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İlköğretim Okullarındaki Öğretmenlerin Sık Karşılaşılan Psikiyatrik Bozukluklar Hakkında Bilgi Düzeyleri ve Eğitimleri

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| M A K A L E B İ L G İ S İ | ÖZ |
|--------------------------------|--|
| Gönderilme Tarihi: | Amaç: Psikiyatrik problemleri olan öğrencilerde erken dönemde |
| 26.12.2018 | tanı sağlanması, tedavinin erken planlanması ve ruh sağlığının |
| Revizyon: | korunması için programların uygulanabilmesi oldukça önemlidir. |
| 23.04.2019 | Klinisyenler, okullarda öğretmenlerle çocuk ve ergenlerin ruh |
| Kabul: | sağlığını geliştirmek için uzun zamandır birlikte çalışmaktadırlar. |
| 23.04.2019 | Okullar, çocukların ve ergenlerin zamanlarının çoğunu bir grup |
| | olarak geçirdikleri yerlerdir. Bu nedenle, okullar ruh sağlığı |
| Sorumlu Yazar: | hizmetlerinin sağlanmasında oldukça uygun ortamlardır. Bu |
| Yasin Yıldız | çalışmanın amacı, öğretmenlerin Dikkat Eksikliği Hiperaktivite |
| yasinyildizmd@gmail.com | Bozukluğu (DEHB) ve diğer bozukluklarla ilgili bilgi düzeylerini |
| Anahtar Kelimeler: | belirlemek, sınıf içi uygun yaklaşımlarla ilgili bilgi düzeylerini |
| Dikkat eksikliği hiperaktivite | araştırmak ve öğretmenlerin eğitimlerinin bu hastalıkların |
| bozukluğu, öğretmen, eğitim | tedavisindeki yerini tartışmaktır. |
| | Gereç ve Yöntemler: Öğretmenlerden bilgilendirilmiş onam |
| | alındıktan sonra bir anket uygulandı. Daha sonra öğretmenler |
| | çocuklarda sık karşılaşılan psikiyatrik problemlerle ilgili Çocuk ve |
| | Ergen Ruh Sağlığı ve Hastalıkları Uzmanı tarafından |
| | bilgilendirildiler. Son olarak, anket yeniden uygulandı. |
| | Bulgular: Anket sorularında başarı oranlarını belirlemek amacıyla; |
| | sorular 1 puan ile derecelendirilmiş ve katılımcılardan alınan anketin |
| | sonuçları değerlendirildiğinde; eğitim öncesi ortalama puan 11,4± |
| | 4,9 (8-16) iken eğitim sonrasında ortalama puan 15,9 \pm 4,4 (10-20) |
| | ve istatistik olarak anlamlı bulunmuştur (p=0,02). |
| | Sonuç: Öğretmenler hem okulda çocuklarla birlikte fazla vakit |
| | geçirmeleri, hem diğer çocuklarla kıyas yapabilmeleri hem de tedavi |
| | sürecinde destek olmaları açısından önemli bir role sahiptirler. |
| | Öğretmenlerin bu konuda bilgi düzeylerinin artırılması oldukça |
| | önem arz etmektedir. |

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Research Article

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Levels of Knowledge and Training on-Common Psychiatric Disorders in Primary School Teachers

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Correspondence Author: Yasin Yıldız yasinyildizmd@gmail.com Key Words: Attention deficit hyperactivity disorder, teacher, education

ABSTRACT

Aim: It is crucial to be able to implement programs to identify students with psychiatric problems and to permit early diagnosis, for the initial planning of treatment and for the preservation of mental health. Clinicians have long collaborated with schools and teachers to improve the mental health of children and adolescents. Schools are the places where children and adolescents spend most of their time as a group. From that perspective, school is the most appropriate environment for the provision of mental health services. The purpose of this study was to determine teachers' levels of knowledge concerning children with attention deficit hyperactivity disorder (ADHD) and other disorders, to investigate levels of their knowledge regarding appropriate in-class approaches and to discuss the place of teacher education in the treatment of ADHD.

Material and Methods: Once teachers had given informed consent, they were administered a questionnaire, after which they were briefed by child and adolescent psychiatrist concerning psychiatric problems frequently encountered in children. Finally, the questionnaire was re-applied.

Results: To determine success levels in the questionnaire, correct scores were awarded 1 point. The mean pre-education score of the 129 participants in the study was11.4 \pm 4.9 (8-16). Mean post-education score was 15.9 \pm 4.4 (10-20) and the difference between two scores was statistically significant (p=0.02).

Conclusion: Teachers have an important role to play in the school with their children and to compare with other children as well as supporting them in the treatment process. Increasing teachers' level of knowledge on this issue is very important.

Introduction

Clinicians have long collaborated with schools and teachers to improve the mental health of children and adolescents. Many psychiatrists such as Caplan, Berlin, Comer, and Berkovitz have made significant contributions to the relationship between psychiatry and education (1).

Psychiatrists today provide counseling services of various kinds in schools. The teacher or parent may seek the psychiatrist's opinion for a student they regard as problematic or over school-related problems. In addition, the psychiatrist's advice may be sought for the development of programs for the prevention and early identification of mental problems or for programs to be used in crisis situations.

Studies in the USA have determined severe mental disorders causing functional impairment in 9-13% of children and adolescents (2,3). It is also known from studies that 80% of children and adolescents with psychological needs are unable to obtain assistance, only 20% receive psychological support and only 10% of children and adolescents can present to a psychiatrist (2-5).

Schools are the places where children and adolescents spend most of their time as a group. It is crucial to be able to implement programs to identify students with psychiatric problems and to permit early diagnosis for the initial planning of treatment and the preservation of mental health. From that perspective, the school is the most appropriate environment for the provision of mental health services.

It is essential to enable teachers to recognize problematic students and allow such individuals to receive help by increasing their awareness of mental health issues. Teachers with sufficient levels of knowledge concerning psychiatric diseases will have a significant advantage to cope with students with behavioral and emotional problems, and in preventing problems attaining a higher level of severity.

Incorrect guidance on the subjects of the origins and treatment of psychological diseases is common in society. Many parents or teachers are still capable of describing students with attention deficit and hyperactivity as 'spoiled' or 'naughty.'

Attention deficit hyperactivity disorder (ADHD) is characterized by heterogeneous clinical features

such as inattention, hyperactivity, and impulsivity and is one of the most common neurodevelopmental disorders in childhood (6). The global prevalence ranges between 8% and 12% (7). Research on ADHD has revealed that it is a neurobiological disorder and drugs are known to occupy the most important place in treatment (8).

The opinions and support of teachers and whether they are being correctly informed on the subject of ADHD are very important for the evaluation of a diagnosis of ADHD and in the therapeutic process (9). The most supported psychosocial interventions in scientific studies are behavioral programs for parents and training programs for schools (10).

Specific learning disability (SLD), another psychiatric disorder seen in childhood, involves specific problems in such academic skills as literacy and mathematics. SLD has been defined as literacy, mathematics and written expression at standard tests applied on an individual basis being considerably below expected levels considering the individual's chronological age, the measured level of intelligence and education received(11).

The levels of information concerning SLD in society are low and the condition may be equated with mental retardation by families and teachers. This may lead to the child being perceived as different by its peers. Children with special learning difficulties were defined by the Turkish Ministry of Education in 2007. This states that inclusive education measures should be taken for students meeting this definition (12).

The number of studies investigating levels of knowledge and misinformation concerning SLD is quite low. This study was therefore intended to investigate 'misinformation levels' concerning SLD in addition to ADHD.

Tic is defined as the involuntary, rapid, arrhythmic and recurring contraction of a group of muscles (13). Tics are sudden and recurring movements, sounds and gestures reminiscent of normal behavior. Tic disorders have a broad spectrum. Accompanying behavioral problems including disinhibited speech and behavior, distractibility, impulsivity and motor hyperactivity in patients with tic disorder exacerbate the difficulties they experience(13,14). Studies have shown a negative social perception of children and adolescents with vocal or motor tics and that chronic tic disorders significantly reduce the quality of life (15,16). Self-injurious motor tics such as hitting or biting and socially unacceptable coprolalia persisting throughout life and that affect the individual's life and relationships may be seen in adolescence. The course of tic disorders is generally good. Tics fluctuate and lessen towards the ages of 19-20 (17).

Autism spectrum disorder (ASD) is a neurodevelopmental disorder that has been intensively studied in recent years (18). ASD is characterized by deficits in social communication and behavior and by limited and repetitive patterns of behavior, interest, and activity (19). The prevalence is increasing every year. According to U.S. Centers for Disease Control and Prevention (CDC) data, one in every 88 children was diagnosed in 2011 with ASD (20). ASD is a neurodevelopmental disorder which is characterized by deficits in bilateral social communication and interaction and by restricted and stereotypical behaviors, activities and interests and which usually appears before the age of 3 and is generally life-long (18,19). Procedures and techniques provided for individuals diagnosed with ASD can contribute to the teaching of skills in areas in which they exhibit deficits such as social development, linguistic development, non-verbal communication, play and behavior management (20).

The purpose of this study was to determine teachers' levels of knowledge concerning children with ADHD and other disorders, to investigate levels of knowledge concerning appropriate in-class approaches and to discuss the place of teacher education in the treatment of ADHD.

Material and Methods

This joint study with the Rize Provincial Education Directorate was performed with the participation of 129 teachers. Once teachers had given informed consent, they were administered a questionnaire, then the teachers were informed by the Child Psychiatry and Diseases specialist about the common psychiatric problems in children. Finally, the questionnaire was re-applied. The questionnaire was taken from the studies which were conducted to measure the teachers' knowledge level (21,22). Pre- and post-education scores for responses to questions were then compared (1 point for correct answer, 0 point for wrong answer or unanswered questions). Data were analyzed on SPSS 21.0 software. Distribution of data was evaluated by "Test of Normality". Because it does not show normal distribution pre- and post-education responses were

compared using the Wilcoxon signed rank test. Significance was set at p=0.05.

Approval for the study was granted by the Trabzon Kanuni Training and Research Hospital Ethical Committee. No financial support was used in our study and there is no any conflict of interest in authorship.

Results

70 of the 129 teachers enrolled in the study were male and 59 were female with a mean age of 32.6 ± 7.9 (22-64) years. Mean length of professional teaching experience was 8.2 ± 7.4 (1-37) years. The demographic data of the teachers are shown in Table 1.

 Table 1: Demographic data of teachers

| | | Ν | % |
|------------------|-----------------|-----|------|
| Education status | High school | 6 | 4,7 |
| | University | 122 | 94,6 |
| | Master's degree | 1 | 0,8 |
| Source of | Television | 97 | 75,2 |
| Common | Internet | 104 | 80,6 |
| Psychiatric | School | 50 | 38,8 |
| Disorders * | Health | 9 | 6,9 |
| | Education | | |
| My knowledge of | It is enough | 18 | 13,9 |
| Psychiatric | Not enough | 121 | 36,1 |
| Disorders | | | |
| When | I refer the | 120 | 93,1 |
| Psychiatric | student to a | | |
| Disorder is | specialist | | |
| suspected | I do not refer | 9 | 6,9 |
| | the student to | | |
| | aspecialist | | |
| N 1/ 1 | 1 | | |

*: Multiple responses to the question

Pre- and post-education responses to questions intended to measure general levels of information such as clinical reflections of psychiatric disorders in the child and problems of concern to the family and society are shown in Table 2. Teachers' pre- and post-education responses to questions involving medical and rehabilitation therapies administered to children with psychiatric disorders and associated risk factors are shown in Table 3. Teachers' pre- and post-education responses to questions concerning children's physical and psychiatric status following neglect-abuse are shown in Table 4.

In order to determine success levels in the questionnaire, correct scores were awarded 1 point and 20 was determined as the maximum possible score for the 20 questions. The mean pre-education score of the 129 participants in the study was11.4 \pm 4.9 (8-16). Mean post-education score was15.9 \pm 4.4 (10-20) and the difference between the two was statistically significant(p=0.020).

 Table 2. Teachers' pre- and post-education responses concerning general knowledge concerning psychiatric disorders

| | Responses (no.) | | | | | | |
|---|-----------------|----|---------------|-----|----------------|----|--|
| Question | | | Pre-education | | Post-education | | |
| | 1 | 2 | 3 | 1 | 2 | 3 | |
| ADHD is a largely life-long psychiatric disease frequently seen in children. | 62 | 50 | 17 | 17 | 88 | 24 | |
| Autism is a disorder characterized by deficits in bilateral social interaction and communication skills and by repeated behaviors. | 86 | 19 | 24 | 98 | 12 | 19 | |
| A child who is able to watch TV or play on the computer for hours without getting up may have ADHD. | 90 | 19 | 20 | 108 | 8 | 13 | |
| A child must have mobility, aggression, behavioral and impulse problems in order to treat ADHD. | 39 | 49 | 41 | 18 | 78 | 33 | |
| Special education difficulty occurs in children with intelligence retardation compared to their peers. | 53 | 54 | 22 | 24 | 98 | 7 | |
| Individuals with ADHD in childhood do not experience this problem in adolescence and adulthood. | 5 | 93 | 31 | 6 | 111 | 12 | |

1:True, 2:False, 3:Do not know

 Table 3. Teachers' pre- and post-education responses concerning knowledge of the treatment of psychiatric disorders.

| | Responses (no.) | | | | | | |
|---|-----------------|---------------|----|----|----------------|----|--|
| Question | | Pre-education | | | Post-education | | |
| | 1 | 2 | 3 | 1 | 2 | 3 | |
| ADHD can be eliminated without the use of medications if families and | 69 | 32 | 28 | 88 | 23 | 18 | |
| teachers exhibit appropriate attitudes and behaviors toward children. | | | | | | | |
| Special learning difficulty can be treated with drugs, and no special | 0 | 119 | 10 | 40 | 79 | 10 | |
| education support is required. | | | | | | | |
| The narcotic effects of drugs used in the treatment of ADHD cause | 34 | 37 | 58 | 14 | 77 | 38 | |
| dependence and have severe side-effects. | | | | | | | |
| Intelligence is affected by ADHD to a large extent and these children | 42 | 62 | 25 | 23 | 85 | 21 | |
| require special education support. | | | | | | | |
| Children with ADHD experience no problems outside school and are | 13 | 105 | 11 | 3 | 111 | 15 | |
| easily able to focus on subject matter and discharge their tasks. | | | | | | | |
| Medication is the primary treatment for autism. | 55 | 64 | 10 | 20 | 102 | 7 | |
| | | | | | | | |

1:True, 2:False, 3:Do not know

| | Responses (no.) | | | | | | |
|---|-----------------|---------------|----|-----|----------------|----|--|
| Question | | Pre-education | | | Post-education | | |
| | 1 | 2 | 3 | 1 | 2 | 3 | |
| Children with ADHD do not require any additional time to complete tasks, and the time allowed in class is sufficient. | 8 | 108 | 13 | 5 | 113 | 11 | |
| Children with special learning difficulty only experience problems in the areas of reading and writing. | 6 | 116 | 7 | 4 | 119 | 6 | |
| Children with special learning difficulty experience problems with learning in class and can learn better with one-to-one teaching. | 112 | 6 | 11 | 111 | 7 | 11 | |
| Tics are behaviors that children exhibit deliberately and consciously and they can control them if they wish so. | 6 | 108 | 15 | 6 | 111 | 12 | |
| Lack of self-consciousness, inter-sibling problems and stress at school among peers can exacerbate tic disorder. | 102 | 5 | 22 | 113 | 2 | 14 | |
| Tics in children with tic disorder can be eliminatedif they are ignored and not made a subject of matter. | 88 | 16 | 25 | 101 | 9 | 19 | |
| Support treatments such as making eye contact, looking and listening, and sitting face to face are needed for language development in autism. | 99 | 0 | 30 | 119 | 1 | 9 | |

Table 4. Teachers' pre- and post-education responses concerning psychiatric disorder support.

1:True, 2:False, 3:Do not know

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Discussion

This study investigated teachers' general perspectives on ADHD and other psychiatric disorders, their levels of information concerning appropriate in-class attitudes and whether or not their levels of knowledge would change after training.

The number of studies investigating levels of knowledge of and attitudes towards ADHD in different cultures is quite low (20). In a recent study of 196 primary school teachers (9), 85.7% of teachers described their level of knowledge concerning ADHD as inadequate.

Notably, in our study, teachers' responses before education indicated a high level of misinformation concerning ADHD and other psychiatric disorders.

Various factors can lead to misinformation. These include education levels, cultural factors, and individual attitudes.

Another noteworthy point in our study is that a significant proportion of teachers regarded ADHD as associated with aggression and behavioral problems. Before education, as many as 53% of teachers regarded ADHD as a disorder that eliminates without use of medication. Twenty-six percent of teachers reported thinking that medications have very severe side-effects, while 45% had no opinion on the subject.

A study investigating knowledge levels among teachers reported that 82% of teachers described the statement that 'ADHD is a disorder that can be treated with drugs' as 'false' (23).

A survey study conducted on teachers and families of children with ADHD in Turkey reported that 47.5% of 453 teachers think that ADHD could not be cured completely even if it is treated (24).

This study shows that numerous misconceptions regarding ADHD and other psychiatric disorders can be widely seen. Misinformation will inevitably have a negative impact on both individuals with ADHD or SLD and their parents. It will also prevent the therapeutic process. Teachers have a particularly important role to play in the treatment of these disorders, which are widely seen, can affect almost all areas of life and whose adverse effects can last throughout life. The importance of studies aimed at providing accurate information is obvious. It is essential for families and teachers to work together in the treatment of SLD for the child's difficulties to be perceived and supported and guided in an appropriate manner and for help to be provided in overcoming deficiencies.

A significant part of the teachers in our study possessed incorrect information concerning SLD. Forty-one percent of teachers associated SLD with mental retardation. That level fell to 18% after education.

Positive results have been achieved with programs directed toward high-risk groups in school, students' learning and behavioral problems have decreased, psychiatric disorder symptoms have improved and academic success levels have risen(25,26).

The probability of misevaluation also increases as a result of misinformation. This can make it difficult for children's stronger aspects to be perceived and can prevent them from obtaining the education they need. In social terms, it can lead to exclusion, neglect or even rejection by teachers or peers.

One of the main sources of misinformation is information which spreads through the internet and whose validity is questionable. There is a need for an examination of the effects of the internet, one of the principal sources of information today.

Previous studies have already reported beneficial outcomes from the addition of teacher training to the treatment program (27,28). The prevention of incorrect and deficient information, predominantly with the assistance of child psychiatrists, can be of benefit to both teachers and parents. Arranging training sessions for teachers on the subjects of understanding and the correct approach to the educational and social needs of children in ADHD and SLD, an area in which teachers have significant responsibilities, will raise recipients' levels of knowledge and encourage positive attitudes. Raising teachers' knowledge levels and awareness will also assist with more accurate orientation. There is a prima facie need for studies to improve knowledge and reduce stigmatization in terms of many difficulties faced by children, not solely ADHD and SLD.

Tic Disorder is often recognized in early primary school age, but there is a false perception that children do tics and do it deliberately (29). For this reason, educating teachers is important in terms of minimizing negative emotions related to children and minimizing the social isolation created by tic disorder. This should be explained to the students who are not under the control of the patient. Additionally, conditions such as a lack of selfconfidence, inter-sibling problems, and stress in the school and peer environment all exacerbate tic disorder(13). The attitude of teachers among students is quite important.In addition, tics can improve through behaviors such as taking no interest or ignoring them in children with this disorder (14).

Children with autism can study in special education schools, special education classes or inclusion classes according to their developmental and educational needs. In the mainstreaming classes, children who do not have severe disability or behavioral problems are rehabilitated together with their peers with normal development. children in these classes have already been diagnosed with autism. however, there is a great deal of need for teachers in early detection of undiagnosed patients and for fusion of mildly ill children in the classroom(30).The early commencement of education following early diagnosis can improve adaptation skills to a significant extent. In addition to various cognitive and behavioral therapies, autistic children also receive learning, linguistic and speech therapies(19). Support therapies aiming language development in autism are also required, such as making eye contact, look and listen, and sitting face to face(17).

In conclusion, teachers are figures of very great importance, in terms of spending considerable amounts of time with children in school, of their being able to compare children with one another and in terms of supporting the therapeutic process. Dividing tasks into small components and allowing additional time if necessary have been reported to increase the probability of successful completion. Positive reinforcement, giving small breaks during study time and removing the child from the environment during anger attacks have also been reported to be beneficial. Appropriate in-class measures have been reported to increase therapeutic success and levels of benefit from education.

The main limitation of the study is that a scale with proven validity and reliability was not employed. Further studies in this area with larger samples and including parents in addition to teachers are now needed. The need for programs intended to raise awareness can thus be emphasized. Similar studies might be performed in more centers to determine the levels of knowledge of psychiatric diseases among both school counselors and teachers in other branches. Similar studies with larger sample groups are now needed to elicit more general results.

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