



Awareness on Clubfoot among Parents having Children with Clubfoot Deformity

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Abstract:

Background: The burden of childhood disability as a public health problem in developing countries remains relatively unrecognized. One out of 750 children born in the world suffer from club foot among them 80% are in low and middle income countries. Most of these babies have limited access to receive effective treatment

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for their clubfoot due to lack of awareness and some barriers. We actually don't know the level of awareness of parents who have child with clubfoot deformity. Objective: The purpose of this study was to assess the level of awareness of parents who have children with clubfoot during clubfoot treatment. Methods: It was a cross sectional descriptive study. A total of 143 parents having children with clubfoot deformity selected purposively to conduct this study. Face-to face interview methods was adopted by using semi-structured questionnaire. Results: Most of the parents completed secondary level of education. Almost two third (62.2%) mothers got married when they were in below 18 years of age. More than half (53.8%) of the respondents family income were 5000 to 10,000 BDT. About half of the parents got information from previous patients. Most of the respondents had poor awareness on clubfoot treatment. Conclusion: Necessary steps should be taken to increase awareness among the parents about clubfoot deformity, its management procedure and as well as adherence of the treatment.

Key words: Awareness, Clubfoot deformity

Background

The burden of childhood disability as a public health problem in developing countries remains relatively unrecognized [1]. One out of 750 children born in the world suffers from club foot. Around 220 000 babies in developing countries born with clubfoot each year [2]. Study shows approximately 80% of total clubfoot is in low and middle income countries [2,3]. Most of these babies have limited access to receive effective treatment for their clubfoot and will grow up with severe disability as a consequence [3]. In America and the United Kingdom the estimate incidence of clubfoot is 1 per 1000 births, with males more affected than females in a ratio of 2:1 [4]. However another finding indicates an incidence of 2 to 3 per 1000 births in developed countries [5]. Additionally the incidence of clubfoot

among black South African children is reported to be 3.5/1000 births [6]. Although it is estimated that 80% of the world's disabled children live in developing countries, not much is known about the disabling conditions such as clubfoot in these countries [7]. In Bangladesh the estimated number of children with clubfoot born per year is about 4373, and an incidence rate of club foot is 1.2/1000 births [8]. Every year in Bangladesh and Myanmar an estimated 5-6000 children are born with clubfoot deformity every year, which is approximately one of every 1000 children born in our country [9]. Untreated or incorrectly treated clubfoot soon becomes 'neglected clubfoot' as the child grows. A child with neglected clubfoot will have difficulty in wearing normal shoes and as they grow older may experience severe pain. Neglected clubfoot severely restricts ability to walk in some cases, and in others only short distances are manageable. The burden of this disability impacts on society as a whole and as such the problem of untreated clubfoot should be viewed as a public health issue which must be addressed [3]. Due to lack of knowledge, awareness and poor access to healthcare most children with clubfoot in developing countries have limited access to receive treatment. Left untreated, clubfoot results in severe disability, causing pain and difficulty in walking. Many individuals with untreated clubfoot end up living as beggars on the streets (10). It has been shown that only 10% of children with clubfoot in East Africa are able to access treatment from a specialist owing to inadequate awareness, poor communication, travel expenses and increased parental responsibilities of care in the family [11]. Currently, only 2% out of over one million people with disabilities in Uganda receive rehabilitation services [12]. Patient compliance with treatment procedures is important for the therapeutic regimen to be effective. Without compliance, the therapeutic goals cannot be achieved, resulting in poor patient outcomes [13]. Research on adherence to pediatric treatment regimes has

received attention in recent years as sub optimal adherence to medical and other therapeutic regimens can have personal, social and clinical implications for the child as an adult [14]. Lack of information regarding reasons for adherence to the regimen makes it difficult for health providers and health planners to determine the impact of treatments on health status or weigh the cost/benefit ratio for prescribing costly treatments to the patients [15]. Therefore, it is important to understand how parents/caregivers manage their children's treatment and the potential barriers these parents encounter during the utilization of clubfoot treatment services. Despite serious consequences of poor compliance to prescribed therapeutic regimens for children with physical and mental impairments, compliance or treatment adherence in this group of children has not been well studied [16]. Studies in developing countries with low-resource settings have shown that multiple barriers affect patient or caregiver's utilization of health care services. In a study in Ghana, Tolhurst and Nyonator (2006) found that level of awareness along with distance travelled to health facilities, cost of treatment, long waiting times and negative attitudes of health care providers were major barriers to utilization of health care services [21,22]. Additionally good communication and information sharing between the patients and the health provider during clinical encounters and consultations is important for mutual understanding and agreement and is a good predictor of compliance to the prescribed care [23,24,25]. In this study we tried to find out the awareness of parents about clubfoot and its management and as well as their future role during clubfoot treatment in clinic of their children with clubfoot deformity.

Methods

The study was a descriptive type of cross-sectional study conducted from September 2012 to April 2013 in outpatient department (OPD) of selected hospitals in Rajshai and comilla division. A total of 143 parents having children with clubfoot deformity selected purposively to conduct this study. Face-to face interview methods was adopted by using semi-structured questionnaire. It is very difficult to quantify one's awareness level but I tried to know some aspect of awareness by fixing some questions about different arena of clubfoot. Three categories were defined on the basis of the score obtained by each participant: poor (<50% of the total score); moderate (50%-70% of the total score) and good (>70% of the total score) and it was pre-defined awareness/practice scoring. The surveyed data has converted into frequencies and percentage forms. Then Data entered into computer was continued along with data collection. Data checking was done meticulous and corrections for any error. Data will be analyzed using SPSS (statistical package for social sciences) for windows 16.0.Necessary tabulations and cross-tabulations, charts and diagrams drawn for summarizing and easy visual presentation of data. Verbal informed consent from the respondents after proper explanation of the purpose and method of the study was undertaken.

Result

Table 1: Socio-economic characteristics of the respondents

Characteristics	Frequency	Percentage
Father's education		
Illiterate	13	9.1
Primary	41	28.7
Secondary	51	35.7
College	30	21
University	8	5.6

Mother's education		
Illiterate	6	4.2
Primary	51	35.7
Secondary	65	45.5
College	19	13.3
University	2	1.4
Mother's marital age		
< 18 years	89	62.2
18 to 10 years	54	37.8
Family income in BDT		
< 5000	22	15.4
5,000 to 10,000	77	53.8
11,000 to 20,000	38	26.6
21,000 to 30,000	6	4.2
Family members		
< 5	74	51.7
5 to 6	48	33.6
7 to 10	21	14.7

In father's level of education study found more than one third (35.7%) children's father had secondary level of education where rest of 28.7%, 21%, 9.1%, 5.6% children's father had primary, college, illiterate and university level of education respectively. In mother level of education study found the highest proportion (45.5%) of mothers had secondary level of education, the second highest (35.7%) had primary level of education and rest of 13.3%, 4.2% and 1.4% mothers had college, illiterate and university level of education respectively. In case of club foot children mother's marital age, almost two third (62.2%) mothers got married when they were in below 18 years of age. Family income showed that more than half (53.8%) of the respondents family income were 5000 to 10,000 where rest of 26.6%, 15.4% and 4.2% family income were 11,000 to 20,000, <5000 and 21,000 to 30,000 respectively. Study found half of the (51.7%) respondent's family members were <5 person and about one third (33.6%) respondent's family members were 5 to 6 person and rest of 14.7% respondent's family members were 7 to 10 person (Table 1).

Table 2: Source of information about clubfoot treatment

Source of information	Frequency	Percentage
Doctor	29	20.3
Previous patients	51	35.7
Publicity	46	32.2
Midwife	6	4.2
Health & family planning worker	10	7.0
Others	1	0.7
Total	143	100

According to given data here most of the parents got information from previous clubfoot patients and it was 35.7 percent. From publicity, doctors and health & family planning workers they got information of 32.2, 20.3 and 7.0 percent respectively.

Table 3: Awareness about clubfoot treatment

Category of awareness	Number	Percentage
Poor awareness	116	81.30
Moderate awareness	19	13.08
Good awareness	8	5.60
Total	143	100

Most of the respondents had poor awareness on clubfoot treatment.

Discussion

Public health planners have recognized the importance of health workers being informed about the knowledge and perceptions which people hold regarding health and illness, causes of disease and possible remedies [26]. Theorists have proposed that a mismatch between the patient/caregivers' and the therapist's expectations for treatment may lead to dissatisfaction with services and may lead to poor adherence to the treatment regime [27]. For instance if patients/caregivers

have little knowledge about the condition and are unfamiliar with the process of treatment, they may have unrealistic expectations about how long the treatment will last, how quickly their child's problem will resolve, and to what extent they will be expected to participate in treatment [27]. Study revealed that more than one third respondent's parents had secondary level of education and about two third mother married before 18 years of age. More than half of the respondent's parent's monthly family income was 5000 to 10000 tk. In case of getting information about clubfoot treatment, parents reported that more than half got information from other parents and about one third got information from publicity. In case of awareness study revealed that majority respondents had poor awareness about clubfoot where minority had good awareness about clubfoot.

Conclusion

Findings of this study revealed that parents have poor awareness about clubfoot deformity and its management. Necessary steps should be taken to increase awareness among the parents about clubfoot deformity, its management procedure and as well as adherence of the treatment.

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