Nurses' Knowledge and Understanding about Autism

Sir,

The worldwide prevalence of autism spectrum disorder (ASD) has been estimated to be 6.2/1000[1] and increased to one out of every 68 children.[2] Health-care professional's understanding and knowledge of autism influences the average age of diagnosis and provision of further information to caregivers. Early developmental screening and surveillance for ASD are not done regularly in India.[3] The American Academy of Pediatrics recommended the regular developmental screening program. The periodic examinations at 15th, 18th, and 24th months are particularly useful because the characteristics of autism often begin to emerge during the 2nd year of life.[4] It is identified that nurses have inadequate knowledge about ASD screening practices and this might be a major barrier to do early identification and interventions.[5] Thus, improving nurse's understanding, knowledge, and skill regarding screening and early identification of the children with ASD is essential.

A cross-sectional descriptive survey to assess the level of knowledge and understanding toward autism among nurses was conducted with the aim of identifying the training need to train the nurses toward autism and early identification of childhood autism. Fifty community psychiatry nurses were selected based on convenient sampling technique. Nurses working under the District Mental Health Programme (DMHP), Karnataka, and having minimum qualification of diploma in nursing were included in the study; nurses who were not presented during the day of data collection period were excluded from the study. For the present study, the researcher used a sociodemographic datasheet, and knowledge about childhood autism among health workers questionnaire which has good psychometric properties and overall internal consistency (Cronbach's alpha = 0.97) has 19 items with four domains: Domain1: Impairments in social interaction, Domain2: Communication, Domain3: Obsessive and compulsive, Domain4: Type of disorder and possible comorbid conditions and onset. The score ranges from 0 to 19. Higher the score indicated higher the knowledge.

The data collection was carried out in January 2019 after getting the permission from concerned authorities. After selecting the study subjects through convenient sampling, written informed consent was obtained, and then self-administered questionnaire was distributed to 60 DMHP nurses. Out of 60 nurses, only 52 nurses returned the questionnaire and two were not filled properly. Hence, the final sample size was calculated as $n = 50$. To analyze the data, descriptive statistics was carried out using Statistical Package for the Social Sciences 24.0 (SPSS 24.0, IBM Corp., Armonk, NY, USA).

The study results revealed that majority of the study subjects (70%) were belonged to the age group of <30 years, 60% were female, 88% were Hindu, 62% were completed diploma nursing, 72% had <5 years of experience in nursing, 58% had no previous experience in caring children with ASD, 70% were not attended the workshop or conference related to the autism, and 94% of the study subjects wanted to attend some training toward childhood autism. As shown in Table 1, the mean knowledge score and standard deviation in respective domains are as follows: impairments in social interaction (domain-1) was 5.28 ± 2.00, communication (domain-2) was 0.68 ± 0.471, obsessive and compulsive pattern of behavior (domain-3) was 2.12 ± 1.11, and type of disorder and possible comorbid conditions and onset (domain-4) was 3.30 ± 1.43. The overall knowledge score toward knowledge about childhood autism among the study subjects was 11.42 ± 3.19.

The present study revealed that majority of the study subjects had moderate level of knowledge about childhood autism in all the domains, but we found that there was some knowledge difference among the following domains: impairments in social interaction, communication, obsessive and compulsive pattern of behavior, and type of disorder and possible comorbid conditions and onset. Most of the study subjects aware about children with autism will have problem in social interaction and communication, but they were not familiar that they would have specific repetitive pattern behavior. Further, most of the study subjects expressed that they were not known that autism is what type of disorder and what are the comorbid conditions will occur along with autism. Sena *et al*. in 2015 found the similar results as like our results, that the nurses had inadequate knowledge towards ASD due to lack of training.

Table 1: Knowledge score based on domains (n=50)

Domains	*F* (*n*)	Minimum-maximum knowledge score	Mean knowledge score±SD	Total mean knowledge score±SD
1. Impairments in social interaction	50	0-8	5.28±2.00	11.42±3.19
2. Communication	50	0-1	0.68±0.471	
3. Obsessive and compulsive pattern of behavior	50	0-4	2.12±1.11	
4. Type of disorder and possible comorbid conditions and onset	50	0-6	3.30±1.43	

SD: Standard deviation

In conclusion, majority of the study subjects had moderate level of knowledge and received lesser information than they needed about childhood autism and Nurses did not have adequate knowledge that, Autism is one of the Neuro developmental Disorder, but at the same time, most of the subjects expressed that they needed further information about the management of children with autism. Hence, continuing education program toward childhood autism and screening is necessary for the community health nurses and psychiatric nurses to improve their knowledge.

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Conflicts of interest

There are no conflicts of interest.

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