Research Paper

Evaluate the effectiveness of need based intervention on psychological parameter among children with Nocturnal enuresis

Nursing

KEYWORDS :

Dr. C. Susila	MSc(N),PhD.,.Principal,Bilroth College of Nursing, Chennai-95
Mrs.C.Starmine	MSc (N), PhD Scholar, The TN MGR Medical University, Chennai-32
Dr.R.Shankar Shanmugam	MSc (N), PhD,MBA, Coordinator-Nursing, Education&PME/ Nursing Tutor,Tamilnadu Govt Multi Super Speciality Hospital, Chennai-2

ABSTRACT
Nocturnal enuresis is the indolently discharge of urine at night by a person with no physical diseases at the age when they could be expected to be dry. "An experimental study to evaluate the effectiveness of need based intervention on selected psychological parameter among children with nocturnal enuresis in selected settings". Quantitative research approach was adapted, quasi experimental research design which includes control group and manipulation with no randomization. The setting of the study was Child Guidance Clinic, Government Institute of Child Health, Egmore, Chennai. The sample consisted of 40 children in experimental and control who were diagnosed to have nocturnal enuresis and met the inclusion criteria were chosen by Non probability purposive sampling technique. The tool used was a demographic variables and rating scale for assessing psychological parameter (stress). The calculated paired 't' value of $t = 5.192$ was found to be statistically significant at p<0.001 level. This clearly indicates that after the administration of need based intervention there was significant decrease in the level of psychological parameter (stress) in the experimental group. The calculated paired 't' value of $t = 1.808$ was not found to be statistically significant and this clearly indicates that there was no significant reduction in the level of psychological parameter (stress) in the control group. The calculated unpaired 't' value of $t = 5.867$ between the experimental and control group was found to be statistically significant at p<0.001 level. This clearly indicates that the need based intervention administered to the children with nocturnal enuresis was found to be effective to reduce the psychological parameter (stress) among children in the experimental group than the children in the control group.

Introduction

Bedwetting is a common and particularly uncomfortable, behavioral disorder. Beyond the age of five, more in boys than girls. According to the clinical criteria of international classification of disease, Nocturnal enuresis is the indolently discharge of urine at night by a person with no physical diseases at as age when they could be expected to be dry. Nocturnal enuresis should be carefully evaluated because it may be a large impact on the child or young persons and their family. Nocturnal enuresis, also called bed wetting, it happen during the night while the child in sleeping. (ICD-10 research criteria, German Society for Child and Adolescent Psychiatry)

Recent epidemiological studies indicate that from 17% to 22% of children and among people less than 19 years of age suffer from developmental emotional (or) behavioral problem. Nocturnal enuresis (PNE) is a common problem in worldwide. Epidemiological surveys in western countries gave a prevalence in boys of 13 – 19 % at 5 years old and 1 -2 % at 16 years old, while the prevalence in girls were 9-16% and 9-20% in boys at 5 years old and 1-2% in the late teenage years.

It is important to take positive steps together as a team (Parent and child) in getting through the problem of enuresis. Motivational therapy involves reassuring the parent and the child, removing guilt with bed wetting and providing emotional support to the child. The success result for children receiving motivated therapy has been estimated 25% to 80% with a relapse rate of approximately 5%.

The children had experienced stress as a result of nocturnal enuresis, but success on the programme dramatically reduced their stress and ability to socialise with other

children. The study affirmed the value of the nurse as the facilitator of this programme. The study has contributed to the knowledge base on the management of nocturnal enuresis in a Community-based nurse-managed programme.

Richard J.Butler etal (2012) conducted study on psychological impact of nocturnal enuresis on children and young people ,quantitative and qualitative approaches adapted .the study functionings explored included social adjustment, emotional state, personality. Self concept and behaviour. Generally the findings suggest children do experience bedwetting as distressing .this children most vulnerable to psychological distress as a consequence of bedwetting are identified.

M.L.Choizza,L.Bernardinelli etal (2011) conducted study to estimate the prevalence of nocturnal enuresis among school children .a random cluster sampling scheme was used to obtain a sample of primary and secondary school children for each socio economic level was sampled in each cities ,42 school covered and 9086 children with 4-14 years were surveyed. Self administered questionnaires were used to investigate the precipitating factors. The prevalence was 3.8% it decrease proportionately with increase age.4.2% in boys and 3.4% in girls. This study suggests a low level of parental and medical knowledge particularly negative effects of a delayed resolution of the problem.

Thus the researcher decided to find the effectiveness of need based intervention on stress among Nocturnal enuresis children.

Objectives
- To assess the pre test level of psychological parameter (stress) among children with Nocturnal enuresis in experimental and control group.
- To evaluate the effectiveness of need based intervention on psychological parameter ((stress) among children with Nocturnal enuresis

Assumption
The need based intervention may have effect on psychological parameter (stress) among children with Nocturnal enuresis

Methodology
Quantitative research approach was adopted for this study.

The research design selected for the study was quasi experimental research design which includes control group and manipulation with no randomization. The setting of the study was Child Guidance Clinic, Government Institute of Child Health, Egmore, Chennai. The sample consisted of 40 children who were diagnosed to have nocturnal enuresis by the screening and confirmed by an Urologist, psychologist and psychiatrist and met the inclusion criteria were chosen for the study by Non probability purposive sampling technique.

Tools of the study; it consists of two sections;

Section-A; Semi structured questionnaires to assess the background variable which consisted of items related to age, gender, educational level of child, number of siblings, parent's education, parent's occupation, type of work. The investigator has collected the responses by interview method and bio physiological assessment.

Section B; Rating scale for assessing stress among children with nocturnal enuresis used to assess the level of stress. This instrument consisted of 20 items and had three domains like physical, emotional and environmental. In which 8 questions were passively scored (4-3-2-1-0) the score of 4 was given for never; 3 was given for rarely; 2 was given for some time; 1 was given for often 0 was given for always. And 12 questions were negatively scored (0-1-2-3-4) the score of 0 was given for never; 1 was given for rarely; 2 were given for some time; 3 were given for often; 4 were given for always. The r value for the tool was 0.82.

Results and findings

Table 1: Frequency and percentage distribution of pretest level of psychological parameter (stress) among children with nocturnal enuresis in experimental group.   N = 20

Psychological parameter (Stress)	No Stress (≤25%)		Mild Stress (26 − 50%)		Moderate Stress (51 − 75%)		Severe Stress (76 − 100%)	
	No.	%	No.	%	No.	%	No.	%
Physiological	0	0	9	45.0	11	55.0	0	0
Emotional	0	0	7	35.0	13	65.0	0	0
Environmental	0	0	6	30.0	14	70.0	0	0
Overall	0	0	6	30.0	14	70.0	0	0

The table 1 revealed that with regard to the domain physiological parameter of stress majority 11(55%) had moderate stress. Considering the emotional parameter, majority 13(65%) had moderate stress in the pretest. Regarding the environmental parameter of stress, majority 14(70%) had moderate stress. The overall pretest level of stress among students in the experimental group revealed that majority 14(70%) had moderate level of stress and 6(30%) had mild level of stress.

Table 2: Frequency and percentage distribution of post test level of psychological parameter (stress) among children with nocturnal enuresis in experimental group. N = 20

Psychological parameter (Stress)	No Stress (≤25%)		Mild Stress (26 − 50%)		Moderate Stress (51 − 75%)		Severe Stress (76 − 100%)	
	No.	%	No.	%	No.	%	No.	%
Physiological	6	30.0	14	70.0	0	0	0	0
Emotional	4	20.0	14	70.0	2	10.0	0	0
Environmental	5	25.0	14	70.0	1	5.0	0	0
Overall	6	30.0	13	65.0	1	5.0	0	0

The table 2 portrays that , regard to the domain of physiological parameter of stress majority 14(70%) had mild stress and considering the emotional parameter of stress, majority 14(70%) had mild stress. Regarding the environmental parameter of stress, majority 14(70%) had mild stress .The overall post test level of stress among students in the experimental group revealed that majority 13(65%) had mild level of stress and 6(30%) had no stress and only 1(5%) had moderate level of stress.

Table 3: Frequency and percentage distribution of pretest level of psychological parameter (stress) among children with nocturnal enuresis in control group. N= 20

Psychological parameter (Stress)	No Stress (≤25%)		Mild Stress (26 − 50%)		Moderate Stress (51 − 75%)		Severe Stress (76 − 100%)	
	No.	%	No.	%	No.	%	No.	%
Physiological	0	0	11	55.0	8	40.0	1	5.0
Emotional	0	0	5	25.0	14	70.0	1	5.0
Environmental	0	0	13	65.0	5	25.0	2	10.0
Overall	0	0	10	50.0	10	50.0	0	0

The table 3 portrays that with regard to the domain physiological parameter of stress majority 11(55%) had mild stress, 8(40%) had moderate stress and only 1(5%) had severe level of stress in the pretest. Considering the emotional parameter of stress, majority 14(70%) had moderate stress, 5(25%) had mild level of stress and only 1(5%) had severe level of stress in the pretest.

Regarding the environmental parameter of stress, majority 13(65%) had mild stress, 5(25%) had moderate stress and only 2(10%) had severe level of stress in the pretest. The overall pretest level of stress among students in the control group revealed that majority 10(50%) had mild and moderate level of stress respectively.

Table 4: Frequency and percentage distribution of post test level of psychological parameter (stress) among children with nocturnal enuresis in control group. N = 20

Psychological parameter (Stress)	No Stress (≤25%)		Mild Stress (26 – 50%)		Moderate Stress (51 – 75%)		Severe Stress (76 – 100%)	
	No.	%	No.	%	No.	%	No.	%
Physiological	0	0	11	55.0	8	40.0	1	5.0
Emotional	0	0	5	25.0	15	75.0	0	0
Environmental	0	0	13	65.0	6	30.0	1	5.0
Overall	0	0	10	50.0	10	50.0	0	0

The table 7 portrays that with regard to the domain physiological parameter of stress majority 11(55%) had mild stress, 8(40%) had moderate stress and only 1(5%) had severe level of stress in the post test. Considering the emotional parameter of stress, majority 15(75%) had moderate stress and 5(25%) had mild level of stress in the post test.

Regarding the environmental parameter of stress, majority 13(65%) had mild stress, 6(30%) had moderate stress and only 1(5%) had severe level of stress in the post test. The overall post test level of stress among students in the control group revealed that majority 10(50%) had mild and moderate level of stress respectively.

Table (3) Comparison of pretest and post test level of psychological parameter (stress) among children with nocturnal enuresis within and between experimental and control group. N = 40(20+20)

Stress	Pretest		Post Test		Paired 't' Value
	Mean	S.D	Mean	S.D	
Experimental Group	44.55	8.48	28.90	7.68	t = 5.192 p = 0.000, S***
Control Group	43.00	7.62	42.05	6.43	t = 1.808 p = 0.087, N.S
Unpaired 't' Value			t = 5.867 p = 0.000, S***		

***p<0.001, S – Significant, N.S – Not Significant

The above table shows that the pretest means score of psychological parameter (stress) in the experimental group was 44.55 ± 8.48 and the post test mean score of stress was 28.90 ± 7.68. The table also depicts that the pretest mean score of stress in the control group was 43.0 ± 7.62 and the post interventional mean score of psychological parameter (stress) was 42.05 ± 6.43 The calculated paired 't' value of t = 5.192 was found to be statistically significant at p<0.001 level. This clearly indicates that after the administration of need based intervention there was significant decrease in the level of psychological parameter (stress) among children with nocturnal enuresis in the experimental group. The calculated paired't' value of t = 1.808 was not found to be statistically significant and this clearly indicates that there was no significant reduction in the level of psychological parameter (stress) among children with nocturnal enuresis in the control group who had undergone normal hospital routine measures. The table also shows that the calculated unpaired't' value of t = 5.867 between the experimental and control group was found to be statistically significant at p<0.001 level. This clearly indicates that the need based intervention administered to the children with nocturnal enuresis was found to be effective to reduce the psychological parameter (stress) among children in the experimental group than the children in the control group.

Conclusion
The study concluded that need based intervention showed significant changes in psychological parameter. There is a notable reduction in psychological parameter (stress) and the control group results shows there is no changes in psy-

chological parameter. Need based intervention which is non invasive harmless will be utilized to minimize psychological parameter among nocturnal enuresis children.

REFERENCE

1. **Haub C.** World population data sheet and Indian population division 2007. Available from www.scribd.com/doc/world-population-database.

2. **Gupta S.** A short text book of paediatrics.7th ed. New Delhi; jaypee publications 1996; 214-215.

3. **Tripathi AD, Srivastava S.** Bedwetting and common habit disorders in School going children.Indian Journal of Medical Research 2008; 127-132.

4. **Wong L D.**Whaley and Wongs Nursing care of infants and children Mosby publication. P; 866.

5. **Jalkat MW,Lerman SE**,Churchill BM.Enuresis.Pediatric Clin North Am; 1997.p1117-33

6. **Caldwell PH, Nankivell G, Sureshkumar P.** Simple behavioral Intervention for nocturnalenuresis in children. Cochrane database, Discipline of pediatric and child health 2013 July 19. (7)1-2.

7. **Van Hoecke E, Hoebeke P, Braet C, Walle JV**. An assessment of internalizing problems in children with enuresis, Pediatric nephrology centre 2004 June 171 (6 pt 2) 2580-3.

8. **Ju HT, Kang JH, Lee SD, Oh MM, Moon du G.** Parent and physician perspective on the treatment of primary nocturnal enuresis in Korea. Department of urology, 2013 February 54(2) 127-34.

9. **Nallbantoglu B, Yazici CM, Nallbantoglu A.** Copeptin as a novel biomarker in nocturnal enuresis. Department of pediatrics, 2013 august 16 (13) 0019-1295.