

Rapid Elimination of Enuresis by Intensive Learning without a Conditioning Apparatus

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Recent studies have shown that enuresis could be eliminated very rapidly by a method based on an operant approach. Modifications were made in the method to make it more convenient to use especially by eliminating the use of conditioning apparatus. The new method consisted of 1 day of intensive training including reinforcement for inhibiting urination, practice in appropriate urination, bladder awareness training, copious drinking, self-correction and positive practice for accidents, awakening training, and family encouragement. All 50 children, aged 3-14 years, who used the new method ceased bedwetting. Accidents were reduced to 25% on the very first night and decreased further to 10% after 1 month and to 2% at 1 year. The average child (median) had only four accidents before achieving 2 weeks of dryness. Relapses were infrequent (20%) and always reversed by a second training session. This reduction was far greater than was achieved by the children in a control condition using the standard pad and buzzer conditioning method. The new method provides a convenient method of eliminating enuresis rapidly and durably for almost all enuretic children over 3 years of age.

Nighttime enuresis is a common problem among children and has received extensive study as to its incidence and treatment (see reviews by Lovibond, 1964; Yates, 1970; Jones, 1960). About 20% of children are enuretic at 3 years of age, about 15% at 6 years of age, and about 3% at 14 years of age. Psychotherapy is generally ineffective (De Leon & Mandell, 1966). Drugs, especially imipramine, have recently come into extensive use, but clinical trials have demonstrated a low cure rate for these drugs (Young, 1965), including imipramine (Schaffer, Costello, & Hill, 1968) which also can produce severe side effects (Parkin & Fraser, 1972).

The pad and buzzer conditioning method has had the greatest success for the control of enuretics and was originally developed and tested by

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Mowrer and Mowrer (1938) based on the classical conditioning model. In that method, a urine-sensing pad in the bed causes an alarm to sound when urination occurs at any time during the night. Success rates have averaged an impressive 80-90% (see reviews by Lovibond, 1964; Yates, 1970). Relapses have averaged about 25% but might not be considered a serious difficulty since reinstatement of treatment almost always eliminated the problem. Of more concern has been the high dropout rate of about 30% of the clients who discontinued treatment (Young, 1965; Young & Morgan, 1972, 1973; Turner, Young, & Rachman, 1970). Contributing to this high dropout rate seemed to be such factors as the long period of time necessary to eliminate enuresis, usually many weeks or months for the average child (Young, 1965), the annoyance caused by awakening of the parents in the middle of the night by the urine alarm, and the inevitable occasional breakdown or unreliability of the urine-alarm apparatus.

An operant model for treating toilet training and nocturnal enuresis has recently been used stressing such factors as reinforcement, shaping, awareness training, self-correction, and positive practice. Using that model, a method was developed for daytime toilet training of adult profoundly retarded persons (Azrin & Foxx, 1971; Foxx & Azrin, 1973a) and, later, normal young children (Foxx & Azrin, 1973b; Azrin & Foxx, 1974). The general method was also extended to eliminating nocturnal enuresis of profoundly retarded persons (Azrin, Sneed, & Foxx, 1973) and, most recently, to normal enuretic children (Azrin, Sneed, & Foxx, 1974). These procedures resulted in very rapid training: The median time was 4 days for daytime-toilet-training-of-the-profoundly-retarded adults and 4 hr for daytime toilet training of the normal children. For the problem of nocturnal enuresis, the procedure resulted in a reduction of bedwetting of 90% on the very first night for the retarded adults. For the normal enuretic children, only two accidents occurred for the average child (median) before reaching the criterion of 2 consecutive weeks of dryness. Control-group comparisons in the above bedwetting studies showed that the new method, which included the standard pad and buzzer procedure, was more effective than the pad and buzzer procedure alone. Moreover the Azrin et al. (1974) study with normal children indicated that the social consequences of the wettings were more important than the temporal contiguity of the alarm sound and the urination response, since equally effective results were obtained when the alarm sounded in the parents' bedroom and not at all within the child's hearing. These results suggested that the method might be improved and simplified by omitting the pad and buzzer conditioning component entirely.

Kimmel and Kimmel (1970) proposed and tested an operant method of treating enuresis which did not use the buzzer-pad procedure but, rather,

taught the child to retain his urine for longer periods during the day. The results of a field test with 31 children showed that generalization occurred, in that about one-half of the children stopped urinating at night, one-fourth improved to some degree, and one-fourth showed no change (Pascalis, Kimmel, & Kimmel, 1972). The promising results of the daytime-training approach suggested that it might be combined with Azrin et al. (1974) method.

The present study evaluated a modification of the Azrin et al. (1974) method which included a daytime-training component. The principal change was to omit entirely the pad and buzzer conditioning apparatus. As noted, this omission was intended to eliminate the problems resulting from the many instances of malfunctioning of the apparatus as well as the parents' annoyance at being awakened in the night. Another change was to provide the 1 day of intensive training to the child in the late afternoon and early evening rather than throughout the night, again so as to reduce the training inconvenience. A third major change was the addition of a "strain-and-hold" procedure whereby the child was instructed to try to initiate urination but, as soon as he felt he was about to urinate, to hold it back. The purpose of this training was to teach the child control over his urination and increase awareness of his bladder sensations. A fourth change was to train the child to inhibit his urination until a large volume had accumulated. This procedure was used only with those children who urinated a small volume of urine at each toileting and was intended to increase the threshold of bladder sensations at which the need to urinate would become urgent. A fifth change was to have the child rehearse during the day the toileting action he would take at night. This procedure provided behavioral rehearsal of the correct toileting response.

Many of the component procedures in the present program were the same as those used in the Azrin et al. (1974) method. One intensive day of training was given followed by a regime of parental supervision. To increase the number of practice urinations during the intensive training, the child drank large amounts of liquids. To increase awareness of the effects of bedwetting, he practiced feeling the dryness of the bedsheets. To increase his ability to retain urine, he was encouraged to delay urination. To increase his readiness to wake at night, he was given mild prompts to awaken at regular intervals during the intensive training. Reinforcement for staying dry was arranged using the behavioral contracting approach with the parents. A variety of desirable reinforcers were arranged for being dry in accordance with the general rationale developed in the token economy approach (Ayllon & Azrin, 1965, 1968). To obtain durability of the benefits, the reinforcers for this extended dryness were natural benefits rather than benefits arbitrarily related to dryness. To make the child aware of the inconvenience of wetting, self-correction and

overcorrection were arranged by having him clean himself and the bed after the accident. To strengthen the appropriate toileting reaction, he was given positive practice in which he practiced going to the toilet. To gradually accustom the child to inhibiting urination throughout the night, he was initially awakened once during the night and, as he gained control, this single awakening was gradually eliminated. To provide social support and feedback for his success, a conspicuous progress chart was used and persons concerned about his condition were informed. To maintain a positive atmosphere, a high frequency of praise was used during the intensive training; during the post-training period a regular schedule of favorable comments was arranged by the parents. At the start of training, the child's motivation to stop wetting was increased by reminding him of the annoyance which bedwetting caused him.

METHOD

Participant children. Fifty-five children participated in the study in response to a newspaper advertisement. Forty-one were boys and 14 were girls. The criteria for inclusion were that the child be at least 3 years old, be daytime toilet trained and free of daytime pants-wetting, wet the bed at least half of the time, be within the normal range of verbal understanding so as to comprehend the instructions, and had been given medical consultation and treatment if needed. The mean age was 7.1 years and ranged from 3 to 14 years of age. Nine children were 3 years old, two were 4 years old, and nine were 5 years old for a total of 20 children below 6 years of age.

Experimental design. The children were randomly assigned to either an Experimental (new treatment) or Control (pad and buzzer) condition with 28 children in one group and 27 in the other group. The parents were told that they could transfer their child to the other condition after 2 weeks if they were not satisfied with the progress in the training condition to which they were initially assigned. The two procedures were comparable in that the trainer conducted the first day and night of training in the home, and both procedures required a continuing maintenance schedule which was conducted by the parents.

Control Group: Urine-alarm method. The children in the Control Group received training as described in the written instructions of a commercially available urine-alarm apparatus (available from Montgomery Ward, Chicago, Catalog No. 53A21530). This method incorporated the principal features of the procedure developed by Mowrer and Mowrer (1938) and used by many subsequent studies. When the child went to bed, he was told by his parents that they were unhappy about the bedwetting. The urine-sensitive pad was placed near the bed. When the child wet the bed, the buzzer sounded. The parent awakened the child if he had not already awakened, sent him to the toilet to finish urination, and had him wash his face to assure complete awakening. The parent then reset the alarm, changed the wet bedsheets, and returned him to bed. The trainer remained in the home from bedtime to about 1 AM explaining the procedure to the family, demonstrating the use of the apparatus, answering questions, and guiding the parent when a bedwetting occurred during that period. The written instructions accompanying the apparatus were left with the parents including the progress charts on which bedwettings were recorded.

New treatment procedure. No urine-alarm apparatus was used in this procedure. Table 1 outlines the sequence of procedural steps.

Training afternoon. The trainer visited the home in the afternoon about 3 PM, or immediately upon the return of the child from school, if he was attending school. The trainer explained the entire procedure to the child and parents. They discussed the reasons the child

TABLE I
NEW TREATMENT PROCEDURAL STEPS

I. Training day

A. Afternoon

1. Parents and child are informed of the entire procedure
2. Child is encouraged to drink his favorite beverage to increase urination
3. Child is requested to attempt initiation of urination every .5 hr
 - a. If child feels the need to urinate, he is asked to hold for increasingly longer periods of time
 - b. If child has to urinate, he is asked to lie in bed as if he were asleep then jump up and go to the bathroom, role-playing what he should do at night. He then is rewarded with a beverage and praise
4. Child is motivated to work at dry beds
 - a. Parents and child review inconveniences caused by bedwetting
 - b. Parents contract with the child for rewards to be given after first dry night and after a specified series of dry nights
 - c. Child specifies persons he'd like to tell when he can keep dry
 - d. Child is given a chart to mark to show his progress posting this in a prominent spot

B. One hour before bedtime with parents watching

1. Child is informed of all phases of maintenance procedures
2. Child role-plays cleanliness training
 - a. Child is required to put on own pajamas
 - b. Child is required to remove sheets and put them back on
3. Child role-plays positive practice in toileting
 - a. Child lies down in bed as if asleep (lights out)
 - b. Child counts to 50
 - c. Child arises and hurries to bathroom where he attempts urination
 - d. Child returns to bed
 - e. Steps a-d repeated 20 times with parent counting trials

C. At bedtime

1. Child repeats instructions on accident correction and nighttime awakenings to trainer
2. Child continues to drink fluids
3. Parents talk to child about rewards and their confidence in child
4. Comments on dryness of sheets
5. Child retires for the night

D. Hourly awakenings till 1 AM

1. If child is dry

- a. Minimal prompt is used to awaken
- b. Child is asked what he should do

1. If can wait another hour

- i. Trainer praises his urinary control
- ii. Child returns to bed

2. If must urinate

- i. Child goes to bathroom
- ii. Trainer praises him for correct toileting
- iii. Child returns to bed

3. Child feels bed sheets and comments on their dryness

4. Trainer praises child for having dry bed

5. Child is given fluids (after 11 PM discontinue beverages)

6. Child returns to sleep

TABLE I (Continued)

2. When an accident has occurred

- a. Parent awakens child and reprimands him for wetting
- b. Parent directs child to bathroom to finish urinating
- c. Child is given cleanliness training
 1. Child changes night clothes
 2. Child removes wet sheets and places them in dirty laundry
 3. Child obtains clean sheets and remakes bed
- d. Positive practice in correct toileting (20 trials) is performed immediately after cleanliness training
- e. Child is reminded that positive practice is necessary before bed the following evening

E. Parents check the child .5 hr early the next morning

II. Post-training parental supervision

A. If dry in the morning

1. Point out to child .5 hr before his usual bedtime that he may stay up that extra .5 hr because he needn't practice and would be awakened .5 hr earlier that night
2. Point out his chart to show his progress toward rewards
3. Tell visitors to the home how he is keeping his bed dry
4. Bring his success up at least three times a day

B. If wet in the morning

1. Wake him .5 hr early asking him what he should do and to feel his sheets
2. Child is required to change his bed and pajamas
3. Child does positive practice in correct toileting (20 trials)
4. Child does positive practice (20 trials) .5 hr before bed that night
5. Child marks chart and is told we will try again tomorrow
6. Tell visitors to the home that the child is learning to keep his bed dry

and the parents were distressed at the bedwetting (to identify reinforcers) and which friends and relatives were concerned (to be used as social reinforcers). The child was encouraged to drink as much as he could of his favorite beverages during the entire afternoon and was prompted about every 15 min. A "strain-and-hold" method of voluntary control over urination was practiced with the child. Every .5 hr, he was asked to strain at the toilet until he felt he had to urinate whereupon he was encouraged to hold it back. If he did inhibit, he was praised and rewarded. If he felt he could not delay much longer, he lay on his bed in his darkened room and pretended to be asleep while concentrating on the full-bladder feeling, describing it aloud. This provision of returning to bed before urinating was intended to recreate the stimulus conditions that would prevail at night when the child was asleep. He was instructed to rehearse mentally, "thought rehearsal," his resolution to awaken when he had the urgent feeling to urinate and to hurry to the toilet, which he then did. To motivate the child, the parents contracted with the child for rewards to be given after a specified period of dryness. These rewards often included a new sleeping bag, having a friend stay over and possibly share his bed, visiting friends and relatives, going to a summer camp, obtaining new pajamas, bed sheets, or a new bed, and eliminating protective rubber sheet. To make his anticipated progress more publically visible, he posted a chart on the wall in a conspicuous location in his room.

One hour before bedtime. Before bedtime, the child role-played the cleanliness training procedure and the positive practice procedure, both of which were to be used when bedwetting occurred. Cleanliness training consisted of cleaning up after an accident. The child pretended he wet his bed and showed how he would change his night clothes, remove

the wet sheets, and replace them with dry ones, doing all of these things entirely by himself. Positive practice was also role-played, pretending that he had a bedwetting the night before. In this procedure, the child practiced the responses which would prevent the wetting, namely, rousing himself at night and walking to the toilet. The child lay in bed in the dimmed room, his eyes closed, and slowly counted aloud to 50 whereupon he arose, hurried to the toilet, and attempted to urinate. Younger children counted to a lower number or recited the alphabet. He performed 20 of these trials with the parent counting the trials aloud. Drinking continued. The positive practice and cleanliness procedures were described to the child and parents as a strategy for having the child take adult responsibility for his accidents and to practice actions which would prevent future accidents.

At bedtime. At the time the child went to bed, he described the actions he would take if he had an accident and what he would do that evening during the hourly awakenings. He felt the sheets and described how dry they felt. The parents expressed their confidence in his ability and they reviewed the rewards they had promised the child.

Hourly awakenings. The child was awakened hourly from bedtime, usually about 8 PM, to 1 AM for a total of four or five awakenings. At each awakening, the trainer lightly touched the child and asked softly "What are you going to do?" Only if he failed to awaken was a stronger prompt used, thereby encouraging the child to awaken to mild stimuli and hopefully generalizing to the stimuli associated with a full bladder. Upon being prompted, the child walked to the toilet and attempted urination. Whether or not he urinated, he was praised for his effort, a drink was given, and he returned to sleep. If the child was reluctant to go to the toilet, he was prompted until sufficiently awake to make eye contact and to sit on the edge of the bed, whereupon he was asked if he could hold back his urine. If he so stated, he was praised, given a drink, and returned to sleep. Whether or not a child went to the toilet, before returning to sleep after each awakening he felt the sheets, commented on their dryness, and reviewed what he would do if he had the urge to urinate or if he had an accident.

If the bed were found to be wet at the hourly awakening, cleanliness training and positive practice were given. For the cleanliness training the child was required to change his night clothes, to remove the wet sheets and place them in the dirty laundry hamper, to obtain clean sheets, and to make up the bed. He then engaged in the positive practice for 20 trials after which he returned to sleep after drinking more liquid. He was reminded that positive practice would also be needed .5 hr before retiring the next night.

A small number of children were slow in learning the procedure, whereupon a second night of intensive training was given.

Post-training parental supervision. After the single night of intensive training with the trainer present, the parents conducted the necessary follow-up supervision. If the child had been dry the previous night, the parents praised him that morning and told him he need not engage in positive practice that night thereby allowing an extra .5 hr to play. They also told visitors, and concerned relatives, how pleased they were with his efforts and scheduled several natural time periods for praising the child such as mealtime, upon father's return from work, child's return from school, as well as upon arising and retiring. The parents checked the child's bed .5 hr before his scheduled awakening. If the bed was wet, he engaged in cleanliness training and positive practice during the next .5 hr as well as that night .5 hr before the usual bedtime. On the first night after the intensive training, the child was awakened to toilet at about midnight or 1 AM when the parents normally retired. Each day that the child was dry, the time was reduced by .5 hr until the point was reached that the awakening was scheduled for just 1 hr after bedtime. At that point, the awakenings were discontinued which could be within 1 week. A "Happy Clock" drawing was posted near the child's bed, showing the progressive change in the scheduled hour of awakening and reminding the parents of the exact wake-up time.

The general atmosphere was to be one of continued encouragement and praise. Even

when accidents occurred, the child was to assume the "grown up" responsibility of correcting them by cleaning up and by practicing still further the right way of preventing them by the positive practice. The parents then stressed their confidence in his future efforts. In rare cases the child became upset during the daytime training about practicing, at which time the parents reviewed with him the success his efforts had thus far and encouraged him to continue in order to obtain the specified rewards. If he was still upset, the parents had him sit in a chair without distraction until he had calmed sufficiently and agreed to practice.

For children who urinated only slight amounts, the child was required to urinate in a measuring cup when at home. The number of ounces per urination was recorded on a chart and he was praised for progress in increasing the volume of urine.

Should the child ever become ill, the parents discontinued the requirement of cleanliness training and positive practice during the illness.

Communication by the trainer with the parents took place with the child present so he would be fully knowledgeable of the procedure.

Feedback to the counselor was arranged during the first 2 or 3 weeks by having the child and parent call the counselor at a special telephone number which tape recorded the message and allowed the counselor to hear it at the end of the day. The counselor would call back if the message requested a return call or if the client failed to call.

The presence of both parents was required during the night of intensive training to permit both of them to understand and cooperate in the program.

Follow-up data were obtained from the records mailed in by the parents as well as from telephone calls to the parents and the child to assure greater reliability.

RESULTS

Figure 1 compares the results obtained with the children in the pad and buzzer treatment with those receiving the new procedure during the first 2 weeks of training. Prior to training, the children in both groups had wet their beds about 90% of the nights. During the first 2 weeks of training, the children receiving the pad and buzzer training wet their beds on 76% of the nights whereas the children receiving the new method wet their beds on only 15% of the nights. This difference in bedwetting between the two training methods was statistically significant ($p < .00001$) according to the t test for statistical significance. Of the 27 children in the pad and buzzer training group, the parents of 23 requested training on the new method after 2 weeks. The results with these 23 were almost identical to those who had received the new training method initially: They wet their beds 14% of the nights during the first 2 weeks with the new procedure. Three of the parents did not request a change to the new procedure, since their children were dry on most nights using the pad and buzzer method. (Two of these three parents called back after several months and requested the new treatment since wetting was occurring with the pad and buzzer treatment.) The fourth parent felt the new method was too inconvenient. None of the parents who were in the new method group elected to change over to the pad and buzzer method when given the opportunity at the end of 2 weeks, because all of the children were dry on most nights by that time.

Figure 2 shows the time course of the bedwetting for the children

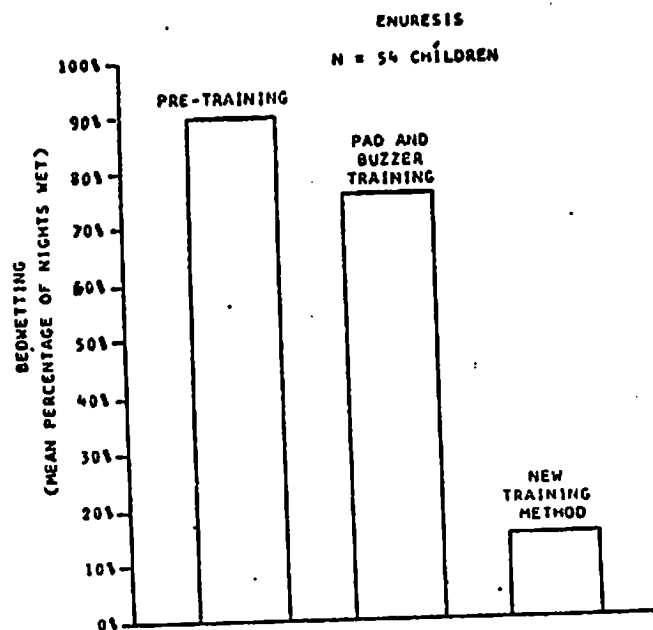


FIG. 1. Comparison of the new training method with the standard pad-buzzer training method. The first bar designates the baseline level of bedwettings prior to training. The "pad and buzzer" bar designates the conditioning method wherein a urine-sensing pad on the bed sounds an alarm when wet. The "new training method" bar designates an operant-social procedure which does not use the urine alarm. Twenty-seven children were assigned to each training method. Data for the two training methods are for the first 2 weeks of training. The children were 3-14 years old. The data are expressed as the mean percentage of nights on which bedwetting occurred.

receiving the new training method. The children who had started earlier on the pad and buzzer procedure were included in this presentation since, as noted above, their results were almost identical to those of the children who had not received prior pad and buzzer training. Figure 2 shows that on the first day after the intensive training day, bedwetting was reduced from its initial level of 90 to 25% and remained at that general level during the first week. During the second week, the accidents had decreased to 15%, during the second month to 9%, during the third month to 6%, and during the fifth month to 4%. One year later, accidents occurred on less than 2% of the nights.

Fifty-one children received the new training method. One dropped out after the first night of intensive training and is not included in Fig. 2. Three others dropped out during the third and fourth week of training, all because the child and/or parents would not perform the necessary post-training activities. Their data are included in Fig. 2 up to the date at which they dropped out. Three of the four dropouts were under 6 years of age.

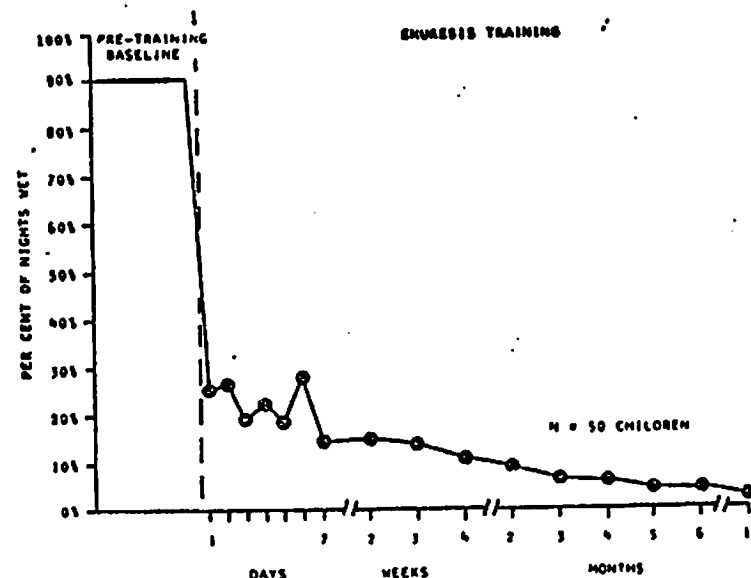


FIG. 2. Time course of effectiveness of the new training method for enuresis. The data are expressed in terms of the mean percentage of nights on which bedwetting occurred. The pretraining data are for the baseline period prior to training. The data points are presented daily for the first week, weekly for the rest of the first month, and monthly for the first 6 months as well as for a 12-month follow-up period. The children were 3-14 years old. The data points include 50 children up to the third week, the remaining 47 children for the first 6 months, and all 25 children who had reached the 12-month follow-up date at the time of this report. The open slash markings on the abscissa indicate the changes in time scale.

Using the criterion of 14 consecutive days of dryness as a measure of cure of enuresis, all of the children (100%) who continued the post-training procedures achieved a cure. Considering the four children who dropped out, 92% of the children can be considered to have been cured.

The average child had four accidents (median) before achieving 14 consecutive dry nights. The mean was 6.8 accidents. The median number of accidents to this criterion was five accidents for the 3-5 year olds, five for the 6-9 year olds, and four for the average 10-14 year olds. Ninety-one percent of the children were wetting every night before training. The median number of accidents to criterion was four for these children as well as for those who occasionally were dry.

Eight awakenings occurred for the average child (median) at the start of training. Consequently, the data for about the first week seen in Fig. 2 include the effects of the awakenings but not the data thereafter.

Occasional accidents continued to occur months after training, almost all of which were associated with periods of childhood illness. The above data presentation did not include accidents which occurred during serious

illness when the child was confined to bed and/or was too ill to attend school. If one defines a relapse as more than three consecutive nights of bedwetting, 10 children had a relapse for a relapse rate of 20%. All of these relapses occurred following an illness or traumatic family experience such as a death in the family. When the maintenance procedures were reinstated, all 10 cases regained control. No child relapsed more than once.

DISCUSSION

The new method was very effective in eliminating bedwetting as measured along many dimensions of effectiveness. The method was effective for a high percentage (100%) of the children who continued to use the method. The percentage of dropouts was very low (8%). Relapses were infrequent (20%) and were immediately corrected in every case by reinstating the procedure. Multiple relapses for a child during the first year were nonexistent (0%). The rapidity of the benefits was great, as seen by the reduction of bedwettings from the initial level of 90 to 25% on the very first day after the single day of intensive training. The benefits were durable as seen by the low rate of bedwettings (2% of the nights) after 1 year. Very few bedwettings occurred before the child achieved arrest: The median was four accidents for the average child before achieving 14 consecutive nights of dryness. Along all of these dimensions of speed, degree, and durability of the benefit, the method was very effective.

The new method was superior to the pad and buzzer method. The direct comparison between the control and experimental groups during the first 2 weeks showed that the new method resulted in about one-fifth the number of bedwettings as did the pad and buzzer method (76 vs 15%). About 90% of the parents who started with the pad and buzzer elected to change to the new method, whereas none (0%) of those who started with the new method elected to change to the pad and buzzer method. Accordingly, the new method appears more effective and more preferred by the parents than the pad and buzzer method. In previous studies, the pad and buzzer method has similarly shown little benefit during the first 2 weeks (Forsythe & Redmond, 1970; Dische, 1971).

The new method does not seem to be as effective as the previous method (Azrin et al., 1974) which had included the pad and buzzer procedure but not the daytime training. In the Azrin et al., (1974) training program the average child had only two accidents before achieving 2 weeks of dryness whereas in the present method he had four accidents. This difference suggests that the pad and buzzer might be used as an addition to the present method if maximum effectiveness is the principal objective and if its use does not create great inconvenience and unreliability.

Although children younger than 6 years are often not treated for enuresis, very young children were benefitted by the new method. Included in the sample were 20 children below 6 years of age of whom 9 were only 3 years old. All achieved virtual elimination of the bedwettings, as did the older children.

An important feature of the present method is the emphasis on positive reinforcement and positive behaviors rather than on the negative behavior of bedwetting. The trainer and parents continually praised the child's efforts and agreed together on suitable reinforcers. Also, the emphasis was on what the child should do: develop bladder control, arise at night, and be aware of the state of dryness of the bed. If he did wet his bed, he should assume responsibility by cleaning up rather than by feeling guilty about it. The emphasis on continued feedback, praise and reinforcement to the parents and child, made the experience fairly pleasant for the child and probably contributed to the low dropout rate.

One apparent disadvantage of the present method is the full day of involvement by the counsellor. The principal reason for having the counsellor, rather than the mother, conduct the training was to assure that the training was properly carried out. Subsequent to this study, the counsellor taught the parents and child in a single office visit of about 1.5-hr duration. Although the follow-up data are not sufficient, preliminary analysis indicates that the present procedure can be taught in an office setting without need for the counsellor to perform the training in the home.

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