

Effect of yoga on bed wetting in children | study



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EFFECT OF YOGA ON BED WETTING FREQUENCY IN CHILDREN

–A Pilot study

ABSTRACT

Bed wetting or Nocturnal enuresis is a common problem in children. It refers to the unintentional passage of urine during sleep. Bed wetting is normal till the age of 5yrs, if continues over the age is due to physical as well as psychological connection. 15% of populations have this problem globally. Yoga is a traditional Indian medicine which was now used up for many clinical conditions. The aim of this study is to find out the effect of yoga on reduction of bed wetting frequency in children. 10 children with complains of nocturnal enuresis were selected by purposive sampling method. Structured yoga programme was given to the children. The yoga programme was conducted alternate days for 4 weeks. Voiding diary was used to evaluate the improvement on bed wetting frequency. Following the 4 weeks of programme the collected data's were analyzed using the descriptive statistical method. This study finds that yoga is useful method in reduction of bed wetting frequency. Thus the study concludes that yoga play a major role in reduction of bed wetting in children and it also promotes psychological and moral boost to the children.

Key words: Yoga, Bed wetting, Voiding diary. Nocturnal enuresis.

INTRODUCTION

Bedwetting is also called as nocturnal enuresis, it is the involuntary discharge of urine in children during night or during sleep¹. When the child

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tends to void involuntarily for at least three times a week after 5 years without any congenital defects is termed as nocturnal enuresis. 2

In India about 15 million children were having bed wetting problem. It is one of the commonest problems in young children. Usually it is found more common in boys³. 1. 6% to 15% of children wet their bed during night, it is found that 10% to 15% of five-year-old children and 6% to 8% of eight-year-old children, and it declines to 1% to 2% by 15 years of age⁴.

Nocturnal enuresis is one of the common urological problem. Actual cause of the bed wetting is unknown. It was considered to be one of the most disabling problems during child physical as well as psychological development. Though it looks a simple problem there may be various other conditions underlying like, neuromotor problems, attention difficulties, learning disabilities, and the possibility of being the cause of psychological status. 5, 6, 7

Bed wetting without day time symptoms are termed as mono-symptomatic nocturnal enuresis whereas bed wetting occurs both day and night are termed it as Non-monosymptomatic 9. Delvin conducted a population survey on 1800 Irish children with the age of 4—14 years and he found that 33% of children void less than once a week, 11% voids once a week and 25% voids two to four times per month¹⁰. Bed wetting will cause enormous emotional impact in child as well as their parents. Children with enuresis are commonly punished and are at the risk of emotional and physical abuse¹¹. Parents should understand that bed wetting is never done on purpose or not done as laziness 8.

Many studies have identified the impact of bed wetting may cause anxiety, embarrassment, loss of self-esteem, concentration difficulty, learning difficulty and may impact the psychological status of the children¹².

Bedwetting tend to run in families. Many children who wet the bed have a parent who did, too. Most of these children stop bedwetting on their own at about the same age the parent did. ¹³

Most children outgrow bed-wetting without treatment ⁴ . However, some child may need some additional assistance from physician. Bedwetting is typically seen more as a social disturbance than a medical disease because it creates embarrassment and anxiety in the child and conflicts with parents. The single most important thing parents should do is to be supportive and reassuring rather than blaming and punishing. The many treatment options range from home remedies to drugs, even surgery for children with anatomical problems ¹⁴ .

Primary management of bed wetting is behavioral modification and positive reinforcement¹⁵. Yoga is an ancient tradition that has been westernized and often practiced for its proposed health benefits. Yoga therapy was described by Indian authors 2500 years ago, but it still plays an important role in everyone's life ¹⁶ . It often translates union of the mind, body and spirit¹⁷. Yoga is considered as a mind and body exercises, it helps to unite the body and mind; it brings the physiological state of the body and shape emotions, thoughts and attitudes¹⁸.

Yoga becomes a promising therapy for the children. It plays an important role in development of several aspects of cognition and executive

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functions¹⁹. Certain yoga postures or asanas have proved to help the child to overcome the bed wetting. Though there were extensive articles on benefits of yoga in bed wetting, still there is no study to prove its efficacy. There is no head to head comparison of the yoga on its role on nocturnal enuresis. This pilot study tries to identify the effectiveness of yoga in the nocturnal enuresis. The study hypothesized that there will be no significant difference in reduction of Bed wetting frequency following yoga therapy.

METHODOLOGY

Subjects were selected through purposive sampling method with descriptive study design. 10 children complains of bed wetting were included in the study. Prior to the selection of the children for the study, a clear analysis was done by urologist and an approval from pediatrician who states that there was no other medical reason for the nocturnal enuresis. A clear examination was done by the senior physiotherapist to rule out any bony deformities (Structural). Clear instruction to the children and the mother about the benefits of yoga and its physiological role on urinary system was clearly explained. Informed consent was obtained from the mother. Upon obtaining the concern 10 male children were included with the age group of 6–10 years, having normal life style, complains of nocturnal enuresis at least 3 times in a week, well-nourished children, school going children and those who are willing to do yoga, and those who wish to continue yoga regularly. The study excludes mental retarded children, children with urinary infections, mal nourished, underweight and any other structural deformity. A detailed session on yoga and its benefits was given to all children and the mother / guardian. Queries and Questions raised by the parents were

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addressed, and advised all parents to bring the children compulsory. The yoga programme was conducted for 4 weeks of duration, and a session of the program was conducted alternate days, each sessions consist of 30—45 minutes of duration. All subjects were taught yoga postures (i. e asanas). Six asanas were chosen for this study, the asanas were chosen as per discussion with the stalwarts in yoga and yoga guru. Asanas were trained to the children by the researchers, all the postures / asanas have to sustain for ten to fifteen counts. For the first three sessions the children were taught to do asanas and difficult postures were assisted by the researcher, later, once they mastered the technique, they are all practiced to do these postures without support. List of asanas trained to the children are Konasana, Sakrasana (Standing), Yoga mudra, Sarvangasana, Savasana , Nisbandabhava. Before commencement of the study a warm up programme was given with Suryanamaskar for 10 mins. Once they completed then the children were initiated the asanas. At the end of the program savasana was given to relax the muscles. The programme was conducted initially in groups, all the queries were cleared on every session. This study was accepted by the Institutional ethical committee. There was no harm involving the participants in this study. There was no drop out in this study. Voiding dairy given to the mother and asked them to fill up when their children does bed wetting. The data were collected in likert scale (i. e 0—5 scale), and the data are used for the analysis and it was tabulated in percentage.

RESULT AND DISCUSSION

The data was analyzed by using SPSS statistical package, 19. 1. The table I shows the general information about the children. All children included in the <https://assignbuster.com/effect-of-yoga-on-bed-wetting-in-children-study/>

study are males. There are various studies suggest that male children are mostly involved in nocturnal enuresis. Voiding history noted in these children is only during sleep and at the night time only. 80% Parents of the children has the family history of nocturnal enuresis. We also gathered that 85 % of parents scold or punish their children for the bed wetting.

Table II shows the voiding history of the participants which was shown in percentage. It shows that 57 % of participants are with the age group of 6, & 8 years. 4 times in a week is the maximum voiding frequency by the children. Two children has the history of voiding 2 times in a week, others are having the frequency of more than 3 times per week.

Table III shows the voiding history before the yoga programme and after the yoga programme. The table value shows that there was a significant difference existed between the groups. There was a marked difference between the pre and post test values.

The result of the study revealed that the yoga programme has showed a marked reduction on bed wetting frequency in children. Yoga helps to promote retention control, regular practicing helps to postpone urination by few seconds to few minutes.

Bed wetting is a shameful situation for children as well as parents, but it is not a serious problem, and it is common in boys²⁰. Yoga play a major role in control of bed wetting, the retention exercises should be increased gradually without putting pressure on the children, and the exercises would help to increase the control in bladder muscles and also increases bladder

capacity²⁰. Yoga helps to strengthen muscles which control urination. It also helps in increasing bladder capacity.

Regular practicing yoga will stimulate the nervous system, and thereby influence the micturition system in the spinal cord lead to better control and coordination of the process²¹. Yoga also helps in reduction and prevention of the psychosomatic stress disorders ²². Studies found that yoga help in improving the bladder control in patients with urinary incontinence. Few researches conducted for women who show that yoga improves pelvic health and helps in gaining control over the urine leakage. Yoga programme directs the mind awareness and increases relaxation and relieves anxiety and stress²³.

The study confirms that the yoga programme will improve the bladder control in children and it was a beneficial one for the treatment of bed wetting. Regular practicing of yoga provides additional benefits like improvement of flexibility and also help to improve the concentration, memory and reduction in stress level. However, the study was done in a small group, the results can't be generalized, and there was an elaborate and large group of participants needed. The other factors like psychological or pharmacological factors were not considered in this study, future study need a holistic approach in the management.

REFERENCES:

1. Dalton R. Enuresis. In: Behrman R, Kliegman R, Arvin A, Nelson W, editors. Nelson Textbook of Pediatrics. 15th edn . Philadelphia: WB Saunders; 1996. pp. 79–80.

2. Forsythe, W. I., Butler, R. J.: Fifty years enureticalarms. Archives of Disease in Childhood, 64: 879, 1989
3. Caldwell PH, Edgar D, Hodson E, Craig JC. Bedwetting and toileting problems in children. Med J Aust. 2005; 182(4): 190–195
4. Mark Feldman et al., Management of primary nocturnal enuresis, Paediatr Child Health Vol 10 10(10): 611–614.. December 2005.
5. von Gontard A, Freitag CM, Seifen S, Pukrop R, Röhling D. Neuromotor development in nocturnal enuresis. Dev Med Child Neurol. 2006; 48(9): 744–750.
6. Okur M, Ruzgar H, Erbey F, Kaya A. The evaluation of children with mono symptomatic nocturnal enuresis for attention deficit and hyperactivity disorder. Int J Psychiatry ClinPract. 2012; 16(3): 229–232.
7. Coppola G, Costantini A, Gaita M, Saraulli D. Psychological correlates of enuresis: a case-control study on an Italian sample. PediatrNephrol. 2011; 26(10): 1829–1836
8. American Psychological Association. Diagnosis and Statistical Manual of Mental Disorders. 4th ed. Washington, DC: American Psychological Association; 2000. pp. 108–110.
9. vanGool, J. D., Nieuwenhuis, E., ten Doeschate, I. O. et al.: Subtypes in monosymptomatic nocturnal enuresis. II. Scandinavian Journal of Urology & Nephrology Supplementum, 202: 8, 1999
10. Devlin, J. B.: Prevalence and risk factors for childhood nocturnal enuresis. Irish Medical Journal, 84: 118, 1991
11. Kaplan, Harold, I and Sadock, M. D, Synopsis of Psychiatry, eight edition, 1998, Baltimore: Williams and Wilkins.

12. Moffatt ME. Nocturnal enuresis: psychologic implications of treatment and non-treatment. *J Pediatr.* Apr 1989; 114(4 Pt 2): 697-704.
13. Katz ER, DeMaso DR. Enuresis (bed-wetting). In: Kliegman RM, Behrman RE, Jenson HB, Stanton BF, eds. *Nelson Textbook of Pediatrics.* 19th ed. Philadelphia, Pa: Saunders Elsevier; 2011: chap 21.3.
14. Ramakrishnan, K, Evaluation and treatment of enuresis, *American family physician* 2008, vol 78, 4, 489-496.
15. Glazener CM, Evans JH. Simple behavioural and physical interventions for nocturnal enuresis in children. *Cochrane Database Syst Rev.* 2004.
16. Garfinkel M, Schumacher H. Yoga Effects. *Rheum Dis Clin North Am.* 2000; 26: 125-32.
17. Satchidananda S. *The Yoga Sutras of Patanjali.* Yogaville, VA: Integral Yoga Publications; 2005.
18. Cowen VS, Adams T. Physical and perceptual benefits of yoga asana practice. *J BodyMovTher.* 2005; 9: 211-9.
19. Chen TL, Mao HC, Lai CH, Li CY, Kuo CH: The effect of yoga exercise intervention on health related physical fitness in school-age asthmatic children. *Hu Li ZaZhi*2009, 56: 42-52.
20. Nadeem Naqvi, 2011, Bed wetting problem: How to deal with bed wetting, <http://www.studyvillage.com/resources/2899-Bedwetting-problem-How-deal-with-bed-wetting.aspx>.
21. Udupa, K. N, 2000, *Stress and its management by yoga.* New delhi, MotilalBanarisdass.

22. Huang, Alison J.; Jenny, Hillary E.; Chesney, Margaret A.; Schembri, Michael; Subak, Leslee L. A Group-Based Yoga Therapy Intervention for Urinary Incontinence in Women: A Pilot Randomized Trial *Female pelvic medicine& Reconstructive surgery* May/June 2014- Volume 20-Issue 3 pp: 123-184
23. Huang, Alison J.; Jenny, Hillary E.; Chesney, Margaret A.; Schembri, Michael; Subak, Leslee L. A Group-Based Yoga Therapy Intervention for Urinary Incontinence in Women: A Pilot Randomized Trial *Female pelvic medicine& Reconstructive surgery* May/June 2014- Volume 20-Issue 3 pp: 123-184.

TABLE I

General Information's

S. N	Characteristics	Percentage	Mean	S. D
1	Age in years			
6	30	7.5	1.35	
7	20			
8	30			
9	10			
10	10			

2 Food habit

Veg	60	7. 666	1. 63
Non Veg	40	7. 5	1. 29

3 Family history

Parents have Bed wetting history	80	-	-
Both Parents	30	-	-
Father	30	-	-
Mother	20	-	-

Table II

VOIDING HISTORY

Age of Children in years Previous Voiding History in a week

Number Percentage %

6 3 42.
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6	4	57. 143
6	4	57. 143
7	3	42. 857
7	2	28. 571
8	4	57. 143
8	3	42. 857
8	3	42. 857
9	3	42. 857
10	2	28. 571

Table III

VOIDING HISTORY

Age of Children in years	Before Yoga	After Yoga		
Number	Percentage %	Number	Percentage %	
6	2	7	1	20
6	4	13	1	20
6	4	13	0	0
7	3	10	0	0
7	2	7	0	0
8	4	13	1	20
8	3	10	1	20
8	3	10	0	0
9	3	10	1	20
10	2	7	0	0
Total	31	100%	5	100 %

1