performance.

You will benefit by participating in this project which is of value to the nursing profession. No money will be given for having participated in this study since it will provide baseline information that is not available at present.

The result will be given to you, should you ask for them. In case of any questions about the study or your rights as a participant, you have a right to contact me at the above address or at this contact telephone number after hours: 031-3051442.

Thanking you in anticipation.

Yours faithfully



NOMUSA J. CHAMANE

King George V Hospital
P O Domerton
4015

5th May 1993

The Superintendent
King George V Hospital
P O Domerton
4015.

Dear Sir

PERMISSION TO CONDUCT RESEARCH IN KING GEORGE V HOSPITAL

With reference to the above matter, Sir, I hereby wish to apply for permission to do a research project in your institution this year, 1993.

I am presently a Master Curationis (M Cur) student at the University of Natal (Durban), and I am doing research as part of the course. I wish to study/evaluate the Professional Nurses knowledge and understanding of HIV infection.

A sample will be randomly drawn from all professional nurses of various departments involved in direct patient care. This study may help to identify the knowledge gap, which may be influencing patient care; thus bridging the gap will ensure that professional nurses are comfortable in working with HIV infected patients. This will eventually uplift the standard of nursing care.

This study will not affect the smooth running of the hospital service, since the subjects will be approached during off duty time, and asked to complete the questionnaire in their off-duty time.

Hoping that my request will be positively considered. Research proposal has been submitted to the ethics committee.

Thanking you in advance.

Yours faithfully

NOMUSA J CHAMANE

SECTION 2

Tick the appropriate box :-

1. AIDS is caused by -----:-
bacillus 1 = []
virus 2 = []
fungus 3 = []

2. What does HIV stand for

3. How long is the window period ?

one month 1 = []
two months 2 = []
three months 3 = []
other (specify) 4 = []

4. The HIV +ve patients are dangerous/to be feared

Yes 1 = []
No 2 = []

5. If given a chance I would refuse care to for AIDS patient.

Yes 1 = []
No 2 = []

6. Can AIDS be contacted from blood transfusion?

Yes 1 = []
No 2 = []

7. Is there a danger of contracting AIDS from donating blood?

Yes 1 = []
No 2 = []

8. Can a mosquito bite lead to AIDS ?

YES 1 = []
NO 2 = []

9. Can one contract AIDS from a new Hepatitis B vaccine ?

yes 1 = []
No 2 = []

10. Are nurses at risk of contracting AIDS when nursing the
AIDS/ HIV +ve patients ?

Yes 1 = []
No 2 = []

11. (a) If no, why? _____

(b) If yes, how much risk?

very low 1 = []
moderate 2 = []
very high 3 = []

12. (a) Should the AIDS patients be isolated ?
- Yes 1 = []
- No 2 = []

Please comment :-

13. Can the AIDS patient use the same toilet and bathroom as other patients ?

Yes 1 = []

No 2 = []

SECTION 3

A. Put an x in a box to indicate whether the statement is True or False .

1. A person's physical appearance provides evidence of his /her HIV status.

True 1 = []

False 2 = []

2. One antibody test can conclusively establish HIV sero - negativity .

True 1 = []

False 2 = []

- 3 Douching before and after sexual activity is sufficient to reduce AIDS risk .

True 1 = []

False 2 = []

4. Use of condoms during sexual activity can reduce the risk of getting infection .

True 1 = []

False 2 = []

B. Put yes or no in the appropriate space .

THE RECOMMENDED PROTECTED CLOTHING FOR HOSPITAL PROCEDURES:-

ACTIVITY	DISPOSABLE GLOVE	GOWN	MASK	PROTECTIVE EYE WEAR
1.Bleeding control with spurting blood				
2.Bleeding control with minimum blood .				

3. Childbirth.				
4. Blood drawing .				
5. Giving an injection .				
6. Taking a temperature .				
7. Oral /nasal suctiong .				
8. Bathing a patient .				
9. Doing dressings .				
10. Feeding a patient .				

SETION 4.

Put an x in the appropriate column to indicate whether you :-

agree = 1
 undecided = 2
 disagree = 3

<u>STATEMENT</u>	<u>AGREE</u>	<u>UNDECIDED</u>	<u>DISAGREE</u>
1. I should have a right to refuse to care for AIDS patient .			
2. Nurses should be assigned to care for AIDS patients on voluntary basis .			
3. I am fearful of contracting AIDS from the patient .			
4. Caring for AIDS patient would put my family ,friends ,and colleagues at risk .			
5. A major conern to me would be as if I don't know whether the patient is HIV +ve or not .			
6. I feel competent in my ability to deal with AIDS patient's psychological needs .			

7. I feel competent in dealing with AIDS patient physical needs .			
8. I feel comfortable in carrying out the infection control procedures re - HIV .			
9. I feel that I have sufficient education to care for AIDS patient .			
10. I feel that AIDS patients should be cared for by specially trained staff.			

SECTION 5

A.Put an x in the appropriate box :-

1.Have you counselled any client on any aspect of AIDS?

Yes 1 = []

No 2 = []

2.If No, give a brief reason.

If Yes, do you feel confident with counselling ?

Yes 1 = []

Unsure 2 = []

No 3 = []

3. If 2/ 3 in which area do think you need more information :-
(You may tick more than one box)

pre - test counselling ----- 1 = []
post - test counselling ----- 2 = []
prevention of infection ----- 3 = []
resources/services available ----- 4 = []
prevention of infection transmission in workplace--- 5
= []
legal rights of clients and ,or of nurses ----- 6
= []

4. Do you feel confident in the following :-

(a) providing any kind of health education re- AIDS

Yes 1 = []

Unsure 2 = []

No 3 = []

(b) giving terminal care to AIDS patient .

Yes	1	=	[]
Unsure	2	=	[]
No	3	=	[]

B. Answer the following questions :-

1.Name two groups that are at high risk of getting AIDS .

a. -----
b. -----

2. Name two symptoms of AIDS .

a. -----
b. -----

3. What are two diagnostic tests for HIV -infection.

a. -----
b. -----

4.Name three body fluids with high concentration of infection .

a. -----
b. -----
c. -----

5.Name two opportunistic infections .

a. -----
b. -----

UNIVERSITY OF NATAL
FACULTY OF MEDICINE
INTER-OFFICE MEMORANDUM

TO: Miss NJ Chamane
Department of Nursing

FROM: Mrs S McDonald
PostGraduate Administration
Faculty of Medicine

27 May 1993

PROTOCOL: KNOWLEDGE HELD BY PROFESSIONAL NURSES IN A SPECIALISED HOSPITAL ABOUT
AID/HIV INFECTION

The Post-graduate (Ethics) Committee has considered the abovementioned application and has found it acceptable.



S McDONALD (Mrs)
PostGraduate Administration

CC. Head of Department

McD/ethics/accept

REFERENCE: 81/13/2

ENQUIRIES: Miss Smith

TELEPHONE: 95-2721

23/8/03

Professor L.R. Uys
University of Natal
Faculty of Social Science
King George V Avenue
DURBAN
4001

PERMISSION FOR RESEARCH IN N.P.A. FACILITIES

Permission to conduct research into "Knowledge held by Professional Nurses in Specialised Hospital in respect of AIDS/HIV Infection" by Ms N.J. Chamane has been granted by Dr R. Neethling, provided that she obtains the necessary written approval of the Medical Superintendent.

RA/S. K39

DEPUTY DIRECTOR: NURSING SERVICES
for DEPUTY DIRECTOR-GENERAL: HEALTH SERVICES

JM/ncj/S.K39

NATALSE PROVINSIALE
ADMINISTRASIE

TAK HOSPITAALDIENSTE



NATAL PROVINCIAL
ADMINISTRATION

HOSPITAL SERVICES BRANCH

☎ : 287121
✍ : Mrs C. Landers
FAX : 299586



King George V Hospital
P O Dormerton
4015

93.12.15

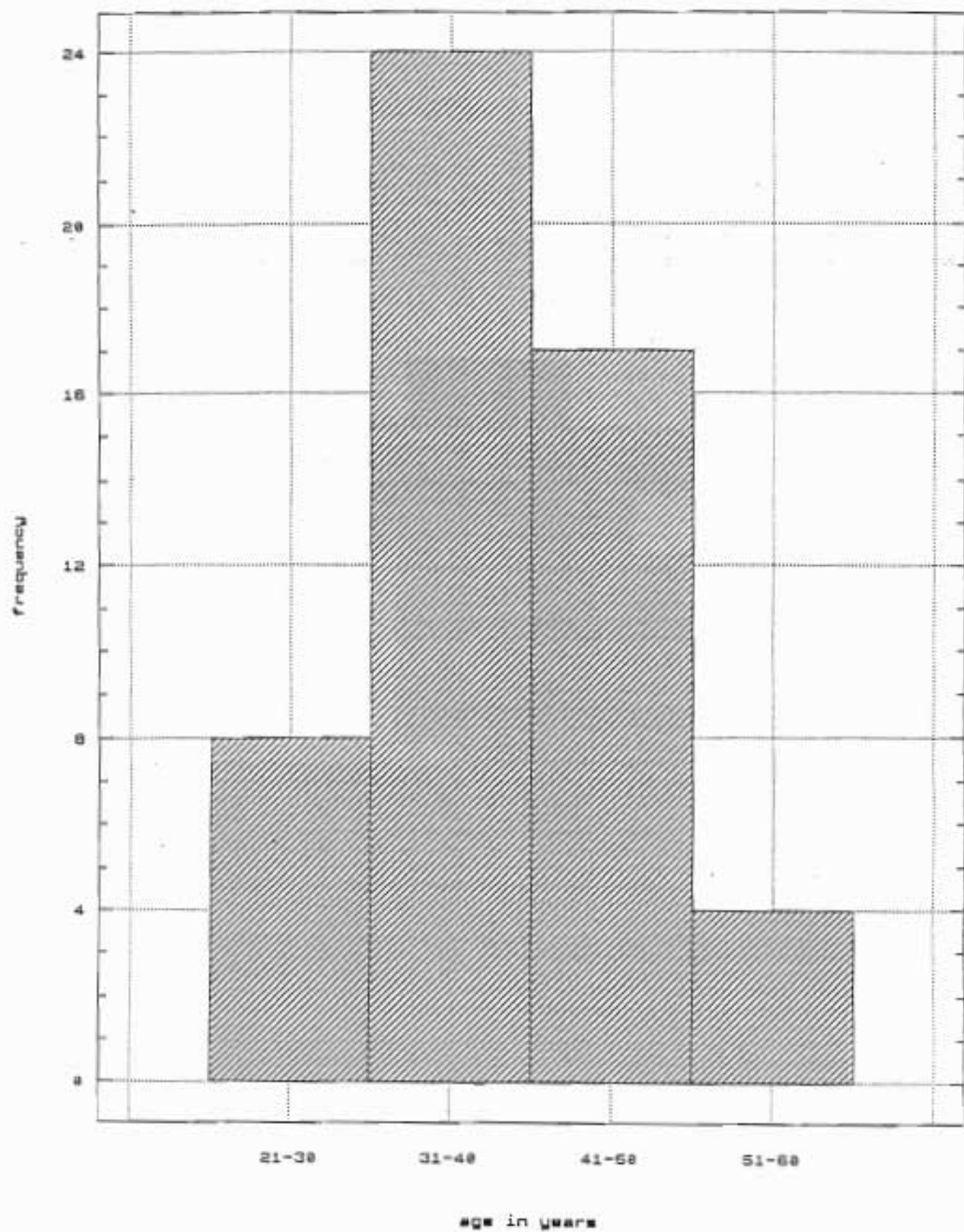
Professor L.R. Uys
Department of Nursing
University of Natal
King George V Avenue
DURBAN
4013

PERMISSION FOR RESEARCH AT KING GEORGE V HOSPITAL

Permission to conduct research into "Knowledge held by Professional Nurses in respect of AIDS/HIV Infection" by Mrs N.J. Chamane is hereby granted.

CHIEF MEDICAL SUPERINTENDENT

Frequency Histogram of age



AMPL	B1GL	B1G	B1M	B1EY	B2QL	B2Q	B2M	B2EY	B3GL	B3Q	B3M	B3EY	B4QL	B4G	B4M	B4EY	B5GL	B5Q	B5M	B5EY	B4
2101	1	1	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	
2102	1	1	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	
2103	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	
2104	1	1	1	1	1	0	0	0	1	1	1	0	1	0	0	0	1	0	0	0	
2105	1	1	1	1	1	1	1	0	1	1	0	0	1	0	0	0	1	0	0	0	
2107	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	
2109	1	1	1	1	1	0	1	1	1	1	0	0	1	0	0	0	0	0	0	0	
2110	1	1	1	0	1	1	0	0	1	1	1	1	1	1	0	0	1	0	0	0	
2112	1	1	0	1	1	0	0	0	1	1	1	0	0	1	0	0	0	1	0	0	
2113	1	-1	-1	-1	1	-1	-1	-1	1	-1	-1	-1	1	-1	-1	-1	1	-1	-1	-1	
2114	1	1	0	0	0	0	0	0	1	1	0	0	1	1	0	0	1	0	0	0	
2115	1	1	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	
2116	1	1	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	
2117	1	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	
2118	1	1	1	1	1	0	0	0	1	1	0	1	1	0	0	0	1	0	0	0	
2119	1	1	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	
2120	1	1	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	
2121	1	1	1	1	1	0	0	0	1	1	1	0	1	0	0	0	1	0	0	0	
2122	1	1	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	
2124	1	1	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	
2125	1	0	0	1	1	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	
2126	1	0	0	1	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	
2128	1	1	0	0	1	1	0	0	1	1	1	1	1	0	0	0	1	0	0	0	
2129	1	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	
2130	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0	0	
2131	1	1	1	1	1	1	0	0	1	1	0	0	1	0	0	0	1	0	0	0	
2132	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	
2133	1	1	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	
2134	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	1	0	0	0	
2135	1	1	1	1	1	1	0	0	1	1	0	0	1	0	0	0	1	0	0	0	
2136	1	1	0	0	1	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	
2137	1	-1	-1	-1	1	-1	-1	-1	1	-1	-1	-1	1	-1	-1	-1	1	-1	-1	-1	
2138	1	1	0	1	1	0	0	0	1	1	0	1	1	0	0	1	0	0	0	1	
2139	1	1	1	1	1	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	
2140	1	1	1	1	1	0	0	0	1	1	0	0	1	0	0	0	1	0	0	0	
2141	1	1	0	1	1	1	0	0	1	1	0	1	1	0	0	0	1	0	0	0	
2142	1	1	1	1	1	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	
2143	1	1	1	1	1	1	0	0	1	1	1	1	1	0	0	0	1	0	0	0	
2144	1	1	1	1	1	1	1	1	1	1	-1	1	1	1	1	1	-1	-1	-1	-1	
2145	1	1	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	
2146	1	1	0	0	1	1	0	0	1	1	0	0	1	0	0	0	1	0	0	0	
2148	1	1	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	
2149	1	0	0	0	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	
2150	1	1	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	
2151	1	1	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	
2153	1	1	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	
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2155	1	1	0	1	1	0	0	0	1	1	0	0	1	0	0	0	1	0	0	0	
2156	1	1	0	0	1	0	0	0	1	1	0	0	1	0	0	0	1	0	0	0	
2157	1	0	0	0	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	
2158	1	0	0	0	1	0	0	0	1	1	0	0	1	0	0	0	1	0	0	0	
2159	1	1	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	
2160	1	1	1	1	1	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	

ANNEXURE 8

B6M	B6EY	B7GL	B7G	B7M	B7EY	B8GL	B8G	B8M	B8EY	B9GL	B9G	B9M	B9EY	B10G	B10G	B10	B10E
0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0
0	0	1	1	1	1	0	0	0	0	1	1	1	1	0	0	0	0
0	0	1	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0
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-1	-1	1	-1	-1	-1	0	-1	-1	-1	1	-1	-1	-1	0	-1	-1	-1
0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
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0	0	0	0	0	0	1	0	0	0	1	1	1	0	0	0	0	0
0	0	1	1	1	0	1	0	0	0	1	1	0	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0
0	0	1	0	0	0	1	0	0	0	1	1	1	0	0	0	0	0
0	0	0	0	0	1	1	0	0	1	1	1	0	0	0	0	0	0
0	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0
1	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0
0	0	1	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
0	0	1	1	0	0	1	1	0	0	1	1	1	0	0	0	0	0
0	0	1	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
0	0	1	0	0	0	1	0	0	0	1	1	1	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0
-1	-1	0	-1	-1	-1	1	-1	-1	-1	1	-1	-1	-1	1	-1	-1	-1
0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0
0	0	0	0	0	1	1	0	0	1	1	0	0	1	1	1	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
0	0	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0
0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0

Summary Statistics for Contingency Tables

ANNEXURE 9

Chi-square	D.F.	Significance
7.63556	10	0.664387

WARNING: Expected values in 14 cells < 5 and 9 cells < 2.

Statistic	Symmetric	With rows dependent	With columns dependent
Lambda	0.06154	0.00000	0.15385
Uncertainty Coeff.	0.03344	0.02246	0.06547
Somer's D	-0.03614	-0.04843	-0.02883
Eta		0.00278	0.26839

Summary Statistics for Contingency Tables

Statistic	Value	Significance
Contingency Coeff.	0.25922	
Cramer's V	0.26839	
Conditional Gamma	-0.05738	
Pearson R	-0.00278	
Kendall's Tau B	-0.03736	0.66232
Kendall's Tau C	-0.04842	

Crosstabulation of SECT5.

SECT1.TOT_	1	2	Row Total
SECT5.quesb			
0	12 22.2	16 30.8	28 26.4
1	12 22.2	8 15.4	20 18.9
2	8 14.8	8 15.4	16 15.1
3	7 13.0	6 11.5	13 12.3
Column Total	54 50.9	52 49.1	106 100.0

Summary Statistics for Contingency Tables

Statistic	Value	Significance
Contingency Coeff.	0.09646	
Cramer's V	0.09691	
Conditional Gamma	0.21739	
Kendall's Tau B	0.09691	0.32067
Kendall's Tau C	0.08544	

Summary Statistics for Contingency Tables

ANNEXURE

Chi-square	D.F.	Significance
2.95940	6	0.813926

WARNING: Expected values in 6 cells < 5 and 2 cells < 2.

Statistic	Symmetric	With rows dependent	With columns dependent
Lambda	0.05469	0.00000	0.13462
Uncertainty Coeff.	0.01160	0.00812	0.02032
Somer's D	-0.00929	-0.01211	-0.00753
Eta		0.00595	0.16709

Summary Statistics for Contingency Tables

Statistic	Value	Significance
Contingency Coeff.	0.16480	
Cramer's V	0.16709	
Conditional Gamma	-0.01499	
Pearson R	-0.00595	
Kendall's Tau B	-0.00955	0.91250
Kendall's Tau C	-0.01210	

Crosstabulation of SECT5.

SECT1.TOT_	1	2	Row Total
SECT5.quesb			
0	14	16	30
	25.9	30.8	28.3
1	14	10	24
	25.9	19.2	22.6
2	4	5	9
	7.4	9.6	8.5
3	10	7	17
	18.5	13.5	16.0
Column Total	54	52	106
	50.9	49.1	100.0

Summary Statistics for Contingency Tables

Statistic	Value	Significance
Contingency Coeff.	0.05367	
Cramer's V	0.05375	
Conditional Gamma	0.11888	
Kendall's Tau B	0.05375	0.58179
Kendall's Tau C	0.04842	

Summary Statistics for Contingency Tables

Chi-square	D.F.	Significance		
8.92792	3	0.0302647		
Statistic	Symmetric	With rows dependent	With columns dependent	
Lambda	0.16667	0.08065	0.26923	
Uncertainty Coeff.	0.04317	0.03317	0.06178	
Somer's D	-0.20925	-0.25142	-0.17919	
Eta		0.19644	0.29022	

Summary Statistics for Contingency Tables

Statistic	Value	Significance
Contingency Coeff.	0.27872	
Cramer's V	0.29022	
Conditional Gamma	-0.34473	
Pearson R	-0.19644	
Kendall's Tau B	-0.21226	0.01861
Kendall's Tau C	-0.25133	

Crosstabulation of SECT5.

SECT1.TOT_	1	2	Row Total
SECT5.quesb			
0	15	29	44
	27.8	55.8	41.5
1	20	10	30
	37.0	19.2	28.3
2	11	7	18
	20.4	13.5	17.0
3	8	6	14
	14.8	11.5	13.2
Column Total	54	52	106
	50.9	49.1	100.0

Summary Statistics for Contingency Tables

Statistic	Value	Significance
Contingency Coeff.	0.27319	
Cramer's V	0.28399	
Conditional Gamma	0.53252	
Kendall's Tau B	0.28399	
Kendall's Tau C	0.27981	0.00361

Summary Statistics for Contingency Tables

Chi-square	D.F.	Significance
2.31281	5	0.804383

WARNING: Expected values in 8 cells < 5 and 8 cells < 2.

Statistic	Symmetric	With rows dependent	With columns dependent
Lambda	0.01031	0.00000	0.01923
Uncertainty Coeff.	0.01775	0.01536	0.02104
Somer's D	0.00206	0.00214	0.00198
Eta		0.00722	0.14771

Summary Statistics for Contingency Tables

Statistic	Value	Significance
Contingency Coeff.	0.14613	
Cramer's V	0.14771	
Conditional Gamma	0.00396	
Pearson R	-0.00722	
Kendall's Tau B	0.00206	0.98268
Kendall's Tau C	0.00214	

Crosstabulation of SECT5.

SECT1.TOT_	1	2	Row Total
SECT5.quesb			
0	31 57.4	30 57.7	61 57.5
2	0 .0	1 1.9	1 .9
3	1 1.9	1 1.9	2 1.9
4	1 1.9	0 .0	1 .9
Column Total	54 50.9	52 49.1	106 100.0

Summary Statistics for Contingency Tables

Statistic	Value	Significance
Contingency Coeff.	0.00288	
Cramer's V	0.00288	
Conditional Gamma	0.00583	
Kendall's Tau B	0.00288	0.97644
Kendall's Tau C	0.00285	