Development of Family Self-Control Skills

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Family physicians require efficient and effective means for intervening with families of patients in order to positively affect the patient's health status. The purpose of this article is to present a new concept in behavioral intervention, family self-control skills, particularly stressing its potential use by physicians. The clinical interventions described here were developed in a family medicine clinic, and have been used successfully with several patients and families. The article identifies specific concepts and techniques found to be useful in promoting family self-control skills, and demonstrates their application in a family medicine setting. A case example is included to illustrate this approach.

The goals for this paper are as follows: first, to present briefly basic behavioral and self-control concepts; secondly, to present a theoretical rationale for the application of self-control strategies and techniques in a family context; and thirdly, to present practical techniques for adapting self-control to working with families in a medical setting.

Definitions of Self-Control

Self-control or self-management is a theoretical and clinical subset of behavior therapy,[1,2] which in turn consists of techniques of therapeutic intervention based on principles of social learning theory.[3] Like other behavioral technologies, self-control strategies assume an individual's behavior to be a function of the individual's physical and social environments.[4]

The unique aspect of self-control skills is that they return to the patient what are generally thought to be responsibilities of the therapist (or, for the purposes of this paper, the physician). Instead of the physician determining a goal for a patient, the patient decides what to change, how to observe and monitor his/her own behavior, and how to strengthen a desirable behavior.[5,6]

This concept of self-control differs from that of the term *will power,* as it is popularly used.[7] Many patients and physicians alike assume willpower to be a fixed attribute or characteristic, like blue eyes, with which a given individual either is or is not endowed. In contrast to this conceptualization, it can be argued that self-control is not an inherent property of the individual. Basically it can be defined as a behavior subject to the same principles as any other behavior. In other words, according to social learning theory, self-control is something that can be learned, something that can be taught.

Behavioral Techniques, the Family, and Medicine

Historically, behavioral techniques have focused on the individual, although usually in the

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context of his/her environment.[8,9] *Self*-management implies a situation in which an *individual* chooses a particular behavior change program. When behavioral strategies have been applied to the family, this application is usually conceptualized so as to make the child the target. The child is passive, acted upon. The parents, termed the mediators, are the persons who have control over the target's reinforcers.[10] Such an approach focuses on maladaptive behaviors in the child[11] and education and training for the parents.[12] This model is one essentially opposed to self-management principles. It is instead a form of other-management,[13] in which the parents choose behavior that the child should display and then set up contingencies for the child to produce that behavior.[14]

Another approach has been to pair behavioral techniques with family oriented crisis counseling.[15,16] The goals of this synthesis are to alter the family system through a program of mutual reinforcement, and to assist the family in the application of newly developed coping skills to other conflict situations. However, in this amalgamation, intervention still rests clearly at the therapist level, and there is little sense of the family regulating its own behavior.

Family physicians have long recognized the relevance of behavioral techniques in the family medicine setting.[17] The relative simplicity of basic mastery, the emphasis on change strategies, and the avoidance of labeling the patient as psychiatrically disturbed are all congruent with the needs and constraints of the family physician.[18,19] The role of behavioral techniques in treatment, prevention, and patient education has been stressed.[20] However, overall, in the family medicine context, behavioral technology has been applied to the individual rather than to the family unit as a whole.

This brief overview suggests that developments relevant to the concept of family self-control skills have occurred in the fields of family therapy, family medicine, and behavior therapy. However, the possibilities of behavioral techniques as a self-control tool for the family unit, with applicability to the family medicine setting, need further delineation.

Applications of Self-Control Skills to the Family Context

The concept of self-control skills applied to the family, rather than to the individual, requires a new concept of the family, different from the model previously outlined. On the surface the term may seem contradictory—self-control for families? What does that really mean?

Just as there is an individual self, so we may also think of a familial self. A family may be conceptualized as an interactive unit in which the individual members are simultaneously actors and reactors.[21] Making an analogy to the person, one can think both of individual parts, such as the intellect and the feelings, as well as a whole which consists of the parts, but also transcends them. Each family has a distinct personality, and in this sense one may legitimately refer to a familial self.

For this purpose, the family needs to be conceptualized as a system whose members mutually regulate one another.[13] In a system of mutually controlling members, influence is continuously being exercised upon as well as being exercised by each individual member of the family. Clearly, in different situations, different members may have varying degrees of control, but the model describes a much more interactive, fluid system.

Use of Family Self-Control Skills in a Medical Setting

How can this concept of family self-control be applied to medical settings? There has been an increasing need and desire on the part of physicians and patients alike for patients to assume greater responsibility for their own health care.[22,23] Usually, when this statement is made, the patient is being defined as an individual rather than as the entire family. It is true, nevertheless, that both individuals and families often lack the skills for assuming responsibility.[24] It is the physician's role to help teach these kinds of skills to his patients and families.

The family is an important health care unit in which to intervene, as it has been well documented that family dynamics may exacerbate or even induce medical problems.[25] For example, a widely acknowledged theory about the causes of alcoholism emphasizes the spouse as an enabler or co-alcoholic.[26] This concept can be generalized easily to other addictive problems. In cases of obesity, there is usually at least one enabler, and often a family of enablers, who facilitate the identified patient's getting fat and staying fat. The role

of the family in psychosomatic illnesses such as asthma and anorexia nervosa has been clearly established.[27] Further, there is a growing theory that what has been defined as a Type A personality is not really a personality type at all but rather an interaction pattern between patient and spouse.[28]

The following case example will be used to illustrate concretely, in step-by-step fashion, how a family physician might utilize these techniques.*

Three months ago, Mrs. N. presented to her family physician with a series of symptoms consistent with laboratory results suggesting a diagnosis of adult onset diabetes. Mrs. N. is an obese woman, 32 years of age, with two children, 9 and 12 years of age. She works a morning shift as a waitress. Mrs. N. appeared somewhat despondent, anxious, and with a low opinion of herself. She is married to Mr. N., a roofer, who is in good health. S., the daughter, recently was brought to the physician's office because she had started menses, and her mother was concerned as to whether "everything was normal." S. is also overweight, passive, shy, sedentary, with few friends, and unusually close to her mother. Mrs. N. complained that J., her 9-year-old son, was "a maniac," and indeed his physician has seen him twice in the emergency room, once for a fractured wrist and once for contusions received from a fall from a tree. The father stated that J. was probably "hyperactive," although he seemed more uncontrollable at home than at school.

The immediate patient management problem confronting the physician was the inability to establish Mrs. N. on an effective weight loss program, although this would probably enable her to regulate the diabetes without insulin. Mrs. N. had seen a dietician and seemed to know what foods she should be eating, but since learning her diagnosis, she had not lost any weight. The physician hoped that intervening at the family level would give Mrs. N. better skills to enable her to regulate her weight and, thus, favorably affect her diabetic condition.

Initial Assessment

The physician needs to engage in an assessment phase during which he determines whether the family is an appropriate candidate for the use of family self-control skills. Common criteria for assessment include the nature of the problem, the degree to which the physician perceives it to involve the family as a whole, and the resources of the family unit. In the case of this family, their physician was familiar with research attesting to the fact that modification of eating behavior is effective when family members are involved.[29,30] Through informal discussions with members of the family, their physician concluded that each family member was adversely affected by Mrs. N.'s neurotic eating patterns, and that they simultaneously contributed to making food her primary source of reinforcement and gratification. In the physician's estimation, despite problems in daily living, the family unit was emotionally healthy (use of the Family APGAR[31] in this context provided the physician with initial screening information that members perceived the family fairly consistently and fairly positively (APGAR score of 7)).

Other assessment criteria include readiness to change, or patient and family's positive motivation to change; degree of success on an assessment task; and examination of barriers to change, or how patient and family may attempt unconsciously or consciously to sabotage efforts toward change.[32] In this family, at an initial family conference, the members were able to state two reasons why they would like to help Mrs. N. lose weight. On an initial assessment task, in which the family members were asked to write down for one week everything they ate, family members were fairly compliant. A follow-up office visit helped the family examine barriers to change, and revealed Mrs. N.'s feelings that "the situation is hopeless," "I'll never be able to manage my weight," Mr. N.'s pessimism that "doctors aren't going to help her anyhow," S.'s worry that it would be "mean to put Mom on a diet," and J.'s anger that "this is taking too much time; I missed soccer practice to come here today." After the family had looked at these sabotaging mechanisms, they reported they felt more aware of how they might undermine change, but still were ready to proceed with the training.

A final aspect of the assessment phase consists of examining patient and family expectations. Exaggerated and unrealistic expectations need to be modified to increase the likelihood of success. The initial conference with the family indicated that

*This case is based on an actual family seen by a family practice resident and the author as part of a behavioral science training program. Information was gathered through direct observation, physician report, and tape recordings of family conferences.

Mrs. N. has fairly unrealistic expectations in terms of her goals ("I'd like to lose at least 50 pounds") and her hopes ("My life would really change if I wasn't so fat"). Her viewpoint was balanced by Mr. N.'s highly negative expectations ("This isn't going to do any good"). Discussion with the physician helped family members reach a middle ground of more moderate and realistic expectations.

Problem Identification and Definition

The single most critical aspect of inducing behavior change in the family is appropriate attention to identification of the problem. Where the problem has not been sufficiently specified, no amount of intervention, however complex, will do any good.

There are several ways of identifying the problem. Sometimes the question the physician wishes to clarify is, "What is the problem in your family?" The best way to find out may be simply to ask this question directly of family members.

If the direct approach is not appropriate, an exercise to facilitate problem identification is the *family problem list,* in which each member of the family independently writes down what he or she perceives to be the problems in the family. These lists also can be the basis for fruitful family discussion. Usually each family member will engage in finger pointing and be heavily rooted in a blame model. For example, Mr. N. wrote "My wife doesn't have enough willpower to stop her eating, and this makes problems for all of us." And Mrs. N. stated simply, "I am too fat."

When these lists reflect disagreement among family members as to what the problem is, this disagreement can provide an opportunity for the first family self-control intervention. A homework assignment for the family is to work out a time when they can meet independently in a *family conference.* This is an important keystone in the whole concept of family self-control skills; the family needs to get together regularly: physically, socially, and emotionally. Simply by eliciting a commitment from family members to meet together for one hour at one time over the next two weeks, the physician already has had an effect on how the family operates.

At this conference, the family has two group tasks: (1) to reach consensus on the primary problem,[33] and (2) to reach consensus on how to interpret and specify the primary problem. When the members compared their problem lists, two interesting points emerged. They agreed that Mom's weight was a big problem. But Mrs. N. also felt that a major problem in their family was not spending enough time together. This item had not appeared on anyone else's list, and initially she was pressured to abandon it. Then S. shifted sides by commenting that "You and I spend time together, Mom, but I guess we don't spend time with J. and Dad." J. also realized he did not spend much time with his father. The family agreed that both Mrs. N.'s weight and the issue of family time were primary problems.

In addition to reaching consensus on this level, the family needs to interpret and specify the problem. To this end the physician gives the family two skills. The first may be termed the skill of *translation,* useful in problem interpretation. Translation refers to the process of taking individual problems, which are generally what appear on the different family lists, and redefining them as family problems. The task for the family then is to take the individual problem(s) generated and translate them into a family context.

In their family conference, the N. family members engaged in this translation process in two ways. First, S. self-consciously acknowledged that being overweight was not simply her mother's problem, but that she too was overweight. Mr. N. spontaneously mentioned that although he was not overweight, the family physician had repeatedly urged him to pay more attention to his eating habits, as he had a history of early heart attacks on his father's side of the family. J. remembered his soccer coach telling him he would have more energy if he ate a balanced breakfast. Suddenly Mrs. N.'s problem had been transformed so that it was an issue affecting the entire family.

The family also translated Mrs. N.'s eating problems on another level. Again, S. initiated this process by commenting on how much time she and her Mom spent eating together. Then Mr. N. admitted that he was always sending his wife on special trips to the grocery store. He also expected her to cook elaborate meals for his extended family who came to visit often. J. remembered his constant demands for candybars and sweets. Thus, the family members began to realize how they contributed to Mrs. N.'s bad eating habits.

The other tool related to problem definition is

the concept of *specification*. Problems presented by families tend to be phrased globally and generally, rather than specifically and in detail. Problems need to be made specific. What do family members really mean when they say their eating habits are poor? When are they poor? For which family members are they poor? Under what circumstances and how often? This specificity often has the salutory effect of demonstrating that problems in the family are situation specific[34] rather than all pervasive. By developing skills to think more clearly about what the problem is, the family is also beginning to put some limits on the problem. In thinking about her own eating behavior, Mrs. N. realized that most of her inappropriate eating occurred during meal preparation (when she often snacked to reduce anxiety), when she went out with her daughter (shopping or to the movies), at large family gatherings (when she was entertaining her husband's relatives), and after an argument with her husband or the children. On the other hand, she learned that she rarely had eating problems in the morning or at work.

Family Monitoring: Observing Behavior Relative to the Primary Problem

Sometimes information useful to both translation and specification may be obtained by having the family monitor the problem behavior. One such method of monitoring is to perform a functional analysis for each family member in relation to the problem behavior. A functional analysis of behavior has been referred to as an ABC paradigm, in which A stands for antecedents and C stands for consequences of the behavior (B).[4] A functional analysis of a behavior such as eating demonstrates how that behavior is determined by stimulus control (the anticipatory cues in the environment) and/or by contingent reward (the consequences of the behavior).

The goal of such monitoring is to obtain accurate information about the family's role in determining a given problem behavior. In conducting a family functional analysis, every member of the family (over ten years of age) receives a monitoring sheet.* Over a given time period, each family member records his or her behavior, thoughts, feelings relevant to the particular problem under consideration. For example, in the case of this family, each family member monitored for one week their affective, cognitive, and behavioral responses to mother's eating.

Several interesting points emerged from this exercise. First, S. apparently often participated in food oriented activities with her mother (at the movies, at meals, and at family gatherings). Secondly, she often felt bad or guilty when she saw her mother eating. Thirdly, although she did engage in eating behaviors with her mother, as a consequence of her discomfort she often left her mother alone as soon as the eating was accomplished. A family functional analysis is a good way of convincing the family that problems affect the entire family, and that the entire family affects the problem.

Goal Setting

Both long-term and short-term goals need to be established for the family. Long-term goals may be more general. For the N.'s, the family agreed on better eating habits and spending more time together as long-term family goals. Short-term goals should examine only one aspect of these broader objectives, and should have components tailored to individual family members.

Especially in identifying the target behavior, the family needs to emphasize small and specific increments of change.[9] It is the responsibility of the physician to modify the family's more ambitious, sweeping goals and set a task with high likelihood of success. It is also important to convey the idea of successive approximation,[35] or having stepwise series of subgoals which can be accomplished as a way of incrementally approaching the family's ultimate change goal.

Several short-term goals were established during this early intervention phase in the N. family. It is important to point out that *each* family member identified a change goal. Mrs. N.'s initial goal was to write down everything she planned to eat before she ate it for a period of one week. S. wanted to do three activities that week with her mother which had nothing to do with food. J. agreed not to ask his mother for junk food for one week, but instead would ask her to buy "healthful snacks." Mr. N., acting on the physician's encouragement to loosen the tight coalition of S. and his wife, set as a goal asking his wife out once during the forthcoming week and agreeing not to talk about food, meals, or diets.

*Available on request from the author

Family Self-Control Techniques: Interventions

Three ways of effecting change in the family which are related to antecedents and consequences should be mentioned briefly. The first is *environmental planning,* which refers to modifying the antecedents in family life relative to a particular problem behavior. An example of environmental planning with Mrs. N. follows. It developed that Mrs. N. tended to do her marketing with her two children. The situation in the market was invariably chaotic. She was out of control and engaged in impulse buying. At home, she would unpack the groceries and in the process would eat about a quarter of them. Clearly there were family related antecedents controlling this aspect of her problematic eating which needed to be changed. In this case, the environment was altered by leaving the children at home when she did the shopping, preparing a shopping list in advance, and shopping after she had just eaten a meal.

Behavioral programming is a second change strategy which focuses on the consequences of a behavior and emphasizes altering the reward structure in the family. Basically, behavioral programming stresses the use of rewards or reinforcement to increase the probability of a new, adaptive behavior.[1] There are material rewards as well as social reinforcers or praise.[36] Cognitive rewards in the form of positive self-statements tend to be effective with adults. In the case of this family, each family member devised rewards or reinforcers to increase the likelihood of carrying out his or her desired target behavior. For example, J. was to be paid one nickel every time he asked his mother for healthy food. Mr. N. decided to reward himself for taking his wife out by spending an evening bowling with his friends. It is important to note that each family member, including the youngest, set his or her own goals and decided on an appropriate reinforcer. Of course, reinforcers must be limited by reality factors and by consent of other family members.

A particularly appropriate concept in this context is the notion of family rewards. In this case, the role of the physician is to identify, with the family's help, behaviors and activities that are rewarding to the family and use them to maintain behavior changes that are agreed on by the family. Some family rewards which emerged for the N. family included playing frisbee at the park; going to Sea World; going to church (J. disagreed!); going to a ball game (S. disagreed!). These activities were useful positive consequences which could be invoked to maintain behavior change in individual family members. They were also important steps toward the long-term goal of spending more time together as a family.

In using rewards there are several aspects that will greatly encourage success.[37] It helps if the rewards are easily accessible. It also helps if they can be obtained frequently. It is useful to find reinforcers that can occur repeatedly in the family environment, in addition to reinforcers that can occur only once or twice a month. Thus, a hug, a kiss, an encouraging word can be as important as an expensive trip.

Role of the Physician in Teaching Family Self-Control Skills

The physician's role in this process of family self-control is limited but critical in order for these skills to be effectively communicated. First, the physician needs to communicate the concept of family problems rather than individual problems and thus lay the groundwork for the further implementation of all subsequent ideas and techniques.

Secondly, it is the physician's responsibility to teach the family how to sit down and talk to each other. For families that are not used to talking to each other, it is the physician's responsibility to provide several ground rules, which might include the following: (1) each family member needs to speak for himself or herself; (2) there are no third party communications; no one can say, "Well, J. said that he hates you, Mom." Instead, J. tells the mother directly that he hates her, if this is the case; and (3) family members should not be punished for anything that they disclose within a family conference. It is also useful, depending on the commitment and expertise of the physician, to provide the family with some basic communication skills.[36] For example, physicians can quickly teach families the effectiveness of I-statements as opposed to you-statements. Similarly, skills of clarification, empathy, and reflection can at least be modeled and practiced briefly.

As was mentioned earlier, another area in which the physician's role is extremely important is in making sure that the monitoring system, for example having the family do a functional

analysis, actually works. The physician also helps the family to set limited goals, which are clearly observable and recordable. The physician next helps the family to devise appropriate interventions that change behavior within the family, and later assists in developing family based techniques to maintain the desired change. At this point the physician's role becomes one of ensuring that the family follows some of the basic guidelines presented in this article to ensure that the problem remains in the family context rather than the individual context.

Teaching family self-control skills provides an efficient use of physician time because it places the physician essentially in the role of consultant. Family members must do most of their work outside of office time, in their own home. The physician is there to give them guidance on specific points but essentially they are responsible for their own behavior. By working with the family in this way, the physician also conveys respect for the family as a self-regulating, self-responsible unit.

Benefits of family self-control techniques include the fact that the physician is providing skills which are not too difficult to grasp and which can be generalized to other family problems, so that over time the family is developing an arsenal of coping skills, even though it may take more time initially to teach a family these skills. Another nonspecific effect is that by teaching family self-control skills, the physician is enhancing family cohesiveness, communicating the idea of the family unit as a team, a mutually interactive body which can be responsible for aspects of its own behavior.

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