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# Knowledge and Attitudes of Preschool Teachers Regarding Attention Deficit Hyperactivity Disorder

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## Abstract

**Background:** The symptoms of attention deficit/hyperactivity disorder (ADHD) may manifest before the child begins elementary school.

**Objectives:** To survey preschool teachers' knowledge and attitudes regarding ADHD.

**Methods:** In this cross-sectional study, 360 preschool teachers were selected via a randomized cluster sampling method from among the teachers working in Tabriz, Iran, during 2013. A self-administered questionnaire concerning the symptoms of ADHD, the method of diagnosis, and their attitudes regarding ADHD was completed by the participants.

**Results:** The response rate was 96.1%. The teachers' age was 39.45 $\pm$ 7.66 years. Educational courses (43.6%) constituted their main source of knowledge regarding ADHD. The teachers' knowledge was more accurate regarding the symptoms of ADHD (81.8% correct answers), followed by the treatment (77.82% correct answers). Their knowledge concerning the consequences of having ADHD and the etiology of the condition was relatively low (61.4% and 69.82%, respectively). The teachers' knowledge was not correlated with their age or years of experience (P = 0.812). The teachers also reported that their typical reaction to inattention on the part of children with ADHD was to inform the parents (59%), while their typical reaction to hyperactivity was to point out the issue to the student (45.4%). More knowledge regarding the etiology of ADHD and more overall knowledge about ADHD were correlated with a healthier attitude on the part of the teachers toward children with ADHD.

**Conclusions:** This study is the first to evaluate the knowledge of Iranian preschool teachers regarding ADHD. Preschool teachers' knowledge about the consequences of having ADHD as well as the etiology of the disorder needs improvement. Our results indicated that increased knowledge would correlate with a healthier attitude on the part of preschool teachers.

*Keywords:* Attention Deficit/Hyperactivity Disorder, Attitude, Knowledge, Preschool Teachers

## 1. Background

Attention deficit/hyperactivity disorder (ADHD) is a common psychiatric disorder beginning in childhood that has a significant impact on various aspects of an individual's social life (1). Children and adolescents with ADHD exhibit a greater hyperactive state than other children of the same age; they fail to consistently complete their tasks and they experience deficits in self-regulation during their interactions with peers (2). ADHD has been extensively studied worldwide in terms of the definition, methods for diagnosis, and treatment. Treatment modalities are available, and children can achieve noticeable behavioral and academic benefits, especially in instances of timely intervention (3).

Despite a detailed understanding of the behavioral characteristics of the condition being presented in the literature and clinical settings, children with ADHD and their families continue to face everyday challenges. Psychoeducation and other educational interventions are an important and constructive part of the management of ADHD (4), although they are mostly limited to the parents of children and adolescents with ADHD. While significant people in their lives might have their own sources of information, the lack of a comprehensive understanding of the condition can affect the treatment adherence, treatment efficacy, and mental well-being of both individuals affected by ADHD and their parents.

For many children, school could be considered their second home; hence, school authorities may play an influential role in their life. School is where children have the opportunity to interact with their peers, comply with specific rules, and perform specific tasks. Children spend several hours a day with their teachers, learning as well as expressing their personalities. Thus, teachers may notice and confront particular symptoms in their pupils. Additionally, teachers play a very important role in many aspects of the treatment plan for students with ADHD as well as

in their achievements, since multimodal treatment is typically the best choice (5). The need for timely diagnosis and interventions highlights the significant role of preschool teachers (6). However, as members of the public, teachers' opinions regarding ADHD might be highly diverse, which might leave children with an ADHD diagnosis at greater risk of stigmatization (7), thereby resulting in counterproductive outcomes.

Despite the importance of knowledge on the part of all educational staff who work with children, almost all the available reports are concerned with teachers working in schools. Little information is currently available regarding the knowledge and attitudes toward ADHD among preschool teachers, and this will be the first report from Iran.

## 2. Objectives

Previous research studies have not investigated all the aspects of this issue. Teachers working in schools and preschool teachers have different sources of education and different qualifications, and their characteristics might also be quite different. Based on the importance of preschool teachers' role in the diagnosis, follow-up, and treatment of children with ADHD, this study evaluates the knowledge and attitudes regarding ADHD among preschool teachers.

## 3. Methods

### 3.1. Participants

The study population comprised preschool teachers working in the city of Tabriz, Iran, during 2013. The sample size was estimated to be 340 in accordance with Cochran's rule for sampling, considering a Z value of 1.96 (for a 95% confidence level) and an estimated percentage of 0.5. Participants were recruited based on a cluster sampling method from all districts of the city. The location of preschool playgroups is approximately determined by education authorities based on the population of the area. As all centers and the number of their staff are registered, they were randomly selected from a list, and the number of selected centers from each district was estimated based on the average population of each district, which is also reflected in the number of centers within each district. All the teachers from each selected center were asked to participate. The only inclusion criterion was a minimum of 12 months' service.

### 3.2. Procedure

The entire study protocol was approved by the ethics committee of Tabriz University of Medical Sciences. The purpose of the study was explained to the preschool teachers. They were asked to complete the survey based on their current knowledge and to avoid any other resources such as other teachers or textbooks. They completed the self-administered questionnaire after their working hours, which took approximately 15 minutes. All the questionnaires and answers were numbered and the confidentially of all participants was respected.

The questionnaires collected demographic data concerning the participants. The first section of the instrument contained 11 multiple-choice questions about the symptoms of ADHD, five questions about the etiology of the condition, five questions about the treatment, and nine questions about the consequences of ADHD. The participants were asked to give their answer to each item as either "strongly agree", "agree", "disagree", or "strongly disagree". The second section contained 11 items exploring participants' attitudes toward children with ADHD, with the answer scheme for the first seven questions being similar to that for previous questions. The last four questions concerned the typical reactions of the teachers and their self-evaluation.

### 3.3. Analysis

The statistical package for the social sciences (SPSS) Version 17 was used for the analysis. All data are described as number (percentage). The questions were categorized by relevance, and the possible correlation between the number of correct answers in each category was evaluated using Pearson's correlation test. The level of significance is reported.

## 4. Results

Of the 360 teachers invited to participate, 346 (96.1%) responded to the questionnaire. Some 92.2% of responders (319 teachers) were female. Their age was $39.45 \pm 7.66$ years, ranging from 19 to 58 years, with a mean level of teaching experience of $14.63 \pm 9.01$ years (range: 1 to 35 years). The preschool teachers reported their main sources of knowledge to be educational courses (43.6%), books (40.2%), media (26.6%), web (24.9%), family and friends (23.7%), and magazines (21.4%).

The knowledge of the preschool teachers regarding the symptoms of ADHD, its etiology, its treatment, and its consequences was tested. As described in Table 1, their knowledge regarding the symptoms and treatment of ADHD was

better than their knowledge of other aspects of the condition. The teachers' knowledge was more accurate regarding the symptoms of ADHD (81.8% of answers were correct), followed by their knowledge of the treatment for the condition (77.82% correct answers). A mean of 69.82% and 61.4% of teachers gave correct answers regarding the etiology and consequences of ADHD, respectively. The level of knowledge regarding ADHD was not different between male and female teachers (P = 0.848). It was not correlated with their age or their years of experience either (P = 0.812).

**Table 1.** Knowledge of the Preschool Teachers Regarding Different Aspects of ADHD

| | Agree/Strongly Agree |
|---|---|
| **Symptoms: A child with ADHD** | |
| Fails to pay close attention to details | 282 (81.5) |
| Does not seem to listen when spoken to directly | 269 (77.7) |
| Avoids engaging in tasks that require sustained mental effort | 280 (80.9) |
| Often loses things necessary for tasks or activities | 246 (71.1) |
| Is often forgetful during daily activities | 225 (65.0) |
| Often leaves his/her seat in the classroom or is restless | 324 (93.6) |
| Often fidgets with hands or feet or climbs excessively | 204 (87.9) |
| Often talks excessively and has difficulty playing or engaging in leisure activities quietly | 312 (90.2) |
| Often blurts out answers before questions have been completed | 282 (81.5) |
| Often butts into conversations or intrudes on others | 285 (82.4) |
| Often has difficulty waiting his/her turn | 306 (88.4) |
| **Etiology** | |
| ADHD is a result of a bad upbringing | 73 (21.9) |
| Symptoms may be exacerbated by stress and family conflicts | 309 (90.4) |
| ADHD is a congenital disorder | 222 (65.9) |
| ADHD is a neurobiological disorder | 225 (70.3) |
| ADHD is a chromosomal disorder | 168 (55.6) |
| **Treatment** | |
| Symptoms may be treated with medications | 251 (72.5) |
| Some children may benefit from psychotherapy | 292 (84.4) |
| These children benefit from additional help in school | 284 (82.1) |
| Home and school can be helpful in decreasing their symptoms | 301 (87.0) |
| Electroshock is effective in severe cases | 137 (36.9) |
| **Consequences: Children with ADHD** | |
| Might have academic problems | 263 (76.0) |
| Are more likely to have substance abuse problems | 154 (44.5) |
| Are more likely to have depression in the future | 198 (57.2) |
| May have ADHD symptoms during adulthood | 238 (68.8) |
| May have problems in their relationships with other children | 283 (81.8) |
| Have a lower IQ | 88 (25.4) |
| Have a lower level of self-esteem | 147 (42.5) |
| Exhibit destructive behavior and commit theft | 179 (51.7) |
| May exhibit aggressive behavior toward others | 204 (59.0) |

Table 2 describes the attitudes of the preschool teachers toward different aspects of the symptoms of ADHD. Almost half of the teachers believed that the educational system plays a very important role in perpetuating the symptoms of ADHD, while nearly half believed that special schools are needed. Although almost one third of teachers believed that the behavior of children with ADHD is deliberate in nature, fewer believed that punishment is needed and even fewer blamed the children's family for their behavior.

**Table 2.** Attitudes of the Preschool Teachers Toward Children With ADHD

| | Agree/Strongly Agree |
|---|---|
| **Identical discipline must be enforced for children with and without ADHD** | 113 (32.7) |
| **Punishment might be effective against inattentiveness or hyperactivity** | 56 (16.2) |
| **Educational system can spontaneously treat ADHD** | 176 (50.9) |
| **These children should be educated in a special school** | 161 (46.5) |
| **ADHD reflects a dysfunctional family** | 65 (18.8) |
| **The hyperactivity of these children is deliberate and destructive** | 101 (29.2) |
| **Parents of children with ADHD are to be blamed** | 40 (11.6) |

A possible relationship between the knowledge and attitudes of the preschool teachers was tested using Spearman's correlation. As described in Table 3, knowledge regarding the etiology of ADHD and overall knowledge concerning ADHD were correlated with a healthier attitude toward the condition.

The preschool teachers also reported their typical reactions to inattention on the part of these children to be informing the parents (59%), pointing out the problem to the student (37%), and temporary dismissal (3.8%). Most (50.8%) of the teachers believed that they were very tolerant of students' inattentive symptoms, while 14.7% could hardly tolerate such symptoms.

The teachers' typical reactions to hyperactivity were pointing out the problem to the student (45.4%), informing the parents (46.2%), and punishment by assigning extra tasks (6.6%). Most (42.8%) of the teachers believed that they were very tolerant of hyperactivity symptoms, while 17.3% found them unbearable.

## 5. Discussion

ADHD is a well-known topic of academic and clinical interest. However, different aspects of ADHD may not be clear to non-professionals. Teachers play a significant role in diagnosing ADHD and following up on the condition by providing appropriate reports. In addition to their direct help in controlling the symptoms of ADHD, teachers are also an important part of children's life and hence their ideas may affect the treatment of ADHD. Preschool teachers play an important role in this regard (6, 8). The results of the current study describe the knowledge and attitudes of preschool teachers working in Tabriz, Iran, toward ADHD. The results show that teachers' knowledge regarding the etiology of ADHD as well as their overall knowledge

**Table 3.** Correlation Matrix of the Relationship Between Preschool Teachers' Knowledge Regarding ADHD and Their Attitude Toward Children With ADHD

| | Attitude | Symptoms | Etiology | Treatment | Consequences | Overall Knowledge |
|---|---|---|---|---|---|---|
| **Attitude** | 1.000 | | | | | |
| **Symptoms** | 0.055 | 1.000 | | | | |
| | 0.349 | | | | | |
| **Etiology** | -0.255[a] | 0.009 | 1.000 | | | |
| | 0.000 | 0.883 | | | | |
| **Treatment** | 0.051 | 0.186[a] | 0.128[b] | 1.000 | | |
| | 0.420 | 0.003 | 0.043 | | | |
| **Consequences** | 0.003 | 0.307[a] | 0.044 | 0.070 | 1.000 | |
| | 0.965 | 0.000 | 0.480 | 0.268 | | |
| **Overall Knowledge** | 0.149[b] | 0.770[a] | 0.317[a] | 0.420[a] | 0.639[a] | 1.000 |
| | 0.031 | 0.000 | 0.000 | 0.000 | 0.000 | |

[a] Correlation is significant at the 0.01 level.
[b] Correlation is significant at the 0.05 level.

about the condition are correlated with their attitude toward children with ADHD. This sample of preschool teachers from Tabriz exhibited the most knowledge regarding the treatment of ADHD. The rather high return rate for the questionnaires might reflect the enthusiasm of teachers regarding this issue. The results of this study, which was the first such study performed in the region, could prove useful for mental health care providers when planning educational programs.

Children with ADHD may benefit from early diagnosis, since the behavioral problems associated with the condition often start before the beginning of elementary school (9). ADHD in preschoolers is a relatively stable diagnosis, and primary school teachers are the individuals most likely to notice ADHD symptoms in children for the first time (10). Fortunately, the knowledge of the preschool teachers in our sample regarding the symptoms of ADHD was relatively high. Restlessness and noisiness (i.e., leaving their seats during class) seem to be the symptoms most noticed by teachers. However, the teachers' knowledge regarding the etiology of ADHD was relatively low. More than half of respondents agreed that ADHD is due to chromosomal problems, or that it is a congenital disorder. Nearly one fourth of all teachers considered ADHD to be the result of a bad upbringing. The overall pattern is similar to a report concerning Korean preschool teachers (11); however, our sample exhibited a higher level of knowledge (near 70% compared to 10%). This knowledge gap has not been modified by educational programs for elementary school teachers, since the same outline has also been reported for elementary school teachers (12). However, this level of knowledge regarding the etiology and symptoms of ADHD is better than the data available from developing countries (13). Incorrect information concerning the etiology of ADHD, especially with regard to the role of the family, may have a negative influence on teacher-parent relationships. Yet, most of the teachers agreed that the symptoms of ADHD can be exacerbated by family problems, a relation that is well known for almost all mental and behavioral problems.

The knowledge of the preschool teachers was better regarding the treatment options for ADHD. This rate was similar to the knowledge exhibited by Korean preschool teachers (11). A relatively high number of teachers had accurate information (compared to the questions regarding etiology) that the symptoms of ADHD can be treated by medication and psychotherapy intervention. Comparable to the findings of other studies, the teachers agreed that specific behavioral modifications that could be applied at school or at home are effective (11). The use of psychotherapy as a treatment for ADHD was more accepted than the use of medications (84% vs. 72%). Our questions were not specific, so it is not obvious whether the teachers have correct information in terms of the details of treatment. The knowledge of the teachers regarding the efficacy of ADHD medication could have an effect on their likelihood of referring affected children to specialists for treatment. It may also positively influence long term adherence to the medication.

The teachers reported their main source of information to be educational courses. Compared to samples in which the majority reported journals to be their main source of information (14), this may reflect either courses being more commonly available in our country for preschool teachers, or a lower interest in reading articles about ADHD. If the former hypothesis is correct, this should be viewed as a significant opportunity to increase teachers' knowledge.

Despite the fact that the main source of information was reported to be educational courses, the teachers' knowledge of the studied areas was not equal. The higher

awareness of the "effect of medication" compared to the "etiology" of ADHD may be a result of their experience with affected children who are undergoing treatment. A positive correlation between "knowledge about symptoms" and "treatment" confirms this explanation. Previous studies have indicated that one of the important factors in knowledge regarding ADHD is exposure to affected children (15). This may explain the more positive belief of teachers in medications compared to pharmacists, since the majority of pharmacists in our community are not in favor of prescribing medications for ADHD despite their accurate information about the function of such medications (16). Similar to their knowledge about the symptoms of ADHD, the teachers' level of knowledge regarding treatment was better than the data available from developing countries (13, 17), and it is comparable to data from developed countries (15, 18)

The knowledge of the preschool teachers regarding the consequences of ADHD seemed to be based on their personal experiences, since they had higher knowledge about academic problems and peer relationships than about other aspects of the condition. They also believed that ADHD could result in aggressive and destructive behavior. This might be influenced by the fact that oppositional behavior may be associated with higher hyperactivity and inattentiveness ratings by teachers (19).

Whether our explanation for the different level of knowledge concerning the studied areas is correct or not, these results indicate the need for continuous education. Establishing a teamwork strategy involving parents, teachers, psychiatrists, and psychologists may improve this situation in a practical way.

The attitude score of the teachers towards children with ADHD was high when compared to a study involving elementary school teachers from our community that was conducted during 2006 (12). This may be a result of the provision of better educational programs during these years, since a significant correlation between teachers' knowledge of ADHD and their attitude was noted here, which is compatible with the findings of similar reports (12, 20).

In a study from Iran in 2006, the main sources of knowledge regarding ADHD were television and radio, followed by friends and relatives (12), although the current sample reported that they had gathered their information from educational courses and scientific periodicals. This may explain why the number of years of experience was not correlated with the knowledge of teachers, although dissimilar results have been reported regarding years of experience and knowledge or attitude toward ADHD (15, 18, 21). Based on the fact that the information presented in the media could feature several biases, we may conclude that a more reliable source of information has been provided to teachers in recent years. Studies have reported that newer methods such as web-based interventions could be helpful in delivering effective information to teachers regarding ADHD (22).

In conclusion, the results of this study are compatible with those of a recent review suggesting that incorrect beliefs regarding ADHD persist (23). Further, the knowledge of preschool teachers regarding ADHD should be improved through continuous educational courses, since increased knowledge will positively improve their attitudes toward children with ADHD.

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## Footnotes

**Authors' Contribution:** Shahrokh Amiri contributed to the study design and data collection and also drafted the manuscript. Seyed Gholamreza Noorazar and Ali Fakhari contributed to the study design and coordination, and they supervised the data collection. Alireza Gorji Darounkolaee and Ali Bahari Gharehgoz contributed to the data collection, quality control, and the data analysis. All the authors approved the final draft of the manuscript.

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## References

1. Faraone SV, Sergeant J, Gillberg C, Biederman J. The worldwide prevalence of ADHD: is it an American condition?. *World Psychiatry.* 2003;**2**(2):104–13. [PubMed: 16946911].
2. Barkley RA, Edwards G, Laneri M, Fletcher K, Metevia L. Executive functioning, temporal discounting, and sense of time in adolescents with attention deficit hyperactivity disorder (ADHD) and oppositional defiant disorder (ODD). *J Abnorm Child Psychol.* 2001;**29**(6):541–56. [PubMed: 11761287].
3. Van der Oord S, Prins P. J. M. , Oosterlaan J, Emmelkamp PMG. Efficacy of methylphenidate, psychosocial treatments and their combination in school-aged children with ADHD: A meta-analysis. *Clin Psychol Rev.* 2008;**28**(5):783–800.
4. Montoya A, Colom F, Ferrin M. Is psychoeducation for parents and teachers of children and adolescents with ADHD efficacious? A systematic literature review. *Eur Psychiatry.* 2011;**26**(3):166–75. doi: 10.1016/j.eurpsy.2010.10.005. [PubMed: 21292454].
5. Jensen PS, Hinshaw SP, Swanson JM, Greenhill LL, Conners CK, Arnold LE, et al. Findings from the NIMH Multimodal Treatment Study of ADHD (MTA): implications and applications for primary care providers. *J Dev Behav Pediatr.* 2001;**22**(1):60–73. [PubMed: 11265923].

6. Kollins S, Greenhill L, Swanson J, Wigal S, Abikoff H, McCracken J, et al. Rationale, design, and methods of the Preschool ADHD Treatment Study (PATS). *J Am Acad Child Adolesc Psychiatry.* 2006;**45**(11):1275–83. doi: 10.1097/01.chi.0000235074.86919.dc. [PubMed: 17023869].
7. Mueller AK, Fuermaier AB, Koerts J, Tucha L. Stigma in attention deficit hyperactivity disorder. *Atten Defic Hyperact Disord.* 2012;**4**(3):101–14. doi: 10.1007/s12402-012-0085-3. [PubMed: 22773377].
8. Posner K, Melvin GA, Murray DW, Gugga SS, Fisher P, Skrobala A, et al. Clinical presentation of attention-deficit/hyperactivity disorder in preschool children: the Preschoolers with Attention-Deficit/Hyperactivity Disorder Treatment Study (PATS). *J Child Adolesc Psychopharmacol.* 2007;**17**(5):547–62. doi: 10.1089/cap.2007.0075. [PubMed: 17979577].
9. Zuvekas SH, Vitiello B. Stimulant medication use in children: a 12-year perspective. *Am J Psychiatry.* 2012;**169**(2):160–6. doi: 10.1176/appi.ajp.2011.11030387. [PubMed: 22420039].
10. Riddle MA, Yershova K, Lazzaretto D, Paykina N, Yenokyan G, Greenhill L, et al. The Preschool Attention-Deficit/Hyperactivity Disorder Treatment Study (PATS) 6-year follow-up. *J Am Acad Child Adolesc Psychiatry.* 2013;**52**(3):264–278 e2. doi: 10.1016/j.jaac.2012.12.007. [PubMed: 23452683].
11. Yoo IY, Ra J, Oh E, Kim M. Knowledge and attitude to attention deficit hyperactive disorder in Korean preschool teachers. *J Korean Academy Child Health Nurs.* 2009;**15**(4):383–91.
12. Ghanizadeh A, Bahredar MJ, Moeini SR. Knowledge and attitudes towards attention deficit hyperactivity disorder among elementary school teachers. *Patient Educ Couns.* 2006;**63**(1-2):84–8. doi: 10.1016/j.pec.2005.09.002. [PubMed: 16504452].
13. Rodrigo MD, Perera D, Eranga VP, Williams SS, Kuruppuarachchi KA. The knowledge and attitude of primary school teachers in Sri Lanka towards childhood attention deficit hyperactivity disorder. *Ceylon Med J.* 2011;**56**(2):51–4. [PubMed: 21789864].
14. Stormont M, Stebbins MS. Preschool teachers' knowledge, opinions, and educational experiences with attention deficit/hyperactivity disorder. *Teacher Educ Special Educ.* 2005;**28**(1):52–61.
15. Sciutto MJ, Terjesen MD, Frank ASB. Teachers' knowledge and misperceptions of attention-deficit/hyperactivity disorder. *Psychol Schools.* 2000;**37**(2):115–22.
16. Ghanizadeh A. Knowledge of pharmacists regarding ritalin and ADHD and their attitude towards the use of ritalin to treat ADHD. *Int J Clin Pharmacol Ther.* 2008;**46**(2):84–8. [PubMed: 18218288].
17. Ofovwe GE, Ofili AN. Knowledge, attitude and practice of school health programme among head teachers of primary schools in Egor Local Government Area of Edo State, Nigeria. *Ann Afr Med.* 2007;**6**(3):99–103. [PubMed: 18240496].
18. Kos JM, Richdale AL, Jackson MS. Knowledge about Attention-Deficit/Hyperactivity Disorder: A comparison of in-service and preservice teachers. *Psychol Schools.* 2004;**41**(5):517–26.
19. Jackson DA, King AR. Gender differences in the effects of oppositional behavior on teacher ratings of ADHD symptoms. *J Abnorm Child Psychol.* 2004;**32**(2):215–24.
20. Bekle B. Knowledge and attitudes about attention-deficit hyperactivity disorder (ADHD): a comparison between practicing teachers and undergraduate education students. *J Atten Disord.* 2004;**7**(3):151–61. [PubMed: 15260172].
21. Power TJ, Hess LE, Bennett DS. The acceptability of interventions for attention-deficit hyperactivity disorder among elementary and middle school teachers. *J Dev Behav Pediatr.* 1995;**16**(4):238–43. [PubMed: 7593658].
22. Barnett B, Corkum P, Elik N. A web-based intervention for elementary school teachers of students with attention-deficit/hyperactivity disorder (ADHD). *Psychol Serv.* 2012;**9**(2):227–30. doi: 10.1037/a0026001. [PubMed: 22667987].
23. Moldavsky M, Sayal K. Knowledge and attitudes about attention-deficit/hyperactivity disorder (ADHD) and its treatment: the views of children, adolescents, parents, teachers and healthcare professionals. *Curr Psychiatry Rep.* 2013;**15**(8):377. doi: 10.1007/s11920-013-0377-0. [PubMed: 23881709].