THE IMPLEMENTATION OF ALQURAN SPEECH THERAPY FOR CHILDREN WITH AUTISM AT SLB C AUTISMA FOUNDATION SEMARANG, INDONESIA

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Abstract: The objectives of this study are (1) to describe the implementation of Al-Qur’an Speech Therapy method with Alquran for children with autism in SLB C Autisma Foundation Semarang; (2) To figure out the development of children with autism which were treated with Alquran Speech Therapy at SLB C Autisma Foundation Semarang; and (3) to figure out the influence of Alquran Speech Therapy method for children with autism at SLB C Autisma Foundation Semarang. This study is quasi experiment. The experimental data were processed by using SPSS version 2.0 with non-parametric wilcoxon test. Based on the description on the results and the outcomes achieved, it can be concluded that (1) the implementation of Alqur’an Speech Therapy for children with autism at SLB C Autisma Foundation was done by giving treatment for 4 times. Treatment for children with autism on kindergarten category was by using hijaiyah, while for children with autism on elementary school category was by using short letters in the Qur’an; (2) the development of children with autism after being treated with Alqur’an Speech Therapy at SLB C Autisma Foundation Semarang is an increase in communicating and interacting with others. This is evidenced by the results of post-test and interviews with teachers / therapists and parents of children with autism; (3) the influence of Alqur’an Speech Therapy is very significant. This is evidenced by Wilcoxon test results of Z=−2.807 and Sig 0.005.

Keywords: speech therapy, Alquran, children with autism

1. Introduction

Autism Spectrum Disorder (ASD) is a severe neurobiological developmental disorder that occurs in children. People with autism experience interference on social interaction and verbal/non-verbal communication (Kompasiana, 2017). Therefore, the symptoms of

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autism can be detected in various viewpoints of autism as neurological symptoms, as a syndrome, and as sensory symptoms (Ginanjar 2007).

In addition to the autism review as a symptom, autism can also be studied from several factors, including psychological, biological, chemical, and physical factors (Rachmawati 2012). Furthermore, in Kompasiana (2017), it was explained that autism is increasing lately, according to data before 2000; the prevalence of autism was 2-5 and 15-20 per 1,000 births, 1-2 per 1,000 population of the world. The ASA data in 2000 were 60 per 10,000 births, with the number in 1:250 population, and the CDC data in 2001 was 1 in 150 people, and in some regions in USA / UK was among 100 residents, CDC (2012) was 88, while CDC (2014) increased by 30% as many as 1.5% of children in the USA (1:68). However, in Indonesia, until now, there is no definitive data. In 2010, referring to Incidence and Prevalence of ASD, there are 2 new cases per 1,000 population per year and 10 cases per 1,000 population (BMJ 1997). The population of Indonesia is 237.5 million with population growth rate of 1.14% (BPS 2010), it is estimated that people with ASD in Indonesia are 2.4 million people with the increase 500 people / year. With many of its autistic people in Indonesia, it is necessary to give the right solution through therapy. We may not let children with autism in Indonesia not get the maximum handling efforts in accordance with their rights. The right has also been regulated in Law No. 23 of 2002 on Child Protection, in Article 4, "Every child has the right to live, grow, develop and participate fairly according to the human dignity and values, and get protection from violence and discrimination."

Therapy is one of the service efforts provided in the implementation of rehabilitation. Therapy has a meaning as an effort of healing and not treatment, because in the implementation of therapy in rehabilitation do not use drugs, but through exercise and utilization of natural energy as a means of healing. The position of therapy in a rehabilitation process occupies a very strategic position, it can be said that therapy is an important part in the rehabilitation process. The scopes of therapy include speech therapy, physical therapy (physio therapy), treatment through work (occupational therapy), music therapy (music therapy), treatment through game (play therapy), and chromotherapy (color therapy) (Tarmansyah 2003: 7). In addition to these therapies, there are also other types of therapy that can be applied to children with autism by YPAC (2010: 22-30), namely behavioral therapy (ABA, Lovaas, TEACCH, Son-rise); speech therapy (speech therapy), occupational therapy, physical therapy, play therapy, drug therapy, therapy through eating (diet therapy), sensory integration therapy and auditory, music therapy, family members therapy, social therapy, development therapy, and visual media therapy.

Of the many therapies exist to deal with children with autism, parents or therapists should adapt with the condition and the child’s ability. The implementation of the selected therapy is not without a basis and not only once or twice, but continuously so that the results can be optimized. In the implementation of these therapies, both parents and therapists should be diligent and patient and not be emotional. The results will be different in each person because of different conditions.
and needs. There may be children who are progressing rapidly, some are slow and some are not progressing at all. Similarly, some therapies have been done in SLB C of Autisma Foundation in Semarang. Among the therapies used is ABA therapy, speech therapy, and occupational therapy, but the results obtained are not optimal. For example, the children cannot communicate well, still shout when meeting with strangers or children prefer to be alone or do not want to socialize. Here is an example of the implementation of therapy performed at SLB C of Autisma Foundation Semarang.

Figure 1: Sample of the Implementation of ABA Therapy at SLB C Autisma Foundation Semarang

SLB C Autisma Foundation was originally only as a therapy for autistic students, but over time the foundation not only accepts autistic students but also students with mental retardation and deafness. This is because of the needs of the community. The foundation was established in 2002 and located in Semarang City, precisely on Jalan Afa Raya No.3 Perum Afa Permai, Semarang. SLB C Autisma Foundation has approximately 10 students with autism, 5 with mental retardation and deafness, and 7 teachers. Of the various therapies that have been done, researchers want to offer a new therapy with the name Alquran Speech Therapy. This therapy is a combination of speech therapy with Quran therapy.

Alquran Speech Therapy offered by researchers derived from the Holy Qur’an which is maintained its sanctity and believed to bring healing. Based on the background of the problem, the researchers were interested in conducting research entitled "The implementation of Alquran Speech Therapy Methods for Children with autism at SLB C Autisma Foundation Semarang." This study was conducted to help solve problems in dealing with children with autism that need to be given special attention.
Research on Alquran Speech Therapy for children with autism has never been done (Chamalah and Meilan 2017). This research is a follow-up study from previous research. Here are some studies of speech therapy and some other therapeutic research for children with autism. First is by Ginting et al (2004) about research on diet therapy, research by Callahan et al (2010) of the ABA and TEACCH therapy, research by Mayrani and Elis (2013) about audio therapy, and research by Desiningrum (2016) regarding the treatment of brain gymnastics. These studies have their own advantages. This research may be used to supplement the subsequent studies. The objectives of this study are

1) to describe the implementation of Alquran Speech Therapy for children with autism at SLB C Autisma Foundation Semarang;
2) to figure out the development of children with autism treated with Alquran Speech Therapy at the SLB C Autisma Foundation Semarang; and
3) to figure out the influence of Alquran Speech Therapy method for children with autism at SLB C Autisma Foundation Semarang.

In addition to contributing to research on autism, the results of this study are also expected to be used as an alternative selection of therapy for parents or therapists in dealing with children with autism.

2. Material and Methods

2.1 Research Methods
This study is quasi-experimental research, so that there is an experimental group consisting of subjects with male and female sex. This experiment was conducted by taking a research subject with mild to moderate disturbance. Measurements were made to obtain the average basic ability of each subject. In addition, a pretest was done first, while post test data was taken after the subjects get treatment for four weeks and each week get treatment for one day, each for two hours.

The next stage was to perform the stages of Alquran speech therapy. After therapy, in accordance with the time specified, that during one month the subject will be measured development of all its ability. Provision of pretest was in the first week of August 2017, treatment was on the second, third and fourth weeks of August and the first week of September 2017, and post-test was in the second week of September 2017. After the measurement is completed, a re-observation will be conducted after one-month research that was in the first week of October 2017. The research procedure can be explained in the following flow chart.
Chart 1: Research Procedure

2.2 Research Sites
The location of this research is at SLB C Autisma Foundation Semarang, Afa Raya St No.3 Perum Afa Permai, Semarang.

2.3 Data Collection Technique
This study used data collection tools in the form of tests and non-test. The test was used to obtain the pretest and post-test score of the children with autism, while the non-test in the form of an interview sheet containing questions was given to the teacher, principal / Chairman of the Foundation, and parents / caregivers of autistic students in order to know the level of abilities and skills possessed by students.

2.4 Data Analysis Technique
The data of this research were analyzed in two ways: qualitative descriptive and experiment. Qualitative descriptive technique is used to answer the question of the implementation of Alquran Speech Therapy method and answer the question of the development of children with autism after being given treatment with Alquran Speech Therapy method. Experimental technique was also used to answer the question on the influence of Alquran Speech Therapy method for children with autism. Experimental research data were processed by using SPSS for windows program with version 2.0. The technique used to analyze was the Wilcoxon for subject did not meet requirement to be analyzed with ANOVA path. The results of the analysis were explained by using the supporting data collected through interviews with principals / Foundation Chiefs, teachers and parents or autistic caregivers.
2.5 Research Design
This research is experimental research with experiment group only, hence design used as follows.

<table>
<thead>
<tr>
<th>KE</th>
<th>YA1 Pretest</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>(speech therapy of the Qur’an)</td>
</tr>
<tr>
<td>YA2 Post-test</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 2: Experimental Design**

Information:
KE: Experiment Group
X ~: The existence of Treatment
YA1: Pretest Data
YA2: Post-test data

3. Results and Discussion

3.1 The implementation of Alquran Speech Therapy Method for Children with autism at SLB C Autisma Foundation Semarang

The implementation of Alquran Speech Therapy method given to children with autism at SLB C Autisma Fondation Semarang was done with 4 treatments. Treatment for children with autism in kindergarten category used hijaiyah and treatment for children with autism in elementary school category used short letters such as (1) Surah Al-Fatiha, (2) Surah An-Nas, (3) Surah Al-Falaq, (4) Surah Al-Ikhlas, (5) Surah Al-Lahab, (6) Surah An-Nasr, (7) Surah Al-Kafirun, and (8) Surah Al-Kausar.

The implementation of Alquran Speech Therapy method given to children with autism in general can be described as follows: (1) Manage children with autism first before applying Alquran speech therapy. If the children still cannot be managed, it should not be done first therapy because the results will not be optimal; (2) After the child is well-managed, get him to sit until he is calm. Do not be treated immediately or given therapy before he can sit quietly because the key to the success of using this therapy is the child can sit quietly. In order to be able to sit quietly, a child can also be given his favorite toy as long as it does not to prevent or interfere with the therapy; (3) If the child is able to sit quietly, recite the prayer by reading the holy verses of the Qur’an to be given ease and fluency; (4) Encourage the child to warm up first to practice oral motor skills.

The warming up activity can be done with exercises such as bending the tongue, blowing the foam, and inflating the cheeks. Such oral motor exercises are expected to increase muscle tone and control the muscles needed when speaking. Thus, a therapist or parent is expected to provide oral exercises that can improve the speech of the child. (5) Begin to invite the child to pronounce the hijaiyah letter one by one until he can pronounce it clearly. Starting from alif letters to ya’ or can be done by playing puzzle / hijaiyah letter card or if not possible can use other alternatives according to the needs.
and conditions of the child. In the early stages of therapy is needed extra patience. In order for children to pronounce hijaiyah correctly, it must be done repeatedly.

Next, (6) Repeat until the child can pronounce it correctly. This therapy can be done at any time if the child’s condition is possible and can be done anywhere. The point is to familiarize children in order to properly pronounce the letters; (7) If the child is able to pronounce the letter hijaiyah correctly (for the Elementary school category), start short letters in the Qur’an such as Surah Al-Fatihah, Sura An-Nas, Al-Falaq, Surah Al-Ikhlas, Surah Al-Lahab, Surah An-Nasr, Surah Al-Kafirun, and Surah Al-Kausar. These surahs are given gradually like what was done by the researcher while giving first treatment with Surah Al-Fatihah and An-Nas, on the second treatment with Al-Falaq and Al-Ikhlas, on the third treatment with Al-Lahab and An-Nasr, and on the fourth treatment with surah Al-Kafirun and Al-Kausar; (8) List the short letters as often as possible so that the child’s ear is used to hearing it.

Next start asking the child to pronounce the short letters from the shortest and easiest. At least the child can pronounce one verse correctly. This stage must also be done repeatedly either taught directly by the therapist or parents. Provision of this therapy can also be a recording of short letters. If the child’s speech skills have been progressing practice continue until the child is really able to communicate well. Train the child continuously in order to make significant progress. Provision of this therapy cannot be done only with an occasional time because it needs a repeating process in accordance with the child’s condition. Sometimes what has been taught today can either be forgotten or not recited again. If children are getting tired, use other methods as variations, for example by going to the open with a supportive atmosphere for therapy. As a therapist or parent, we must be patient and creative in applying this Qur'an speech therapy. Everything cannot be done instantly because it must be done gradually and repeatedly. Here is an example of the implementation of speech therapy in the Qur’an.

Figure 3: Giving Treatment 2 with Alquran Speech Therapy for Children with autism at Kindergarten Category
3.2 The Development of Children with autism After Given Treatment with Alquran Speech Therapy Method

The development of children with autism after being given treatment with Alquran Speech Therapy method has increased significantly. This can be seen in the improvement of post-test results and supported by the results of interview with teachers and parents of children with autism. According to the information that researchers get, after being given treatment with these methods, children with autism become easier to interact with family at home. Children with autism become happy with the short letters that are present in the Qur’an while at home or before bed. In addition, the autistic speech skills of an autistic child may begin to pronounce syllables until they can say simple words clearly and correctly, such as eating, bathing, drinking, reading, taking, books, chickens, cows, vegetables, and milk.

3.3 The implementation of Alquran Speech Therapy Method for Children with autism at SLB C Autisma Foundation Semarang

Based on the results of the data analysis by Wilcoxon statistical test, it was obtained $Z = -2.807$ and 0.005 Sig. Therefore, it is known that there is an influence of the Alquran Speech Therapy for children with autism. With these data, it can be proven that the speech ability of children after Alquran Speech Therapy has a very significant change with the ability to speak before the treatment. The following is the result of normality test of pretest and post-test.

<table>
<thead>
<tr>
<th>Tests of Normality</th>
<th>Kolmogorov-Smirnov</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>Df</td>
</tr>
<tr>
<td>Pretest Value</td>
<td>.408</td>
<td>9</td>
</tr>
<tr>
<td>Post-test Value</td>
<td>.414</td>
<td>9</td>
</tr>
</tbody>
</table>

a. Lilliefors Significance Correction

Acceptance or rejection of $H_0$ on SPSS 20 calculation results is only seen on Sig value, in Kolmogorov-Smirnov$^a$. If the value is Sig. KS value is greater than the predetermined $\alpha$ level, the pretest and post-test value data does not follow the normal distribution, so it does not meet the parametric test but uses the nonparametric test of Wilcoxon. The results of the nonparametric tests of Wilcoxon can be described as follows.

<table>
<thead>
<tr>
<th>Ranks</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest Value - Pretest Value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative Ranks</td>
<td>0</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Positive Ranks</td>
<td>9</td>
<td>5.00</td>
<td>45.00</td>
</tr>
<tr>
<td>Ties</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Post-test Value <Pretest Value
b. Post-test Value > Pretest Value
c. Post-test Value = Pretest Value
<table>
<thead>
<tr>
<th>Test Statisticsa</th>
<th>Post-test Value - Pretest Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>-2.807 b</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.005</td>
</tr>
</tbody>
</table>

a. Wilcoxon Signed Ranks Test
b. Based on negative ranks.

4. Conclusion

1) The implementation of Alquran Speech Therapy method for children with autism at SLB C Autisma Foundation Semarang is by giving treatment 4 times. Treatment for children with autism at Kindergarten was by using hijaiyah, while for children with autism at elementary was by using short letters in the Qur'an. The short letters are (1) Surah Al-Fatihah, (2) Surah An-Nas, (3) Surah Al-Falaq, (4) Surah Al-Ikhlas, (5) Surah Al-Lahab, (6) Surah An-Nasr, (7) Surah Al-Kafirun, and (8) Surah Al-Kausar.

2) The development of children with autism after being treated with Alquran Speech Therapy in SLB C Autisma Foundation Semarang is an increase in communicating and interacting with others. This is evidenced by the results of post-test and interviews with teachers / therapists and parents of children with autism.

3) The influence of Alquran Speech Therapy is very significant. This is evidenced by Wilcoxon test results of Z = -2.807 and Sig 0.005.

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