AN EVALUATION OF COMMUNITY-BASED REHABILITATIVE CARE GIVEN TO AMPUTATED PATIENTS LIVING IN THE SUBURBAN AREA NORTH OF DURBAN METRO REGION "F"

BY

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DATE OF SUBMISSION: JANUARY 2004

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DECLARATION

I, Nondumiso Cecilia Shangase, declare that

AN EVALUATION OF COMMUNITY-BASED REHABILITATIVE CARE GIVEN TO AMPUTATED PATIENTS LIVING IN THE SUBURBAN AREA NORTH OF DURBAN METRO REGION "F"

is my own work. All sources used or quoted have been indicated or acknowledged by means of complete reference.

N.C. Shangase

DEDICATION

This dissertation is written and dedicated to the memory of my father who has always been a source of inspiration. He was the first and main person who instilled in me the love to learn. He kept on encouraging me to learn in spite of financial constraints. May his soul rest in peace.

This work is also dedicated to my beloved mother for planting in me a seed of positiveness, enthusiasm to achieve the goals set and never to give up. Her words inspired me to work tirelessly to pursue my research project.

ACKNOWLEDGEMENTS

This research project would not been possible without the participation of several people in my academic, organizational and social active. I would therefore like to express my innermost gratitude to the following persons without whom this study would never have been possible or taken place.

My supervisor Dr B.A. Kubheka who spent her time tirelessly guiding, giving constructive criticisms, reading and re-reading my work on which I spent every minute and energy trying to elevate the standard that would be acceptable to her. Most of all, I would have failed to relay the intention of this message if I do not personally thank Dr Kubheka for her patience and encouragement when I was tied up my professional work and could not keep up the right pace with my research study, lifted me from which I now surface with indestructible wealth of knowledge.

The Department of Health and King Edward Hospital, for allowing me to pursue my study in their premises.

The amputees who co-operated and spent their time to complete questionnaires used to obtain data for the study.

King Edward Hospital physiotherapist and occupational therapist, surgical and orthopaedic outpatient department staff for their support.

Miss B. Kubheka for meticulous typing of the document.

Mrs S. Siyothula for producing excellent graphics used in this study.

My beloved sister, Dr A.T. Nzama, for her indefinite academic support and encouragement. If it were not for her, I would not have reached this level.

The University of Zululand for providing me with partial financial assistance, which I desperately needed to complete this study.

Finally, my family for their unfailing support understanding and belief in me, especially my loving husband Celamandla and my four children Thembalethu, Thubelihle, Simthembile and Ikhona-Masethemba.

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ABSTRACT

The aim of the study was to evaluate the community-based rehabilitative care given to amputated patients living in the suburban area North of Durban Metro Region "F". this was done in order to improve the quality of rehabilitative care and the lives of amputated patients in the community.

A non-experimental, quantitative and qualitative study was undertaken to obtain the required information. The questionnaires were designed for the amputees only and consisted of open and closed-ended questions. The total number of the sample was twenty five (25) and were selected conveniently and purposively, because of the small number of amputees in the community.

The study revealed that as a result of the apparent lack of community rehabilitation services, the vast majority of amputees attended the hospitals where their needs were met, even though not all the rehabilitation team members were present in the hospital. The rehabilitation team members that were mostly nurses and vocational rehabilitations counselors, which contributed to vocational training not being done leading to a high rate of unemployment of the amputees.

Based on the findings of the investigation certain recommendations were presented. It was recommended that each local clinic there should be a rehabilitation center attached to it with the rehabilitation team members placed in these clinics for rehabilitation and consultation by the amputees. It was also recommended that proper discharge planning in the hospital should be done by all the rehabilitation team members especially vocational rehabilitation counselor in order to improve employment for the amputees.

OPSOMMING

Die doelwit wan hierdie ondersoek was om gemeenskapsgebaseerde rehabilitatiewe nasorg aan pasiënte met amputasies in die stedelike gebied noord van die Durban Metropolitaanse gebied, Streek "F", te evalueer. Die ondersoek was gedoen ten einde sowel die kwaliteit van rehabilitiewe nasorg as die lewenskwaliteit van die pasiënte binne hulle gemeenskappe te verbeter.

'n Nie-eksperimentele, kwantitatiewe en kwalitatiewe ondersoek is gedoen. Gestruktureerde vraelyste is ontwerp om deur die pasiënte met amputasies ingevul te work en het oop en geslote vrae bevat.. in the lig van die klein aantal pasiënte met amputasies in die gemeenskap is 'n gerieflikheidstoetsgroep van vyf en twintig respondente is gekies.

Die ondersoek het aan die lig gebring dat as gevolg van die oënskynlike gebrek aan rehabilitasiedienste binne die gemeenskap, die meeste geamputeerde pasiënte die hospitale waar ann hulle behoeftes voldoen kan word, besoek, ten spyte van die feit dat nie al die lede van die rehabilitasiespan by die hospital beskikbaar is nie. Dienste wat veral benodig work is rehabilitasieverpleegsters en beroeprehabilitatiewe beraders, wat daartoe lei dat beroepsonderrig nie gedoen word nie met 'n gevolglike hoë vlak van werkloosheid onder die geamputeerde pasiënte.

Gebasser op die bevindinge van die ondersoek is sekere aanbevelings gemaak. Daar is aanbeveel dat elke plaaslike kliniek voorsiening moet maak vir 'n rehabilitasiesentrum met 'n rehabilitasiespan wat met pasiënte kan konsulteer. Daar is ook aanbeveel dat behoorlike ontslagbeplanning in die hospital gedoen moet work deur al die lede van die rehabilitasiespan, veral berading in beroepsrehabilitasie ten einde beroepsmoontlikhede vir geamputeerde pasiënte te bevorder.

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CHAPTER 1

1.1 INTRODUCTION

Rehabilitation is the word used to describe ways of helping those with disabilities to become fully participating members of society, with access to all benefits and opportunities of that society (Mbeki, 1997:26). It is the responsibility of the Government to make sure that the disabled are well rehabilitated by providing all facilities and health services that they need. This is made possible through community development programmes, welfare organizations as well as provincial and local authorities (Vlok, 1993: 205).

The National Health Care Delivery System aims at moving away from long term institutionalization of disabled patients to a short term stay during resuscitation, with health care to be continued in the community (ANC, WHO & UNICEF, 1994:75). This enables individuals to use their remaining capabilities through rehabilitation.

The amputees especially experience many problems in the community, often caused by lack of proper discharge planning, lack of adequate information about the care of their stumps and lack of community-based resources. Examples of these problems are pressure sores on the stump, flexion contructures due to poor positioning, or poorly fitting prosthesis due to improper shaping of the stump (Kubheka & Uys, 1995:45).

McNett (1991:250) states that from fifty amputees discharged within three years from urban rehabilitation facilities, ten were wheelchair bound and functionally effective. With the remaining forty, ten were using prostheses and crutches and were coping effectively. This includes all aspects, that is physical, psychosocial and vocationally. McNett(1991:251) indicates that available social support was ineffectively utilized due to lack of knowledge and poor community reintegration. This means that from this study, only 20% of amputees were productive and successfully rehabilitated. It would seem that,

even if social support services are available, they are very few and that conditions are worse in rural areas where health services are not available at all.

1.2 BACKGROUND

Disabled persons are no longer kept in the institutions for a long period. This requires a lot of support by both family members and the community at large. The disabled persons need to be well motivated in order to meet their physical and psychological needs through participation in their care. This also requires inspiration of hope to the disabled individuals and their families by the whole rehabilitation team in order to proceed with the rehabilitation process (Dittmar, 1989:4).

Lack of the above support has resulted in many health problems being experienced by amputees and their families, as they fail to meet all the rehabilitation needs due to a lack of knowledge. The information given by the orthopaedic rehabilitation team on discharge about community resources for rehabilitation is inadequate. The amputated patients are poorly prepared for discharge. Discharge planning and community re-integration are not done properly. Where this preparation is done, it is of poor quality such that the amputees and their families do not gain from it.

There are no rehabilitation nurses in the clinics to continue with the care of the amputees to ensure that discharge planning is done successfully and effectively. These rehabilitation nurses will need to work together with the rehabilitation team members. Research studies estimated that between 5% and 12% of South Africans are moderately to severely disabled. Despite this large percentage of disabled people, few services and opportunities exist for people with disabilities to allow them to participate equally in society (Mbeki, 1997:1).

1.3 STATEMENT OF THE PROBLEM

Amputees in the community experience a number of psychosocial and vocational and physical problems. They lack knowledge and information about the available health resources for their rehabilitation due to lack of proper community reintegration, discharge planning and rehabilitative care. The facilities for rehabilitation of the amputees are either lacking or do not exist at all, while support by National Health is also lacking.

1.4 AIMS OF THE STUDY

The aim of this study is to evaluate the community based rehabilitation given to amputees. It is aimed at providing scientific rehabilitative approach thereby improving the quality of care and life of the amputated patients in the community.

1.5 OBJECTIVES

1.5.1 To identify various community-based rehabilitation services available to amputees in the Durban Metro suburban community area, North Region "F".

1.5.2 To evaluate the physical, psychosocial and vocational rehabilitative care rendered to the amputees.

1.5.3 To identify problems experienced by the amputees at home after discharge.

1.5.4 To make recommendations for the improvement of community-based care.

1.6 RESEARCH QUESTIONS

1.6.1 Are there any facilities for community-based rehabilitative care in the suburban areas?

1.6.2 If any, are these facilities for community-based rehabilitation adequate?

1.6.3 Are the rehabilitation facilities property utilized by the amputees and their families?

1.6.4 Do amputees experience physical, psychosocial and vocational problems in the community?

1.7 MOTIVATION

The researcher has observed amputees in the community who were neglected and rejected by their families in such a way that some were in the streets begging. These amputees were physically, psychosocially and vocationally neglected. They lack rehabilitation in all aspects of life, especially so in the suburban communities. Some of the suburban amputees do not receive disability grants hence cannot even afford to buy their prostheses.

Some amputees come to the outpatient clinics with broken prostheses or old broken crutches, not knowing anything about disability grants or having no money to attend the hospital or the clinic to purchase these appliances (Kubheka & Uys, 1995:44). Amputees with prostheses that are in good working condition often do not use them because they complain of pressure sores and heaviness of the prosthesis, as well as a physical environment which is not easily accessible. They cannot even attend follow-up clinics to report these problems because of financial problems and unemployment, especially clients living in remote areas (Mbeki, 1997:6). School-going amputees are often not accepted by their peers with the result that they leave school. This leaves the question whether community reintegration was ever done.

1.8 ASSUMPTION OF THE STUDY

It is assumed that proper community-based rehabilitation can contribute to successful adjustment for the amputees with regard to their physical, psychosocial and vocational needs.

1.9 DEFINITION OF CONCEPTS

1.9.1 REHABILITATION

Rehabilitation is a dynamic process of planned adaptive changes in life-style in response to unplanned changes imposed on the individual by disease or traumatic incident (Dittmar, 1989:8).

1.9.2 COMMUNITY-BASED REHABILITATION

It is a programme such as physiotherapy, functional assessment, vocational training, educational and recreational programmes that take place in special rehabilitation centres, satellite clinics, community centres run by voluntary organizations and sheltered employment centres (Mpanza & Van Tonder, 1994:25).

1.9.3 AMPUTATION

Amputation is a mutilation of a body part that demands a great deal of understanding from the nurse and the team involved with the care of the patient (Farrel, 1986:174).

1.9.4 DISCHARGE PLANNING

It is the effort of preparing the patient for returning to the community through evaluation of the patient's environment, identification of problems and problem solving techniques (Dittmar, 1989: 156).

1.10 CONCLUSION

In this chapter an introduction and background of the study were presented, and the problem statement, aims of study, objectives of study, research questions, motivation of the study, assumption and definitions were discussed.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The goal of rehabilitation is return to family, job and community. Some patients achieve this goal; some never do, while others only partially do because of their medical illness, lack of motivation and lack of support towards rehabilitation (Jones, 1997:27). Rehabilitation is a compensatory approach appropriate for patients who will need to live with a disability on a temporal or permanent basis. The theory of this approach focuses on the use of the person's remaining abilities to achieve the highest level of independence possible for that individual, as occupational performance tasks. These occupational performance tasks may include self-care, home making, recreation school, civic involvement and work. When amputees are unable to accomplish daily tasks in the usual way, adapted techniques may enable them to be independent. This independence cannot be possible without assistive devices that are commercially manufactured, therefore financial assistance is a requirement. When assistive devices are to be used, it will involve the rehabilitation team, approach, family and community development programmes, welfare organizations as well as full participation of provincial and local authorities (Vlok, 1993:205). Mbeki (1997:26) supports this statement by saying that disabled people should be helped to become fully participating members of society, with access to all benefits and opportunities of a society.

2.2 PHYSICAL REHABILITATION

Physical rehabilitation is an important aspect in order to be able to meet the activities of daily life. The amputees need to be trained in order to be able to perform certain activities of daily living, such as self care, exercises, getting in and out of the wheelchair independently, etcetera.

2.2.1 GENERAL PHYSICAL REHABILITATION BEFORE AMPUTATION IF IT IS PLANNED AMPUTATION

The patient is prepared before amputation of the limb if performance of the operation is planned. Exercises play a great role in healing of the stump wound and mobility after amputation. These exercises involve exercises of the upper limb; quadriceps drills, push-ups and walking with crutches. Exercises strengthen the patient's muscles and enable the clients to practice untill competent to function independently. Gaining of independence is stressed even before amputation so that the patient be positive right through the process of rehabilitation. The patient is educated about general hygiene, which include bathing, dressing and use of the toilet (Jones, 1997:58).

2.2.2 CARE OF THE STUMP

The development of functional mobility in conjuction with daily living tasks enable the amputees to improve self-confidence and feel safe and comfortable during the rehabilitation process. Care of the stump is an important aspect that facilitates functional mobility. It involves stump massage, which promotes blood circulation and warmth to the stump thus promoting wound healing. Exercise of the stump promotes the range of all movements to prevent stiffness of joints and contractors, while coning and bandaging to shape the stump prepare it for fitting into the prosthesis. Failure to exercise the stump causes constructures of the joint above the stump, thus causing difficulty in using a prosthesis and also in performing the activities of daily living. Failure to massage the stump will cause pain followed by a reluctance to wear a prosthesis. This is because massage stimulates circulation, relieves pain and reduces phantom sensations as the patient handles the stump (Footner, 1987:58 as cited in Siyothula & Kubheka, 2002:71).

2.2.3 PROSTHESIS

Prior to fitting of the prosthesis, the patient is evaluated with regard to independence in dressing, toileting, bathing, kitchen and transfer activities. After this evaluation, training is provided if indicated. Evaluation and treatment principles are based on the part of the body amputated. Independence is very important, even for those amputees who are to be fitted and trained with prostheses. Prior to and following prosthesis fitting, the development of functional mobility is essential. The prosthetist measures and fits the prosthesis according to the limb amputated and the amputee is then taught how to put it on and remove it. The amputees are also taught about the use of the prosthesis, for instance, walking with the prosthesis for lower limb amputees and writing, moving or handling of objects if it is an upper limb amputee. Kubheka and Uys (1995:45) describe how care of the prosthesis is done by the prosthetist and how to keep it in a good condition to prevent injuries. If limb-fitting instructions are given correctly, a fitted modern prosthesis enables the amputee to walk in such a way that the disability can hardly be noticed.

2.2.4 WHEEL CHAIR AND CRUTCHES

amputees with bilateral lower limb amputations use wheelchairs, as they cannot balance on crutches, and those with unilateral lower limb amputations use crutches initially before fitting of the prosthesis. The bilateral amputees are educated about the use of the wheelchair and are taught upper limb exercises specifically to strengthen muscles to enable them to push the wheelchair. Although with advancement in technology wheelchair are driven electronically, bilateral amputees are still to be taught about these sophisticated wheelchairs by the orthotist. The unilateral amputees are also taught crutch walking and care of crutches, for instance, that crutches should always have rubber a tip to prevent slipping off and arm pads to prevent injury to the tissues where the crutch comes into contact with the body. They are also taught about wear and tear of the wheelchair as well as servicing thereof (Farrel, 1986:117).

2.2.5 ACCESS TO HOME AND COMMUNITY REINTEGRATION AND ENVIRONMENTAL BARRIERS

It is the duty of the occupational therapist to do community assessment before discharge and reintegration of the patient into the community. This helps in discharge preparation of the patient when the occupational therapist knows exactly what the environment or home of the patient looks like. The occupational therapist considers the concept of environmental barriers and environmental support to occupational performance. These are influenced by social, cultural, economic, institutional and architectural elements. According to Trombly (1995:255) community assessment is not done well for all amputees, as a result of which some amputees adapt poorly to the environment or community after discharge.

All the amputees whose environment has been assessed should be recorder in his/her file. This include purpose of assessment focus done by qualified occupational therapist, that is, environmental factors involved and addressed, location of the environment assessed, how assessment was carried out, for instance questionnaires or observation, clarity and comprehensiveness of instruction, time taken to do assessment, its usefulness, standardization, that is, literature used to base the assessment on or experts consulted for reassessment, whether the assessment was published and whether the assessment have undergone testing for reliability and validity. This information is very important for the rehabilitation team to assess a successful amputee's rehabilitation on the community level. This also depends on good discharge preparation, and an accessing home, community and workplace (Trombly, 1995:258).

2.2.6 DISCHARGE PLANNING

Discharge planning is part of rehabilitation of the amputees whereby amputees are involved in the care, planning and preparation for their discharge before they are disposed to community rehabilitation services. This is the crucial period when the patient has to go home and face the community for the first time after amputation; uncertain and not sure

whether adjustment will be successful or not. It is therefore very important to involve the patient and the family in discharge preparation, in order to prepare him physically and psychologically to face this challenge. It is during this period that the rehabilitation team gets time to assess the amputee for readiness to be discharged and reintegrated into the community. It also gives the rehabilitation team the chance to meet the patient's family. During this period the patient is educated together with the family so that the family would be able to support the patient during and after discharge. Involvement of family members in planning for discharge is an important rehabilitation strategy to ensure continuity of care at home, in order to prevent complications like sepsis due to failure to dress the stump wound, contractors due to lack of exercise, etcetera (Browse, 1998:280). During home trial visits it was found that amputees encountered problems like small houses which caused difficulty for movement of wheelchairs, while some houses had steps but no ramps. The community-based care services for patients were also not available (Siyothula & Kubheka, 2002:12).

2.2.7 ALTERATION OF THE ENVIRONMENT

If there are alterations that need to be done liaison with the social services department is essential, as well as with the Department of Housing if alterations involve the physical structure of the house. It is important that these alterations are done before the amputees are discharged. Social support systems are essential for community rehabilitation like community home based caregivers and ordinary helpers. These helpers assist by taking part in the environmental alteration strategy. If the infrastructure like roads is included in the alterations strategy, the Department of Transport is also involved to assist with construction or a road to the amputee's house or driveways as well as ramps in the place of steps (Ndlovu, 1998:54)

2.3 PSYCHOLOGICAL REHABILITATION

Kubheka and Uys (1995:45) quote Farrel (1982:115) with regard to adjusting to the change in body image and the limitation of mobility with all social, economic and psychological ramifications involved. This is a momentous task for any person and requires a lot of support from all involved in rehabilitation. For amputees to be well rehabilitated they require a high degree of motivation to be independent and be able to help others to build their independence and cope with disability (Footner, 1987:24 as cited by Siyothula & Kubheka, 2002:24). It is important that amputees meet so that they can share their experiences about loss of an important body part like a limb, how they cope with it, that is, becoming aware that loosing a limb need not necessarily interfere with their lives and the resumption of work, which is necessary and will be beneficial (Trombly, 1995: 250). Most of the amputees require some time for adaptation when they return to their dwelling, therefore this aspect should be taken care of before the patient is discharged.

In spite of discharge preparation amputees require assistance during the initial stage of adaptation after discharge. Mpanza and Van Tonder (1994:238) found that the key helpers of amputees were mostly women, with 85% being wives of amputees with the majority being in the same household with the amputees they were nursing. The psychological rehabilitation of these amputees was successful as they were open to their partners and could confide in them all their fears or anxieties with their full support (Ndlovu, 1998:56). This statement is supported by Chilvers and Browse (1971:58) cited in Kubheka and Uys (1995:317), who agree that amputees often do not have sources of assistance for their practical problems, and that relatives were the most common helpers.

2.3.1 EMOTIONAL ADJUSTMENT TO DISABILITY AS A FACTOR THAT AFFECT REHABILITATION OF AMPUTEES

The amputees and all patients who sustain major traumatic injuries that involve loss of body parts, use defence mechanisms when they realize the loss of a body part. Defence

mechanisms are unconscious and anxiety relieving processes that help to restore a patient's psychological equilibrium and normalize emotional functioning. Defence mechanisms can be protective and transient forms of adaptation to the trauma or can be chronic and pathological adaptations to the residual disability. Some of the defence mechanisms that are used are denial regression acting out and traumatization (Captain, 1991:487).

Denial allows the patient to integrate realities of the disability at an acceptable pace and prevents excessive anxiety and severe depression. In the case of amputees, the patient becomes well motivated towards rehabilitation. In other cases a patient may be insightful and well motivated initially but when faced with overwhelming tasks of rehabilitation and awareness of the permanent barriers to life plans and satisfactions, may start denying again. This becomes a problem in rehabilitation, and denial may even reach psychotic proportions or may be combined with fantasy and delusion, which requires psychiatric consultation (Felton & Revenson, 1994:687).

Regression refers to an emotional and physical retreat from adult standards of independence to an earlier and less mature level of adaptation. This behaviour includes persistent dependency, lack of motivation and passivity. Regression is usually precipitated by inability of the patient to have personal control over his actions because of loss of a body part, for instance, getting into a wheelchair on his own, or a therapist who is too assertive and eager for results, pushing the patient too fast in the treatment and misses the signs that the patient is becoming overwhelmed. The patient will not like to do anything and insist on discharge before he is ready and not yet fully prepared for discharge by the rehabilitation team. This becomes a problem as patient becomes dependent as soon as he reaches home and less motivated for rehabilitation. This goes together with acting out at times, where the patient uses verbal or physical aggression to avoid conscious recognition of feelings of fear, sadness and anxiety, which creates a problem for rehabilitation because family members become less supportive (Caplan & Sadock, 1992:377).

Somatization is one of the defence mechanisms that affect effective rehabilitation of patients with major injuries like amputees. It refers to the state when the patient's emotional responses never reach the conscious level but are instead expressed through physical symptoms like pain, headache or back problems for which there is no discoverable organic cause. The patient with regression may somatize in such a way that no rehabilitation programmes are commenced. Community based rehabilitation becomes a problem as such patients are hospitalized for a long period and even after discharge cause problems to the community rehabilitation team (Caplan & Sadock, 1992:391).

A major concern of the patients after traumatic injury like bilateral amputation is to maintain gender identity and continuing ability to function in sexual roles. Tardif (1995:218) urges that therapist should improve rehabilitation by addressing the frequently overlooked critical area of a patient's sexuality and sexual functioning. Sexuality is an essential area of a person's self-identity and self-esteem, whether a person is sexually active, married, or unmarried, heterosexual or homosexual. The rehabilitation team should aim at helping the disabled patients to maintain a positive self-identity, enjoy life satisfaction in all functional areas and compensate and adapt in all life areas (Neistadt & Tardif, 1995:300).

2.4 SOCIAL REHABILITATION

Most amputees are sole breadwinners in their families and require financial assistance. Looking at the amputee both in suburban and rural areas, very little has been done to support them financially. One thing that stands between a disabled person and abandonment in a suburban or rural area is a disability grant. "Accessing disability grants on its own is a huge problem. Some people can wait for years from the time of applying," says Couper (1999:205). Mbeki (1997:43) agrees that people who receive social security benefits in South Africa tend to be totally dependant on them for their survival. However, the majority of people with disabilities however receive no grants at all.

It is the duty of the social worker as a member of the rehabilitation team to make sure that the disability grants are processed while the amputees are still prepared for discharge. The social worker has to take part in the assessment of the environment so as to assess the state of houses, yards and people in the same dwelling. This will assist if there are any alterations that require financial assistance, like application for a social relief grant and other types of grants depending on the social standing of the amputees (Couper, 1999:209).

2.5 ANCILLARY FACTORS THAT AFFECT REHABILITATION FROM THE HOSPITAL TO THE COMMUNITY

Leaving the hospital is a threatening time to the disabled person, who may feel he does not have the capacity to deal with the move to the community. One of the most deceptive aspects of rehabilitation is the condition of the patient at the time of discharge. They fear the loss of protection and reliable care, as has been done by the hospital staff. It is also easier to deny the severity of the handicapping condition in the hospital where mobility is easier and with sophisticated equipment, such as electric wheelchairs, which mask the patient's real level of function. In addition, personal needs are provided for whereas in the community the patient is not "unlike others". Disabled patients who are not emotionally prepared to deal with separation from the hospital may put an obstacle in the way of discharge and community rehabilitation (Wright, 1992:361).

2.5.1 CULTURE

Cultural attitudes and values acquired from childhood are influencing factors in the process and outcome of rehabilitation. Cultural education within the family affects matters such as how pain is perceived and expressed, what is considered physically attractive, what aspects of the body are most prized and whether this will represent the greatest loss, and so forth. Within each culture there may be considerable variations in the intensity of feeling towards disabled or specific handicaps. Cultural education may not prepare disabled individuals for a new life of leisure time. Cultural role expectations for

work, family and sexual roles may be narrowly defined. Thus options for compensatory role changes may be cultural background influences such as patients' attitudes towards treatment, therapy use of modalities, treatment activities, work and education, or, cultural values, for instance that they are being punished for something sinful by having a disability. Such a patient may be less motivated towards rehabilitation, as the patient is no longer serving punishment for the sin committed by being rehabilitated. Sanchez (1999:367) suggests that rehabilitation should be sensitive towards cultural differences and attempt to understand the basic values and assumptions of the patient's culture. He also suggests that the rehabilitation team therapy principles be adjusted to consider the cultural orientation of the ethnic population.

2.5.2 RELIGION

Religious beliefs, taboos and traditions contribute to a patients feelings about his role in the injury or illness, his own worth, and his interest in rehabilitation. The ancient Hebrews felt that illness marked a person as a sinner being punished. Ancient Greek looked at illness or disability not as a sign of sin but of inferiority, while the early Christians saw illness, pain and disability as the way to grace or salvation through suffering. Kutner (1997:98) and Wright (1992:367) found that a physical disability may be worn with pride and a patient may feel especially selected by God for trial by physical suffering. The disability may give purpose to life. This gives insight to rehabilitation, as these patients may not be motivated towards rehabilitation and become incooperative and would not like to share their social standing for financial assistance nor vocational rehabilitation. Wright (1992:375) adds that such patients appear peaceful, uplifted and almost superior therefore do not require any rehabilitation strategy. He urges rehabilitation team members to be sensitive to the meaning of the patient's religious beliefs and to incorporate those beliefs and ceremonies into treatment programming whenever possible.

2.5.3 STAFF ATTITUDES

An examination of staff attitudes and behaviour reveals concern and loyalty to the patient as a concept of good rehabilitation. The demanding nature of treatment of physically disabled requires long term commitment, dedication to service and high tolerance for stress and frustration. What is less obvious are some of the unconscious needs and attitudes of staff which may hinder the process of rehabilitation. Rehabilitation team members are urged to resume responsibility for patients and at the same time to deal with conflicts concerning their own unresolved dependency needs and longing for care and affection. Stewart (1996:418) states that constant exposure to physical disability can be emotionally overwhelming and threatening to the therapist's own sense of intactness. Staff may go through identical stages of adaptation, may deny the extent of the dysfunction and become depressed and mourn. This retards rehabilitation of the disabled persons and instead promotes dependency.

The rehabilitation team may, without conscious intent, encourage unrealistic rehabilitation goals based on the need to feel successful professionally and to be liked by patients and their families. Lamb (1994:189) states that when patients do not improve the team may feel as failures, guilty or in adequate, and then reject the patients. Levitin (1996:331) states that the rehabilitation team should be taught to be emotionally neutral and that the behaviour important for this value is maintaining distance from the patient.

Stereotyping of the physically disabled was found to be prevalent among professional staff at rehabilitation agencies. The physician showed a considerable degree of pessimism about success in rehabilitation. If staff even unconsciously tend towards stereotyping and labeling patients as impossible to rehabilitation, they fail to evaluate the total person and undermine long-term rehabilitation potential. The disabled need to be treated by professional staff that demonstrate respect, empathy and a humanistic philosophy (Trombly, 1995:283).

2.5.4 COMMUNITY ATTITUDES

Sakuma (1997:98) states that the disabled patients who progress favorably in the psychological accommodation to disability and restoration of physical function still face a formidable hurdle. He adds that disabled patients experience staring rejection, intimate personal questions concerning the disability and degree of dysfunction, or intrusive assistance, which they do not need. Wright (1998:258) stresses that healthy acceptance of the disabled is related to qualities in the non-disabled, such as a positive self-image, sound, stable interpersonal relationships, personal confidence and security in their own concept of body image and self-worth.

2.6 VOCATIONAL REHABILITATION

Vocational rehabilitation is commenced while the patients are still admitted in the hospital. It forms part of discharge preparation. Vocational training is the responsibility of the vocational rehabilitation counselor working in conjunction with the occupational therapist. The vocational rehabilitation counselor prepares the patient psychologically and physically to return to the old work or change to light duty in the same employment, depending on the results of vocational assessment done by the occupational therapist. If the patient cannot return to the old employment then the vocational rehabilitation team liaise with the Department of Manpower to place such a patient in sheltered employment workshops (Dittmar, 1989:137 cited by Siyothula & Kubheka, 2002:26). These vocational team members work together with the disablement resettlement officer who is placed in the Department of Manpower. The disablement resettlement officer assesses the patient's potential ability for work, provides training and places the patient within specialized centres.

A vocational study that was done by Ndlovu and Couper (1998:59) at Manguzi Hospital, Northern Zululand, revealed that amputees who were well rehabilitated had limited opportunities for placement in the sheltered employment workshops or light duty in their old work place. Couper (1999:64), an occupational therapist in this hospital added that

the only solution in the study that was done in the same Manguzi Community in 1998 was to survey the amputees in the community to find out what they could do to earn a living. There is now a vegetable garden, handiwork and cement block-making projects running as an answer to amputees' employment problems. Ndlovu (1998:4) in the same study adds that the only problem they faced was maintenance of these projects to make them sustainable.

Davis (1994:118) stresses that there is a need for investigation of occupational possibilities to promote return to previous employment or to establish the need for returning to a new job. Met and Wilson (1990:98) contendthat the main aim of their rehabilitation centre in Cape Town is to prepare the physical disabled persons for suitable employment in the open labour market, by training and educating them in the work place that resembles the realistic work situation as much as possible. Gillies (1993:185) agrees with the above view point in that correct placement of the employee with disability is of paramount importance, ensuring he is able to be effective in his job and remaining with the company. A physical impairment need not affect one's lifestyle. With the right aids and facilities, someone with an impairment may function just as productive in society as someone without. It is up to society to enable people with disabilities to function optimally in a suitable environment.

2.7 CONCLUSION

This chapter highlighted the goals of community-based rehabilitation and the importance of rehabilitation to amputees and other disabled persons. It explained the types of rehabilitative modalities needed to meet the biopsychosocial and vocational needs of the amputees, highlighted the importance of multidisciplinary approaches for forming the rehabilitation teams and also support of the amputees. It described the environmental barriers encountered by amputees that hinder rehabilitation progress and other ancillary factors that affect rehabilitation. In the next chapter King's theory of an Open Systems Framework and the theory of Goal Attainment will be discussed, with the emphasis on the theory of an Open Systems Framework as it forms the basis of Goal Attainment.

CHAPTER 3

THEORETICAL FRAMEWORK

3.1 INTRODUCTION

This study was based on King's theory, which was utilized to help the researcher to organize the study and provided the basis from which to identify and examine the problems and collect and analyze data (Brink, 1996:26).

3.2 THE DEVELOPMENT OF KING'S THEORY

Imoge King developed her theory after her retirement from the University of South Florida in 1989. King's theory is divided into two sections, namely, King's Open Systems Framework and King's Theory of Goal Attainment. The theory of Goal Attainment is based on the Open Systems Framework (George, 1995: 211).

3.3 KING'S OPEN SYSTEMS FRAMEWORK

King formulated the Open Systems Framework in order to organize concepts that represent essential knowledge that might be used by different disciplines to construct their theories. King's conceptual framework consists of goal, structure, function, resources and decision-making. In the framework health represents the goal for nursing, structure is represented by three open systems, function by reciprocal interaction by individuals, resources by health professionals and their clients and all services required to carry out specific activities. Decision-making occurs when choices are made in allocation of resources to assist in achievement of goals.

King's Open System Framework consists of three interacting systems. These systems are the personal system (individual); interpersonal systems, which refer to dyads, triads,

small and large groups, and social systems, which include family, social organizations and health care delivery. These three dynamic interacting systems form the basis of King's theory of Goal Attainment (George, 1995:212).

3.3.1 PERSONAL SYSTEMS

A personal system refers to an individual. The concepts used in this system are perception, self-growth and development, body image, space, learning and time. The major concept in personal systems is perception as it influences all behaviours though it is subjective. Perception is experienced by every person though it differs from person to person. Perception is described as a process of human interaction with their environment, which then influences the behaviour, provides meaning to the experience and represents the individual's image of reality.

The self as defined by King (1995) in George (1995:212) is a composite of thoughts and feelings, which constitutes a person's awareness of his individual existence, who and what he is. The self includes, among other things, a system of ideas, attitudes, values and commitments. It consists of the individual's inner world as distinguished from the outer world that consist of all people and things. A person's self is the same total of all a person can call his own.

One of the concepts is growth and development, which includes all the stages of development from the period of conception till adulthood. There are changes, which are physical, and behaviour assisted by the environment till maturity. Growth and development is therefore defined as the process in people's lives through which they move from a potential for achievement to actualization of self.

Body image is part of each stage of growth and development. It is subjective, acquired or learned, dynamic and changing as a person redefines the self. It is defined as the way one perceives both one's body and reaction of others to one's appearance.

Space is individualized and subjective. It depends on the situation and the relationship in that situation. It is defined as a physical area of the individual and is described by the behaviours of those who occupy it.

Time is defined as the duration between one event and another as uniquely experienced by each human being and is a relation of one event to another event. It is characterized by life processes dependant on the distance and the amount of information given. Time is irreversible, measurable and subjective but based on perceptions (George, 1995:213).

3.3.2 INTERPERSONAL SYSTEMS

The interpersonal system involves interaction by two or more people. The concepts used in this system are interaction, communication, transaction, role and stress. The main concept is interaction. Interaction is characterized by values, human relationships, being influenced by perceptions, mutuality, verbal and non-verbal communication, through effective communication, irreversibility and dynamism. Interaction is therefore defined as the observable of two or more persons in mutual presence.

Communication is defined as a process whereby information is given from one person to another directly or indirectly. It is characterized by verbal and non-verbal symbols. It is situational, irreversible, perceptual, transactional, personal and dynamic. It is influenced by language spoken or written and behaviour of parties interacting. Communication is a major social process that develops and maintains human groups and societies.

Transactions are derived from perceptions and their interpretation. They are unique depending on the individual's perceptions and are short-lived. Transactions are defined as a process of interaction in which human beings communicate with their environment to achieve goals set after interpretation of perceptions.

Role is described as a set of expected behaviours of those who occupy positions in the social system. These persons are guided by a set of procedures or rules that explain their

responsibilities in positions they occupy. Role involves a relationship of two or more persons who are interacting for a purpose in a particular situation. Interacting with other people help one to attain the skills, knowledge and value of other persons,, thereby enabling one to identify goals and assist with goal attainment.

Stress results from open systems as they continuously interact with the environment. It depends on the coping mechanism of the individual as the intensity of the stress varies. Stress is dynamic and is influenced by past experiences. It is individualized and personal as individuals respond uniquely to life events. George (1995:215) defines stress according to King (1990:96) as a dynamic state whereby a human being interacts with the environment to maintain balance for growth, development and performance, which involves an exchange of energy and information between the person and the environment for regulation and control of stressors.

3.3.3 SOCIAL SYSTEMS

George (1995:215) cites King's definition of social systems as an organized boundary system of roles, behaviours and practices developed to maintain values and the mechanisms to regulate the practices and rules. The concepts that are of great importance in this social system are organization, authority, power, status, decision-making, control and all other concepts mentioned under personal systems and interpersonal systems.

Organization as the major concept consist of five parameters, namely, human values, behaviour patterns, needs, goals and expectations; a natural environment in which material and human resources are essential for meeting goals and expectations; employers and employees, parents and children, who form the groups that collectively interact to achieve goals and technology that facilitates goal attainment.

Authority is the structure that is observable through provisions of order, guidance and responsibility for actions; essential for formal organizations, requires cooperation essential to goal attainment and is associated with power. It is described as an active,

reciprocal process of transaction in which the actor's backgrounds, perceptions and values influence the definition, validation and acceptance of those in organizational positions associated with authority.

Power is another concept of social systems. It is defined as the capacity to use resources in organization to achieve goals in which one or more persons influence other persons in a situation. Power is social force that occurs in all spheres of life whereby each and every individual has a potential power depending on available resources and environmental forces encountered. It is the ability to use and to mobilize resources to achieve goals. Power is therefore situational, universal, dynamic and goal directed.

Status refers to position of the individual in a group or groups in relation to other groups in an organization. It is accompanied by duties, responsibilities and privileges. It is reversible, position dependent and situational.

Decision-making is an important concept as it regulates the individuals' life and work, subjective, personal and universal. It is a continuous process and is goal directed. It refers to a dynamic and systemic process by which goal directed choices of perceived alternative is made and used by individuals or groups to answer a question and attain a goal (George, 1996:216).

In conclusion King's Open Systems Framework focuses on the human being or individual who perceive the world as a total person through interaction with other individuals and things in the environment. What has been perceived represents the life situation in which the perceiver and the perceived utilize in order to attain a goal. King developed the theory of Goal Attainment from this theory of Open Systems Framework.

3.4 KING'S THEORY OF GOAL ATTAINMENT

King's theory of Goal Attainment focuses on interpersonal systems which reflects King's belief that the practice of nursing is differentiated from that of other health professions by

what nurses do with and for individuals. The theory uses the concepts that are interrelated in every nursing situation, namely, interaction, perception, communication, transaction, self, role, stress, growth and development, time and personal space.

3.4.1 INTERACTION

Interaction is defined as a process of perception and communication between person and environment and between person and person. This is presented by verbal and non-verbal behaviours that are goal directed. Each of the individuals involved in the interaction brings different ideas, attitudes and perceptions to the exchange. These individuals come together for a purpose and perceive each other. Each individual makes a judgment, thinks about the judgment made and decides to act. Then each react to the other and the situation. In this way the interaction and transaction become directly observable (George, 1995:217)

3.4.2 PERCEPTION

Perception means each person's representation of reality. Perception is formed by different elements. These elements are importing of energy from the environment and organizing it by information, transforming this energy, processing information, storing information, and taking out the information is the form of behaviour that is observable.

3.4.3 COMMUNICATION

Communication is a process whereby information is given from one person either directly in face-to-face contact or indirectly through electronic media like telephone and television, or written words, to another. Communication is therefore involved in the information content of interaction.

3.4.4 TRANSACTION

Transaction is the outcome of interaction. It is the observable behaviours of human beings interacting with their environment. It represents the evaluation component of human interactions involving negotiation and social exchange. When interaction occurs between two parties, like a patient and a nurse, they negotiate and come out with the decision of what should be done, and goals are achieved; which is the transaction.

3.4.5 ROLE

It is a set of behaviours expected of persons occupying a position in a social system. It is accompanied by rights and obligations in a position. It is important that roles be understood and correctly interpreted to avoid conflict.

3.4.6 STRESS

Stress is a dynamic state whereby a human being interacts with the environment to maintain balance for growth, development and performance. It is an energy response of an individual to persons, objects and events, usually called stressors. The level of stress differs from individual to individual and decreases the ability of the individual to attain goals.

3.4.7 GROWTH AND DEVELOPMENT

Growth and development are defined as the continuous changes in individuals at the cellular, molecular and behavioural levels of activities. It is the process that takes place in the life of individuals that help them move from potential capacity for achievement to self-actualization.

3.4.8 TIME

Time refers to the sequence of events moving onwards to the future and duration of events as uniquely experienced by each human being as well as the relation of events to other events.

3.4.9 SPACE

Space is defined as a physical area or territory as defined by those who occupy it. It is also explained by the behaviours of those individuals who live in it.

3.4.10 HEALTH

Health is the outcome variable. It indicates the outcomes as; an individual state of health or the ability to functions in social roles.

3.5 KING'S PREDICTIVE PROPOSITIONS DEVELOPED FROM THEORY OF GOAL ATTAINMENT

According to George (1995:219) King developed a predictive proposition from her theory of Goal Attainment. These proposition are perceptual accuracy, role congruency and communication in a nurse-client interaction that lead to transactions. Transactions are equivalent to outcomes and therefore leads to goal attainment, growth and development. Goal attainment leads to satisfaction and to effective nursing care.

Other propositions were generated in addition to the first three. These propositions are divided into internal boundary and external boundary determing criteria. The internal boundary criteria is from the characteristics of the concepts of the theory and speaks to the theory itself, whereas the external boundary criteria speaks to the area in which the theory is applicable.

3.5.1 THE INTERNAL BOUNDARY CRITERIA FOR KING'S THEORY OF GOAL ATTAINMENT

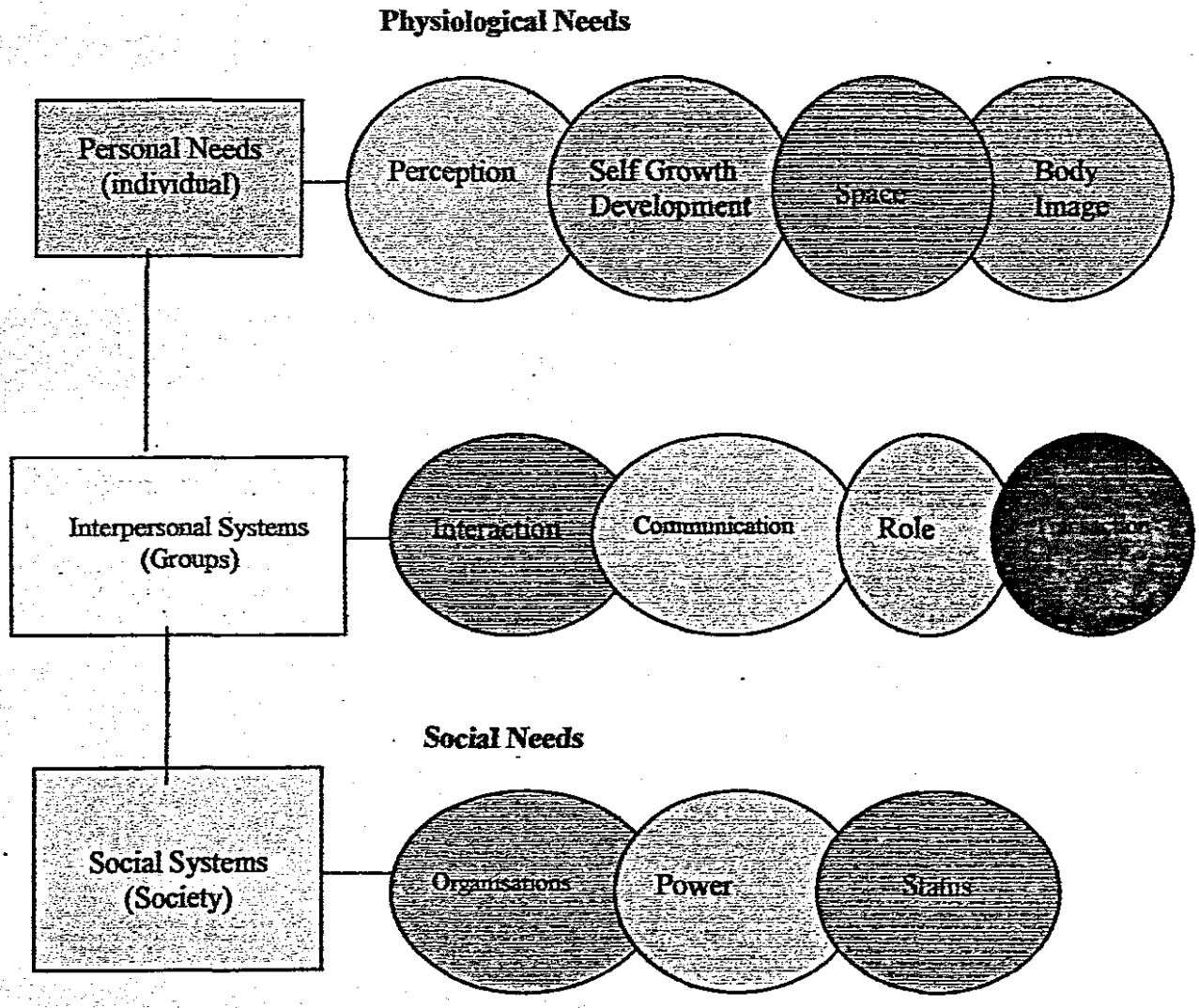
The internal boundary criteria describes the relationship between the nurse and the client. When the client comes to the nurse in the care center, they both do not know each other. The nurse is a licensed practitioner to practice professional nursing. The client is in need of the services provided by the nurse.

The client and the nurse are in a reciprocal relationship, because a nurse has special knowledge and skills to communicate appropriate information to assist the client, to set goals and to meet the needs. The client has information about self and concerns or perceptions that require to be communicated to a nurse, in order to get help with mutual goal setting. In this way the nurse and the client are in a mutual relationship, purposefully interacting to achieve goals (George, 1995:219).

3.5.2 THE EXTERNAL BOUNDARY CRITERIA FOR KING'S THEORY OF GOAL ATTAINMENT

The external boundary criteria are applicable in a two-person, group, like two clients with the same concerns or perceptions of the problem. The interactions can also be limited to a licensed professional nurse and to a client in need of care. These interactions take place in the natural environment. This means that the professional nurse who is knowledgeable and skillful interacts with the client in need of nursing care because of personal knowledge and perception of problems. Both the nurse and client meet in a strange environment to mutually identify problems, set goals for solving problems, act and achieve goals together. This is based on King's interpersonal systems whereby the nurse and client's relationship is influenced by the social system that surrounds them as well as by each of their personal systems (George, 1995: 220).

3.5.3 MODIFIED CONCEPTUAL FRAMEWORK ADAPTED FROM KING'S OPEN SYSTEM



3.6 APPLICATION OF KING'S OPEN SYSTEMS THEORY TO REHABILITATION NURSING

King's model is relevant to this study because it discusses rehabilitation as a dynamic process of planned adaptive change in life style, in response to unplanned change imposed on the individual by disease or traumatic incidence. It recognizes the rights to separateness as an individual and to togetherness with other human beings. It revolves around and evolves from the disabled person's goals, choices and decisions, shared and shaped in an integrative way by all who have an impact upon the individual, with the nurse being an important influence on the client's life. Rehabilitation is goal directed, requiring one to listen, hear, observe, see, speak and be understood.

3.6.1 PERSONAL SYSTEMS

It is important to understand that each individual is a personal system. It involves the physical needs of the individual, like amputated patients who have the same disability but require individualized care as they have different physical needs. It includes perception, self- growth and development. This takes place through learning, for instance, learning about the care of the stump or crutch walking in order to be able to adapt to the environment
where one lives.

Personal systems also involve the space around the individual, which refers to the physical environment or territory of the individual. This should facilitate adaptation of amputated persons; there should be no barriers in the environment, for instance, ramps in the place of steps to facilitate mobility of the amputees using wheelchairs. All the corners of the house as well as the roads should be accessible to amputees.

It also involves body image, which is usually distorted after amputation. It is the responsibility of the nurse to see that the amputees are well educated and given a chance to see other amputees who have been well rehabilitated and have gained a positive self-

image. In this way psychological adaptation will be enhanced and amputated individuals will gain a positive self-concept. According to King's theory this is referred to as personal growth and development which is the transaction/outcome of education commenced before and continued after amputation.

3.6.2 INTERPERSONAL SYSTEMS

Successful rehabilitation depends on interactive management by all members of the rehabilitation team with support by the family members and the community. This type of management is enhanced by communication among team members performing different roles and establish rapport with the client in need of care. This facilitates a trust relationship. This interpersonal system is not only limited to the rehabilitation team members, client and family but also to different governmental sectors required to meet the goals or needs of the client. An example of this is vocational rehabilitation, whereby the Department of Transport is required to transport vocationally trained amputees to sheltered employment workshops, and for their employment interaction with the Department of Manpower, which is essential. The success of this strategy depends on mutual participation between the nurse who makes the arrangements together with other members of the rehabilitation team and the amputee who is going to be part of the workforce. The client should therefore be encouraged to take part in decision-making. The client should also make his own judgment according to his perception as an individual whether he/she will manage to work or not. As soon as the client commences work he/she has to give feedback about the work experience and whether the goals were met or not.

3.6.3 SOCIAL SYSTEMS

The amputated clients have social needs that should be met. They have families and the majority of them are breadwinners who require social support grants. They are members of social groups and need to be rehabilitated in such a manner that they become fully involved in their organizations. They have human rights, which need to be respected.

They have roles that they were playing in their families and in the community before amputation; their power and status achieved or acquired should be maintained during the rehabiliation process. This transaction is achieved through cooperation of all the rehabilitation team members, to ensure that the client is well motivated with full support of the family, community involvement and community awareness workshops. The community should be made aware of the rights of the amputees and the support they require in order to be able to function independently and productively (Trombly, 1995:301).

3.7 CONCLUSION

Imoge King's theory of Open Systems Framework and Goal Attainment was discussed in this chapter, although the study is based on the Open Systems Framework. The aim of discussing both theories was highlighted, in that King's theory of an Open Systems Framework forms the basis for the theory of Goal Attainment. This theory consists of three systems, namely personal, interpersonal and social systems. These systems are in continuous exchange with their environment. The application of King's theory of Open Systems Framework to nursing and rehabilitation was also highlighted. The next chapter will deal with the research methodology.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 INTRODUCTION

In this chapter the following will be discussed:

- Research design
- Target population
- Delimination of the scope of the study
- Sample and sampling technique
- Selection of patients
- Research instruments
- Validity and reliability of the instrument
- Pilot study
- Ethical considerations.

4.2 RESEARCH DESIGN

The research design chosen was a non-experimental quantitative and descriptive survey. This method aimed at obtaining information about community-based rehabilitation of amputees and to identify the problems they encounter with rehabilitation in the community.

The non-experimental, qualitative and quantitative survey was chosen for this study for the following advantages:

- It ensured that research took place in the natural clinical environment and in patients' own communities. Amputees were given the questionnaires to complete during their spare time.
- It ensured a high degree of representativeness in the sample as convenience and purposive sampling method was used and patients were readily available.

4.3 TARGET POPULATION

A population refers to the entire aggregation of cases that meets a designated set of criteria, in other words, that meets the criteria the researcher is interested in studying (Brink, 1996:132). The population of this study included amputees between ages 15 and 56 years who had been discharged from hospitals to their suburban and rural communities. This population was selected because the varieties were closely related to the causal factor of amputation, and convinced in that they were selected from their natural communities.

4.4 SAMPLE SIZE AND SAMPLING TECHNIQUE

4.4.1 SAMPLE SIZE

A sample refers to the some of the individuals within a specific territory or small portions of a population or a smaller representation of a larger whole, intended to reflect and represent the character, style or content of the population from which it is drawn (Brink, 1996:133). In this study every amputee from the selected residential area were purposely selected for the study until the required number of twenty five (25) amputees was reached.

4.4.2 SAMPLING TECHNIQUE

A sampling technique or method refers to the process of selecting a sample from a population in order to obtain information regarding a phenomenon in a way that represents the population interest (Neuman, 1996:130). Using convenient and purposive techniques persons that has had any limb or both limbs amputated irrespective of the cause of amputation were selected, provided they were aged between 15 and 56 years; discharged from the hospital, were from the identified communities and were attending follow-up clinics in the identified hospitals or in their communities. When twenty-five (25) questionnaires had been completed, these were recorded and analyzed.

4.5 RESEARCH INSTRUMENT

A research instrument is a specific tool, often a questionnaire or interview guide, used to measure the variable in a study (Spradley & Allender, 1996:604). A questionnaire was used

as it is a useful self-report instrument where the respondents were required to write their answers in response to questions asked. A total of 45 questions were included in the questionnaire. Both closed and open-ended questions were included in the questionnaire. Respondents were interviewed personally by the researcher. It took 35 to 45 minutes to interview one respondent. The questionnaire was subdivided into eleven 11 sections as follows:

SECTION A

- Consisted of the demographic data. It was included for comparative purposes to find out which age and residential area were affected more than the other.

SECTION B

- Consisted of the types of injuries sustained. This gave information on the rehabilitation services each amputee requires.

SECTION C

- Consisted of health services. This was included to determine the health services available in the community.

SECTION D

- Consisted of health education for patients. This section was included to find out if the amputees were given enough health education.

SECTION E

- Consisted of discharge planning. This section was included to determine if the amputees were prepared for discharge from the hospital.

SECTION F

- Consisted of the community reintegration. This was included to find out if the amputees were assessed and prepared for community reintegration.

SECTION G

- Consisted of housing. This section was included to discover if there were any physical or structural barriers which may hinder the amputees adjustment to the community.

SECTION H

- Consisted of employment after amputation. This section was included to investigate whether the amputees were prepared or assessed for employment before they were discharged.

SECTION I

- Consisted of transport. This section was included to find out if amputees experience any transport problems especially for follow-up at the clinics or hospital.

SECTION J

- Consisted of rehabilitation aids. This section was included to determine whether the amputees were using rehabilitation aids.

SECTION K

- Consisted of problems encountered. This section was included to find out what the problems were being encountered by the amputees in the community.

4.6 VALIDITY AND RELIABILITY

The instruments need to be adequately tested for their reliability and validity to ensure that the instrument is one that results in measures that are relevant, accurate, unbiased, sensitive and efficient. After the instrument was developed, it was tested for its validity and reliability before the actual data collection was done.

4.6.1 CONTENT VALIDITY

This refers to how accurately the questions tend to elicit the information sought. The questionnaires were sent to different experts in the field under study to review and analyze all items, to see if they adequately represent the content universe. The instrument was given to different members of the multidisciplinary team including the orthopedic surgeon, orthopedic nurse, specialist, physiotherapist, occupation therapist and social workers from local higher education institutions. These members were requested to examine the instrument and to add items which they deemed necessary and to delete those deemed irrelevant. These members and supervisors agreed that the instrument contained questions pertaining to community-based rehabilitation. The instrument was also formulated from an extensive literature review.

4.6.2 FACE VALIDITY

Face validity indicated whether the instrument appeared to be measuring what it purposed to measure. It was found to be present because all questions in the instrument appeared to focus on the selected topic of community based rehabilitation of the amputees.

4.6.3 EXTERNAL VALIDITY

In this study external validity was ensured because the researcher provided a detailed description so that someone other than the researcher could determine whether the findings of the study were applicable in other settings or contexts where the method of data collection was precisely and thoroughly reported (Brink, 1996:125).

4.6.4 RELIABILITY

Reliability entails the stability, consistency, accuracy and dependability of a measuring instrument. This was adopted by ensuring that the instructions to the participants were clearly written, and the responses were recorded honestly and objectively.

4.7 PILOT STUDY

A pilot study is small-scale version or trial run of the major study (Brink, 1996:60). The pilot study was conducted to pre-test the instrument on a group of five amputees from a suburban community attending a follow-up clinic at the hospital. These amputees were excluded from the main study.

The aim of the pilot study was to assess the feasibility of the study, to detect problems that could be resolved before the major study was attempted and to make modifications in the instrument and data collection methods.

The pilot study assisted the researcher to correct errors of wording where questions seemed ambiguous, judging by the responses given by the subjects. The researcher took 35-45 minutes to interview one respondent. The instrument was found to be acceptable.

4.8 ETHICAL CONSIDERATIONS

4.8.1 PERMISSION TO CONDUCT THE STUDY

Permission to conduct the study was obtained from the relevant authorities including the from the Secretary General for Health from the KwaZulu-Natal Health Department, the Medical Superintendent and the Deputy Director of Nursing Services of the identified hospitals, and the Assistant Director. Permission was granted in the form of letters.

4.8.2 PATIENT'S RIGHTS

The rights of the participants were respected throughout the research process. The principle of beneficence was maintained in that the researcher ensured that no participant was

subjected to any physical, emotional spiritual, economic, social or legal harm. Privacy of the participants was ensured by keeping in confidence all information gathered from participants. The principle of autonomy was respected by ensuring that each respondent's participation was voluntary and any participant was free to withdraw at any time. No treatment or nursing care was withheld from those who elected not to participate in the research.

4.8.3 INFORMED CONSENT

Informed consent was obtained verbally from each participant before a questionnaire was handed out. The purpose of the study was explained. They were assured of anonymity by instructing them not to write their names anywhere in the questionnaire.

4.9 CONCLUSION

This chapter serves as a global indicator indicating how the whole research process was carried out. In the following chapter data will be presented and analyzed in tables, pie-graphs and histograms.

CHAPTER 5

DATA ANALYSIS AND INTERPRETATION OF FINDINGS FOR AN EVALUATIVE STUDY OF COMMUNITY-BASED REHABILITATIVE CARE FOR AMPUTATED PATIENTS LIVING IN THE SUBURBAN AND RURAL AREA NORTH OF DURBAN METRO REGION F

5.1 INTRODUCTION

This chapter discusses a quantitative and qualitative study conducted on the amputated patients living in the suburban area north of Durban Metro, Region F. The data will be analyzed and presented in the form of graphs, figures and tables and will be interpreted simultaneously in order to attain the meaning of the study. This analysis is directed at the patients only.

5.2 SECTION A: DEMOGRAPHIC DATA

This section was included for comparative purposes to find out which sex and ages are affected more than the other. These varieties are thought to be closely related to causal factors of amputation, for instance, males are more commonly involved in violence and car accidents than females, as they are the power and working force. With amputated female patients the cause is thought to be related to the physical medical illnesses rather than injury.

The age distribution is also thought to be a contributory factor to amputation. Adults outnumber children that are amputated. The reason for this is that children use transport less frequently, except those who attend schools that are far from their homes. The number of children that are amputated are commonly those who play on the road or are injured by tractors on the farms and rural areas, as well as complicated fractures that result in vascular injury. In suburban areas amputations are thought to be commonly

caused by accidents. As far as rehabilitation is concerned children are rehabilitated easier than adults.

5.2.1 ITEM 1 GENDER DISTRIBUTION OF AMPUTATED PATIENTS

TABLE 5.1 GENDER DISTRIBUTIONS OF AMPUTATED PATIENTS

Gender	Frequency	Percentage
Males	15	60%
Females	10	40%
Total	25	100%

Table 5.1 indicates that amongst the respondents there were (15) 60% males as compared to (10) 40% females. This reveals that male amputees outnumber female amputees, thus more males were affected than females. The common cause of amputation in males was crushing injuries to those who were pedestrians, gunshot with vascular injuries and complicated fractures sustained during accidents while driving. Among these male respondents, one amputation was due to snakebite. The majority of amputations amongst female respondents were due to vascular injuries though a few were also due to injuries sustained from road and railway accidents.

5.2.2 ITEM 2 AGE OF THE RESPONDENTS

TABLE 5.2 AGES OF THE RESPONDENTS

Age Distribution	Frequency	Percentage
Below 15 years	–	–
15 – 25 years	1	4%
26 – 35 years	4	16%
36 – 45 years	12	48%
46 – 55 years	7	28%
56 and above	1	4%
Total	25	100%

Table 5.2 indicates the incidence of amputation at the ages between 36 and 45 as (12) 48%, ages between 46 and 55 as (7) 28%, ages 26 to 35 years as (4) 16%, ages 15 to 25 as (1) 4%, while ages 56 and above show (1) 4%. These results indicate that the majority of amputees were between 36 to 55 years as compared to ages 15 to 25 and above 56 years. This is important for rehabilitation as children and young adults adapt easier with rehabilitation aids and their healing process is much faster than the elderly. This was highlighted by a respondent. This was supported by Sakuma(1999) who states that the amputees who progress favorably in rehabilitation are children and young adults as they mobilize much earlier than elderly persons, and restoration of function of amputated limb is much sooner in young ones than adults though they experience staring and rejection in similar ways when using rehabilitation aids like prosthesis.

5.2.3 ITEM 3 RESIDENTIAL AREA

The inclusion of this item is based on the focus of the investigation, which is the amputated patients living in the suburban area North of Durban Metro, Region F. This is to identify whether all the respondents are from the identified residential area as well as numbers of amputees in these areas.

FIGURE 5.1 RESIDENTIAL AREA OF THE RESPONDENTS

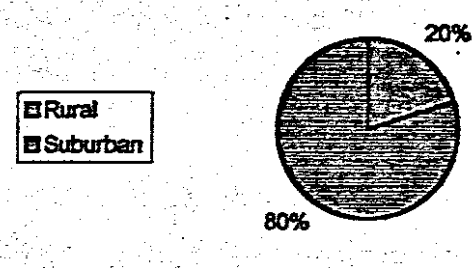


Figure 5.1 indicates that there were (20) 80% amputees from the identified suburban area and (5) 20% from the area in close proximity to the identified suburban area. Even if

more of these respondents were from the suburban area they would be the same as those in rural areas, where there are no rehabilitation services. They will be forced to go to the urban health services.

5.3 SECTION B: TYPES OF INJURIES SUSTAINED

Knowledge of the type of injury sustained helps in the rehabilitation of the amputees, therefore inclusion of this section was found to be essential.

5.3.1 ITEM 4 TYPES OF INJURIES SUSTAINED

TABLE 5.3 TYPES OF INJURIES SUSTAINED

Types of Injury	Frequency	Percentage
Upper Limb Amputee	4	16%
Lower Limb Amputee	21	84%
Total	25	100%

Table 5.3 shows that there were (21) 84% lower limb amputees as compared to (4) 16% upper limb amputees. This indicates that there are more lower limb amputees than upper limb amputees, the reason being that the lower limbs are most commonly injured in accidents either by being a driver, passenger or pedestrian. Vascular disorders are also common in the lower limbs. Amongst the upper limb amputees, three were caused by gunshot injuries and one amputee was assaulted with a bush knife. The lower limb amputees require extensive rehabilitation even at home, which causes a problem as there are no rehabilitation services in the community. Vitali (1996:5) stresses that rehabilitation should focus on the use of the person's remaining abilities to achieve the highest level of independence.

5.3.2 ITEM 5 LEVEL OF AMPUTATION

The inclusion of this item is of great importance because it determines the type of rehabilitation aids required by the amputees as well as rehabilitation methods.

TABLE 5.4 LEVEL OF AMPUTATION

Level of Amputation	Frequency	Percentage
Below Elbow	2	8%
Above Elbow	2	8%
Below Knee	15	60%
Above Knee	6	24%
Total	25	100%

Table 5.4 indicates that (15) 60% respondents sustained below knee amputation and (6) 24% above knee amputation, as compared to (2) 8% above elbow and (2) 8% below elbow amputation. This indicates that below knee amputations are more common as compared to above and below elbow amputation. Community rehabilitation centres should be well equipped for both upper and lower limb amputations. The level of amputation in lower limbs is important because patients with below knee amputations are more easily rehabilitated than above knee amputation, as below knee amputation involves the knee joint for easy fitting of the prosthesis.

5.3.3 ITEM 6 NUMBER OF LIMBS INVOLVED

TABLE 5.5 NUMBER OF LIMBS INVOLVED

Number of Limbs Involved	Frequency	Percentage
Unilateral Amputees	18	72%
Bilateral Amputees	7	28%
Total	25	100%

Table 5.5 reveals that there were (18) 72% unilateral amputees as compared to (7) 28% bilateral amputees. The unilateral amputees ambulate easier as only one limb is

amputated. The bilateral amputees end up in wheelchairs and dependent for longer periods and need more rehabilitation and support. Use of a wheelchair becomes difficult as houses are rarely altered to suit free movement of wheelchairs. Clark (1999:51) comments that for proper community reintegration bilateral amputees need ramps for wheelchairs which may have to be up to the front entrance of the building.

5.4 SECTION C: HEALTH SERVICE INFORMATION

5.4.1 ITEM 7 NATURE OF THE SERVICE

The inclusion of this section was to determine the availability of rehabilitation services in the community, and if these are available, whether are they adequately utilized by amputees or not.

FIGURE 5.2 NATURE OF THE SERVICES

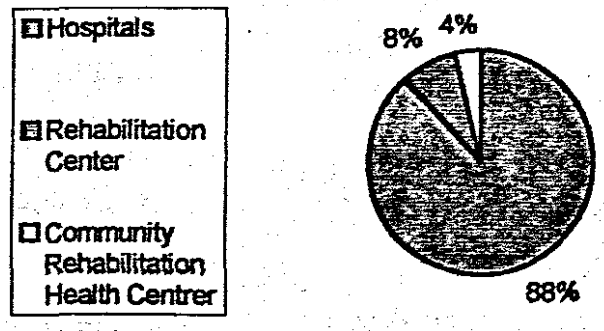


Figure 5.2 indicates that (22) 88% attended the hospital, (2) 8% attended the rehabilitation centre as compared to only (1) 4% amputee who attended the community health centre. This indicates that the majority of the amputees attended the hospital rather than the rehabilitation centres and the community health services. The reason for this is that, there are no rehabilitation services within the community and the amputees therefore return to referral hospitals. There is very little that the amputees get from the community clinics, for instance, they could not get simple accessories like rubber tips for crutches.

The members of the rehabilitation team are not available except nurses who are neither rehabilitation nurses nor orthopedic trained nurses. These patients were often referred to the hospital where their needs were met. Siyothula and Kubheka (2002:71) in their research study found the same results as above, in that (18) 72% disabled people had no community rehabilitation services available to them.

5.4.2 ITEM 8 OWNER OF THE HEALTH SERVICE

This item was included to determine whether the respondents attended private or government institutions. This will help to compare the availability of community rehabilitative services, the private health service and government health service.

TABLE 5.6 OWNER OF THE HEALTH CARE SERVICE ATTENDED BY THE RESPONDENTS

Ownership of Health Centre	Frequency	Percentage
Government	22	88%
Private Sector	3	12%
Community Service	nil	nil
Total	25	100%

table 5.6 reflects that (22) 88% of the respondents attended the government health services as compared to (3) 12% who attended private sector health services, while there was no ownership for community services. This indicates that more respondents attended the government health services as compared to the private sector. The reason for this is that government health services are less costly than private sector services. The private health services have rehabilitation centres with all resources and all members of the rehabilitation team, buy they cannot be afforded by all the respondents as they do not have medical aid schemes.

5.4.3 ITEM 9 CATEGORIES OF PERSONNEL INVOLVED IN REHABILIATION OF AMPUTEES

The inclusion of this item was to find out whether the respondents were seen by all the members of the rehabilitation team. This will help in determining whether the health services attended by the respondents do have all the members of the rehabilitation team or not.

TABLE 5.7 REHABILITATION CATEGORIES

Rehabilitation Team Categories	Frequency	Percentage
Physiotherapist	20	80
Occupational Therapist	20	80
Social Worker	20	80
Psychiatrist	2	8
Psychologist	2	8
Vocational Rehabilitation Counsellor	1	4
Rehabilitation Nurse	2	8

Table 5.7 shows that (20) 80% of respondents were seen by the occupational therapist, (20) 80% by the physiotherapist, (20) 80% by the social worker, (2) 8% by the psychologist, (2) 8% by the psychiatrist and (2) 8% by the rehabilitation nurse in the private sector, as compared to (1) 4% by the vocational rehabilitation councilor. This reveals that there are not adequate rehabilitation nurses and vocational counselors in either government hospitals on in the private sector as the only three amputees attended by these two members were from the private sector, with the result that most amputees are left unattended or not properly attended to.

This also shows that the only rehabilitation team members available in government health services are the physiotherapist, the occupational therapist and social workers, as almost all the respondents were seen by these categories of personnel. These respondents were also seen by all other health personnel who do not fall under the category of the

rehabilitation team, to meet other basic needs of the amputees. other categories that are also lacking in the government institution are the psychologist and psychiatrist, whose services are very important especially in the rehabilitation of amputees because of psychological problems.

5.4.4 ITEM 10 NUMBER OF AMPUTEES SERVED IN THIS HEALTH CENTRE PER ANNUM

TABLE 5.8 NUMBER OF AMPUTEES SERVED IN THIS HEALTH CENTRE PER ANNUM

Number of Amputees Served Per Annum	Frequency	Percentage
Less Than 25	3	12%
26 – 50	17	68%
51 – 100	4	16%
101 – 150	–	–
151 and above	–	–
Not sure	1	4%
Total	25	100%

Table 5.8 show that (17) 68% of the amputees responded that there were 26 to 50 amputees attended to, (4) 16% responded that there were 51 to 100 amputees seen and (3) 12% responded that there were less than 25 amputees attended to, as compared to (1) 4% who was not sure of the number that is served by the health services they attended. These are the number of the amputees served in the both government and private health services.

5.4.5 ITEM 11 SPECIAL REHABILITATION PROVISION FOR AMPUTEES AT EACH INSTITUTION

This item was included in order to find out if there any special provision for the amputees in the health institutions to prevent costs involved when amputees move out from the health service to private assistance.

TABLE 5.9 SPECIAL REHABILITATION PROVISION FOR AMPUTEES

Special Provision	Frequency	Percentage
Wheelchairs	4	16%
Crutches/Rubber Tips	18	72%
Walking Sticks	3	12%
Total	25	100%

Table 5.9 indicates that (18) 72% of the respondents were provided with crutches and rubber tips, rubber tips or had replaced when worn out, (4) 16% were provided with wheelchairs and (3) 12% provided with walking sticks. Most amputees were provided with rehabilitation aids by the government hospital whereas those who attended private sector institutions had to purchase their rehabilitation aids. The amputees who were referred to community health centres had to return to hospitals for replacement of rehabilitation aids as the community centres had no facilities.

5.5 SECTION D: HEALTH EDUCATION ON PATIENT CARE

This section was included to find out if amputees are given enough knowledge about their care. This includes physical care, psychosocial care and vocational rehabilitation. According to Dittmar (1989:12) amputees should be rehabilitated physically, psychosocially and vocationally in order to be able to meet the daily living task. This information is imparted in the form of health education and it prepares the amputees to function independently after discharge.

PHYSICAL CARE

This item was included in order to focus on the physical aspect of the patient, especially the amputated limb or limbs. This care includes wound care when the stump is new with a fresh wound, stump bandaging or coning, stump massage, stump position and exercise of the stump thus promoting healing to the wound. Stump coning is done while the stump has a wound till it heals in order to mould the stump in preparation for the prosthesis. This item was therefore included to investigate whether amputees are given enough knowledge and practice to face this challenge. The amputees have to perform these procedures independently by the time they are discharged.

5.5.1 ITEM 12 CARE OF THE STUMP

TABLE 5.10 CARE OF THE STUMP

Health Education	Yes	Percentage	No	Percentage
Wound Care	20	80%	5	20%
Stump Bandaging	15	60%	10	40%
Stump Massage	14	56%	11	44%
Positioning of Stump	10	40%	15	60%
Exercise of Stump	10	40%	15	60%

Table 4.10 shows that (20) 80% were educated about wound care, (15) 60% educated about stump bandaging, and (14) 56% educated about stump massage, as compared to (15) 60% who were not educated about stump positioning and exercise. This indicates that there is a need of rehabilitation nurses who will be responsible for this aspect of rehabilitation. Davis (1994:18) stresses that a rehabilitation nurse must work with the client and his family and provide a service of training, information and support.

5.5.2 ITEM 13 PROSTHESIS

This item was included because the majority of the amputees use prosthesis with or without other walking aids, and should therefore have enough information about the care and the use of the prosthesis. They should also know about the care of the stump before it is fitted in the prosthesis to prevent injury to the stump, as well as fitting of the prosthesis. This item was therefore included in order to verify with amputees if they did get information about care of the prosthesis as well as demonstrations about fitting of the prosthesis.

TABLE 5.11 CARE OF THE PROSTHESIS

Health Education	Yes	Percentage	No	Percentage
Care of the Stump	11	44%	14	56%
Coning of the Stump	10	40%	15	60%
Care and Wearing of the Stocking	11	44%	14	56%
Fitting of the Prosthesis	15	60%	10	40%
Care of the Prosthesis	8	32%	17	68%
Use of the Prosthesis	14	56%	11	44%

Table 5.11 shows that (17) 68% of the amputees were not educated about care of the prosthesis, (15) 60% were not educated about coning of the stump, (14) 56% were not taught about care of the stump, care and wearing of the stockings, (11) 44% were not taught the use of prosthesis, and (10) 40% were not taught the fitting of the prosthesis, as compared to only (15) 60% who were educated on fitting of the prosthesis and (14) 56% on the use of the prosthesis. The prerequisites reflect that a lesser percentage were educated on care of the stump, and care and wearing of the stocking (11) 44%, coning of the stump (1) 40%, and care of the prosthesis (8) 32%. This means that less number of amputees were educated, and where these amputees were educated, little information was given. As a result amputees fail to care and fit their prosthesis correctly and end up not using prosthesis. The amputees then use walking aids which are not user friendly and promote dependence, which should not be the case if the prosthesis were cared for and

used correctly. Hodkinson, Smith and Mallet (2000:17) support this statement that if correct limb fitting instructions are given and the prosthesis correctly fitted, it will enable a person to walk and work in such a way that the disability should hardly be noticed.

5.5.3 ITEM 14 REHABILITATION TEAM INVOLVED IN EDUCATION OF AMPUTEES ABOUT THE PROSTHESIS

This item was included because there are different rehabilitation team members involved in teaching of care and use of the prosthesis. Information about the prosthesis is mainly done by the prosthetist though there are some grey zones attended to by other team members. The inclusion of this item was also to identify the actual members involved in teaching the amputees about the prosthesis and its care.

TABLE 5.12 REHABILITATION TEAM MEMBERS INVOLVED IN EDUCATION OF THE AMPUTEES ABOUT THE PROSTHESIS

Rehabilitation Team Members	Yes	Percentage	No	Percentage
Prosthetist	10	40%	15	60%
Physiotherapist	15	60%	10	40%
Occupational Therapist	4	16%	21	84%
Rehabilitation Nurse	1	4%	24	96%
Medical Practitioner	2	8%	23	92%
Ordinary Professional Nurse	2	8%	23	92%

Table 5.12 indicates that (24) 96% amputees were not seen by the rehabilitation nurse, and only (1) 4% was educated, (23) 92% were not educated by the medical practitioners with only (2) 8% educated, (21) 84% were not educated by the occupational therapist with only (4) 16% educated, (15) 30% were not educated by the prosthetist, (10) 40% were educated by the prosthetist and (15) 60% were not educated.

This clearly indicates that amputees are educated about the prosthesis, its use and care by other members of the rehabilitation team who are not specialists in this field, except 40%

who were educated by a prosthetist who is a specialist in this field. This argument is supported by Kubheka and Uys (1995:45), that amputees are educated by the prosthetist on how to care and use the prosthetist as well as care of the amputated limb. Education of amputees by the members of the rehabilitation team who are not specialists in the use and care of prosthesis cause a downfall in rehabilitation. The amputees who did not get enough information failed to use the prosthesis correctly and ended up not using their prosthesis.

PSYCHOSOCIAL CARE

The inclusion of this item was based on the fact that the amputees experience problems with adjusting to change in body image. They therefore need support and encouragement to be in touch with reality.

5.5.4 ITEM 15 PSYCHOLOGICAL CARE GIVEN

TABLE 5.13 SUPPORT GIVEN TO AMPUTEES

Support Given	Yes	Percentage	No	Percentage
Visited an Old Coping Amputee	15	60%	10	40%
Visited Limb Fitting Clinic	10	40%	15	60%
Provision of Television – Donated	25	100%	–	–
Provision of Newspapers	10	40%	15	60%
Provision of Time with Visitors	20	80%	5	20%
Consultation by Psychologist Lacking	2	8%	23	92%
Consultation by Psychiatrist Lacking	2	8%	23	92%

Table 5.13 indicates that (25) 100% amputees were provided with television which were donated and others provided by Department of Health to the hospitals where they were admitted; (20) 80% of amputees were given the opportunity to be visited and have time with their visitors, whereas (5) 20% were not visited by their relatives as their homes were far from the hospitals where they were admitted; (15) 60% amputees were given

time to be visited by old coping amputees to support them and discuss with them coping with amputation and prosthesis, as compared to (10) 40% who did not get time to discuss with old amputees. (10) 40% visited the limb fitting centre where they observed different types of prosthesis and were taught about fitting of the prosthesis. A psychologist attended to only (2) 8% and 92% were not seen, while a psychiatrist attended to only (2) 8% who had major depression and (23) 92% were not seen by the psychiatrist. This clearly indicates that very few amputees were attended to by all members of the rehabilitation team.

The results indicate that the majority of the amputees did not get psychological support from the rehabilitation team members but that some got support from their families. One amputee relapsed in such a way that he actually needed to be seen by the psychiatrist.

SOCIAL CARE

5.5.5 ITEM 16 FINANCIAL ASSISTANCE

Amputees experience financial problems, as they cannot return to work immediately after amputation and require long-term rehabilitation. Even upper limb amputees whom research have revealed are in the category that return to work after amputation, require financial assistance, because they also undergo rehabilitation sessions until their sick leave is exhausted. During the unpaid leave period, they default rehabilitation programmes because of financial crises, which in turn retards their rehabilitation progress. This item was included to investigate if all amputees do get financial assistance to meet their basic needs.

FIGURE 5.3 CATEGORY OF PERSONNEL WITH WHOM FINANCIAL CONCERNS WERE DISCUSSED

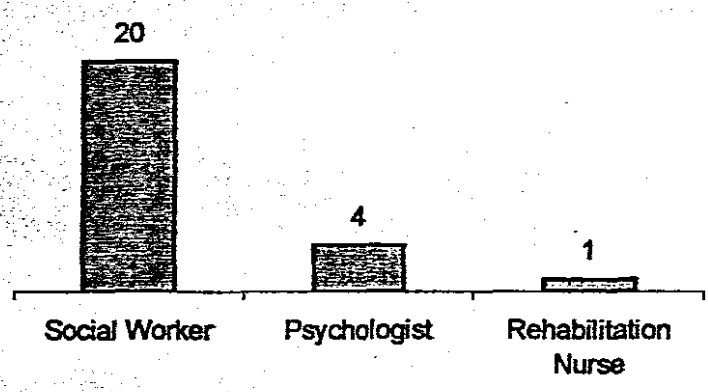


Figure 5.3 shows that (20) 80% of amputees discussed their financial concerns with the social worker as compared to (4) 16% who discussed this aspect with the psychologist and (1) 4% with the rehabilitation nurse. The reason for this is that the social worker is the rehabilitation team member responsible for social care and therefore has to assist amputees with applications for a disability grant, which means that amputees are assisted financially. However, it would seem that the rehabilitation nurses are lacking a lot in this respect. Siyothula and Kubheka (2002:24) states that thesocial worker coordinates the community agencies necessary to help the patient return home.

5.5.6 ITEM 17 RESPONDENTS' FINANCIAL HISTORY

Inclusion of this item was of utmost importance because the amputees have different financial standings. Some amputees are breadwinners of the family who cannot be helped by the disability grant alone, but require more financial support. Other amputees manage to work in sheltered employment workshops if they are well rehabilitated to add to the disability grant they are getting, or return to their old work. For this reason amputees are assessed for financial assistance according to their needs.

TABLE 5.14 FINANCIAL HISTORY

Financial History	Yes	Percentage	No	Percentage
Breadwinner Before Injury	22	88%	3	12%
Ability to Provide for the Family	16	64%	9	36%
Financial Assistance	4	16%	5	20%

According table 5.14, (22) 88% respondents were breadwinners as compared to (3) 12% who were not breadwinners. The other amputees could provide for their families, that is (16) 64% as compared to (9) 36% who were unable to provide for their families. This indicates that financial assistance is a requirement, as amputees cannot work soon after injury. Even if they work they are not as productive as they were before injury. There is no governmental assistance except the disability grant. Those who had financial assistance (4) 16% were assisted by their families, which was proven by the fact that (9) 36% were not able to provide for their families at all. This is supported by Cooper (1999:18), who stresses that there is very little that has been done to support amputees financially. He adds that one thing that stands between the disabled person and abandonment is a disability grant. Cooper (1999:19) further adds that accessing a disability grant is a huge problem on its own.

5.5.7 ITEM 18 DISABILITY GRANT

Inclusion of this item is essential because all amputees fall under the disabled group who are compensated with a disability grant. It is therefore important to identify whether all amputees receive a disability grant or not. The disability grant is important even if the person is not a breadwinner, because the prosthesis and the rehabilitation aids undergo wear and tear and therefore need maintenance.

FIGURE 5.4 DISABILITY GRANT HISTORY

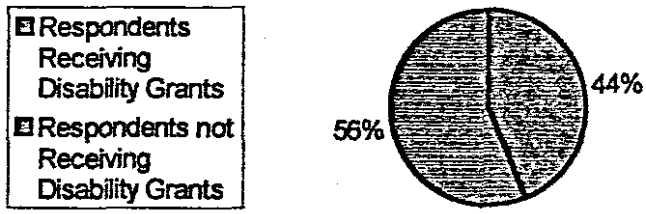


Figure 5.4 reveals that (14) 56% amputees were not getting disability grants as compared to only (11) 44% amputees who were getting disability grants. This shows that the majority of the respondents were not receiving the disability grant. The amputees who received the disability grant were assisted by the social workers who are part of the rehabilitation team. The amputees who were not receiving a disability grant had applied for the grant and were still awaiting for the response, which also takes very long. This statement is supported by Couper (1999:20), in that some people wait for years from the time of application before receiving a disability grant.

VOCATIONAL REHABILITATION

This item was included to establish the baseline data for vocational training by identifying amputees who were working before injury and amputation as well as the type of work they were doing before amputation. Vocational training prepares the amputees to be gainfully employed either in sheltered employment or open labour market or return to the work that they were doing before injury. This helps the amputees to add to the disability grant that they are getting, which is very little. It also helps the amputees to survive and enables breadwinners to support their families while still waiting for a disability grant. Mets and Wilson (1990) stress that the main aim of their rehabilitation centre in Cape Town is to prepare physically disabled persons for suitable employment in the open labour market, by training and educating them in the work place that resembles the realistic work situation as much as possible.

5.5.8 ITEM 19 RESPONDENTS WHO MANAGED TO WORK AFTER AMPUTATION TO ADD TO THE DISABILITY GRANT AND THOSE WHO DID NOT WORK AFTER AMPUTATION

FIGURE 5.5 RESPONDENTS WHO WORKED OR NOT WORKED AFTER AMPUTATION

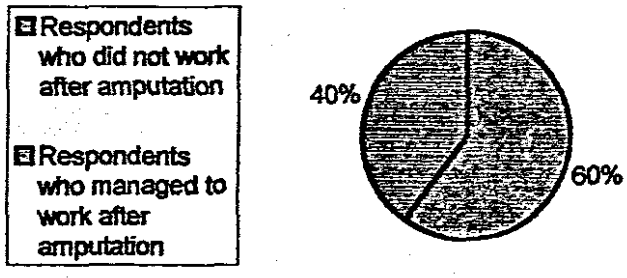


Figure 5.5 indicates that (15) 60% respondents did not work after amputation as compared to (10) 40% who managed to work after amputation. This does not mean that (10) 40% amputees returned to their old work after amputation, but that some did light duties on their own like repairing shoes, handwork like bead work to get an income to add to the disability grant, except for those who were self-employed and who returned to their old employment. This indicates that there is a great need of proper rehabilitation so that people are supported and prepared to go back to their old work.

This also reveals that there is a need for family and community involvement to start mini projects in the community where all physically challenged people can get involved so as to add to their disability grants. However, financial support becomes a problem to start these projects. Ndlovu (2000) supports this statement that there is a great need to make these projects last.

5.5.9 ITEM 20 EMPLOYMENT HISTORY

This item was included to identify the exact number of respondents who were employed before amputation and the type of work they were doing.

FIGURE 5.6 EMPLOYMENT HISTORY

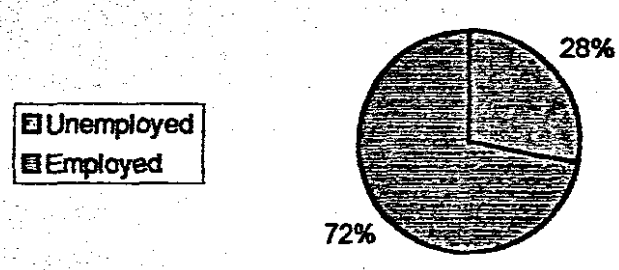


Figure 5.6 shows that (18) 72% amputees were employed before amputation and only (7) 28% were not employed. This is a big challenge as all amputees who were working before injury need to be rehabilitated in such a way that they return to their old work, which is still a problem due to lack of rehabilitation resources in the community. Even those who were unemployed before amputation require to be rehabilitated in such a way that they are productive to promote independence. Mets and Wilson (1990:258) stress that physically disabled persons should be prepared for suitable employment in the open labour market, by educating and training them in the work place that resembles the realistic work situation as much as possible.

5.5.10 ITEM 21 WORK ASSESSMENT

Work assessment is an important aspect of rehabilitation to make sure that amputees are placed correctly and where they are going to be productive without any complication to the physical status of the amputees. The reason for including this item was therefore to determine if the respondents who returned to work were really assessed to make sure if

they were fit for their old work or they required a change to lighter duty, and to find the reason that prevented other amputees from resuming work.

FIGURE 5.7 WORK ASSESSMENT TO DETERMINE WHETHER AMPUTEES COULD RETURN TO THEIR WORK

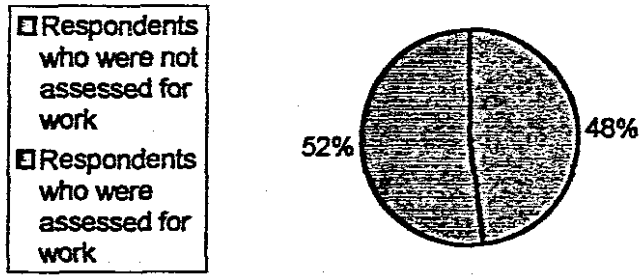


Figure 5.7 indicates that (13) 52% respondents were not assessed for work compared to (12) 48% respondents who were assessed. Work assessment and placement in suitable employment either in the open labour market or a sheltered workshop to add to the disability grant is important. Gilles (1999:248) supports this statement by saying that correct placement of the persons with disabilities is of paramount importance ensuring that he is effective in his job and remains with the company. Gilles (1999:252) further adds that a physical impairment need not affect one's life style, and with the right aids and facilities, someone with an impairment may function just as productive in the community as someone who is able bodied.

5.5.11 ITEM 22 RETRAINING

Inclusion of this item was to ascertain whether amputees that were assessed for work, were trained to go back to their previous work, as they had not been working for a long time and are now using a prosthesis. This makes the situation before amputation different from the situation after amputation, even if amputees return to their old work. Powel (1989:56) supports this statement that there is a great need for investigating occupational

possibilities to promote return to previous employment or establish a need for returning to a new job that is lighter than the previous job, which might require retraining for such a job.

FIGURE 5.8 ESTABLISHMENT OF DATA WHETHER AMPUTEES WERE RETRAINED AFTER FITTING OF PROSTHESIS BEFORE RETURNING TO OLD WORK

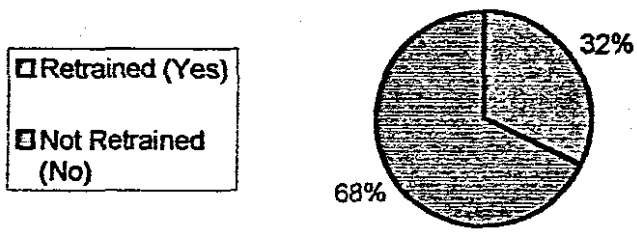


Figure 5.8 shows that (17) 68% amputees were not retrained and only (8) 32% were retrained. This reveals that there is very little that has been done on training of amputees to enable them to return to their old work. Mbeki (1997:38) supports this by stating that an estimated 99% of disabled people in the country are excluded from the open labour market.

5.5.12 ITEM 23 CATEGORIES OF THE REHABILITATION TEAM INVOLVED IN RETRAINING OF THE AMPUTEES

This item was included to identify the categories of the rehabilitation team who assisted with retraining of the amputees even though there are grey zones in some of the duties of the team members.

FIGURE 5.9 CATEGORIES OF REHABILITATION TEAM WHO ASSISTED WITH RETRAINING OF AMPUTEES

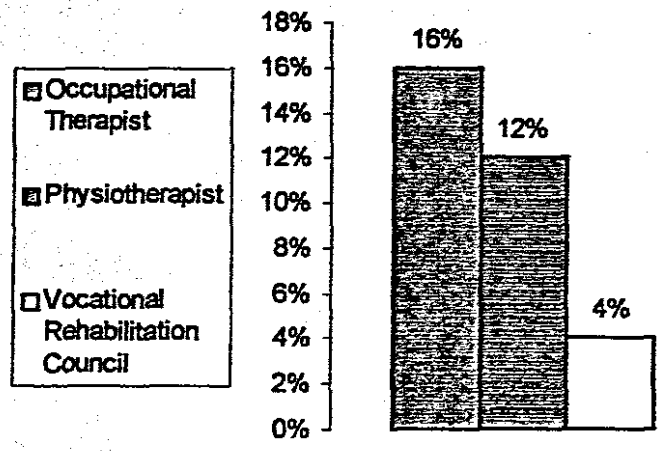


Figure 5.9 indicates that (4) 16% were assisted by the occupational therapist, (3) 12% by the physiotherapist and (1) 4% by the vocational rehabilitation counselor. These results clearly show that the health care centres do not have vocational trainers where amputees can be referred to. This is reflected by the fact that amputees were assisted by the occupational therapist and physiotherapist, who are not specialists in vocational training. Only private health care centres have vocational rehabilitation counselors as the amputee who was assisted by the vocational counselor attended a private hospital. These findings are supported by Mbeki (1997:131) that, according to research undertaken in 1990 only 0,26% of the disabled people were employed in the open labour market in South Africa. He adds that the Employment Equity Act stipulates that there are standards that should be observed, like the promotion and implementation of policies and programmes for disabled people which ensure equity in terms of employment benefits, status and conditions.

5.5.13 ITEM 24 SHELTERED EMPLOYMENT

After work assessment and retraining, there are amputees who are found not to be fit to return to their old jobs. Inclusion of this item is therefore important to determine whether the respondents who were not assessed or retrained or those who were retrained but could

not be effectively productive at work, were placed in sheltered employment workshops or not.

FIGURE 5.10 ARRANGEMENT FOR SHELTERED EMPLOYMENT

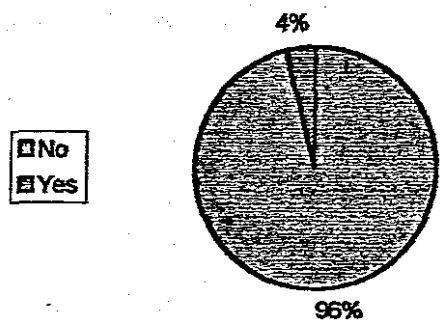


Figure 5.8 indicates that (24) 96% of amputees were not placed in sheltered employment as compared to only (1) 4% amputee who was placed in a sheltered employment workshop.

5.5.14 ITEM 25 TYPE OF WORK ALLOCATED FOR AMPUTEES IN SHELTERED EMPLOYMENT WORKSHOPS

It is important to include this item so as to determine whether the conditions of employment suit the amputated patients and whether they are coping well with the work they are given, working hours, wages, special training and checks on workers' progress, with a view to their possible settlement in an ordinary working environment. It is also important to check the availability of medical, social and psychological assistance to workers. Figure 5.8 indicates that only (1) 4% amputee from 25 amputees was placed in a sheltered employment workshop. This respondent worked as a general worker as he had had a bilateral amputation and was using a wheelchair. He is satisfied with the work he is doing as he is making cotton balls which are then packed by another group of employees and distributed to different companies.

They are protected from occupational hazards as they wear masks when working with cotton wool to prevent inhaling dust from the wool. They work 40 hours a week like any worker, with tea and lunch privileges. The respondent wanted to keep his wages confidential but he was satisfied with the amount he was getting. There was a vocational trainer in the company who assisted him by teaching him how to make cotton wool balls. The workers are given sick leave if they are to attend their doctors, social worker or psychologist. Although there is an occupational health nurse in this company she does not deal directly with their rehabilitative needs but instead refers them to the rehabilitation team. There are promotions according to functional levels, and some employees progress until they again access to the open labour market. This is supported by Powel (1989:---) who states that there is a need for investigation of occupational possibilities to promote return to previous employment or to establish the need for returning to a new job in the same establishment.

5.6 SECTION E: DISCHARGE PLANNING

5.6.1 ITEM 26 INVOLVEMENT OF RESPONDENTS IN THEIR DISCHARGE PLANNING

Discharge planning is a very important aspect of rehabilitation whereby amputees are involved in their care planning and preparation for discharge before they are disposed to community rehabilitation services. This is the critical time when the amputees have to go home and face the community for the first time. For this reason it is very important to involve the patient in his care in order to prepare him for discharge. It also enables the rehabilitation team to assess the patient's readiness to be discharged. This item gives the rehabilitation team the opportunity to meet and communicate with the patient's family thus establishing a trust relationship with them. While the members of the family are free to discuss with the team, they are also involved in discharge planning. This helps the rehabilitation team to identify the barriers to discharge of the amputees. This item is therefore included to determine whether discharge planning is done at all.

FIGURE 5.11 INVOLVEMENT OF AMPUTEES IN THEIR DISCHARGE PLANNING

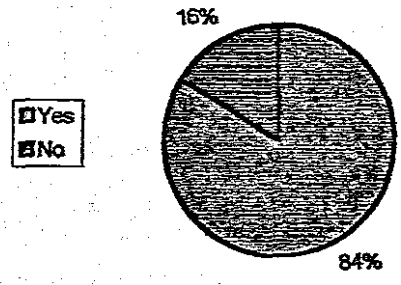


Figure 5.11 shows that most amputees were involved in their discharge planning (21) 84%, and only (4) 16% were not involved. The results indicate that the majority of the amputees had enough preparation for discharge, which may enable them to cope well with their disabilities at home.

5.6.2 ITEM 27 OTHER PEOPLE THAT WERE INVOLVED IN DISCHARGEPLANNING

TABLE 5.15 OTHER PEOPLE THAT WERE INVOLVED IN IDSCHARGE PLANNING

Other people involved in discharge planning	Frequency	Percentage
Spouse	3	12
Family	18	72
No one involved	4	16
Total	25	100

Table 5.15 indicates that family members were mostly involved in discharge planning, (18) 72%, followed by the spouse (3) 13%, and (4) 16% where no one was involved. This is a sign that amputees were well supported by family members, except those who had no family members to support them; these patients reported that family members were too far away to support them. Involvement of family members in planning for discharge is an important rehabilitative strategy to ensure continuity of care at home in order to prevent complications. Ndlovu (1998:20) states that with the support from amputees' families and

other disabled families there is a project for occupational rehabilitation that is running in the Manguzi area. This project is for discharged patients.

5.6.3 ITEM 28 INFORMATION GIVEN ON DISCHARGE

Health education of the patient on discharge is very important for the continuity of care, even after discharge. This is the reason why this item was included as there should be no break in the patient's treatments.

TABLE 5.16 INFORMATION GIVEN ON DISCHARGE

Information Given on Discharge	Frequency	Percentage
Rehabilitation Services – Follow up	24	96
Care of Self	24	96
Bandaging of Stump/Coning	24	96
Care of Prosthesis	20	80
No Information Given	1	4

Table 5.16 indicates that the majority of the amputees were given information on discharge; (24) 96% amputees were given information about follow-up dates for visits to the rehabilitation services or hospital clinics, care of self which involves general hygiene, exercises, nutrition to promote resistance and wound and bone healing as well as care of the stump, dressing and bandaging (coning) and care of the prosthesis. Only (1) 4% amputee reported that he was not given any information by the rehabilitation team but heard what other amputees were saying and observed what they were doing. This should be improves as all patients have a right to get the information they need. Mbeki (1997:37) supports this statement by saying people with disabilities should have access to full information on personal health, education and social aspects affecting their lives. In spite of the information given to (24) 96% of the amputees, they ended up going back to the hospitals for minor problems like dressings which could not be obtained from community clinics. The amputees who visited community clinics reported that their needs could not be met as clinics had no resources.

5.6.4 ITEM 29 MEMBERS OF THE TEAM INVOLVED IN DISCHARGE PLANNING

It is important that all members of the rehabilitative health team involved in discharge planning so that the information required by the amputees is given by all members. This enhances the patient's knowledge as amputees then know all the steps to be take when they are alone with their families.

TABLE 5.17 TEAM MEMBERS INVOLVED IN DISCHARGE PLANNING

Team members involved in Discharge Planning	Frequency	Percentage
Occupational Therapist	10	40
Physiotherapist	20	80
Social Worker	5	20
Medical Practitioner	24	96
Rehabilitation Nurse	1	4
Vocational Counselor	1	4

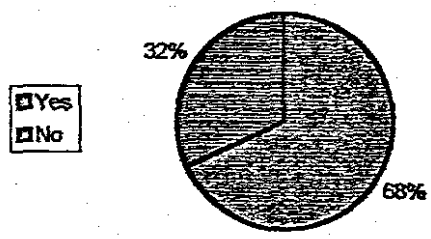
Table 5.17 indicates that the members of the rehabilitation team were involved in discharge planning of the amputees though most amputees, (24) 96%, were seen by the medical practitioners, (20) 80% seen by the physiotherapist, (10) 40% by the occupational therapist, (5) 20% by the social worker and only (1) 4% by both the rehabilitation nurse and vocational counselor. This shows that there are no vocational counselors and rehabilitation nurses in the government hospitals except in private hospitals, as the two amputees who were seen by these two members attended private hospitals.

5.7 SECTION F: COMMUNITY REINTEGRATION

5.7.1 ITEM 30 ASSESSMENT OF THE AMPUTEES FOR COMMUNITY REINTEGRATION

Inclusion of this item is important, as the amputees have to be prepared physically and psychologically before being introduced into the community.

FIGURE 5.12 ASSESSMENT OF THE AMPUTEES' READINESS FOR COMMUNITY REINTEGRATION



The above figures indicate that the amputees who were assessed for readiness to be integrated into the community were (17) 68%, except (8) 32% who were not assessed. Assessment of the amputees for community reintegration ensure their readiness, which will result in good coping with their disabilities and better utilization of rehabilitation services.

5.7.2 ITEM 31 HOME VISIT BY THE REHABILITATION TEAM

Inclusion of this item is necessary because it helps the rehabilitation team to identify problems which might be an obstacle towards community reintegration of the client, like physical barriers. This item also enables the rehabilitation team to identify the cultural beliefs among the family and cultural role expectations, as these may affect the amputee's motivation towards rehabilitation. The rehabilitation team should be cultural sensitive

towards cultural differences and try and understand a patient's basic values and cultures (Sanchez, 1999:875). Home visits also give the rehabilitation team the opportunity to correct misconceptions where necessary. This also enables the team to help the client and family to realize that amputees are not handicapped, but instead have to establish optimistic realistic goals with the client and family, for instance, maintaining the client in the community.

FIGURE 5.13 VISITATION OF AMPUTEES BY THE REHABILITATION TEAM

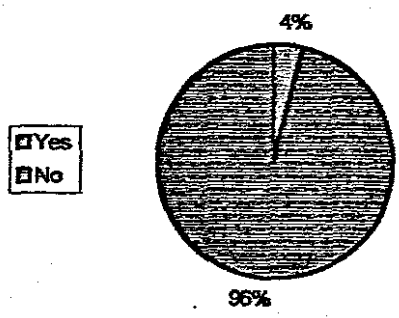


Figure 5.13 indicates that the majority of the amputees (24) 96%, were not visited at home while only (1) 4% was visited. This was the respondent who attended the private hospital During the home visit nothing much was done except health education about the prosthesis and stump care which had already been done in the hospital. This shows that home visits are not generally done. Those who were not visited reported that the problem is due to the infrastructure, as they stay far away in rural areas. This is an important aspect of rehabilitation which should not be overlooked. Without this aspect rehabilitation is incomplete causing overcrowding in the hospitals and clinics, while this is a small problem which could have been solved or attended to at home.

5.7.3 ITEM 32 MEMBERS OF THE REHABILITATION TEAM THAT VISITEDTHE RESPONDENTS HOME

TABLE 5.18 MEMBERS OF THE REHABILITATION TEAM THAT VISITED THE RESPONDENTS HOME

Members of Personnel	Frequency	Percentage
Physiotherapist	–	–
Occupational Therapist	–	–
Social Worker	–	–
Rehabilitation Nurse	1	4%
Medical Practitioner	–	–
Never Visited By Any Member	24	96%
Total	25	100%

Table 5.18 shows that (24) 96% of the amputees were not visited by any member of the rehabilitation team, while only (1) 4% respondent was visited at home by the rehabilitation nurse. This member of the rehabilitation team is only employed private hospitals, therefore, this service should be extended to government hospitals as well so that all amputees' homes are visited, to ensure continuity of care after a patient's discharge and a warm welcoming home and community. This also enhances successful reintegration of the amputees to the community. All members of the team should work together to do home visits successfully. This item still needs to be looked at for improvement. Visitation of the amputee's home in preparation for community reintegration is the purpose of rehabilitation in order to prevent a dependent life style after discharge (Dittmar, 1989:106).

5.7.4 ITEM 33 HOME TRIAL LEAVE

Home trial leave is needed for each patient so as to see whether they will adjust after discharge. This help the amputees because they are more able to identify their own needs, in comparison with what is obtained by the rehabilitation team during their visits, such as

accessibility of the home, easy movement of the wheelchair inside the house and to assess the available rehabilitation services in the community.

FIGURE 5.14 HOME TRIAL LEAVE BEFORE DISCHARGE

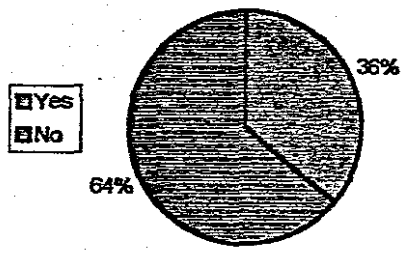


Figure 5.14 shows that (16) 64% amputees were not given home trial leave before discharge as compared to (9) 36% amputees who were given. Amongst the (9) 36% amputees, one requested a leave of absence before discharge because he had no hope of being able to stay at home because of poor infrastructure. This indicates that the amputees are aware that they need to go home for trial leave or visits to see whether they will cope or not. The amputees who were not granted leave of absence experienced problems that they had to deal with on their own until the next follow-up date. These amputees experienced rejection by family, usually because the families were not prepared beforehand to receive the patient. The family members did not know how to care for these amputees and thought that they should not yet have been discharged. These are amputees whose home assessment and visit were not done by the rehabilitation team; therefore family members did not have insight on their care. This is supported by Sakuma (1997:97), who states that the disabled patients who progress favorably in psychological accommodation to disability and restoration of function, still face a problem with home and community adjustment if not well prepared by the rehabilitation team for discharge and integration into the community. He adds that they at times get intrusive assistance, which they do not need.

5.7.5 ITEM 34 PROGRESS MONITORING

The progress of the patient is monitored until the patient is ready for discharge and prepared for community reintegration. Progress monitoring is continuous even after discharge, though the amputees have to attend community rehabilitation centres which are not available in all communities. This item was therefore included to ascertain if amputees were followed up.

TABLE 5.19 COMMUNITY REHABILITATION CENTRES USED FOR PROGRESS MONITORING

Rehabilitation Centres	Frequency	Percentage
Community Rehabilitation Centre	0	0
Hospital	19	76%
Never Monitored Progress	6	24%
Total	25	100%

Table 5.19 indicates that the majority of the amputees were monitored in the hospital (19) 76% as there were no community rehabilitation services (0) 0%. The progress of (6) 24% of the respondents were never monitored at all, and they visited health centres only when they had problems with their stumps or when requiring the renewal of the disability grants. The reason for not monitoring their progress was financial problems as they were breadwinners depending on the disability grant, and health centres were very far away. They were assisted by family members until their stumps healed well and were able to use their rehabilitation aids. The amputees (19) 76% that monitored their progress in the hospital were initially referred to the community health services, but were frequently sent back to the referring hospitals because community services had no resources to cater for these clients. This is supported by Mpanza and Van Tonder (1994:76) that the key helpers of the amputees were mostly women, with 85% of them being wives of the amputees. Chilvers and Browse (1981) in Kubheka and Uys (2001:72) support this statement that amputees do not have sources of assistance for their practical problems and that relatives were the most common helpers.

5.8 SECTION G: HOUSING

This section was included because it was discovered during home access evaluation that some homes were situated in areas where there were environmental barriers, such as roads that were far from houses, no bridges to cross rivers and those that were closer to the roads, had no driveways to the houses. This cause problems to community reintegration of the amputees, therefore housing should be looked at as physical or structural barriers which may hinder the amputees' adjustment to the community. Trombly (1995:315) states that if community assessment is not done well for amputees to identify physical and structural barriers, amputees adapt poorly to the environment after discharge. This item was therefore included to find out if there was any assistance offered to the amputees to prevent or deal with environmental barriers.

5.8.1 ITEM 35 SUITABILITY OF HOUSES FOR ADAPTATION BY THE RESPONDENTS

Inclusion of this question was to determine whether the houses for the amputees were accessible enough for better adaptation, including the house and the road.

FIGURE 5.15 SUITABILITY OF HOUSES FOR ADAPTATION

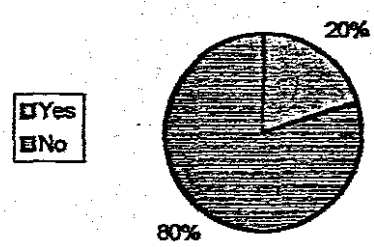


Figure 5.15 indicates that (20) 80% were not assisted with housing assessment, and reported that houses were small, and do not allow free movement especially for bilateral amputees as they use a wheelchair. The respondents reported that even those houses closer to the roads had no driveways, while some driveways were handmade and became

muddy and slippery when it is raining thus confining amputees to the house. Only (5) 20% respondents reported that the houses were suitable for their adaptation.

5.8.2 ITEM 36 BARRIERS EXPERIENCED BY AMPUTEES

The amputees experienced different barriers to adaptation due to the houses which were not suitable for them. This item was therefore included in order to find out about different barriers the amputees experienced

TABLE 5.20 BARRIERS EXPERIENCED BY AMPUTEES

Barriers Experienced by Amputees	Frequency	Percentage
Small Doors	1	4%
Very Small Passages	2	8%
Small Rooms & Toilets	3	12%
No Driveways	3	12%
Muddy Driveways	2	8%
Bumpy or Sloppy Yards	4	16%
Upstairs Bedrooms	1	4%
Pit Toilets Far From the House	4	16%
No Problems Experienced	5	20%
Total	25	100%

Table 5.20 indicates that the majority of the amputees had a problem with adaptation as only (5) 20% experienced no problems, while (4) 16% of the amputees used toilets that were very far from their houses. Bumpy or sloppy yards made it difficult for them to walk as these were lower limb amputees using walking aids; (3) 12% reported small rooms and toilets; (3) 12% had no driveways and as they were bilateral amputees using wheelchairs, it was really difficult to use wheelchairs independently in these situations. (2) 8% reported very small passages, (2) 8% reported muddy driveways, (1) 4% had a room upstairs which could not be altered before the patient's discharge because of financial constraints as this amputee was a breadwinner on a wheelchair, and (1) 4%,

reported that the door was too small. This shows that there is a lot that need to be improved as these amputees could not do any alterations on their own as they were living on disability grants which inadequate.

5.9 SECTION H: EMPLOYMENT AFTER AMPUTATION

This section was included because the majority of amputees depend on disability grants after amputation and do not easily find opportunities for employment. The reason for inclusion was to investigate whether the amputees were prepared or assessed for employment before they were discharged.

5.9.1 ITEM 37 PREPARATION FOR EMPLOYMENT

TABLE 5.21 PREPARATION FOR EMPLOYMENT

Preparation For Employment	Frequency	Percentage
Full Work Assessment	14	56%
Restraining For Old Work	2	8%
Progress Evaluation Done	14	56%
No Preparation	11	44%

Table 5.21 shows that (14) 56% amputees were given a full work assessment and the same (14) 56% underwent progress evaluation. These were the amputees who stood good chance of being employed after discharge if considered. (11) 44% of the amputees were not prepared for employment while they were still in the hospital, had no motivation working and were ready to depend on the disability grant. Only (2) 8% managed to return to their old work after retraining from the group of (18) 36% that were retrained. Mbeki (1997:37) supports this findings in that people who receive social security benefits in South Africa tend to be totally dependent on it for their survival, and also because an estimated 99% of disabled people are excluded from employment in the open labour market. Amputees need to undergo extensive assessment and preparation for going back

to their previous jobs or to be trained for new jobs because they are mostly psychologically sound.

5.9.2 ITEM 38 WORK THAT WAS DONE BY AMPUTEES

This item was included to establish whether amputees who were retrained to go back to their old work, could work productively or not.

TABLE 5.22 WORK THAT WAS DONE BY AMPUTEES

Type of Work Done by the Amputees	Frequency	Percentages
Machinist	1	4%
General Assistant	1	4%
Total	2	8

Table 4.22 indicates that (23) 92% of the amputees did not work, and that even those who did undergo a full work assessment could not be considered for work. Only (2) 8% amputees who were retrained, could work. One was a patient with a unilateral lower limb below knee amputation with prosthesis, and worked as a machinist in the paper industry. The second one worked as a general assistant in a cotton wool company, making cotton wool balls. This client had abilateral below knee amputation and had prosthesis on both limbs, using crutches. Both amputees were happy with the work they were doing and were managing well.

5.9.3 ITEM 39 ASSISTANCE WITH EMPLOYMENT

Inclusion of this item was to determine whether the Department of Manpower do assist the amputees with employment.

FIGURE 5.16 ASSISTANCE WITH EMPLOYMENT

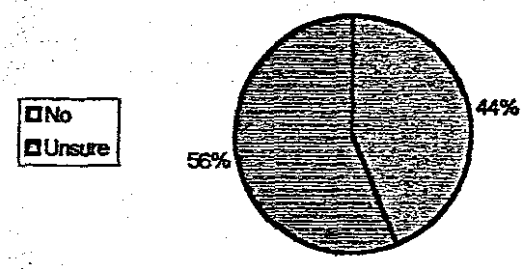


Figure 5.16 reveals that (14) 56% of the amputees were not sure of the Department of Manpower's assistance with employment as compared to (11) 44% who did not know anything about the Department and did not get any assistance with employment. This means that there was no collaboration between the health services and the Department of Manpower. This is supported by Mbeki (1997), in that the creation of employment opportunities for people who are physically challenged will only come about if a number of government departments, as well as key stakeholders in the non-governmental organisations and private sectors, work together.

5.9.4 ITEM 40 COMMUNITY INVOLVEMENT

This item was included because after community reintegration of amputees, it is the duty of the community to accept the amputees as full members of the community through active participation in all the activities in that community.

FIGURE 5.17 INVOLVEMENT OF COMMUNITY IN EMPLOYMENT OF THE AMPUTEES

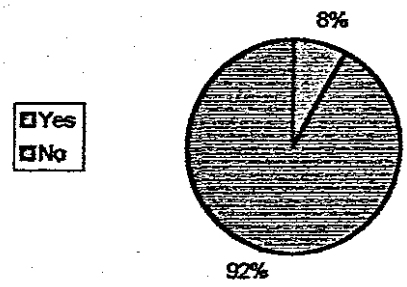


Figure 5.17 reflects that the majority of the amputees (23) 92% did not get assistance from their communities as far as employment is concerned. Only (2) 8% reported that they did get assistance from their community. One amputee joined a community development group under the Department of Agriculture, who were running a project that was empowering the community members to develop gardens, and supported them to make sure that their gardens flourished. They collaborated with small business entrepreneurs to sell the harvest. This client was an upper limb amputee. The second amputee had a bilateral lower limb amputation using a wheelchair. He joined a community development group that had a sewing industry where they were sewing uniforms and knitting jerseys for local schools. They had contracts with all the local schools to buy new uniforms, and do mending or alterations for these schools. This amputee had never worked before but this community supported him and taught him how to use a hand machine, and was employed in the same company. He is the only member using a hand machine. This respondent was very proud of the community group and even though he got less money than the others, was accepted like any other member of the community. Ndlovu (1998:83) supports this statement by stressing that even though there

are community group projects, there is a need for financial support to make these projects last. This reveals that there is a great need for community development group projects and financial support to sustain them, as this is the only way that the community can assist amputees with employment.

5.10 SECTION I: TRANSPORT

This section was included because of the concern that many amputees do not attend followup clinics but only visit health centres when they have complications. The reason they give was that they did not have transport or transport was very far from where they stay. This was due to lack of infrastructure. A further reason was that transport is very costly.

5.10.1 ITEM 41 AVAILABILITY OF TRANSPORT FOR AMPUTEES

TABLE 5.23 AVAILABILITY OF TRANSPORT FOR AMPUTEES

Availability of Transport	Frequency	Percentage
Train	2	8%
Buses	3	12%
Taxis	10	40%
No Transport	10	40%
Total	25	100%

Table 5.23 indicates that (10) 40% used taxis as they complained that other means of transport was not user friendly. They were not designed for amputees as one do not easily find a seat and the drivers are not patient enough to wait till a person sits down, and had small passages. Other (10) 40% amputees reported that they had no transport because the roads were far from their residential areas and they therefore had to hire cars to transport them, using small handmade roads. Only (3) 12% used buses, as they were the only means of transport available as compared to only (2) 8% who used the train. The amputees that used the train also had difficulty, as there were many steps to and from the

station. These were amputees with lower limb amputations using crutches. This shows that provision of transport that is specially designed to accommodate the amputees is essential.

5.10.2 ITEM 42 DISTANCE TRAVELLED BY AMPUTEES TO THE HEALTH CENTRES

TABLE 5.24 DISTANCE TRAVELLED BY AMPUTEES

Kilometers Travelled by Amputees	Frequency	Percentage
Less Than 5km	4	16%
Less Than 10km	10	40%
Less Than 15km	3	12%
Above 15km	8	32%
Total	25	100%

Table 5.24 reveals that (10) 40% travel a distance less than 10km, (8) 32% travel less than 15km (4), 16% travel less than 5km and (3) 12% travel a distance less than 15km. This means that only (4) 16% amputees travel within an acceptable distance that was assessable and affordable. All other respondents travel long distances that are above an acceptable distance. WHO (1998:13), cited in Vlok(1995:350), supports this finding in that by year 2000, health should be accessible and affordable to all. There is much that needs to be done by both the Department of Health in collaboration with the Department of Transport to provide transport for the long distances being travelled by amputees to the health care centres.

5.11 SECTION J: REHABILITATION AIDS

The inclusion of this section is important because rehabilitation aids help the people with amputations to become fully participating members of society, with access to all the benefits and opportunities of that society. It was also included to determine whether the amputees were using rehabilitation aids or not and to find out if they were managing to purchase them and use them. If they are not able to purchase them, who provides them and maintain them.

5.11.1 ITEM 43 TYPES OF REHABILITATION AIDS USED BY AMPUTEES

TABLE 5.25 TYPES OF REHABILITATION AIDS USE BY AMPUTEES

Types of Rehabilitation Aids Used	Frequency	Percentages
Prosthesis	12	48
Crutches	6	24
Wheelchairs	7	28
Other	–	–
Total	25	100%

Table 5.25 indicates that respondents used different types of rehabilitation aids in accordance. Most amputees were using prosthesis for mobility (12) 48%, followed by wheelchairs (7) 28% and (6) 24% were using crutches. This is an indication that amputees needed to use these aids in order to be mobile. The aids are very expensive, and need frequent repairs and replacements. It is important that specific suppliers are identified to provide them, since most of the amputees are not working.

5.11.2 ITEM 44 PROVISION OF REHABILITATION AIDS

Provision of rehabilitation aids has been considered to be an essential factor because it has been found that the majority of the amputees were dependent on the disability grant, were breadwinners and were unemployed.

TABLE 5.26 PROVISION OF REHABILITATION AIDS

Donor or Institution that Provided the Rehabilitation Aid	Frequency	Percentage
Donation from Non-Governmental Organization	1	4%
Hospital	18	72%
Purchased from the Special Aids Shop	6	24%
Provision at Community Centres	–	–
Total	25	100%

Table 5.26 shows that most amputees (18) 72% received rehabilitation aids like wheelchairs from the hospital at a lesser cost, (6) 24% purchased rehabilitation aids from the special aids shops, and (1) 4% received these from a non-governmental organization. No rehabilitation aids were provided at the community centres. The hospital also maintain these rehabilitation aids free or at a lesser cost, for example the amputees pay for consultation, but if rubber tips for the crutches of the same amputee are worn out, they are replaced free of charge. If the crutches are broken, amputees have to purchase new ones at a lesser cost than in the special aids shop. These rehabilitation aids were more affordable in the hospitals than in the special aids shops, but for the amputees who only depend on disability grant being breadwinners, even hospital rehabilitation aids were not affordable. According to Mbeki (1999:302), without access to these devices, disabled people endure prolonged periods of hospitalization and are dependent for longer periods, continue to be accommodated in segregated "special" institutions where they were cared for and continue to experience great difficulties in securing rights to education, employment and other forms of participation in society. It is therefore a challenge for the Government to provide free rehabilitation aids in its institutions to provide for those who cannot afford purchasing of rehabilitation aids.

5.11.3 ITEM 45 AVAILABLE COMMUNITY SERVICES

Community services form part of rehabilitation centres as they assist in helping disabled people to become fully participating members of society and they in turn become supportive services for the disabled. They are also engaged in a rehabilitative strategy of community involvement.

TABLE 5.27 AVAILABLE COMMUNITY SERVICES

Available Community Services	Frequency	Percentage
Society for Disabled	1	4%
Home Help Community	12	48%
Groups	–	–
Home Adaptive Grants	–	–
Occupational Workshops	–	–
Meals on Wheels	–	–
All of the Above	–	–
None	12	48%
Total	25	100%

Table 5.27 indicates that (12) 48% amputees received help from community groups available to help them, (12) 48% reported that there were no community services available in the community where they live and only (1) 4% was exposed to a society for the disabled. Dittmar (1989:430) states that the rehabilitation process requires a number of supportive services, but its impetus must come from community action and involvement. This means that this item has to be looked at for improvement as half of the respondents had no community supportive services available for them.

5.12 SECTION K: PROBLEMS ENCOUNTERED

Inclusion of this section was based on the problems that were being encountered by the amputees soon after discharge. These problems were either physical, if the amputees were not well prepared for discharge or not given enough health education about stump care. The other problems were socially related, when the amputees could not financially afford visits to the health care centres for stump care, if they were offered there.

5.12.1 ITEM 46 PROBLEMS EXPERIENCED BY AMPUTEES AT HOME

TABLE 5.28 PROBLEMS EXPERIENCED BY AMPUTEES AT HOME

Problems Experienced by Amputees at Home	Frequency	Percentage
Physical Problems		
Septic Stump Wound	5	20%
Non-fitting of Prosthesis	5	20%
Inability to use Prosthesis	10	40%
Psychosocial Problems		
Financial Problems	23	92%
Depression	25	100%
Rejection, Stigmatization and Poor Perception	4	16%
Housing Unsuitable for Adaptation	20	80%
Environmental Barriers		
No Driveways	3	12%
Muddy Driveways	2	8%
Bumpy, Sloppy Yards	4	16%
Pit Toilet Far From the House	5	20%
Vocational Problems		
Unemployment	23	92%

Table 5.28 reveals that amputees experienced physical, psychosocial and vocational problems. Psychosocial problems, especially depression, were expressed by all amputees (25) 100%, as loosing a limb causes anxiety and makes one uncertain about life. Financial problems were also a major issue for (23) 92%, because even amputees who were getting disability grants were breadwinners and the disability grant is too small to support the family. Another major problem was vocational, whereby the majority of the amputees experienced unemployment (23) 92%. Even amputees who had undergone a full work assessment were never employed. Another psychosocial problem that was experienced by most amputees was housing that was not suitable for adaptation for the amputees (20) 80%, since there were no modifications done, doors were small and the house itself small and restricting movement in the house. Physical problems were the inability to use a prosthesis (10) 40%, as these amputees ended up by not using the prosthesis, with non-fitting of the prosthesis (5) 20%, as patients did not get enough support from home. The stump needs to be molded or coned in preparation for fitting into the prosthesis and septic stump wounds occurred in (5) 20% cases, due to inadequate wound care. Some amputees experienced rejection, stigmatization and poor perception (4) 16%. Environmental barriers also posed a problem to adaptation of amputees at home, namely, pit toilets far away from the houses (5) 20%, bumpy sloppy yards (4) 16%, no driveways (3) 12%, and if they were available, they were very muddy and slippery, and unable to be used on a rainy day (2) 8%.

These problems may seem to be minor, but when not attended to become major issues as stump wounds could become septic such that the client may even require revision of the stump. Financial problems and unemployment became the predisposing cause for all the problems, as amputees defaulted follow-up appointments, could not care for themselves physically or psychosocially and became stressed as they could not provide for their families. Among these amputees there were those who visited local health centres but could not get relevant care, as there were no resources.

CHAPTER 6

SUMMARY, CONCLUSIONS, LIMITATION AND RECOMMENDATIONS

6.1 INTRODUCTION

This chapter presents a brief overview of the project. The areas of emphasis will be a summary of the findings, conclusions, limitations and recommendations. These might serve as a guide for further scientific enquiry into the subject under investigation.

6.2 SUMMARY

The title of the study was an evaluation of community based rehabilitative care given to amputated patients living in the suburban area north of Durban Metro Region "F".

This study focused on the rehabilitative care given to amputated patients in the community in terms of:

- Physical rehabilitation
- Psychological rehabilitation
- Social rehabilitation
- Vocational rehabilitation
- Problems encountered.

The research questions were as follows:

- Are there any facilities for community-based rehabilitative care in the suburban area?
- If any, are these facilities for community-based rehabilitation adequate?
- Are the rehabilitation facilities properly utilized by the amputees and their families?
- Do amputees experience physical, psychosocial and vocational problems in the community?

6.2.1 RESTATEMENT OF ASSUMPTION AND OBJECTIVES

Emanating from the above questions, the following assumptions were made:

- Proper community-based rehabilitation can contribute to successful adjustment of the amputees with their physical, psychosocial and vocational needs.

Based on the above assumption the following objectives were formulated for the study:

6.2.2 OBJECTIVE 1

To identify various community-based rehabilitation services available to amputees in the Durban Metro Suburban community area, North Region "F".

6.2.3 OBJECTIVE 2

To evaluate physical, psychosocial and vocational rehabilitative care rendered to the amputees.

6.2.4 OBJECTIVE 3

To identify problems experienced by the amputees at home after discharge.

6.2.5 OBJECTIVE 4

To make recommendations for the improvement of better community based care.

6.3 The research report were presented in six chapters:

In chapter one the researcher discussed the introduction under the following headings: motivation, statement of the problem, assumptions, research questions, objectives of the study, and definitions of certain concepts used in the text.

Chapter two presented an overview of the literature reviewed on community based rehabilities.

Chapter three described the theoretical framework which forms the basis of the study.

Chapter four presented the methodology used for the study.

Chapter five focused on analyzing and presentation of data obtained from the amputees.

Chapter six presented the summary, conclusions, limitations and recommendations.

6.4 LIMITATIONS

- There was a delay in obtaining the permission to conduct the study, therefore the study was conducted over a shorter period of time than originally envisaged and the researcher could therefore not include the larger sample as planned.
- The generalization of the research results was limited by the fact that the research only focused on amputees living in the suburban and rural communities north of Durban Metro, thus the results might not be generalisable to the amputees living in other communities.

6.5 CONCLUSION

Conclusions were dealt with in accordance with the objectives and related questions.

6.5.1 OBJECTIVE ONE

To identify various community-based rehabilitation services available for amputees in the Durban Metro Suburban area, North Region "F".

6.5.1.1.1 AVAILABILITY OF COMMUNITY REHABILITATION CENTRES FOR THE AMPUTEES

- The study revealed that (22) 88% amputees did not use rehabilitation centres because there were none. The amputees who were referred to community health services for minor rehabilitative services were turned back to the referring hospitals. The reason for this was that the community health centres had no resources to cater for the

amputees, for instance, surgical sundries for wound dressing and rubber tips crutches. Only (3) 12% amputees attended private rehabilitation centres because were on medical aid schemes and treated by private hospitals.

- Six (6) 24% of amputees never monitored their progress at all because the hosp they were using were too far. Even if the community-based rehabilitation serv were lacking most amputees were rehabilitated in the hospitals before discharg different rehabilitation team members.
- Twenty (20) 80% amputees were seen and rehabilitated by the physiotherapist was responsible for evaluating, prevention and managing disorders of human mo by doing exercises of the joints above the stumps.
- Twenty (20) 80% amputees were rehabilitated by the occupational therapist, who responsible for maintaining and restoring physical and psychological abilit functions in preparation for return to work, family, school or community.
- Twenty (20) amputees were also treated by the social worker. The social worker responsible for assessing family support systems and assist clients and familie alleviating or solving of personal problems that surfaced during the injury.
- Only (2) 8% of amputees were seen by the psychologist and (1) 4% by psychiatrist in order to solve their psychological problems. This category of rehabilitation team was severely lacking. This category is essential because amp experience many psychological problems.
- Vocational rehabilitation counselors were also not available, thus only (1) amputee was seen by this category. The responsibilities of this team member i provide employment evaluation, treatment, training, placement and follov evaluation for the amputees.
- Another category of rehabilitation team members that is important is a rehabilita nurse. There are no properly trained rehabilitation nurses. Only (2) 8% amputees v assisted by the rehabilitation nurse in the private hospitals since there were none ir public hospitals. This nurse provide valuable help to the rehabilitation team. gathers all the information about the disabled patients and act as a coordinato rehabilitation services for all rehabilitation team members.

6.5.2 OBJECTIVE TWO

To evaluate physical, psychosocial and vocational rehabilitative care rendered to the amputees in the hospitals.

6.5.2.1 PHYSICAL REHABILITATION

It is the responsibility of the rehabilitation team to educate the patients about physical rehabilitation before they are discharged. This facilitates active participation of patients in their care as well as independence after discharge. This was mostly done in their hospitals since there were no community rehabilitation centres. Physical rehabilitation of the amputees included care of the stump and care of the prosthesis.

6.5.2.1.1 CARE OF THE STUMP

The activities or procedures involved in the care of the stump were:

- Wound cares.
- Stump bandaging for coning the stump.
- Massage of the stump.
- Stump positioning.
- Stump exercise.

Teaching amputees about all these activities is very important because they are discharged before the stumps have healed completely; therefore discharge preparation should commence while amputees are still in the hospitals.

- This study revealed that the majority of the amputees (20) 80% were educated about wound care.
- Fifteen (15) 60% amputees were educated about stump care.
- Fourteen (14) 56% of amputees were educated about stump massage.
- Ten (10) 40% amputees were educated about positioning of the stump.
- Ten (10) 40% amputees were given health education on exercises of the stump.

- Fifty-one (51) of the amputees who were not taught, and stated that they did these activities on their own by observing amputees who were taught. The amputees revealed that they were aware of complications if they did not do these activities on their own.

6.5.2.1.2 CARE OF THE PROSTHESIS

The activities or procedures that were involved in the care of the prosthesis were:

- Care and coning of the stump in preparation for fitting of the stump into the prosthesis.
- Care and wearing of the stockings.
- Care and use of the prosthesis.
- Fitting of the prosthesis.

The majority of the amputees (15) 60% revealed that they were not well educated on all the activities, except fitting of the prosthesis and use of the prosthesis by (14) 56%, and (24) 56% about the use of the prosthesis. Fewer amputees (11) 44% were taught about care and coning of the stump, (10) 40%, and care and wearing of the stocking (11) 44%. The number of amputees who were not taught range between 44% and 68%.

Members of the rehabilitation team involved in education of amputees about the prosthesis were:

- Fifteen (15) 60% amputees were seen by the physiotherapist. The physiotherapist is responsible for exercise of the limbs after the amputees have fitted the prosthesis so that the amputees use the prosthesis as if it is their own limb.
- Another (10) 40% amputees was seen by the prosthetist who is responsible for issuing different types of the prosthesis, and measures the limbs of the amputees in order to choose the correct fit to the amputees. The prosthesis and assesses the amputees even after fitting of the prosthesis and follow-up care is done even after discharge, to make sure that the amputees are comfortable with their prosthesis.
- Four (4) 16% were seen by the occupational therapist who continued with restoration of function after fitting of the prosthesis, and functional assessment if amputees could be placed back in their old work or do new work.

- Another (4) 16% were seen by the medical practitioner, (2) 4%, and by the ordinary professional nurse (2) 4%. The reason for this is that rehabilitation team were not all available in public hospitals, and therefore these amputees had to report their problems with the prosthesis to the personnel available.
- Only one (1) 4% amputee managed to be seen by the rehabilitation nurse for further education about the prosthesis.

6.5.2.2 PSYCHOSOCIAL REHABILITATION

Psychosocial rehabilitation includes psychological care and rehabilitative care given to amputees by the rehabilitation team.

65.2.2.1 PSYCHOLOGICAL CARE

Psychological care involves adjusting to change in body image. The role of the rehabilitation team is to assist the client and the family to achieve a positive response, assist with acceptance of physical impairment and to adjust to the environment following disability.

The findings of the study revealed that all the members of the health team were involved in this aspect:

- Most amputees (20) 80% were given a chance to be with their family members and relatives to share their experiences, except (5) 20% whose families were far from the hospitals where they were admitted.
- Diversional therapy was provided in the form of:
    - Television in all wards where the amputees were admitted (25) 100%.
    - Ten (10) 40% accessed newspapers, which were provided by their families.
- Fifteen (15) 60% amputees managed to get a chance to visit old coping amputees for support; this assisted amputees to know how other amputees were coping with their disabilities.
- Ten (10) 40% amputees managed to visit the limb-fitting centre to share their experiences with amputees whose stumps had healed and were to fit their prosthesis. It also helped them to see different types of prostheses.

- In spite of the support by family and team members, the findings reveal that four amputees had prolonged denial and showed sign of depression.
- Two (2) 8% of amputees were seen by the psychologist until they became better.
- Two (2) 8% had complications due to major depression and were seen by the psychiatrist, who put them on treatment and continued monitoring them.

6.5.2.2.2 SOCIAL CARE

There are social factors related to amputees, including:

-FINANCIAL ASSISTANCE

The study indicated that (22) 88% amputees were breadwinners who could not depend on a disability grant only and really needed financial assistance. Among these amputees:

- Twenty (20) 80% amputees discussed their needs for financial assistance with the social workers;
- Only eleven (11) 44% amputees were receiving disability grants.
- Fourteen (14) amputees were not receiving disability grants, which meant that the social worker had to intervene to assist these amputees to get their disability grants.

-FINANCIAL HISTORY

The findings of this study indicate that:

- Twenty (22) 88% amputees were breadwinners before injury and could not depend on disability grants only to support their families;
- Nine (9) 36% respondents reported they could not support their families at all after amputation as the disability grant was inadequate and they needed financial assistance. There was no assistance so far from the Government except the disability grant.
- Four (4) 16% amputees who received financial assistance were assisted by their families.

-DISABILITY GRANT

The disability grant is important even if the person is not a breadwinner because the prosthesis and rehabilitation aids undergo wear and tear and therefore require maintenance. Not all amputees received disability grants before or after discharge:

- The results reveal that (14) 56% amputees received disability grants.
- Eleven (11) 44% did not receive disability grants but the application procedure was started while the amputees were still in the hospital. It is the responsibility of the social worker to follow up the processing of these disability grants once the application has been submitted.

-HOUSING AND BARRIERS EXPERIENCED BY AMPUTEES

It was found in this study that the houses that were used by the amputees were not suitable for adaptation of the amputees after discharge from the hospital:

- Eighty percent (80%) amputees reported that their houses were very small, did not allow free movement, especially for bilateral amputees as they were using wheelchairs, there were no driveways, and even those that were there were handmade and became very muddy and slippery on rainy days, thus confining the amputees to the house.
- Four (4) 16% amputees reported that the toilets were outside, very far from the houses and therefore inaccessible.
- Five (5) 20% amputees responded that their houses were suitable for their adaptation. Four (4) 16% of these amputees had upper limb amputations and (1)4% of these amputees had a house that was modified with the assistance of the family. No assistance was received from the Department of Housing.

-ASSESSMENT OF THE AMPUTEES READINESS FOR COMMUNITY REINTEGRATION

Amputees have to be physically and psychologically prepared to be introduced into the community:

- Seventeen (17) 68% amputees were assessed for readiness to be introduced into the community.
- Eight (8) 32% amputees were not assessed for readiness for community reintegration. These are the clients who experience more barrier problems as well as psychological problems as they are introduced into the community.

HOME VISITS BY THE REHABILITATION TEAM MEMBERS

Visitation of the amputees' home in preparation for community reintegration is the purpose of rehabilitation in order to identify environmental barriers, thereby preventing a dependent life style after discharge (Trombly, 1995:305). This study made it evident that home visits are not done as (24) 96% amputees reported that their homes were not visited. Only (1) 4% amputee that was attending private hospitals was visited.

REHABILITATION TEAM MEMBERS THAT VISITED THE AMPUTEES HOME

Only (1) 4% member visited one amputee. The rehabilitation team member that visited was the rehabilitation nurse who is not employed in the government hospitals. All the amputees who had problems at home after discharge presented themselves to the hospital to report their problems instead of these problems being detected by team members during the visit.

HOME TRIAL LEAVE

It is the aim of the rehabilitation team to grant home trial leave for each amputee. This gives the amputees the opportunity to discover if they are accepted in the community, accessibility of the environment, to know if their activities of daily living will be met as well as recreational activities. This study revealed that amputees still experience stigmatization and rejection by the community as well as by family members:

- Sixteen (16) 64% amputees were rejected by their families. Their families thought it was too early for the amputees to be discharged. These were the respondents who were not given home trial leave and whose families were not prepared by the rehabilitation team to receive these patients.

TRANSPORT

It is the aim of community rehabilitation that community based rehabilitation services are in the communities where people live and therefore should be accessible to all health care users. This is made possible through provision of enough transport or short distances to travel to health centres.

AVAILABILITY OF TRANSPORT

The findings of this study show that some amputees had transport and while others did not have transport:

- Ten amputees (10) 40% reported that they had no transport because the roads were far from their residential areas and, they had to hire cars to take them, using small hand made roads.
- Another ten amputees (10) 40% responded that they used taxis which are cramped for space and therefore difficult to fit them in with their rehabilitation aids, but that they preferred them in comparison with other means of transport, like buses and trains. These means of transport are not user friendly, drivers do not have the patience to wait for them to get a seat before they move, at times buses are full and they do not get a seat and also have small passages that do allow free mobility with their rehabilitation aids.
- Three (3) 12% used buses because they were the only means of transport available.
- Two (2) 8% amputees used the train, which was the most convenient and affordable means of transport for them. These amputees reported that they also experienced problems because there were many steps to and from the station. These were amputees with lower limb amputation using crutches.

DISTANCE TRAVELLED BY AMPUTEES

The study results show that the amputees traveled long distances to the health care centres.

- Ten (10) 40% amputees traveled between 5 km and 10km.
- Eight (8) 32% amputees traveled more than 15km
- Four (4) 16% traveled less than 5km which was the only acceptable distance from a rehabilitative care point of view.

- Three (3) 12% amputees traveled between 10km and 15 km.

This study clearly shows that the amputees really needed assistance with transport.

AVAILABILILTY OF COMMUNITY SERVICES

Community services form part of rehabilitation as they keep the amputees occupied until they become full participating members in all the activities present in the community service, like the society for the disabled.

The findings of the study reveal that:

- Only (12) 48% of amputees had home help groups in their communities.
- Only (1) 4% amputee had a society for the disabled in the community where he lived.

6.5.2.3 VOCATIONAL REHABILITATION

It was essential for this study to evaluate the preparation and employment status of amputees as this affects their rehabilitation. The amputees who were working before amputation required work assessment, to see if they were fit for their old employment or needed retraining for placement. Those amputees who were not working before amputation also needed to be reskilled for placement in the open labour market or a sheltered employment workshop.

PREPARATION FOR EMPLOYMENT

The findings of the study made it evident that only half of the respondents were prepared for employment.

WORK ASSESSMENT

- Fourteen (14) 56% amputees received a full work assessment before discharge from the hospital. They were the amputees who had a good chance for employment, if they were considered.

- Eleven (11) 44% amputees reported that they were not prepared to work as work assessment was not done. They were the clientd who remained unsure whether they could return to work or not, then became demotivated and thus dependent on a disability grant.

RETRAINING AND EMPLOYMENT

The study revealed that only (2) 8% amputees were retrained for their old work and manage to return to their old work. Progress monitoring was done on these amputees and they reported that they adapted well to the work environment. One amputee worked as a machinist, another as a general assistant.

ASSISTANCE WITH EMPLOYMENT

GOVERNMENT

It is the responsibility of the government through the Department of Manpower to assist with employment. The finding of the study clearly shows that nothing was done by government to assist the amputees with employment in the open labour market.

COMMUNITY INVOLVEMENT

The community was involved in assisting the amputees with employment, though only a small number of amputees were assisted.

Only (2) 8% amputees were assisted by the community for employment. One amputee joined a community development project under the Department of Agriculture.

The second amputee who was using a wheelchair joined the community development group that had a sewing industry for school uniforms. Both amputees responded that they were happy and coping well with the work they were doing.

SHELTERED EMPLOYMENT

After work assessment, amputees who are fit for employment are retrained to return to their old work or sheltered employment workshops with the assistance of the Department of Manpower. The findings revealed that:

- Twenty-four (24) 96% remained unemployed, except those who were self employed.
- Only one (1) 4% was placed in the sheltered employment workshop. No assistance was received from the Department of Manpower.

CATEGORIES OF PERSONNEL INVOLVED IN RETRAINING

There are specific members of the rehabilitation team that are responsible for retraining of the amputees. The findings of the study reveal that the amputees were seen by the following members:

- Four (4) 16% amputees responded that they were retrained by the occupational therapist.
- Three (3) 12% amputees reported that they were retrained by the physiotherapist.
- One (1) 4% amputee reported that he was retrained by the vocational rehabilitation therapist. This is the only member of the rehabilitation team who is responsible for retraining of the amputees.

In spite of these constraints the clients were not neglected but seen by the physiotherapist and occupational therapist, who are not specialists in this field. The amputee that was seen by the vocational rehabilitation counsel or was attending the private hospital. This indicates there is a need for a vocational rehabilitation counselor in government hospitals.

6.5.3 OBJECTIVE 3

To identify problems encountered by the amputees at home after discharge.

6.5.3.1 PHYSICAL PROBLEMS

SEPTIC STUMP

In spite of health education on physical care (5) 20% of the amputees experienced problems with their stump wounds. The reasons were:

- There was no family support to assist with dressings.
- Inability to reach community health centres as they were far from where they lived.
- Lack of surgical sundries in the local community health care centres.

NON-FITTING PROSTHESIS

The amputees experienced problems with the prosthesis, which were not fitting properly. Five (5) 20% amputees had this problem. The reasons were:

- Poor molding of the stump due to failure to cone the stump.
- Inaccurate measurement of the stump fitting of the prosthesis.

INABILITY TO USE PROSTHESIS

A further problem that was experienced was an inability to use the prosthesis, as (10) 40% amputees stated that the reason for this problem was:

- The prosthesis was too heavy and very uncomfortable.
- The stump wounds that had healed redeveloped after the use of the prosthesis. This was due to failure of using the stocking before fitting the prosthesis.

6.5.3.2 PSYCHOSOCIAL PROBLEMS

FINANCIAL PROBLEMS

- Financial problems were reported by (23) 92% amputees because not all amputees were getting disability grants.
- Even those amputees who were getting disability grants felt it was inadequate as they were breadwinners of their families.

DEPRESSION

Depression was another problem that was identified from all the amputees. All respondents 100% initially experienced depression together with denial, which improved as they continued adjusting with their altered body image, except (4) 16% who required consultation by the psychologist and psychiatrist.

REJECTION, STIGMATISATION AND POOR PERCEPTION

Rejection, stigmatisation and poor perception by the community and family were experienced, as the families thought it was too early for the amputees to be discharged. This was due to lack of proper discharge preparation.

HOUSING

Housing inaccessibility due to lack of support by the Department of Housing. This includes public buildings.

- Twenty (20) 80% amputees indicated that they experienced inaccessibility to their homes because of environmental barriers:
    - Small doors (1) 4% amputees
    - Very small passages (2) 8% amputees
    - Small rooms and toilets (3) 12% amputees
    - No driveways (3) 12% amputees
    - Muddy driveways (2) 8% amputees
    - Bumpy, sloppy yards (4) 16% amputees
    - Upstairs bedrooms (1) 4% amputees
    - Pit toilets far from house (4) 16% amputees
    - Steps in public buildings (25) 100% amputees.

TRANSPORT

Transport was inaccessible as there were no driveways and some amputees were staying far from the bus stops. Special transport to be used by the amputees using wheelchairs were not available.

DISCHARGE PREPARATION

The findings revealed that discharge preparation was incomplete:

- Home visits were not done to all the amputees except one (1) 4% who attended the private hospital.
- Home trial leave was not granted to the amputees (16) 64%, only (9) 36% managed to visit their homes to see whether they would cope after discharge or not.
- Disability grants which should have been taken care of while respondents were still in the hospital were not done, as only (11) 44% were receiving disability grants during the time of the study.
- Progress monitoring of the amputees or follow up care for (6) 24% were not done resulting in financial problems, as their disability grants were was still being processed and health care centres were very far from where they lived.

VOCATIONAL PROBLEMS

The main vocational problem that was experienced by the amputees was unemployment.

- Twenty (23) 92% amputees were unemployed. Even the amputees that were vocationally trained were unemployed in both the open labour market and sheltered employment workshops.
- Respondents felt that they were discriminated against because of the disability.

6.5.3.3 OTHER FACTORS

MEMBERS OF THE REHABILITATION TEAM

The findings revealed that the government health services did not have complete multidisciplinary team members. All respondents reported that there were no rehabilitation nurses and vocational rehabilitation counselors, except (1) 4% amputee who attended the private hospital and was attended by these members of the rehabilitation team.

6.5.4 OBJECTIVE 4

To make recommendations for the improvement of community based care.

In the light of the foregoing findings the researcher recommends the following:

6.5.4.1 COMMUNITY REHABILIATION SERVICES

The research findings revealed that there were no community rehabilitation service in the area under investigation. It is suggested that at least the rehabilitation team members be made available in the existing local community centres with all the required rehabilitative equipment so that clients would not have to travel long distances to the referral hospitals to get help. In the areas where local clinics are far the amputees' houses, mobile rehabilitation clinics to reach the clients at their closest convenient points.

6.5.4.2 SURGICAL SUNDRIES

The problem of unavailability of surgical sundries lead to delayed wound healing and sepsis of stump wounds. To make sure that clients are well educated on how to dress a stump wound, demonstrations should be done in the presence of family members. The amputees should be given opportunities to dress themselves while they are still in the hospital until they are efficient and cost effective in the use of surgical sundries. This would also give the rehabilitation team members the opportunity to evaluate the patients and discharge those who will be able to manage themselves at home. Enough surgical sundries should be issued to the amputees, that is, stock that would last until the next follow-up date. The local community services should have enough surgical sundries in stock to meet the needs of all the clients.

6.5.4.3 DISCHARGE PREPARATION

INVOLVEMENT OF THE FAMILY

The family forms the important part of rehabilitation team therefore it is essential that they are involved in discharge preparation. This should be done before and after amputation while the patient is still in the hospital. Empathy by the family members should be encouraged instead of sympathy. The family members should be encouraged to support the amputees at all times. All the education given by the rehabilitation team members should focus on both patient and the family so that they are supported both physically and psychosocially. The family members should be made aware of the activities of daily living that can be managed by the amputees and where they need assistance, especially bilateral amputees, as it take time to learn difficult procedures like getting out of the wheelchair into the bed and from the bed into the wheelchair.

The family should be educated about psychosocial care, that is, accepting the client as a human being as before amputation. This would improve the patient's self-esteem. The rehabilitation team should work together with the family to encourage the amputees to be involved in community activities which will boost the amputee's morale and self-image. The family should know about the disability grant that would enable the amputee to look after himself. The client and the family should be made aware of the community resources available, like a society for the disabled, though these are very few. Even if there is no community resource available, the community should be encouraged to be involved in their rehabilitation and be creative with the support of the rehabilitation team, for example with amputees that were from the rural area where there were no resources at all. This would remove stigma, rejection and poor perception of the amputees.

6.5.4.4 HOME TRIAL LEAVE

The rehabilitation team members should make sure that home visits are done to all the amputees in order to identify areas that would prevent amputees' adaptation to the community, like environmental barriers. Signs of amputee's rejection by the family members could be identified by the rehabilitation team during this period.

Home trial leave should be granted to all the amputees. This helps them to assess whether they would be able to cope with the environment or not.

Arrangements for alterations or environmental modification could be done for those amputees who really find it difficult to adapt to the environment. The departments of housing and transport should be actively involved in this aspect.

6.5.4.5 FOLLOW-UP CARE

Follow-up care should be done within the first month after discharge depending on the condition of the stump. This should be done either in the hospital or community health centre, provided the rehabilitation team is available to monitor progress. Progress monitoring should include assessment of the stump condition including wound care if the wound has not healed. Condition of the prosthesis, ability to use the prosthesis and adaptation to the environment should be included.

Record keeping is essential for all amputees' appointments, to record those who kept appointments and trace defaulters. This would help to identify amputees with problems early before stump wounds become septic.

6.5.4.6 REHABILITATION TEAM MEMBERS

Effective rehabilitation requires a team approach. In order to improve the health status of the amputees and other physical and mental challenged individuals, the government should improve and provide provision of all the members of the rehabilitation team in the government hospitals.

6.5.4.7 ACCESSIBILITY TO HOUSES AND PUBLIC BUILDINGS

HOUSING

It is important to initiate negotiations with the Department of Housing to assist the amputees in modification of their houses to prevent environmental barriers. Public buildings should

also be made accessible for the amputees either by building ramps, lifts or escalators to enable them to visit places of entertainment or enter the workplace.

TRANSPORT

Public transport specially designed for the disabled should be available in all communities, for instance, buses that have wide passages and space for wheelchairs. This would be comfortable for the amputees unlike ordinary buses and taxis where clients would be off-loaded from their wheelchairs into transport seats and wheelchair folded to the side. This involves strenuous physical effort and manpower. The Department of Transport should be involved in this strategy.

6.5.4.8 EMPLOYMENT OPPORTUNITIES FOR THE AMPUTEES

The fact that the majority of the amputees were unemployed, is a fundamental problem affecting not only the amputees but also their families as the majority were breadwinners. It is recommended that the government devise a strategy to reinforce protection of disabled persons against unfair discrimination on the basis of their disability for working in the open labour market.

CONCLUSION

This study succeeded in evaluating community based rehabilitation. The findings show that there were inadequate community rehabilitation services available in government hospitals and rehabilitation team members which were necessary for physical, psychosocial and vocational rehabilitation were also inadequate. Rehabilitation adjustments were similarly found to be inadequate. The recommendations have made it evident that without community based rehabilitation; the amputees' adjustment to change in body image and adaptation to the environment would be unsuccessful. This proves that the researcher's assumption was correct. Limitations and recommendations for further study were made based on the problems experienced during the study.

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26. Tardif, K. 1995. Clinical Measure In Rehabilitation. Journal Of Occupational Therapy, 22(1): 18-19.

27. Trombly, C.A. 1995. Occupational Therapy For Physical Dysfunction. 4th Edition. William & Wilkin's. Baltimore.

ANNAXURE 1

LETTER REQUESTING PERMISSION TO CONDUCT STUDY – DEPARTMENT OF HEALTH

P.O. Box 49257
Qualbert
4078
18 November 2002

Mr Tromp

Secretary: Department of Health
330 Longmarket Street
Pietermaritzburg
3200

Dear Sir

REQUEST FOR PERMISSION TO CONDUCT A RESEARCH STUDY

I hereby request a permission to conduct a research study as a requirement for M.A. Cur degree; I am doing the University of Zululand, Durban-Umlazi Campus Nursing Science Department.

The topic of the study is: An evaluation of community-based rehabilitative care given to amputated patients living in the suburban area North of Durban Metro Region "F".

The study is intended to evaluate the physical psychosocial and vocational rehabilitative care at community level. I enclosed a research proposal, which gives details of the proposed study and methodology.

I shall be grateful if my request is successfully considerated.

Yours Faithfully

N.C. Shangase (Mrs)

ANNAXURE 2

PERMISSION LETTER FROM DEPARTMENT OF HEALTH

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KWAZULU-NATAL
HEALTH SERVICES

SAKWAZULU-NATALI
EZEMPILO

PROVINSIE
KWAZULU-NATAL
GESONDHEIDDIENSTE

NATALIA
330 LONGMARKETSTREET
PIETERMARITZBURG

TEL. 033-3952111
FAX 033-3426744

Private Bag X9051
Isikhwama Seposi : Pietermaritzburg
Privaatsak : 3200

REFERENCE : 9/2/3/R – Vol.10
ENQUIRIES : Mr G. Tromp
EXTENSION : 2761
12 MAR 2003

Mrs N.C. Shangase
University of Zululand
Nursing Science Department
Durban-Umlazi Campus
Private Bag X10
ISPINGO
4110

Dear Mrs Shangase

APPLICATION TO CONDUCT RESEARCH STUDY AT KING EDWARD VIII, CLAIRWOOD AND PRINCE MSHIYENI MEMORIAL HOSPITALS

Your letter dated 19 November 2003 refers.

Please be advised that authority is granted for you to conduct a research at King Edward VIII, Clairwood and Prince Mshiyeni Memorial Hospitals provided that;

(a) Prior approval is obtained from Heads of relevant Institutions;

(b) Confidentiality is maintained;

(c) The Department is acknowledged; and

(d) The Department receives a copy of the report on completion.

Yours sincerely

SUPERINTENDENT-GENERAL
HEAD : DEPARTMENT OF HEALTH
NNM/shnegase-amputated

ANNAXURE 3

LETTER REQUESTING PERMISSION TO CONDUCT STUDY – KING EDWARD HOSPITAL

2 Crimpdene Close
Newlands West
4037
18 March 2003

The Chief Matron
King Edward VIII Hospital
Private Bag Congella
4013

Dear Madam

APPLICATION TO CONDUCT RESEARCH STUDY IN YOUR INSTITUTION

I hereby wish to apply for the permission to conduct research study in your institution

My research topic is an evaluative study/investigation on community-based rehabilitation of amputated patients living in Region "F", suburban area North of Durban Metro. It involves personnel working in orthopaedic and surgical wards and outpatients and amputated patients attending these units. The objective of the study is to evaluate discharge preparation and community reintegration of these patients.

I shall be thankful if my application is successfully considerated. I herein enclosed the letter from Natalia granting me the authority to conduct research provided I get approval from you.

Yours Faithfully

Mrs Nondumiso Cecilia Shangase

ANNAXURE 4

PERMISSION LETTER FROM DEPUTY DIRECTOR KING EDWARD HOSPITAL

PROVINCE OF KWAZULU-NATAL
ISIFUNDAZWE SAKWAZULU-NATAL
PROVINSIE KWAZULU-NATAL

KING EDWARD VIII HOSPITAL

(Recipient of the Premier's & PWC Good Governance Awards 2001)

Postal Address: Private Bag, Dalbridge, 4014. • Telephone: 031 3603853 • Fax: 031 2061457 •

Enquiries: Mr. A.J Seekola
Reference: KE 2/7/1 **(17/2003)**
Research Programming
13 June 2003

Mrs NC Shangase
University Of Zululand
Private Bag X10
ISIPINGO
4110

Request to conduct research at King Edward VIII Hospital.
Protocol: An evaluative study of community based rehabilitative care for amputated patients living in the suburban area north of Durban Metro Region F.

Your application received on the 8 May 2003 is approved pending the submission of an Ethical Approval from the University of Zululand.

After the submission thereof, please make an appointment with our Nursing Management to discuss how and when your questionnaire could be handled.

Please ensure that King Edward VIII Hospital receives full acknowledgement in the study on all publications and reports and also kindly present a copy of the publication or report on completion.

Please sign an Indemnity Form at Room 8, Admin Block before commencement.

The Management of King Edward VIII Hospital reserves the right to terminate the permission for the study should circumstances so dictate.

Yours Sincerely

Dr ZN Kharva
Acting Hospital Manager.

ANNAXURE 5

QUESTIONNAIRE FOR THE AMPUTEES

ANNEXURE 5

RESEARCH QUESTIONNAIRE FOR AN EVALUATE STUDY OF COMMUNITY BASED REHABILITATIVE CARE FOR AMPUTATED PATIENTS LIVING IN THE SURBABAN AREA NORTH OF DURBAN METRO REGION "F"

Dear Participant

Kindly answer the following question by marking with a tick (✓) the response that matches your answer to the question.

You are assured of total confidentiality and anonymity. Do not write your name on the questionnaire. Please answer the following questions as honest as possible.

SECTION A : DEMOGRAPHIC

1. GENDER

   Male ☐

   Female ☐

2. AGE ☐

3. RESIDENTIAL AREA

   Urban ☐

   Suburban ☐

   Rural ☐

SECTION B

4. TYPES OF INJURIES SUSTAINED

Upper limb ☐

Lower limb amputee ☐

5. LEVEL OF AMPUTATION

Below elbow ☐

Above elbow ☐

Below knee amputee ☐

Above knee amputee ☐

6. NUMBER OF LIMBS INVOLVED

Unilateral amputee ☐

Bilateral amputee ☐

Below ☐

If any other, specify: _____

SECTION C : HEALTH SERVICE INFORMATION

7. NATURE OF THE SERVICE YOU ARE ATTENDING

Hospital ☐

Clinic ☐

Rehabilitation center ☐

Other ☐

If other, please specify : _____

8. WHO IS THE OWNER OF THE INSTITUTION?

Government ☐

Private sector ☐

Other ☐

If other, please specify: _____

9. LIST THE CATEGORIES OF THE HEALTH PERSONNEL THAT ARE INVOLVED IN YOUR REHABILITATION WHO ARE EMPLOYED IN *THIS SERVICE YOU ARE ATTENGING*

Occupational therapist ☐

Physiotherapist ☐

Social worker ☐

Psychiatrist ☐

Psychologist ☐

Vocational rehabilitation counselor ☐

Rehabilitation nurse ☐

Professional nurse ☐

Enrolled nurse ☐

Other ☐

If other, please specify: _____

10. HOW MANY ARE YOU ATTENDING THIS SERVICE?

Less than 25 ☐

26 - 50 ☐

50 - 100 ☐

151 and above ☐

Not sure ☐

11. IS THERE ANY SPECIAL PROVISION MADE FOR IN THE SERVICE FOR YOUR REHABILITATION?

Yes ☐

No ☐

SECTION D : HEALTH EDUCATION ON PATIENT CARE

PHYSICAL CARE

12. CARE OF THE STUMP

12.1 Are you encountering any problem about your stump?

Yes ☐

No ☐

12.2 If yes, which problems do you encounter about your stump?

Yes ☐

No ☐

12.3 Were you given health education about your stump?

Yes ☐

No ☐

12.4 If yes, were the following activities covered?

12.4.1 Wound are ☐

12.4.2 Stump bandaging or conong ☐

12.4.3 Massage of the stump ☐

12.4.4 Positioning of the stump ☐

12.4.5 Exercise of the stump ☐

13. PROSTHESIS

13.1 Fitting of prosthesis ☐

13.2 Walking with prosthesis ☐

13.3 Care of prosthesis ☐

14. WHO TAUGHT YOU THESE ABOVE ACTIVITIES?

Prosthesis ☐

Physiotherapist ☐

Occupational ☐

Medical practitioner ☐

Ordinary professional nurse ☐

If other, please specify: _____

15. PSYCHOLOGICAL CARE GIVEN (PSYCHOSOCIAL CARE)

Visited by an old amputee with a prosthesis in good working order, motivating to face reality of having one or no limbs instead having prosthesis as limbs. ☐

Given opportunity to visit limb fitting center. ☐

Given opportunity to discuss with other amputees amongst whom, other had returned to their old work. ☐

Discussed with amputee with severe injuries who could not cope with their old work but had been placed for sheltered employment. ☐

Advised to always have someone to talk to or have confiding relationship to prevent depression ☐

All of the above ☐

None of the above ☐

Other ☐

If other, please specify: _____

16. FINANCIAL ASSISTANCE (SOCIAL CARE)

16.1 With whom did you discuss your financial concerns?

Rehabilitation nurse ☐

Social Worker ☐

Psychologist ☐

17. RESPONDENTS FINANCIAL HISTORY

17.1 Were you're a breadwinner before injury?

Yes ☐

No ☐

17.2 If yes, are you able to provide for your family?

Yes ☐

No ☐

17.3 If no, do you get any financial assistance besides disability grant?

Yes ☐

No ☐

17.4 If yes, who provides this financial assistance?

Please specify: _____

17.5 If this financial assistance enough to provide for your family?

Yes ☐

No ☐

17.6 Is there anything that you do to add to the income you are getting?

Yes ☐

No ☐

17.7 What was done to support you financially?

Application of disability grant ☐

Occupational theory ☐

Vocational training ☐

Other ☐

If other, please specify: _____

18. DISABILITY GRANT

18.1 Are you receiving disability grant?

Yes ☐

No ☐

19. VOCATIONAL REHABILITATION

Was there any information given about vocational rehabilitation

Yes ☐

No ☐

20. EMPLOYMENT HISTORY

20.1 Were you working before injury?

Yes ☐

No ☐

20.2 If yes, what work were you doing? _____

21. WORK ASSESSMENT

21.1 Was there any assessment done to ascertain whether you can return to your old work?

Yes ☐

No ☐

22. RETRAINING

22.1 If yes, was there any retraining done after fitting of the prosthesis before returning to your old work?

Yes ☐

No ☐

23. If yes, who assisted you with retraining?

Occupational therapy ☐

Physiotherapist ☐

Social worker ☐

Other ☐

If other, please specify: _____

24. SHELTERED EMPLOYMENT

24.1 If no, was sheltered employment arranged?

Yes ☐

No ☐

25. If yes, please specify the type of work you are doing:

_____

_____

SECTION E : DISCHARGE PLANNING

26 Were you in your discharge planning?

Yes ☐

No ☐

Other ☐

If other, please specify: _____

27. Who else was involved in this discharge planning?

Spouse ☐

Family ☐

28. What information was given on discharge?

Rehabilitation service follow-up ☐

Care of self ☐

Bandaging of stump/coning ☐

Care of the prosthesis ☐

No information ☐

29. Who were the rehabilitation team members involved in discharge planning?

Occupational therapist ☐

Physiotherapist ☐

Social Worker ☐

Medical practitioner ☐

Rehabilitation Nurse ☐

Vocational counselor ☐

SECTION F : COMMUNITY REINTEGRATION

30. Was there any assessment done to make sure that you were physically and psychological ready for community reintegration before introduction to that community?

Client and family ☐

Physiotherapist ☐

All of the above ☐

Other ☐

31. HOME VISIT BY THE REHABILITATION TEAM

31.1 Is there any member of the health who visited your home before you were discharged?

Yes ☐

No ☐

Other ☐

If other, please specify: _____

31.2 If yes, how many times did they visit your home before you were discharge?

1 – 2 ☐

3 – 4 ☐

31.3 Were you given any report after your home had been visited?

Yes ☐

No ☐

Other ☐

If other, please specify: _____

32. Who were the members who visited your home?

Physiotherapist ☐

Occupational therapist ☐

Social Worker ☐

Rehabilitation Team Nurse ☐

Medical practitioner ☐

Never visited by any member ☐

33. HOME TRIAL LEAVE

33.1 Were you given any chance for leave of absence for home trial, before actual discharge?

Yes ☐

No ☐

Other ☐

If other, please specify: _____

34. PROGRESS MONITORING

34.1 Is there any day that you visit rehabilitation or formal clinic setting for only evaluation of your progress at home even if you do not have any complaint?

Yes ☐

No ☐

34.2 If yes, how often is this done?

Once a year ☐

Half yearly ☐

Monthly ☐

Every three months ☐

Only when you come to forward your complaints ☐

34.3 If no, who does the evaluation at home to see if you are progressing well?

Community rehabilitation nurse ☐

Physiotherapist ☐

Social worker ☐

Other ☐

If other, please specify: _____

SECTION G : HOUSING

35. SUITABILITY OF HOUSES FOR ADAPTATION

35.1 Did the department of housing assist you by subsidized houses?

Yes ☐

No ☐

Unsure ☐

35.2 If yes, are these houses maintained by the department of housing?

Yes ☐

No ☐

35.3 Is this house suitable for you to adapt and move freely?

Yes ☐

No ☐

36. If no, please specify: _____

SECTION H : EMPLOYMENT AFTER AMPUTATION

37.1 How did you know that you are fit to return to old work or sheltered employment?

Full work assessment done ☐

Retraining for old work done ☐

Progress evaluation done ☐

All of the above ☐

None of the above ☐

Other ☐

If other, please specify: _____

38. What type of work did you do after amputation?

_____

39. ASSISTANCE WITH EMPLOYMENT

39.1 Does the department of manpower assist disabled to get sheltered employment?

No ☐

Unsure ☐

Other ☐

If other, please specify: _____

40. Is your community involved in assisting in the employment of amputees?

Yes ☐

No ☐

40.1 If yes, who is responsible for this service?

Community development group ☐

Society for the disabled ☐

Other ☐

SECTION I : TRANSPORT

41. What type of transport is available?

Train ☐

Buses ☐

Taxis ☐

41.1 Does the institution provide you with any transport to you to and from this institution?

Yes ☐

No ☐

Other ☐

If other, please specify: _____

41.2 Does department of transport provide suitable for disabled clients to institution they are attending for follow-up?

Yes ☐

No ☐

Unsure ☐

Other ☐

If other, please specify: _____

42. How many kilometers do you travel to reach the hospital or clinic you attended for follow up?

Less than 5km ☐

Less than 10km ☐

Less than 15km ☐

Above 15km ☐

SECTION J : REHABILITATION AIDS

43. Which type of the rehabilitation aid are you using?

Prosthesis ☐

Crutches ☐

Wheelchair ☐

Other ☐

If other, please specify: _____

44. Who provided you with these special aids?

Donation from Non-Governmental Organisation ☐

Hospital ☐

Purchased special Aids shop ☐

45. Which of the following community services are available to you?

Social for disabled ☐

Home help community workers ☐

Home adaptive grants ☐

Occupational workshops ☐

Meals on wheel ☐

All of the above ☐

None ☐

Other ☐

SECTION K: PROBLEMS ENCOUNTERED

46. Are there any problems that you encounter now at home concerning your amputation?

Yes ☐

No ☐

46.1 If yes, please specify them: _____

_____

_____

_____