

COMMENTARY

Health care use and risk of ovarian cancer: Is there a link?

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The article by Abenhaim and colleagues in this issue presents an interesting case-control study that attempts to determine the risk of ovarian cancer associated with health care use by comparing the medical history of women with and without ovarian cancer.¹ In this large study, 668 women with ovarian cancer and 721 healthy age-matched control subjects were interviewed about their demographic characteristics and their medical, dietary and family history during a 5-year period. Participants were also asked to complete a self-administered dietary questionnaire.

Abenhaim and colleagues report an increased risk of ovarian cancer among women who had no medical visits or pelvic examinations and who had no regular health care provider during the study period. These findings were most apparent among postmenopausal women. The authors rightfully detail the limitations of their study, especially with regards to study design, potential confounders and bias. They conclude that, although the exact mechanism is unknown, their findings suggest that a lack of regular health care is associated with an increased risk of ovarian cancer.

Ovarian cancer is a devastating disease, and there is considerable pressure on clinicians and policy-makers to identify and make available effective screening strategies and treatment options. However, the conclusion of the present study should be viewed cautiously. Acting on this conclusion in the form of clinical practice or policy change is premature.

One interpretation of this study is that receiving regular medical care from a primary health care provider in some way lowers the risk of ovarian cancer. However, this has not been shown to be the case. Indeed, there is expert agreement among the Canadian Task Force on the Periodic Health Examination,² the US Preventive Services Task Force³ and the American College of Obstetricians and Gynecologists⁴ that, to date, no interventions have proven effective in the routine screening of asymptomatic low-risk women for ovarian cancer.

But what about the evidence? Consensus opinion from credible organizations is fine; however, there is a powerful method for synthesizing evidence that is often overlooked—the systematic review. The strength of this methodology is the systematic strategy for locating, selecting, appraising and synthesizing all studies on a particular topic according to a set of specific criteria identified a priori. The sum total of the data tends to moderate individual study results that may have been due to chance, study design limitations, potential confounders, bias or misinterpretation of results.

Cancer Care Ontario's Program in Evidence-Based Care has taken the process of systematic review a step further by developing and refining the Practice Guidelines Development Cycle.^{5,6} A typical report from this program consists of a comprehensive systematic review of the evidence, an interpretation of the findings, expert consensus opinion and the resulting recommendations. External peer review is solicited from Ontario clinicians and administrators for whom the topic is relevant, to improve the quality of the document, to facilitate buy-in and to begin the process of knowledge translation and exchange. It is through this process that the evidence, resulting conclusions and recommendations for practice are considered in a balanced manner with consensus among practitioners who have clinically relevant expertise.

Better patient outcomes would be seen if efforts were directed toward improving compliance with promising treatment modalities

Indeed, 2 comprehensive systematic reviews by the Program in Evidence-Based Care's Gynecology Cancer Disease Site Group—one on screening postmenopausal women for ovarian cancer⁷ and the other on screening women at high-risk of ovarian cancer⁸—have concluded that there is little value in the routine screening of these populations. These conclusions were well supported by clinicians in the practising community: 100% and 90% of external reviewers agreed with the interpretation of the evidence as presented in the 2 reports respectively. The findings from these 2 reviews are supported by the findings of other recent studies of ovarian cancer screening.^{9,10}

Increasingly, the need to accurately interpret the totality of research findings from the medical scientific community, such as ovarian cancer risk and screening studies, is becoming

a mandated requirement in the determination of health care utilization strategies, costs and best practices. An evidence-based approach is needed to determine the appropriate course of action for a given health care issue. This is important because it can identify options for cancer care that should be targeted for implementation. For example, although we do not yet know the most effective screening technique for ovarian cancer, we do know that intraperitoneal chemotherapy has been found to improve survival among patients in randomized clinical trials and is a treatment option that warrants targeted investigation.¹¹ Yet, diffusion and uptake of this treatment option, despite the evidence base, is uneven. Better patient outcomes would be seen if efforts were directed toward improving compliance with promising treatment modalities, rather than trying to advance practice in areas where the totality of evidence to date suggests there is no benefit.

The conclusions from the study by Abenhaim and colleagues, although interesting, need to be considered within the larger evidentiary foundation upon which the issue of ovarian cancer risk and screening will one day be determined. We certainly do not object to women receiving yearly medical and pelvic examinations by qualified health care practitioners; however, the utility of this intervention should not be misinterpreted as a strategy to reduce the risk of ovarian cancer.

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