

Attitude and perception of patients towards amputation as a form of surgical treatment in the University of Calabar teaching hospital, Nigeria

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Abstract

Background: A survey of the attitude and perception of a cross-section of residents of Calabar to therapeutic limb amputation was done to determine the level of knowledge and understanding of the indications, advantages as well as the prospects for the amputees in our environment.

Patients and Methods: Structured questionnaires were administered to adults at the Orthopaedic Unit of the University of Calabar Teaching Hospital, Calabar. Data obtained from the study was analyzed using EPI Info software version 2002.

Results: One hundred and fifty-five respondents participated in this study. There were 88 (57%) males. One hundred and forty respondents (90%) had knowledge of amputation as a treatment method; 134 (86%) knew that amputation is beneficial. Fifty participants (32%) indicated that they had no alternative to amputation when indicated while 36 (36%) of those who would refuse believed in divine and traditional treatment. Eight six regard amputees as normal people with potentials while 14 (9%) regard them as 'invalids'. One hundred and five (68%) were aware of the importance of artificial limb while 38 (25%) had no knowledge. One hundred and thirty-one (85%) of respondents regard physicians who do amputation as life savers while 3 (2%) and 9 (6%) regard them as people who take pleasure in amputating limbs and as people who are indifferent to patients' plight respectively.

Conclusion: Though majority of respondents have a fair knowledge of amputation and would accept or advice others to accept it, there is still need to create more awareness on the importance of amputation and its indications.

Key words: Amputation, attitude, perception, treatment, Calabar

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Introduction

Amputation is the surgical removal of an external part of the body, most often a limb or part of it, as a form of treatment¹. The aim of amputation is to save the patient's life and or reduce debility. It may be required when a limb is severely crushed or dead due to impaired blood circulation in diabetic disease. Part of a limb may also die because of infection (gangrene), burns, frostbite or disease of blood vessels. Removal of a limb may also be required to prevent the growth of bone cancer¹⁻⁵. However, amputations are not without problems such as thromboembolism from the surgery and prolonged

immobilisation, flexion contractures, neuroma, causalgia, phantom limb pain and phantom limb^{6,7}.

In recent times in the developed world, amputation is no longer a dreaded procedure because artificial devices (prosthesis) have been adapted to reproduce the shape, and functions of amputated parts. In our society, it is not readily practicable because of ignorance, stigmatization and poverty which militate against it. Lack of adequate rehabilitation in many instances also prevents the return of the patient to a fully functional life. Therefore, the decision to accept an amputation continues to be difficult hence the need for alternative measures. Amputation is an ultimate form (last option) of treatment. Alternatives are usually less satisfactory and are only adopted in circumstances such as lack of patients' consent and or funds¹.

The aim of this study was to determine the level of knowledge and acceptance of the procedure so as to enlighten Nigerians on the importance of and indications for amputation and to encourage

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them to accept it promptly when it becomes necessary, particularly when there are no superior alternatives.

Patients and Methods

This was a cross-sectional study. Structured questionnaires were administered to adult patients, who attended the outpatient clinic at the orthopaedics and trauma unit of the University of Calabar Teaching Hospital from April to August, 2008. The respondents were adequately briefed on the aims and objectives of the study. To avoid bias, patients and relations of patients who had any lesion that may require amputation were excluded from the study. The proposal for the study was approved by the ethical committee of the hospital. Apart from demographic information, the questionnaire focused on the knowledge and attitude towards amputation, the influence of cultural and religious beliefs on amputation, use of artificial limbs as well as regards for amputees and the surgeons who perform amputation.

Results

The total number of respondents was 155. The mean age of respondents was 38 years (SD \pm 14). Age range was 16 -71 years. There was a male preponderance with 88 (57%) males and 67 (43%) females. The Efiks 33 (21%), Ibibios 26 (17%) and Ibos 22(14%) were the main tribes while 74 (48%) did not indicate their tribes.

One hundred and forty respondents (90%) had knowledge of amputation as a treatment method while 11 (7%) had no knowledge and 4 (3%) were indifferent. 134 (86%) knew that amputation is beneficial, 15 (10%) did not respond while 6 (4%) believed that it is not beneficial. One hundred and thirty-seven (88%) knew reasons for amputation [to save a life 90 (54%), to remove dead limb 70(42%)] while 7(5%) had no knowledge and described it as doctor's treatment method. Eleven (7%) did not respond.

Fifty (32%) indicated that they have no alternative to amputation when it is indicated while 11 (7%) of those who refused believed God for healing, 16 (10%) rather chose to die, 5 (3%) opted for traditional treatment while 25 (16%) opted for undisclosed treatment methods and 48 (32%) did not give any response.

Regarding cultural and religious reactions to amputation, 77(50%) encourage it when it is the only option to preserve life, 29 (19%) did not encourage

it and 29 (19%) were indifferent or had no idea while 13 (8%) did not give any response. One hundred and twenty-three (86%) regard amputees as normal humans with potentials while 14 (9%) regard them as invalid and 8 (5%) were indifferent. None of the respondents saw amputation as a punishment for patients' sins

One hundred and five (68%) were aware of the importance of artificial limb. Thirty-eight (25%) had no knowledge and non responders were 12 (7%). One thirty-one (85%) of respondents regard physicians who perform amputation as life savers, 3 (2%) regard them as people who take pleasure in amputating limbs while 9 (6%) regard them as people who are indifferent to patients' plight and 12 (8%) did not respond.

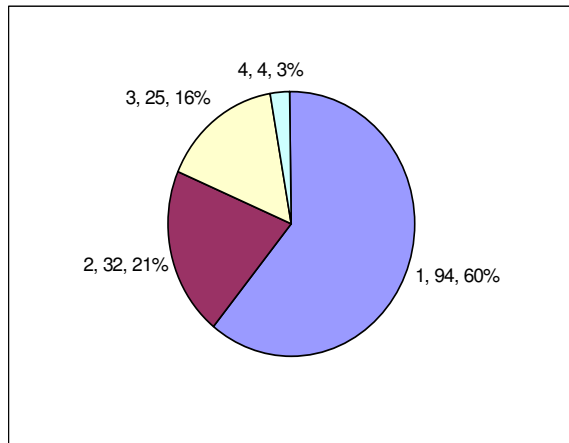
One hundred and seventeen (75%) of respondents would advise patients and close relations to accept amputation when it is indicated, 4 (3%) would not advice anybody to accept while 34 (22%) did not make any comment.

One hundred and forty-six (94%) of respondents acknowledged that our society is not receptive to amputation while 32 (21%) were of the opinion that the society is receptive. Twenty-five (16%) do not know and 4 (3%) did not make any comment.

Table 1: Demographic variables of respondents

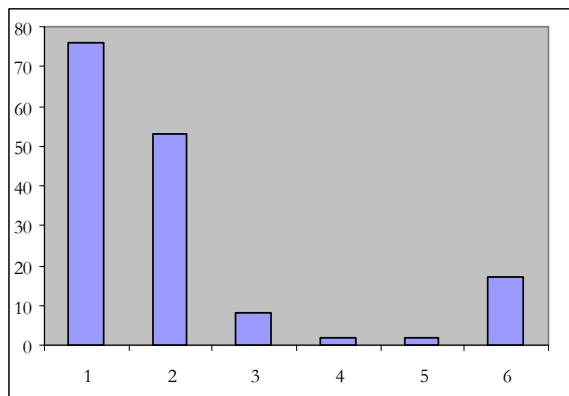
Variable	Frequency	Percentage
Sex:		
Male	88	57
Female	67	43
Educational status:		
Primary	10	6
Secondary	41	26
Tertiary	87	56
Vocational	5	5
Non responses	12	8
Occupation:		
Professional	16	10
Non Professional	59	38
Students	31	20
Applicants	5	3
Retirees/Pensioners	7	5
Business	19	12
Others	18	12
Marital Status:		
Single	57	37
Married	81	52
Widowed	1	1
Non responses	16	10
Religion:		
Christian	150	96
Islam	1	1
Others	4	3

Figure 1: Receptivity of the society toward amputation



1=Not receptive 2=Receptive 3=Don't know
4=Non response

Figure 2: Respondents' feeling in the event amputation



1=Negative Feeling 2=Positive feeling
3=Negative initially followed by positive
4=No comment 5=No idea 6=No response

Discussion

Limb amputation is a dreaded word in our society and in very rare circumstances would patients and relations accept this therapeutic procedure easily. Statements such as “I would rather die than lose my limb” and “that is not my portion” are commonly heard in our hospitals. This is because amputation carries a stigma. It serves as a mode and mark of punishment for certain offenders in some parts of Africa, and in some religions. It is also believed to recur during incarnation. Most of these beliefs are based on ignorance and superstition^{1,2,3,4}. Therefore, the decision to amputate and the subsequent management of such patients pose problems to the surgeon and socio-economic stress to the patient and the family.

This study has shown that about 90% of the population has knowledge of the procedure and its indication and importance but only 32% are receptive to it.

Earlier studies in Nigeria show that ignorance of proper methods of treatment for limb injuries remains the major cause of amputation while ignorance of the indications for amputating a limb is the leading cause of leaving against medical advice and mortality among such group of patients^{1,3-6}.

On hearing of the word “amputation”, patients would go through stages of denial, anger, negotiation and depression before acceptance, a situation akin to what is applicable to patients who find out for the first time that they have cancer or are HIV positive. In many instances it is this delay in the decision making process that worsens the outcome. Doctors therefore must give prompt and adequate counseling to the patients before they take the final decision⁷⁻⁹. However in life -threatening situations particularly where patients present very late to hospital, urgent decisions should be agreed upon by patients and relatives to save life. It is still better to be alive even without a limb.

This study found that some patients refuse amputation for religious and or cultural reasons. Patients and their relations often have the wrong impression that the only method of treatment of fractures in hospitals is amputation.^{4, 10,11,12}

Amputation is the last option in the surgeon's methods of treating diseases. It is done only when there are absolute indications as shown above. In trauma and other diseases, no doctor can carry out an amputation of a limb without an informed and written consent of the patient or relations. For this reason it is advised that amputation should be delayed in order to allow the patient and relations to partake in the decision-making process. Most patients and their relations would never come to the point of acceptance until it is too late.^{1,12} This is usually done at a stage when the patients and or relations can no longer bear the embarrassing odour and other inconveniences from the injured limb. This behaviour always militates against good medical practice.

Conclusion

Though majority of respondents have a fair knowledge of amputation and would accept or advice others to accept, 94% still observed that our society is not yet receptive to this procedure. This may not be unconnected with poor social support

for amputees and general poverty as well as stigmatization in our society. There is need to create more awareness on the importance and indications for amputations. Provision of adequate social support and health insurance scheme that would enhance early prosthetic fitting would help in this direction. There is need to do more studies on the relationship between receptivity of limb amputation and levels of medic-social support in our society.

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