ENURESIS — A CASE STUDY

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This paper describes the treatment within a behaviourist framework of a 6 year-four-month boy who suffered with primary enuresis. The ball and pad method, or enuresis alarm, was used along with over learning and positive reinforcement. After 33 days, dryness was maintained with no relapse.

INTRODUCTION

This paper centre around a particular treatment procedure for a 6 years old boy with primary enuresis. According to Hudson (1980) the term "enuresi" mean "persistent wetting of the bed by children over the age of 3 or 4 years in the absence of any demonstrable organic pathology". (p. 70).

Although there have been various ways of handling this over the centuries (mostly unsuccessful), according to many modern researchers, the bell and pad or enuresis alarm has the best record of success. Hudson claims "a continually demonstrated high success rate of approximately 75%" (p.18). He does emphasize, however, that these figures are for good quality equipment, used with professional supervision.

It has been shown that the additional over learning procedure results in fewer relapses. In Doley's (1978) a study by Taylor & Turner (1976) compared over learning with a continuous and 50% intermittent alarm group. The over learning procedure resulted in significantly lower relapse rates.

Doley's (1978) and Hudson quote from various studies which indicate additionally, the greater effectiveness of an intermittent schedule, compared to a continuous one. Although there was a tendency for frequency of wetting to decrease more slowly for the intermittent than the continuous group, the relapse rate was significantly smaller. It was suggested by both that this area requires further study, i.e. they suggest research on the relative effects of different types of intermittent schedules.

METHOD

(a) Subject

A 6 years 4 months old boy, the eldest of 3 boys, the siblings being aged 4 and 2. His father, mother's senior by fifteen years, was employed as a technical school teacher and mother, who had no particular training, was involved full-time at home. John has nearly completed Grade 1 at a State primary school. Mother said he was having difficulty in most areas of the curriculum. For the last 12 months he had been regularly attending Speech Therapist from the Special Services Division of the State Education Department, for an "articulation" problem, which mother said had now improved.

Mother, somewhat overweight, impressed as an easy going, jovial woman, who described John as a happy child at home who played happily with his friends. The father appeared to be rather tense, tired and thin, apologising for the noisy children and untidy home; he said it was not easy coping with three young children after a tiring day at school. The children were very active, boisterous and noisy and mother had to speak several times to control them. The boys all shared one bedroom (two in a double decker bunk – John on the top).

Previous parental attempts at stopping the bed wetting were sometimes waking John in the night and sometimes restricting fluids. he had not had a medical check with the local doctor. Mother was very patient in her attitude towards the wetting, explaining that she herself had wet at night until age six and a half years when she "grew out of it". She said John wetted in his sleep, whether in his bed, the family car or lounge room. John's attitude to his wetting was annoyance with himself for doing it. About a month prior to mother's request for assistance he had said "I don't want to wet anymore".

(b) Procedure

(i) Contacts

One office interview with mother.

One contact with both parents in the room with John and his two siblings.

Two phone contacts with Speech Therapist.

Four phone contact with mother, twice per week, then once weekly.

Phone contact continued approximately once monthly for three months following treatment.

(ii) Treatment

(a) *Baseline* recorded by mother for fourteen days, i.e. times of going to bed, bed checks during night, and, if wet, size of patch, times of self-awakening and any comments.

(b) *Treatment phase* – Ball and pad secured to bed, and John and parents instructed in the use of it and associated procedures. The parent were also instructed to praise John heavily on the achievement of a dry night. The criterion was fourteen consecutive dry nights. Alarm placed on a continuous schedule.

(c) After the above criterion was achieved, an *"over learning"* period followed during which the pad remained on the bed and John was to drink at least two pints of liquid prior to bedtime. The criterion for this phase was again fourteen continuous dry nights. The pad was then to be removed. Follow-up criterion was fewer than two accidents per month for three months.

RESULTS

During *baseline,* there were five dry nights and, on four occasions, two wets per night. For the first ten days of the treatment phase, there was at least one wet every night, on three occasions two wets, and on one occasion three. However, following this, he remained mainly dry for fourteen days – including once after seven dry days. He then remained dry (this includes the over learning period).

John himself is delighted with the results. Mother reports he has told his teacher and grandparents about his success and is feeling much more confident generally. He has also not wet during the day when he has fallen asleep in the car or house.

DISCUSSION

John's added confidence is to be noted. As Hudson (1980) states "There is considerable evidence to show that there is often improvement in adjustment (improved self concept and reduced anxiety) following treatment" (p.76). Phillip & Mordock (1970) write, "The emphasis in behaviour therapy is upon treatment of specific problems in a systematic manner. Although the goals may sometimes appear limited, we find a positive spread and generalisation to needs of the child's functioning not specifically included within the therapy program. A significant change in a child's behaviour elicits positive feedback from his environment, reinforcing and maintaining new behaviour and accelerating their generalisation" (p.358).

The part that positive reinforcement plays appears to be very important. It is interesting that, although mother claimed he had never been dry at nights, during baseline he had five dry nights, three of them consecutively. This is likely to have been due alone to the verbal praise given by the parents for a dry night. It is wondered whether this only may have effected a cure without the aversive stimulus of the bell, and passive avoidence conditioning. Madsen (1965) writes about a nineteen months old girl who was rapidly toilet trained in twelve days through positive reinforcement alone, in the form of her favourite candy and praise. Bach & Moylan (1975) quote another case study of a six year old boy with a two and a half years history of incontinence of urine and secondary encopresis, being successfully treated through positive reinforcement of monetary rewards (faded into weekly allowance). The rate of urine incontinence dropped immediately, but the results with the encopresis were not as successful. These cases cited, however, were case studies, rather than experimental studies, and with only the one subject.

The training of the parents was a decisive factor in the success of this case. As Phillip & Mordock (1970) state, "Environmental reinforcement is

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heightened if the therapist expands her efforts to include the counselling and training of key figures in the child's life" (p. 359). Prior to intervention, the mother commented that she was always very busy with the three boys, particularly the younger ones – it is likely that John, being the eldest and more independant, lacked individual attention and positive reinforcement. This he gained with this program, and it is hoped that his parents will be able to generalise positive feedback to other areas (even including the marital relationship). Bach & Moylan in the study previously quoted, where positive reinforcement was the only treatment technique stated "for the parents there was a tremenous feeling of accomplishment after three years of frustration. More importantly, the number of praising interactions between parents and child multiplied considerably" (p.241).

Regular contact by the program supervisor is obviously of great importance; it would have been advantageous for another home visit to have been made during the treatment period. As is was, the mother had recorded the one wet night on the data sheet but had not mentioned it on the phone, hence there was no change made in the program. Usually, after a wet night, the treatment period must be recommended in order to reach the criterion of fourteen continuously dry nights.

An aspect which could have adversely affected the results, was the fact that John shared his room with two brothers and slept on the top of a double decker bunk. Monther did not wish to move John from the room (or any of the others); she said they were heavy sleepers and the alarm would not disturb them, also the only other rooms available were the living rooms and kitchen. After spending two nights on the bottom bunk, John insisted on returning to his own bed on the top. Such obstacles as arranging the pad for the top bunk, and climbing down two or three times a night, may have daunted some children (and parents). One can only conclude that John's high motivation (and that of his parents) was the deciding factor.

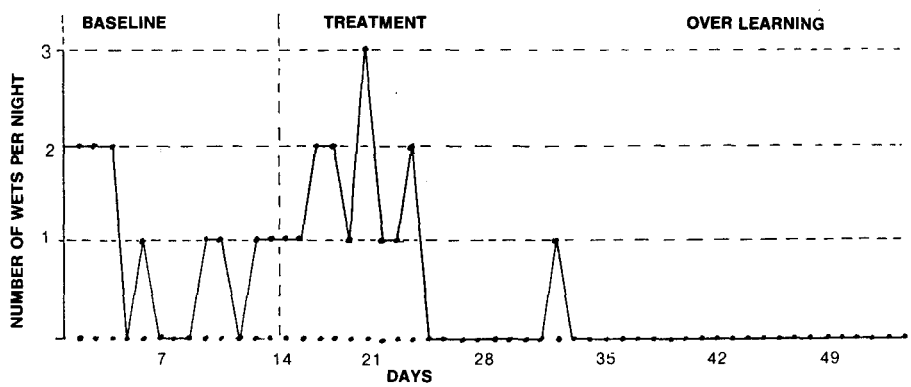
Peterson (1964) states "If the behaviour is indeed more adaptive, reinforcement may intrinsically occur and the behavioural tendency maintained or enhanced" (p.294). It is likely that this is another factor involved in John's success. However, as noted by Gambrill (1977) in reviewing some studies on treatment methods of enuresis, and quoting from a successful program by Fox & Azrin (1973a), "the motivation desired for maintaining toileting habits was the pleasure of the child's parents and family . . . most children experience the program as very positive, hugging and kissing the trainer ... many of the parents described their children as more co-operative and pleasant in their general conduct after the training program" (p.859). Interestingly, this program had also included the child's being reprimanded when his pants were wet. It would also seem that some involvement of the child in taking responsibility for his or her behaviour would be a factor in ensuring success (e.g. changing own pants).

If the program had not been successful, re-arrangement of the bed would have been important, also further enquiry into other areas of John's life. According to Doleys (1978) "Information concerning the home and family environment should be obtained . . . the presence of marital or other family problems has been related to treatment failure (Turner et al, 1970) and should be discovered as early as possible". If there are indication of problems elsewhere in the child's life, it is important that the therapist assist the parents to recognise these and offer services (if appropriate) to deal with them, even though these problems were not those with which they presented. Further treatment of this particular family would have been appropriate if the mother had been able to recognise her difficulties in controlling the children; however, she saw the bed wetting as the only concern.

The difficulty with John's speech, and poor performance at school, were being monitored (with improvement) by the Special Services Division of the Education Department. It was important for permission to be gained from the mother so that these other involved personnel be contacted, as this serves against duplication of services, provides better co-ordination of resources and an integrated team approach. If a parent refuses permission, in the event of a child being seriously at risk of physical or emotional maltreatment, the principle of confidentiality may have to be waived, the therapist focusing on the child as client, rather than the parental "rights".

Doleys states that medical screening is important in ruling out any neurological or urological pathology. He believes that a urine culture and urinalysis is needed to ensure the absence of infection (p.100). If there is dribbling, painful or frequent urination, urgency, or a small irregular stream, Doleys believes this should be a sign for further investigation. Doleys maintains that any medication has usually proved ineffective in the treatment of enuresis.

In summary, various researches claim that the bell and pad method is the most effective way of treating enuresis. This technique, however, can appear deceptively simple – additional variables such as supervision of parents, positive reinforcement of the child's dryness and likely increased self responsibility (child responsible for changing sheets, re-setting alarm), are of crucial importance. It is also important for the therapist to be aware of dynamics in the family which could be operating against the success of the problem, for example a punitive approach. If a therapist is aware of other problems, where possible, opportunities for treatment should be provided. It should be noted that the initial reason for referral may not be the total problem – in a wider sense, the bed wetting may by the only obvious "misbehaviour" the parents can identify as a focus, and a more comprehensive assessment of the family functioning may then be indicated.



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