LETTERS TO THE EDITOR

The Journal welcomes Letters to the Editor; if found suitable, they will be published as space allows. Letters should be typed double-spaced, should not exceed 400 words, and are subject to abridgment and other editorial changes in accordance with journal style.

PERIODIC HEALTH EXAMINATIONS

To the Editor:

I hasten to comment on the editorial in the August 1984 issue by Dr. A.O. Berg[1] and the article by Dr. F. Romm, "Patients' Expectations of Periodic Health Examinations,"[2] since I am concerned that the conclusions drawn by both of the authors may be based on data that is itself "awry."

I refer specifically to the data collection instrument given to the patients in Dr. Romm's study as they checked in for care. The instrument was not shown in the article, but apparently the patients were given a "shopping list" from which to select items of history, examination, laboratory tests, and procedures that they desired from their physician, and the frequency with which they should be performed. In my view, such an instrument has great potential for biasing subjects to select items that they had not thought about, did not really desire, or even may not have heard about before!

A number of questions regarding the implementation of the study come to mind. For instance, (1) did all the patients understand the terminology used or the implications and costs of the items they were selecting? Maybe this could explain why young women selected mammograms as frequently as older women, a finding that surprised Dr. Romm. (2) Was the reliability of the data tested by repetition? (3) What would have been the result had the subjects been asked to propose and indicate the items they desired without being given a list from which to choose? (4) Were the people attending the Family Practice Center biased in their responses by their reason for visiting the office (ie, chronic disease, acute illness, routine checkup)? (5) What could have been responses of patients of the Family Practice Center who were currently not attending for care?

Although I agree with the author's suggestions that the standards of preventive care, at least based on the audit of medical records, require improvement. I do not think that the gap between the patients' desires for preventive care and its provision by physicians has been demonstrated because the data reported are suspect. Although the medical charts were audited to see whether there was a fit between patient item selection and physician performance, another equally reasonable approach would have been to ask the subjects whether they had received specific care items in previous examinations and whether this was satisfactory.

Finally, I have some difficulties with the semantics of the words *expectations* and *desires*, which seem to be used interchangeably in the paper. Expectations are what patients believe will take place or

anticipate will occur at the periodic examination. These are not necessarily what they wish to be done. This semantic difference does have an impact on the way a data-collection instrument would be developed depending on what the researcher was trying to ascertain. A definition of these items would have helped to clarify the specific purpose of Dr. Romm's study and reduce the confusion I believe has led to unjustified conclusions.

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References

1. Berg AO: The periodic health examination: Expectations gone awry. J Fam Pract 1984; 19:165-166
2. Romm FJ: Patients' expectations of periodic health examinations. J Fam Pract 1984; 19:191-195

The preceding letter was referred to Dr. Romm, who responds as follows:

Dr. Curtis' comments mainly concern the validity and reliability of the data collection instrument. Indeed, the instrument was in the form that Dr. Curtis suggests, and could be called a "shopping list." I am not sure, however, that the open-ended questionnaire that he suggests would have been better. To apply the shopping list metaphor, if one went to a store only once a year (the annual examination) and had only a brief time to prepare (the 10 or 15 minutes available to the patients to fill out the questionnaire), which would produce a more accurate group of needed items, a preprinted check list or a blank sheet of paper?

As for the other comments, it is not clear that patients understood all the terms. Patients may have selected items because they were on the list, perhaps believing that if the clinic provided them, they must be worthwhile. But this potential bias does not seem an adequate explanation for all the results: there was substantial variation in selection among the history, examination, and laboratory groups as well as within these categories; patients also had the opportunity to check an "other" or "don't know" column if they did not understand an item sufficiently.

The reliability of the data was not tested. There was a mix of problems presented by the patients who participated, and only a relatively small number came for general examinations. The demographic and disease characteristics of the study participants were not different from the overall center patient population.

As to the semantic problem with regard to the use of the words *expectations* and *desires,* the questionnaire was worded, "How often should the item be part of your check-up" (page 192). My dictionary's definition of "should" includes "used . . . to express what is probable or expected." This justifies the use of expectations in the title and body of the paper. Desires, as Dr. Curtis points out, are things that are wished for. In the context of an examination that is seen as potentially beneficial to an individual, I would think that an item that is expected would also be wanted and, thus, I have no problems with the use of desires as an alternative to expectations in the paper.

I believe that Dr. Curtis has pointed out some possible limitations that are in addition to those expressed in the discussion. Certainly this is not the last word on this subject. More detailed study is needed to clarify what patients know about preventable diseases and screening tests and what they expect and desire from their physicians. Despite the limitations, I think the conclusions, expressed in the typical academic terminology of "suggest" and "apparent," with "notes of caution," are justified from the data.

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SCREENING FOR GESTATIONAL DIABETES

To the Editor:

With regard to the article by Dr. Barbara Reed, "Screening for Gestational Diabetes—Analysis by Screening Criteria" (*J Fam Pract 1984;* 19:751-755), I have several comments. Dr. Reed gives a thoughtful and complete evaluation of several possible approaches to screening for gestational diabetes. However, I must disagree with her choice of 150 mg/dL as a cutoff for proceeding to a three-hour glucose tolerance test (GTT) following the 1-hour glucose screening test (GST).

Based on data presented by Carpenter and Coustan,[1] which Dr. Reed mentions but discounts in her article, lowering the cutoff to 135 mg/dL would increase the sensitivity of the glucose screening test to near 100 percent while maintaining a specificity of 80 percent. Even

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conservatively assuming a 96 percent sensitivity, 24 of 25 cases would be detected in the hypothetical population presented in her article. This would be at a total cost of $14,950 incurred from 1,000 glucose screening tests and 199 oral glucose tolerance tests. While slightly higher than the $13,688 resulting from the test as recommended by Dr. Reed, the actual cost per case would be only $623 because of the additional number of cases that would be picked up using this method.

A screening test should be very sensitive, even at the expense of specificity, in detecting serious illness for which there is effective treatment. I feel that the most accurate, yet cost effective, approach is to screen all pregnant women and to perform a GTT in those whose serum glucose is 135 mg/dL or higher during the GST.

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Reference

1. Carpenter MW, Coustan DR: Criteria for screening tests for gestational diabetes. Am J Obstet Gynecol 1982; 144:768-773

The preceding letter was referred to Dr. Reed, who responds as follows:

I appreciate Dr. Jurica's comments regarding the importance of the choice of glucose level criteria in the glucose screening test for gestational diabetes. The level at which a screening test is considered abnormal clearly affects the sensitivity and specificity, as well as the predictive value, of that test.

Dr. Jurica's argument rests on the assumption that a near 100 percent sensitivity is obtained by using the lower screening criteria. The data presented in the Carpenter and Coustan article, however, are insufficient to determine the sensitivity of this criterion because three-hour glucose tolerance tests were not performed on those patients with screening glucose values less than 130 mg/dL. Furthermore, they studied only those patients older than 25 years. Therefore, the sensitivity of the lower criteria for younger women is unknown.

Carpenter and Coustan's data do indicate that 16.7 percent (4/24) of their known true positive patients aged over 25 years did fall in the level of glucose screening determinations that would have been missed by O'Sullivan's criteria.

Clearly, a repeat study utilizing both the screening test and the three-hour glucose tolerance test for all patients would clarify the value of a lower screening cutoff. If large patient numbers were obtained, a more precise false-negative rate could also be determined. Until this is done, it is not unreasonable to perform a three-hour glucose tolerance test when the result of the glucose screening test is below 150 mg/dL. Data are inadequate to accurately compute a cost per case detected, but the point is well taken that the added cost of a greater number of glucose tolerance tests may be offset by a higher detection rate and, hence, may hold down the cost per case detected.

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