

Parental Health Education in Identifying Emotional Problems in Children with Autism Spectrum Disorder in Cimahi City SLB

Dewi Umu Kulsum^{a)}, Rini Mulyati, Sri Wulandari Novianti

Faculty of Technology and Health Sciences, Jenderal Achmad Yani University, Cimahi, Indonesia

^{a)}Corresponding author: dewiumukulsum81.stikay@gmail.com

ABSTRACT

Autism Spectrum Disorder (ASD) is a pervasive neurodevelopmental disorder characterized by impaired verbal and nonverbal communication, reciprocal social interactions, and restricted and repetitive behavior. Children with ASD tend to have difficulty understanding and expressing emotions, paying attention to facial expressions, other social skills, and emotional skills. As a result, children and parents both do not understand each other. This community service aims to provide understanding to parents in identifying emotional disorders that occur in children, looking for efforts to control children's emotions. This community service method is by conducting outreach by providing health education to parents of children with ASD, which is carried out with lectures and question-and-answer discussions. This socialization was designed using observational analytics with a cross-sectional study design approach. The result of this community service was the presence of parents of Cimahi City SLB students to take part in socialization in efforts to handle emotional problems in children with ASD. It is hoped that parents will be able to identify disorders that occur in children and be able to understand efforts to control children's emotions.

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INTRODUCTION

Autism is a group of brain development disorders called autism spectrum disorder (ASD). The term "spectrum" refers to the wide range of symptoms, development, and levels of impairment or disability that appear in children with ASD [1]. Another definition of ASD is a neurobiological disorder that occurs in childhood. ASD affects a person's social and communication skills. People with ASD process information and view the world differently (P. Murphy and S. Oliver, 2015).

Based on data from the World Health Organization (WHO), in 2022, 1 in 100 children in the world will experience autism. (World Health Organization, 2022). Meanwhile, in Indonesia itself, it is estimated that the number of autism sufferers continues to increase by 500 people every year. There were 5,530 children with developmental disorders, including autism, in the 2020-2021 period (Indonesian Ministry of Health, 2022)

Children with ASD tend to have difficulty understanding and expressing emotions, paying attention to facial expressions, other social skills, and emotional skills. Parents often complain that their children are not optimal in learning and have difficulty controlling their children's emotions and behavior. Emotional disorders that occur in children with ASD include tantrums, screaming, self-harm, and even hurting other people. They have difficulty expressing emotions and thoughts clearly. As a result, children and parents both do not understand each other.

This is, of course, a problem for parents and teachers at school. If this continues, children will have difficulty describing their feelings and behavior and getting along with their peers. Apart from that, the learning process will be disrupted and not optimal. Not to mention that schools also have limited collaboration with therapists, such as speech therapy services, occupational therapy, physiotherapy, and psychologists. Therefore, it is necessary to provide appropriate treatment as early as possible for ASD children so that they can manage their emotions well. Socialization in the form of health education for parents of children with ASD is important so that parents can know, identify, and handle emotional problems in their children.

ASD has emotional disturbances, such as a lack of empathy, and has particular difficulty understanding other people's beliefs verbally. ASD children cannot identify emotional expressions, differentiate bodily sensations, and emotional arousal. ASD children often find it difficult to recognize emotions, facial expressions, and other emotional cues such as tone of voice and body language when showing and managing their own emotions, less understanding and responding to other people's emotions, and less empathy with others. (Hill, E., Berthoz, S. and Frith, 2004).

Management of ASD with emotional problems, using management of emotional problems in children with ASD according to the National Autistic Society (2020): Communicate clearly, such as speaking clearly and precisely; use short sentences; use visual information, such as the stress scale or PECS, give children more time to process information. Provide structure by organizing a daily schedule with visual support, building in relaxing activities, and allowing alone time for recovery. By identifying Children's Emotions using a visual stress scale or traffic light system, the concept of emotion is changed to 'concrete,' helping children understand the physical changes when emotions are extreme. Safe Space by providing children a safe place or time, matching the environment to their preferences to calm themselves.

METHOD

The method for implementing this community service is by conducting outreach by providing health education to parents of students at the Cimahi City SLB. This community service will be carried out from September 2022 – June 2023. The method is carried out online and offline. The socialization took the form of a lecture and question-and-answer discussion on the topic of emotional problems in children with ASD to the student's parents. This socialization was designed using observational analytics with a cross-sectional study design approach. This socialization aims to increase the understanding and awareness of parents to recognize, understand, identify, and handle emotional problems in children with ASD. The media and tools

used are projectors, projector screens, laptops, sound systems, chairs/carpets, Zoom applications, and PowerPoint (PPT). Counseling is conducted for 40 minutes, pre-activity is for 10 minutes, the opening is 5 minutes, the main activity is 20 minutes, questions and answers are 10 minutes, and the closing is 5 minutes.

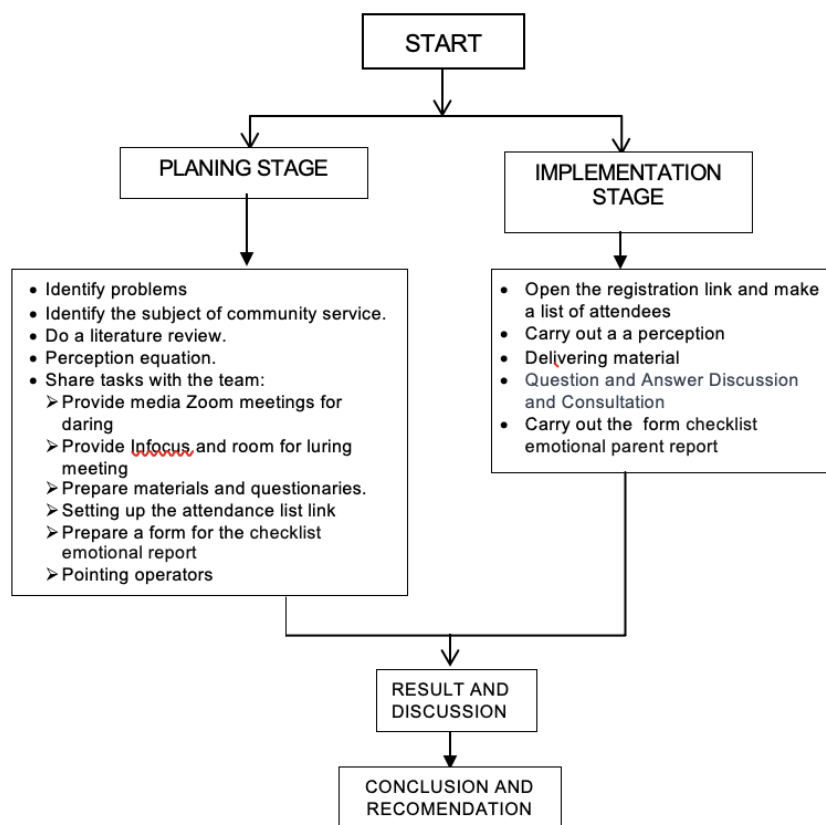


FIGURE 1. The stages of Community service activities (Sukmawatia, Lilis Mamuroh, 2022)

PLANNING STAGE

Preparations for community service activities have been underway from September 2022 to June 2023. The steps taken involve various aspects, such as communicating with the parents of patients in five special needs schools (SLB) and providing education on the emotions of children with ASD to enhance the understanding and awareness of parents regarding recognizing, understanding, identifying, and addressing emotional issues in children with ASD. Team-based socialization is conducted online through Zoom meetings and offline in five SLBs. The media and tools utilized include a projector, projector screen, laptop, sound system, chairs/carpets, Zoom application, PowerPoint (PPT), and video.

The details of the activities are carefully planned, starting with a 40-minute educational session, a 10-minute pre-activity, a 5-minute opening, a 20-minute main activity, a 10-minute question-and-answer session, and a 5-minute closure. Furthermore, observations are conducted by having parents of patients fill out checklists and conducting interviews regarding the emotional aspects of the children. The overall preparation demonstrates the team's commitment and seriousness in positively contributing to the community, particularly in supporting the development of children with ASD.

IMPLEMENTATION STAGE

The implementation of this community service activity is carried out through a continuous education approach via webinars, which include:

- Those taking attendance using an attendance sheet.
- The team prepares the media and tools, including a projector, projector screen, laptop, sound system, chairs/carpets, Zoom application, PowerPoint (PPT), and video.
- Education takes place from September 2022 to June 2023, starting with filling out the attendance list. The educational session lasts 40 minutes, with a 10-minute pre-activity, a 5-minute opening, a 20-minute main activity, a 10-minute question-and-answer session, and a 5-minute closure. Following this, there is a checklist and interview session, the presentation of materials, and a question-and-answer session.

RESULTS

Community service activities in the form of socialization to handle emotional problems in children with ASD in Cimahi City were carried out in October and November 2022. This activity was attended by 102 parents of SLB students in Cimahi City, with an overall attendance percentage of 92.7% and participants of as many as eight people, or a percentage of 7.3%.

TABLE 1. Distribution of student-parent attendance based on SLB

SLB name	Amount	Percentage
SLB Citereup	27 people	24.55%
SLB Pambudi Dharma	19 people	17.28%
Central SLB	23 people	20.91%
Yatira SLB	19 people	17.28%
Prima Bhakti Mulia SLB	14 people	12.73%

Based on Table 1, the number of attendance at socialization for parents of students from Citereup SLB was 24.55%, Pambudi Dharma SLB was 17.28%, Sentra SLB was 20.91%, Yatira SLB was 17.28%, and Prima Bhakti Mulia SLB was 12.73%. So, the final percentage of all parent attendance was 92.74%. This indicates that the student's parents are enthusiastic about holding outreach regarding emotional problems in children with ASD.

Table 2. Distribution Of Parental Education Level

Parental Education Level	Amount	Percentage
Elementary School	Five people	4.54%
Junior High School	21 people	19.09%
Senior High School	59 people	53.63%
College	17 people	15.45%

Based on Table 2, the number of parents attending based on parents' education level is 4.54% for elementary school, 19.09% for junior high school, 53.63% for high school, and 15.45% for tertiary education. So, most parents who participate in socialization are at the high school level. This shows that the student's parents can understand the material presented by the instructor well. The student's parents were also active during discussions, as evidenced by three questions at each socialization in each SLB.

TABLE 3. Distribution of age groups of children with ASD

Age Group	Amount	Percentage
School Age (6-12 years)	84 people	76.36%
Teenagers (13-18 years)	18 people	16.36%

Based on table 3. The number of attendance is based on school age groups and teenagers; namely, school age is 76.36%, and teenagers are 16.36%. So it can be concluded that most parents of their children are in the school-age group (6-12 years).

TABLE 4. Estimated distribution of children experiencing emotional problems based on gender

Age Group	Percentage
Man	67%
Woman	33%

Based on Table 4, estimates of children experiencing emotional problems based on gender are 67% experienced by boys and 33% experienced by girls. So, it can be concluded that many boys experience emotional problems.

TABLE 5. Estimated distribution of children experiencing emotional problems by age group

Age Group	Percentage
School Age (6-12 years)	72%
Teenager (13-18 years old)	28%

Based on table 5. Estimates of children experiencing emotional problems based on the child's age group, namely, for school-age children, the percentage of children is 72%, and for teenagers, the percentage is 28%. So, it can be concluded that emotional problems in children suspected of having ASD are often experienced by children in the school-age group (6-12 years).

The estimated percentage of children with emotional complaints overall is above 60%, with emotional reactions such as tantrums, anger, crying, biting hard, banging their heads against the wall, hitting, pushing, pulling their hair, and hitting their heads.

DISCUSSION

Community service activities in the form of socialization regarding handling emotional problems in children with Autism Spectrum Disorder (ASD) in Cimahi City were successfully carried out in October and November 2022. A total of 102 parents of students from various Special Schools (SLB) in Cimahi City participated, with The attendance rate reaching 92.7%, showing a high level of enthusiasm. Analysis of attendance distribution based on SLB shows that SLB Citereup has the highest attendance rate of 24.55%, followed by SLB Sentra, SLB Pambudi Dharma, SLB Yatira, and SLB Prima Bhakti Mulia. Analysis of parental education level revealed the highest participation from parents with a high school education level, amounting to 53.63%. Active discussions from parents during socialization show a good understanding of the material.

Based on table 1 shows that the high presence of parents of students from various special schools in socialization regarding emotional problems in children with ASD reflects awareness of the important role of parents in supporting the development of children with special needs (Fergusson et al., 2018). According

to social support theory, active parental participation can help reduce stress in children with ASD and improve their well-being (Smith, JD et al., 2016). An article published [10] states that parental involvement in school activities can strengthen positive relationships between schools and families, which in turn can positively impact children's well-being. Therefore, high attendance at socialization can be considered an indicator of parental concern for discussing emotional problems in children with ASD. Furthermore, research (Brown, 2019) highlights the importance of collaboration between parents and teachers in designing educational programs that suit the needs of children with ASD. Thus, high attendance at outreach events creates opportunities to build strong collaborative networks between schools and parents.

Most student participants came from the school-age group (6-12 years), with a percentage of 76.36%, indicating the main focus was children in that age range. Estimates of emotional problems in children with ASD reach more than 60%, with a higher incidence rate in boys (67%) than girls (33%). In addition, emotional problems are more dominant in school-aged children (72%) than teenagers (28%). These results illustrate that this socialization activity was successful in achieving its goal, namely increasing parents' understanding and awareness of emotional problems in children with ASD in Cimahi City. The high percentage of children with ASD in the school-age group suggests that there is a strong focus on educational intervention and support at this stage. This may reflect an emphasis on early education and intervention for ASD, which has been shown to improve long-term outcomes for children with ASD. The transition from school age to adolescence is a critical period for children with ASD. There may be a variety of challenges that arise, such as changes in physiology, educational or therapeutic services, changes in academic and social demands, and quality of life.

The significant differences between male and female individuals with Autism Spectrum Disorder (ASD) have important implications in the context of the diagnosis process. These findings indicate that there is a consistent pattern in which girls with ASD tend to show lower levels of sustained emotionality compared to their peers who are boys with ASD. This highlights the complexity and variation in ASD symptoms between genders that may influence the identification and treatment of this condition. Further understanding of these differences may provide a more holistic view in approaching ASD, taking into account gender factors to improve diagnostic accuracy and optimize treatment planning to suit each individual's specific needs. (Head, AM, McGillivray, JA, & Stokes, 2014)

In general, it can be noticed that the older age group tends towards lower scores when compared with the younger group. This difference becomes even more striking when looking at the group of individuals with Autism Spectrum Disorder (ASD), where 9.0% of members of this group met one or more lifetime diagnostic criteria for a psychiatric disorder. Further analysis showed that older adults with ASD generally had a lower frequency of meeting diagnostic criteria compared with younger age groups. These dynamics illustrate the differences that can influence further understanding regarding the characteristics and development of individuals with ASD as they age (Lever, AG, & Geurts, 2016).

These emotional problems are influenced by a combination of individual, social, and biological factors, with gender playing a significant role in the expression and experience of emotional difficulties. Some of the above studies suggest that boys may exhibit certain types of emotional and behavioral problems more than girls, perhaps because of differences in emotion regulation strategies, societal expectations regarding emotional expression, and underlying biological factors. The ability to regulate emotions is essential for mental health. Emotional awareness and emotional regulation are interrelated in mental health outcomes. Children with good strategies tend to have lower negative emotions and depressive symptoms. Emotional intelligence, which includes components such as emotional awareness and regulation, has been shown to influence emotional and behavioral outcomes in children. Those with higher emotional intelligence can manage their emotions better, which may contribute to fewer emotional problems (Antia K et al., 2023).

CONCLUSION AND RECOMMENDATIONS

Based on the evaluation of community service activities that have been carried out, it can be concluded that the level of enthusiasm of the student's parents is very high, as evidenced by the almost universal level of attendance at the socialization that has been held. The student's parents can understand the instructor's material well, as can be seen from the active interaction and discussions between them and the instructors. The importance of this activity is reflected in the ability of parents to identify emotional problems that their children may face. Community service results also show that children with Autism Spectrum Disorder (ASD) who experience emotional disorders are more dominant in boys, especially in the school-age group. Manifestations of emotional reactions in children with ASD of five SLBs include behaviors such as tantrums, anger, crying, biting hard, banging their heads against walls, hitting, pushing, hair pulling, and hitting their heads. This conclusion provides a crucial overview of the role of nurses in understanding and following up on nursing interventions that can be conducted for further management of emotional issues in children with Autism Spectrum Disorder (ASD).

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APPENDIX



FIGURE 1. Discussion and question-and-answer sessions with parents and teachers via the platform *teleconference*



FIGURE 2. Implementation of exposure and socialization in school