Communications

Use of a Medical History Questionnaire in a Rural, Educationally Disadvantaged Population

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Questionnaires have been found to be valuable tools in the procurement of the medical history from patients, and they show a high degree of reliability when compared to physician-recorded histories. Such questionnaires save time for physicians, provide a legible historical record, and can even aid in patient scheduling.[1] While patient acceptance of questionnaires appears to be high, most studies have only superficially covered the patient's personal opinion and feelings. Indeed, these studies have dealt with relatively sophisticated, middle-class, urban populations.[1,2,3] For these reasons, we decided to test a complicated medical questionnaire which was acceptable to us as physicians to see if it was acceptable to our relatively less sophisticated, rural patient population.

Methods

The Dry Fork Community Health Services, Incorporated, is a comprehensive, outpatient family practice clinic using the *Problem-Oriented Practice*[4] of Cross and Bjorn as a model. The clinic is located in McDowell County in the coal fields of southern West Virginia. Recent statistics[5] classify our area as rural, and show a mean education of 8.3 years for men and 9.1 years for women. Mean family income is $2,011, and 33.3 percent of our families have incomes below the United States poverty level.

In order to obtain a complete data base, many new patients at the Dry Fork Community Health Services are scheduled for a "complete history and physical." As part of this examination, a medical history questionnaire is mailed to the patient who fills it out at his leisure in the privacy of his own home. The completed questionnaire is then brought in when the patient returns to the clinic for the first part of his examination, at which time he is seen by a paramedic. At this point the questionnaire is converted to a more readable form by the secretary. Our clinic uses a flow-sheet history, although if a computer is available, one can obtain a more traditional printed-out history. One week later, the patient consults the physician. By this time the physician has available a completed history and partial data base which allow him to make more definite diagnostic and therapeutic plans upon completion of his own examination. We have found this to be a very workable, effective method of data collection, as have others.[4]

The questionnaire used for this study was the PROMIS II Adult Medical Questionnaire.[6] This is a 12-page comprehensive booklet covering past medical history, review of systems, family history, and social history. Eighty consecutive patients were questioned by the physician as to their opinion of the questionnaire. This was done prior to the patient's examination, so that later historical information brought out by the physician would not bias the patient's opinion of the questionnaire.

Results

The overall acceptance of this highly sophisticated questionnaire by our patient population was impressive. Of the 80 patients, 99 percent felt that the questionnaire had given them a complete history, 84 percent had a positive feeling about the questionnaire, and 96.5 percent said that they would repeat it. Contrary to the opinion of some medical skeptics, 94 percent of the patients did not consider the questionnaire impersonal, although one did consider it "exhausting." It was interesting that 61 percent of those who responded felt that the questionnaire was superior to other histories that they had encountered in the past. However, this may represent a biased response, since the patient's personal physician was doing the questioning and the patient may have been seeking to win his approval. The average education of this group of patients (excepting five who had attended college) was the ninth grade. Of these, 36 percent were either functionally illiterate or had significant visual or other physical handicaps. These patients were still able to complete the questionnaire by having a family member ask the questions and write down their responses. They found this acceptable, although we suspect in certain cases that it invalidated personal questions (eg, "problems with sex?", "a history of V.D.") since the patient may have been hesitant to discuss such problems frankly with a loved one.

Discussion

History questionnaires have been in existence since the late 1940s when the Cornell Medical Index was the first to be widely used.[7] Later, computerization of the medical history was developed and found to be reliable when compared to physician-recorded histories.[2,3,8] Others[9,10] have preferred mailed questionnaires, and the Lahey Clinic in particular[1,11] has had extensive experience in tens of thousands of mailed, automated medical histories. Most of this varied exper-

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