in differences in reporting, since questions presented verbally may be interpreted differently from those presented on paper, especially because the phone examiner may provide some explanation that would otherwise not be available. Potosky et al. did not address this possible problem.

Second, although the authors refer to “baseline” pretreatment functioning, the survey was not administered prior to treatment. Instead, the authors used the concept of “recall” to obtain their baseline information, an approach that a recent publication (2) has shown to be highly inaccurate.

Third, the study failed to acknowledge several major issues regarding the evaluation of sexual function. For example, all postsurgical results should be assessed relative to both pretreatment erectile function and the technical nature of the surgery, i.e., whether or not nervesparing techniques were used. In addition, differences between radiation therapy and surgery relative to sexual function should be evaluated only in those men who are potent prior to treatment. Inclusion of men who are impotent prior to treatment can make potential differences between the effects of these treatments difficult to identify.

Fourth, with regard to urinary function, another study (3) has shown a much lower rate of pad usage (9%) for men receiving prostatectomy, which was even lower when taking into account whether patients used pads because they were wet (3%) or just for “safety” (6%) than that reported by Potosky et al.

Despite the flaws in this important contribution by Potosky et al., the database that they used is an excellent clinical base from which to derive outcome analysis information. Prospective studies, using data obtained before treatment along with data acquired after intervention, will provide much more relevant analyses. In addition, the database used by Potosky et al. is derived from multiple centers providing treatment for prostate cancer. In the future, prospective studies not only could review outcomes based on treatment but also could compare outcomes for similar treatments between different centers. Both surgery and radiation therapy are highly technical interventions, and it is likely that outcome differences between providers/centers will exist. This information, which databases such as the one used in the study by Potosky et al. are able to provide, would be an important contribution to the field of urology.

BRUCE L. DALKIN

REFERENCES


NOTE

Correspondence to: Bruce L. Dalkin, M.D., College of Medicine, Department of Surgery/Urology, University of Arizona Health Sciences Center, P.O. Box 245077, Tucson, AZ 85724–5077.

RESPONSE

We appreciate the time that Dr. Dalkin has taken to review and comment on our article. However, we disagree with his assessment that there are significant flaws in the study.

First, we have previously addressed the issue of the mode of questionnaire administration in an article that described the methods, rationale, and objectives of the Prostate Cancer Outcomes Study (PCOS) (1). There, we noted that 91% of all PCOS participants completed a mailed self-administered questionnaire, with the rest completing surveys by phone or in-person. We found that the mode of survey administration had no statistically significant effects on reported outcomes.

Second, we carefully noted throughout the article that the baseline measurements were obtained retrospectively at approximately 6 months after diagnosis because of the practical difficulty of surveying newly diagnosed cancer patients in a large, community-based study prior to initiation of treatment. We agree that it is important to verify the accuracy of using such recall for estimating baseline status. We, therefore, conducted our own validation study to assess recall and

Re: Health Outcomes After Prostatectomy or Radiotherapy for Prostate Cancer: Results From the Prostate Cancer Outcomes Study

The article by Potosky et al. (1) on health outcomes after prostatectomy or radiotherapy for prostate cancer is an important contribution to the literature, but it must be considered as such only in light of significant flaws in the study design.

First, health-related quality-of-life instruments were used postoperatively, and these instruments were obtained not only by having the patients fill them out but also by phone surveys. These different approaches certainly may result
found that it was, in fact, reasonably accurate (2). Furthermore, we found no strong biases that would favor either underestimation or overestimation of baseline functioning. The median time of recall in the study by Litwin et al. (3) that was cited by Dr. Dalkin was 21 months, whereas in our study it was approximately 6 months. While we do not claim that recall is without error, it is unlikely that biased recall over a 6-month period would invalidate our comparisons of post-treatment outcomes.

Third, we agree with Dr. Dalkin that postsurgical results should be assessed relative to pretreatment erectile function. Our article reports (on page 1588) that, among men who were potent prior to treatment, 76% receiving prostatectomy compared with 45% of men receiving beam radiotherapy were impotent after 2 years. In Fig. 3 of our article, we showed trends in sexual function by treatment approach in men with better pretreatment function and in men with poorer function.

We did not specifically examine the technical aspects of prostatectomy in our study because we wanted to maintain the focus on a comparison between surgery and radiotherapy. An earlier study by Stanford et al. (4), also using PCOS data, compared prostatectomy patients for whom the details of their surgery were recorded in their medical records. The levels of impotence were 65.6% in men who had a non-nerve-sparing procedure, 57.0% in men who had a unilateral nerve-sparing procedure, and 56.0% in men who had a bilateral nerve-sparing procedure.

Fourth, with regard to urinary function, the difference between our study, which reported that 28.1% of men wore pads 2 years after prostatectomy, and that reported by Gralnek et al. (5) may be due to differences in patient selection, health care setting, and the skill of the surgeons. The lower rates of incontinence and impotence reported by Gralnek et al. (5) and other investigators at major academic centers highlight one of the important reasons for initiating the PCOS. The better outcomes reported by academic centers reflect the experiences of carefully selected patients who were treated by skilled surgeons. Whether these same outcomes are achievable in the general population is unknown because patients, surgical practices, and the health care system are much more heterogeneous in the general population. While case series from academic centers may tell us about patient outcomes under optimal circumstances, population-based studies, such as PCOS, tell us what most men in the community might expect after treatment. Clearly, there is value in both types of studies.

Arnold L. Potosky
Julie Legler
Richard M. Hoffman
Frank D. Gilliland

REFERENCES


NOTES

Affiliations of authors: A. L. Potosky, J. Legler, Applied Research Program, Division of Cancer Control and Population Sciences, National Cancer Institute, Bethesda, MD; R. M. Hoffman, Albuquerque Department of Veterans Affairs Medical Center, NM; F. D. Gilliland, Department of Preventive Medicine, University of Southern California Keck School of Medicine, Los Angeles.

Correspondence to: Arnold L. Potosky, Ph.D., National Institutes of Health, EPN, Rm. 4005, 6130 Executive Blvd., MSC 7344, Bethesda, MD 20892–7344 (e-mail: potosky@nih.gov).