

## PARENTAL PERCEPTION AND RESPONSE TO CHILDREN WITH ENURESIS IN JOS

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### ABSTRACT

#### Introduction

Enuresis is a common childhood problem and can be very stressful for both children and parents. Parental perception plays an important role on the nature of response to the child with enuresis. It has been shown that in different populations, there are several factors that influence parental response to enuresis. Therefore, extrapolation of findings from one population may not be appropriate for formulating treatment plans in another as a result of differences in culture or socioeconomic conditions. This report summarizes parental perceptions and responses to their children with enuresis in Jos Nigeria.

#### Methods

This was a cross sectional study with survey of primary school children aged between five and 12 years. A multistage sampling technique was used with administration of questionnaires to parents of the recruited children.

#### Results

Parents of 264 children completed and submitted their questionnaires. The children comprised of 111 (42%) males and 153 (58%) females. Enuresis was present in 34 (12.9%). Of the 264 parents 13 (4.9%) considered enuresis to be a medical problem but among the children with enuresis only six (17.6%) parents considered it so. Twenty four (70.6%) parents of the 34 children with enuresis said they were worried about their children's problem but only one (2.9%) sought medical care. Twenty three

(67.6%) parents of the enuretic children punished them using different methods.

#### Conclusion

Few parents of children with enuresis in this study perceived it a medical problem. Many still use harsh forms of punishments for enuresis control.

Keywords: Enuresis, children, parents, perception, response, treatment

### INTRODUCTION

There are several definitions of enuresis in use and this to some extent influences reports presented by different studies on the one hand and on the other, it poses challenge when comparing data.<sup>1,2</sup> The World Health Organization International Classification of Diseases<sup>3</sup> (WHO ICD)-10 defines enuresis as 'the involuntary voiding of urine in a child aged five years and above occurring at least once a month for three consecutive months'. The traditional understanding of enuresis is that, it is due to one or a combination of factors from psychological, sociological and biological sources.<sup>4</sup> Recently however, there is a growing body of evidence to suggest that maturational or developmental factors are more critical in causation than are psychodynamic considerations.<sup>5,6</sup> This understanding is important in order to help managing physicians offer appropriate counsels and treatment to affected children and their parents.

Enuresis causes considerable and significant distresses to affected children and their parents.<sup>4,7-10</sup> Such distresses as low self-esteem,

reduced ambition, poor school performance, anxiety, oppositional and conduct disorder have been reported.<sup>1,10-11</sup> Many parents of enuretic children are usually ignorant of the condition and may express anxiety and inappropriate concern initially. With time, they begin to put unnecessary pressure, and some parents are known to punish and shame their children openly. Furthermore, it is known that some parents often treat enuresis as a psychological problem and therefore offer no active support.<sup>1</sup> This leaves affected children to handle their problem by themselves, a situation that may result in unfavourable outcome. There are other parents who are convinced that heavy sleeping and emotional problems are responsible for their children's enuresis.<sup>12-13</sup>

Knowledge influences a person's attitude and it significantly affects how an individual responds to any stimulus or circumstance.<sup>14</sup> This position is also true for enuresis; what parents perceive of enuresis will determine how they subsequently respond to it. In a previous study from Nigeria, many parents believed that enuresis was caused by urinary tract infections, deep sleep and excessive play.<sup>12</sup> A Turkish study also showed that over 75% of enuretic children were not taken for treatment, and as much as 87% of parents in Malaysia had not sought any form of treatment for their enuretic children.<sup>15,16</sup> This approach partly stemmed from the level of knowledge of enuresis these parents have and it can lead to the belief that treatment of the condition is possible with antibiotics, will resolve spontaneously or they are simply unaware of any treatment modality. On the other hand, some parents, have been shown take to self-treatment such as fluid restriction, traditional herbal concoctions, waking the child at night to void and counseling.<sup>1,13,16-19</sup> Others who think enuresis is a deliberate act by the child take to harsh punishments.<sup>20</sup>

For the child with enuresis, the most important reason to seek treatment is to minimize the embarrassment, anxiety and frustration

experienced by them and their parents, as well as improve and preserve the child's self-esteem.<sup>10</sup> Treatment guidelines therefore, recommend that education of the child and family should be important step in the process.<sup>21,22</sup> This study was undertaken to determine parental perception and responses to their children with enuresis in Jos, Nigeria.

## **SUBJECTS AND METHODS**

This was a cross-sectional and analytical study conducted during the months of July 2012 to September 2012. Using multistage sampling technique, six primary schools were selected from Jos south local government area where the study was carried out. The registers of the selected schools were used as the sampling frame and by means of systematic random sampling; the sample size of 264 children was recruited. Parents/guardians of recruited children were invited to the school premises for a meeting on a scheduled date per school. In that meeting, the purpose of the study was explained to them and they were further informed that participation was voluntary. The first part of the questionnaire was administered to parents during the meeting and their contact phone numbers collected. The second part of the questionnaire was administered only if the child met the WHO-ICD 10 definition<sup>3</sup> of enuresis and this was interviewer administered in the hospital premises after the parent and child were contacted and invited on scheduled days. Five parent/child pair was scheduled per day for the 34 with enuresis. The socioeconomic status of the parents was determined using Olusanya et al<sup>23</sup> tool for Nigerian population.

The Research and Ethical Committee of the Jos University Teaching Hospital (JUTH) gave approval for the study. Permission to carry out the study was also obtained from the State ministry of Education and from the heads of each of the schools. Written consent was obtained from the parents/guardians of all the school children who participated in the study.

Data was analyzed using EPI info version 3.5.1. Odds ratios were calculated. Chi-square tests, Fisher's exact test and logistic regression analysis were used where applicable to test for associations between variables. Ninety-five percent confidence interval was used and p-values of <0.05 were considered statistically significant.

## RESULTS

Two hundred and sixty four children aged five to 12 years with a mean age of  $8.6 \pm 2.3$ , were recruited for the study. One hundred and eleven (42%) were males and 153 (58%) females. One hundred and ninety eight (75%) were aged 5-10 years while the remaining 66 (25%) were 11-12 years old.

One hundred and thirty nine (70.5%) of these children came from families of low socio-economic class while only 38 (14.3%) were from the upper class. Other socio-demographic

characteristics of the parents are shown in table 1.

Thirteen (4.9%) of all the parents involved in the study considered enuresis to be a medical condition. Thirty four (12.9%), of the 264 children had enuresis. Twenty eight (10.6%) had nocturnal enuresis while one (0.4%) had strict diurnal enuresis. In nineteen (55.9%), enuresis was primary while in 16 (47.1%) it was secondary. Among the children with enuresis, only six (17.6%) parents considered enuresis a medical problem while the remaining 28(82.4%) did not. Among the parents who considered enuresis a medical problem, only one parent took an affected child for medical care. The parental responses to enuresis (whether concerned or if it was a medical problem), did not vary significantly between the different socioeconomic classes, ( $X^2 = 3.788, p=0.435$ ).

**TABLE 1: Sociodemographic characteristics of the 264 respondents**

CHARACTERISTICS	Parents	Study population (Children)	
	TOTAL n=264	FEMALE n=153	MALE n=111
<b>Parents' marital status</b>	248	140 (91.5)	108 (97.3)
Married	5	3 (2.0)	2 (1.8)
Separated	2	2 (1.3)	0 (0.0)
Widowed	9	8 (5.2)	1 (0.9)
Divorced			
<b>Father's educational status</b>			
No formal education	32	23 (15.0)	9 (8.1)
Primary	65	37 (24.2)	28 (25.2)
Secondary	123	68 (44.4)	55 (49.6)
Tertiary	44	25 (16.3)	19 (17.1)
<b>Mother's educational status</b>			
No formal education	62	40 (26.1)	22 (19.8)
Primary	91	50 (32.7)	41 (36.9)
Secondary	86	47 (30.7)	39 (35.1)
Tertiary	25	16 (10.5)	9 (8.1)

<b>Father's occupation</b>			
Civil servant	41	21 (13.7)	20 (18.0)
Private organization	44	27 (17.6)	17 (15.3)
Self employed	164	97 (63.4)	67 (60.4)
Unemployed	15	8 (5.2)	7 (6.3)
<b>Mother's occupation</b>			
Civil servant	13	10 (6.5)	3 (2.7)
Private organization	31	15 (9.8)	16 (14.4)
Self employed	168	96 (62.7)	72 (64.9)
Unemployed	52	32 (20.9)	20 (18.0)
<b>Family size</b>			
≤6	187	106(69.3)	81(73.0)
≥6	77	47(30.7)	30(27.0)
<b>Socio-economic status</b>			
Lower	139	81 (52.9)	58 (52.3)
Middle	87	48 (31.4)	39 (35.1)
Upper	38	24 (15.7)	14 (12.6)

Measures taken by parents of enuretic children in the control of the condition are shown in Table 2.

**TABLE 2: Measures taken by parents to reduce or stop enuresis**

Parental Measures	Frequency n=34	Percentage
<b>Water intake restriction</b>		
Yes	22	64.7
No	12	35.3
<b>Wakes child from sleep to urinate</b>		
Yes	24	70.6
No	10	29.4
<b>Ensures urination before sleep</b>		
Yes	13	38.2
No	21	61.8

With regards to forms of punishment, Table 3 shows the nature and frequency of punishment meted out by parents. Twenty three (67.6%)

parents punished their children for the enuresis and no parent resorted to use of traditional medication.

**Table 3: Frequency and types of parental punishment for 34 enuretic children**

Variables	Frequency	Percentage
Parental punishment		
Yes	23	67.6
No	11	32.4
Types of punishment*		
Spanking	14	60.9
Beating	9	39.1
Making fun of child	1	4.3
Bathing with cold water	1	4.3
Washing of all beddings	4	17.4

\*= Multiple responses

## DISCUSSION

The prevalence of enuresis in our study of 12.9% is very similar to what had been reported in Turkey, USA, Korea, and Burkina Faso<sup>7,17,18,24</sup> but contrasts sharply with those from Iran, Italy and even some studies in Nigeria.<sup>2,20,25-27</sup> These differences in prevalence observed may be due to the definitions of enuresis used in the various studies. We noticed that where the same definition of enuresis was used as in our study, the prevalence rates were similar.

Majority of the parents (82.4%) did not consider enuresis a medical problem even though, (70.6%) expressed concern or worry. This poor understanding of enuresis as a medical problem probably explained why only one parent sought help for his child in a health facility. It has been shown that parental perception of the need for help or show of concern is influenced by factors such as: age of the child, prior experience with enuresis and a history of enuresis in the parents themselves.<sup>28,29</sup> In other words, if a parent or both had enuresis they would less likely be

worried about their child with enuresis than a parent that did not. Similarly, if a younger child in the family has become dry while an older child still bed wets, parents would be concerned. We did not evaluate any of these factors in our study but despite the high level of concern shown by the parents of children with enuresis, there was lack of corresponding search for help. The high level of parental concern or worry as seen here therefore could be related to the effect of enuresis on the parents and family in general rather than on the child. Stigmatization has been shown to be one important reason parents are worried when their children bed-wet.<sup>19,26</sup> This may have been responsible for the failure to seek medical help so that affected children are not identified with their parents, but it may also be due to lack of awareness or low health seeking behaviour common to most developing countries like Nigeria.

Many parents (67.6%), harshly punished their enuretic children. This approach to control of

enuresis was probably informed by their understanding of the condition. Surveys have shown that between twenty five to thirty percent of parents punish their children for wetting the bed and sometimes, punishment is physically abusive. Many blamed their children for bed wetting.<sup>28,30</sup> In other instances, some parents insisted that the children were lazy or that bed-wetting was done on purpose.<sup>6,13,22</sup>

Parental levels of education and socioeconomic status have also been shown to impact both on the prevalence and responses to enuresis.<sup>7,13,29-32</sup> Studies have shown that children who come from low socioeconomic background or whose parents have low education have higher prevalence of enuresis while their parents respond more severely to them.<sup>27,30-32</sup> These findings contrast with what Abdel latif et al<sup>33</sup> however, observed. They reported a significantly greater association between parents of higher educational level and enuresis. However, our study did not find any relationship between educational level, social class of parents and enuresis in children. This is similar to what have been reported elsewhere.<sup>34,35</sup> Another study showed that parents with grade level school were twice more likely to punish their enuretic children than parents with high school or college education.<sup>13</sup> On the other hand, parents with a high educational level and socioeconomic status were more proactive in seeking out treatment for their child's enuresis and more likely to utilize encouragement and comfort as their methods of treatment.<sup>29</sup> We did not find any of these associations in our study.

The finding of only one child that was taken for medical care was similar to other reports from Nigeria, where only few parents had ever consulted a health worker for their child's enuresis.<sup>12,36</sup> This is in stark contrast to what was reported from Italy and Iran where a large proportion of families sought medical help for their enuretic children.<sup>27,37</sup> The difference we observed here may be due to low level of awareness about enuresis as a medical

condition or wrong perception about it. Health seeking habit generally has been shown to be poor in most developing countries due to causes such poverty, cultural practices and beliefs, ignorance or accessing other means of care, as demonstrated by very late presentation of most illnesses.<sup>38,39</sup>

The need for physicians to be constantly aware of the distress faced by children with enuresis and their parents should be emphasized. Many parents have wrong beliefs and misconceptions about the causes and management of enuresis.<sup>29,40</sup> These include a mythical origin, witchcraft, excessive play, drinking too much water, and the child's laziness as causes.<sup>12,40</sup> Although, only one child was taken for medical care in this study, however, the only form of care received was counseling despite persistence of bedwetting. It is difficult to say what this health officer knows about enuresis but it emphasizes the need for better understanding of the condition on the part health officers, so that appropriate therapy can be offered to affected children.

In conclusion, majority of the parents in this study stated that enuresis was a problem and that they are worried if their children have it but did not consider it a medical problem. Similarly, even among parents of children with enuresis, most of them held same view concerning the condition. This probably was responsible for only one child out of the thirty four identified with enuresis been taken for medical care. Harsh forms of punishment were used by some parents as a means of controlling the condition.

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