# ADULT-ONSET ENURESIS IN A NIGERIAN HOUSEWIFE

### ALEXANDER NDUBUISI OTAKPOR\*

# **ABSTRACT**

A case report of secondary non-organic nocturnal enuresis with co-morbid depressive illness and marital disharmony in a 37 year old housewife is presented to apprise clinicians of such uncommon condition in our locale, highlight the assessment procedures and the multi-faceted management methods.

Combination of behavioral management, Imipramine medication and conjoint therapy aborted the enuresis by the 8th week of treatment, and the patient remained dry at subsequent clinic visits six months later.

Adult-onset non-organic nocturnal enuresis could be an expression of an underlying psycho-social conflict. Exploring patients' psychosocial history and familiarity with the various treatment modalities for the management of enuresis become imperative.

### INTRODUCTION:

Non-organic enuresis is considered a predominantly childhood and adolescent problem<sup>1-3</sup>. The bulk of the available research reports globally have been on children<sup>3-7</sup>, including those from our locale<sup>8-10</sup>. This state of affairs probably accounts for the dearth of information on adults who bed wet, or are enuretic. It is estimated that 1 - 3% of adolescents continue wetting into adulthood<sup>2, 3</sup>. The magnitude of the problem and the characteristics of the affected adults remain scanty as probably only the ones with co-morbid conditions come to medical attention. In an epidemiological study of 16-40yrs olds in Hong Kong, prevalence of primary non-organic nocturnal enuresis was found to be 2.3% 11; and in a nation-wide epidemiological study in Korea of similar age population as in the Hong Kong study, a

\*Correspondence

Alexander Ndubuisi Otakpor\* Department of Mental Health

University of Benin P.M.B. 1154 Benin City, Nigeria

E-mail address: ndualexotakpor@yahoo.com;

Tel: +2348023772274

KEYWORDS: Adult-Onset Enuresis; Nigerian Housewife; Case Report

both studies, the identified cases had higher incidence of depression and low self esteem. The studies used telephone and e-mail contacts to conduct the survey interviews, and recorded high non-response rates that could adversely have impacted the reported findings. In a rural community interview survey in northwestern Pennsylvania USA involving 3,884 older adults aged 65-79yrs, a prevalence rate of 2.1% with a significantly higher female proportion was found<sup>13</sup>. While multi-factorial causation is generally advanced for enuresis4-6, 13-15 developmental factors would apply only to adult cases with intellectual disability. Aside from organic causative factors, psychodynamic theories which consider enuresis to be a symptom of an underlying emotional disturbance 16 could well have played a significant role in the aetiology of the case described in this article. Even though enuresis is known to associated with psychiatric disorder 11-14, 17&18 the question as to whether the link is causal, reactive, or coincidental remains conjectural. It is this state of affairs that has informed clinicians of the need for eclectic bio-psychosocial approach in its management.

prevalence rate of 2.6% was reported<sup>12</sup>. In

The present report discusses some of these aetiologic and management issues, as well as lends support to the need for a large-scale epidemiological study amongst the adult populations, particularly in our setting where cultural beliefs consign enuresis in an adult to the list of taboo subjects.

## CASE REPORT:

Mrs. B, a 37 years old morbidly obese (weight 113kg; height 1.65m; BMI 41.5 ) married, multi-parous self-employed woman, and the first of her husband's two wives presented at a Nigerian University Teaching Hospital Clinic in the company of her husband with 7 years history of secondary non-organic nocturnal enuresis. The bed wetting occurs usually between 01:00 and 03:00 hours, initially every night, but has since showed wide variation in frequency. Sometimes, especially in the last 2 years, she could remain dry for about two months and then would relapse with bed wetting occurring at greater frequency. She would usually dream of voiding in the toilet only for her to wake up in her pool of urine. For fear of the cultural sanctions, she initially concealed it from her husband who to her astonishment has been very supportive since he learnt of the problem.

The patient is a product of a monogamous close-knit family, the eldest daughter of her parents, and her father's favorite child. Her mother died during child birth when she was 10- years old; she then quit school to assist her maternal grandmother with the care of her youngest sibling. Despite this trauma her childhood was considered quite happy. At the age of 15 years her father died and a couple of years later, she was given out in marriage to her husband who is nearly twice her age. Following initial difficulties with carrying pregnancy to term, she had uneventful delivery of all subsequent children, including a set of twins. During her

last childbirth, however, she requested to have bilateral tubal ligation, a procedure her husband reluctantly consented to. Three months later, she was informed by her husband of his decision to marry his erstwhile concubine who already had for him two children. This decision was carried through despite Mrs. B's protestations. The other woman, together with her children, soon moved in with the rest of the family in their five bedroom house. Open marital conflicts soon ensued and climaxed five months later when the patient had to move out of the matrimonial home taking only her youngest child with her. Her problem of enuresis started in the course of all the quarrels and had continued for a month before she left for her family house at the behest of her family.

The consensus amongst her family members was that her co-wife had "bewitched" her in order to dent her image and cause disaffection between her and their husband. Several rituals were performed by her family without any improvement. Consequently, her husband was summoned by her family during which he was mandated to "restore their daughter's health" before their marital difficulties could be addressed. Three days later, the couple was privately referred to the author's Clinic. Except for her youngest two children aged 6 years and 10 years (both males) who suffer from nocturnal enuresis (primary subtype) none of her other children or her siblings suffers from similar problem.

During the assessment she was tearful, markedly depressed (Hamilton Depression Rating Scale (HAM-D) Score of 22, and Self Reporting Questionnaire (SRQ – 24 score of 15); she was no longer able to enjoy previously pleasurable things, had suicidal ideation and evident psychomotor retardation. There were no psychotic features elicited. Physical examination at the index

presentation revealed a low grade pyrexia (T=37.8°C) and supra-pubic tenderness, otherwise all systems were essentially normal. Urine culture yielded growth of Staphylococcus Aureus which was sensitive to Gentamycin. Other investigations aimed at excluding diabetes, symptomatic epilepsy and spina bifida were all normal.

One week after the completion of the course of antibiotics for urinary tract infection (UTI), she was bacteriologically cleared of any infections; her depression was considerably lifted (HAM-D score = 15, SRQ -24 = 8) but the enuresis persisted although at reduced frequency of twice a week. Radiologic investigation (cystourethrography) was done to exclude urinary bladder pathology but no abnormality was detected.

A diagnosis of non-organic nocturnal enuresis was made. A three-pronged treatment approach was instituted comprising a behavioural management involving eating dinner early (before 20.00hrs daily), restriction of fluid intake after dinner, and voiding before retiring to bed not earlier than 3 hours after dinner, as well as waking up at intervals to void at night; pharmacotherapy using the tricyclic antidepressant, Imipramine tablets 50mg early evenings initially for one week and subsequently increased at the rate of 25mg weekly until dryness was achieved with a dosage of 150mg; and weekly conjoint (marital) therapy that focused on resolving conflicts over family planning decisions, the issues of marital intimacy arising from taking another wife by the husband, and building inclusive relationships that involve all members of the new family structure. Each weekly session was for one hour, and the treatment lasted three months.

By the 8<sup>th</sup> week of treatment, the patient had been dry for about two weeks, her depression had lifted completely (HAM-D Score = 3) and she opted to remain in her family house where her husband could still visit at will as has been the case since she left her matrimonial home. The arrangement was agreeable to all parties including the extended families. At her last clinic visit, she had remained dry for 6 months, had resumed her trade with the assistance of her husband, socializing adequately and on 100mg of imipramine every evening.

#### **DISCUSSION:**

The peculiarity of this case lies in the fact that the onset was in adulthood in a patient that had been dry for thirty years previous. It is noteworthy that she did not show such regressed behavior following the traumatic childhood and adolescent experiences characterized by object losses - death of mother and father, separation from family of origin by marriage and the two miscarriages she had. Also, at age of 30 years she faced the threat of yet another object loss this time her husband, and separation from her children her dearest possessions in a situation that amounted to her being rejected. This social situation which is a major life event could have precipitated the clinical state of depression - a state which historically preceded the onset of the enuresis in this patient.

On the basis of observation that depressed enuretic children tend to wet more frequently than their non-depressed counterparts, it was suggested that depression may have a role in producing enuresis<sup>7</sup>. Recent research findings indicate that depression and enuresis share common neuro-chemical pathogenesis characterized by lowered levels of serotonin and noradrenaline in the central nervous system<sup>14</sup>. The link between enuresis and depression in this case is therefore unlikely to be spurious or coincidental given the shared pathogenesis of both conditions and the role of stressors in precipitating both conditions in vulnerable individuals.

However, it must be noted that only a small proportion of depressed individuals have enuresis.

This particular patient was investigated within limits of available resources in an effort to exclude probable underlying organic condition. Such cases should ideally have bladder biopsy for histopathologic studies as well as functional imaging and uroflowmetry studies. The actual time of onset of the urinary tract infection (UTI) could not be established. However, it was noted that its detection and effective treatment failed to abort the enuresis as would probably have occurred if a causal link existed. Rather, this case provided more supportive evidence for the report that UTI increases the frequency of wetting without necessarily altering the course of non-organic enuresis; and that those who wet very frequently as the case here reported, have higher risk of urinary tract infection<sup>19</sup>.

Finally, enuresis and urinary tract infection appear to have co-existed independently in this case thereby warranting a dual diagnosis.

It has been reported that about 70% of all enuretic individuals have a first degree relative who is, or who was afflicted with the same condition<sup>19</sup>, and that monozygotic twins have higher concordance than dizygotic twins<sup>20</sup>. This genetic predisposition could significantly have contributed to the occurrence of enuresis in the two children of this patient. The strength of this argument lies in the fact that both children suffer from the primary subtype of enuresis. There is therefore the plausible explanation that the patient bears a genetic vulnerability for enuresis and was made manifest by the unbearable emotional stressor.

The choice of combination therapy using behavioral self-management, pharmacotherapy and psychotherapy was

informed by the dynamic relationship between the patient's marital problems, the consequent depressive disorder, and the bed wetting. A sequential approach in instituting treatment regimens is often advocated to allow for the assessment of the efficacy of each component of the treatment package, as well as easy discontinuation of treatment in the event of an adverse reaction. In real life clinical settings, treatment must always be individualized as in this case. Imipramine was used because of its reputation as the tricyclic anti-depressant of choice in the management of enuresis<sup>21, 22</sup>. Although its mode of anti-enuretic action remains unclear, it does not appear to be related to the antidepressant effect as the former is known to manifest quite early in the course of therapy<sup>22</sup>.

While Imipramine lifted the mood and controlled the bed wetting, conjoint therapy sessions initially focused on psychoeducation with emphasis on the value of effective communication in marriage; then progressed to working through the need for mutual recognition, acknowledgement and respect of each others' emotions; symbolism, object loss and past traumatic experiences in the patient's life and how these impacted the prevailing family situation; and specific homework assignments on giving and receiving attention expressly and covertly, and trying out other coping strategies in an effort to eliminate or minimize conflict and restoring healthy social functioning. Patient's relocation to her family of origin may not be the ideal solution yet therapeutic in the circumstance, and fits in with Binitie's concept of psychotherapy through environmental manipulation<sup>23</sup>.

Data on long term follow up of persons with enuresis on Imipramine therapy are few. It is hoped that the effect of discontinuation of Imipramine therapy after eighteen months will throw some light on its long term benefit in the treatment of enuresis.

### REFERENCES

- World Health Organization (WHO): The ICD-10 Classification of Mental and Behavioural Disorders. 10<sup>th</sup> Edition, Geneva 1992.
- 2. American Psychiatric Association(APA): Diagnostic and Statistical Manual of Mental Disorders 4<sup>th</sup> Edition, Washington, D.C 1994.
- 3. Forsythe WI and Redmond A: Enuresis and Spontaneous Cure Rate: A study of 1129 enuretics. Arch. Dis. Childhood 1974, 49: 259-263.
- Werry JS: Physical Illness, Symptoms and Allied Disorders In: Quay HC and Werry JS (eds.) Psychopathological Disorders of Childhood, 3<sup>rd</sup> ed., New York John Willey and Sons Publication, 1986; 232-293.
- 5. Rutter M: Helping Troubled Children 1<sup>st</sup> ed., Penguin Books Ltd, Middlesex, 1975; 290-295
- 6. Enfield C: Enuresis Med. J. Austr. 1976, 2: 908-910
- 7. Weinberg W, Rutman J, Sullivan L, Penick E and Dietz S:Depression in Children referred to an Educational Diagnostic Centre: Diagnosis and Treatment.J. Paed. 1973, 83: 1065-1072.
- 8. Obi JO: Enuresis in Nigerian children as seen in Benin City. Afr. J. Psychiatr. 1977, 2: 65-68.
- 9. Famuyiwa OO: Enuresis. Nig. Med. Pract. 2001, 10: 97-102
- Idueriyekemwen NJ, Ibadin MO, Abiodun PO: Survey of childhood enuresis in Ehor Community, Edo State, Nigeria. Saudi J. Kidney Dis. Transpl 2006, 17: 177-182
- 11. Yeung CK, Sihoe JD, Sit FK, Bower W, Sreedhar B, Lau J: Characteristics of primary nocturnal enuresis in adults: an epidemiological study. BJU Int. 2004, 93(3): 341-345.
- 12. Baek M, Park K, Lee HE, Kang JH, Suh HJ, Kim JH, Lee SD, Pai KS, Han SW, Park YH, Kim KD: A nation-wide epidemiological study of nocturnal enuresis in Korean adolescents and adults: population-based cross sectional study. J. Korean Med Sci 2013, 28(7): 1065-1070.

- 13. Burgio KL, Locher JL, Ives DG, Hardin JM, Newman AB, Kuller LH: Nocturnal Enuresis in a Community-dwelling older adults. J. Am Geriatr Soc 1996, 44(2): 139-143.
- 14. Steers WD, Lee KS: Depression and incontinence. World J. Urol. 2001, 19(5): 351-357.
- 15. Lin AD, Lin AT, Chen KK, Chan LS: Nocturnal Enuresis in older adults. J. Chin Med. Assoc. 2004, 67(3): 136-140.
- 16. Sperling M: Dynamic Considerations and Treatment of Enuresis. J. American Acad. Of Child Psych. 1965; 4: 19-31
- 17. Kumar R, Robson KM: A Prospective study of emotional disorders in childbearing women. Brit. J. of Psychiatry 1984, 144:35-47
- 18. Rutter MI, Yule W and Graham PJ: Enuresis and Behavioral Deviance: Some epidemiological considerations. In: Kolvin I, Mackeith R and Meadow SR (editors) Bladder Control and Enuresis. Clinics in Dev. Medicine Series London Heinemann/Spastics International Medical Publications 1973, (48&49): 137-147.
- 19. Bakwin H: Enuresis in Children. J. Ped. 1961, 58: 806-819.
- 20. Bakwin H: The genetics of bedwetting. In: Kolvin I, Mackeith R, Meadow RS (eds.) Bladder Control and Enuresis Clinics in Dev. Medicine. Heinemann/Spastics Int. Medical Publications, London. 1973, (48&49): 73-77
- 21. Omer Hassan Shaheen: Enuresis in Egyptian Children: A clinical and therapeutic study. Afr. J. Psychiat. 1976, 1:7-12.
- 22. Rapoport JL, Mikkelsen EJ, Zavardil A: Childhood Enuresis 11 Psychopathology, tricyclic concentration in plasma and antienuretic effect. Arch. Gen. Psychiatr. 1980, 37: 1146-1152.
- 23. Binitie AO: Brief Psychotherapy for African Patients: Psychotherapy through environmental manipulation. Nig. J. Psychiat. 1982, 1: 1: 36-44.