Prescription-Filling as a Dependent Variable in the Study of Psychosomatic Families: A Demonstration

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This paper discusses the use of prescription-filling rates in the study of psychosomatic families. A single case A-B design is used to demonstrate the application of the method. Results suggest that this measure may be useful in additional research efforts with psychosomatic families. The method is ethically acceptable and involves no patient stress.

Within both the fields of medicine and behavioral sciences the use of family systems therapy in the treatment of psychosomatic disorders has become increasingly popular. However, surprisingly little research has been published which assesses the effectiveness of such treatment. In a recent review of the literature in this area only three studies were mentioned which support the effectiveness of this approach to treatment (1).

One of the reasons for the relative lack of research seems to be related to inadequate dependent variables. Very few measures are currently available for systems researchers which are reliably and objectively measured, easily emitted by subjects, and sensitive to change (3). The purpose of this discussion is to demonstrate the use of a dependent variable (prescription-filling) that seems to have many of these necessary characteristics. Since one of the characteristics of psychosomatic families is that they seek medical treatment repeatedly, the number of prescriptions filled by the family was selected as the dependent variable.

CASE EXAMPLE

The family unit participating in treatment included mother (age 48), daughter (age 27), the identified patient (IP) son (age 17), and another son (age nine). The father had maintained little or no contact with the family after divorcing 10 years previously. Every member reported a history of an uncommon amount of physical complaints. The mother complained of a heart ailment, allergies, lower back pain, and headaches. The daughter complained of severe allergies which prevented her from working outside the home. The family's presenting problem was the IP's headaches, for which he
had recently undergone a neurological evaluation including EEG and EKG although no cause for the headaches was discovered. These headaches caused him to drop out of school in the seventh grade and he was a third-year high school freshman due to excessive absences. The nine-year-old son complained of allergies and missed school frequently.

For all family members, a record of all prescription medications was obtained from pharmacy records. These prescriptions included primarily antidiarrheal-, antibiotic-, and antihistamine-type medications. It was reasoned that the use of medication would decrease in direct proportion to the psychosomatic symptoms. By using a release of information consent form, objective medical information was gathered without relying upon the self-report of family members.

Treatment, completed by the second author, utilized a structural (2) format and was conducted in a local MHMR counseling center. After interviewing the family, it was determined that the most strategic points of intervention would be to join with the mother to provide an alternate source of support normally supplied by the children, while attempting to help the IP distance from the enmeshed relationship with his mother. Consequently, encouragement was given to the mother to meet with women friends and to date more often. Concurrently, the boundaries within the child-child subsystem were addressed by having the IP son engage in a half-hour coaching session with his brother on how to catch ground balls. This was done to demonstrate that family members could interact without processing their communication through mother. Upon questioning at the beginning of the first and second session, it appeared that homework assignments given to both the children and the mother were met with compliance.

Next, a paradoxical intervention was employed. The “symptom” of over-dependent behavior was prescribed through directives and homework. The IP was instructed to notice even the slightest sign of pain or dizziness and to take appropriate precautions for such a serious illness by immediately lying down on his bed until he was totally recovered. The mother was instructed to continue her motherly duties of taking his temperature, counting his pulse, placing a moist cloth across his forehead, and bringing juice every 15 minutes until the IP got out of bed. The rationale behind these directives was that if the IP got sick the strong emphasis on the mother’s overprotection pattern would cause both the mother and the IP to rebel, thereby reducing the dependency. However, if the IP refused to “get sick,” the symptom would be eliminated.

Therapy consisted of one individual session with the IP and four sessions with the family and was terminated when the family failed to schedule additional appointments. When contacted, reasons of “not feeling well” were given by the mother. The IP said that he had gotten a job and would no longer be coming to therapy. The family was warned that a relapse was probable and the IP was encouraged to attend sessions on days he was off or sick. No family member made further contact with the therapist.

Graphic presentation of the results appears in the Figure 1. Pretreatment (baseline) rates of prescription-filling were highest for mother and IP. Rapid and dramatic reductions in prescription-filling are apparent for the IP during the treatment phase. Some change was also apparent for mother during this phase, although the trend was not as strong. No change was evidenced in either of the two other family members.

The data following treatment termination were mixed. The IP son had one month of prescription-filling similar to pretreatment rates and two months of low rates. Mother’s rate appeared to have returned to pretreatment levels and the young son’s rate appeared to have increased. No change was noted for daughter at any phase of the study.
DISCUSSION

The results of this demonstration are interesting in several respects. First, the measurement of prescription-filling appeared to be a useful dependent variable for assessing change in psychosomatic families. It was reliably measured (since all pharmacies used by the family were contacted) and objectively defined. It was ethically measured (with consent) because treatment was not withheld during baseline (or pre-testing), since historical data were used as the pretreatment measure. This measure was also easily emitted by subjects since they were not asked to participate directly in data collection. This measure also avoided many of the disadvantages of measurements taken in a laboratory setting. Family prescriptions also appeared sensitive to change since the changes in filling rates by this family were so dramatic.

Another interesting result was the sudden change in the dependent variable for the IP following the introduction of treatment. While it was impossible to attribute causality because of the unstable baseline and lack of systematic replication, this demonstration at least suggests the need for further investigation into the specific effects of this type of treatment. Finally, the increased prescription-filling for the nine-year-old
son during follow-up also availed itself to an interesting speculation regarding the function of illness in this family. If the original IP son was getting better (i.e., not being sick) as suggested by his prescription rate during treatment and follow-up phases, the younger son may have been getting "sicker" to fulfill the family function formerly filled by the IP. By monitoring the dependent variables, the therapist may be able to recognize the system shift and obviate the problem.

Although the results of this demonstration could not provide a clear cause-and-effect relationship between treatment and change in the dependent variable, they did present some interesting findings regarding the treatment used. But more significantly, the further investigation of this measure seems warranted since it appeared to fulfill many of the requirements for a useful dependent variable.

REFERENCES


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