

Bed-wetting in a Lusaka Suburb

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Bed-wetting may sometimes be the result of physical pathology or psycho-social stress or it may be due simply to slow maturation — Kolvin (1975) but even when it occurs in older children it may neither be classed as a behaviour disorder nor as an illness by the parents. There is no clearly accepted age by which a child should be dry and Swift and Asuni (1975) have stated for example that, "Among the Acholi of Uganda and among most tribes in Ghana parents become concerned only if bedwetting continues into the fifth year. In Nigeria the practice of permissiveness . . . is reported until the age of 6 or 7 (while) . . . in Tanzania this early relaxed approach . . . changes to threats and punishment when bedwetting occasionally persists into the fourth year." In the investigation to be described the arbitrary definition will be taken (after Sim, 1974) that, "Enuresis is said to exist when a child after the age of 3 frequently wets his bed." This investigation is a study of bedwetting in children aged 4 to 15 years, living in a Lusaka suburb.

METHOD OF STUDY

Detailed interviews on various handicaps, behaviour disorder, chronic ill-health and bed-wetting were conducted in a sample (27.5%) of houses in a well-established Lusaka suburb — Chilenje. This particular suburb was chosen because it is one of the oldest in Lusaka. Building in Chilenje began in 1940 only 5 years after Lusaka was established as the Capital City and hence the length of stay of families could be expected to be longer, with greater stability of the whole population.

26% of householders had been living there for up to five years, 24% for 6 to 10 years, 4% for 11 or more years and the remainder said that they did not know — in 8 cases because it was 'very long'. No children were present in 34 of 485 randomly selected households and there were 8 refusals leaving a sample of 443. A two-stage questionnaire was developed, the first stage being designed to record detailed basic demographic information and to elicit information on any children suffering from a wide range of handicaps and the second stage consisting of more detailed inquiries on specific problems including bedwetting. University students conducted the interviews after having participated in the final piloting of the questionnaire and they were supervised by two full-time senior workers (an experienced male mental nurse and a university lecturer in educational

psychology) who had participated in the design of the questionnaire and the initial pretesting.

THE AGES OF CHILDREN WHO WET THEIR BEDS AND DIFFERENCES BETWEEN THE SEXES

1370, 77% of the total of 1857 of the children were aged 4 and 15 and of these 155 were reported as bed-wetters, found in 105 households. Detailed results are given in Table 1.

TABLE 1

SEX AND AGES OF BED-WETTING CHILDREN

Age	Boys	Girls	Total	Bedwetters Boys/Girls	Total Number	Bedwetters as a percentage of age group
4	63	80	143	7 10	17	11.89
5	69	68	137	13 7	20	14.6
6	65	66	128	12 10	22	17.19
7	71	81	150	12 11	23	15.33
8	53	49	100	10 8	18	18.0
9	51	67	118	6 6	12	10.17
10	42	56	98	4 5	9	9.18
11	51	60	111	7 6	13	11.71
12	41	56	97	3 6	9	9.28
13	57	44	101	6 2	8	7.92
14	49	45	94	1 2	3	3.19
15	38	48	86	—	1	1.16
Totals	650	720	1370	81 74	155	11.31

Baasher and Ibrahim (1976) reported enuresis in 7% children in a village community but noted it in only 3 of 180 children attending a neuro-psychiatric clinic in Khartoum. Baasher and Cederblad (1964) reported bedwetting in 14% of 1569 children aged 3–15 in a village only a few kilometres away from where the prevalence had been reported as 7%; they attributed the higher rate to an increased incidence of urinary infections. The almost equality in the sexes in the present study is unusual.

CONTINUOUS AND INTERMITTENT BEDWETTING

Bedwetting have been commonly divided into the primary (continuous) and secondary (discontinuous — when bedwetting has been resumed after having stopped for a period) and the former type has been thought to be due to slow maturation while the latter often indicates a response on the part of the child to some stress. The results are best considered in association with an examination of families with more than one bedwetter. Details are given in Table 2.

TABLE II

CHARACTERISTICS OF SINGLE AND MULTIPLE

No. of bedwetters in household	Boys	Girls	Aged 4 - 7 Cont. Dis- cont.	Aged 8 - 15 Cont. Dis- cont.	All Ages Cont. Dis- cont.
Multiple	48	31	27 8	34 10	61 18
Single	33	43	37 10	9 20	46 30
Totals	81	74	64 18	43 30	107 48

It is obvious that families with more than one bedwetter may have to face problems such as simple overcrowding and as I describe below certain families exhibit definite evidence of other stresses, such as the occurrence of behaviour disorders in the children. However, other factors may be important. Seventy six families had only one bed wetter (72% of BW households), as against only 43 families in the whole survey having only one child. 17 families had 2 bed-wetters, 7 and 3 bed-wetters, 4 families 4 and 2 families 5. There were thus 79 bed-wetters in this group comprising 51% of the total found in 28% of families with bed-wetters and in only 7% of all households.

The difference to be noted in Table 2 must be taken with some caution since the division into 'single' and 'multiple' bedwetter families is arbitrary, being based upon the definition of bedwetter given above. Boys outnumber girls in the multiple bedwetter families but the reverse is true for those families with only one. The difference is not significant. In distinguishing between primary and secondary bedwetters it was thought to be of value to compare the groups aged 4-7 with those 8 and above. Since families with bed-wetting children have the same proportion of children in the various age groups as the total sample, several points of interest emerge. There is no significant difference between families for the younger age group but for older group the difference is significant at the 0.005 level (Chi Squared with Yates' connection 8.89). Two separate groups clearly emerge, one with the familial tendency to bed-wetting being those who have never stopped bed-wetting and thus falling into a primary group with a possible constitutional tendency to bedwet and those lone bed-wetters who, once having stopped, started again perhaps in response to some stress. One can recognise the second category with greater confidence than the former since the possibility of a substantially higher proportion of families with several bedwetters would anyway be found for the high age group. The question of stress will be discussed below.

OTHER PHYSICAL COMPLAINTS IN BEDWETTING CHILDREN:

Two aspects merit consideration. Some complaints, such as headache and vague abdominal pains may in themselves be indicative of psychological stress and so may be expected to occur with greater frequency in bedwetters if their enuresis is also the result of such stress. In addition ill health may in itself be a form of stress which predisposes a child to wet the bed.

When a child was reported as being a bed-wetter detailed inquiries were made regarding the general health. Of the 155 bed-wetters 56 (36.1%) were reported as having been taken to the hospital at least once. Twenty-two had been taken on account of coughing, 14 for abdominal troubles, 6 for headaches and in addition there were miscellaneous complaints such as ear trouble (2), eye trouble (2), disability from poliomyelitis (2), chest pain (2), epilepsy (1), a deformed back (1), poor appetite and vomiting (1) and in two cases the complaint was not specified. In the whole sample nineteen children complained of headache, 7 had eye troubles and 8 difficulty in hearing. In addition, in the whole sample 14 children were reported as being slow (small) in physical development and of these five were also bed-wetting. Although the numbers are small there would appear to be significantly more complaints of ill-health in the group of bed-wetters.

THE RELATIONSHIP OF THE SPOUSES AND TWINS:

Certain types of cousin marriage are permissible in Zambian society and therefore it is not surprising that some marriages where the spouses were related were reported: the total was 17 in 464 marriages - 3.66%; the spouses were related in only three of the bedwetting families - 2.86% but the numbers are too small for any conclusions to be drawn.

Thirty-three pairs of twins were found, 12 both girls, 9 both boys and 12 with one boy and one girl. One pair of boys were bedwetters amongst the mixed twins one girl of age years and one boy of 10 years were bedwetters. There was also one set of triplets, a girl and two boys both the latter being bedwetters.

No behaviour disorders were mentioned as occurring in any of the families where the spouses were related or where there were twins.

HANDEDNESS AND BEDWETTING

The type of survey carried out was suitable for including a question upon left and right handedness. Naturally the information could not be given in respect of younger children but details were unknown for only 101, all below the age of 4. Twenty children were reported as being left-handed, 9 girls

and 11 boys; of these one girl and one boy (whose twin brother was reported as right handed) were bed-wetters.

BEHAVIOUR DISORDERS

Twenty-three children were thought to exhibit some evidence of behaviour disorder 4 definite, 7 probable and 5 possible – and of these 7, 4 and 2 respectively were bed-wetters; thus 13 of 23 children with behaviour disorder were bedwetters and in the 17 families involved there were 25 bedwetters amongst 75 children aged 4 to 15 – 38%. Those children exhibiting only bedwetting without any other type of deviant behaviour were not classified as exhibiting any behaviour disorder although it was sometimes evident that they came from very disturbed families. The difference in prevalence between “disturbed” and other families is statistically highly significant.

DISCUSSION

I began by stating that often enuresis is not classed as a medical problem nor even as deviant behaviour by many people. That it is relatively common is evidenced not only from figures given above but, in a manner which cannot be overlooked in those overcrowded suburbs where it occurs – from the number of blankets seen hanging out to dry every day outside so many houses. While the occupants have perhaps grown to tolerate the situation we must ask whether there are preventable causes and especially whether health workers have anything to offer both the children and the families. The child who has started to wet his bed again after being dry for a considerable period certainly merits investigation which should include a check on physical

health as well as psycho-social stress. The ill-health may not necessarily involve genito-urinary complaints while often enough it will be found to be found to be combined with other stress factors – within the child or within the family and involving other children as well. Factors whose contribution is as yet unknown and which would merit further study include malnutrition; mild recurrent urinary infections, bilharzia and perhaps intestinal parasitic infestations such as hookworm or threadworm. Since the present study was carried out in an urban area a similar might now be done in a number of villages with added refinements attempting to examine some of the factors mentioned above.

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