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Knowledge, attitude and acceptance of amputation among amputee patients admitted in National Orthopaedic Hospital Enugu - Nigeria

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***Abstract*---**Background: Amputation is perceived differently across the globe hence the study was designed to determine the knowledge, attitude and acceptance of amputation among Amputee patients in the National Orthopeadic Hospital Enugu. Objectives: The objectives were to elicit the level of knowledge of amputation, determine the attitude of respondents towards amputation and determine level of acceptance of amputation. Materials and Methods: A descriptive cross sectional design was used and data was collected using questionnaire. The entire population (106) amputees were studied. Data was analyzed using (SPSS) version

24.0 and results presented in tables. Results: Findings revealed the mean age of the respondents 35±2.25years. All the respondents (100%) were aware that amputation is a treatment option to save live. The major factors that affects acceptance of amputation were preparation for the procedure (mean 3.26± 2.37), fear of deformity (mean 3.15± 2.68), and cost of prosthetics (mean 3.11± 2.56), affordability of prosthetics (mean 3.57± 3.07) availability of prosthetic device (mean 3.57± 3.07) and public acceptance of amputees (mean 3.21± 2.62). Conclusion: It was recommended that there is need to create more awareness by the healthcare providers on the importance and indications for amputations and adequate availability and affordability of prosthesis with effective rehabilitation for the amputees.

***Keywords*---**Amputation, Acceptance of Amputation, Amputee Patients.

Introduction

With the development of the society, firearms were invented and popularized gradually in the early 19th century, resulting in the number of amputation increasing voluminously; therefore amputation became commonest in military medicine[1] (Grzebień et al., 2017). In spite of further advances of modern medicine, the number of amputations had not decreased. In 2005, about 1.6 million people experienced limb loss in the United States, but people didn't know much about the prevalence of amputation or the exact number of people who currently lived without a limb[1,2] (Ziegler-Graham, MacKenzie, Ephraim, Travison. Brookmeyer, 2018). There were many reasons for amputation, including vascular diseases like diabetes and peripheral arterial disease, trauma e.g., car accident, natural calamities, different kinds of cancer types, infections like wound infections [3]. (Dabkana, Nyaku, Bwala, 2018). However, the most common reason for amputation was complications from diabetes. Amputation brought a series of changes to the patients, like physical, emotional and psychological changes. These changes had an impact on patients' social and family relationships. People, as a unique unified whole, would thereby respond to impaired physical integrity like losing a segment of his limb after amputation [3,4] (Dabkana, Nyaku, Bwala, 2018).

Though a dreadful procedure, amputation is perceived differently across the globe, in advanced countries, it is no longer a dreaded procedure, anchoring on artificial devices (prosthesis) which have been adapted to reproduce the shape, and functions of amputated parts. Furthermore, developed countries have embraced knowledge of science in its fullest form, as such they are more receptive to understanding pathophysiology of diseases and when some measures like amputation are the ultimate form of treatment.

In contrast to this, developing countries like in Africa and particularly in Nigeria, treats the fact of amputation differently, because of ignorance, poverty, stigmatization, superstition and religious belief. More so, patients often believe

that surgeons unnecessarily prefer amputation to any other form of treatment, and so they tend to get help first from herbalists or traditional bone setter, but the flip side of it is that this ignorance and delay in accessing health care leads to an increased risk of amputation and reduced treatment outcome. In fact, research done by [4]Nwosu, Babalola, Ibrahim and Suleiman (2017) shows that trauma and traditional bone setters' gangrene has remained the leading indications for amputation in Nigeria for years. In the same light, [5] (Thanni and Tade 2017), reported that 'the persistently poor economic situation and government apathy to strict control or regulation of native medical practice has served the twin purpose of sustaining the beliefs and making the trade attractive to an ever-increasing army of the unemployed and the poor when fracture or injury care is required'. The author further stated that slightest clue of possible amputation is enough reason for patients not to come to hospital and if already within the facility they reject it based on their faith or by thinking that their problem is fashioned by some evil people or spirit and so cannot be handled in the hospital hence they resort to prayer houses or traditional herbalist/traditional bone setters/native doctors.

Mobility is the ability of an individual to purposively move about her environment. It is central to fulfilling one's basic needs as well as social engagements. This action is the function of both the musculoskeletal and nervous system and as such, any impairment to these systems of the body could bring about immobility with its accompanying complications if not managed. The North American Nursing Diagnosis Association International (NANDA I), defines physical and mobility impairment as a limitation in independent, purposeful physical movement of the body or of one or more extremities[6] (Herdman and Kamitsuru, 2017) which may either be temporary or permanent. Losing freedom of movement due to an orthopedic injury, illness or surgery can be challenging to the patient as well as his relatives. Physically, it limits the individuals' daily activities, psychologically, it creates disturbances in the individuals' self-image and esteem and socially, it reduces the individuals' social activities, functions and relationships.

Both the human upper and lower limb represents a triumph of complex engineering, exquisitely evolved to perform a range of tasks. Upper limbs are essentially used for touching, grasping, feeling, holding, manipulating, caressing, and more. Our hands can perform both fine motor and gross motor activities We use our hands to feel whether something is rough or smooth, hot or cold, sharp or dull. We hold a child's hand as we cross the street. On face value, the feet touch the ground whenever we are standing, walking or running, and they are extensions of the legs. Amputation is the surgical removal of an external part of the body, most often a limb or part of it, as a form of treatment [4] (Nwosu, Babalola, Ibrahim & Suleiman, 2017). The Amputee Coalition of America reported that the United States had about two million amputees, and by 2050 the number would be predicted to increase significantly to 3.6 million [7,2] (Advanced Amputee Solutions, 2012), over that time, the number of amputees under the age of 65 had increased (Ziegler-Graham, MacKenzie, Ephraim 2018). Lower limb amputation is twice as frequent in diabetic individuals as in non-diabetics, accounting for 70% of non-traumatic lower limb amputations, and 85% of these amputations occur after the emergence of ulcers, which affect 25% of diabetics. Diabetes mellitus

affect 30% of persons over 40 years of age, and its costs increase significantly when the diabetic patient undergoes limb amputation 8 (Cole and Coe, 2020). In 2001, the incidence of amputations in Brazil was 13.9 per 100,000 inhabitants per year. There were 80,900 amputations due to diabetes mellitus, of which 21,700 evolved to death 9(São and Farmacêutica, 2016). From 2011 to 2016, 102,056 amputation surgeries were performed in the Brazilian Unified National Health System (SUS), of which 70% were in individuals with diabetes mellitus and the majority (94%) were lower amputations.

The aim of surgical amputation is to save the patient's life and or reduce disability. It may be required when a limb is severely crushed or dead due to impaired blood circulation in diabetic disease. Reasons for amputation may also include medical (diabetes, osteomyelitis, peripheral embolization, intravascular diseases, bone malignancies etc, surgical which can either be traumatic (road traffic accident, work place injury, falls etc) or intended which is usually done in the hospital setting by the surgeon in order to combat/arrest complications deemed to arise from medical condition or certain diseases. The decision to amputate a patient's limb is often one of the most difficult one for the surgical team to make and a most trying period for the patient and his relations to give consent for the procedure. This is even more critical in our environment where amputees often become permanently handicapped and dependent due to the difficulties with accessing rehabilitative and prosthetic facilities. An elective amputation typically entails far more than the simple mechanics of an anatomical adjustment and consequential lifestyle change. Individuals confronting the decision to amputate also face issues of grieving the loss of the limb, dealing with social stigma, and the sometimes uncertain aspect of needing to connect with peers to get a realistic picture of what life with an amputation will be like 10 (Otto, 2019).

Anecdotal reports in the study setting revealed that when amputations occur after a long period of illness and loss of function, the patient may already have gone through a period of grieving and has no need to grieve again for the amputation. However large number of those that eventually agrees for the procedure to be done, still die untimely out of depression, frustration, distorted body image perception or lack of proper rehabilitation. Amputation is therefore a dreaded word in the country and hospital records revealed that the most frequent indications for amputation were trauma (34%); complication of traditional bone-setting (TBS) (23%); malignant tumors (14.5%); diabetic gangrene (12.3%); infections (5.1%); peripheral artery disease (2.1%); and burns (2.1%). Therefore, it is on this account that the researchers carried out the study to examine the knowledge, attitude and acceptance of amputation among amputee patients in National Orthopeadic Hospital Enugu, Nigeria.

Objectives of the Study

The objectives of the study were to: elicit the level of knowledge of amputation among patients, determine the attitude of respondents towards amputation, determine level of acceptance of amputation by respondents, identify perceived factors that affect acceptance of amputation by patients and identify perceived ways of reducing barriers to acceptance of amputation by patients.

Methods and Materials

Research Design

A cross sectional descriptive research design was used for the study. This research design seeks to obtain information concerning the current status of a phenomenon, described relationship that exist as well as opinions held which were evident and changes that are occurred or trends that are developed.

Setting of the Study

The area used for the study was National Orthopaedic Hospital, Enugu (NOHE). It is located in Enugu-East L.G.A. of Enugu State, along Enugu-Abakaliki express road, adjacent to 82 Division of the Nigerian Army headquaters and opposite Enugu State Police Area Command. It comprises of 12 wards, a Trauma unit, an Out-Patient department and a Physiotherapy department amongst other departments. NOHE offers orthopaedic specialist services as seen during accidents, domestic violence, inter-tribal or ethnic clashes. NOHE is also the regional burns Centre of the South Eastern part of Nigeria. The hospital being a specialist has nurses of various specialists: orthopaedics, plastic, perioperative, intensive care, anesthetists, public health as well as accident and emergency nurses.

Population of the study

The population of study consists of patient receiving treatment for amputation at National Orthopaedic Hospital Enugu - Nigeria between the periods of January–March, 2021. Available records from the medical record unit of the hospital put the population of these patients at 106.

Sample and Sampling

The population (N) was few hence, the total population was studied. No sampling was done. However the patients are eligible if they meet the under listed criteria:

Inclusion criteria

- Patient who were admitted into in-patient wards of NOHE for an orthopaedic case
- Patient who were seen during the period of the study.
- Patient who consented to participate in the study.

Instruments for data collection

The instrument for data collection was a questionnaire constructed from reviewed of literature. It consists of 38 items in four sections. Section A contains demographic data of the respondents with 6 questions. Section B consists of 6 items of Amputation Knowledge Questions. Section C has 8 questions on attitude towards amputation. Section D comprises of 3 questions, assessing the level of acceptance, the respondents has on amputation. Section E has 10 questions on

perceived factors affecting amputation acceptance while Section F has 5 questions on perceived ways to reduce barriers.

Validity and Reliability of instrument

The questionnaire was drafted and submitted to the researcher's supervisor and experts in Orthopaedics for face and content validity to examine the items in line with the objectives of the study.
To assess the reliability of the instrument, data generated from the pilot study was analyzed using Cronbach's alpha. A reliability coefficient of 0.763 was obtained. This is considered an acceptable level of reliability.

Pilot study

A test- retest was conducted using the questionnaire and it was administered once to 11 patients in the Orthopaedic ward of University Of Nigeria Teaching Hospital, Enugu. The chosen institution has similar characteristics (a tertiary institution) with the study institutions.

Method of Data Collection

The copies of the questionnaire were distributed to patients receiving Orthopaedic care in wards of Naional Orthopaedic Hospital Enugu by the researchers and research assistants from January – march 2021, in female orthopeadic ward, male orthopeadic ward and trauma unit. Data collection was mainly during the day and lasted for over a period of two weeks. This was done only after the respondents consented to be part of the study/work.

Method of Data Analysis

Collected data was collated, tallied and analyzed using the Statistical Package for Social Sciences (SPSS) version 24.0. Descriptive statistics such as frequencies, mean, percentages were used to showcase the findings.

Ethical consideration Informed consent

An introductory letter and research proposal was submitted to the Health Research and Ethical Committee of the hospital and approval was granted for the study. Permission was gotten from the Chief Nursing Officer in charge of the various wards and respondents. Ethical clearance was collected from ethical committee of the institution, confidentiality of respondent's information was assured, strictly observed and their ideas kept secret and not divulged. Respondents that understood the objectives of the study and gave consent were recruited for this study.

Results

Table 1: Demographic data
n= 106

	Characteristics	Frequency	Percentage (%)
	Age		
	Below 20	3	2.8
	20-30	40	37.8
	31-40	35	33.0
	41-50	10	9.4
	Above 50	18	17.0
	Mean±SD	35±2.25	
	Gender		
	Male	64	60.4
	Female	42	39.6
	Level of Education		
	Primary	6	5.7
	Secondary	40	37.7
	Tertiary	53	50.0
	Vocational	7	6.6
	Occupation		
	Professional	31	29.3
	Non professional	13	12.3
	Students	15	14.1
	Applicants	7	6.6
	Retirees/Pensioners	5	4.7
	Business	21	19.8
	Others	14	13.2
	Marital Status		
	Single	46	43.4
	Married	55	51.9
	Widowed	5	4.7
	Religion		
	Christianity	105	99.0
	Others	1	1.0

Result shows that most of the respondents were between the ages of 20-30 (37.8%) and 31-40 (33%) with a mean age of 35±2.25years. Majority 64(60.4%) of the respondents were male. Majority (50%) had tertiary education. Result shows that 51.9% are married and majority (99%) are Christians.

Table 2: knowledge on amputation
n= 106

	Item	Yes (%)	No (%)
	Amputation is a treatment option	106 (100)	0 (0)
	Amputation is beneficial	83 (78.3%)	23 (21.7)
	Amputation is done on every leg that	22 (20.8)	84 (79.2%)

	has a fracture		
	To save live	106 (100)	0 (0)
	To remove dead limb	101(95.3)	5 (4.7)
	Doctors own treatment method	44 (41.5)	62 (58.5)

Result shows that (100%) of the respondents perceived amputation as a treatment option. Eighty three (78.3%) said that amputation is beneficial. Majority 84 (79.2%), are on the affirmative that amputation is not done on every leg that has a fracture. However, 22 (20.8%) indicated that it is done on every leg that has fracture. All respondents acknowledged that amputation is done to save life whereas 95.3% view the procedure as intervention done to remove dead limb.

Table 3: Attitude of patients towards acceptance of amputation
n= 106

	Item			**F (%)**			
	Line of action when asked to go for amputation						
	No alternative	76 (71.7)					
	Wait for Gods healing	18 (17.0)					
	Traditional treatment	11 (10.4)					
	Others	1 (0.9)					
		SA (%)	**A (%)**	**D (%)**	**SD (%)**	**Mean±SD**	
	I will recommend amputation when it is the only option to preserve life	64 (60.4)	38 (35.8)	2 (1.9)	2 (1.9)	3.57±3.07	
	Amputees are invalids	0 (0)	8 (7.5)	34 (32.1)	64 (60.4)	1.79±0.88	
	I will allow my relation marry an amputee	24 (22.6)	28 (26.4)	46 (43.4)	8 (7.6)	3.08±2.18	
	Amputation is a punishment for ones sin	0 (0)	5 (4.7)	24 (22.6)	77 (72.6)	1.55±0.71	
	One can have a normal life with amputation	48 (45.3)	46 (43.4)	9 (8.5)	3 (2.8)	3.39±2.85	
	Amputation is not a death sentence	43 (40.6)	55 (51.8)	2 (1.9)	6 (5.7)	3.29±2.83	
	Not handicapped because I have an amputation	30 (28.3)	52 (49.1)	14 (13.2)	10 (9.4)	3.09±2.54	

SA- Strongly Agree, A- Agree, D- Disagree, SD- Strongly Disagree,

Result shows the attitude of patients towards acceptance of amputation. Result revealed that recommend amputation when it is the only option with mean score of 3.57±3.07. However, when asked whether they will allow their relations to marry an amputee 3.08±2.18. Result also shows that amputation is a punishment for ones sin (mean 1.55±0.71). Findings revealed that amputation is not a death sentence (mean 3.29±2.83).

Table 4: Level of acceptance of amputation
n= 106

		SA (%)	A (%)	D (%)	SD (%)	Mean±SD
	I will accept the procedure willingly to save life	45 (42.5)	58 (54.7)	0 (0)	3 (2.8)	3.37±2.89
	I will accept procedure due to pressure from family members	0 (0)	20 (18.9)	59 (55.7)	27 (25.5)	2.49± 1.30
	I will accept procedure upon threat to withdraw financial/psychosocial support	1 (0.9)	15 (14.2)	41(38.7)	49 (46.2)	2.08±1.16

SA- Strongly Agree, A- Agree, D- Disagree, SD- Strongly Disagree, Std Dev – Standard Deviation

Result shows that accept amputation willingly to save life with a mean value of 3.37±2.89, accepting the procedure as a result of pressure from family members with mean 2.49± 1.30.

Table 5: Perceived factors that affect acceptance of amputation
n= 106

	Item	SA (%)	A (%)	D (%)	SD (%)	Mean±SD
	Time for planning (long time plan or a sudden event e.g accident)	19 (17.9)	63 (59.4)	14 (13.2)	10 (9.4)	2.99±2.42
	The younger in age, the easier in acceptance.	11 (10.4)	23 (21.7)	49 (46.2)	23 (21.7)	2.67±1.73
	Major source of income requires use of limbs	14 (13.2)	72 (70.0)	10 (9.4)	10 (9.4)	2.94±2.40
	Reason for amputation: elective or accidental	40 (37.7)	40 (37.7)	22 (20.8)	4 (3.8)	3.30±2.65
	Preparation for amputation: level of education and counseling given by Health personnel.	40 (37.7)	50 (47.2)	10 (9.4)	6 (5.7)	3.26±2.73
	Psychosocial support	10 (9.4)	61 (57.5)	23 (21.7)	12 (11.3)	2.87±2.19
	Marital status: single or married	25	57	16	8	3.08±2.49

		(23.6)	(53.8)	(15.1)	(7.5)	
	Difficulty in finding spouse	27 (25.5)	48 (45.2)	15 (14.2)	16 (15.1)	2.95±2.43
	Cost of prosthetics	28 (26.4)	58 (54.7)	12 (11.3)	8 (7.6)	3.11±2.56
	Fear of deformity	34 (32.1)	58 (54.7)	5 (4.7)	9 (8.5)	3.15±2.68

SA- Strongly Agree, A- Agree, D- Disagree, SD- Strongly Disagree

Result above shows that the major factors that affect acceptance of amputation as pecieved by the respondents are: reason for amputation with mean score of 3.30±2.65, preparation for amputation with mean score 3.26±2.73, fear of deformity with mean score of 3.15±2.68, cost of prosthetics with mean 3.11±2.56, source of income requires use of limb mean 2.94±2.40 and Psychosocial support with mean score of 2.87±2.19.

Table 6: Perceived ways of reducing barriers to acceptance of amputation
n= 106

s/n	**Item**	**SA (%)**	**A (%)**	**D (%)**	**SD (%)**	**Mean±SD**
	Adequate explanation on the reason for Amputation	51 (48.1)	53 (50.0)	2 (1.9)	0 (0)	3.48±2.97
	Explanation of rehabilitative process	46 (43.4)	57 (53.8)	3 (2.8)	0 (0)	3.43± 2.9
	Availability of prosthetic devices	43 (40.6)	53 (50.0)	9 (8.5)	1 (0.9)	3.39±2.82
	Affordability of prosthetic devices	43 (40.6)	55 (51.9)	7 (6.6)	1(0.9)	3.39±2.84
	Public acceptance of amputees	26 (24.5)	68 (64.2)	10 (9.4)	2 (1.9)	3.21±2.62

SA- Strongly Agree, A- Agree, D- Disagree, SD- Strongly Disagree

Result shows agreement that adequate explanation of the reason for amputation (mean score of 3.48±2.97, explanation of rehabilitative process with mean 3.43± 2.9 and public acceptance of amputees with mean – 3.21±2.62

Discussion

Socio=demographically, result from this study revealed that majority (60.4%) of the respondents were male with most of them falling between the age 20-30 ± 2.25. This is a youthful age where they engage in various businesses, craftwork, and enrollment in higher educational programmes which requires movement of people from one location to the other. Again, this study revealed that 99% of the respondents are Christians. The reason for this may be as a result of the study area which is located in the eastern part of Nigeria. This region is known to be

dominated by Christians. This study shows that all (100%) of the respondents recognized amputation as a treatment option in the surgical management of patients. This is higher than 86% and 90% recorded in similar study conducted by Yongu, Kortor, Mue, Anhange and Musa (2020) and Udosen et al. (2019). The reason for this may be as a result of educational level as nearly all of the respondents in this study have had at least a secondary education (87.7%). However, this study did not test for this relationship. In this study, 78.3% of the respondents appreciate that amputation is beneficial. This is similar to result of the study of Enweluzo, Ogbeide and Akinbode (2019), where 78% understood that amputation is beneficial. Sadly, 20.8% of the respondents indicated that amputation is done on every leg that has a fracture. This result is similar to the result of Enweluzo, Ogbeide and Akinbode (2019) where 16.2% also thought that amputation is done on every fractured limb that is brought to the hospital for treatment. The wrong impression observed in 20.8% of our respondents that orthodox treatment of fractures involves amputating every fractured limb may be one explanation why some patients leave against medical advice when they are told they have a fracture. There is a need to enlighten the public on the fact that surgical amputation is the last option. Also, 41.5 % of the respondents had poor knowledge as they indicated that amputation is doctors own treatment method. This finding is quite higher than the (5%) of a similar study in Calabar who described it as doctors treatment method (Udosen et al., 2019). With regards to the understanding of the reasons why doctors who are trained to save lives and limbs sometimes opt for amputation of limbs, all (100%) of the respondents expressed that it is done to save life of which 95.3% agreed that it could be indicated when a limb is dead. This is similar to the findings in an earlier study where 42% agreed that it was indicated to remove a dead limb (Enweluzo, Ogbeide and Akinbode, 2019).

Result from this study shows that 71.7% of the respondents will have no alternative when advised to go for an amputation. This is similar to findings of Yongu, where (61.2%) said that they had no alternative to amputation (Yongu, Kortor, Mue, Anhange and Musa, 2020). The findings is however higher than that of Enweluzo, Ogbeide and Akinbode (2019), where only 30% of respondents indicated willingness to accept amputation when it is indicated. In this study, 17% of the respondents will rather wait for Gods healing while another 10.4% of them will seek traditional treatment. The reason for this finding is probably as a result of the fear of amputation. The fear of amputation is palpable such that most patients go through stages of denial, anger, and depression before acceptance, a situation akin to what is applicable to patients with conditions with high mortality like cancer or significant stigma like HIV/AIDS. The outcome most of the times depend on the delay in the decision-making process; consent for amputation is also commonly withheld until very late, thus contributing significantly to mortality (Enweluzo, Ogbeide and Akinbode, 2019).

With regards to attitude towards encouraging amputation to others if their life is to be saved by it, this study showed that more than half (60.4%) of the respondents strongly agreed to do so although the result is lower than 90% of respondents from the study of Yongu, Kortor, Mue, Anhange and Musa (2020) who agreed to encouraging others have an amputation. Again majority 64 (60.4%), of the respondents strongly disagreed that amputees are invalids. A

finding similar to the findings of Enweluzo, Ogbeide and Akinbode (2019) were (90.7%) regarded amputees as normal humans. However, when asked whether they will allow their relation to marry an amputee, most 46 (43.4%) of the respondent disagreed and 8 (7.6%) strongly disagreed on this. This is different from the findings of Yongu, Kortor, Mue, Anhange and Musa (2020) where greater than half the respondents (75.2%) were willing to encourage their relation to marry an amputee. This strong aversion to allow a relation marry an amputee may be due to stigmatization and fear of dependency of the spouse.

Furthermore, majority of the respondents strongly disagreed (72.6%) or disagreed (22.6%) that amputation is a punishment for ones sin. 5(4.7%) out of the 106 respondent still saw it as punishment for ones sin. A finding which is contrary to that of a similar study in Lagos state where none of the respondents perceived it as a stigma or punishment for evil act (Enweluzo, Ogbeide and Akinbode, 2019). This study revealed that pressure from family members or threat of withdrawal of financial/psychosocial support may not affect patients acceptance of amputation as 81.2% (mean 2.49$\pm$ 1.30) and 84.9% (mean - 2.08$\pm$1.16) respectively of the respondents do not agree to that. This is because, majority (mean 35$\pm$ 2.25) of the respondents were adults who are capable of making crucial decision without pressure from family. More so, (50%) of the respondents have tertiary education as such can; to an extent financially support themselves. Majority (97.2%) of the respondents indicated that they will accept amputation willingly to save life and not as a result of pressure or threats from family members (mean - 3.37$\pm$2.89). The findings from this study revealed that psychosocial support may not be so much of a factor that affect acceptance of amputation.

Findings from this study revealed that the top perceived factors which affect acceptance of amputation are reason for amputation, preparation for amputation and fear of deformity. Followed by cost of prosthetics, marital status and dependent of limb as source of income. Difficulty in finding a spouse, psychosocial support and age are other factors that may affect acceptance of amputation to a little extent. The reason for this may not be unconnected to the general perception of amputation in the society and the stigma associated with it which makes the public generally unacceptable to amputation. The finding may also be as a result of limited information given to patients by the surgeon and the attitude to which the information was dissimilated, can positively or negatively affect patient's acceptance of amputation. Furthermore availability and high cost of prosthesis make it usually difficult to accept the procedure. The finding from this study is seen in other studies in Nigeria which shows that ignorance of the indication for amputating a limb, fear of deformity, and stigma associated with amputation are the leading causes of poor acceptance of amputation, discharge against medical advice and mortality among these group of patients (Olaolrun, 2011; Udosen, Glen, Ogbudu and Nkosong, 2016).

Findings from this study revealed that adequate explanation of the reason for rehabilitation, explanation of rehabilitative process, affordability and availability of prosthetic devices as well as public acceptance of amputees are various ways to reduce barriers to accepting amputation. This finding is because; alternative to life after amputation may not have been clearly explained to the patients. The current concept of amputation as reconstructive surgery and a first step toward

returning the patient to a near normal and productive place in society needs to be patiently explained to patients and their relations (Bessell, Dures, Semple and Jackson, 2017). These will help them to make a quick, well-informed decision. Doctors therefore must give prompt and adequate counseling to the patients before they take the final decision. Furthermore, financing strategies can improve the provision, access, and coverage of rehabilitation services, particularly in low-income and middle-income countries. Strategies like cooperating with international bodies in the procurement of affordable prosthetics and assistive devices evaluate coverage of health insurance, including criteria for equitable access and targeting poor people with disabilities can be helpful in bridging this barrier.

Implication of the study to Nursing

The study was carried out to elicit patient's knowledge of the indications and reason for amputation and also to determine their attitude towards acceptance of amputation. The study furthermore elicited perceived barriers to acceptance of amputation and ways which these barriers can be overcome. Patients and their relations often have the wrong impression that the only method of treatment of fractures in hospitals is amputation. Even when it is imminent that a limb be ablated to save live, delay in decision making must be minimized by all possible means. The nurses as health educator and counselor, performs her role by providing timely and adequate information on the reason for amputation. Seminars and enlightenment programmes can be championed by nurses to encourage the public acceptance of amputation and amputee as stigmatization has been indicated as a factor that often affect acceptance of amputation. Nurses should advocate for affordability and availability of prosthetic devices to promote a successful rehabilitative programme for amputees.

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