

A Study to Assess the Knowledge Regarding COVID-19 among Mother Child with Autism at District Disability Rehabilitation Centre at Agartala, Tripura, India

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ABSTRACT

In spite of high density of population, higher in poverty, lower levels of per capita public health infrastructure in our country interestingly recovery rate of COVID-19 is good. COVID-19 is a novel respiratory disease. Studies suggest that lack of proper knowledge regarding COVID-19, severe morbidity and high mortality also high in our country. During any kind of disaster or pandemic vulnerable groups or populations like mental and neurodevelopmental disorder like child with autism spectrum disorder known to be overly effected in negative way. According to epidemiological research report during the last decade there is dramatically increase in the rate of autism with prevalence of 5 to 10 cases of classic autism per 10,000 . Knowledge regarding COVID-19 among mothers child with autism was negatively correlated with the demographical value and social functional support reported by the mothers child with autism. This study sought to assess the knowledge toward COVID-19 among mother with autism seeking care for their child with autism in the District Disability Rehabilitation Centre, Tripura. This descriptive study hypothesized there are adequate knowledge about COVID-19 as because awareness was done by mass media from government and nongovernment side in a very intensive way. We conduct an investigation how mother child with autism with their specific demographical properties shows their knowledge about COVID-19 awareness and strategy they applied to prevent and recover from COVID-19. Our sample was selected randomly. Our study shows that knowledge and strategy of mother regarding COVID-19 significantly associated with their education, mother with special training, source of income, background of family support. The awareness level high among mothers about COVID-19 in percent was high 6.7 levels. Proportion of High Strategic capacity with COVID- 19 as high percentage 18.7. This descriptive study is according result is significant with selected demographical variables of mothers child with autism.

Method: A descriptive study was conducted in District Disability Rehabilitation Centre, Tripura. A simple random sampling technique was conducted with structured questionnaire in this centre. A total 50 mothers with child autism were randomly sampled. Descriptive analysis was used to assess the knowledge between the mothers with autism with demographic variables. Data was analyzed depending priorities on source of hearing and visualizing awareness, awareness regarding source of infection, sign and symptoms of infection, strategies adopted to withstand challenges from COVID-19, vulnerable group's members, Proportion of high strategies capacity with COVID-19.

Result: The awareness level high among mothers about COVID-19 in percent was 6.7 levels. Because our Government did mass awareness on Covid-19 as well as District Disability Centre also. Distribution source of hearing about COVID-19 knowledge among mothers according to study mostly from newspaper is 37%. Awareness among mothers about sources of infection high in percentage via handshaking is 70.3, Cough

Droplets and Public Gathering are same as 49.3. Symptom awareness of fever, cough, breathlessness are equal as in percentage 70. Strategies adopted to withstand challenges from COVID-19 in percentages in hand washing and using sanitizer 70.9. The demographical independent variables are the age, religion, education, family income, residential area, with chronic stress child with autism. Mothers child with autism without family support and with no formal education negatively associated with Covid-19 strategic capacity in percentage. According to our study mothers have adequate knowledge regarding COVID-19 is resulted Proportion of high Strategic capacity with COVID-19 in percentage is 18.7

Conclusion: Although majority of mothers have adequate knowledge about COVID-19 and engaged in good practice of COVID-19, awareness level have to increase in all mothers with different demographical variables. As a study result mothers are aware about COVID-19 in percent 33.3 in low level, 60 percent are in medium level. From result there is some decrease in awareness depending on demographical value as education, family income, special training, background of family support and types of family negatively impact- the adequate knowledge among mothers. From we come in conclusion that mothers have adequate knowledge about COVID-19 with path of strategic capacity.

Key words: Autism, mother, Demographic variables, knowledge, COVID-19,

INTRODUCTION

Corona virus disease 2019 (Covid-19) is an emerging respiratory disease caused by severe acute respiratory syndrome coronavirus-2 (SARS-COV-2), which is a single-strand, positive-sense ribonucleic acid (RNA) virus.¹ Confirmed cases of Covid-19 usually present with clinical signs and symptoms of fever, dry cough, tiredness and shortness of breath with an incubation period of 2-14 days after exposure to the virus.²⁻⁵ The virus may cause morbidity in the range of mild respiratory illness to severe complications characterized by acute respiratory distress syndrome, septic shock, and other metabolic and homeostasis disorder, and eventually death.^{4,5} (Most of the fatal forms of COVID-19 including acute respiratory syndrome occurred in older adults and people with underlying medical comorbidities.⁶⁻⁷

Pandemics are similar to other disasters in their unpredictability, fatalities, and persistent effects, yet, they are dissociate from disasters as they prevent victims from converging and gathering and instead requiring the opposite reactions of separation, isolation, and quarantine, which end up interfering with family norms, rituals that generally protect family functioning during crisis.⁸ Such rituals are especially relevant the ASD population, where repetitive behaviors and interests area defining feature of the

condition and affected individuals adhere to rigid daily rituals. Beyond their health and fatality consequences, pandemics of infectious disease tend to induce widespread anxiety and psychological problems.⁹

Social support from friends that carries some importance for stress protection in caregivers in children with ASD likely become less available during the social isolation measures of COVID-19. Moreover, parents of children with ASD were found to display higher cortisol response to psychosocial response compared to parents of typically developing children and this increased physiological stress¹⁰ may result in parents with ASD experiencing more stress during COVID-19 compared to parents of typically developing children which may be even more aggravated by increased behavioral problems quarantine anxiety levels and difficulties experienced by the children including but not limited to behavioral problems reciprocally exacerbate each other over the course of pandemic.¹¹

On the other hand, some COVID-19-related situations may be dealt with easier by some children with ASD and their families. The adherence to rules and routines and aversion of socialization and physical contact in individuals with ASD may follow mandated hygiene measures like frequent hand washing and avoiding physical contact

in individuals with people or surfaces. The risk of sensory overload maybe lowered as the children will be out of home less frequently due to home confinement measures. In their recent qualitative study on children with special needs ,of which the majority has ASD, and their parents , Asbery et al .found that a small proportion of participants reported some positive impacts of the quarantine ,such as not experiencing the challenges of daily routines as going to school or other public places or anxiety of socializing with others¹² Yet ,these ASD related strengths for dealing with COVID-19 measures are likely to be limited and not balance out of the participated and challenges.

From all the study done earlier have been hypothesized that the knowledge of COVID-19 measures are adequate like wearing mask, using sanitizer, avoidance of crowd depending on demographical variation.

OBJECTIVE

- To assess knowledge of mothers child autism regarding COVID-19,
- To assess strategies adopted to withstand challenges from COVID-19,
- To assess the awareness sources regarding COVID-19,
- To assess the knowledge about sources of infection of infection of COVID-19,
- To assess the knowledge about symptoms of disease,
- To know about vulnerable group members of disease COVID-19.

Methodology: Descriptive study has done to achieve the objectives of the study. A quantitative experimental research approach was considered to be the most appropriate. The target population for the study is the mother's child with behaviors disorder autism of Tripura in the selected development center of Tripura D.D.R.C (District Disability Rehabilitation Centre), Agartala.

Study design: A non comparative descriptive research design was used.

Target population: Mother with child with autism in the selected development center of District Disability centre

Sample and sampling technique: The total sample sizes are 50 numbers of mothers. This non-experimental Comparative study was conducted in D.D.R.C offering service for the child with autism. A r a n d o m sampling technique, structured questionnaire, and descriptive analysis were used to assess the knowledge among mothers child with autism regarding COVID-19.

Statistical analysis: Statistical numerical analysis done based on percentage among 50 mothers selected for study. Data was entered in MS Excel and analysis was performed using SPSS version 25. In the descriptive analysis, continuous variable were expressed as count (percentage).

Distribution of knowledge

Sources of hearing about COVID-19 (in percentages)

Source	%
News Paper	37.0
TV	28.0
Family members, friends	25.0
Social Media	20.0
Govt. awareness Program	16.6

Awareness about sources of infection (in percentages)

Source	%
Cough Droplets	49.3
Through Water	6.7
Through Air	6.7
Quarantine Areas	Nil
Handshaking	70.3
Public Gathering	49.3
Hugging	13.3
Sharing Food Items	6.7
Sharing Clothes	13.3
Others	Nil

Awareness about symptoms of infection (in percentages)

Source	%
Fever	70.0

Fatigue	23.4
Cough	70.0
Body Ache	16.6
Breathlessness	70.0

Awareness Index of COVID-19

	<i>Low</i>	<i>Medium</i>	<i>High</i>
Awareness level	33.3	60.0	6.7

Strategies adopted to withstand challenges from COVID-19 (in percentages)

<i>Measures</i>	<i>%</i>
No contact with the infected person	25.3
No contact with the person who has recent travel history	43.3
Wearing Mask	43.3
Washing hands/hand sanitizer	70.9
Maintaining Distance	53.0
Avoid crowding Place	26.0

Protecting vulnerable group members (in percentage)

<i>Vulnerable Groups</i>	<i>%</i>
Children	63.0
Older	53.3
Person with Chronic illness	33.0

Proportion of High Strategic capacity with COVID- 19

	<i>Percentage</i>
High	18.7

DISCUSSION

In this study investigated the knowledge about COVID-19 among mother child with autism. Our study found that mother has adequate knowledge regarding COVID-19 in the District Disability Rehabilitation Centre of Agartala, Tripura. They are adequate aware about source of infection, sign and symptom of infection and path of strategy from recovery of COVID-19. However mothers with no formal education, lower income, nuclear family, background of family support mother's

knowledge about COVID-19 awareness level negatively associate with the significant of study and strategic capacity .

A similar study done by Clements JM, 2020 on knowledge and behavior toward COVID-19 among US residence based cross sectional online questionnaire on during the early days of the pandemic. The results of the study indicated that the overall knowledge regarding COVID-19 was poor in less than 90% of pregnant women. Although about 70% of the cases achieved acceptable knowledge score. This finding was supported by surveys conducted in different countries, for example, Nigeria, China, the United States and Bangladesh, suggesting that pregnant women had acceptable levels of knowledge of COVID-19.¹³⁻¹⁶

Sirchan et al (2020) stated in their study efforts made by governmental and nongovernmental organizations aimed to educate people through various methods including social media, newspapers, television programs, and short message services. However, these findings were not universal and reported that most Thai women (74.1%) had poor knowledge about COVID-19.¹⁷

Talking about knowledge, the highest knowledge score found for routes of transmission of COVID-19, which harden correctly answered by more than 80% of the pregnant mothers. These findings were 19, which had been correctly answered by more than 80% of the pregnant mothers. These findings were consistent with the results of the study by Farhan and Mannan¹⁸ in which most Bangladeshi women had adequate knowledge about routs of transmission of COVID-19. This high level of knowledge can be considered as an advantageous point because it can lead to people to take proper preventive measures. About two third of the participants in the present study had acceptable knowledge regarding the most common manifestation of COVID-19. Having an acceptable knowledge regarding common symptoms of this condition can help people become aware of common symptoms of this condition can help people become aware

of common symptoms of disease and on-time referrals to healthcare centers and hospitals, hence not infect unaffected individual if people refer to hospital for any unimportant manifestation of COVID -19, it can result in burnout among healthcare workers. On the other hand referring late to hospital for any unimportant manifestations.

Ethical clearance: Ethical permission was taken from Dr. Dipti Bikash Roy District Disability Rehabilitation Officer, DDRC, West Tripura.

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Conflict of interest: Nil.

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