



ASSESSMENT OF KNOWLEDGE REGARDING NAIL BITING, EATING DISORDERS AND MENTAL RETARDATION AMONG SELECTED GOVERNMENT PRIMARY SCHOOL TEACHERS: A DESCRIPTIVE STUDY

Author:

Ms. Pooja Thakur

Nursing Tutor, Abhilashi college of Nursing,
Tanda, Nerchowk, Mandi, H.P

Corresponding Author and Co-author:

Ms. Anjali Sharma

Nursing Tutor , Akal College of Nursing
Eternal University, Barusahib, Sirmaur H.P.

ABSTRACT

Background: *Teachers play a very important role in the formation of healthy mind of children. They have huge impact on young children's mental health. There are about 43 millions of teachers in primary and secondary levels all around the world, which means the teachers population, is of public health significance. Since due to shortage of mental health professionals, school teachers can make important contribution in promotion of mental health of children.*

Aim: *A descriptive study was conducted among teachers of selected Govt. Primary Schools of District Bilaspur H.P. Main aim of the study was to assess the knowledge of school teachers regarding Nail Biting, Eating Disorders and Mental Retardation and to find out the association of knowledge of teachers with their selected demographic variables.*

Methodology: *Quantitative approach and descriptive research design was used in the study. Sample sizes of 19 primary school teachers were selected by using consecutive sampling technique. Knowledge of study sample regarding risk factors, signs and symptoms, prevention, complications and role of teachers in managing these disorders among school going children were assessed through self-administered questionnaire.*

Results: *The study findings revealed that majority of the participants that is 52.6% were between 31-40 years of age, 68.4% were females, 52.63% were graduates. 97.4% of the participants had knowledge regarding management of nail biting with behavior modification and very few 15.8% knew that this disorder is more common in girls. 73.7% of the participants had knowledge that eating disorders can lead to gastrointestinal obstruction and very few 42.1% knew that eating disorder is an abnormal eating habit and iron deficiency is the main cause of PICA. 89.5% participants had knowledge that mental retardation is a genetic abnormality and very few 5.3%*



knew that a teacher can help a mentally retarded student by creating opportunities for them to succeed.

Conclusion: *Since the study showed that majority of the teachers had average knowledge regarding nail biting, eating disorder and mental retardation. But very few teachers knew their role in handling these disorders. Thus it is concluded that various workshops, conferences, school programmes can be organized for the primary school teachers regarding different behavioral disorders so that they can have better understanding of behavioral disorders. They should be able to recognize their role in managing and in early identification of different behavioral disorders in children at school level.*

Keywords: *Knowledge, Nail Biting, Eating Disorders, Mental Retardation.*

INTRODUCTION

Children's are tomorrow's future. Great emphasize is being given on children these days because they constitutes 35-45% of world's population. The future of any country is affected by the mental health of its young people. However, regardless of geographical region or their economical status nearly one in five children and adolescents have emotional and behavioral disorders at some point of time in their young lives. The term "behavior disorder" is often seen as less stigmatizing, more acceptable by society and more practical and less severe than the term emotionally disturbed. This term is derived from a behavioral model which states that the teachers can see and describe behavior disorder, but cannot describe emotionally disturbed.

Patel J, Vaghela M, Patni M, Solanki J, Panchal P, Sheikh F et.al conducted a study aims to assess the knowledge regarding behavioral disorders and its prevention among 100 primary school teachers. The research design adopted was Non experimental descriptive research design and non-probability convenient sampling technique was used for data collection. The study was conducted in selected primary school of Ahmadabad. Data collection tool consisted semi-structured knowledge questionnaire with multiple choice questions. Data was analyzed through descriptive and inferential statistics. The study revealed that 68% of the samples had good knowledge, 30% had average knowledge and 2% had poor knowledge. Mean score regarding behavioral disorder and its prevention was 21.87. Among demographic variables Gender, Age, Religion, Education, Monthly income, Residing area, Type of family, Job pattern, any family history of behavioral disorder and Have you taken any training for prevention and management of behavior disorder? , it was found that there was association between any training and knowledge of teachers. Chi- square value was 6.713, and calculated P value was 0.0349 which was less than 0.05 which indicates that it was significant.¹



Nail biting or onychophagia is a common stress-relieving oral habit. The habit of biting one's nails is commonly observed in both children and young adults. Need of biting fingernails is related to a psycho emotional state of anxiety. A nail biting child exhibits an evolutionary disturbance related to the oral stage of psychological development. Among several treatment measures to stop nail biting, some focus on behavior changes and some focus on physical barriers to nail-biting. To control the nail biting habit patient must be motivated. Treatment is not required in case of mild onychophagia. In serious cases treatment should involve removal of the emotional factors inducing the habit. In majority of cases a little more attention, love, affection, and comprehension are enough to break the habit.²

There are no large scale prevalence studies on onychophagia, so epidemiological data on this is limited. This may be because onychophagia is often not considered a disorder at all and medical attention is generally not sought. Onychophagia usually develops in childhood, after the age of 3 to 4 years. In America, the prevalence of onychophagia in preschool children was reported to be 23 per cent. It increases to reach a peak in adolescence and decreases thereafter as many individuals discontinue the habit. This is supported by a study which reports a prevalence of 20–33% in 7 to 10-year-old children, increasing to 45% in adolescence, but with only 21.5% of men having onychophagia. In India, a lower prevalence (12.7%) has been reported, with girls being more affected than boys. In an Iranian study on a community sample of school going children, the rate of onychophagia in boys and girls was 20.1% and 24.4%, respectively, with 36.8% (3–44.2) of these children having a positive family history of nail biting in at least one member.³

Eating disorders (EDs) can be described as severe disturbances in eating behavior and body weight. EDs are frequently found in adolescents and young adults. Eating disorders can be sometimes severe. They may lead to somatic and multiple psychiatric complications. These disorders are likely to have an impact in terms of quality of life and even mortality. Indeed, individuals with EDs have significantly elevated mortality rates, in particular with anorexia nervosa (AN).⁴

In 94 studies with accurate ED diagnosis, the weighted means (ranges) of lifetime ED were 8.4% (3.3–18.6%) for women and 2.2% (0.8–6.5%) for men. The weighted means (ranges) of 12-month ED prevalence were 2.2% (0.8–13.1%) for women and 0.7% (0.3–0.9%) for men. The weighted means (ranges) of point prevalence were 5.7% (0.9–13.5%) for women and 2.2% (0.2–7.3%) for men. According to continents, the weighted means (ranges) of point prevalence were 4.6% (2.0–13.5%) in America, 2.2% (0.2–13.1%) in Europe, and 3.5% (0.6–7.8%) in Asia. In addition to the former, 27 other studies reported the prevalence of EDs as broad categories resulting in weighted means (ranges) of total point prevalence of any EDs of 19.4% (6.5–36.0%) for women and 13.8% (3.6–27.1%) for men.⁴



According to American Association on *Mental Retardation* (AAMR) as “significantly sub-average general intellectual functioning accompanied by significant limitations in adaptive functioning in a least two of the following skills areas: communication, self-care, social skills, self-direction, academic skills, work, leisure, health and/or safety.

According to the World Health Organization overall prevalence of Mental retardation (MR) is 1-3% in the global scenario. This suggests the magnitude of the problem in terms of the economy for a developing country like India. Mental retardation also produces psychological, social and financial distress to the whole family, particularly parents, as they are usually the only constant caretakers. Mothers being the primary caregivers for their children suffer more psychological distress than other members in their families. Studies from different countries on parents of children with disabilities suggested that 35-53% of mothers of children with disabilities have symptoms of depression. The prevalence of depression and anxiety in mothers is said to be affected by several demographic and disease related factors which differ from culture to culture across the world. In the Indian society, it is mostly the mothers of the mentally retarded children who bear the burden and stress of upbringing an underprivileged child.⁵

Parikh N, Parikh M, Vankat G, Solanki C, Banwari G, Sharma P conducted a study on Knowledge and attitudes of secondary and higher secondary school teachers toward mental illness in Ahmedabad. Five hundred and twenty teachers from English medium schools of Ahmedabad city were assessed by a self-reported, predesigned and pretested 25 item questionnaire, the first 15 of which assessed their knowledge about mental illnesses and the remaining 10 pertained to negative attitudes. Results revealed that 79.4% of teachers were 45 years or less, 77.5% were female teachers and 86.9% were married. 76% of teachers scored <7 out of 15 which points toward majority of them having inadequate knowledge. 63.6% scored 5 or more on the negative attitudes questionnaire, which points toward high prevalence of negative attitudes. Females had comparatively more knowledge than males about symptoms and management of mental illness, although there was no significant gender difference in the attitude toward mental illnesses. Thus the study concluded that the knowledge of teachers about mental illness is insufficient, and they hold a lot of stigma against mentally ill as demonstrated by their low score in attitude. With training of teachers in mental health, in general and child, and adolescent mental health in particular, they can make an attitudinal shift from being negative to being positive toward the psychologically disturbed.⁶



OBJECTIVES

1. To Assess the Knowledge regarding Nail Biting, Eating Disorders, Mental Retardation among selected Govt. Primary School Teachers of District Bilaspur H.P.

METHODOLOGY

Quantitative research approach and descriptive research design were used to collect the data from selected Govt. primary school teachers of District Bilaspur H.P. Total 19 school teachers; who were willing to participate in the study. The data was collected using Self-administered structured knowledge questionnaire. The questionnaire comprised of two sections; section first consisted questions related to socio demographic variables (age, sex, educational status), section two consisted of questions about knowledge regarding nail biting, eating disorder, and mental retardation. Total 18 knowledge based question were involved in the questionnaire, 6 questions were from nail biting, 7 questions were from eating disorders and 5 questions were from mental retardation. For ensuring the content validity of the tool (structured questionnaire), it was submitted to various experts. Reliability of the tool was computed by using Karl Pearson's correlation coefficient formula. The reliability of structured knowledge questionnaire was found to be 0.77. Since the normal range is 0.5- 0.9 so the tool was found to be reliable.

Ethical approval was taken from the ethical committee of Kol Valley Institute of Nursing. Written permission was taken from Principal of Kol Valley Institute of Nursing and Principal's of selected ten Govt. Primary School of District Bilaspur H.P to conduct the study. Written informed Consent was taken from the study participants and purpose of the research study was explained to the participants and confidentiality of the participants was maintained. The data analyzed by descriptive and inferential statistics by using SPSS (Version-20)

RESULTS:

Demographic characteristics:

The demographic characteristics of primary school teacher are as following (Table-1):

- **Age:** The study finding revealed that the majority of the participants (52.6%) belong to 31-40 year of age and only 5.2% of participants were in 21-30year of age.
- **Sex:** The study finding revealed that the majority of the participants (68.4%) were female and 31.5 % of subjects were males.
- **Education:** The study finding revealed that the majority of the participants (52.63%) were graduates, 26.32 % of participants were diploma holders, and 21.05 were postgraduate.



TABLE -1: Socio demographic characteristics of Government primary school teachers N=19

Variables	Frequency	Percentage (%)
Age (in years)		
21-30	1	5.2%
31-40	10	52.6%
41-50	7	36.8%
51-60	1	5.2%
Sex		
Male	6	31.5%
Female	13	68.4%
Educational Status		
Diploma	5	26.32
Graduation	10	52.63%
Post-graduation	4	21.05%

Table2 represent the knowledge of Government Primary School teachers regarding nail biting. Total six multiple-choice questions were asked and 94.7% of participants knew that nail biting can be managed by doing behavior modification; very few participants (15.8%) has knowledge that nail biting is more common in girls.

TABLE 2: knowledge of Government Primary School teachers regarding nail biting. N=19

Characteristics	Frequency (%)
The disorder of nail biting starts at 3 year of age	8 (42.1)
The problem of nail biting is common in girls	3(15.8)
In the teething stage of milestone development, the disorder of nail biting can occur.	11(57.9)
Parental neglect is the emotional factor responsible for the nail biting.	10(52.6)
The complication of nail biting is worm infestation	16(84.2)
We manage this problem by behaviour modification	18(94.7)



TABLE 3: Knowledge of Government Primary School teachers regarding eating disorder.

N=19

Table3 represent the knowledge of Government Primary School teachers regarding eating disorder. Total seven multiple-choice questions were asked and 73.7% of participants knew that eating disorders can lead to gastrointestinal obstruction; few participants (42.1%) has knowledge that eating disorder is an abnormal eating habit and Iron deficiency is the main causes of PICA.

Characteristics	Frequency (%)
Eating disorder is an abnormal eating habit.	8 (42.1)
1-4 years age group child mostly eat non edible substance	12(63.2)
Non-edible substance eating can lead to malnourishment	10(52.6)
Iron deficiency is the main causes of PICA	8 (42.1)
If any child eat soil or chalk, Engage him/ her in other activity	7(36.8)
Eating disorder can lead to Gastrointestinal obstruction in future	14(73.7)
Zinc/iron test , Hb test help to confirm eating disorder in child	11(57.9)

TABLE 4: Knowledge of Government Primary School teachers regarding mental retardation N=19

Table3 represent the knowledge of Government Primary School teachers regarding mental retardation. Total five multiple-choice questions were asked and 89.5% of participants knew that the main cause of mental retardation is genetic abnormality; few participants (5.3%) has knowledge that a teacher can help a mentally retarded student by creating opportunities for him to succeed.

Characteristics	Frequency (%)
Low IQ is the main characteristic of mental retardation	12(63.2)
child with an IQ score of 50 would be classified as Mentally Retarded	12(63.2)
The main sign of mental retardation is poor learning	5(26.3)
The main cause of mental retardation is genetic abnormality	17(89.5)
A teacher can help a mentally retarded student by creating opportunities for him to succeed.	1(5.3)



DISCUSSION

Behavior problem is the symptomatic expression of problems (Like emotional, maladjustment) suffered by children. The common behavior problems among children are nailbiting, eating disorders, mental retardation, Bed wetting, sleep walking etc. A descriptive study was done to assess the knowledge of primary school teacher regarding nail biting, eating disorders, mental retardation in selected ten school of district Bilaspur, Himachal Pradesh. A self administered structured questionnaire was used to collect data by face to face interview method. Total 19 teachers were included in the study as per total enumeration technique including excluding those who were not willing to participate and were on leave during data collection. The number of participant was low in this study; suggest that we need to focus on student teacher ratio especially in hilly and tribal area. A study done on the impact of number of students per teacher on student achievement shows that the cities with greater number of students, per teacher tend to have a low achievement⁷. In the above mentioned study on an average only 2-3 teachers were in once primary school.

The study finding analyzed and presented in the form of tables. The majority of the teachers (52.6%) belong to 31-40 year of age; 68.4% of participants were female; majority of the participants (52.63%) were graduates. In another study the majority of the participants (31%) belongs to the age group of 51-60; half of the participants (50%) were females; 43% of subjects were M.A Graduate and only 14% were M.Com Graduate. The differences in result findings can be the result of large study sample used in this study (i.e. 100)⁸.

In the present study total three-behavior disorders (Nail biting, Eating disorders & Mental retardation) knowledge assessed from government primary school teachers. Under nail, biting total six questions were asked and easiest question, which was answered by maximum teachers (i.e. 94.7%), was that the nail biting can be managed by behavior modification and only 15.8% of participants know that this is more common in girls. Under eating disorders total seven questions were asked and easiest question, which was answered by maximum teachers (i.e.73.7 %), was that the eating disorder can lead to Gastrointestinal obstruction in future and only 36.8% of participants knows that how we can handle a child while she/he is having soil or chalk. i.e. by engaging him/her in other activity. Under mental retardation total five questions were asked and easiest question, which was answered by maximum teachers (i.e. 89.5 %), was that the main cause of mental retardation is genetic abnormality and only 5.3% of participants knows that a teacher play an important role in mentally retarded student's life and can help him by creating opportunities for him to succeed. There results suggest that there is a need to enhance awareness and knowledge among primary school teacher regarding behavior problem, as most of these disorders are diagnosed in the early childhood.

So, there is a need to more interventional study to enhance awareness and make teachers more skillful to screen out those children who are suffering from any behavioral problems. A study



was to assess the knowledge of primary school teachers regarding behavioral problems and their prevention among school going children with a view to develop an information booklet⁸. Other studies can be done to assess the impact of existing intervention on knowledge of primary school teachers regarding behavioral problem.

CONCLUSION

The study finding reveals that the knowledge regarding nail biting, eating disorders and mental retardation is average among primary school teachers; knowledge can be enhanced by placement of school health nurse, routine health education, arranging of health awareness session etc. In short there is a need to do some interventional studies or to do some revision in teacher's curriculum like addition of behavior problem.

ACKNOWLEDGEMENT

We wish to express our sincere gratitude and regard to the Principal of Kol Valley Institute of Nursing Harnora, Bilaspur H.P. and Principal's of selected Govt. Primary School of District Bilaspur H.P without their dedication, this endeavor might not have been possible. We appreciate the support of our study sample for their willingness and cooperation. We have no words to describe their role and efforts without which it would have been impossible to complete this study.

REFERENCES

1. Patel J, Vaghela M , Patni M, Solanki J, Panchal P, Sheikh F et.al. Study to assess the knowledge regarding behavioral disorders and its prevention among 100 primary school teachers. *Journal Nursing Today*. August 2019 [cited 2020 Apr 24];23 (11):45-58. Available from: <file:///C:/Users/MY%20PC/Downloads/JNT-v11-i1-6-p-45-58.pdf>
2. Sachan A, Chaturvedi T P. Onychophagia (Nail biting), anxiety, and malocclusion. *Indian Journal of Dental Research* 2012 [cited 2020 Apr 24];23:680-2. Available from: <http://www.ijdr.in/text.asp?2012/23/5/680/107399>
3. Singal A, Daulatabad D. Nail tic disorders: Manifestations, pathogenesis and management. *Indian Journal of Dermatology Venereology Leprology* 2017 [cited 2020 Apr 24];83:19-26. Available from: <http://www.ijdvl.com/text.asp?2017/83/1/19/184202>
4. Galmiche M, Déchelotte P, Lambert G, Tavolacci M P. Prevalence of eating disorders over the 2000–2018 period: a systematic literature review. *The American Journal of Clinical Nutrition*. 2019 May [cited 2020 Apr 24]; 109(5):1402-13. Available from <https://doi.org/10.1093/ajcn/nqy342>



5. Nagarkar A, Sharma JP, Tandon S K, Goutam P. The clinical profile of mentally retarded children in India and prevalence of depression in mothers of the mentally retarded. *Indian Journal Psychiatry*.2014 [cited 2020 Apr 24]; 56:165-70. Available from: <http://www.indianjpsychiatry.org/text.asp?2014/56/2/165/130500>
6. Parikh N, Parikh M, Vankar G, Solanki C, Banwari G, Sharma P. Knowledge and attitudes of secondary and higher secondary school teachers toward mental illness in Ahmedabad. *Indian Journal of Social Psychiatry*. 2016 [cited 2020 May 7]; 32:56-62. Available from: <http://www.indjps.org/text.asp?2016/32/1/56/176770>
7. Koc N, Celik B. The Impact of Number of Students per Teacher on Student Achievement. *Procedia - Social and Behavioral Sciences* [Internet]. 2015 Apr [cited 2020 May 22];177:65–70. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S1877042815016894>
8. Rajanidevi S. Hiremath, Dr. Bimlarani. A study to assess the knowledge of primary school teachers regarding behavioural problems and their prevention among school going children in selected government primary schools at bagalkot with a view to develop an information booklet| *International Journal of Innovative Science and Research Technology* [Internet]. [cited 2020 May 22]. Available from: <https://ijisrt.com/a-study-to-assess-the-knowledge-of-primary-school-teachers-regarding-behavioural-problems-and-their-prevention-among-school-going-children-in-selected-government-primary-schools-at-bagalkot-with-a-view-to-develop-an-information-booklet>