

Perception of Iraqi Women about Autism

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Abstract

Background: Autism is increasing in prevalence year by year worldwide. In most cases, women are the primary health-care providers; eventually, they should manage to identify the signs and symptoms of autism and respond accordingly. The ultimate goal is to achieve optimum care for patients with autism. This study aims to ascertain the mothers' awareness and knowledge of autism. **Methodology:** A descriptive study design using a purposive (nonprobability) sample of 230 women in the age range 17–48 years were included in this study from women visiting Primary Health Care Centers in Ramadi city. **Results:** About one-quarter of women (25.2%) reported to have an autistic child, only 11.3% of them do not know that their children show no contact, interaction, or interest with other children. Social media were the most frequent source of information regarding autism (38.7%). About half of the women under study do not know if autism is a genetic disease. **Conclusions:** The study revealed a high perception of women regarding autism.

Keywords: Autism, children, Iraq, perception

INTRODUCTION

Autism is a spectrum of neuropsychiatric disorder described as a severe neurodevelopmental illness belonging to autism spectrum disorders (ASDs), including autism, Rett syndrome, Asperger's syndrome, childhood disintegrative disorder, and unidentified pervasive developmental disorders. It is much higher in boys than girls (4–5 times).^[1]

Children with autism instantly have abnormal brain development. Consequently, they cannot adhere to or communicate with other children, so they attain specific behaviors with repetitive, rigid, and stereotypic patterns. Such disorders are considered neurodevelopmental and classified in a special tool, the diagnostic and statistical manual of mental disorders. Diagnosed autism can be established in children under 3 years of age due to its symptoms that can begin even earlier.^[2,3]

None of the children with various socioeconomic and ethnic backgrounds are protected against autism. To diagnose a child with autism there must be a developmental history along with the medical history and observations of communicative, social, and playing behaviors that usually appear before the age of 3 years.^[4]

Several works of literature have been conducted on children with ASD. Among the deliberated parameters were the

fallout of having a child with ASD on parents and families. Unfortunately, most of those studies were limited to Western countries, while communities of low- and middle-income countries have limited professional services to support children with ASD. Moreover, developing countries have little information on the prevalence of children with this condition and poor access to specialized services which are – in turn – less developed.^[5]

The vast majority of those studies revealed that there is a significant association between autism and different sociodemographic factors such as mother stress mothers (mothers who suffered from psychosocial stress during pregnancy compared with mothers of normal children), low level of antenatal care, and maternal diseases show a positive relationship with autism, widespread usage of electronic games and devices that make the child isolated from his environment, positive history of autism in the family (environmental and

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genetic factors are involved in ASD pathogenesis), and harmful effects of the radiation to mothers throughout gestation and in early childhood that may implicate many disorders in children including autism.^[1,6]

In less developed countries, autism prevalence is relatively lower than in the developed world. Iraq is a part of developing countries, unlike developed countries with more advanced health and education services.^[5,7]

Families having a child diagnosed with autism are expected to experience elevated stress levels and depression; they also suffer from diminished marital and family unity. Eventually, mothers carry the most considerable burden and undergo the most significant mental health problems. For parents to succeed in raising a child with ASD, parents should be flexible and patient to meet their child's needs.^[8] Detection of autism in its early stages is beneficial for proper treatment and good prognosis. It is best fulfilled by education of parents. A mandatory tool is the screening programs which raise parents' awareness about signs that their child could have a problem.^[4] The implementation of the integrated management of neonatal and childhood illness strategy in primary health-care (PHC) centers helps in the early diagnosis of many diseases, including autism.^[9]

This study aims to study the perception of Iraqi women about autism.

METHODOLOGY

A descriptive study design using a purposive (nonprobability) sample of women. The study design was used in this quantitative research to assess the prevalence and perception of Iraqi women about autism. A purposive (nonprobability) sample of women. The target population (230) included in this study was from Google Forms and PHCs in Ramadi city. Primary health centers in Ramadi include Altal, Al Qattan, and Hay Al Andalus.

The data were collected from February 2 to March 6, 2022. Half of the samples were gathered from Google Forms by posting the link to the form on social media among near relatives. Furthermore, the other half was gathered from PHCs in Ramadi City.

Verbal consent was taken after informing participants (mothers) and holding a direct interview. The questionnaire was specially designed (structured) with closed-ended knowledge-related questions. Data collection started using Google Forms and questionnaire format and filling out sampling (residents of Anbar province). The interviewer explained to all participants the reason for the questionnaire; to assess the prevalence and perception of Iraqi women about autism.

Statistical analysis of data was carried out and calculated using SPSS version 27 (SPSS Inc., Chicago, IL, USA). The descriptive statistical forms (percentages, mean, and standard deviation) were obtained.

Ethics approval

This study was approved by the ethical committee of Department of Family and Community Medicine, Medical College, Anbar University, Ramadi, Iraq, on 29 March 2023. To ensure adherence to ethical guidelines, several measures were adopted while conducting this study:

1. No incentives were offered to the participants in return for their participation.
2. Verbal consent was obtained from the participants before filling the questionnaire.
3. Participants were informed that their participation in this study is voluntary, no incentives or compensations will be offered in return, and that they have the right to withdraw from the study at any stage. The scientific value of their participation was explained in the verbal consent.
4. The contact information of the principal investigators was provided for participants.
5. All the participants' information was kept private by keeping it in a secured folder in a password-protected computer owned by the study investigators. No information was shared with any other individuals or entities.

Table 1: Distribution of sociodemographic factors in the sample

	Frequency (%)
Age: Mean±SD (range)	27.6±8.0 (17–48)
<20	26 (11.3)
20–24	88 (38.3)
25–29	34 (14.8)
30–34	31 (13.5)
35–39	16 (7.00)
40 and more	35 (15.2)
Educational level	
Illiterate	4 (1.7)
Read and write	9 (3.9)
Primary school	6 (2.6)
Intermediate school	16 (7.00)
Secondary school	10 (4.3)
University	185 (80.4)
Occupation	
Homemaker	66 (28.7)
Employed	164 (71.3)
Address	
Urban	204 (88.7)
Rural	26 (11.3)
A number of children	
<3	168 (73)
>3	62 (27)
The number of abortions	
None	182 (79.1)
1–3	44 (19.1)
>3	4 (1.8)

SD: Standard deviation

RESULTS

Sociodemographic characteristics

The study's sample size is two 230 interviewed women aged between 17 and 48 years. Table 1 illustrates the distribution of the age in this study sample. Participated women's age mean of 27.6 ± 8.0 years. The highest percentage (38.3%) was in the age 20–24 years old, while the age 35–39 years demonstrated the lowest percentage (7.0%) as shown in Table 1.

Another studied factor was the education level which ranged uniformly from a minor percentage (1.7%), which represents illiterate mothers, to the highest 1 (80.4%) among mothers having a university degree. Regarding occupation, more than two-thirds of participants were employed (71.3%), while unemployed women (homemakers) constitute (28.7%) of the sample size. Also shows that 88.7% of women live in the center of Ramadi City. Regarding parity, the highest percentage of women had less than three children (73%) while the lowest percentage had more than three children (27%). About 19.1% of women had a history of abortion at least once [Table 1].

Knowledge of autism

Most interviewed women (95.2%) have heard of autism, and most women knew that a child with autism does not like to play with peers (85.7%). Almost (7.8%) did not know that a child with autism does not play with peers. Women who knew a child with autism showed no interest in other children or lacked interaction with other children (80.5%), while those who did not know were (11.3%). The women who knew that autism is a psychological disease (77.5%), while those who partially knew autism as a psychological disease have the lowest percentage (7.8%), as shown in Table 2.

Table 2 shows that 76.2% of women knew that most children with autism are antisocial or do not even show a connection with their parents and that a child with autism is delayed in pronunciation and speech, while those who did not know (21.2%, 12.6%), respectively. While those who partially knew that most children with autism are antisocial or do not even show a connection with their parents have the lowest percentage (2.6%). Women who knew that the autistic child used repeated phrases at inappropriate times (77.1%). Only 6.1% did not know that the autistic child used repeated phrases at inappropriate times, 71% of women knew that autism was a learning and mental disorder, and (12.6%) did not know.

Regarding knowledge that autism is a contagious disease, most women (92.2%) did not know autism is a contagious disease. Only 1.7% knew autism was a contagious disease, and 6.1% fractionally knew it. Nearly half (45.9%) knew the symptoms of autism appear at the neonate period to the age of 3 years, while 33.8% did not know the symptoms of autism appear in such age group. The women who knew a child with autism could use eye-to-eye contact when interacting with other children. A child with autism uses body gestures and hands when conducting conversations well in more than one-third of the study sample (35.5%). Those who cannot use these communication skills constitute (44.6% and 45.0%), respectively.

Table 2 also shows that 44.6% of women knew that autism due to the neglect of parents and family, 45% did not know while 10.4% had no idea. Less than one-fifth of women knew that autism was due to pregnancy complications (17.7%), while 46.8% did not know. More than half of women knew that the autistic child did not respond to the call of his name (54.5%),

Table 2: Distribution of women according to their knowledge of autism

Variables	Yes	No	Do not know
Heard about autism	219 (95.2)	7 (3)	4 (1.7)
Autism is a contagious disease	4 (1.7)	13 (6.1)	213 (92.2)
Autism is a genetic disease	74 (32.5)	43 (18.6)	113 (48.9)
Autistic a psychological disease	178 (77.5)	18 (7.8)	34 (14.7)
Autistic and organic disease	33 (14.7)	51 (22.1)	146 (63.2)
Autism is a learning and mental disorder	163 (71)	36 (16.5)	29 (12.6)
Symptoms of autism appear from birth to the age of 3 years	105 (45.9)	47 (20.3)	78 (33.8)
Most children with autism are antisocial or do not even show a connection with their parents	175 (76.2)	6 (2.6)	49 (21.2)
Children with autism deliberately uncooperative (can they control their behavior)	65 (28.6)	22 (9.5)	143 (61.9)
Autism tends to spread among high socioeconomic families	85 (37.2)	52 (22.5)	93 (40.3)
Autism due to neglect of parents and family	102 (44.6)	24 (10.4)	104 (45)
Autism due to pregnancy complications	40 (17.7)	82 (35.5)	108 (46.8)
A child with autism delayed in pronunciation and speech	175 (76.2)	26 (11.3)	29 (12.6)
A child with autism does not like to play with their peers	197 (85.7)	15 (6.5)	18 (7.8)
A child has the eye-to-eye contact when interacting with children	81 (35.5)	46 (19.9)	103 (44.6)
A child with autism uses body gestures and hands when conducting conversations well and appropriately	81 (35.5)	45 (19.5)	104 (45)
A child with autism shows no interest in or lacks interaction with other children	185 (80.5)	19 (8.2)	26 (11.3)
There is a lack of emotional response to a child with autism	123 (53.7)	36 (15.6)	71 (30.7)
Autistic child uses repeated phrases at inappropriate times	177 (77.1)	39 (16.9)	14 (6.1)
Autistic child does not respond to the call of his name	125 (54.5)	45 (19.5)	60 (26)

Table 3: Distribution of women according to the source of information

Source of women's information	Frequency (%)
Social media	89 (38.7)
Books and articles	16 (7.0)
Family and relatives	40 (17.4)
School and university	33 (14.3)
Doctors and health staff	52 (22.6)

while 26% did not know. The result showed that social media were considered the primary source of information on autism (38.7%), while the lowest source included as books and articles (7.0%). Doctors had the second higher percentage (22.6%) as .source of women's information as shown in Table 3.

DISCUSSION

This study is concerned with on conception of autism among women. Despite researchers' efforts, there is insufficient data concerning the prevalence of autism owing to the relatively small sample size. As a cross-sectional study, it is expected to mislead factors associated with the diagnosis of autism (causative or outcome).^[10]

Research has studied the role of several specific brain regions in autism pathogenesis. They suggest the disease could arise due to multiple genes. In addition, the contribution of environmental factors effect on autism through additive or multiplicative effects is still unclear and needs further studies to explore the origin of the disease.^[11] Bhandari *et al.* describe these multiple mutated genes affecting DNA transcription with inflammatory mediators from the glial cell in the brain and the imbalance of signaling pathways of excitatory and inhibitory, which in turn affect the behavior of patients.^[12]

Previous studies highlighted early detection of autism, early interventions in managing children affected with ASD, and better outcomes in those children.^[13,14]

Approximately 95% of the studied sample had heard about autism. Consequently, these participants can be more effective in recognizing actual concepts and clinical features of autism than other respondents who have no idea about autism. This fact is strengthened by research conducted in Kerala, which compared before and after the introduction of the awareness program to measure the level of autism awareness among parents. Expectedly, the level of parents' knowledge was higher after introducing the awareness program.^[15,16] Even though media seems the most significant source of knowledge because it is trusted by most population,^[17] nonetheless; health-care professionals are still considered the most trustworthy source.^[18] Most women who participated in this study graduated from universities. In addition, they were employed, so a significant difference in the knowledge of the autism disease was found related to educational level and occupation.^[19,20]

A study in Turkey showed that the knowledge of nurses under study increased due to training programs for them about knowledge of childhood autism.^[21] A study in Kazakhstan showed that participants included different health professionals, including general practitioners, who have different beliefs across the country, including misunderstanding of the clinical picture and etiology of autism.^[22] In India, research indicates that assessing autism knowledge and beliefs among speech-language pathologists were average and below average scores.

Concerning the source of information among mothers regarding their perception of autism, social media was the most frequent source among samples in this study. These results are in the same line with another study conducted by Hull *et al.* who reported that social media were the primary source of information about autism among respondents.^[15] Furthermore, Al-Anbar city is known for the high prevalence of consanguineous marriage, which raises the possibility of genetic and social influence.^[23]

Certain limitations were found within our study owing to convenience sampling. Most of the respondents belonged to the middle class. As a result, inefficient assessment of the socioeconomic effect on the awareness level of mothers. In addition, the sample has no males (fathers) participating in this study. Men should be included in other studies. Autism is still a relatively undiscussed disorder among the Iraqi population, especially Al-Anbar City. Many candidates refused to participate in the questionnaire as they were unaware of ASD. This study was implemented strictly in Ramadi city. Therefore, it is unobtainable to estimate autism awareness in the whole country. However, this study is unique in its type in Ramadi, for being confined to women mothers. The calculated results are applicable to identify the gap in knowledge among mothers and give solutions on how to cover that gap. Eventually, this allows mothers to determine signs needed to look for and how to respond accordingly with suitable guidance.

CONCLUSIONS

The majority of Iraqi women has heard of autism and has good knowledge of its presentation and various aspects. It is recommended to encourage further studies on Autism in Iraq, and follow-up studies are needed. In addition, government involvement in the provision of exceptional health centers for autism. Public health education is increasingly needed to elevate autism awareness in the Iraqi community.

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Conflicts of interest

There are no conflicts of interest.

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