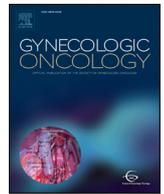




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## Editorial

## Financial Toxicity: A Severe But Underrecognized Side Effect for Cancer Patients



Financial toxicity is a term that has been coined to describe the financial hardship that accompanies cancer treatment. Population-based data suggests that approximately 20% of cancer patients experience significant financial hardship [1]. Financial hardship may result in the inability to pay for medical care, the acquisition of debt, implementation of major changes in household spending or bankruptcy [2]. Compared to those without cancer, cancer patients are more than two and a half times more likely to declare bankruptcy [3]. High financial burden has been associated with a number of downstream effects including lower quality of life, increased emotional distress, treatment nonadherence, delays and discontinuation and even increased mortality [2,4–7]. To date, financial toxicity has been examined for a wide variety of tumor types but data for gynecologic cancers has been limited.

In this issue of *Gynecologic Oncology*, Boubberhan and colleagues report the results of a prospective study aimed to determine the prevalence of financial toxicity among women seen in a gynecologic oncology practice. The investigators surveyed 240 respondents using the Comprehensive Score for Financial Toxicity (COST) instrument and a self-reported overall health assessment questionnaire. Overall, the study found that financial toxicity was common, particularly among women with non-commercial insurance, those with lower income, and in patients receiving chemotherapy. High financial toxicity had an important impact on quality of life for women, with 29% reporting they applied for financial assistance, a third reporting reduced spending on necessities, 43% described decreased spending on leisure activities, and 51% of women had to access their savings to meet the cost of care. Perhaps most importantly, over a fifth of women with high financial toxicity reported delaying or avoiding medical care, over 7 times more likely than women with lower financial toxicity [8].

The study is one of the first large analyses focused specifically on women treated by gynecologic oncologists and is an important contribution to the field. Strengths of the study include utilization of validated and commonly used survey instruments and the inclusion of a large sample of women. As the authors point out, the study sample was drawn from a population of women with universal health coverage who were treated at a single tertiary care, academic medical center. As such, these findings may not be generalizable to other practice settings. An additional important caveat is that 20% of patients had benign disease and 50% of the cohort was treated with only surgery or received no treatment. The effects of financial toxicity are likely most pronounced in women who require intensive, longitudinal care (i.e., chemotherapy) and more muted in those who only undergo a single intervention (i.e., surgery). Prior work from other tumor types has been largely limited to cancer patients receiving chemotherapy [9].

Undoubtedly the findings from the current study would have been even more sobering if the cohort was restricted to women with gynecologic cancers receiving adjuvant or salvage chemotherapy.

The study raises two important considerations for clinicians caring for women with gynecologic cancers. First, how do we recognize and measure financial toxicity among our patients? Whether voiced or not, patients often have questions about the cost of their care that physicians are usually ill equipped to answer. While often uncomfortable for physicians, proactively engaging cancer patients about financial concerns and hardships may be important to identify barriers to treatment. A number of screening tools, such as the COST instrument used by Boubberhan and colleagues, can provide a rapid assessment of potential financial hardship in patients [9]. Clinical trials are underway to provide more quantitative data and assessment tools for financial hardship. For example, SWOG protocol S1417 is developing quantitative measures of financial distress in patients with metastatic colorectal cancer [10]. Importantly, national organizations now encourage communication of cost to cancer patients. As a result of these efforts, there is growing use of financial counselors or navigators for cancer patients [11,12]. Financial counselors help estimate out of pocket costs for patients, provide education, and screen for financial assistance programs [11,12].

Second, and perhaps more difficult, what do we do for patients with high financial toxicity and how can we reduce financial distress? There has been an increasing shift of costs to patients in the form of higher deductibles, copays and coinsurance. In gynecologic oncology, the diffusion of oral chemotherapeutic drugs into practice and the widespread use of molecular diagnostic tests have greatly increased potential cost sharing for patients. In addition to communicating costs to patients, targeted interventions are warranted for patients at high risk for financial toxicity. Recognizing financial toxicity may allow oncologists to reduce costs through use of generic drugs, to prescribe lower cost treatments with similar efficacy when possible, and to provide extra counseling and follow-up to maximize compliance with cancer care for high risk patients. From a policy perspective, many have advocated price transparency of treatments for both patients and providers. Such initiatives have had mixed results in other fields and the impact of price transparency in oncology is unknown [13]. Lastly, there has been great interest in value-based pricing, a strategy in which out of pocket costs are based upon the value of a given treatment. While data in oncology is limited, value-based pricing may offer an opportunity to not only reduce financial distress, but also to improve value for cancer patients [13].

As the cost of cancer care continues to rise, how to pay for therapeutic advances will challenge patients, providers, and society. There is no

question that financial hardship is common among our patients and that it impacts quality of life and treatment. Just as the evaluation of physical toxicities is a routine part of oncologic practice, assessment of financial toxicity is warranted among cancer patients. Bourberhan and colleagues' work helps to lay the groundwork for research in gynecologic oncology to develop novel interventions to mitigate financial toxicity for patients and improve value for society.

### Declaration of Competing Interest

Consultant for Tesaro and Clovis Oncology.

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