Original article

Knowledge on Care of Autistic Child among the Mother's Attending Protibondhi Foundation, Dhaka

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Abstract:

Objective: Autism has a strong genetic basis, although the genetics of autism are complex and it is unclear. This descriptive type of cross sectional study was conducted to explore the knowledge on care of autistic children among the mother's attending Protibondhi Foundation, Dhaka. *Methods:* A total of 385 samples were selected purposively, but due to time and budget constrict it was 150 finally. Data were collected by using an anonymous, pre-tested, semi structured and self-administered questionnaire. *Results:* The study revealed that more than 50% of the respondent's were in the age group 16-30 years, majority of the respondent's were Muslim. Almost 84% of the respondents were SSC-Graduate and majority of them (nearly 50%) were housewife .The monthly family income was ranged between Taka 25,001-50,000 and its percentage was 53.3%. The knowledge about type of autism is very low, the data showed that only two types of autism they knew and the respondent's knowledge about the risk factor was also very low; only 24% of the respondents had knowledge about complications during pregnancy and delivery related risk factors. About 28% needed physiotherapy, 30% needed occupational therapy, 34% needed speech therapy & 44.7% needed psychotherapy. Here significant association was found between age, education and knowledge about autism (p<0.05). *Conclusion:* Overall knowledge on care of autistic child was not satisfactory among respondents.

Keywords: knowledge; autism; care

Introduction

Autism is a neural development disorder characterized by impaired social interaction and communication, and by restricted and repetitive behavior. These signs all begin before a child is three years old[1]. Autism has a strong genetic basis, although the genetics of autism are complex and it is unclear whether ASD is explained more by rare mutations, or by rare combinations of common genetic variants[2]. In rare cases, autism is strongly associated with agents that cause birth defects[3]. Controversies surround other proposed environmental causes, such as heavy metals, pesticides or childhood vaccines[4]; The prevalence of autism is about 1–2 per 1,000 people; the prevalence of ASD is about 6 per 1,000, with about four times as many males as females. The number of people diagnosed with autism has increased dramatically since the 1980s, partly due to changes in diagnostic practice. The signs usually develop gradually, but some autistic children first develop more normally and then regress[5]. Autism is a highly variable neurodevelopmental disorder that first appears during infancy or childhood. Overt symptoms gradually begin after the age of six months,

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become established by age two or three years[6]. Autistic infants show less attention to social stimuli, smile and look at others less often, and respond less to their own name. Autistic toddlers differ more strikingly from social norms; for example, they have less eye contact and turn taking, and are more likely to communicate by manipulating another person's hand. Three- to five-year-old autistic children are less likely to exhibit social understanding, approach others spontaneously, imitate and respond to emotions, communicate nonverbally, and take turns with others. However, they do form attachments to their primary caregivers[7]. Contrary to a common belief, autistic children do not prefer being alone. About a third to a half of individuals with autism do not develop enough natural speech to meet their daily communication needs[8]. A study was done in Nigeria on the relationship between the pattern of impairments in autism spectrum disorder and maternal psychosocial burden of care and they showed that children with ASD had impairments in social, communication and behavioural areas. On bivariate analysis, the presence of social type of impairments and a large number of impairments were significantly associated with psychological distress and burden in mothers. Following multiple linear regression, only a large number of impairments remained significantly and independently associated with psychological distress in the mothers.[9] As the prevalence of autism spectrum disorder (ASD) increases and scarcity of information about knowledge on care of autism of child among mother, the present study was an effort to explore the real scenario in our country.

Materials and Methods

This study was conducted in Dhaka city, Capital of Bangladesh has been chosen as study area in this descriptive study. The main reason for this selection was accessibility & convenience. The study was conducted over a period of three months (June 2008 to September 2008). All the mother's of autistic children attending Protibondhi Foundation, Dhaka were target population. This study was a cross sectional descriptive with taking 385 samples initially but due to time limitation and lack of resources I had to take 150 samples finally using pre-tested, semi structured and self administered questionnaire. Informed consent from the school authority was sought in advance. The anonymous self-administered semi structured questionnaire was distributed to the mother's of selected school after explaining the purpose of the study and the instruction to fill in the questionnaire. After the collection of all data,

researcher sorted, scrutinized the data by the selection criteria and then data were analyzed by statistical package for social science (SPSS), version 12.0. Data were analyzed by descriptive and inferential statistics. Initially informed consent was sought to the respondents verbally and taken permission from them. Participants were also informed them that their

Table 1: Socio-demographic characteristics of the study subjects (n=150)

Variables	Frequency	Percentage
Age (in years):		
16-30	77	51.3
31-40	66	44.0
>40	3	2.0
Religion:		
Muslim	121	80.7
Hindu	20	13.3
Others	9	6.0
Respondent's education:		
Illiterate	2	1.3
SSC-Graduate	125	83.3
Post graduate	23	15.3
Husband's education:		
SSC-Graduate	70	46.7
Post graduate	78	52
PhD	2	13
Respondent's occupation:		
Govt. Job	22	14.7
NGO/Private Job	29	19.3
Housewife	74	49.3
Teaching	17	11.3
Physician	8	5.3
Husband's occupation:		
Govt. Job	45	30.0
NGO/Private Job	35	23.3
Business	39	26
Teaching	29	19.3
Physician	2	1.3
Monthly income (in Taka):		
5,000-10,000	2	1.3
10,001-25,000	54	36
25,001-50,000	80	53.3
50,000 or more	14	9.3

participation was voluntary and all the information were kept in confidential. Prior the study local ethical approval was taken.

Results

Table 1 describes the socio demographic characteristics of respondents like age, religion, respondent's education, husband's education, respondent's occupation, husband's occupation and monthly family income in Taka.

More than 50% of the respondent's were in the age group 16-30 years. Majority of the respondents (80.7%) were Muslim and very few had other religion. Most of the respondents (83.3%) were SSC-Graduate. Regarding husband's education, 52% were post graduate. Majority of the respondents (nearly 50%) were housewife. Regarding husband's occupation 30.0% husband's occupation were Govt. job and 26% were NGO/Private job and few numbers were doing other jobs. The monthly family income was ranged between 25,001-50,000 and its percentage was 53.3%.

Table 2: Frequency distribution of respondent's correct knowledge on types of autism (n=150)

Types of autism:	Frequency	Percentage
Asperger disorder	4	2.7
Childhood disintegrative syndrome	17	11.3
Rett syndrome	2	1.3
Pervasive developmental disorder	7	4.7
Classical autism	17	11.3

Table 2 shows that respondent's knowledge on types of autism. But in this stated only 11.3% respondent's had knowledge about childhood disintegrative syndrome and classical autism.

Table 3: Frequency distribution of respondents' correct knowledge on risk factors for autism (n=150)

Risk factors:	Frequency	Percentage
Genetic	4	2.7
Environmental	1	2.0
Metabolic	3	7.3
Viral	11	7.3
Complication during pregnancy & delivery	37	24.7

Table 3 describes the respondents' knowledge on risk factors for autism. Only 24.7% respondents had the knowledge about complication during pregnancy and delivery related risk factors and 7.3% had knowledge about metabolic and viral risk factors & near about 2.0% known about genetic & environmental risk factors.

Table 4: Frequency distribution of respondents' correct knowledge on essential treatment of autism (multiple responses) (n=150)

Essential treatment	Frequency	Percentage
Physiotherapy	42	28
Occupational therapy	45	30
Speech therapy	51	34
Psycho therapy	67	44.7

Table 4 describes the essential treatment of autism. About 28% needed physiotherapy, 30% needed occupational therapy, 34% needed speech therapy & 44.7% needed psychotherapy.

Results were published as number (%), $\chi 2$ test was performed and $P<0.05$ was level of significance.

Table 5 shows association of respondents' knowledge with age, education and occupation. Here significant association was found between age, education and knowledge about autism ($p<0.05$).

Discussion

The respondents showed overall poor knowledge about the types of Autism. Basically most of the mothers of autistic child had poor knowledge about the type of autism. Majority of the respondents actually didn't know the risk factors of autism. Only 24.7% respondents had knowledge in complication during pregency and delivery. Different reports also found that mothers had very poor knowledge about the risk factors of Autism[10,11]. In case of treatment of autism 44% respondents had knowledge about the need of psycho therapy where 34% had knowledge about speech therapy, 30% had the knowledge about occupational therapy and 28% had the knowledge about physiotherapy. Studies also found that even health care professionals also had poor knowledge about where had to send the autistic child for better treatment[12]. The study had found significant association among knowledge with age and educational level of the espondents. Where some study showed same result regarding this factors[13,14].

Conclusion and Recommendation:

Overall knowledge on care of autistic child was not satisfactory among respondents. The knowledge about care of autistic child should be made generalized and easily accessible to all parents or eligible couple and need large scale study.

Table 5: Association of knowledge on autism with characteristics of respondents (n=150)

Characteristics	Satisfactory knowledge n (%)	Unsatisfactory knowledge n (%)	Total (%)	*p*-value
Age in years:				
16-30	12 (15.6)	65 (84.4)	77(100)	<.001
More than 30	31 (44.9)	38 (55.1)	69(100)	
Respondent's education				
Up to graduate	49(33.9)	84(66.1)	127(100)	.04
Post graduate	3(13.0)	20(87.0)	23(100)	
Respondent's occupation				
Govt. service	8(18.2)	18(81.8)	22(100)	0.14
NGO/private	6(20.7)	23(79.3)	29(100)	
Housewife	25(33.8)	49(66.2)	74(100)	
Professional	11(44.0)	14(56.0)	25(100)	

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