

Parental Intervention for Children with Autism Spectrum Disorder

A Review of Curriculum

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Abstract: Abstract. The parental involvement in the intervention against ASD child plays an important role for the effectiveness of the intervention program. An intervention program is not possibly apart from the curriculum. The curriculum development of intervention program for children with ASD needs to refer to the description of the curriculum of the intervention programs involving parents, which have proven effective in overcoming barriers to children with ASD. This article is intended to provide an overview of the curriculum of the various programs of effective interventions for children with ASD that involve parents. The curriculum is studied by the component objectives, materials, methods, evaluation, and program effectiveness. The study was conducted through a review of six articles on ASD interventions involving parents, which are published in the open access journal in 2014-2016. The articles were selected using key words: ASD intervention, ASD intervention curriculum and parental involvement in the intervention. The results showed that the effective ASD intervention program curriculum is specifically and flexibly developed in accordance with the conditions of children, involving parents in curriculum development and implementation of interventions. The implication is that to be effectively intervene their ASD children, parents need to be given the understanding and skills through problem-based learning according to individual needs of children with ASD.

1 INTRODUCTION

As a severe developmental disorder, people with Autism Spectrum Disorder require intensive treatment and in the long term, so the treatment becomes costly (Wang, et al., 2013). As a result, two-thirds of people with ASD in South Korea do not get special treatment (Kim, 2011), and more than 20% of children with ASD in 18 European countries did not obtain intervention (Salomone, et al., 2015). The involvement of families, especially parents, to be an alternative solution and is important for the effectiveness of interventions to children with ASD (Karst and Van Hecke, 2012; Shie and Wang, 2007; Xu and Filler, 2008). Involving parents in dealing with children will also make the treatment effective and low cost (Rudy, 2013). Either directly or indirectly, parental involvement affect the effectiveness of interventions for parents to have the following aspects: 1) being the most knowledgeable about the child, so that it can provide distinctive insight and has a key role in interventions for children (Dept of Health NYS, 2002; Dept for Education UK, 2011; Elder, 2013; Moroz, 2015); 2) more

opportunities to interact with the child, so the amount of time for intervention is more (Gupta and Singhal, 2005; Steiner et al., 2012; Elder, 2013; Aziz, 2015; Moroz, 2015); 3) The same cultural background with children to facilitate the success of the intervention (NYS Dept of Health, 2002); 4) the opportunity to generalize the results of interventions in the natural setting compared with the therapist (Steiner et al., 2012; Elder, 2013); 5) the typical love and concern to the child (Dept for Education UK, 2011; Rudy, 2013); 6) the enthusiasm and confidence in dealing with children with autism (Kasari et al., 2010), and 7) fortitude in facing the child (Moroz, 2015).

Various research shows the benefits of empowering parents / families in the intervention of autism, among other things: 1) parent training as an actor intervention to bring the better prognosis and quality of long-term life (Elder, 2013; de Bruin et al., 2015), 2) parents are empowered to demonstrate proficiency in implementing new strategies learned (Beaudoin, Sébire, and Couture, 2014), 3) the parent is able to manage the events of life effectively, solve problems, and make decisions (Shie and Wang,

2007), and 4) reduce stress on parents (McConachie and Diggle, 2007).

Therefore, to be able to intervene effectively in overcoming the barriers of children with ASD and beneficial to the welfare of the parents, it is necessary to know how the picture curriculum of ASD intervention programs that involve parents and which is effective for children.

2 METHOD

To obtain an overview of ASD intervention program curriculum that involves parents, a review of articles published in 2014-2016 was conducted, with the following criteria: a) a primary report of the results of research on intervention of children with autism spectrum disorder that involves parents, and b) contains an overview intervention program as a whole so that the intervention program curriculum structure can be analyzed. The articles were taken from the Open Access Articles on Wiley Online Library, JAMA Network, Journal of Autism and Developmental Disorder SAGE Journal, using the keywords: ASD intervention, ASD intervention curriculum and parental involvement in the intervention.

Based on these criteria, six articles to be analyzed were obtained, the article results of research on the effectiveness of intervention programs Jasp and EMT (involving the participants of 61 parents and 61 children with ASD), Son-Rise (49 parents and 49 children), Impact Online (28 parents) , Parent Training and Parent Education (180 parents and 180 children), Social ABCs (20 parents and 20 children), and PEBM and PEAC (105 parents and 107 children).

Review the components of the intervention program curriculum are: 1) objectives, 2) material, 3) methods, 4) evaluation, and 5) the effectiveness of intervention programs.

3 RESULT AND DISCUSSION

In line with the Review purpose of this article, curriculum or program targeted intervention as perpetrators are parents of children with ASD intervention and as a subject that is subjected to intervention (intervention receiver). Analysis of the curriculum is focused on four main components, namely: objectives, materials (content), strategies / methods, and evaluation) and the effectiveness of intervention programs to children with ASD that involves parents can be seen in Table 1 below.

Table 1: Analysis of Curriculum Structure and Effectiveness of Intervention Program.

Title of Article	Purpose of Program	Material	Method	Evaluation	Effectivity
Shire, S.Y., <i>et al.</i> (2015). Parent's adoption of social communication intervention strategies: Families including children with Autism Spectrum Disorder who are minimally verbal. <i>J Autism Dev disorder</i> , 2015 Jun, 45(6):1712-1724. doi 10.1007/s10803-014-2329-x	<ul style="list-style-type: none"> the ability of parental intervention strategies to improve their communication skills. 	<ul style="list-style-type: none"> <i>Joint Attention, Symbolic Play, engagement, dan regulation (JASP), Enhance Milieu Teaching (EMT), dan augmented communication berupa Speech Generating Device (SGD)..</i> 	<ul style="list-style-type: none"> Parents observe intervention by the therapist to the child. Parents training in the form of: a) workshop, b) <i>passive parent coaching</i>, dan c) <i>active parent coaching</i>. 	<ul style="list-style-type: none"> Implementation of the strategy of intervention by parents (viewed from the parent-child interaction in play activities). 	<ul style="list-style-type: none"> Parents successfully implement intervention strategies of Jasp + EMT to support their children who bear autism.
Thomson, C.K., and Jenkins, T. (2016). Training parents to promote communication	<ul style="list-style-type: none"> Parents can implement home-based treatment program in the 	<ul style="list-style-type: none"> Principle of Son-Rise Programme(SRP), 	<ul style="list-style-type: none"> Elementary course Advance course 	<ul style="list-style-type: none"> The impact of the intensity of the implementation 	<ul style="list-style-type: none"> SRP is effective in increasing positive

<p>and social behavior in children with Autism: The Son-Rise Program. <i>Commun Disord Deaf Stud Hearing Aids</i>, 2016, 4:1, 1-7.</p>	<p>long term, so that the child can initiate social interactions spontaneously</p>		<ul style="list-style-type: none"> • Training in a big group 	<p>ion of the SRP by parents of children</p> <ul style="list-style-type: none"> • filling out the observation questionnaire of preliminary course and advanced course. 	<p>behavior of children.</p> <ul style="list-style-type: none"> • The number of hours of treatment can significantly predict treatment outcome. • The intensity of treatment is important for the behavioral development of children with ASD.
<p>Pickard, K.E. et al. (2016). A mixed-method evaluation of the feasibility and acceptability of a telehealth-based parent-mediated intervention for children with autism spectrum disorder. <i>Autism 1-11</i>. DOI: 10.1177/1362361315614496. sagepub.co.uk/journalsPermissions.nav</p>	<ul style="list-style-type: none"> • Test methods telehealth to deliver training interventions for parents of ASD based (IMPACT Online) 	<ul style="list-style-type: none"> • Method Impact Online telehealth programs and other services are accessible to parents for their children. • Usage-based telehealth program to provide learning in evidence-based intervention 	<ul style="list-style-type: none"> • Training for parents of ASD interventions based (IMPACT Online) 	<ul style="list-style-type: none"> • parental perceptions about the program Impact Online compared to other services that are accessible to parents for their children • experiences and perceptions of parents about the program as a result of the involvement of the therapist as a mentor program. 	<ul style="list-style-type: none"> • Communication skills of children increased. • Parents receiver supports the guidance of the therapist and the acceptability of the program observability. • Internet-based services potentially efficient for the dissemination of the training intervention by parents.
<p>Bearss, K. et al. (2015). Effect of parent training vs parent education on behavioral problems in children with autism spectrum disorder, a randomized</p>	<ul style="list-style-type: none"> • Parents have information about autism and were able to reduce problem behaviors of children with ASD. 	<ul style="list-style-type: none"> • The basic concept of autism. • The importance of evaluation. • Changes in the 	<p>Training:</p> <ul style="list-style-type: none"> • individual • 11 main sessions, 2 sessions of choice, 6 parent-child training sessions, 2 sessions 	<ul style="list-style-type: none"> • Evaluation of the child by the parents to know the behavior of disruptive and disobedient, (using 	<ul style="list-style-type: none"> • The training program is better than the education program for parents to reduce disruptive

<p>clinical trial. <i>Jama</i>, 2015, 313(15), 1524-1533. doi 10.1001/jama.2015.3150</p>		<p>development of ASD.</p> <ul style="list-style-type: none"> • Planning of education. • Advocacy and choice of treatment. • Specific strategies for managing disruptive behavior. 	<p>telephone booster, and one home visit.</p> <ul style="list-style-type: none"> • Flexible Schedule. • Direct Teaching, video, practice, role play with feedback. • Assignment to apply new techniques for specific behavior. • Education: the provision of information • 12 main sessions and one home visit. 	<p><i>Aberrant Behavior Checklist-Irritability subscale dan Home Situation Questionnaire-Autism Spectrum Disorder</i>).</p>	<p>behavior of children with ASD.</p>
<p>Brian, J.A., et al. (2016). The Social ABCs caregiver-mediated intervention for toddlers with autism spectrum disorder: Feasibility, acceptability, and evidence of promise from a multisite study. <i>Autism Research</i>, 9:899-912. doi 10.1002/aur.1582</p>	<ul style="list-style-type: none"> • Parents can be the mediator for his alleged intervention or ASD bears the functional aspects of vocal communication skills and sharing positive affect. 	<ul style="list-style-type: none"> • Concept and determination of ASD intervention techniques that can be integrated into the daily routine. 	<p>Workshop one week:</p> <ul style="list-style-type: none"> • working directly with ASD children • cooperation 1: 1 with at least three families to practice intervention strategies. 	<ul style="list-style-type: none"> • Review by senior staff who are trained to videotape participants when parents intervene and interact with children. 	<ul style="list-style-type: none"> • ABCs of Social Intervention model feasible to be studied and applied by parents.
<p>Tonge, B., et al. (2014). A randomized group comparison controlled trial of preschoolers with autism: A parent education and skills training intervention for young children with autistic disorder. <i>Autism</i>, 2014, vol 18(2), 166-177. doi 10.1177/1362361312458186</p>	<ul style="list-style-type: none"> • Parents can enhance adaptive behavior and cognitive skills / language and reduce the symptoms of autism ASD child bearing. 	<p>Program PEBM:</p> <ul style="list-style-type: none"> • Manual-based Education "Preschooler with Autism" • Training in behavior management skills. <p>PEAC Program:</p> <ul style="list-style-type: none"> • Manual-based Education "Preschooler with Autism" 	<p>Program PEBM:</p> <ul style="list-style-type: none"> • discussion, modeling, watching videos, homework, feedback, practice. • group sessions and individual sessions. <p>PEAC Program:</p> <ul style="list-style-type: none"> • expository, discussions and counseling. 	<ul style="list-style-type: none"> • The evaluation by the assessment team autism from different disciplines, to both parents and children after 6 months following the program. 	<ul style="list-style-type: none"> • PEAC improve the child's ability in communication, socialization, and daily living skills. • PEBM provide a greater effect than the PEAC.

Table 1 above shows that the curriculum or intervention program developed relatively the same, which aimed to equip parents to have the ability to understand the characteristics of ASD and practical skills about strategy or how to intervene on their children who bear ASD. An intervention program developed specifically and flexibly adapted to the needs of children with ASD, as well as curriculum content which is developed based on the analysis of objective needs of each child with ASD. There are differences in terms of content (material) that were trained, strategies and evaluation methods and instruments used, however, in general interventions contribute to the improvement of the effective ability in children with ASD.

From some articles that were reviewed, parents of children with ASD can take the role of an effective intervention, provided that they are trained and prepared beforehand with the understanding of theory and practice in order to help intervene in accordance with the needs of their children. The timing of the intervention is highly dependent on the scope of skills or competencies that must be mastered by children with ASD. Similarly, an evaluation into the effectiveness of interventions tailored to the type of intervention. As it turned out, the effectiveness of the intervention was strongly influenced by the fit between curriculum developed, trained content for parents (Bearss, K. et al. (2015), the intensity of the interventions (Thomson, CK, and Jenkins, T., 2016), means used (Solomon, R., Necheles, J, Ferch, C., and Bruckman, D., 2007; Bears, K. et al., 2015), and who performed the intervention (Solomon, R., Necheles, J, Ferch, C., and Bruckman, D., 2007), as well as the evaluation used to measure the success of interventions (Shire, et al., 2015). to obtain optimal results, parental intervention actors is highly recommended in obtaining assistance from psychologists and / or therapist.

4 CONCLUSION

To obtain optimal intervention results which are effective and efficient, the development of a curriculum for children with ASD should be done by providing understanding and skills to parents of children with ASD to be independently developing the curriculum. Parents of children with ASD are very precisely suitable to be the intervention giver because of their psychological proximity and availability of time they have to intervene. Parents need to be given a briefing by the expert assistance through problem-based learning that the specific needs and

characteristics of persons with ASD. Evaluation should be carried out jointly between parents and teachers in order to achievement skills which are intervened and measured in accordance with established criteria.

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