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Parents/Caregivers Perception about the Management of Clubfoot: the Case of St. John of God Hospital

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Abstract

Clubfoot presents early in neonatal life and if not treated becomes more disabling with age The structural differences in children with clubfoot are associated with social stigma, which has a psychological effect on the child. Parents of infants born with clubfeet may be reassured that their baby, if otherwise normal, when treated by expert hands will have normal looking feet with normal function for all practical purposes, but to our part of the world parent may have different perception about this disorder and management. The purpose of the study was to investigate parents/caregivers perception concerning management of clubfoot at the St. John of God Hospital, Duayaw-Nkwanta. A cross sectional survey design using convenience sampling was used to select 100 participants in both the out-patients and in-patients orthopedic ward at St John of God Hospital, Duayaw-Nkwanta, B/A. A self-structured questionnaire in both open and close –question format was used to determine the parents/caregivers perception concerning management of clubfoot. Data was analyzed using SPSS 16.0. Descriptive and Inferential statistics were used summarize and find relationships amongst the variables. Significant level was set at 0.05 alpha. A total of55(55.0%) of the parents attributed spiritual or curse to the cause of the deformity. 83(84.7%) of the parents indicated necessity to attend to regular treatment. 59(60.8%) of the parents showed confidence to send child out on the brace. Majority (69%) of the respondents indicated the reason for neglected or inadequately managed clubfoot is as a result of lack of awareness indicating a significant association between proper and timely management of clubfoot and awareness. X^2 (8.64, 2), $p<0.05$. There seem to be a significant association between satisfaction with the treatment and willingness to regularly attend to treatment, as 78.6% of those who were satisfied were willing to regularly attend to treatment. X^2 (30.23, 2), $p<0.05$. There seem to be a favorable perception towards management of clubfoot, which can be enhanced by massive educational campaign to raise awareness. Educational campaigns on the awareness on Clubfoot should be the focal priority.

Keywords: *Clubfoot, Perception, Management, Parents/Caregivers*

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Background to the Study

A **Clubfoot**, also known as **Congenital Talipes Equinovarus** (**CTEV**), is a congenital deformity involving one foot or both. The affected foot looks like it has been rotated internally at the ankle. Without treatment, people with club feet often appear to walk on their ankles or on the sides of their feet. It is a relatively common birth defect occurring in about one in every 1,000 live births. Approximately half of people with clubfoot have it affect both feet, which is called deformed clubfoot. It occurs in males twice as frequently as in females. Clubfoot presents early in neonatal life and if not treated becomes more disabling with age. Clubfoot is painless in a baby and can eventually become a noticeable disability. The structural differences in children with clubfoot are associated with social stigma, which has a psychological effect on the child. Left untreated clubfoot does not straighten itself out. The foot will remain twisted, out of shape, and the affected leg may be shorter and smaller than the other. These symptoms become more obvious and more of a problem as the child grows. (Dobbs et al., 2004). Parents of infants born with clubfeet may be reassured that their baby, if otherwise normal, when treated by expert hands will have normal looking feet with normal function for all practical purposes, but to our part of the world parent may have different perception about this disorder and management.

Objectives

The objective of the study was to investigate parents/caregivers perception concerning management of clubfoot at the St. John of God Hospital, Duayaw-Nkwanta.

The specific objectives

1. To find out if parents/caregivers are aware of the causes of clubfoot.
2. To investigate alternative interventions attempted by parents/caregivers
3. To investigate measures taken by parents/caregivers in the management of their child's clubfoot.

Methodology

A cross sectional survey design using convenience sampling was used to select 100 participants in both the out-patients and in-patients orthopedics ward at St John of God Hospital. The survey design was deployed because of the discernible patterns and regularities in society. Additionally individual responses are gathered for the purposes of subsequent aggregation and meanings are clearly articulated and are inter subjective. (Sim & Wright, 2000) The hospital which is a mission hospital also serves as the district hospital in the Tano North in Duayaw-Nkwanta in the Brong Ahafo region of Ghana. It serves as the referral hospital for most orthopaedic patients/clients and many hospitals in the Northern and Western part of Ghana with patients/clients coming from almost all parts of Ghana. It also sometimes receives Orthopaedic patients/clients from neighbouring countries like Ivory Coast and Burkina Faso. The hospital in addition, serves as the National Centre for Club Foot management in Ghana. . A self-structured questionnaire in both open and close –question format was used to determine the parents/caregivers perception concerning management of clubfoot.

The SPSS version 16.0 was used to perform a qualitative and quantitative analysis of the data. Descriptive statistics such as mean, standard deviation and percentage frequency distribution were used to summarize the data collected. Inferential statistics such as Chi-Square and Pearson correlation were used to find relationships amongst the variables and

its significance. Significant level was set at 0.05 alpha.

Results

One hundred (100) respondents participated in this study. Majority of which were females (63 %) showing the level of care and attention females have for their children. The mean age of the respondents was (31.23±7.3)ranging from 20 – 51 years. 74.0 % of the respondents were Christians, 20 % were Muslims and 6% was Traditional believers. Hence the beliefs and values elicited may be a reflection of Christian values.

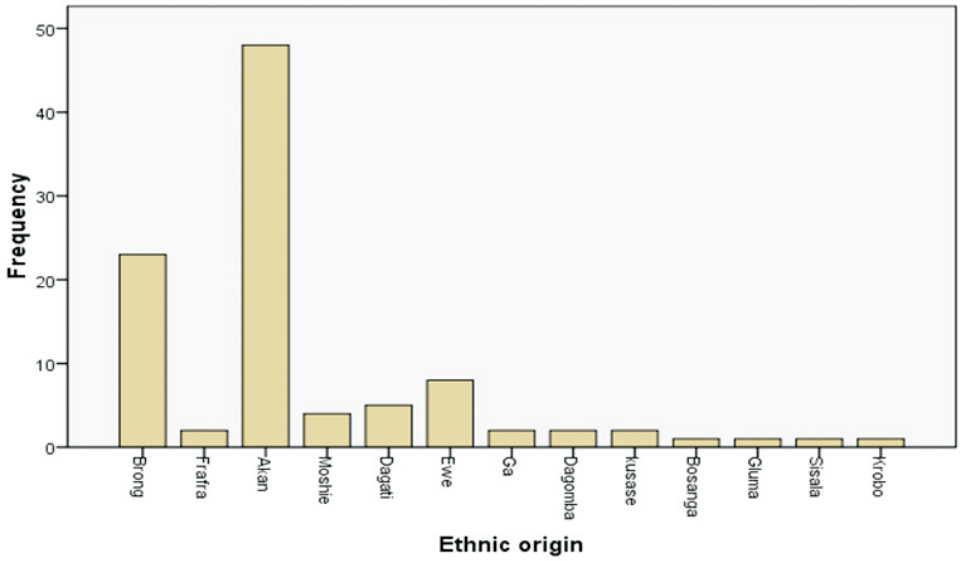

Fig 1. **The Ethnic Origin of the Respondents**

Majority (48.0 %) of the Respondents were Akan's followed by Bono (23.0%).

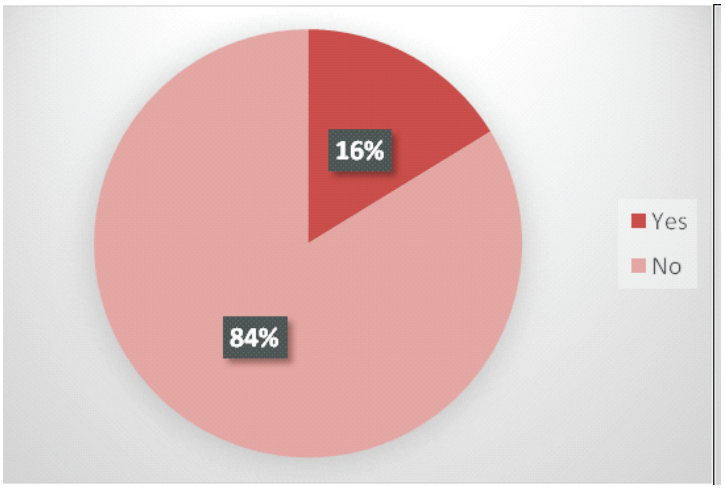

Fig 5. The Awareness of the Parents on Clubfoot

Majority 67(81.7%) of the Respondents were not aware of the Condition

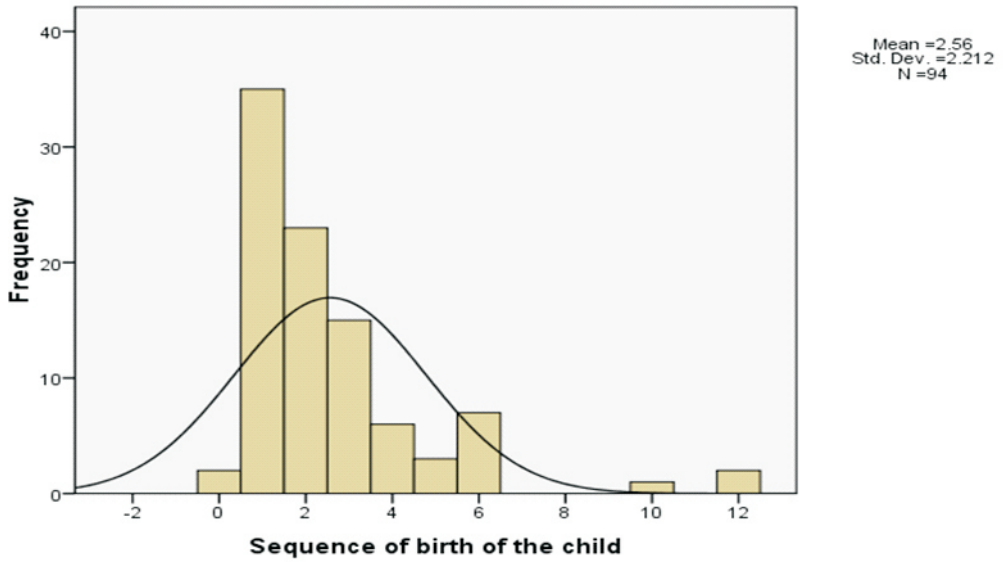

Fig 2. The Sequence of Birth of the Children
The figure above Indicates the Sequence of birth of the Children. Majorities (37.2%) were their Parent's first Child and Minority (2.1%) were the 10th Born.

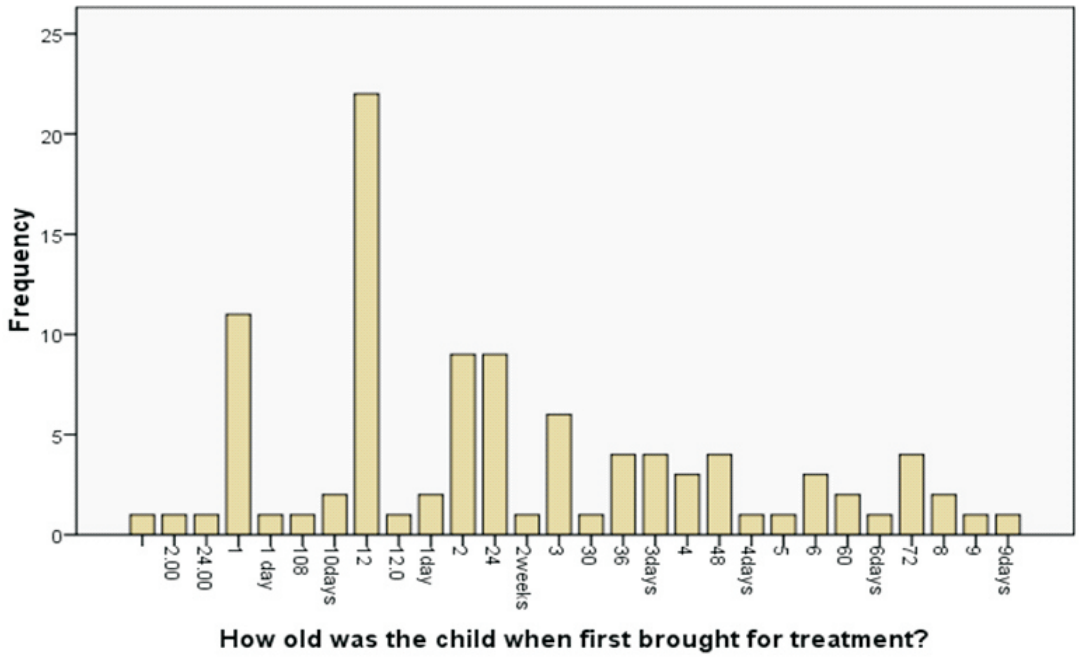

Fig 3. The Age of the Child when first brought for Treatment
Majority of children were 12months (1year) old when first brought to the clinic. This indicates the level of responsiveness of the respondents to the management of the condition.

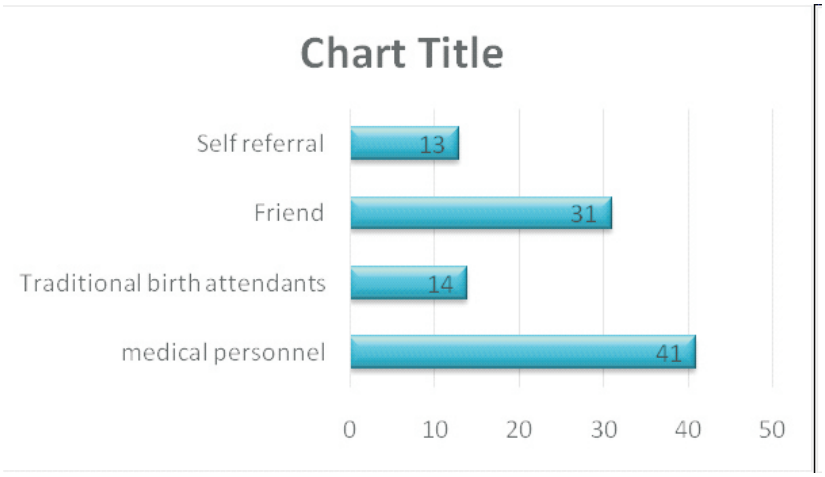

Fig 4. The Mode of Referral to the Clinic

41(41.4%) of the respondents were referred by medical personnel, 31(31.3%) were referred by their friends, 14(14.1%) were also referred by traditional birth attendants and 13(13.1%) were self-referred.

Majority, 55(55.0%) of the parents attributed the cause of the deformity to spiritual or curse.

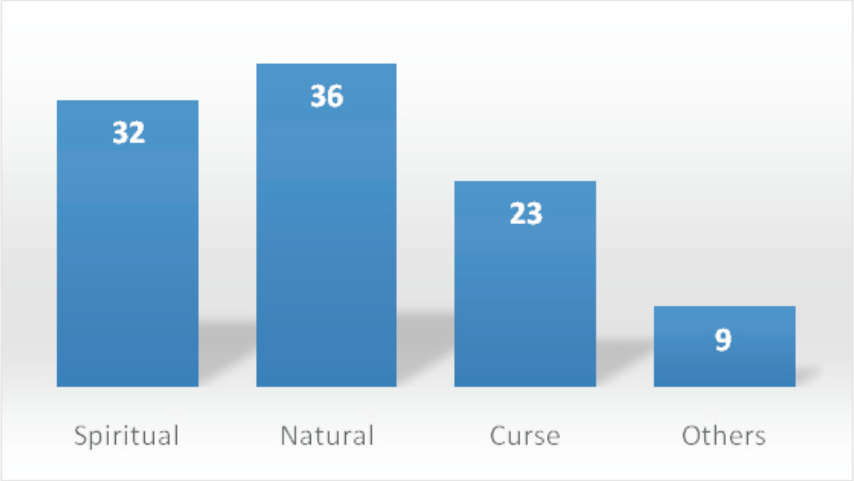

Fig 6. Perceived attributable causes

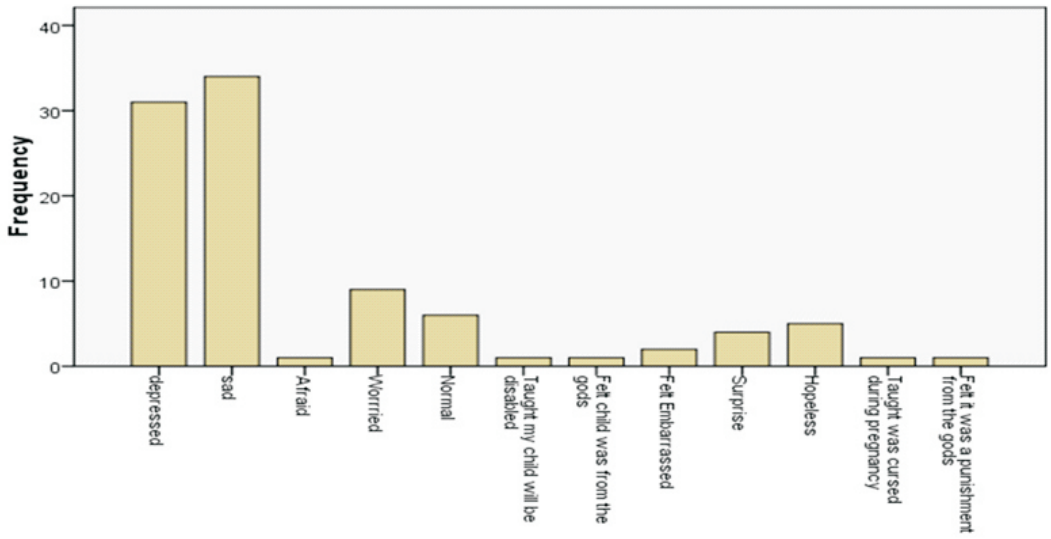

Fig 7. How the parents felt when they were told their child had clubfoot.
35.4% respondents were sad about their child's condition, 32.3% also felt depressed.

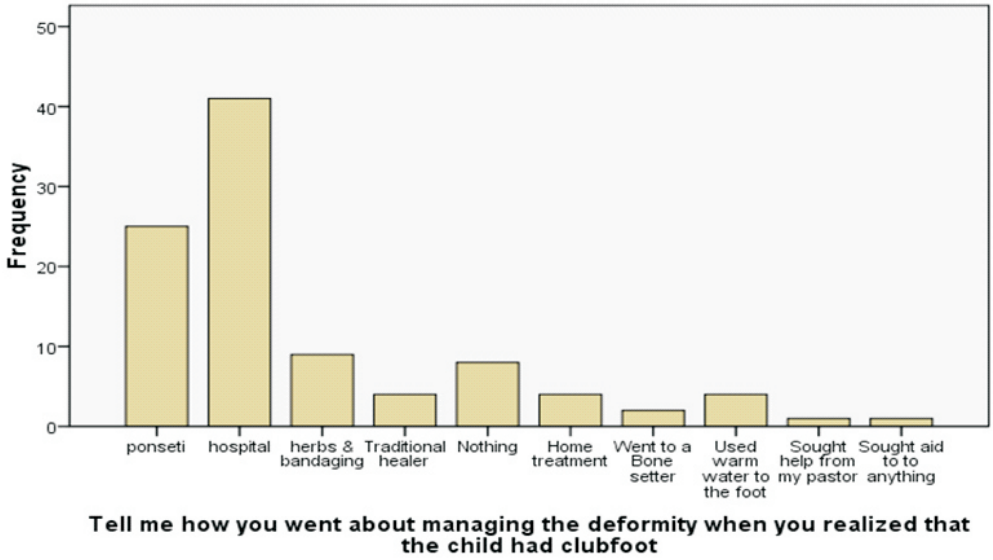

Fig 8. How the respondents went about managing the deformity when they realized that their child had clubfoot
Majority (41.4%) went to the hospital and the 2.0 % went to a pastor for help and sought aid to do anything. This explains that, the parents/caregivers tried other interventions which didn't yield much appreciable results.

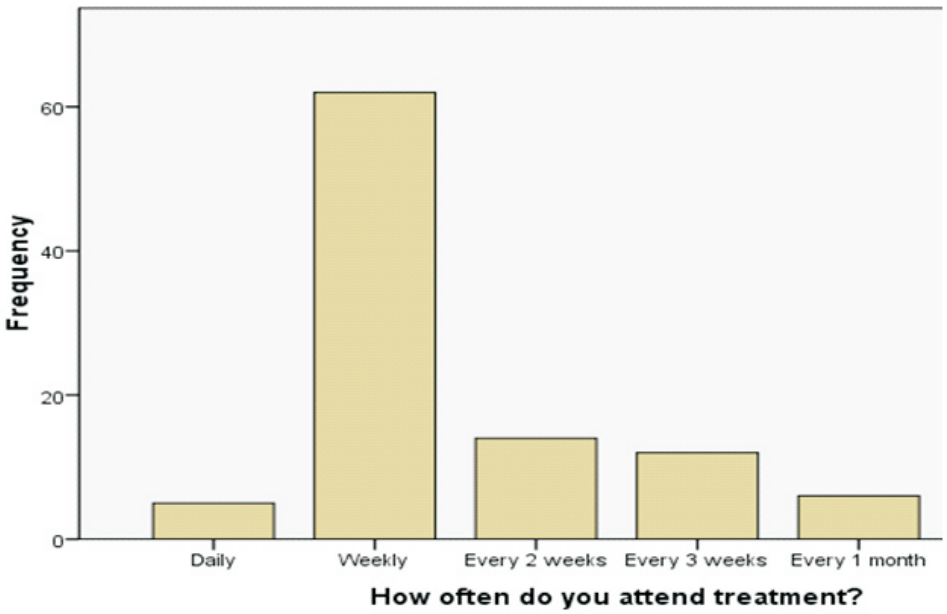

Fig 9.How often the caregivers attend to the treatment protocols
83 (86 %) of the respondentsindicated the necessity to attend to regular treatment.

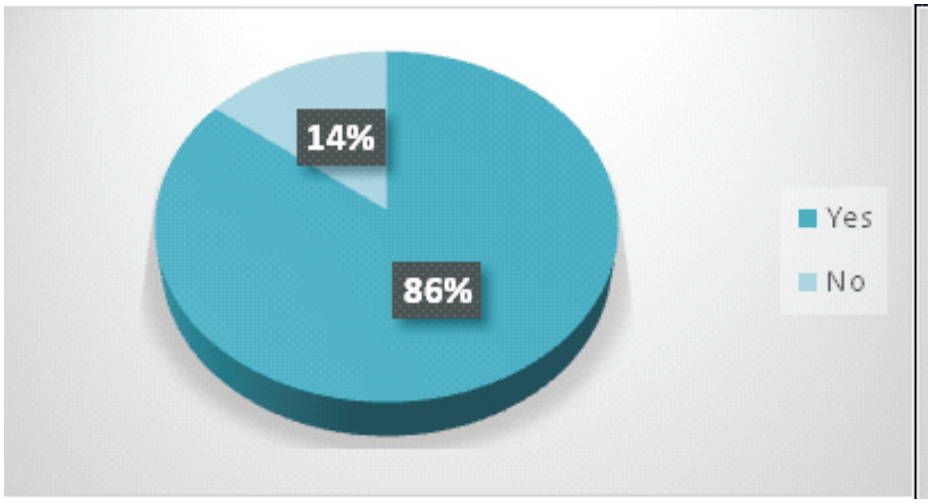

Fig 10: Regularity of attendance of to treatment.

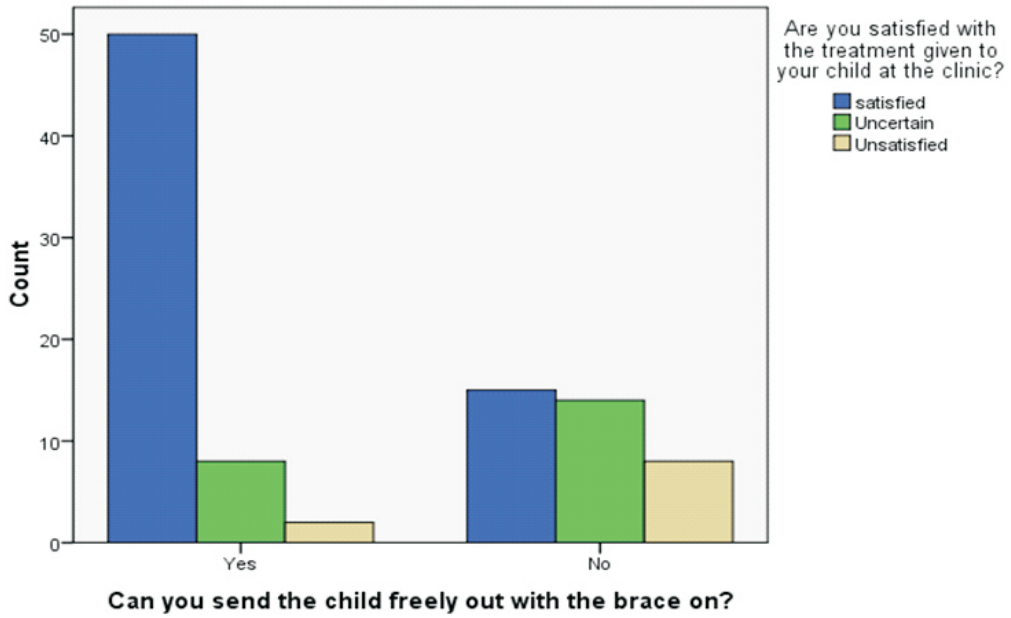

Fig 11. Cross tabulation of satisfaction with treatment and willingness of the respondents to send their child freely out on the braces.

There seem to be a significant association between satisfaction with the treatment and ability to freely go out with the children in their braces, as 83.3% of those who were satisfied were willing to freely send their children out. X^2 (19.74, 2), $p<0.05$.

Majority (69%) of the respondents who think attending to regular treatment can help manage the child's foot says the reason for children with neglected or inadequately managed clubfoot is as a result of lack of awareness.

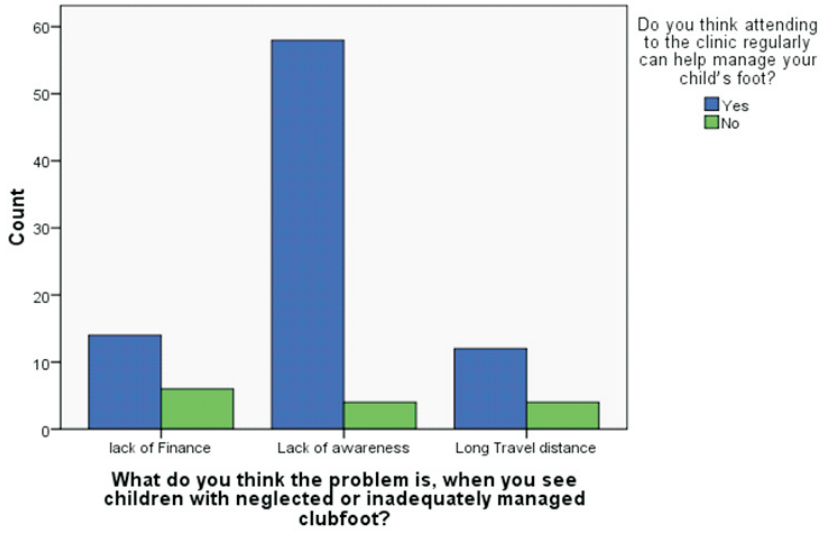

Fig 12. Cross tabulation of the need to attend to regular treatment and attributable reasons for defaulting treatment.

This indicates a significant association between proper and timely management of clubfoot and awareness.. X^2 (8.64, 2), $p<0.05$.

The findings also specified that 59(60.8%) of the parents mentioned they can send their child out freely with the brace on.
There seem to be a significant association between satisfaction with the treatment and willingness to regularly attend to treatment, as 78.6% of those who were satisfied were willing to regularly attend to treatment. X^2 (30.23, 2), $p<0.05$.

Discussion
Outcome of the study also shows that the parents/caregivers who took part in the study, the majority 63(63.0%) were women and the rest were men 37(37.0%). The feminine gender dominance in this study concurs with the observation made in a study conducted in Uganda on parents/caregivers who took their children at an outpatient treatment clinic for clubfoot management (Kazibwe, 2006). A similar study by Kadzin and Wassell (1999) in USA found that out of 200 parents/caregivers, who took part in a study on barriers to treatment participation reported that majority of them were mothers or female relatives. The result of the social demographic data of the current study implies that mothers/female relatives are more committed and/or available in seeking treatment for their children as opposed to their male counterpart.

From the study it also shows that, consistent follow up of treatment appointments forms a major role in improving structures and functions of the foot (Pirani et al., 2009). This is linked with positive results, improved activity, participation and better quality of life of the patient (Ponseti, 2005). From our study we acquired 83(84.7%) said it is necessary to attend to regular treatment and 14(14.3%) also said it is not necessary.

The study found that the reason why more clubfoot are seen are as results of long travel distance which recorded 16(16.0%), which is peculiar to the literature stated below. According to Meremikwu et al (2005), despite the availability of effective treatment interventions in clubfoot management, the outcome of treatment in many parts of Africa remains sub-optimal. The authors further maintain that patients/caregivers in rural communities travel long distances to urban centers to access healthcare which involves high transport costs. This makes it difficult for them to adhere to therapeutic regimes (Beardsley et al., 2003). This also have greater significant impact on our study where majority of the parents said there was less social and family support. From the findings, we recorded 32(32.0%) saying the cause of the deformity is attributed to spiritual and 23(23.0%) also said it is associated with curse. Which have similar significance with this literature. Some of the cultures consider clubfoot as a curse or punishment for wrong doing hence no support is offered to these children and their family. These elements tend to affect the consistency with treatment and may lead to non-compliance or neglect clubfoot.

Additionally, a study conducted by Broardman and Morcuende (2010) in Chile and Peru, found that some parents/caregivers rejected the use of abduction brace because of the social stigma associated with children in orthotics braces. This is similar to our findings which shows that, 37(38.1%) also said they can't send their child out freely because of social stigma and other factors but a significant proportion59(60.8%) said they can send their child out freely with the brace on.

Conclusion

There seem to be a favorable perception towards management of clubfoot, which can be enhanced by massive educational campaign to raise awareness.

Recommendation

Educational campaigns on the awareness on Clubfoot should be the focal priority of Physiotherapist and professionals involved in clubfoot management to key stakeholders and effective counselling of parents.

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