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## Psychotherapeutic Intervention and Health Service Utilization

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The value of brief psychotherapeutic or mental health interventions in reducing health service utilization by emotionally distressed persons has been studied by many investigators.<sup>1-7</sup> The psychotherapeutic intervention common to all these investigations was continuing talk sessions with the same person.

The accumulating evidence on the value of simple mental health interventions in reducing utilization is inconclusive. Taken as a whole, the literature provides little assurance that the mental health intervention of various studies is comparable. At best, the studies measure the number of mental health visits vs any qualitative estimation of the nature and type of service provided.

The majority of studies<sup>2,4-7</sup> measured patients' use of health service the year before and the year after the experimental maneuver. Of these, one study<sup>5</sup> had no control group and several investigations<sup>4,7</sup> suffered from a lack of comparability among study groups. Investigations by Follette and Cummings<sup>1</sup> and Kogan et al<sup>3</sup> met the more rigorous criteria of comparable study groups, a cohort analytic study design and multiple years of

utilization measured. If the methodological question of the number of years to be measured when the outcome variable of health service utilization is examined, it could explain the mixed results of these studies.

The basic purpose of this study was to determine the effect of an ongoing physician-patient relationship on health service utilization in a prepaid practice. Does the health service utilization of persons who receive most of their primary care from the same professional differ from that of persons who receive care from any one of 12 professionals?

### Method

In May and June of 1979, the records of 9,317 patients in four family practices grouped as a health service organization (HSO) on a global budget\* were enumerated (classified as to age, sex, and family practice and emergency health service utilization) during the preceding year.

A cohort of 419 frequent attenders were identi-

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\*Physicians on a form of remuneration other than fee-for-service were needed for this demonstration. If the physicians were on a fee-for-service system, there may have been a financial motive for allowing patients to come back frequently.



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fied, and 278 consenting frequent attenders (visited the HSO six or more times in the previous year) were retrospectively classified according to whether or not the primary provider intervention was received.

The characteristics of 141 frequent attenders refusing to be studied have been described elsewhere.<sup>8</sup> The refusers affected the mean age of consenting female high users, who were five years younger (43.9 years) than the whole population of female high users (48.2 years).

Sixty subjects dropped out of the study between the initial consent (May-June 1978) and the follow-up period (May-June 1981) because of misclassification as frequent attenders, death, and termination of subjects with the practice. The 218 remaining subjects were judged to be comparable to the original 278 consenting frequent attenders in age ( $\chi^2=1.205$ , 1 *df*,  $P=.27$ ).

To control for possible bias introduced by the research investigation, 40 records were rated by the four judges. An *F* ratio of .33,  $P=.802$  among judges, indicated very little variation or disagreement among judges counting units of utilization. A Fleiss' generalized Kappa of .8748 indicated substantial agreement among four judges rating the occurrence of the experimental maneuver in the same 40 records.

## Results

Figure 1 displays the mean physician visits generated by frequent attenders who received and did not receive most (50 percent) of their service annually from the same health professional in the prepaid practice.

Years 4 and 5 were the measurement and interventional years, respectively. In year 4, patients who sought services six or more times per year in the preceding year 3 were selected.

The first analysis of the data demonstrated a marked reduction in physician visits in both study groups. Since this reduction also occurred in an unidentified control group, two hypotheses were advanced to explain the data: statistical regression (the tendency of extreme scores to move toward the mean of the population for that variable), or the "Hawthorne Effect" (the awareness of being studied and giving attention tends to elicit a socially desirable response). Patients knew they

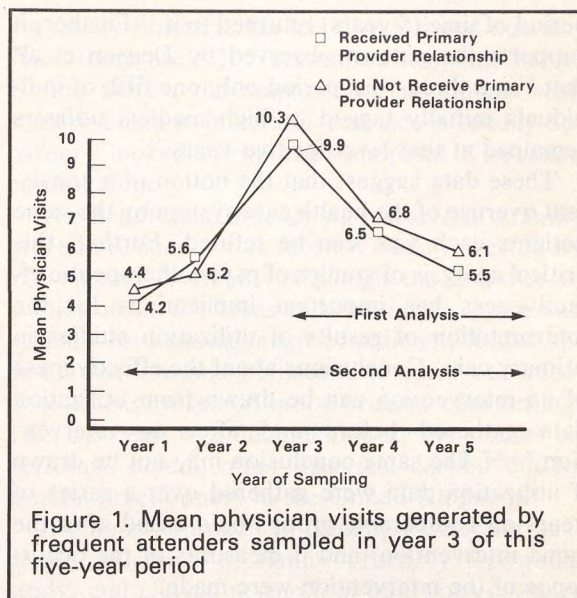


Figure 1. Mean physician visits generated by frequent attenders sampled in year 3 of this five-year period

were being studied. Professionals knew the intent of the study and the names of the two groups of the patients. Conceivably, the professionals could have extended their intervention to other patients with "thick charts" who were obvious high users. Only a measure of the occurrence of the intervention could distinguish between these plausible explanations of the data.

The assumption that high users are the same people each year has remained, however. Only a more longitudinal analysis of patients' utilization patterns illustrated that frequent users may not be the same people each year, even though the prevalence rate of high users in the same setting can remain quite constant over years.

## Comment

If this same group of people were selected in years 1, 2, and 3 of this same period, conclusions about utilization rates increasing might have been drawn. Such conclusions were noted in previous studies alluded to earlier.

This methodological analysis concurs with Kogan's<sup>3</sup> conclusion that the reduction in health service utilization could be attributed to statistical regression. He observed that "high utilizers arose from the average utilization of the population and over a



period of time (5 years) returned to it." Further, it supports the pattern observed by Densen et al<sup>9</sup> that "in a three-year period only one fifth of individuals initially tagged as high medical utilizers remained at that level for two years."

These data suggest that the notion of a consistent overuse of the health care system by the same patients each year can be refuted. Further, this critical analysis of studies of psychotherapeutic effectiveness has important implications for the interpretation of results of utilization studies in primary care. Conclusions about the effectiveness of an intervention can be drawn from utilization data gathered before and after an intervention.<sup>2,4,6,7</sup> The same conclusion may not be drawn if utilization data were gathered over a series of years on comparable groups before and after the same intervention<sup>3</sup> and if measures of the occurrence of the intervention were made.

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# An Infectious Disease Fellowship for a Family Physician

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Teaching fellowships have been developed in family practice education; however, no fellowship

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training in medical subspecialties designed for board certified or board eligible family physicians has been described. The purposes of this communication are (1) to outline a university sponsored fellowship program in infectious diseases based on a medical school clinical campus and designed for a family practice residency graduate, and (2) to initiate discussion regarding subspecialty training for family physicians.

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