A Comparative Study of Anxiety Level of Enuretic and Non-Enuretic Children

Mrs. Kirti Chaurasia1*, Prof. Bhupinder Singh2

ABSTRACT
Enuresis is more commonly known as bed-wetting. Enuresis is diagnosed when children repeatedly urinate in inappropriate places, such as clothing (during the day) or the bed (during the night). In most cases, the child's urination problem is involuntary in nature, and is perceived by the child as an unavoidable loss of urinary control. This condition is most likely a symptom of psychological stress, although physiological causes, such as bladder infection, should not be ruled out. In general, the causes of bedwetting are related to anxiety, life stress, and possibly trauma, both inside and outside the home. Psychological factors such as a stressful life situation (death of a parent) or birth of a new sibling, disturbed family patterns, and delay toilet training, personality characteristics, parenting style, anxiety or presence of other emotional problems may predispose factors of enuresis. Many Children with enuresis experience significant distress or impairment in their social, academic, or everyday lives and the disorder can also drastically affect their families. The aim of the study is to find out the Anxiety level of Enuretic and Non-Enuretic Children. Test Anxiety Scale for Children (TASC) questionnaire made by A. kumar to determine anxiety level administered over 80 (Boys and girls) children of enuretic and non-enuretic. Result showed that there is significant difference in anxiety level of enuretic and non-enuretic children (p<.01).

Keywords: Enuresis (Bedwetting), Psychological stress and Anxiety level

Enuresis is characterized by repeated voiding of urine into the bed or clothing in youth at least 5 years of age, chronologically or developmentally (APA, 2013). For children to meet criteria for enuresis, such voiding, whether involuntary or intentional, must occur twice a week for at least 3 months or result in clinically significant distress or functional impairment. Additionally, this behaviour cannot be attributed to a medication side effect or a general medical condition (e.g., diabetes, epilepsy). Subtypes are identified as nocturnal only (nighttime bedwetting), diurnal only (wetting during the day), and nocturnal and diurnal.
According to the ICCS criteria, enuresis denotes an intermittent (i.e., not continuous) wetting during sleep in children after their fifth birthday. The term nocturnal can be added for clarity (i.e., enuresis and nocturnal enuresis are synonyms). Daytime wetting is termed urinary incontinence, which can be organic (structural, neurogenic or due to other physical causes) or functional. As the vast majority of cases are functional, most children with daytime wetting would be considered to have some form of functional urinary incontinence. According to these criteria, the term diurnal enuresis is obsolete and should be avoided. If children wet during sleep and during the day, they would receive two diagnoses: enuresis and urinary incontinence. The classification of enuresis is simple. Only two aspects need to be considered: the longest dry period and if lower urinary tract symptoms are present:

1. Primary enuresis means that the child has been dry for less than 6 months (or not at all)
2. Secondary enuresis means that a relapse after a dry period of at least 6 months has occurred.

Nocturnal enuresis is an important developmental problem for school age children and it can cause emotional and social problems for the child as well as family (Gomow et al., 1999). Chronic anxiety, impaired self-esteem and delayed developmental steps such as attending camps or sleeping at a friend's house may occur as secondary problems. Frequently, the psychological and developmental damage may actually be more significant and devastating to the child than the symptom of enuresis itself (Fritz et al., 2009).

It is hypothesized that different underlying etiological pathways exist for diurnal and nocturnal enuresis. Based on the greater medical comorbidities and physiological abnormalities observed in children with diurnal enuresis compared to those who experience nighttime wetting, this chapter focuses primarily on nocturnal enuresis (Järvelin et al., 1991; Rushton, 1995).

Enuresis and subclinical bedwetting are common problems experienced by school-age children. Estimates from a large, longitudinal study indicate that at least 20% of first graders experience occasional bedwetting, while 4% wet the bed at least twice a week (Butler et al., 2008). Approximately 10% of school-age children experience nighttime bedwetting compared to the 2% to 3% who experience daytime wetting (McGrath, Mellon, & Murphy, 2000; von Gontard & Nevéus, 2006).

Enuresis is more common in boys than girls, with rates of 9% and 7% in 7- and 9-year-old boys as compared to 6% and 3% in 7- and 9-year-old girls (Byrd, Weitzman, Lanphear, & Auinger, 1996). Early literature suggests that prevalence rates steadily decline as children get older; by adolescence, only approximately 1% to 2% experience enuresis (Feehan, McGee, Stanton, & Silva, 1990; Glazener & Evans, 2004).

Enuresis is a socially embarrassing symptom, with concomitant emotional and behavioural difficulties (Rutter et al. 1973). However, from the studies showing an association between
A Comparative Study of Anxiety Level of Enuretic and Non-Enuretic Children

bedwetting and behavioural/emotional problems it is not clear whether these problems are the cause or the consequence of the enuresis (Hallgren et al. 1957).

Many claims have been made supporting the view that enuresis is a result of social adversity or psychological trauma. These claims have sometimes taken on mythical proportions, such that families have been negatively affected by the attitude that they are themselves to blame, or are at least indirectly responsible for the problem (Gillberg 1995). Enuretic children with behavioural problems are sometimes first referred to psychosocial workers or a psychiatrist in order to treat their behavioural problems in the belief that these are the cause of the bedwetting.

Anxiety and Enuresis

Anxiety is a feeling of apprehension and fear characterized by physical symptoms such as palpitation sweating and feeling of stress is seen in bed wetting children (Elsevier, 2009). A scary dreams as a frightening experience like a horror movies or a ghost story could also lead to bed wetting. Parent should try not to scold or humiliates the child.

Anxiety causing events are anger of the parents, unfamiliar social situations and overwhelming family events such as the birth of the brother or sister. Incontinence is also an anxiety causing event. Another anxiety related reason for bedwetting is stronger bladder contractions leading to leakage in the daytime may cause embarrassment and anxiety which leads to wetting in the night. In our study, especially in the adolescence anxiety causing events are the main reason for enuresis. Some investigators empirically observed that in some children number of bed wettings increases in winter and decreases in the summer (American Psychiatric Association 2000).

Children with enuresis experience a high level of stress, causing those symptoms. Moreover, they have a lower quality of life (Bachmann et al. 2009). In a large population-based study, 36.7% of children consider enuresis highly endorsed as a difficulty, ranking eighth behind other stressful life events (Buttler et al 2008).

Enuresis might also be a risk factor for the psychological well-being of parents, especially the mother, and can compromise their responsiveness towards the child. Mother of children with enuresis report a lower quality of life, in term of anxiety and depression, more stress and more intensity of pain than mother of healthy children (Egemen et al. 2008 and De Bruyne et al. 2009). Moreover, they appear to be less accepting and more punishing than mothers of continent children (Coppola et al 2011).

Enuresis can be stressful for the parents and other family members. Feelings of the parents may range from being worried to frustrated, sad to angry and even tired. Children may be able to sense these feelings in parents. Children may feel responsible for their parents' reactions and for upsetting the household. It is important to take the positive steps together as a team (parent and child) in getting through the problem of enuresis. Together, parents and
A Comparative Study of Anxiety Level of Enuretic and Non-Enuretic Children

children should work on ways to diminish feelings of failure and look for ways to encourage good feeling (Warzak, 1993)

**Objective**
The present study was designed with the following objectives:
- To compare the Anxiety level of Enuresis and Non-Enuresis children.

**Hypothesis**
For the present research work following hypothesis has been formulated:
- Enuretic Children and Non-Enuretic Children differ significantly in Anxiety level.

**Variables**
In the present research work the variables used are as follows:
- **Independent variable**: Enuretic and Non-Enuretic children.
- **Dependent variable**: Anxiety level.
- **Controlled Variable**: (1) 4th-5th standard student. (2) Age 8-10 years.

**Tools**
Test Anxiety Scale for Children (TASC) questionnaire made by A. Kumar to determine the Anxiety level. It will help to determine the anxiety level of boys and girls of 4th-5th standard students belonging to both enuretic and non-enuretic children.

**Sample distribution:**

| Name of groups          | Boys | Girls | Total |
|-------------------------|------|-------|-------|
| Enuretic children       | 20   | 20    | 40    |
| Non-Enuretic children   | 20   | 20    | 40    |
| **Total**               | 40   | 40    | 80    |

**METHODOLOGY**
The researcher had visited the paediatrics & counselling centres of Sagar district and collected the information of Enuretic children. Non-Enuretic children were selected from Aaryekanya school Sagar District. 40-40 Subjects are drawn from enuretic and non-enuretic children, through purposive sampling and they assigned into 4 groups. The questionnaire of Test Anxiety Scale for Children was filled by children and scored as per direction of scoring key provided in the manual. The statistical calculation has used Mean, Standard deviation and t-ratio for verification of hypothesis. The conclusion was drawn and further suggestion was given.

**Analysis of Result**
For the present research, “A Comparative study of Anxiety level of Enuretic and Non-Enuretic Children” the data collected from the specified sample has been classified, tabulated and the analysis of the result is presented in tables. T-ratio scores indicate that the main effect of Anxiety level of Boys and Girls (Enuretic children= B-20.35, G-19.80) (Non-Enuretic children= B-12.90, G-13.85) was significant t-ratio (38) 2.02 P<.01. (Table 1, 2). The main
effect of Anxiety level of both (Enuretic children= 20.75 & Non-Enuretic children= 13.75) was significant t-ratio (78) 2.64 P<.01 (Table 3).

Table no. 01: Showing the comparative result of Anxiety level of Enuretic and Non-Enuretic children (Girls)

| Types of group          | N  | Mean | S.D. | Df  | t-ratio | Significant |
|-------------------------|----|------|------|-----|---------|-------------|
| Enuretic children       | 20 | 19.80| 4.78 | 38  | 4.55    | P<.01       |
| Non-Enuretic children   | 20 | 13.85| 3.85 |     |         |             |

Level of significant at .05- 2.02
Level of significant at .01- 2.71

Table no. 02: Comparative result of Anxiety level of Enuretic and Non-Enuretic children (Boys)

| Types of group          | N  | Mean | S.D. | df  | t-ratio | Significant |
|-------------------------|----|------|------|-----|---------|-------------|
| Enuretic children       | 20 | 20.35| 3.59 | 38  | 6.89    | P<.01       |
| Non-Enuretic children   | 20 | 12.90| 3.11 |     |         |             |

Level of significant at .05- 2.02
Level of significant at .01- 2.71

Table no. 03: Comparative result of Anxiety level of Enuretic and Non-Enuretic children

| Types of group          | N  | Mean | S.D. | Df  | t-ratio | Significant |
|-------------------------|----|------|------|-----|---------|-------------|
| Enuretic children       | 40 | 20.75| 4.23 | 78  | 8.04    | P<.01       |
| Non-Enuretic children   | 40 | 13.75| 3.57 |     |         |             |

Level of significant at .05- 1.99
Level of significant at .01- 2.64

DISCUSSION
The data is analysed in the form of Mean, Combined Mean, Standard Deviation and t-ratio are computed separately. From the above result, it is clear that there is significant difference between anxiety level of enuretic and non-enuretic children. The present study is an exploratory one and it reveals several important facts which may beneficial to enuretic children and their parents.

In total anxiety scores of enuretic children are found high compare to non-enuretic children it is show the table-(1, 2 & 3). Some studies found that nocturnal enuresis frequency was higher in boys than girls (Ozkan et al., 2010). Anxiety related reason for bedwetting is stronger bladder contractions leading to leakage in the daytime may cause embarrassment and anxiety which leads to wetting in the night. In our study, especially in the adolescence anxiety causing events are the main reason for enuresis. Some investigators empirically observed that in some children number of bed wettings increases in winter and decreases in the summer (American Psychiatric Association 2000).
A Comparative Study of Anxiety Level of Enuretic and Non-Enuretic Children

Many Children with enuresis experience significant distress or impairment in their social, academic, or everyday lives and the disorder can also drastically affect their families. Previous studies found that enuretics in the age range of four to six years, with 88.8 percent being nocturnal. He found developmental delays and stress in early childhood, such as parental ill-health, conflicts and sibling rivalry were significant associate of enuretic children. (Agarwal et al., 1978).

Enuresis is a prevalent and potentially distressing experience for children and their parents (Butler, 1994; 1998). The researches shows that around 15–22% of boys and 7–15% of girls wet the bed at 7 years of age, with almost 3% wetting more than twice a week (Butler, Golding & Northstone, 2005).

Nevertheless, it should be acknowledged that the results of this study are based on a limited sample of Enuretic and Non-Enuretic children of Sagar District (M.P.). It may useful to conduct study on larger sample of different areas of India for future studies.

CONCLUSION
There is significant difference in Anxiety level of Enuretic and Non-Enuretic children. This is due to the fact the obtained value of t-ratio is statistically significant since it is high than the value for significance even at .01 level.

Acknowledgments
The author appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interests: The author declared no conflict of interests.

REFERENCES
Agarwal, G., Saksena, N. K., & Singh, S. B. (1978). Child rearing attitude of mothers of emotionally disturbed and maladjusted children. Indian journal of clinical psychology 5, 111-16.
American Psychiatric Association. (2013).Diagnostic and statistical manual of mental disorders, 5th ed., text rev. Arlington, VA: American Psychiatric Publishing.
Bachman, C., Lehr, D., Janhsen, E., Sambach, H., Mueslan, H., Van Gontard, A.et al. (2009) Healthy related quality of life of a tertiary referral center population with urinary incontinence using the DCGM-10 questionnaire. J Urol; 182:2000-6.
Butler, R. J., Golding, J. &Northstone, K. (2005). Nocturnal Enuresis at 7.5 year old prevalence and analysis of clinical. J. unit, 96: 404-410.
Butler, R., & Heron, J. (2008). An exporation of children’s view of bedwetting at a years. Child Care heath Dev.; 34: 65-70.
A Comparative Study of Anxiety Level of Enuretic and Non-Enuretic Children

Butler, R.J., Redfern, E. J. & Holland, P. (1994). Children’s notion about enuresis and the implications for treatment. *Scandinavian journal of Urology and Nephrology*, 163 (suppl.) 39-47.

Butler, U., Joinson, C., Heron, J., von Gontard, A., Golding, J., & Emond, A. (2008). Early childhood risk factors associated with daytime wetting and soiling in school-age children. *Journal of Pediatric Psychology*, 33, 739–750.

Byrd, R. S., Weitzman, M., Lanphear, N. E., & Auinger, P. (1996). Bed-wetting in US children: Epidemiology and related behavior problems. *Pediatrics*, 98, 414–419.

Coppola, G., Costantini, A., Gaita, M., Saroulli, D., (2011). Psychological correlates of enuresis: care control study on an Italian sample. *PediatrNephrol*; 26: 1829-36.

Egemen, A., Akil, L., Canda, E., Ozyurt, B.C., Eser, E. (2008). An evaluation of quality of life of mothers of children with enuresis nocturna. *PediatrNephrol*; 23: 93-8.

Feehan, M., McGee, R., Stanton, W., & Silva, P. (1990). A 6-year follow-up of Enuresis: Prevalence in adolescence and consequences for mental health. *Journal of Paediatrics and Child Health*, 26, 75–79.

Fritz, G., Rockney, R., Bernet, W., Arnold, V., Beitchman, J., & Benson, R.S. (2004). Practice parameter for the assessment and treatment of children and adolescents with enuresis. *J Am Acad Child Adolesc Psychiatry* 43:1540-50.

Glazener, C.M.A., & Evans, J.H.C. (2004). Simple behavioural and physical interventions for nocturnal enuresis in children. *Cochrane Database of Systematic Reviews*, 2. Article CD003637. doi: 10.1002/14651858.CD003637.

Gomow, B., Vurgun, N., Lekili, M., Iwnan, A., Moezzinorlu, T., & Boyoksu, C. (1999). Prevalence of nocturnal enuresis and accompanying factors in children aged 7-11 years in Turkey. *ActaPaediatr* 88:1369-72.

Järvelin, M. R., Moilanen, I., Kangas, P., Moring, K., Viikeväinen-Tervonen, L., Huttunen, N. P., & Seppänen, J. (1991). Aetiological and precipitating factors for childhood enuresis. *ActaPaediatricaScandinavica*, 80, 361–369.

McGrath, M. L., Mellon, M. W., & Murphy, L. (2000). Empirically supported treatments in pediatric psychology: Constipation and encopresis. Journal of Pediatric Psychology, 25, 225–254.

Ozkan, S., Durukan, E., Iseri, E., Gurocak, S., Maral, I., & Bumin, M.A. (2010). Prevalence and risk factors of monosymptomatic nocturnal enuresis in Turkish children. *Indian J Urol*, 26:200-5.

Von Gontard, A. (2012). The impact of DSM-5 and guidelines for assessment and treatment of elimination disorders. *European Child and Adolescent Psychiatry*, 22(Suppl. 1), 61–67.

Warzak, W., 1993. Psychosocial Implications Nocturnal Enuresis. *Clinical Pediatrics*, (199): 190-196.

**How to cite this article:** Chaurasia K, & Singh B (2017). A Comparative Study of Anxiety Level of Enuretic and Non-Enuretic Children. *International Journal of Indian Psychology*, Vol. 5, (1), DIP: 18.01.002/20170501, DOI: 10.25215/0501.002