Knowledge in Autism Spectrum Disorder (ASD) among Pre-School Teachers in Yemen

Sahar Mohammed Taresh

Department of Foundation Studies,
Universiti Putra Malaysia (UPM),
Taiz University–Yemen.
sahartaresh@yahoo.com

Nor Aniza Ahmad, Samsilah Roslan, Aini Marina
Ma'rof

Department of Foundation Studies,
Universiti Putra Malaysia (UPM),
nor_aniza@upm.edu.my, samsilah@upm.edu.my,
samsilah@gmail.com, ainimarina@upm.edu.my

Abstract—**Preschool teachers are one of the key players in early childhood, and they have an essential role in the early detection and care of children with autism spectrum disorder (ASD). This role is implicated by their identification of children's early signs of ASD and the provision of professional resources to guide families for this. Therefore, the current study aimed to figure out what is the pre-school teacher's knowledge about ASD. Besides, this study attempted to find out if there are any significant differences in preschool teacher's knowledge about ASD in relation to their education level and teaching experience. A total of 300 preschool teachers from various region schools in Taiz City in Yemen responded to the study questionnaire to determine their level of knowledge about Autism. The data were analyzed by using descriptive statistics and analysis of variance. The results indicated that preschool teachers had lower level of knowledge about the disorder. The findings also showed significant differences in the teachers' knowledge about Autism, depending on their education level and teaching experience.**

Keywords—pre-school teachers; knowledge; autism, Yemen

I. BACKGROUND

Autism Spectrum Disorder (ASD) is a set of complex and lifelong repetitive, stereotyped behaviors, and a pervasive inability to socialize, unable to engage in verbal and non-verbal communication, and exhibiting patterns of behaviour [1-3] and this disorder is a neurological state that exists from birth and may persist with the individual for life[4][4][3](National Center for Health Statistics. The US, 2016 [5].

This disorder affects the cognitive and emotional abilities as well as the memory of a child [6]. Autism is considered the most public of the neurological disorders that affect children today [7-9]. The ASD disorder, according to the American Psychiatric Association (2013) is explained as being characterized by three features: Pervasive Developmental Disorder (PDD) the main characteristics of which are: as impairment in social interaction, communication, and limited behavioral patterns, interests, and activities.

On the other hand, these diverse disorders are no longer current in the new DSM-5 released in May 2013. [10] DSM-IV had recognized it as a disorder group with four disorders under the term autism spectrum disorder, namely, autistic disorder, Asperger disorder, childhood disintegrative disorder,

and PDD-NOS. Each disorder has a separate clinical practice, although there are general symptoms for all (American Psychiatric Association, 2013). There are several reports from health officials on ASD, which have emphasized that there is a rise in the number of ASD cases in recent years. In an earlier report, the prevalence rate was 1 case in 88. The CDC has reported that the rate had increased to 1 in 68, and rose further to a worrying 1 in 50. This suggests that ASD is now more common than childhood cancer, juvenile diabetes, and pediatric AIDS combined [11].

II. LITERATURE REVIEW

A survey study of autism in 1987 examined the views of parents and teachers on autism to assess beliefs and knowledge regarding specific areas of the disorder. The study revealed that many parents and teachers had inaccurate beliefs and misconceptions about autism[11].In Haimor study [12], it was reapplied a modified version of the autism survey [13] to examine levels of knowledge, perceptions, and stress in recognition of the disorder and the provision of services in the field of autism among parents and professionals and pediatricians. Both parents and professionals involved in the study had outdated beliefs regarding the nature and characteristics of ASD.

Meanwhile, Z. A. Assis [14] in their paper aimed to provide a preliminary insight into awareness of children with autism among the general public in Malaysia A total of 250 copies of a structured questionnaire were distributed randomly to the public in the Kluang valley. This study found that although there are many Malaysians familiar with the term autism still, most of them do not really understand the characteristics of children with the disorder. The lack of public awareness is a burden that families with special children have to bear.

Furthermore, a study by Neik [5] in their study highlighted the current prevalence, diagnosis, treatment, and research on Autism Spectrum Disorders (ASD) in Singapore and Malaysia. Based on database searches, it was found that the awareness about autism among the lay and professional public is higher in Singapore compared to Malaysia.

Search on this subject from Arab countries has been especially rare. In a survey on mental health research in the Middle East

over 25 years, publications on child psychiatry, particularly, on autism, were reported to be underrepresented [15,16]. However, there have been some attempts to study ASD in Arab countries and among them is a survey done in the United Arab of Emirates (UAE), in which the researchers examined a random sampling of 694 children age of 3 years. They found that 58 out of 10.000 children exhibited symptoms of ASD. Among them were more boys than girls who showed disturbing behavior and had a family history of the developmental disorder [15,16]. In the Kingdom of Saudi Arabia, there were found to be 42,500 confirmed cases of autism, with the possibility of many other cases that have not been diagnosed. A field study using the Arabic version of Gilliam Autism Rating Scale (GARS) among children found 11,057 children under the age of 16 suffering from autism.

The study showed that the ratio of prevalence among boys was 2:1 for girls [16]. In Oman, the prevalence rate was 104 per 10,000 children, while In Jordan This it was 5.2% (N=12) of a clinical sample of children with global developmental delay (N=229) [16]. In a pediatric clinic in Tripoli, Libya, out of 50,838 children surveyed, 128 children were autistic, while in Egypt and Tunisia, the number of cases of children with autism was 11.5%. However, in Palestine, according to the Palestinian Central Bureau of Statistics, nearly two million children have disabilities or have special needs, including 1,515 of the mentally disabled [17]. Yemen is a poor country, and there is widespread ignorance about ASD. It is one of the world's poorest countries (ranking178 out of189 countries in the Human Development Index; (UNDP, 2017), and the ongoing war contributed to the lack of education and poor health (World Bank, 2006). As a result, there is lack of ASD centers, except for the main cities like Sana'a, Taiz, and Aden. All the previous reasons led to the absence of real recordings of ASD cases in Yemen. It has been assumed that there is a large number of cases which has not been diagnosed [16].

This percentage was obtained from the centers located in the main cities in Yemen, to which children were referred usually into later stages, as shown in the studies by[16,17]. Additionally, Al-Zaalah et al. (2015) emphasized that early diagnosis of ASD is still limited in Arab countries like Saudi Arabia, which is a neighboring country of Yemen. The early identification and intervention of ASD are necessary to increase the positive results on children with ASD, especially among the preschool children aged three to five years [18]. However, many ASD cases were found to be late. Therefore, many reasons lead to substantial under-diagnosis of ASD cases. The ignorance of parents and pre-school teachers about ASD, which leads to their inability to recognize the symptoms of ASD and seek treatment is a significant factor [5]. Al Farsi [19] emphasized that the lack of knowledge about autism disorder among many teachers often leads to diagnosis later in the stage of childhood. Also, Haimour and Obaidat [20] in their study endeavored to find out what school teachers knew about autism. A total of 391 general and special education teachers in Jeddah in Saudi Arabia completed a study tool (Autism Knowledge Questionnaire) to measure their level of knowledge about autism. It was found that among the participants, the knowledge about autism disorder. Ranged from satisfactory to almost weak. Besides, Al-Sharbati et al. [16], studied children with special needs such as those with an autism spectrum disorder. Unfortunately, such negative attitudes towards children with autism are commonly held by teachers in public schools in Oman. The researchers used a cross-sectional study to gauge the knowledge and attitude of mainstream school teachers towards autism spectrum disorder in an urban region in Oman. A total of 164 teachers were randomly enrolled in five schools. The results confirmed that misconceptions about autism spectrum disorder were found to be common among mainstream teachers in Oman.

III. STATEMENT OF THE PROBLEM

This paucity of ASD knowledge suggests a need for studies that examine knowledge and stigma associated with ASD in Arab countries. Yemen, as a part of the Middle East, has some characteristics similar to the neighboring countries, Saudi Arabia, and Oman. Several studies showed that knowledge among the general population and teachers is low in these countries. In addition to the lack of knowledge among parents and teachers, there are many misbeliefs related to ASD Disorders [15, 16, 21-23]. These studies described their society views toward ASD and ascertained that there exist misbeliefs and lack of knowledge related to ASD, and therefore they called for more studies to enhance the awareness and knowledge and change the misbelief to face the increased number of ASD today.

Furthermore, Hussein [23] confirmed that there is no single published study conducted on ASD in Yemen. To the best of the researcher's knowledge, no study has been done on ASD in Yemen. Based on the results of these studies in neighbor countries of Yemen, the researcher aims to figure out the level of preschool teachers knowledge in autism to enhance their ability to identify children with ASD in early stage, and to meet the needs of the growing number of children with Autism and to take the necessary action to assist them. So, preschool teachers must become aware of Autism. So It is required to understand the many as facts of this condition, which can be reliably diagnosed. In this study, the study aimed to examine the pre-teachers knowledge in ASD in Taiz.

IV. PURPOSE OF THE STUDY

The purpose of the study was to figure out what pre-school teachers know about ASD. Preschool teachers' knowledge or lack of knowledge of ASD could significantly impact on the children with ASD. In addition, this study tried figure out if there any significant differences in school teachers' knowledge about Autism depending on the variables; teacher education level(high school, bachelor's degree, and diploma), teaching experience (less than 5 years, 5–10 years, more than 10 years), Based on the reviewed literature, there are several research questions regarding teachers' knowledge about Autism. Specifically, this study aimed to answer the following questions:

- What the level of knowledge do pre-school teachers possess about Autism?
- Are there any significant differences in teachers' knowledge about Autism based on their, education level and teaching experience variables?

V. METHOD

A. Research Design

This study used quantitative study research design to determine a preschool teacher's knowledge about Autism in Taiz schools.

B. Population of Sample

Regular preschool teachers working in schools in Taiz district, which considered as one of the biggest cities in Yemen were invited to participate in this research study. Participating teachers were asked to complete The Questionnaire to determine their level of knowledge about Autism. The researcher emailed the appropriate school administrators in Taiz to obtain permission to make this study. Primarily, the questionnaire was administered to 350 preschool teachers; 300 of the questionnaire were completed and returned, 50 of which were excluded for providing incomplete information. Thus, the final sample consisted of 300 preschool teachers from various segregated schools within the Taiz in Yemen. The preschool teachers were randomly selected from the study population. Table (1) provides the sample distribution according to the variables of the study: gender, education level, teaching experience.

TABLE 1: DISTRIBUTION OF THE STUDY SAMPLE ACCORDING TO THE VARIABLES OF THE STUDY

Variable		f	%
Gender	female	300	100
Education Level	High school	75	25
	Bachelor	160	53
	Diploma	`65	21
Teaching Experience	Less 5 years	105	35
	5–10 years	94	31
	More than 10 years	101	33

VI. MEASURES

The Questionnaire in this study is comprised of three subscales: (a) general information, (b) symptom, (c) and etiology. These subscales were used in this study to look for knowledge about ASD. The questionnaire includes 29 items measures the knowledge among preschool teachers in general information in nature of ASD, etiology, and symptom .questionnaire was used after the permission was taken from Al-Sharbati 2015. So the questionnaire includes tow section. The first section is the demographic information (gender, education level, teaching experience). The second section, The Autism knowledge Questionnaire, contains 29 items. The questions in this section were presented in (Grades 1–5) as strongly agree, into strongly disagree statements; this option was included, and respondents were instructed to select these

responses rather than guess. The face validity of the current study questionnaire was verified by a group of professors (4 professors) trained in the field of special education that rated the clarity and appropriateness of the scale statements. Based on the group's reworded. After observations and suggestions, necessary adjustments were made, and some phrases were implementing the professor's suggestions, their percentage of an agreement reached 88%. On the other hand, reliability for the internal consistency of the; study instrument was measured by Cronbach Alpha with a value reached (0,945).

VII. DATA COLLECTION PROCEDURE

After communicating the suitable school administrators of schools to obtain permission to do this study, preschool teachers were asked to complete the Questionnaire to determine their level of knowledge about Autism. The Data collection for the study was conducted in September of 2018

VIII. DATA ANALYSIS

Procedure to answer the research questions, the data were analyzed using descriptive statistics for categorical data (i.e., frequency and percentage). Data were numerically coded and transferred to the statistical package for social science (SPSS) pack 21. The Questionnaire was divided into categories of (Grades 1–5) (strongly agree, agree, I don't know, disagree, strongly disagree) response was coded with a score of (1, 2, 3, 4, 5,).Responses of the study sample members were calculated by extracting the (percentage) of the correct responses for each member of the sample on the Questionnaire.

IX. RESULTS

The first research question respect to this study aimed to find out what teachers preschool know about Autism. Teachers' level of knowledge was measured by the study Questionnaire. Table 2 Also shows numbers and percentages of the responses that preschool teachers have achieved on the questionnaire.

TABLE II: GENERAL INFORMATION ABOUT ASD AMONG PRESCHOOL TEACHERS

No	Items	Mean	SD
1.	Have an idea about the prevalence of autism	2.516	1.238
2.	Autism affects males more than females	2.400	1.308
3.	Autism continues for life	2.330	1.008
4.	The majority of autistic cases suffer from mental retardation	2.310	1.01
5.	Autism appears in the early years of life	2.296	1.035
6.	An autistic child needs special education	2.270	1.083
7.	There is a cure for autism	2.233	1.040
8.	An autistic child can improve very much if the diagnosed early	2.120	1.201
9.	The majority of autistics are genius (have distinguished skills)	2.110	.934
10.	The autistic child suffers from social stigma in Yemen	2.106	1.227

No	Items	Mean	SD
11.	Diagnosis of autism will bring a negative attitude toward the child	2.083	1.238
12.	Autism can be prevented completely	2.060	1.172
13.	Autism is more commonly affecting children of high-income families	2.057	.2173
14.	Autism is more commonly affecting children of high-education families	2.050	1.151
15.	Available services for the autistics are adequate in Yemen	2.130	.914
	Aggregate mean score	2.06	.370

Table2. This table points out that preschool teachers' knowledge about autism. Preschool teachers showed a slight tendency to have no idea about ASD. More than half of preschool teachers expressed that they didn't have an idea of the percentage of autism prevalence in Yemen. While most of them reported, autism affects male more than female. Roughly high score (M=2.296, SD=1.035) preschool teachers stated that the early signs of autism appear in the early stage of their life, most of them (M=2.330, SD=1.008) declared that autism continues in whole long life,

preschool teachers believed that the ASD condition can be blocked .nerveless most of the preschool teachers emphasize that ASD is joint with stigma in Yemen, and named a child as autistic reflected in a negative view toward this child from his society and His colleagues (M= 2.12, SD=1.23)

Preschool teachers expressed that high-income families are more likely to have a child with ASD. Otherwise, families with a high level of education likely have fewer children with ASD. But in the services provided for ASD in Yemen, most of the preschool teachers (M=2.13, SD=914)emphasized that there is service while others said they don't know. The effect of years'

Teachers who had few years teaching experience emphasized that "The majority of autistics are genius (have distinguished skills)" and "The majority of autistic cases suffer from mental retardation" (M=2.310, SD=101) Furthermore, most of Bachelor or less their rate in knowledge of general information was low (M=2.06, SD=3.70).

TABLE III. PRESCHOOL TEACHERS' KNOWLEDGE ABOUT SYMPTOMS AND SIGNS OF AUTISM.

N	Items	Mean	SD
16.	The autistic child does not show specific emotions	1.946	1.192
17.	The autistic child does not look at others' eyes (maintains gaze)	2.020	1.08791
18.	The autistic child does not enjoy the presence of others	2.026	1.16372
19.	The autistic child can communicate with others by body movements or symbols	2.016	1.08950
20.	There is no or limited speech development in the autistic child	2.013	1.193
21.	Autistic children may lose the acquired speech	2.041	1.21369
22.	Autistic children show frequent movements of the hands and probably the body	1.940	1.092
23.	The adaptation of the autistic child to environmental changes is very much	1.930	1.178

	limited		
24.	The autistic child does not like to change the pattern of eating, clothing, and play	1.883	1.039
Aggregate mean score		2.027	.508

Table III. Points out the symptoms and signs of autism knowledge among preschool teachers in Yemen were Uneven. Most of them confirmed that a child with autism "Autistic children may lose the acquired speech" (M=2.041, SD=1.213), And most of the preschool teachers who had high education with 5-10 years' experience agreed with "The autistic child does not look at others' eyes (maintains gaze) (M=2.020, SD=1.0879)
The autistic child does not enjoy the presence of others" appeared to be significantly different between Bachelor teachers and high school level, with a higher percentage of high school level teachers endorsing this item. And the rate of symptoms information among preschool teachers, in general, was low (M= 2.027, SD=.508)

TABLE IV. PRESCHOOL TEACHERS' KNOWLEDGE ABOUT ETIOLOGY OF AUTISM SPECTRUM DISORDER

N	Items	Mean	SD
25.	Vaccination can cause autism	1.876	1.009
26.	Some dietary habit or types of food can lead to autism	1.803	1.132
27.	Autism is precipitated by maltreatment or neglect during the child's tender age	1.690	1.028
28.	Genetics plays an important role in autism development	1.830	1.091
29.	The cause of autism is not yet known for sure	1.830	1.063
Aggregate mean score		2.090	.8493

Table IV. Point out of the knowledge of preschool teachers in etiology of ASD in Yemen .most of half of the preschool teacher believed that maltreatment of parents could be caused ASD specific in early years of child life or ignoring of parents toward their child. And a high score among preschool teachers (M=1.830, SD=1.091) reported the cause of ASD referred to genetics factors. But few percentages of them (36.7%) thought that ASD might be due to kind of food .but highest score among them (M=1.876, SD=1.009) thought that the significant factor of caused ASD is vaccination. On hand preschool teachers who had more than 5 years' experience, their response was different from others in some items as the cause of autism is not yet known for sure" and "Genetics plays an important role in autism development" it was higher than the preschool teacher who had few years' experiences. And in general preschool teachers showed a slight tendency to have low knowledge in ASD (M=2.090, SD=.8493)

Accordion to the second aim in this study to compare between the level of knowledge and both of level of education (high school-Bachelor-Diploma) and there experience year of teaching (> 5 years-5-10-< 10 years) it was used ANOVA to camper between differences. Differences were found in the

extent of the teachers' knowledge of autism with the level of teacher education and educational experience. Concerning the differences between school teachers' knowledge of autism concerning the level of teacher education, .as shown in Table 5, differences in the mean scores were found. Preschool Teachers who had a Bachelor degree (n=160) had a mean score of x = 67.48 and a standard deviation of σ = 4.29, and preschool teachers who had a Diploma degree (n=65) had a mean score of x? = 76.08 and a standard deviation of σ = 6.19; and preschool teachers who had high school (n=75) had a mean score of x? = 75.95 and a standard deviation of σ =4.29. An ANOVA test between the means yielded (F=904.8) at p = 0.000, for p < 0.05. These results indicate a statistically significant difference between the means of the different education level groups

TABLE V: RESULTS OF ANALYSIS PRESCHOOL TEACHERS RESPONSES LEVEL AND EXPERIENCE) VARIABLES

variable		N	Mean	Std		Sum of Squares	df	Mean Square	F	Sig.
Level of Education	high school	75	75.95	4.35	Between Groups	414.32	2	207.6	904.8	.000
	bachelor	160	67.48	4.29	Within Groups	679.071	297	22.85		
	diploma	65	76.08	6.19	Total	483.39	299			
teaching experience	<5	105	69.49	2.99	Between Groups	348.93	2	17.9	38.7	.000
	5-10	94	91.49	9.90	Within Groups	135.47	297	45.3		
	>10	101	68.13	.580	Total	481.39	299			

In addition, a Tukey post hoc test was conducted for the comparisons between different education level groups, as shown in Table 6. Results indicated that teachers with diploma had a higher level of knowledge about Autism in comparison with teachers with a Bachelor degree (mean difference = 29.91at p= 0.000). furthermore, preschool teachers with bachelor degree had a higher level of knowledge about Autism in comparison with teachers with a high school degree (mean difference = 8.47at p= 0.000), and finally, teachers with diploma degree had a higher level of knowledge about Autism in comparison with teachers with Higher school degree (mean difference = 21.44at p=0.000)

Regarding the differences between preschool teachers' knowledge about the Autism concerning preschool teachers' Experience variable, as shown in Table 6, differences in the mean scores were found. Preschool Teachers with (< 5) years of experience (n=105) had a mean score of x? = 69.49and a standard deviation of σ = 2.99; and preschool teachers with (5-10) years of experience (n=44) had a mean score of x = 91.49 and a standard deviation of σ = 9.40; and preschool teachers with (>10) years of experience (n=101) had a mean score of x= 68.13 and a standard deviation of σ = .580. An ANOVA test between the means yielded (F=38.7) at p = 0.000, for p < 0.05. These results indicate a statistically significant difference between the means of the different teachers' Experience level groups. Also, a Tukey post hoc test was conducted for the comparisons between different teachers' Experience level groups, as shown in Table 6. Results indicated that teachers

with (5-10) years of experience had a higher level of knowledge about Autism in comparison with teachers with (>10) years of experience (mean difference = 23.84 at p= 0.000), and preschool teachers with (>5) years of experience had a higher level of knowledge about Autism in comparison with preschool teachers with (>10) years of experience (mean difference = 22.48 at p= 0.00).

TABLE VI: POST HOC ANALYSIS (TUKEY TEST) FOR THE TEACHERS RESPONSES DEPENDING ON (EDUCATION LEVEL, AND EXPERIENCE) VARIABLES

Variables			Mean Difference	Std. Error	Sig.
Level of education	high school	bachelor	8.47*	.669	.000
		diploma	-21.43*	.811	.000
	bachelor	high school	-8.48*	.669	.000
		diploma	-29.91*	.703	.000
	diploma	high school	21.44*	.810	.000
		bachelor	29.91*	.703	.000
Experience	<5	5-10	-22.48*	.956	.000
		>10	1.36	.938	.319
	5-10	<5	22.48*	.956	.000
		>10	23.84*	.965	.000
	>10	<5	-1.36	.939	.319
		5-10	-23.84*	.965	.000
*. The mean difference is significant at the 0.05 level					

X. DISCUSSION

This study aimed to describe the preschool teachers' knowledge on ASD .furthermore, this study tried to discover the relationship between preschool teachers' knowledge level with the year of experience and level of education variables. The first question in this study has discussed the level of knowledge among preschool teachers, the answer to this question showed a lake of knowledge among teachers. The total level of mean value was and lied between (M=2.06, SD = .245), in general preschool teachers have lower level in knowledge in ASD. Preschool teachers with high school and bachelor had different level of education it was an adequate a close to a weak level of knowledge on ASD. Taking into account, teachers who had a high level of education (diploma) their a mean score was 76.08 while the preschool teachers with the high school were mean 67.95. This result leads us to emphasize that low level of education among preschool teachers had a weak knowledge about ASD. While preschool teachers who had more than 5 years' experience had a high level of knowledge conversely preschool teachers, who had a low level of education or more than 10 years. This finding may be due to the neutral of preparation service in faculty because preschool teachers didn't prepare well to contact with pre-schooler with ASD. This fact supported formal Farsi study [12], emphasized that preschool teachers didn't qualify to deal with challenge behavior as ASD , moreover, [13] Obaidat confirmed that direct experience in dealing with students with special needs is a critical factor in general educators' efficacy of teaching such a population and with their willingness to include such students in their class. Other

So, as a result, it becomes significantly important to ensure preschool teachers are sufficiently prepared and have essential knowledge and skills. To face this kind of a challenge among preschooler .and to take the suitable action to assist them .furthermore, preschool teachers must be more aware of ASD, need to teach and training in nature of ASD and their child' need.

Preschool teachers can identify abnormal development among children in the class, When they have a high level of knowledge about ASD and have specific training on ASD and how to deal with them [14]. Besides, the finding of this study are confirmed with another study (Hendricks 2007 that preschool teachers have inaccurate knowledge on ASD, and they need more training about this kind of disability .in which teachers reported a low level of knowledge as well as the application of practices. And the most repeated stated was a training need in identifying children with ASD . on the other hand, several studies were found there is a positive relationship between the level of knowledge and preschool teachers including the level of education, years of experience teaching. As it is aimed in this study on the second objective to find out if there is any significant difference in preschool teachers knowledge about ASD depending on other variables as preschool teachers education level, teaching years' experience. The result of the study indicated a significant difference in preschool teachers knowledge depending on the level of education, that diploma's preschool teachers have a higher level of knowledge than others, this finding supported from Abdul [15]. While preschool teachers who have bachelor have a higher level of knowledge about ASD in comparison with teachers with high school .finally, preschool teachers with an advanced level of education have the higher level on ASD in compression with others, may have more received courses in the special education needs or in the difficulties children behaviors. This finding confirmed by al-Farsi and al-Obaidat [13, 16] both studies confirmed that a low level of education among teacher is an effect on their level of knowledge of ASD. While the relationship with the level of knowledge about ASD with the teaching experience variable. The result of this objective indicated that teachers with more 5 years of experience had a higher level of knowledge in ASD than teachers with >10 years of experience, while preschool teachers with 5-10 years of experience had a higher level of knowledge about ASD than preschool teachers with >10 years of experience. This finding refers to the fact that individual with few years of teaching less than 10 years still retain their information and knowledge which they were received from their undergraduate period. Furthermore, they may still have high readiness to learn more about any challenging behavior as ASD. Finally, preschool teachers in this study showed low knowledge in ASD, .and regarding other variables like education level and teaching experience were the most influential factors in their level of knowledge .

There are a number of limitations to this study. The first limitation is related to the kind of the sample, the study did not include teachers from the special education needs. The reason for that, the purposed of the study exposed the level of knowledge related to the ASD from the background of regular preschool teachers, not including teachers from special education programs stems.

The second limitation was the presence of the questionnaire; the preschool teachers were asked to answer it .this method might have promoted them to respond a positive when they were not sure about some items [17]. and this method is better than if preschool teachers were asked to write the list of signs and symptoms that they know about ASD

"The third possible limitation was the teachers' lack of contact with children with autism (only 11% had contact). As derived from the "contact hypothesis," there is vast literature suggesting that having previous interpersonal contact to a disabled person, for example, is likely to erode negative view. This view is based on the assumption that one side is exposed to the other side; new understanding emerges as prejudice weakens. Therefore, if the teachers had more contact, then their perception would have been invariably affected. Future studies could explore whether contact versus noncontact factor has a bearing on one's perception toward children with ASD [18]

XI. CONCLUSION

This paper has highlights the knowledge among preschool teachers in Yemen .the misconceptions about ASD are popular among caregivers and preschool teachers in Yemen. Furthermore, this low level of knowledge needs more training to increase preschool teachers ' knowledge towered ASD in Yemen. By curricula in college and university and educational program as lecture, courses, workshops. And reactive the mass media which can be enriching the knowledge and awareness of preschool teachers. This, compared with other studies documented in the literature from different parts of the world, indicates that many people appear to harbor inaccurate or misconceived ideas about autism. As for the first time, this study has shed light on the prevailing situation in Oman. One conclusion that can be drawn is that inaccurate or misconceived attitudes toward children with ASD transcend specific culture, geography, or ethnicity. Being a global challenge, the global initiative would be imperative.

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