UNIVERSITY OF CAPE COAST

IMPACT OF PSYCHOTHERAPY ON QUALITY OF LIFE OF AMPUTEES IN GHANA

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2018

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BY

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Thesis Submitted to the Department of Education and Psychology and Faculty of Educational Foundations of the College of Education Studies, University of Cape Coast, in partial fulfilment of the requirements for award of Master of Philosophy Degree in Clinical Health Psychology

JULY 2018

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature:……….. Date:…………

Name: ………...…………...

Supervisors' Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature:…………………………....... Date…………..

Name: ………...…………...

Co-supervisor's Signature:………………………………….. Date:…………..

Name: ………...…………...

ABSTRACT

The research investigated the impact of psychotherapy on quality of life of amputees in Ghana. The Ex-post-facto research design was employed and the census technique was used in selecting forty-two (42) amputee patients as participants. Seven hypotheses were tested using the Independent Sample t-Test, and One-way Analysis of Variance (ANOVA). The research outcome indicated that there was no statistically significant difference in the overall quality of life among the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy. In addition, it was also found that there was no statistical significant difference between the amputee groups in relation to their quality of life (physical health, psychological well-being, social relation and environmental situation). Finally, the study also revealed that there was no statistical significant difference in gender and marital status on their quality of life. It recommended from the findings that, the number of psychotherapy sessions should be increased in addressing all facets of the problems related to the quality of life of amputees. In addition, psychologists should be involved in the earlier stages of the treatment plan of amputees. Finally, Ghana Psychological Council should organise regular in-service training for psychologists and create awareness for the public on the importance of seeking psychological assistance for amputees.

ACKNOWLEDGEMENTS

I cannot but thank my principal supervisor, Mr Joseph Kwarteng-Ofusuhene for his sacrifice and expert input in my work, but for him I may not have met the deadline for this thesis. I also want to thank Dr. Mark Owusu Amponsah, for his immense support and co-supervision in spite of his tasking duties and busy schedule.

Finally, I want to thank the management of 37 Military Hospital and Tema General Hospital for accepting my request to use their facility for this research and to all who in one way or the other contributed to this success story. May it be done unto you as you have unto me.

DEDICATION

To My Family, Friends, and All Amputee Patients

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CBT	Cognitive Behavioural Therapy
HRQOL	health related quality of life
LLA	lower Limb Amputation
QOL	Quality Of Life
REBT	Rational Emotive Therapy
WHO QOL-BREF	World Health Organisation Quality Of Life Bref
WHOQOL	World Health Organisation Quality Of Life

CHAPTER ONE

INTRODUCTION

This chapter provides detailed background information on amputation, specifically, impact of amputation on quality of life, methods and psychosocial influences pertaining to the condition from a global perspective and then a Ghanaian outlook. The background information primarily throws light on the various variables, namely: gender, marital status, duration of the condition being studied and its effect on their quality of life. The next is followed by the statement of the research problem, the purpose of the study, objectives of the study, the statement of hypotheses, the significance of the study, delimitations, and limitations of the study, the definition of terms and organization of the rest of the study.

Background of the study

Amputation is an acquired condition that results in the loss of a limb or part thereof usually from injury, disease or surgery (Davis, Kingston, Fyling & Gena, 2003; Walter, Burgess, Romemo & Zetle, 2003). Amputation is the surgical removal of a part or whole of a limb (Davis et al. 2003). This procedure is performed when arterial reconstruction surgery has failed or is not technically possible, and when the state of the limb is such that it cannot function well. It can also be described as a rescue procedure embarked upon usually when reconstructive or healing procedures are not achievable (Ogunlade, Alonge, Omololu, Gana & Salawu, 2002). Acquired amputation occurs as a result of peripheral vascular disease, trauma, malignancy, metabolic disorders and infection; the main purpose of amputation previously done to and still is done to save life by the removal of a badly damaged limb or by suppression of a malignant disease (Davis et al. 2003).

Globally, 200-500 million amputations are performed annually, with approximately 70,000 of these in the United States (Walters et al. 2003). Another study by Ziegler-Graham, MacKenzie, Ephraim, Travison & Brookmeyer (2008) revealed that in the United States of America there are close to 2-million people who have had their legs amputated with almost 185,000 amputations taking place each year (Owings & Kozak, 1998). It is estimated that one out of every 190 persons has lost a limb; the number of persons living with amputation in the U.S. is estimated to increase over two-fold to 3.6 million by the year 2050 if current trends continue (Ziegler-Graham, MacKenzie, Ephraim, Travison, & Brookmeyer, 2008). Worldwide, men are more likely than women to undergo amputation and there is an age-related increase in lower limb amputation secondary to dysvascular disease (Ephraim, Dillingham, Sector, Pezzin & MacKenzie, 2003; Heikkinen, Saarinen, Suominen, Virkkunen, & Salenius, 2007). The ratio of male to female amputees is 2:1 in the United Kingdom (Thomson, Skinner, Piercy, 1991).

The prevalence of diabetic foot ulcer ranges from 1.0 to 4.1% in the US, 4.6% in Kenya, 20.4% in the Netherlands (Bartus & Margolis, 2004; Nyamu, Otien, Amayo, & McLigeyo, 2003), between 11.7 and 19.1% in Nigeria (Ogbera, Fasanmade, Ohwovoriole, & Adediran, 2006; Unachukwu, Babatunde, & Ihekwaba, 2007) and 20% in Iran (Fard, Esmaelzadeh, & Larijani, 2007). Diabetic Foot Ulcer may become common in the Tropics with the increasing occurrence of diabetes in Nigeria and Ghana (International

Diabetes Federation, 2005). It is believed that in every 30 seconds, a lower limb is lost somewhere in the world because of diabetes (Wild, Sicree, Roglic, Green, & King, 2004).

The main causes for amputations among people living with limb loss in western countries are vascular diseases including diabetes and peripheral arterial disease (54%), trauma (45%) and cancer approximately 2% (Ziegler-Graham et. al., 2008). A greater number of amputations occur as a result of Diabetes Miletus, which is a metabolic disorder characterized by chronic hyperglycemia (Eastman, Javitt, Herman, Dasbach, Zbrozek, Dong & Eastman, 1997).

Quality of life and psychotherapy

Psychotherapy research outcome generally focuses on the reduction of symptoms and impairments in functioning. However, the most important goal psychotherapy is improving the general positive quality of life is of an individual. The results of psychotherapy tend to last longer and be less likely to require additional treatment courses than psychopharmacological treatments (Deacon & Abramowitz, 2005; Paris, 2008; Patterson, 2008). For instance, in the treatment of depression and anxiety disorders, psychotherapy patients acquire a variety of skills that are used after the treatment termination and generally may continue to improve after the termination of treatment (Hollon, Stewart, & Strunk, 2006; Shedler, 2010). According to a study by Dixon-Gordon, Turner, and Chapman (2011), there is a growing number of evidence that psychotherapy is cost-effective, reduces disability, morbidity, and mortality. Thus, improves work functioning and by extension improving the quality of life of individuals.

Despite advances in medicine and surgery, amputation continues to be a problem among adults; it has resulted in more than 900,000 individuals living with minor limb loss worldwide (Ziegler-Graham et. al. 2008). Amputation of the lower limb is more common than that of the upper limb in the ratio of 12:1 (Thomson et al, 1991), and generally, major limb amputations of the lower extremities account for approximately 85% of all cases of amputations (Davis et al, 2003).

The loss of a limb by any individual has profound economic, social and psychological effects on the individual and their family. This is more evident in developing countries where the males are often the providers for the family (Pernot, Winubst, Cluitmans, & De Witte, 2000). Amputation of a limb affects almost all aspects of an individual's life. It is estimated that 145,299 people have been amputated in Ghana (Chalya, Mabula, Dass, Ngayomela, Chandika, Mbelenge, & Gilyoma, 2012). According to Gitter, Bosker, and DeLisa, (2005), lower limb amputation does not only disfigure the individual, but also makes the affected individual less mobile and may lead to loss of independence. After amputation, victims face a number of challenges both within themselves and in their environment (Bradway, Malone, Racy, Leal & Poole, 1984). For example, victims may have problems with returning to work after lower limb amputation (Burger & Marincek, 2007). Burger and colleague also assert that lower limb amputation is associated with considerable morbidity and mortality.

Common postoperative lower limb amputation (LLA) complications include cardiac problems, pneumonia, and delayed wound healing due to infection or necrosis of the stump, which frequently necessitates revision of the amputation to a more proximal level of the affected limb (Ploeg, Lardenoye, Peeters & Breslau, 2005). The risk of losing the contra-lateral limb following unilateral amputation ranges from 15-20% within the first two years of the initial procedure and rises to 40% by four years post-amputation (Cutson & Bongiorni, 1996). There is evidence of increased morbidity among individuals with amputations secondary to diabetes, with the probability of experiencing cardiac failure and further amputation being twice as great as that observed among non-diabetic patients.

Most often, the amputee may grieve for the lost limb and the old body (Elizabeth & David, 2007). This often resembles the way in which people usually respond to the death of a loved one or when being diagnosed with a life-threatening illness (Kelham, 1958). In addition, individuals with lower limb amputation usually have reduced mobility which affects their ability to perform daily tasks and to successfully integrate into community life; hence improving their quality of life (QoL) is a goal in their rehabilitation (Ramachandran, Rogers-Ramachandran, & Cobb, 2011).

The Psychologist plays vital roles in the assessment of cognitive and psychological functioning, formulation of the patient's diagnosis, and in the design and delivery of the intervention to optimize mental health and adjustments outcomes. With the global trends in the incidence of LLA and the methods used in treating amputee patients, it is imperative, that psychologists' role in the treatment and rehabilitation intervention cannot be overemphasised. These roles may range from preventative to health promotion, to rehabilitation and eventually improving the quality of life of amputees.

Statement of the problem

The QoL of individuals with amputation in developed countries have been investigated and reported in literature. From the literature, people with lower limb amputation face many challenges; these challenges range from physical to social relations, emotional, psychosocial and environmental matters which in turn affect their quality of life. Healthcare provision efforts are available in various parts of the world. However, concerning the impact of psychotherapy on quality of life of people with lower limb amputation, it appears that little has been done in this area especially in Ghana. Thus, the need for this study to investigate the impact of psychotherapy on the QoL of people with LLA during their reintegration into the society/community of origin, in Ghana.

According to a study conducted by Sharma, Singh and Sharma, (2016), indicated that QoL among the experimental group significantly improved in their Physical health domain, Psychological domain, Social domain, Environmental domain, overall QoL and overall health as a result of the Cognitive behavioural interventions that were provided. Another study conducted by Bisson, Shepherd, Joy, Probert and Newcombe (2004), was to examine the efficacy of cognitive behavioural intervention after physical injury. Results show that cognitive behavioural intervention reduces symptoms of post-traumatic stress disorder in individuals with physical injury who display initial distress.

Again, Ghana having seen the relevance of the psychologist in the area of health, introduced the Ghana Mental Health Act, 2012 (Act 846) which mandated hospitals across the country from districts to regional level to have, if not all, Counsellor, Clinical Psychologist or Nurse Counsellor on their staff. Their main function was to provide psychological interventions for individuals who need psychological services. Since the introduction of Act 846 in Ghana, it is also not clear if the psychologist function has been effective in improving the quality of life of individuals including amputees whom they provide psychological services. Therefore, the need also for this study.

Purpose of the study

The main purpose of the study is to find out the impact of psychotherapy on quality of life of amputees. Specifically, the study will:

1. Examine the differences between the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy on quality of life.
2. Determine the impact of psychotherapy on an amputee's physical health.
3. Analyze the impact of psychotherapy on the amputee's psychological well-being.
4. Discuss the impact of psychotherapy on the amputee's social relation.
5. Examine the impact of psychotherapy on the amputee's environmental situation.
6. Determine the influence of gender on quality of life of an amputee.
7. Examine the role of marital status on quality of life of an amputee.

Research Hypotheses

Hypothesis one

H_1: There would be a statistically significant difference in the QoL of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.

Hypothesis two

H_1: There would be a statistically significant difference in the physical health of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.

Hypothesis three

H_1: There would be a statistically significant difference in the psychological health of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.

Hypothesis four

H_1: There would be a statistically significant difference in the social health of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.

Hypothesis five

H_1: There would be a statistically significant difference in the environmental health of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy

Hypothesis six

H_1: There would be a statistically significant difference between the male and female quality of life.

Hypothesis seven

H_1: There would be a statistically significant difference in the QoL of the amputee group by marital status.

Significance of the study

This research will be beneficial in unearthing the physical health, psychological well-being, social relation, and environmental situation an amputee encounters and how well it will improve their quality of life in these aspects. Patients with amputation in Ghana encounter myriad of problems because of the condition, these difficulties impact on their treatment outcomes and quality of life. The findings of this research will also bring to the fore, the most pertinent problems associated with amputation; how it can influence their quality of life. The research will afford patients the requisite insight into which steps to take to improve their quality of life. It will serve as a revelation to clinical health psychologists and related health professionals as regards the psychological needs of patients with amputation and which factors to focus on in their treatment. Findings from this research will further direct clinical health psychologist as to which forms of psychological assessments to look at and therapies to consider in the treatment of patients with amputation. It will also inform policy direction and help other relevant stakeholders that is the Educationist and Engineers etc. Finally, it will add to existing knowledge by way of bringing to the fore, the issues associated with psychotherapy and its impact on the quality of life of amputee.

Limitations of the study

The sample was too small due to difficulty in getting access to some hospitals, which the researcher sought to use for the study. Therefore, the researcher had to forgo those hospitals and use the hospitals that access was granted for the study.

Delimitations

The research was delimited to amputee as a result of diabetes in Greater Accra Region. Specifically, those receiving medical treatment at the 37 military hospital and Tema General hospital. The primary objective was to assess the quality of life of amputee patients. The questionnaire used to collect the data was targeted at their quality of life in line with their physical, psychological, social, and environmental. Hence, the research considered only patients who had been amputated as a result of diabetes and were receiving treatment in the form of physiotherapy.

Definition of Terms

Amputee: An Amputee is a person who has lost all or part of an arm, hand, leg, etc., through surgery or traumatic experiences.

Quality of life: Quality of life is the subjective general well-being; it could be negative and positive features of individuals' life in society.

Psychotherapy: Psychotherapy is a form of treatment process focused on helping you heal and to learn more informed ways: to deal with the problems or issues within your life.

Physical health: Physical health is not just the absence of disease but a person's physical overall well-being includes a person's fitness, strength, flexibility, and endurance, healthy eating, avoiding alcohol, getting enough rest and sleep, addressing minor ailments or injuries and seeking emergency care as necessary.

Psychological health: psychological health is the mental state of someone who is functioning at an acceptable level of emotional and behavioural change.

Social health: it is a close association or acquaintance between two or more people.

Environmental situation: This includes the persons' safety, financial recourse, transportation, physical environment, eating, health service etc.

Organisation of the Study

Chapter one (1) provides a general picture of a detailed background of the study, the research problem, purpose of the study, hypotheses of the study, significance of the study, limitations of the study, delimitations of the study as well as definitions of terms. The hypotheses were formulated in consonance with the purpose of the research and its problem statement. Chapter two (2) of the research brings to the fore a detailed review of the theoretical underpinnings of the research and an empirical review of related literature based on the hypotheses formulated to be investigated in the research. A conceptual framework was also developed to help provide a simplified concept of the research and a summary of major findings of the reviewed empirical literature. The related literature reviewed, therefore, provides an eye-opening experience into the relationship that exists between physical health and quality of life, psychological and quality of life, social relation and quality of life and environment and quality of life of an amputee. Chapter three (3) of the research captures all the aspects of the methodology used to conduct the study which includes research design, population, sample and sampling procedure, instruments, data collection procedure and data analysis. Going by the research problem, its formulated hypotheses and purpose, expose facto design comprising a quantitative method was employed. In order not to flaw the research ethically, approval was sought from the University of Cape coast Ethical Board, Ethical Board of 37 Military Hospital, and Management of Tema

General Hospital. In addition, the consent of participants was sought before the instruments were administered.

Questionnaires were pretested before the final administration was done to collect the data. The sample size for the study was 42, which comprised of amputee patients who were receiving treatment at the various hospitals selected. Chapter four (4) of the research report shows a concise presentation of the research findings and a detailed discussion of each one of them. Chapter five (5) summarizes the key findings and conclusions drawn based on the outcome of the research. It also unveils the various recommendations made with respect to the need for patients receiving treatment for amputation and the need for a detail treatment regime for the client/patient. The need for the formulation and implementation of various policies that would help patients to receive good treatment plan.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter espouses the theoretical underpinnings of the research in order to give it a perspective from which its literature and findings could be examined and explained. In all, seven theories or models formed the basis on which the quality of life dimensions; physical health, psychological health, social relation, and environmental situations associated with amputation was presented. Empirical review on amputation and quality of life were thoroughly done to give a vivid idea of the outcomes of studies done and what must be critically considered to make this research useful by way of adding to existing knowledge. In addition, the conceptual framework on which the research is built is also presented in the chapter. This gave a summarized idea of the study and the hypothetical outcomes to be expected. The concept is first presented as a figure, and then briefly explained.

Conceptual Framework of the Study

From the hypotheses stated above, the relationship between the various variables under investigation have been illustrated in a conceptual freamework that is presented below in figure (1)

This study zeroes on the importance of psychotherapy and its impart on the quality of life of an amputee. The researcher based his assumption from logo-therapy, positive psychology, emotional processing theory, restorative model of well-being, city of hope quality of life. Thus, individuals who are able to survive bad experience typically found some meaning in it; eventually leading to a better quality of life.

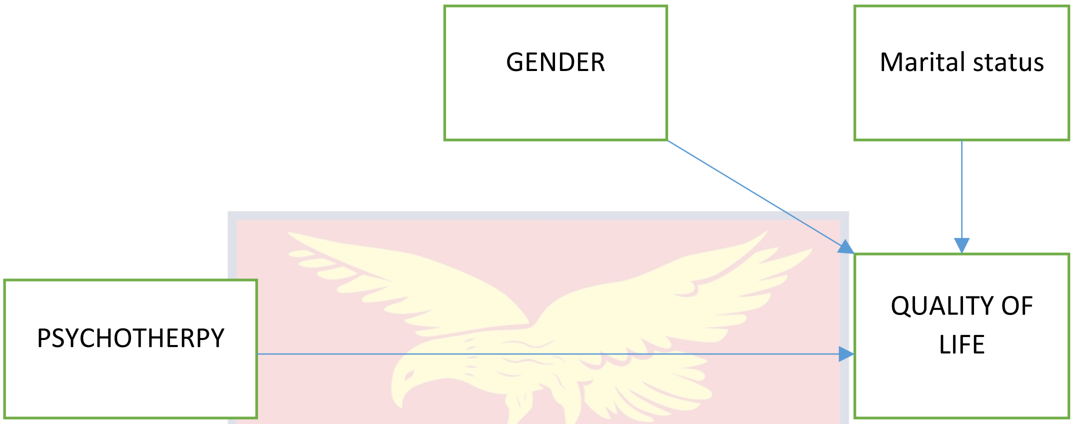

Figure 1- Explains the impact of psychotherapy, gender, and marital status on quality of life of amputees.

Source: Author's Own Construct

This figure shows the relationship between psychotherapy and quality of life of amputees as well as impact of gender and marital status on their quality of life.

It can be seen from figure1 that psychotherapy which is a form of treatment amputees receive from a psychologist may influence the quality of life of amputees. From this figure, it can be seen that quality of life (physical health, psychological health, social relationship, and environmental situation) may be influenced by the psychotherapy that is offered by the psychologist. Thus, the psychologist is supposed to target all these domains for an effective treatment after an amputation for a better quality of life. Similarly, it can be seen from figure1 that gender and marital status may influence the quality of life of amputees.

Conceptual base of the study

The concept of quality of life

It is significant that the concept of quality itself carries positive connotations, so does the notion of health. Health has an absolute value, but it also has an instrumental value i.e. it enables the individual to achieve his/her goals, most importantly, a better quality of life. Quality of life (QoL) is an individual's perception of his/her position in life, in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns (WHOQOL GROUP, 1996; WHO, 1997). The concept of quality of life should comprise an individual's mode of perception of their material and subjective resources, information about their functioning, its assessment and the level of satisfaction with it (WHOQOL..., 1995). Medical interest in QoL has been encouraged by the success in prolonging life and the realisation that persons under treatment want to live and not merely survive (McDowell & Newell, 1996). It is a comprehensive concept, that is affected in a complex way by the person's physical health, psychological state, level of independence, social relationships, personal beliefs, and relationship to salient features of the environment (WHO, 1997). The measurement of health and the effects of healthcare must include not only a sign of changes in occurrence and severity of disease but also an evaluation of well-being. This can be assessed by measuring the improvement in the quality of life-related to healthcare. Although there are generally satisfactory ways of measuring frequency and severity of disease, this is not the case with the measurement of well-being and QoL (WHOQOL GROUP, 1996). The World Health Organisation (WHO) developed two generic instruments for measuring QoL, namely: the WHO QOL-100 and

WHOQOL-BREF questionnaires. These instruments can be used in a variety of cultural settings and the WHO QOL-BREF provides a valid and reliable alternative to WHOQOL-100 (WHO, 1997). Although the 20th century saw extraordinary achievements in medicine, the health-care system found itself in crisis. This was not only due to economic reasons but also the changing nature of the illness, from acute to chronic, whose causes were increasingly linked to an individual's lifestyle. New methods of treatment, advances in medicine and the costs of treatment did not seem directly to explain effects noticeable to the patient. This called for a change of approach giving priority to non-material values. Some scholars definition of quality of life

Quality of life is the expression of the degree of satisfaction or dissatisfaction felt by people with various aspects of their lives (Abrams, 1973).

McCall (1975), defined quality of life as the provision of the necessary conditions for happiness and satisfaction. Fuhrer (2000) suggested that QoL could be understood from the individual's perspective, commonly referred to as subjective QoL or subjective well-being (SWB). Dijkers (1997) made a similar distinction between the objective and the subjective approach to QOL measurement. The subjective approach defines QoL as the congruence between aspirations and accomplishments, as perceived by the person involved. Measurement of life satisfaction, happiness, and positive and negative affect fall within this category concept of health status (Dijkers 1997. HRQOL is part of objective QoL and refers to components of QoL that centred upon or are directly and indirectly affected by health, disease, disorder, and injury (signs, symptoms, treatment side effects, physical, cognitive, emotional and social functioning (Dijkers, 1997).

George and Bearon (1980) identified four dimensions, two of which are 'objective' (general health and functional status; socio-economic status) and two of which are 'subjective' (life satisfaction, self-esteem). Health, on the one hand, is treated as a general predisposition to and capability for all-round development, the ability to perform social roles and to adapt to the ever-changing environment.

Five dimensions of the holistic approach to health are based on physical, psychological (mental and emotional), social, public, and spiritual. In comparison with the most frequently cited definition of health included in the WHO charter defined health as a physical, mental and social well-being, and not merely a lack of disease or ailment *(*WHOQOL, 1996).

A healthy person can find meaning in their life and thus derive satisfaction with it. However, achieving a better quality of life cannot be directly equated with ensuring oneself satisfactory living conditions Oles (2002). Quality of life measured by affluence and variety of the environment can have an influence on the sense of meaning of ones' life but does not decide it. One may have excellent living conditions, enjoy good health and yet be dissatisfied with life (Oles, 2002).

The concept of Psychotherapy

Psychotherapy (mind healing) has a long past and a short history. It may be traced no further back than the emergence of psychiatry (medical treatment of mental disorders) as an autonomous branch of medicine in the eighteenth century (Tringer, 2004). If we take the term psychotherapy to mean activities by which some kind of certified person heals troubles and diseases by psychological means, the story of psychotherapy is as old as the story of humanity.

Healing by psychic means has since ancient times been the province of selected persons, known by titles as shaman, priest, wizard or prophet. They performed their activities through rituals rooted in their own cultures. Actually, medicine in ancient societies was part of healing “the soul”, and the mental effect was the doctor’s most powerful therapeutic tool. In historical times, psychological healing was largely the province of religion and religious institutions. An illustrative example is the 4-week meditational retreat devised by St Ignatius of Loyola, possibly a precursor of the group psychotherapies used in institutions today (Tringer, 2004). Freud is generally recognized with founding psychotherapy as an independent branch, he clearly received powerful influences from Bernheim and Charcot during his visit to France. The origin of “free association”, hypnosis and dream analysis were central to Freud’s theory and therapeutic practice. Thus, Freud’s was of the belief that unresolved psychical conflict could manifest in abnormal behavioural that could affect the person function.

At the turn of the nineteenth and twentieth centuries, the currently-prevailing ideas of positivism, together with the results of scientific research and dissatisfaction with the Freudian approach led to a fundamentally new approach to the study of behaviour. According to the early behaviourists (notably Watson), human behaviour is determined by constellations of external stimuli. Therapy can take effect by modifying these stimuli (behaviour therapies). Psychological therapies based on behaviourism have had a long career, and in the second half of the twentieth century, they formed the basis for cognitive developments.

Humanist therapists defined actions as not just due to internal and external determinants, but also our own internal decision-making processes that offer the possibility of making free choices. This approach also emphasizes people's capacity to make rational choices and develop to their maximum potential. Concern and respect for others are also important themes.

Person-centred

Therapy is essentially aimed at supporting the self-realization process inherent in the person and removing obstacles in its path. The success of therapy depends on the personal competences of the therapist and the self-exploration skills of the patient. The therapist must possess empathy and reflective skills, and take a style of unconditional positive regard and genuineness (Rogers, 2006).

Cognitive therapies

Cognitive therapists focus on the way their clients see the surrounding world and themselves in it. Beck (2001) created his method to treat depressive patients and called it cognitive therapy. Cognitive-behavioural therapy (Ellis, 1962); which focuses on both thoughts and behaviour, which followed the same principle. Gestalt therapy (Perls, Hefferline & Goodman, 1951) emphasizes what it calls "organismic holism," the importance of being aware of the here and now and accepting responsibility for yourself. Existential therapy (Maslow & May, 1962) focuses on free will, self-determination and the search for meaning of integrative or holistic therapy.

Contemporary definitions/ views on Psychotherapy

Norcross (2013) defined Psychotherapy as the informed and intentional application of clinical methods and interpersonal stances derived from established psychological principles for the purpose of assisting people to modify their behaviours, cognitions, emotions, and/or other personal characteristics in directions that the participants deem desirable. Psychotherapy is often dubbed as a "talking therapy", particularly for a general audience although not all forms of psychotherapy involves verbal communication (National Alliance on Mental Illness 2015). Many therapists do not tie themselves to any one approach. Instead, they blend elements from different approaches and tailor their treatment according to each client's needs. The goal of treatment and arrangements for how often and how long to meet are planned jointly by the patient and therapist. Most sessions are 45 – 50 minutes long. Psychotherapy can be short-term, dealing with immediate issues, or long-term, dealing with longstanding and complex issues. Therapy may be conducted in an individual, family, couples, or group setting, and can be used by adults, children, or adolescents. Medication is often used in addition to psychotherapy, and for some disorders, the combined treatment is better than alone. This is a decision to be made by a patient in consultation with the therapist. Psychotherapy is increasingly being adopted into health care.

Psychotherapy and Counselling

The terms Counselling and Psychotherapy are often used interchangeably (Kwiatkowski, 1998). Howe (1992) states that the reported experiences of clients or patients have remained remarkably similar over the years regardless of the theoretical orientation or status of the therapist. Howe and Thorne (1992) made a strong assertion that it is difficult to differentiate from counselling and psychotherapy on several grounds such as problems explored and goals addressed. Although they have similar meanings, there is some considerable overlap. There are some important distinctions between the two that are helpful to keep in mind when looking for a mental health care professional.

Psychotherapy like counselling is based on a healing relationship between a health care provider and client. Psychotherapy, or therapy for short, also takes place over a series of meetings, though often it has a longer duration than counselling. Some people participate in therapy off and on over several years. Instead of narrowing in on individual problems, psychotherapy considers complete patterns, chronic issues, and recurrent feelings. This requires an openness to exploring the past and its impact on the present. The goal of psychotherapy is to resolve the fundamental issues, which fuel ongoing complaints. Psychotherapists help to resolve past experiences as part of laying the foundation for a fulfilling future.

On the other hand, Counselling is sometimes called “talk therapy,” is a conversation or series of conversations between a counsellor and client/patient. Counselling usually focuses on a specific problem and taking the steps to address or solve it. Problems are deliberated in the present tense, without too much emphasis on the role of past experiences. The titles “counsellor” and “advisor” are often used synonymous but counsellors rarely give advice. Instead, counsellors guide clients to discover their own answers and support them through the actions they choose to take.

Many psychotherapists are open to and interested in wisdom from a variety of sources: the body, the unconscious, and the inner child, to name a few possibilities. Therapists should be comfortable working with strong feelings, traumatic memories, and the therapeutic relationship.

Some scholarly definition of counselling

House and Hayes (2002) describe counselling as helping pupils on an individual or group basis to explore their own thoughts and feelings, about their present life situation, about the choices open to them, and about the consequences of each choice. Urumbo (2000) maintains that the definition of counselling depends on the specific theoretical orientation of any discussion. However, counselling can be described as a process that focuses on enhancing the psychological well-being of the client, such that the client is then able to reach his/her full potential. Atodo (2008) asserts that counselling is largely concerned with giving advice and concentrates on the individual’s self-awareness as well as helping improve problem-solving skills and education of the individual.

Counselling is a relationship between a concerned person and a person with a need (Gora, Sawatzky & Hague, 1992). This relationship is usually person-to-person, although sometimes it may involve more than two people. It is designed to help people to understand and clarify their views, and learn how to reach their self-determined goals through meaningful, well-informed choices, and through the resolution of emotional or interpersonal problems. Counselling is therefore a process by which the helper expresses care and concern towards the person with a problem, and facilitates that person's personal growth and brings about change through self-knowledge (UNESCO, 2000).

Lambert and Barley (2001) explain that counselling aims to help clients gain insight into the origins and development of emotional difficulties, leading to an increased capacity to take rational control over feelings and actions. They also posited that counselling aims to provide clients with the skills, awareness and knowledge, which will enable them to confront social inadequacy, such as negative cultural and gender stereotypes. Gysbers and Henderson (2006) added that counselling achieves its aims on three different, but interrelated operational levels, namely, educational counselling, personal/social counselling, and vocational counselling.

Personal counselling deals with emotional distress and behavioural difficulties, which arise when individuals struggle to deal with developmental stages and tasks (McGannon, Carey & Dimmitt, 2005). Personal counselling is important because any aspect of development can be turned into an adjustment problem, and it is inevitable that everyone encounters, at some time, exceptional difficulty in meeting an ordinary challenge. For example, Gysbers and Henderson (2006) noted that developmental challenges, such as anxiety over a career decision, lingering anger over an interpersonal conflict, depressive feelings, guilt about mistakes, or grief over the loss of a loved one may require the services of personal counselling.

Ethical Issues in Psychotherapy/ counselling

According to Urumbo (2000), ethics are codes of conduct that ensure best practices of any profession. Ethics, according to UNESCO (2000), are important aspect of the psychotherapy process that ensures trust of the psychotherapist and a major contributor to finding the right solutions for the problem. They must, therefore, be adhered to in order to gain trust and patronage of the service.

Josselson (1996) maintains that the psychotherapist has a primary obligation to the client, who is to be treated with dignity and respect as unique individuals. The psychotherapist should, therefore, be genuinely concerned with the educational, academic, career, personal, and social needs of the client. Moreover, the psychotherapist should respect clients' values, beliefs, and cultural background and not impose his personal values on students or their families.

Concerning client-counsellor relationship, the psychotherapist must understand that professional distance with the client is appropriate, and any sexual or romantic relationship with the client whether legal in the state of practice is considered a grievous breach of ethics and is prohibited regardless of a client's age (Urumbo, 2000).

One important component of the entire psychotherapy process is the factor of confidentiality. Confidentiality issues border on many fronts including informing individual clients on the purposes, goals, techniques and rules or procedures under which they may receive counselling (Okuma-Nystrom, 2005). Confidentiality also includes issues of disclosure and informed consent of the client. The disclosure includes the limits of confidentiality in a developmentally appropriate manner. Informed consent requires competence on the part of the client to understand the limits of confidentiality and therefore, can be difficult to obtain from a client of a certain developmental level. However, attempts to obtain informed consent are not always possible and when needed, counsellors will have to make counselling decisions on clients' behalf.

Ethical issues also include referral responsibilities. Referrals are to be made when necessary or appropriate to outside resources for the client and/or family support. Urumbo (2000) suggests that clients should retain the right to discontinue the psychotherapy relationship at any time. A reasonable method of termination of psychotherapy when it becomes apparent that counselling assistance is no longer needed or a referral is necessary to better meet the clients' needs, must be developed. Psychotherapist also has the responsibility to make reasonable efforts to honour the wishes of the clients unless a court order expressly forbids the involvement of the clients.

Amputation

Amputation is the removal of a limb by trauma, medical illness, or surgery. As a surgical measure, this is sometimes used to control pain or a disease process in the affected limb, such as malignancy or gangrene. Sometimes, it is carried out on individuals as a preventative surgery for such problems (Davis et al. 2003). Lower limb or leg amputations can be divided into two broad groups: minor amputations and major amputations. According to Dillingham and Pezzin (2005) each year over 150,000 individuals are admitted to hospitals to go through amputations secondary to peripheral vascular disease or diabetes. As of 2005, an estimated 1.6 million individuals with amputation live in the United States, of whom approximately 65% underwent lower limb amputation Diabetes increases the incidence of foot (Ziegler-Graham, MacKenzie, Ephraim, Travison, Brookmeyer, 2005) ulcer admissions by 11-fold, which accounts for more than 80% of all amputations and increasing hospital costs more than 10-fold over the years (Hicks, Selvarajah, Mathioudakis, Sherman, Hines, Black & Abularrage, 2016). From literature, it is clear that diabetes-related amputation is alarming the rate people lose their lower limb could affect their quality of life.

Quality of life and Amputation

According to Wald and Alvaro (2004) given the complex physical and psychological issues involved in amputation, a comprehensive and holistic rehabilitation approach is needed. The impact on the person and the process of adjustment to limb amputation is highly multifaceted and dynamic and varies across individuals (Saradjian, Thompson & Datta 2008). Amputation affects the lives of these patients, and their quality of life automatically drops after losing this important body part (Taylor, 1983). Although physical injuries can be treated through medical care and rehabilitation, the psychosocial impact can last for several months, years or even throughout the individual's life (Parkes, 1988). Amputation often involves cognitive, emotional, and behavioural adaptations (Wald et al. 2004). Depression has been reported as being the reason for the decreased use of prosthesis and lower level of mobility amongst people with long-term amputations (Horgan & MacLachlan 2004). The process of adjusting to prostheses often demonstrates a person’s relationship to it (Saradjian, Thompson & Datta, 2008). Generally, it involves regaining an acceptable level of functioning (Kelly & Dowling, 2008).

Theoretical review

Humanistic Approach (Maslow, 1962)

Humanistic is a term in psychology referring to an approach, which studies an individual holistically and the uniqueness of the person. This means that the person’s own experiences is studied in relation to his personality. Humanistic psychology begins with the existential assumptions that phenomenology is central and that people have free will. The humanistic term for the exercise of free will is a Personal agency. Personal agency is the choices you make in life, the paths you choose in life and the consequences that come with it. Secondly, people are naturally good and have an inborn need to make themselves and the world a better place. The humanistic approach emphasizes the personal worth of the individual, the centrality of human values, and the creative, active nature of human beings. This allows people to think positive and focus on the noble human capacity to overcome hardship, pain, and despair. This theory deals with the subjective, conscious experiences of the individual. Humanistic psychologists argue that objective reality could be what we see, as happening to somebody is less important than a person's subjective perception and understanding of the world (Maslow, 1962). The weakness with this theory is it assumes that all people experience these needs in the same order, failing to recognize cultural and individual differences. For example, some ones psychological needs may be considered more important than physiological needs.

Applying the theory to the study, when we take more responsibility for our own life, we take more of the good qualities that we have into use, and we become more free, powerful, happy, and healthy. It seems that Maslow's concept of self-actualization can play an important role in modern medicine. As most chronic diseases often do not disappear in spite of the best biomedical treatments, it might be that the real change our patients have for betterment understands and leads the noble path of personal development. However, you will only find this hidden meaning of life if you scrutinize your own life and existence closely enough, to come to know your innermost self.

Logo-therapy (Frankl, 1959)

According to Frankl (1959), logo therapy is a term derived from “logos,” a word translated as “meaning,” and therapy, which is defined as treatment of a condition, illness, or disturbance (Frankl, 1959). The theory is founded on the belief that human nature is motivated by the search for a purpose in life; logo-therapy is the pursuit of that meaning for one’s life. Frankl (1959) was of the view that, those who were able to survive the experience typically found some meaning in it, such as a task that they needed to fulfil or a tragedy goes through. There are three main components that Frankl philosophy is based on each person has a healthy core, the primary focus is to enlighten a person to their own internal resources and provide them with the tools to use their inner core, life offers you purpose and meaning; it does not owe you a sense of fulfilment or happiness. Logo-therapy is based on the idea that humans are motivated to find a sense of meaning and purpose in life. According to Frankl, life’s meaning can be revealed in three different ways: by creating a work or accomplishing some task, by experiencing something fully or loving somebody, and last but not least by the attitude that one adopts or accepts toward unavoidable suffering. Frankl believed that suffering is a part of life, and that man’s ultimate freedom is his ability to choose how to respond to any set of given circumstances, even the most painful ones. Additionally, people can find meaning in their lives by identifying the unique roles that only they can fulfil. The three main techniques used in logo-therapy are de-reflection, which is used when a person is overly self-absorbed on an issue or attainment of a goal. By redirecting the person thoughts from that which is causing pain to them and rather focusing on other people rather than themselves. Paradoxical intention is asking for the thing the individual fears the most. By using humour and ridicule, they can wish for the thing they fear the most, thus removing the fear from their intention and relieving the anxiety symptoms associated with it. Socratic dialogue is a technique, which uses the person's own words as a method of self-discovery. The problem with this theory is that, it assumes everybody can see something good/meaning from a bad experience.

Applying the theory to the study, Frankly said if an individual is able to survive an experience they usually find meaning and also suffering is a part of life, and that man’s ultimate freedom is his ability to choose how to respond to any set of given circumstances, even the most painful ones. An example could be the amputees and what they are going through as individuals.

Rational Emotive Behavioural Therapy (Ellis, 1962)

A fundamental premise of REBT is unfortunate circumstances do not emotionally disturb humans, but how they construct their views of these circumstances, meanings and philosophies about the world, themselves and others. REBT framework assumes that humans have both innate rational (self-helping, socially helping, and constructive) and irrational (self-defeating, socially defeating, and unhelpful) tendencies and leanings. The A-B-C model states that it is not an A, adversity (or activating event), that causes disturbed and dysfunctional emotional and behavioural Cs, consequences, but also what people B, irrationally believe about the A, adversity. A adversity can be an external situation, or a thought, a feeling or other kind of internal event, and it can refer to an event in the past, present, or future.

According to REBT, if a person is evaluative B, belief about the A, activating event is rigid, fictional and dysfunctional, the C, the emotional and behavioural consequence, is likely to be self-defeating and destructive. REBT claims that people to a large extent consciously or unconsciously construct emotional difficulties such as self-blame, self-pity, clinicalanger, hurt, guilt,shame, depression and anxiety, and behaviour tendencies like procrastination, compulsiveness avoidance, addiction and withdrawal by the means of their irrational and self-defeating thought. Even though some have criticized REBT for being harsh, systematic and failing to address deep underlying problems (Ellis, 1962).

The flaw with this theory is that, it presumes it is easy for every individual to relegate his/her belief about a stressful event.

Applying the theory to the study, according to Ellis (1962) the unfortunate circumstances do not emotionally disturb humans, but by how they construct their views of these circumstances, meanings and philosophies about the world, themselves and others. Consequently, if an individual is amputated the views that he/she holds of the current situation determines how he/she feels about it.

Emotional-Processing Theory (Foa and Kozak, 1986)

According to the emotional processing theory, fear is activated through associating with the information about the feared stimulus, escape or avoidance responses to the feared stimulus, and the meaning of the fear (e.g., threat or danger) and the meaning associated with the feared object. Fear becomes problematic when it is intense to a degree that it gets in the way of functioning, or when it persists even when there are no clear indications of danger. In these instances, there may be maladaptive or pathological fear structures. The theory holds that chronic avoidance (e.g., escape behaviour, avoidance, dissociation) often leaves these maladaptive schemas in place, as people do not remain in a situation long enough for new learning to occur. Emotional processing theory proposes that exposure can alter the relationships between the fear stimulus and these networks. For this to happen, the network must first be activated, and then new information must be encoded that is incompatible with what is in the fear network. Foa and Kozak (1986) suggested that exposure weakens associations and replaces maladaptive fear associations with more adaptive ones. However, this view was revised in Foa and McNally (1996), where the authors incorporated animal behaviour models of exposure from the lab of Bouton. Bouton's work suggests that exposure does not actually alter associations as much as creates new, competing associations. What this means is that following exposure, there may now be two associations: a pathological one and a non-pathological one. Ideally, the person begins engaging in behaviours that are more in accordance with the non-pathological association, strengthening it over time.

The problem with this theory is it believes that exposing the individual to the feared object necessary mean that, the individual will overcome the feared object or experience.

Applying the theory to the study, according to Foa and Kozak (1986) suggested that exposure weakens associations and replaces maladaptive fear associations with more adaptive ones but this was revised by Foa and McNally (1996) saying that if an individual begins engaging in behaviors that are more in agreement with the non-pathological association, strengthening it over time. Therefore, if the amputee is able to focus on something positive apart from his /her situation then he/she will be able to process the emotions and move on with life.

Restorative Model of Well-Being (Hoffman, Lent & Raque-Bogdan, 2013)

The restoration type of appraisal is often referred to as meaning-making. People implement strategies to cope with appraised stressors. Personality traits and dispositional variables play important roles in people's reactions to negative events and traumas. Certain traits such as dispositional optimism, may for example, affect how people appraise life events, perceive their coping efficacy, and manage coping strategies. Environmental supports and resources offer key aids to emotional and physical coping. They come in a variety of forms and serve a variety of functions, such as emotional support, cognitive guidance, access to coping models, learning new coping strategies, and social persuasion regarding one's coping efficacy.

The restorative model assumes that the process through which people typically maintain their sense of well-being may become destabilized when they are confronted by problematic external events (e.g., health threats) or internal states (e.g., mood states, existential questions). Under such conditions, people engage in cognitive process of appraising the nature of the stressor e.g., threat or loss, to see whether they have the capabilities or resources to cope. When confronted by a possible amputation of any part of your body and that stressor that is deemed life-changing, and for which the person believes he/she lacks the necessary coping strategies are likely to have the greatest negative impact on domain and life satisfaction. For example, the problem-focused and emotion-focused coping, meaning making, shifts in life goals and roles to protect and optimize one's well-being in the face of health threats. The appraisal process often involves seeking information about treatment options and the likelihood of their success. Next, available resources such as financial, social support and treatment access, to evaluate whether they are available and adequate to meet the threat. Appraisal of what amputation may mean post-treatment in terms of valued goals that is life roles, self-image, and fundamental assumptions about one's life may also occur. (Hoffman, Lent & Raque-Bogdan, 2013).

The problem with this theory is the proponent assumes that most people are generally happy with their lives, thereby, the idea of a person's return to a positive emotional state may not sound bad. However, that may not be the case in all situation.

Applying the theory to the study, this theory maintains that an individual sense of well-being may become destabilized when they are confronted by problematic external events (e.g., health threats) or internal states (e.g., mood states, existential questions). Therefore, when confronted by a possible amputation, the person believes that this is life-changing and thus, the body goes through stressors, which makes believes he/she lacks the necessary coping strategies and this is likely to have the greatest negative impact on life satisfaction.

City of Hope Quality of Life Model (Lavdaniti & Tsitsis, 2015)

The model supports that quality of life has four dimensions: physical well-being and symptoms, psychological well-being, social well-being and spiritual well-being. In this model, it was demonstrated that pain is an experience that affects all the domains of quality of life.

It explained that the domain for amputees fell within four parameters: physical well-being, which is the control or relief of symptoms and the ability to have physical independence and capability to do all the basic functions.

Social wellbeing is adjusted by the impact of amputee on the individuals, their roles and relationships and how well they can deal with those factors. Spiritual well-being is dependent on how well an individual can control the uncertainty that is created by the hope and derive from the cancer experience. Psychological well-being is the ability to sustain a sense of control in the face of life against illness characterized by altered life priorities, emotional distress, and fear of the unknown as well as a positive life change. In addition, it must be taken into consideration that the perception of a person's quality of life differs from person to person. This means that people with different expectation will report a different quality of life, even when they have the same health status. Therefore, insight into a patient's quality of life can only be obtained by asking a patient's perspective (Lavdaniti & Tsitsis, 2015).

This theory is of the view that perception of pain can affect the quality of life, therefore, how the individual perceives pain has a great deal of affecting our quality of life.

Positive Psychology

This model was developed by Seligman and Csikszentmihalyi and the model became prominent in the year 2000. Seligman and Csikszentmihaly (2000) defined positive psychology as the scientific study of positive human functioning and flourishing on multiple levels that include the biological, personal, relational, institutional, cultural, and global dimensions of life. Positive psychology is concerned with the good life or living according to what holds value in life. Thus, factors that contribute to a well-lived and satisfying life. Positive psychologists agree that one must live a happy and meaningful life in order to experience the good life. Therefore, highlighting the study of positive human development helps to balance the individual meaning of life and not just focus on the disorder. The basic principle of positive psychology is that individuals often are attracted by the future more than they are driven by the past, seeks to encourage acceptance of your past and hope for one's future and well-being in the present and Positive psychology also placed a greater emphasis on promoting positive self-esteem and self-image. Therefore, a change in an individual's orientation to time can radically affect how we think about the nature of happiness (Seligman, 2002).

This theory, foster positive attitudes toward one's subjective experiences, life events, and bad situation that one may find self. Therefore, the goal of positive psychology is to minimize pathological thoughts that may arise in a hopeless mind-set instead to develop a sense of optimism toward life. However, that may not be the situation for every individual.

Empirical studies

Physical Health and Quality of life

Sharma, Singh and Sharma (2016) conducted a study titled impact of cognitive behaviour intervention in enhancing the quality of life in individuals with amputation. A sample of 100 patients with specified inclusion-exclusion criteria was selected and sequentially allotted fifty each in experimental and control groups. An experimental design with pre-and post-assessment was adopted. The assessment was done using Socio – demographic and clinical data sheet, World Health Organization Quality of Life Scale- Brief Version (WHOQOL). A cognitive-behavioural intervention programme was developed incorporating psychoeducation, behavioural techniques and behavioural counseling to significant others. Their results showed that on QoL among the experimental group significant enhancements in Physical health domain, Psychological domain, Social domain, Environmental domain, overall QoL and overall health indicates that there were significant improvement in their QoL.

Goedendorp, Peters, Gielissen, Witjes, Leer, Verhagen and Bleijenberg (2010), conducted a study where two interventions for fatigue were given during curative cancer treatment. The aim of this multi-centre randomized controlled trial (RCT) with three conditions was to demonstrate the efficacy and to determine the contribution of physical activity. Two hundred and twenty patients with various malignancies participated in the study. The brief nursing intervention (BNI) consisted of two 1-hour sessions, 3 months apart, given by 12 trained nurses, focusing only on physical activity. Cognitive behaviour therapy (CBT) consisted of up to ten 1-hour sessions, within 6 months, provided by two therapists, focusing on physical activity and psychosocial elements. The control group received only usual care (UC). Assessments took place before and at least 2 months after cancer treatment when patients had recovered from acute fatigue. Their study revealed that, the CBT group was significantly less fatigued than the UC group. Between the BNI and the UC groups, no significant difference was found in fatigue. The study concluded that CBT given during curative cancer treatment proved to be an effective intervention to reduce fatigue at least 2 months after cancer treatment. The BNI was not effective. Contrary to what was expected, physical activity did not mediate the effect of CBT on fatigue. Thus, the reduction in fatigue was elicited by CBT.

Vitiello, Rybarczyk, Von Korff, and Stepanski (2009), researched into cognitive behavioural therapy for insomnia improves sleep and decreases pain in older adults with co-morbid insomnia and osteoarthritis. They examined this possibility in a secondary analysis of a previously published randomized controlled trial of cognitive behavioural therapy for insomnia (CBT-I) in patients with osteoarthritis and co-morbid insomnia. Twenty-three patients were randomly assigned to CBT-I and 28 patients to an attention control. Neither directly addressed pain management. Twelve subjects crossed over to CBT-I after control treatment. Sleep and pain were assessed by self-report at baseline, after treatment, and (for CBT-I only) at 1-year follow-up. CBT-I subjects reported significantly improved sleep and significantly reduced pain after treatment. Control subjects reported no significant improvements. One-year follow-up found maintenance of improved sleep and reduced pain for both the CBT-I group alone and among subjects who crossed over from control to CBT-I. The research concluded that CBT-I improved both immediate and long-term self-reported sleep and pain in older patients with osteoarthritis and comorbid insomnia. These results are unique in suggesting the long-term durability of CBT-I effects for co-morbid insomnia. They also indicate that improving sleep in patients with osteoarthritis may result in decreased pain.

Luttik, Jaarsma, Veeger and Veldhuisen (2006), the aim of their study was to investigate the impact of having a partner on quality of life (QoL), the number of hospital readmissions, and 9-month survival in patients with heart failure (HF). The study population consisted of hospitalized patients with HF at University Medical Centre Groningen, Groningen, in the Netherlands. Results revealed that out of the 179 patients, 96 (54%) were married or were living with a partner. Differences in QoL between married patients and those living alone were most pronounced with regard to future expectations of QoL. However, in a multivariate model, QoL was primarily associated with socioeconomic status, age, and gender. Married patients had 12% fewer events in the 9-month follow-up period compared with patients living alone (*P* = not significant). They concluded that most patients with HF who are living alone are mostly elderly women with a low socioeconomic status, who are at risk for recurrent events and a worse QoL.

A study carried out by Spincemaille, Klomp, Steyerberg and Habbema (2000), was an assessment on pain and quality of life of patients with critical limb ischaemia during the follow-up of a multicentre randomized trial in more detail than previously reported. In a multicentre clinical trial, 120 patients were randomized between medical treatment and medical treatment plus spinal cord stimulation. Patients were selected at the Dijkzigt Academic Hospital, Rotterdam on the basis of clinical symptoms and macro-circulatory data as described in the European consensus document on critical limb ischaemia. Their Pain level was evaluated using the visual analogue scale (VAS), the McGill pain questionnaire, the pain score of the Nottingham Health Profile (NHP) and the use of analgesics. Quality of life was evaluated using the NHP, the EuroQol and mobility sub-score of the Sickness Impact Profile. Pain relief was considerable in both treatment strategies with no significant differences between the strategies. The improvement occurred within the first few months and remained stable during further follow-up. The overall scores of quality of life improved significantly with no difference in score between treatments. The subscores of mobility and energy of the NHP in non-amputated patients was significantly better in the SCS group. Amputation had a negative effect on mobility, resulting in a difficult rehabilitation but relieved pain substantially.

Pell, Donnan, Fowkes and Ruckley (1993), conducted a study on quality of life following lower limb amputation for peripheral arterial disease. The quality of life of 149 amputees from one hospital was evaluated using the Nottingham Health Profile and compared to that of a control group matched for age and sex. One hundred and thirty (87%) amputees and 115 (77%) controls responded to the questionnaire. Amputees reported significantly more problems with mobility, social isolation, lethargy, pain, sleep and emotional disturbance than controls. However, mobility was the only significant independent factor after matched logistic regression analysis. The differences in social isolation and emotional distress lost their significance after adjustment for mobility. The overall quality of life following lower limb amputation for the peripheral arterial disease is poor, but much of this is secondary to restricted mobility. Rehabilitation following amputation focus should be on attempts to improve mobility.

Psychological Health and Quality of Life

Vakilian, Poorjandaghi and Khorsandi, (2018). The aim of their study was to determine the effectiveness of group counselling on cognitive-behavioural approach on the self-esteem in primiparous pregnant women. This randomized clinical trial was conducted on 46 pregnant nulliparous women in one of the hospitals in Tehran. Then, they were randomly divided into two groups in the intervention and control group. The intervention group participated in 7 sessions of cognitive-behavioural group counselling, while the control group received only the routine pregnancy care. The results showed that there were differences between mean age among women in the intervention group, and the control group was significant. It was concluded that cognitive-behavioural group counselling could increase the self-esteem of women during pregnancy.

Alavi, Molavi and Molavi, (2017), conducted a study aimed to examine the effects of CBT on self-esteem and QoL of hospitalized amputee elderly patients. A randomized controlled trial was carried out on a sample of 64 amputee elderly patients. The subjects were selected consecutively and then were randomly assigned either the experimental or the control groups. The data collection instrument consisted of a demographic data form, the Rosenberg self-esteem scale, and the short form of the World Health Organization QoL Questionnaire (WHOQOL). Patients in the intervention group participated in six sessions of CBT and the control group received routine care. Results revealed that there were no significant differences found between the intervention and the control groups regarding their baseline mean scores of self-esteem and QoL. The observed changes in the QoL and self-esteem of the control group were not statistically significant. However, significant statistical differences were observed between all mean differences in the two groups that indicate the positive effect of the intervention. They concluded that CBT employed in the present study could significantly improve the self-esteem and QoL in amputee elderly patients.

Another study conducted by Izadi-Ajirlo, Bahmani and Ghanbari-Motlagh (2013), their aim was to see the effectiveness of cognitive behavioural group intervention on body image and self-esteem among breast cancer patients after mastectomy. Methods: Our study comprised of 23 breast cancer patients in Imam Hossein Hospital, aged between 30-60 years, all of whom had undergone mastectomy and then radiotherapy. The study participants were selected through purposeful sampling and then randomly assigned to the case (10) and control (13) groups. The intervention program (cognitive behavioural group intervention) consisted of 12 sessions of intervention (2 sessions per week) each taking 90 minutes, in a 6-week process. Both group members completed the “body image and relationships scale” and the “Pope self- esteem questionnaire” before and after training. The results of this study revealed that the intervention was significantly effective on improving the mean score of body image and self- esteem in the breast cancer/mastectomy patients of the case group compared to that of the control group. Therefore, they concluded that cognitive behavioural group intervention can be effective in improving body image and increasing self-esteem among women with breast cancer after mastectomy.

Moura, Faurot, Gaylord, Mann, Sill, Lynch and Lee (2012), the aim of their study was to look at the Mind-body interventions for the treatment of phantom limb pain in persons with amputation. There is growing empirical evidence of the therapeutic effectiveness of mind-body therapies for the relief of chronic pain. The researchers undertook a focused literature review on mind-body interventions for patients with amputation who experience phantom limb pain. Only descriptive presentations of the studies were used because of the heterogeneity nature of the study. Studies on imagery, hypnosis, and biofeedback, including visual mirror feedback, were found. Few studies of specific mind-body therapies were dedicated to the management of phantom limb pain, with the exception of mirror visual therapy. Overall, studies were largely exploratory and reflect considerable variability in the application of mind-body techniques, making definitive conclusions inadvisable.

Nevertheless, the weight of existing findings indicates that a mind-body approach to phantom limb pain. Pain management technique is a promising and that this specific method may offer either temporary or long-term relief, either alone or in combination with conventional therapies.

Garnefski, Kraaij, De Graaf and Karels (2010), their study represents, the influence of cognitive coping strategies and goal-related coping on depressive symptoms in people with severe visual impairments with the aim of finding targets for intervention. Sixty-seven participants with visual impairments were assembled by telephone interviews. Depressive symptomatology, cognitive coping strategies, and goal-related coping processes were measured. It was shown that a ruminative way of responding to visual impairments was related to more depressive symptoms among the study participants. In contrast, refocusing attention by seeking and re-engaging in alternative, meaningful goals was related to less depressive symptoms. it was concluded that both cognitive and goal-related coping could be important targets for intervention.

Another study conducted by Bisson, Shepherd, Joy, Probert and Newcombe (2004), aim was to examine the efficacy of a four-session cognitive–behavioural intervention following physical injury. A total of 152 patients attending an accident and emergency department displaying psychological distress following physical injury were randomised to a four-session cognitive–behavioural intervention or to no intervention and then followed up for 13 months. Their results showed at 13 months, the total Impact of Event Scale score was significantly reduced in the intervention group. Other differences were not statistically significant. It was concluded that brief cognitive–behavioural intervention reduces symptoms of post-traumatic stress disorder in individuals with physical injury who display initial distress.

Eiser, Darlington, Stride and Grimer (2001), the aim of their study was to investigated self-reported quality of life (QoL), body image and daily competence of patients as a consequence of limb salvage surgery (LSS), primary or secondary amputation, and the views of patients following secondary amputation. Participants of 37 who had all been treated for osteosarcoma or Ewing's sarcoma in the lower limb. QoL was measured by questionnaire. A separate interview to determine satisfaction with decision-making was conducted with those treated for secondary amputation. Results revealed that, for the total group, QoL was below that expected from population norms. There were no differences in QoL between those undergoing LSS surgery compared with amputation.

Social Well-Being and Quality of Life

A study conducted by Riyahi, Ziaee and Dastjerdi (2018), sought to evaluate the effects of cognitive behavioural therapy on the quality of life among patients with hepatitis B. In this quasi-experimental study, 60 patients with hepatitis B were conveniently recruited from a private infectious disease clinic in Birjand, Iran. The patients were randomly allocated to either a control (n = 30) or an intervention (n = 30) group. Patients in the intervention group received cognitive behavioural therapy in 45-minute sessions while their counterparts received no cognitive behavioural therapy. All patients completed the 36-item Short Form Survey both before and after the intervention. Results revealed that in the intervention group, the scores of the social functioning and general health domains of quality of life significantly decreased while the score of the emotional well-being domain significantly increased after the intervention. However, the mean scores of the other domains did not change significantly. Moreover, in the control group, the scores of quality of life and its social functioning and general health domains significantly decreased, while the scores of the other dimensions did not change significantly. The groups did not significantly differ from each other with respect to the pre-test and post-test mean scores of the quality of life and its domains. Therefore, the study suggests that cognitive behavioural therapy has no significant effect on the quality of life but significantly improves emotional well-being among patients with hepatitis B.

A study conducted by Verschuren, Geertzen, Enzlin, Dijkstra and Dekker (2015), aimed to investigate whether sexual problems are present in people with a limb amputation, analyse how they experience their sexuality and how to investigate whether sexuality was discussed with them during their rehabilitation process. A total of 301 participants completed a survey consisting of a questionnaire on participant characteristics, the Hospital Anxiety and Depression Scale (HADS), the Maudsley Marital Questionnaire (MMQ), the Amputee Body Image Scale (ABIS), the Questionnaire about Sexual Counselling, the Questionnaire about Sexuality and the Short Sexual Functioning Scale (SSFS). Results revealed overall that, 20% of the participants experienced one or more sexual dysfunction(s). Participants who had at least one sexual dysfunction were more likely to be male and had a more negative body image. They concluded that sexual problems and sexual dysfunctions do occur in people with a limb amputation, but these problems are not discussed during the rehabilitation process. Justice for a person's “whole body” can only be served when sexuality is taken seriously in rehabilitation care in order to avoid cutting sexuality out of an amputee's life.

Another study by Deans, McFadyen and Rowe (2008), was conducted to investigate the relationship between physical activity and perceived quality of life in a lower-limb amputee population. The aim was to show which aspects of physical activity were most strongly linked to quality of life factors in this special patient group. The outcome measurements were two questionnaires: a section of the Trinity Amputation and Prosthetic Experience Scales (TAPES) and the World Health Organization Quality-of-Life Scale (WHOQOL-Bref). The former measures activity restriction and has Athletic, Functional, and Social subscales. The latter includes Physical, Psychological, Social, and Environmental domains, and measures the individual's perception of their quality of life. The two questionnaires were sent by post to 75 male and female participants with either trans-tibial or trans-femoral amputation who were receiving prosthetic care from a Glasgow-based rehabilitation and mobility centre and who met the inclusion criteria. There was a very strong correlation between scores on the social elements. The correlations between scores on the functional and athletic elements of the TAPES questionnaire and scores on the social element of the WHOQOL-Bref questionnaire were less strong. Their findings support the need for greater acknowledgement by healthcare professionals involved in the care of those with amputation about the importance of the patient's social relationships with friends and family.

A study by Behel, Rybarczyk, Elliott, Nicholas and Nyenhuis (2002), was to examine the role of feelings of vulnerability in post-amputation adjustment problems such as depression and diminished quality of life. Eightyfour participants with a lower extremity amputation. This study results revealed vulnerability accounts for significant portions of the variance in quality-of-life ratings, and prosthetists' adjustment ratings. They conclude by saying feelings of vulnerability significantly affect adjustment in persons with amputations, and this impact is not limited to a single domain by extension impacting the social well-being of an individual.

Environmental Well-Being and Quality of Life

A study conducted by Couture, Caron and Desrosiers (2010), their aim was to describe leisure activities, leisure satisfaction and constraints on participation in leisure following a unilateral lower limb amputation due to vascular disease. Method: This study used a mixed-method approach where 15 individuals with lower limb amputation completed the individual leisure profile 2–3 months post-discharge from rehabilitation. A subsample ($n = 8$) also participated in semi-structured interviews. Results show that participants were involved in 12 different leisure activities on average. Compared to before the amputation, a decrease in participation was observed in all categories of leisure activity, and especially crafts, nature and outdoor activities, mechanics, sports and physical activities. Nonetheless, overall satisfaction was high. The most important constraints on participation in leisure were lack of accessibility, material considerations, functional abilities, affective constraints and social constraints. This study concluded that a decrease in leisure activity participation and the presence of constraints do not automatically translate into low levels of leisure satisfaction.

Asano, Rushton, Miller and Deathe (2008), the purpose of their study was to identify factors that predict an individual's subjective quality of life

(QoL) after having a lower limb amputation. Cross-sectional descriptive study design. A total of 415 unilateral who had lost their limb related to vascular or non-vascular aetiology. Medical chart review, questionnaires (Frenchay Activities Index, Interpersonal Support Evaluation List, the Center for Epidemiology Studies – Depression scale, Prosthetic Evaluation Questionnaire mobility subscale, and the Activities-specific Balance Confidence Scale) and a QoL Visual Analogue Scale were assessed using multiple linear regression analysis. Results: The analysis revealed seven significant factors (depression, perceived prosthetic mobility, social support, comorbidity, prosthesis problems, age and social activity participation) as predictors of subjects' perceived QoL. Depression explained 30% of the variation, while the full model explained 42% of the variation. They concluded that several modifiable characteristics influence QoL after lower limb amputation including depression and participation in daily living. This study finding recommends the importance of addressing individuals' affective status to regain or maintain QoL.

According to a study by Ephraim, MacKenzie, Wegener, Dillingham and Pezzin, (2006), was to describe the prevalence of perceived environmental barriers in a population of amputees. A cross-sectional survey was used for the study. A stratified sample by aetiology of 914 community-dwelling persons with limb loss was used for the study. Their results showed that majority (87%) of persons surveyed reported barriers in 1 or more areas with 57% reporting barriers in 4 or more of the 5 domains (policies, physical/structural, work/school, attitudes/support, and services/assistance subscales). Across all domains, poverty level and comorbidity were significant predictors of significant barriers. When compared with a general population sample of disabled and nondisabled Americans, amputees were more likely to perceive barrier in all areas except work/school. This study's conclusion showed that perceived environmental barriers among persons with limb loss are highly prevalent. Therefore, this means it could lead to a reduced quality of life in the individuals.

Gender and Quality of Life

A study conducted by Muomah, Nwadinigwe, Ndukuba, Odinka, Chukworji and Amadi (2017), intended to examine psychological distress in 86 orthopaedic patients with limb amputation participated in the study. They were assessed with the Symptom Distress Checklist-90 (SCL-90) and a socio-demographic questionnaire. Results showed that about sixty-four per cent (64.4%) of the participants manifested distress in at least one domain of the Symptom Distress Checklist. None of the socio-demographic variables (e.g., gender) differentiated the participants in their self-reported psychological distress. Considering the high prevalence of psychological distress among amputees, mental health professionals should be involved in the management of these patients prior to and after amputation in order to enhance and promote prevention, early detection, and treatment of psychological morbidity among amputees.

Another study conducted by Cox, SKP and Weaver (2011), the aim was to determine the QoL and functional independence of lower limb diabetic amputees one to three years post amputation, using variables such as age, gender, and amputation level. A total of 87 participants were selected for the research. These participants completed the World Health Organization Quality of Life Scale (WHO QOL-BREF) and the Functional Independence Measure

(FIM). Relationships between the variables: age, gender and level of amputation with QoL and functional independence were analysed. Results revealed that among the 35 males and 52 females participating in the study, females had a significantly higher average score than males among the four domains for QoL. Similar results were obtained from the FIM where women again had significantly higher scores than males. The majority of females across the age groups reported average to high QoL compared to the males. A positive correlation was found between functional independence and quality of life of all participants. Hence, results showed that below-knee amputees functioned better than those with above knee amputations and that female were more likely to cope and function with the disability than males.

Miller and Dishon (2006), the aim of their study was to see the impact of disability, gender and employment status on health related quality of life. The researchers assessed the HRQoL of 215 Multiple Sclerosis (MS) outpatients. They compared QoL between MS subgroups defined by disability, gender and employment. Their result indicated QoL of MS patients measured by SF-36 is lower than controls, varying by QoL dimension with the greatest difference emerging for physical aspects of the disease. Non-linearity is most pronounced among women, who show a weak EDSS/QoL relationship at higher levels of physical disability, suggesting women better able to “psychologically buffer” the debilitating aspects of MS. Gender and employment status affects QoL.

Hagedoorn, Buunk, Kuijer, Wobbes and Sanderman (2000), the goal of their study was to further knowledge on gender and role (i.e. patient versus partner) differences in psychological distress and quality of life as a consequence of dealing with cancer. In total, 173 couples facing various forms of cancer (two samples) and a control group of 80 couples. Analyses of variance revealed that both female patients and female partners of patients perceived more psychological distress and a lower quality of life than women in healthy couples. In contrast, role did have an effect on men. Specifically, male patients scored as high on psychological distress and as low on quality of life as female patients and female partners, but psychological distress and quality of life did not differ between male partners of patients and their healthy controls. However, this effect was found in only one patient sample. Their findings revealed that female partners perceived distress that is more psychological and a lower quality of life than male partners.

Marital Status and Quality of Life

A study conducted by Han, Park, Kim, Kim and Park (2014), intended to examine the relationship between marital status and quality of life (QoL) in an attempt to understand these changes. They also investigated the relationship between QoL and marital status by age group. They used data from the Community Health Survey administered by the Korean Centres for Disease Control and Prevention. Participants used were 594,202 for the study. Results by marital status showed that single men had significantly worse QoL than married men. On the other hand, the QoL measured by EQ-VAS was better in single women than in married and separated or divorced women. When QoL was assessed using EQ-5D, single and separated or divorced women had worse scores than married women. In the analysis by age group, the QoL of married men under the age of 30 years was lower than that of single men or men with marriage problems as measured by EQ-VAS. However, among 40–69-year-old men, married men had the highest QoL values. Similarly, for women in their

30s, single women had the highest EQ-VAS values, but for 40–69-year-old women, single women had lower EQ-VAS scores than married women. They concluded that there was a significant relationship between marital status and QoL.

According to a study by Holt-Lunstad, Birmingham and Jones (2008), the aim of their study was to examine the influence of marital status, relationship quality. They examined ambulatory blood pressure (ABP) among 204 married and 99 single males and females (N = 303). Their results revealed that both marital status and marital quality were important. Married individuals had greater satisfaction with life (SWL) and blood pressure dipping than single individuals. High marital quality was associated with lower ABP, lower stress, less depression, and higher SWL. Importantly, contrasting those who are unmarried with those in low-quality marriages, we find that single individuals had lower ABP suggesting that single individuals fare better than their unhappily married counterparts. Likewise, having a supportive network did not moderate (i.e., buffer) the effects of being single or unhappily married. Thus, they concluded that being married per se is not universally beneficial, rather, the satisfaction and support associated with such a relationship is important.

Hagelin, Seiger and Fürst (2006), study was conducted to explore symptoms, other quality of life (QoL) aspects and impact of age, gender, marital status, cancer diagnosis and time of survival in patients with advanced cancer admitted to palliative care. This study used a cross-sectional study of 278 cancer patients. The results found that gynaecological and gastro-intestinal tract cancers were the most common. Patients reported impaired general QoL and high occurrence of symptoms. Married/cohabiting patients and younger patients reported lower functional abilities and more symptoms. The study concluded that young and married patients may be at higher risk for perceived low quality of life at the end of life.

Tate and Forchheimer (2002), aim of their study was to determine differences in quality of life, life satisfaction, and spirituality across different patient groups and to determine what factors may relate to these three outcomes across rehabilitation and cancer patients. Participants were first stratified by five diagnostic groupings. Patient data were then regrouped for additional analytic purposes into two large cohorts. This study results revealed that group differences were found across the quality of life measures used in the study. There were also differences in life satisfaction and spiritual well being. Spirituality was found to be associated with both quality of life and life satisfaction, although it was not a significant predictor. The study concluded that participants with prostate cancer reported higher scores across all measures. Factors such as age, marital status, and work status, in addition to specific dimensions of quality of life, such as social functioning and functional well-being, were found to be associated with total quality of life.

According to a study by Luttik, Jaarsma, Veeger and Veldhuisen (2006), the aim of their study was to investigated the impact of having a partner on quality of life in patients with heart failure (HF). The study population consisted of hospitalized patients with HF. QoL was measured by the Cantril Ladder of Life (0–10) during hospital admission. The study revealed that 96 (54%) were married or were living with a partner out of the 179 patients. The differences in QoL between married patients and those living alone were most pronounced with regard to future expectations of QoL. However, in a multivariate model, QoL was primarily associated with socioeconomic status, age, and gender. Married patients had 12% fewer events in the 9-month follow-up period compared with patients living alone (*P* = not significant). This study concluded that most patients with HF who are living alone are mostly elderly women with a low socioeconomic status, who are at risk for recurrent events and a worse QoL. Although the study is not related to amputation it can be seen, married individuals had a better quality of life than the individuals living alone did, and this could serve as a good empirical review for this research.

Summary

The literature gave an explicit insight into how psychotherapy could impact on quality of the amputee. Going by the literature which spans varied ethnicities and geographical locations and which considered different forms of psychotherapies including cognitive behavioural therapy, mind-body therapies etc. Thus, the impact of psychotherapy on the quality of life of amputee patients cannot be over-emphasised. All the literature reviewed indicated a positive association between psychotherapy and quality of life of the amputee patients studied. Though all the studies measured psychotherapy using different markers and tools, and also measured various forms of quality of life, the impact of psychotherapy on these different forms of quality of life measured, irrespective of the nature gave an impression of its influence on patient's well being measured in terms of their quality of life. For instance, Physical health of amputees has been a major problem for these category of indidviduals going by the literature reveiwed.

On the most part, physical health has been measure in relation to amputees quality of life. A study done by Sharma et al. (2016), measured quality of life using cognitive behavioural intervention as marker just as Vitiello et al. (2009). However, the former looked at enhancing quality of life of amputees while the latter was looking at improving sleep (a part of quality of life) with cognitive behavioural intervention. Again, Spincemaille et al. (2000) measured quality of life using pains as a marker just as Pell et al. (1993). However, the former looked at assessment of pain on quality of life whereas the latter looked at overall quality of life.

Again, Psychological health has its own problems associated with amputation looking at the literature reviewed. A study conducted by Vakilian et al. (2018), measured the effectiveness of cognitive-behavioural approach on self-esteem in pregnant women whileas Alavi et al. (2017) aim was on self-esteem and QoL of hospitalized amputee elderly patients yet both had positive impact on the quality of life of patients invpolved in the study.

Social and environmental health also comes with its own issues after an individual has done amputation and how it affects the indiviual's quality of life. A study by Verschuren et al. (2015), measured quality of life using vunerability same as Behel et al. (2002). Nonetheless, the former measured vulnerability in relation to the amputee's sexual problem whereas the latter measured vulnerability in general terms.

CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter presents the research design adopted for this study and the reason for choosing the design. In addition, the chapter has discussed the population for the study, the sample and the sampling procedures used, instruments used for data collection, ethical considerations, data analysis technique and results from analysis of data collected from the study.

Research Design

This study used a quantitative research design to measure the variables of the study. Specifically, the ex-post facto research design was adopted to examine the impact of psychotherapy on the quality of life of an amputee. There are other research strategies: descriptive strategy, quasi-experimental strategy, and experimental strategy, which are all suitable for different studies; based on what the researcher(s) intend to investigate, and its study objective, the most appropriate research design, which was adopted for the purpose of the study, was the non-experimental research strategy using specifically the ex-post facto research design.

Non-experimental designs include research designs in which an experimenter simply describes a group or examines relationships between pre-existing groups. The members of the pre-existing groups are not randomly assigned and the predictor variable is not manipulated by the researcher, thus, no conclusions about causal relationships between variables in the study can be drawn. Usually, little attempt is made to control for threats to internal validity in non-experimental designs. Non-experimental designs are used simply to answer questions about groups or about whether group differences exist. The conclusions drawn from non-experimental research are primarily descriptive in nature. In other words, this study attempts to discover the pre-existing causal conditions between groups. It should, however, be pointed out that the most serious danger of ex-post facto research is the conclusion that because two factors go together, one is the cause and the other is the effect. According to Isaac and Michael (1971), they offered the following strengths' and weaknesses for the ex-post facto research design: The causal-comparative method is appropriate in many circumstances where the more powerful experimental method is not possible, It yields useful information concerning the nature of phenomena, what goes with what under what conditions and in what sequences and patterns. Kelinger (1964) presented a strong case for the ex-post facto research design, it can even be said that ex-post facto research is more important than experimental research. This is, of course, not a methodological observation. It means, rather, that the most important social scientific and educational research problems do not lend themselves to experimentation, although many of them do lend themselves to the controlled inquiry of the ex-post-facto kind. Thus, reason for choosing this type of research was that, the phenomena is studied after the fact; that is after it occurred naturally or was already manipulated. The research participants were not assign to the various groups. Hence, the reason I used the ex-post facto design.

Study Area

The study was conducted in the 37 Military Hospital within Greater Accra Region of Ghana using samples from 37 Military Hospital. A British military officer originally established the 37 Military Hospital in 1941. It was the 37th Military Hospital in the world. The hospital's name at the time was No. 37 General Hospital; it was later changed to 37 Military Hospital of the Gold Coast in 1956. The hospital was later expanded and opened to the public, although the hospital continues to be staffed primarily by military personnel. The hospital has a 24-hour accident and emergency department and pharmacy with a hospital bed capacity of 400. The hospital has other department including physiotherapy department. The physiotherapy department in 37 strives to provides preventive, curative and rehabilitative services to both in and out patients based on high standards of care and quality. The second hospital that was used for this research was Tema General Hospital, the biggest Health Facility in the Tema Metropolis. Sir William Halcrow and Partners developed the Tema Port handed over the hospital to the Ghanaian government in 1967. The company used the facility as a clinic for the treatment of injured construction workers and engineers who worked on the harbour project from 1954-1967. The hospital runs a 24-hour specialist and general services on both out-patients and in-patients with a total bed capacity of 294. The facility has 21 various units that is, the internal medicine and intensive care unit, general surgery, physiotherapy, specialist clinics such as sickle cell, diabetic, among others. It has 40 doctors, 49 house officers, 430 nurses, interns and other general staff. What it means is that, any person within Tema with amputation could visit the physiotherapy unit for rehabilitation. Hence, a good point of data collection for studies involving persons with amputation.

Population

A population is described as a group of individuals who possess specific characteristics and from which a sample is drawn to determine the parameters or characteristics (Creswell & Clark, 2017:112; Maree & Pietersen, 2007:172; Singh, 2007:8). Wilson and Anthony (2001) observed that a population is an entire group of individual or objects having common observable characteristics and that each member can be identified as having those characteristics. Gorard (2001) opines that a population is a group usually of the individual from which a sample selection will be used to generate results of a study. The target population for the research was 42 patients that have been amputated and undergoing treatment at the 37 Military Hospital, and Tema General Hospital. This target population was useful in determining the appropriate participants to be considered since members of the population from which the sample was drawn was a medically diagnosed one, hence ascertaining the veracity of the representative sample. The target population enabled the researcher control for certain characteristics such as marital status, duration of the condition, and gender variability. This is due to the diverse background of the participants since they were not selected from a particular sociocultural environment.

Sample and Sampling Procedure

A sample is a sub-group of the target population that the researcher plans to study for generalizing about a target population (Creswell, 2005). Based on size of the population under study, all 42 participants were recruited by census for the study. Fifteen (15) of the participants were recruited by way of census at

37 Military Hospital and twenty-seven (27) representing the rest of participants at Tema General Hospital. Although most studies are performed using samples, whether or not they represent any target population, census-based estimates should be preferred whenever possible (Suresh, Thomas, & Suresh 2011: Rothman, Gallacher & Hatch 2013). This size, though low, was considered feasible because of the challenge of accessibility to a sizeable number of participants given the specificity of the condition under study, the sensitivity of the condition, the age and physical strength of the participants. Purposive sampling was used to select the hospitals this is because amputation is a major surgical procedure and it needs a specialized hospital. Hence, the reason for these hospitals within the Greater Accra Region. The hospitals that were used for the study were 37 military hospital and Tema General Hospital. A census technique was used in getting the participant who received psychotherapy and those who did not receive psychotherapy. The participants were either coming for regular medication check-up or physiotherapy in their respective hospitals. Purposive sampling and census survey was considered the most appropriate sampling techniques for this study because of the participant characteristics in the study.

Inclusion Criteria

- Patients with diabetes that has resulted in lower limb amputation.
- The participant used for the study were 18 years old and above and were willing to participate in the study.
- Be receiving outpatient treatment.

Exclusion Criteria

- Participants whose amputation is a congenital disorder, trauma-related and any other condition a part from diabetes

Data Collection Instruments

The use of a questionnaire is an effective means of measuring the behaviour, attitudes, preferences, opinions and intentions of relatively large numbers of subjects. Knowles (as cited in Adane, 2013) indicated that questionnaires are useful as they are easy to administer, friendly to complete and fast to score and thus, take relatively less time from responding to them. The instruments becomes more reliable when participants are assured of their anonymity and confidentiality. However, Payne and Payne (2004) indicated that there are various setbacks to the use of questionnaires in research study: questionnaires do not encourage probing which allows respondents to give shallow responses; respondents may not, for privacy and social desirability, give 100% trustworthy responses; respondents may skip complicated questions which can affect the results of the study. After a thorough review of the literature concerning the concepts and theories and with the study objective in mind, questionnaire type research instruments together with demographic questionnaire were adopted and used for the study. A standardized questionnaire was used in measuring patients' quality of life. As with the standard WHOQOL-BREF (1996) questionnaires, the WHOQOL-BREF Taiwan version was simplified from the WHOQOL-BREF for Taiwan. For the purpose of cross-cultural comparison, the first 26 items were the same as the standard WHOQOL-BREF, which was developed from global studies. In addition to the 26 items, they applied the psychometric criteria proposed by the

WHOQOL Group. The Taiwan Version of the quality of life scale included two of the national items were selected, each from a cultural-specific facet that was proposed for Taiwan in a previous study. Thus, the WHOQOL-BREF Taiwan version of the quality of life instrument was used for this study, which contains 28 items classified into the same four domains as the standard WHOQOL-BREF. The scale administration and scoring procedures are the same as for the WHOQOL long form except that the facet score is based on only one item. The test was scored on a 5- point Scale with "Very dissatisfied" obtaining a score of 1 while "very satisfied" obtained a score of 1. The internal consistency (Cronbach's α) coefficients were 0.70 to 0.77 at the domain level and 0.91 for the whole questionnaire. The test-retest reliability coefficients of the scale range from 0.41 to 0.79 at item/facet level and 0.76 to 0.80 at the domain level. Discriminant validity was best demonstrated in the physical, followed by psychological, social and environmental domains. To establish its Construct validity WHOQOL domain scores can be compared to general single-item QoL measures with evidence face validity. The psychometric analyses on the WHOQOL-BREF Taiwan version indicate that this questionnaire is reliable and valid.

Ethical Considerations

Ethical considerations are essential to research requirement as it guarantees the safety of research participants and properties. To ensure this, participants were assured of the right to privacy, voluntary participation, no harm to participants, anonymity and confidentiality through an informed consent form written in accordance with the University of Cape Coast Institutional Review Board (UCCIRB) guideline. All ethical and legal standards specified by the hospital and UCC ethical committee were observed and met and participants were given informed consent which enabled them to freely quit study if they wanted. They were assured of confidentiality and anonymity. I briefed participants about the intention of the study and assured them of their safety. Participants demographic information were well looked at to avoid identification with such information. The assigned codes that were generated were mainly for questionnaire identification but had no bearing on respondent identity after the study (Creswell, Smith & klassen, 2012).

Data Collection Procedures

The beginning of the main data collection was preceded by a pilot test. It was carried out to ascertain the reliability of the scale to be used in the study. According to Baker (1994), a sample size of 10-20% of the sample size of the actual study is a reasonable number of participants to consider for your pilot test. Hence, the number of participants used for the pilot study were five traumatic amputees patients receiving outpatient care at the police hospital. Internal consistency domain level after pilot testing was 0.700 for the physical domain, 0.621 for the psychological domain, 0.510 for the social domain and 0.710 for the environmental domain and overall questionnaire was 0.848, demonstrating moderate-to-good internal consistency. The least subscale of the questionnaire after the pilot testing was social (0.510), which could be because of the number of items (4) and the number of participants (5) in the pilot test. According to Nunnally (1978), recommended a minimum level of Cronbach's coefficient alpha of 0.7; however, this value tends to underestimate the internal consistency of scales consisting of fewer than 10 items" according to Herman (2015, p. 8) mean inter-item correlation values as an alternative measure of internal consistency. Another study conducted by Briggs and Cheek (1986) reported that in a situation where the number of items was less than 10, it is better to calculate and report the mean inter-item correlation for the items.

An introduction letter from the department of education and psychology was sent to the Chief Executive Officers of 37 military hospital and Tema General Hospital to permit data collection within a period of two months. The assessment procedure involved administration of the demographic questionnaire and the adopted questionnaire to all selected participants. Two assistants were trained for the collection of the data. Assistants guided respondents concerning any difficulty with an item on the questionnaire. The entire answered questionnaire was collected at the end of each session and packed into brown sealed envelopes to ensure confidentiality and safety of data. The physiotherapy centre at the various teaching Hospital selected was used for the data collection. The questionnaire was self-administered to those who can read and write, but for those who could not read and write, the questionnaire was read to them and their answers indicated as well. Participants who required any form of assistance pertaining to how to respond or difficulty to understand an item were given as much insight into the questions as possible without hinting a response. Participants were assured of confidentiality of their information and the fact that the report of the study would be based on group data.

Data Processing and Analysis

Data was thoroughly cleaned before data entry, processing and analysis. Questionnaires with too many missing data were manually sorted and excluded from data. The researcher made data entry into SPSS software version 20.0

(SPSS. v20.0). The participant's data was coded and reversed coding was done for negatively phrased questions. During data analysis, extreme outliers were excluded from data for which the items were requisites of data analysis for the particular scale. The analysis of the data was guided by the stated research hypotheses. The demographic data of the participants were also scored. Section B, which was the Likert WHOQOL-BREF Taiwan Version test that measures the quality of life and scored on a 5- point Scale with "Very dissatisfied " obtaining a score of 1 while "very satisfied" obtained a score of 1. Considering, the purpose of the research and the kind of investigation is done, the following statistical analysis methods were used; analysis of variance (ANOVA) and independent t-test.

Independent t-test

Research hypotheses (1,2,3,4,5,6), which states that how psychotherapy affects the amputee 's physical health, overall psychological well-being, social well-being and the environmental situation was analysed using independent t-Test to find out the impact on these variables. The researcher also wanted to find out the significant difference that existed between those who received and those who did not receive psychotherapy and gender differences that existed. Thus, the rationale behind the use of independent sample t-test was, I had two independent groups and a continuous variable so it was appropriate I use the independent sample t-test to compare the means of the two groups to see if there existed statistically significance difference between the groups.

One-way analysis of Variance

Hypothesis (H7) which states whether there is difference in the quality of life by marital status. This hypothesis was analysed by using the one-way analysis of variance. This was used to determine the difference that existed between the groups. Hence, the reason behind the use of analysis of variance was, I had three independent groups and a continuous variable so it was appropriate I use the analysis of variance to compare the means of the three groups to see if there existed statistically significance difference between the groups.

Summary

The chapter discussed the methods and procedures that were used to attain the objectives set for the study. A review of the research design, population and sample, data collection instruments, data collection and analysis procedures, as well as validity and reliability of the instruments, have been described. As indicated above, non-experimental research design with quantitative approach was most appropriate for the study even though it has its own associated drawbacks: introduction of bias into data collection procedures; inability to follow-up on respondents' responses; failure of the methodology to give in-depth description on respondents' experiences; sample size adequacy as required by quantitative methodology was limited. However, the study focused on obtaining information on the amputees, the design was deemed appropriate. Data was collected from the 37 military Hospital and Tema General Hospital. A standardized questionnaire was used in soliciting responses. Namely; WHOQOL-BREF- Taiwan Version. Hypotheses 1,2,3,4,5,6 was analysed using independent sample T-test. One-way analysis of variance was computed for hypothesis 7. Data analysis procedures were done considering their underlying statistical assumptions. For inferential statistics, levels of significance were set at 0.05 alpha levels. Ethical standards were fully observed

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter presents the results of the analyses and discussion of the findings of the study. The purpose of this study was to find out the impact of psychotherapy on the quality of life of in the Greater Accra Region. To accomplish this, non-experimental research strategy was employed. The respondents of the study were amputees from the selected teaching hospitals in the Greater Accra Region. The data was analysed based on a 76 per cent return rate on the questionnaire. This presupposes that the 55 questionnaires that were distributed to amputees, only 42 were retrieved for analysis. Using inferential (independent t-test and one-way analysis of variance) and descriptive statistics (frequencies and percentages). The results were presented based on the research hypothesis that guided the study.

The first part of the analysis was based on the demographic characteristics of the amputees involved in the study. This included gender, age, psychotherapy and duration. The second part of the analysis was based on hypotheses. The demographic data were analysed using frequencies and percentages.

Results

Demographic Characteristics of Amputees

This section surveyed amputees' responses on their demographic characteristics including psychotherapy, gender, age, marital status, and duration. A summary of the responses on the demographic characteristics is presented in Tables 1.

Findings on the demographic background of participants are presented in Table 1

Table 1: *Demographic Background of Participants*

	Amputee Patients (n=42)	
Variables	Frequency	Percentage
Psychotherapy		
Group with Psychotherapy	18	42.9
Group without Psychotherapy	24	57.1
Gender		
Male	31	73.8
Female	11	26.2
Age		
31-40	3	7.1
41-59	20	47.6
60 and Above	19	45.2
Marital Status		
Single	4	9.5
Married	24	57.1
Divorced	14	33.3
Duration		
1-5months	7	16.7
5-10months	22	52.4
11-15months	10	23.8
16-20months	1	2.4
21-25months	2	4.8

Source: Field Survey, Adjei (2018)

Table 1 revealed that 18 respondents [42.9%] were in the group with psychotherapy and 24 respondents [57.1%] were in the group without psychotherapy. As a result, the majority of the respondents were in the group that did not receive psychotherapy.

Again, with respect to gender, the majority of the respondents comprising 73.8% were males with the remaining 26.2% being females. This demonstrates that there were more male respondents than female respondents in the sample used for the study.

Table 1 revealed that, patients who fell between the ages of 41-59 to 60 and above constituted the greatest number of patients with amputation [47.6%] and [45.2%] respectively. This indicated that patients with diabetes between the ages of 41 and 60 above are more likely to be amputated than those who were between 31 and 40 years since those between this age categories were lesser [7.1%].

The greatest proportions of the patients fell within married [57.1%] and divorced [33.3%]. However, those who were single constituted an equal insignificant proportion [9.5%] compared to the married and divorced category of patients. This is most likely because most of the patients were in their late adulthood and were more likely to be married or divorced than being single.

A significant group of the respondents representing 22 [52.4%] and 10 [23.8%] representing 5-10 months and 11-15 months respectively represents the majority of respondents after amputation, 2[4.8%] representing 21-25 months were the lest group of amputees in this category. This is likely to be due to a high mortality rate of amputees that fall within this range.

Hypothesis one

H_1: There would be statistically significant difference in the QoL of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.

This research hypothesis sought to find out whether there were differences in the quality of life of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy in the Greater Accra Region. To achieve the purpose of this research hypothesis, the independent sample t-test was used to investigate the difference between the variables. It should be emphasised that the independent variable, psychotherapy was made up of two groups namely the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy against the dependent variable (Overall quality of life). Alpha was set at 0.05. The result was justified using descriptive statistics and the summary of the results presented on the table below.

Table 2: *Independent Sample t-Test of Psychotherapy Impact on an Amputee's Overall Quality of Life*

Psychotherapy	N	Mean	SD	t-value	Df	p-value
Group with Psychotherapy	18	84.44	17.23	-.04	40	.97
Group without Psychotherapy	24	84.63	8.88			

Source: Field Survey, Adjei (2018)

From Table 1, the independent sample t-test was associated with a statistically non-significant effect, t (40) =-.04, p= .97. Thus, the value for sig. (2-tail) is 0.97 which is greater than 0.05 (p>0.05). Therefore, it can be concluded that there was no significant difference in the amputee group that received psychotherapy (M=84.44, SD=17.23) and the group that did not receive psychotherapy (M=84.63, SD=8.88). This means that the null hypothesis was not rejected and thus, the test was not statistically significant, hence the means were equal. This shows that there was no statistically significant difference between the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy in relation to their overall quality of life.

Research hypothesis two

H_1: There would be statistically significant difference in the physical health of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.

This research hypothesis sought to find out whether there was a physical health difference in the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy in the Greater Accra Region. To achieve the purpose of this research hypothesis, the independent sample t-test was used to investigate the difference between the variables. It should be emphasized that the independent variable, psychotherapy was made up of two independent groups namely the group that received psychotherapy and the group that did not receive psychotherapy against the dependent variable (physical health of quality of life). Before the conduct of the analysis, assumptions such as normality and equality of variance were conducted. Alpha was set at 0.05.

Table 3: *Independent Sample t-Test of Psychotherapy's Impact on an Amputee's Physical Health in relation to their Quality of Life.*

Psychotherapy	N	Mean	SD	t-value	Df	p-value
Group with Psychotherapy	18	20.56	5.60	-0.63	40	0.54
Group without Psychotherapy	24	21.46	2.81			

Source: Field Survey, Adjei (2018)

Table 3 indicates that the independent sample t-test was associated with a statistically non-significant effect, t (40) =-.63, p= .54. Thus, the value for sig. (2-tail) is 0.54 which is greater than 0.05 (p>0.05). Therefore, it can be concluded that there was no significant difference in the amputee group that received psychotherapy (M=20.56, SD=5.60) and the group that did not receive psychotherapy (M=21.46, SD=2.81). This means that the null hypothesis was not rejected and thus, the test was not statistically significant, hence the means were equal. This shows that there was no statistically significant difference between the amputee group that received psychotherapy in relation to their physical health and the amputee group that did not receive psychotherapy in relation to their physical health.

Research hypothesis three

H_1: There would be statistically significant difference in the psychological health of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.

This research hypothesis sought to find out whether there was a psychological well-being difference in the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy in the

Greater Accra Region. To realize the purpose of this research hypothesis, the independent sample t-test was used to investigate the difference between the variables. It should be highlighted that the independent variable, psychotherapy was made up of two independent groups namely the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy against the dependent variable (psychological well-being of quality of life). Before the conduct of the analysis, assumptions such as normality and equality of variance were conducted. Alpha was set at 0.05.

Table 4: *Independent Sample t-Test of Psychotherapy's Impact on an Amputee's Psychological Well-Being in relation to their Quality of Life*

Psychotherapy	N	Mean	SD	t-value	Df	p-value
Group with Psychotherapy	18	17.22	5.23	-0.33	40	0.74
Group without Psychotherapy	24	17.67	2.62			

Source: Field Survey, Adjei (2018)

Table 4 shows that the independent sample t-test was associated with a statistically non-significant effect, t (40) =-.33, p= .74. Thus, the value for sig. (2-tail) is 0.74 which is greater than 0.05 (p>0.05). Therefore, it can be concluded that there was no significant difference in the amputee group that received psychotherapy (M=17.22, SD=5.23) and the group that did not receive psychotherapy (M=17.67, SD=2.62). This means that the null hypothesis was not rejected and thus, the test was not statistically significant, hence the means were equal. This shows that there was no statistically significant difference between the amputee group that received psychotherapy in relation to their psychological well-being and the amputee group that did not receive psychotherapy in relation to their psychological well-being.

Research hypothesis four

H_1: There would be statistically significant difference in the social relationship of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.

This research hypothesis also sought to find out whether there was a social relationship difference in the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy in the Greater Accra Region. To attain the purpose of this research hypothesis, the independent sample t-test was used to investigate the difference between the variables. It should be emphasised that the independent variable, psychotherapy was made up of two independent groups namely the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy against the dependent variable (social relationship of quality of life). Before the conduct of the analysis, assumptions such as normality and equality of variance were conducted. Alpha was set at 0.05.

Table 5: *Independent Sample t-Test of Psychotherapy's Impact on an Amputee's Social Relations of their Quality of Life*

Psychotherapy	N	Mean	SD	t-value	Df	p-value
Group with Psychotherapy	18	13.44	1.92	1.17	40	0.25
Group without Psychotherapy	24	12.83	1.46			

Source: Field Survey, Adjei (2018)

Table 5 reveals that the independent sample t-test was associated with a statistically non-significant effect, t (40) =1.17, p= .25. Thus, the value for sig. (2-tail) is 0.25 which is greater than 0.05 ($p>0.05$). Therefore, it can be concluded that there was no significant difference in the amputee group that received psychotherapy (M=13.44, SD=1.92) and the group that did not receive psychotherapy (M=12.83, SD=1.46). This means that the null hypothesis was not rejected and thus, the test was not statistically significant, hence the means were equal. This shows that there was no statistically significant difference between the amputee group that received psychotherapy in relation to their social relation and the amputee group that did not receive psychotherapy in relation to their social relation.

Research hypothesis five

H_1: There would be statistically significant difference in the environmental situation of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.

This research hypothesis sought to find out whether there was an environmental situation difference in the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy in the Greater Accra Region. To achieve the purpose of this research hypothesis, the independent sample t-test was used to investigate the difference between the variables. The independent variable, psychotherapy was made up of two independent groups namely the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy against the dependent variable (environmental situation of their quality of life). Before the conduct of the analysis, assumptions such as normality and equality of variance were conducted. Alpha was set at 0.05.

Table 6: *Independent Sample t-Test of Psychotherapy's Impact on an Amputee's Environmental Situation in relation to their Quality of Life*

Psychotherapy	N	Mean	SD	t-value	Df	p-value
Group with Psychotherapy	18	26.67	4.27	.68	40	.50
Group without Psychotherapy	24	25.88	3.25			

Source: Field Survey, Adjei (2018)

Table 6 indicates that the independent sample t-test was associated with a statistically non-significant effect, t (40) =.68, p= .50. Thus, the value for sig. (2-tail) is 0.50 which is greater than 0.05 (p>0.05). Therefore, it can be concluded that there was no significant difference in the amputee group that received psychotherapy (M=26.67, SD=4.27) and the group that did not receive psychotherapy (M=25.88, SD=3.25). This means that the null hypothesis was not rejected and thus, the test was not statistically significant, hence the means were equal. This shows that there was no statistically significant difference between the amputee group that received psychotherapy in relation to their environmental situation and the amputee group that did not receive psychotherapy in relation to their environmental situation.

Research hypothesis six

H_1: There would be statistically significant difference between the male and female quality of life.

This research hypothesis sought to find out whether there were gender differences in the quality of life of the amputee in the Greater Accra Region. To achieve the purpose of this research hypothesis, the independent t-test was used to investigate the difference between the variables. It should be stressed that the independent variable, gender was made up of two independent groups namely male and female against the dependent variable (quality of life). Before the conduct of the analysis, assumptions such as normality and equality of variance were conducted. Alpha was set at 0.05.

Table 7: *Independent Sample t-Test on Impact of Psychotherapy on Male and Female Respondents in the Quality of Life of Amputees*

Psychotherapy	N	Mean	SD	t-value	Df	p-value
Male	18	85.03	9.80	.30	40	.77
Female	24	83.18	19.92			

Source: Field Survey, Adjei (2018)

Table 7 reveals that the independent sample t-test was associated with a statistically non-significant effect, t (40) =.30, p= .77. Thus, the value for sig. (2-tail) was .77 which is greater than 0.05 (p>0.05). Therefore, it can be concluded that there was no significant difference in the male amputee group (M=85.03, SD=9.80) and the female amputee group (M=83.18, SD=19.92). This means that the null hypothesis was not rejected and thus, the test was not statistically significant, hence the means were equal. This shows that there was no statistically significant difference between the male and female amputee groups in relation to their quality of life.

Hypothesis seven

H_1: There is statistically significant difference in the QoL of the amputee group by marital status

This research hypothesis wanted to find out whether there were differences in the quality of life of the amputee group according to their marital status in the Greater Accra Region. To achieve the purpose of this research hypothesis, the analysis of variance test (ANOVA) was used to investigate the difference between the variables. It should be emphasised that the independent variable, marital status was made up of three groups namely single, married, and divorced against the dependent variable (overall quality of life). Alpha was set at 0.05. The result of ANOVA was justified using descriptive statistics and the summary of the results presented in Table.

Table 8: *ANOVA Test for Marital Status in the Quality of Life of Amputees*

	Sum of squares	Df	Mean Square	F	Sig.
Between Groups	304.482	2	152.241	0.906	.413
Within Groups	6555.923	40	168.101		
Total	6860.405	42			

Source: Field Survey, Adjei (2018)

A one-way between groups analysis of variance was conducted to explore the marital status on overall quality of life on amputees. Respondents were divided into three groups according to their marital status (Single, Married, and Divorced), there was no significant difference between group means as determined by one-way ANOVA, F (2, 40) =0.906, p=0.413 > 0.05. This indicated that the null hypothesis was not rejected and that; there were no significant differences in the means of marital status in relation to their quality of life.

Discussion

In this section, the findings were discussed in relation to research hypotheses and reviewed relevant literature. These research hypotheses were:

1. H_1: There would be statistically significant difference in the QoL of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.
2. H_1: There would be statistically significant difference in the physical health of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.
3. H_1: There would be statistically significant difference in the psychological health of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.
4. H_1: There would be statistically significant difference in the social health of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.
5. H_1: There would be statistical significant difference in the environmental health of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.
6. H_1: There would be statistically significant difference between the male and female quality of life.
7. H_1: There would be statistically significant difference in the QoL of the amputee group by marital status.

Hypothesis one

The first research hypothesis sought to find out the difference that existed between the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy in their quality of life. The research finding showed that there was no significant difference that existed between the amputee groups in terms of their quality of life. Thus, the quality of life remains the same for both amputee groups in their overall quality of life. This research finding supports a study by Alavi, Molavi, and Molavi, (2017), which states that there were no significant differences found between the intervention and the control groups regarding their quality of life of amputees. Therefore, both groups experienced the same quality of life. Another study by Sharma, Singh, & Sharma (2016), which contradicts this research findings indicated that there was significant difference in the experimental group as compared to the control group. Thus, the experimenting group improved in terms of their quality of life compared to the control group.

Hypothesis two

The second research hypothesis sought to find out the difference that existed between the physical health aspect of quality of life of amputee group that received psychotherapy and the amputee group that did not receive psychotherapy. This research finding indicated that there was no significant difference that existed between the amputee groups in terms of their physical health. This research finding is in contrast with these literature which states that, there was significant difference in the physical health of amputees (decrease in pain, improve sleep, and work capacity) of the experimental group as compared to the control group (Sharma, Singh, & Sharma, 2016;

Spincemaille, Klomp, Steyerberg, & Habbema, 2000). Another study by Goedendorp, Peters, Gielissen, Witjes, Leer, Verhagen, and Bleijenberg (2010) that contradicts this research finding states that, the CBT group was significantly less fatigued than the UC group. Thus, their level of fatigue reduced significantly compared to the control group as a result of the CBT. Again, the study conducted by Vitiello, Rybarczyk, Von Korff, and Stepanski (2009), indicates CBT subjects reported significantly improved sleep and significantly reduced pain after treatment as compared to the control group. Thus, the participants sleep improved as a result of the cognitive behavioural therapy (CBT).

Hypothesis three

The third research hypothesis sought to find out the difference that existed between the psychological health aspect of quality of life of amputee group that received psychotherapy and the amputee group that did not receive psychotherapy. This research finding indicated that there was no significant difference that exists between the amputee groups in terms of their psychological health. This research findings contradicts these study, which findings states that there was significant difference in the psychological health (increase self-esteem, decrease negative feeling of sadness, depressive cognition and anxiety) of the experimental group as compared to the control group (Sharma, Singh, & Sharma, 2016; Garnefski, Kraaij, De Graaf, & Karels 2010). Another study by Izadi-Ajirlo, Bahmani, and Ghanbari-Motlagh, (2013), also contradicts this research findings, stating that, intervention was significantly effective on improving the body image and self- esteem in the breast cancer/mastectomy patients of the case group compared to that of the control group. Another study also conducted by Asano, Rushton, Miller, and Deathe (2008), contradicts these research findings, their research findings indicated that several characteristics influence the quality of life after lower limb amputation including depression and participation in daily living. Thus, the importance of addressing the psychological aspect of the amputee.

Hypothesis four

The fourth research hypothesis sought to find out the difference that existed between the social health aspect of quality of life of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy. These research findings indicated that there was no significant difference that existed between the amputee groups in terms of their social health. These research findings supports a study conducted by Riyahi, Ziaee, and Dastjerdi (2018), which indicates that cognitive behavioural therapy has no significant effect on the quality of life of hepatitis B. Another study conducted by Sharma, Singh, and Sharma (2016), contradicts these research findings, indicating that there was significantly greater satisfaction in the social domain of the quality of life. Which the researcher attributed to behavioural counselling, educating patients about communication and quipping them problem –solving skills as compared to the control group. This research finding was contradicted by some studies that indicated the importance of the patient's social relationships with friends and family (Deans, McFadyen, & Rowe 2008; Behel, Rybarczyk, Elliott, Nicholas, & Nyenhuis, 2002).

Hypothesis five

The fifth research hypothesis sought to find out the difference that existed between the environmental health aspect of quality of life of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy. The research findings indicated that there was no significant difference that existed between the amputee groups in their psychological health. These research findings support a study Sharma, Singh, and Sharma (2016), their research findings indicated that there was no significant difference in both the experimental group and the control group in relation to their environmental health. Thus, no improvement was seen in the experimental group compared to the control group. Another study contradicts this research findings by stating that, a decrease in participation was observed in all categories of leisure activity conducted by (Couture, Caron, and Desrosiers, 2010; Ephraim, MacKenzie, Wegener, Dillingham, and Pezzi 2006). Again, a study by Pell, Donnan, Fowkes, and Ruckley (1993), contradicts this research finding indicating that the overall quality of life following lower limb amputation for the peripheral arterial disease is poor, but much of this is secondary to restricted mobility.

Hypothesis six

The sixth research hypothesis sought to find out whether there was quality of life differences that exist between the male and female amputee group. The findings indicated that there was no significant difference that existed between the male and female amputee groups in terms of their quality of life. This research finding supports a study conducted by Muomah, Nwadinigwe, Ndukuba, Odinka, Chukworji and Amadi (2017), which indicates that in terms of their level of psychological distress the male did not differ too much from their female counterpart. Hence, they all experience the same level of psychological distress. Another study which was in contrast to this research finding stated that, females were more likely to cope and function with the disability than males and their quality of life were significantly better than their male counterparts (Cox, SKP, & Weaver 2011; Miller & Dishon, 2006; Hagedoorn, Buunk, Kuijer, Wobbes, & Sanderman 2000)

Hypothesis seven

The seventh research hypothesis sought to find out the difference in their quality of life as a result of their marital status. This research finding indicated that there was no significant difference that existed between the amputee groups in relation to their marital status. Another study by (Han, Park, Kim, Kim, & Park 2014; Holt-Lunstad, Birmingham, & Jones, 2008; Tate & Forchheimer 2002; Luttik, Jaarsma, Veeger, & Veldhuisen, 2006), contradicts this study which states that there was no significant relationship between marital status and QoL. Again, a study that contradicts this research finding is by Hagelin, Seiger, and Fürst, (2006), which stated that married/cohabiting patients reported lower functional abilities and more symptoms. Thus, their quality of life was perceived as low.

From the literature reviewed, it is somewhat clear that psychotherapy (e.g. cognitive behavioural therapy) effectively improve quality of life of amputees. However, this study results shows that there was no statistically significance between the group that received psychotherapy and the group that did not receive psychotherapy in these areas (physical health, psychological health, social health and environmental health). The reason could be: (a) the number of psychotherapy sessions may not be sufficient in addressing all facet of the problems in relation to quality of life prior amputation; (b) in the health team, psychologist may be involved in the earlier stages of treatment plan; and,

(c) clients perception about the role of the psychologist in the treatment plan may in a long run affect the acceptance of psychotherapies and its benefits. (d) the size of the sample used for the study.

Summary

The chapter presented the results and discussion of the study. The findings of the study revealed that there was no significant difference in the quality of life (physical, psychological, social, and environment) of both amputee groups, there were no male and female differences in terms of their quality of life, marital status did not have any significant impact on their quality of life.

The results from the analysis gave reasons to conclude that there was no significant difference in their quality of life after psychotherapy. Again, the findings of the study also indicated that there was no significant difference in gender and marital status on their quality of life of the amputees.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter presented a spummary of the key findings, the conclusions drawn as well as recommendations made in the study. The chapter also presented the contributions of the study to knowledge and suggestions for further research.

Overview of the Study

The study sought to obtain evidence of impact of psychotherapy on the quality of life of amputees in the Greater Accra Region of Ghana. In pursuance of the purpose, the following research hypotheses guided the study:

Hypothesis one

H_1: There would be statistically significant difference in the QoL of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.

Hypothesis two

H_1: There would be statistically significant difference in the physical health of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.

Hypothesis three

H_1: There would be statistically significant difference in the psychological health of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.

Hypothesis four

H_1: There would be statistically significant difference in the social health of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.

Hypothesis five

H_1: There would be statistically significant difference in the environmental health of the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy

Hypothesis six

H_1: There would be statistically significant difference between the male and female quality of life.

Hypothesis seven

H_1: There would be statistical significant difference in the QoL of the amputee group by marital status.

Summary of key findings

The key findings are presented in accordance with the objectives of the study as follows:

The first objective of the study was to explore the impact of psychotherapy on the amputee quality of life and the amputee group that did not receive psychotherapy in the Greater Accra Region. The findings of the study showed that there was no significant difference in both the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.

The second objective of the study was to explore the impact of psychotherapy on the amputees' physical health of both groups in relation to their quality of life in the Greater Accra Region. The findings of the study showed that there was no significant difference in both the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.

The third objective of the study was to explore the impact of psychotherapy on the amputees' psychological health of both groups in relation to their quality of life in the Greater Accra Region. The findings of the study showed that there was no significant difference in both the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.

The fourth objective of the study was to explore the impact of psychotherapy on the amputees' social health of both groups in relation to their quality of life in the Greater Accra Region. The findings of the study showed that there was no significant difference in both the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.

The fifth objective of the study was to explore the impact of psychotherapy on the amputees' physical health of both groups in relation to their quality of life in the Greater Accra Region. The findings of the study showed that there was no significant difference in both the amputee group that received psychotherapy and the amputee group that did not receive psychotherapy.

The sixth objective of the study was to explore the impact of male and female on the amputees' quality of life in the Greater Accra Region. The findings of the study showed that there was no significant difference in both the male and female quality of life.

The seventh objective of the study was to explore the impact of marital status on the amputees' quality of life in the Greater Accra Region. The findings of the study showed that there was no significant difference in relation to their marital status.

Conclusions

From the findings of the study, the following conclusions were drawn:

First and foremost, it was concluded from the findings that, the psychotherapy did not have an impact on the quality of life (physical health, psychological health, social health, and environmental health) of the amputees in the Greater Accra Region. Thus, the purpose for assessing psychotherapies impact on the amputees is to generate accurate information that leads to valid changes in the treatment plan for amputees in terms of their quality of life. The premise behind the importance of psychotherapy can be seen from related literature and its irrelevance in relation to their quality of life.

Furthermore, the study revealed that there was no statistically significant difference in gender. Thus, there was no significance difference between male and female amputees. Both male and female agree in terms of their quality of life.

Finally, the study revealed that there was no statistically significant difference in the amputee's marital status. Thus, there was no significant difference whether the amputee was single, married or divorced in terms of their quality of life.

Recommendations

The findings from this study had the under listed recommendations for policy and programme interventions for Amputees.

1. The number of psychotherapy sessions should be increased in addressing all facets of the problems in relation to quality of life of amputees.
2. The psychologist should be involved in the earlier stages of the treatment plan of the amputees.
3. Ghana Psychological Council should organize regular in-service training for psychologists and create awareness for the public on the importance of seeking psychological assistance for amputees.

Suggestions for Further Research

With reference to the present scope of the study, it is suggested that future research work should extend beyond two teaching hospitals in Greater Accra Region to involve other hospitals throughout the country. In addition, it is suggested that a similar study should be conducted using an experimental method.

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APPENDICES

APPENDIX A

UNIVERSITY OF CAPE COAST

INSTITUTIONAL REVIEW BOARD

INFORMED CONSENT FORM

Title of Study: Impact of psychotherapy on quality of life of amputees

This project is toward a partial fulfilment for the award of Master of Philosophy degree in Clinical Health Psychology.

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General Information about the Research

We are conducting this research study to investigate impact of psychotherapy on the quality of life of amputees. This will help us understand and find techniques to optimize health among persons with such conditions

If you agree to participate, we will take information from you during your time at the Cape Coast Teaching hospital for management or even during you monthly review. We will use a questionnaire to collect information on you age, marital status, your sex, duration of the physical health condition. In addition, a questionnaire will also be used to collect information to assess your quality of life after amputation. You participation in this study will be complete after you have been give this last questionnaire to answer. This will take just about 20 minutes duration.

Procedure

If you agree to participate in this study, you will be asked to do the following;

1. Complete a questionnaire to collect information on your age, marital status, sex, and duration of your physical health condition.
2. Complete questionnaires that assess your quality of life.

Possible Risk and Discomforts

Psychological

Quality of life questionnaire may be uncomfortable and may pose psychological and social risks as it compares the individual to reflect on past unpleasant memories. The research team has on board experts (clinical psychologist) who have expertise in detecting and addressing these problems should they ensue. Such interventions include psychological therapies such as cognitive therapy; relaxation techniques such as progressive muscle relaxation etc. This will be offered at no cost to you as participant.

Possible Benefits

You will directly benefit by obtaining basic information about your health and wellbeing. If we detect that you had psychological problem, which you were unaware of, you would be referred for thorough assessment and treatment. The research has the potential to unveiling the influence amputation has on your quality of life. These findings will help services providers (health professionals), caregivers and other organisations to broaden their scope of care for persons with amputation.

Confidentially

We will protect information about you to the best of our ability. As a participant, you are assured of anonymity. Phone lines will be taken for follow up purposes only. Demographic information will be well protected to prevent identification with such information; where necessary, pseudonyms will be used. No part of you identifying information shall be included in the reports.

Compensations

We have the desire to compensate our voluntary participants with token. However, expenditure for this study is borne solely by the researcher with limited research funding. This makes this desire highly to almost impossible. Participant will not be given compensations.

Additional Cost

It will not cost you anything to be in the study either than you time

Voluntary Participations and Right to Leave the Research

Participation in this study is completely voluntary, and it is not connected to the health services you are receiving for your chronic physical health condition. You may decline to continue, or decline any individual questions or measurement at any points in the data collections process. There will be no penalty for withdrawal from study and will not affect the medical care you are receiving at the clinic or unit.

Termination of Participation by Researcher

Participants who develop severe medical or psychological conditions and will require a quick response care will be terminated from the study to allow for comfortable medical and psychological attention.

Contact for Additional Information

If you have any questions or concerns about the research, please contact

Kingsley Adjei: kingniiadjei2204@gmail.com

Phone: +233243743832

Your Right as a Participant

This research has been reviewed and approved by the Institutional Review Board of the University of Cape Coast (UCC IRB). If you have any questions about your right as a research participant, you can contract the Administrator at the UCC IRB office between the hours of 8:00 a.m. and 4:30p.m. through the phone line (+2330332133172) or email address: irb@ucc.edu.gh.

Voluntary Agreement

The above document describing the benefits, risks and procedures for the research study titled "influence of religiosity on psychological wellbeing of persons with chronic physical health conditions has been read and explained to me. I have been given an opportunity to have any questions about the research answered to my satisfaction. I agree to participate as a volunteer.

Date Name and signature or mark of volunteer

If volunteer cannot read the form themselves, a witness must sign here

I was present while thee benefits, risks and procedures were read to the volunteer. All questions were answered and the volunteer has agreed to take part in the research.

Date Name and signature or mark of witness

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this study have been explained to the above individual.

Date Name and signature of person who obtained consent

APPENDIX B

WHOQOL-BREF- TAIWAN VERSION

The Impact of Psychotherapy on Quality of Life of Amputee.

Basic Instructions

In this study, I seek to explore the impact of psychotherapy on quality of life of amputee. Your voluntary participation will be highly appreciated. You are please informed that this project is mainly for academic purposes, and you are free to quit anytime you wanted. Information provided will be held strictly confidential. This questionnaire is carefully designed to ensure anonymity. You are hereby encouraged to read the questions carefully and follow the instructions diligently.

SECTION A

1. **Demographic Information**

   Please respond to the following statement as it applies to you

   a. Group with Psychotherapy [ ] b. Group without Psychotherapy [ ]

   Sex: M [ ] F [ ]

   Age: 18-30 [ ] 31-40 [ ] 41-59[ ] 60 and above [ ]

   Marital status: Single [ ] Married [ ] Divorced [ ] Separated [ ]

   Duration of condition following Treatment:

   ……………………………………………………………………………

   ……………………………………………………………………………

SECTION B

The following questions ask how you feel about your quality of life. I will read out each question to you, along with the response options. Please choose the answer that appears most appropriate. If you are unsure about which response to give to a question, the first response you think of is often the best one (The numbers after responses indicates the scores of the responses).

Please keep in mind your standards, hopes, pleasures and concerns. We ask that you think about your life in the last four weeks (The overall quality of life and general health facet).

1. How would you rate your quality of life?

Very poor: 1
Poor: 2
Neither poor nor good: 3
Good: 4
Very good: 5

2. How satisfied are you with your health?

Very dissatisfied: 1
Dissatisfied: 2
Neither satisfied nor dissatisfied: 3
Satisfied: 4
Very satisfied: 5

3. To what extent do you feel that physical pain prevents you from doing what you need to do?

Not at all: 5
A little: 4
A moderate amount: 3
Very much: 2
An extreme amount: 1

4. Do you have enough energy for everyday life?

Not at all: 1
A little: 2
Moderately: 3
Mostly: 4
Completely: 5

5. How satisfied are you with your sleep?

Very dissatisfied: 1
Dissatisfied: 2
Neither satisfied nor dissatisfied: 3
Satisfied: 4
Very satisfied: 5

6. How well are you able to get around?

Very poor: 1
Poor: 2
Neither poor nor good: 3
Good: 4
Very good: 5

7. How satisfied are you with your ability to perform your daily living activities?

Very dissatisfied: 1
Dissatisfied: 2
Neither satisfied nor dissatisfied: 3
Satisfied: 4
Very satisfied: 5

8. How much do you need any medical treatment to function in your daily life?

Not at all: 5
A little: 4
A moderate amount: 3
Very much: 2
An extreme amount: 1

9. How satisfied are you with your capacity for work?

Very dissatisfied: 1
Dissatisfied: 2
Neither satisfied nor dissatisfied: 3
Satisfied: 4
Very satisfied: 5

10. How much do you enjoy life?

Not at all: 5
A moderate amount: 3
An extreme amount: 1
A little: 4
Very much: 2

11. How well are you able to concentrate?

Not at all: 1
A moderate amount: 3
Extremely: 5
A little: 2
Very much: 4

12. How satisfied are you with yourself?

Very dissatisfied: 1
Dissatisfied: 2
Satisfied: 4
Neither satisfied nor dissatisfied: 3
Very satisfied: 5

13. Are you able to accept your bodily appearance?

Not at all: 1
Moderately: 3
Completely: 5
A little: 2
Mostly: 4

14. How often do you have negative feelings such as blue mood, despair, anxiety, depression?

Never: 5
Quite often: 3
Always: 1
Seldom: 4
Very often: 2

15. To what extent do you feel your life to be meaningful?

Not at all: 5
A moderate amount: 3
An extreme amount: 1
A little: 4
Very much: 2

16. How satisfied are you with your personal relationships?

Very dissatisfied: 1
Dissatisfied: 2
Neither satisfied nor dissatisfied: 3
Satisfied: 4
Very satisfied: 5

17. How satisfied are you with the support you get from your friends?

Very dissatisfied: 1
Dissatisfied: 2
Neither satisfied nor dissatisfied: 3
Satisfied: 4
Very satisfied: 5

18. How satisfied are you with your sex life?

Very dissatisfied: 1
Dissatisfied: 2
Neither satisfied nor dissatisfied: 3
Satisfied: 4
Very satisfied: 5

19. Do you feel respected by others?

Not at all: 1
A little: 2
Moderately: 3
Mostly: 4
Extremely:5

20. How safe do you feel in your daily life?

Not at all: 1
A little: 2
A moderate amount: 3
Very much: 4
Extremely: 5

21. How satisfied are you with the conditions of your living place?

Very dissatisfied: 1
Dissatisfied: 2
Neither satisfied nor dissatisfied: 3
Satisfied: 4
Very satisfied: 5

22. Do you have you enough money to meet your needs?

Not at all: 1 Moderately: 3 Completely: 5

A little: 2 Mostly: 4

23. How satisfied are you with your access to health services?

Very dissatisfied: 1

Dissatisfied: 2 Satisfied: 4

Neither satisfied nor dissatisfied: 3 Very satisfied: 5

24. How available to you is the information that you need in your day-to-day life?

Not at all: 1 Moderately: 3 Completely: 5

A little: 2 Mostly: 4

25. To what extent do you have the opportunity for leisure activities?

Not at all: 1 A little: 2 Moderately: 3

Mostly: 4 Completely: 5

26. How healthy is your physical environment?

Not at all: 1 A little: 2 A moderate amount: 3

Very much: 4 Extremely: 5

27. How satisfied are you with your transport?

Very dissatisfied: 1 Dissatisfied: 2 Neither satisfied nor dissatisfied: 3

Satisfied: 4 Very satisfied: 5

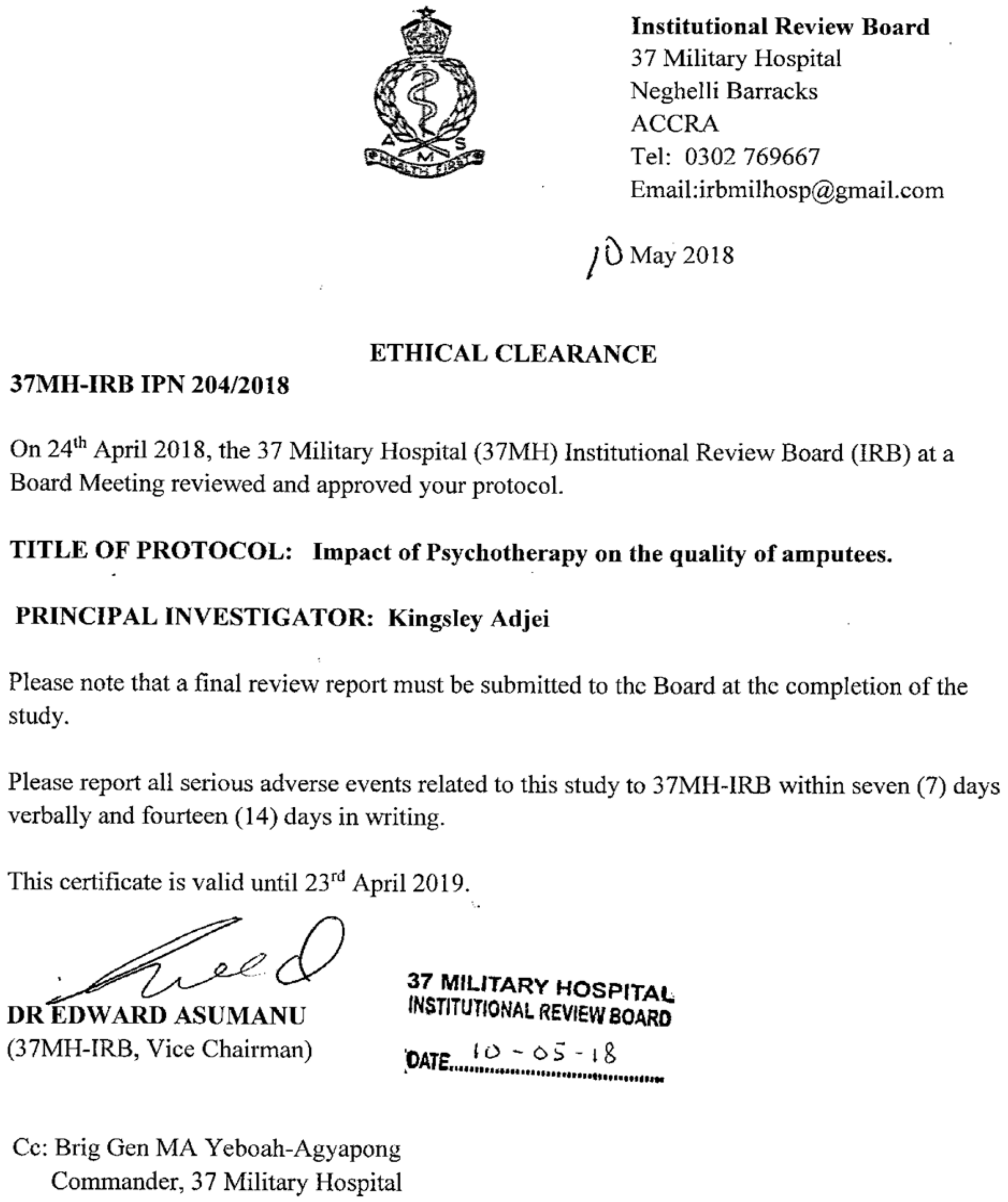
28. Are you usually able to get the things you like to eat?

Never: 5 Seldom: 4 Quite often: 3 Very often: 2

Always: 1

APPENDIX C

ETHICAL CLEARANCE (37 MILITARY HOSPITAL)



Institutional Review Board
37 Military Hospital
Neghelli Barracks
ACCRA
Tel: 0302 769667
Email:irbmilhosp@gmail.com

10 May 2018

ETHICAL CLEARANCE

37MH-IRB IPN 204/2018

On 24th April 2018, the 37 Military Hospital (37MH) Institutional Review Board (IRB) at a Board Meeting reviewed and approved your protocol.

TITLE OF PROTOCOL: Impact of Psychotherapy on the quality of amputees.

PRINCIPAL INVESTIGATOR: Kingsley Adjei

Please note that a final review report must be submitted to the Board at the completion of the study.

Please report all serious adverse events related to this study to 37MH-IRB within seven (7) days verbally and fourteen (14) days in writing.

This certificate is valid until 23rd April 2019.

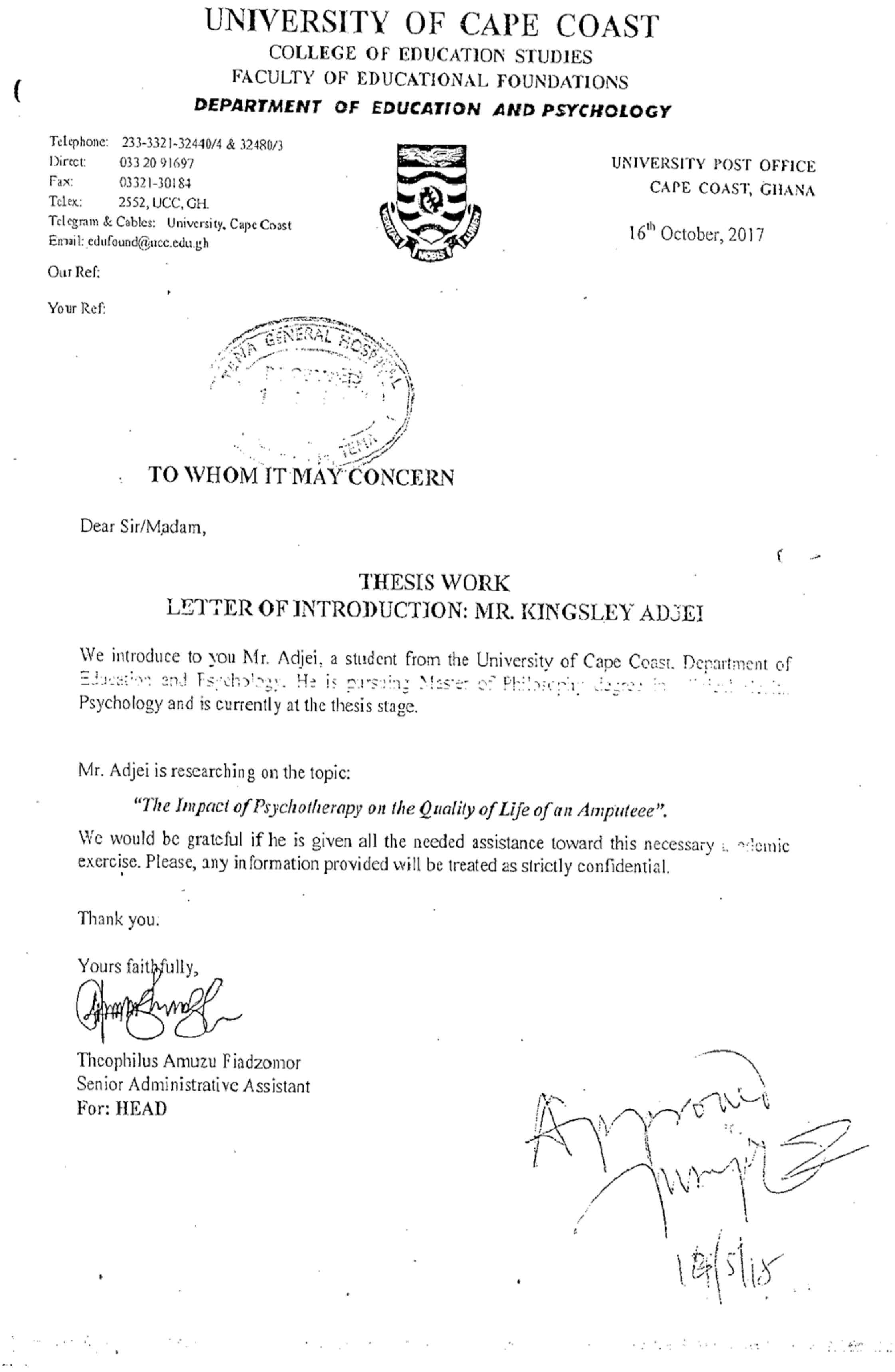
DR EDWARD ASUMANU
(37MH-IRB, Vice Chairman)

37 MILITARY HOSPITAL
INSTITUTIONAL REVIEW BOARD
DATE 10 - 05 - 18

Cc: Brig Gen MA Yeboah-Agyapong
Commander, 37 Military Hospital

APPENDIX D

INTRODUCTORY LETTER



UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
FACULTY OF EDUCATIONAL FOUNDATIONS
DEPARTMENT OF EDUCATION AND PSYCHOLOGY

Telephone: 233-3321-32440/4 & 32480/3
Direct: 033 20 91697
Fax: 03321-30184
Telex: 2552, UCC, GH.
Telegram & Cables: University, Cape Coast
Email: edufound@ucc.edu.gh

UNIVERSITY POST OFFICE
CAPE COAST, GHANA

16th October, 2017

Our Ref:

Your Ref:

TEMA GENERAL HOSPITAL
RECEIVED
TEMA

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

THESIS WORK
LETTER OF INTRODUCTION: MR. KINGSLEY ADJEI

We introduce to you Mr. Adjei, a student from the University of Cape Coast, Department of Education and Psychology. He is pursuing Master of Philosophy degree in [illegible] Psychology and is currently at the thesis stage.

Mr. Adjei is researching on the topic:

"The Impact of Psychotherapy on the Quality of Life of an Amputeee".

We would be grateful if he is given all the needed assistance toward this necessary academic exercise. Please, any information provided will be treated as strictly confidential.

Thank you.

Yours faithfully,

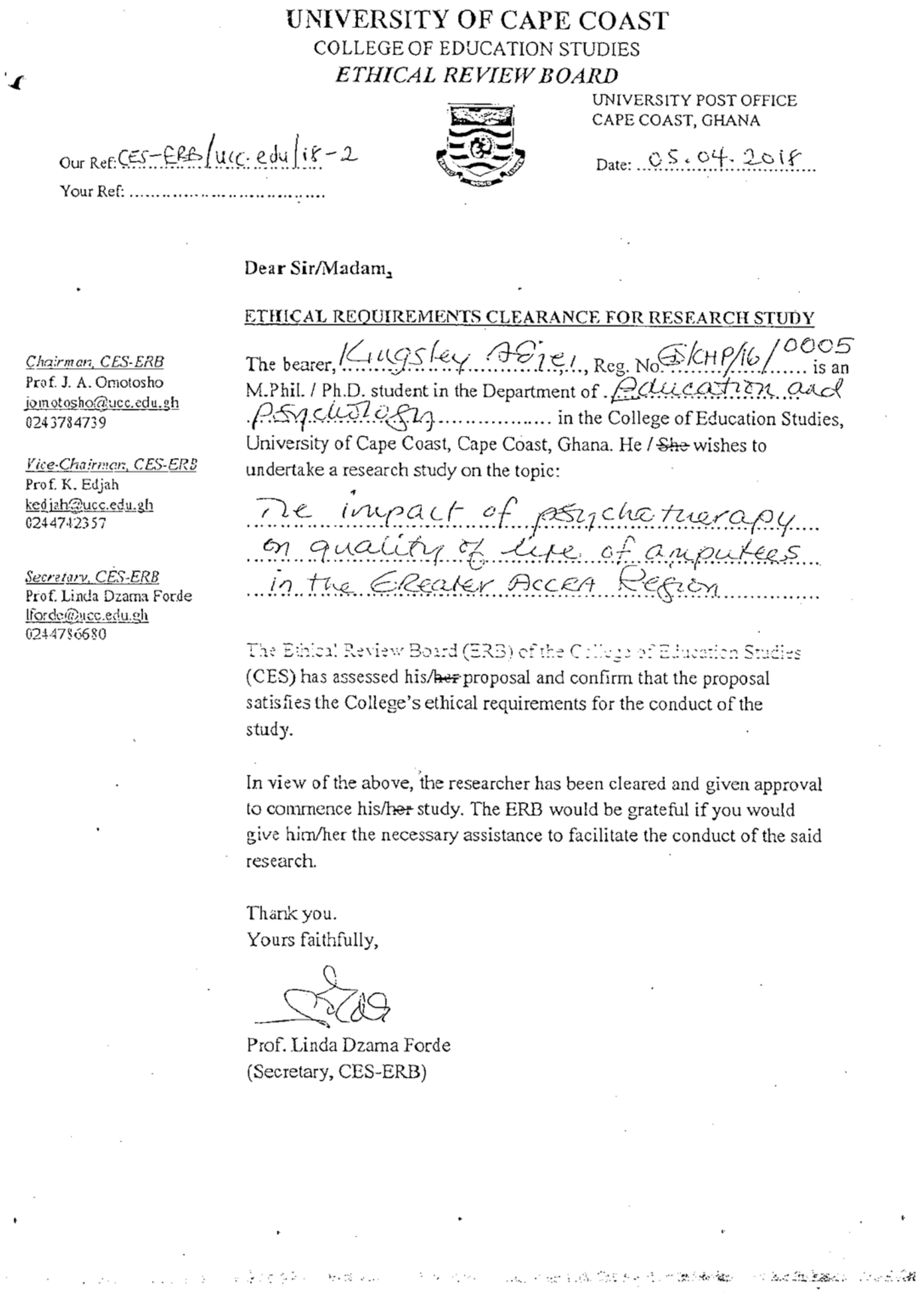
Theophilus Amuzu Fiadzomor
Senior Administrative Assistant
For: HEAD

Approved

19/5/18

APPENDIX E

ETHICAL CLEARANCE (UNIVERSITY OF CAPE COAST)



UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
ETHICAL REVIEW BOARD

UNIVERSITY POST OFFICE
CAPE COAST, GHANA

Our Ref: CES-ERB/ucc.edu/18-2
Your Ref: ……………………………

Date: 05.04.2018

Chairman, CES-ERB
Prof. J. A. Omotosho
jomotosho@ucc.edu.gh
0243784739

Vice-Chairman, CES-ERB
Prof. K. Edjah
kedjah@ucc.edu.gh
0244742357

Secretary, CES-ERB
Prof. Linda Dzama Forde
lforde@ucc.edu.gh
0244786680

Dear Sir/Madam,

ETHICAL REQUIREMENTS CLEARANCE FOR RESEARCH STUDY

The bearer, Kingsley Agyei, Reg. No EF/CHP/16/0005 is an M.Phil. / Ph.D. student in the Department of Education and Psychology in the College of Education Studies, University of Cape Coast, Cape Coast, Ghana. He / ~~She~~ wishes to undertake a research study on the topic:

The impact of psychotherapy on quality of life of amputees in the Greater Accra Region

The Ethical Review Board (ERB) of the College of Education Studies (CES) has assessed his/~~her~~ proposal and confirm that the proposal satisfies the College's ethical requirements for the conduct of the study.

In view of the above, the researcher has been cleared and given approval to commence his/~~her~~ study. The ERB would be grateful if you would give him/her the necessary assistance to facilitate the conduct of the said research.

Thank you.
Yours faithfully,

Prof. Linda Dzama Forde
(Secretary, CES-ERB)