Factors Influencing Financial Toxicity Among Cancer Patients In UF Cancer Catchment Area

Biswadeep Dhar, University of Mayland Eastern Shore¹

Travis P. Mountain, University of Georgia²

Michael S. Gutter, Virginia Tech³

While cancer's physical and emotional toll is well-known, a less often discussed burden is the financial hardship that cancer patients experience. Financial burden affects patients' quality of life and treatment outcomes along with the impact on treatment adherence; collectively known as financial toxicity. Using University of Florida (UF) Bureau of Business Research's data on UF Health Cancer Center's 22-county catchment area, we measured the impacts of direct and indirect and supportive cost factors, on patients' levels of financial toxicity. Controlling for socioeconomic, disease, and treatment characteristics, our study showed greater financial well-being was associated with lower levels of financial toxicity.

Keywords: financial toxicity, cancer, financial well-being, CoST score

¹ Biswadeep Dhar (<u>bdhar@umes.edu</u>), Assistant Professor, Department of Human Ecology ²Travis P. Mountain ((<u>travis.mountain@uga.edu</u>) Assistant Professor, Department of Family and Consumer Sciences

³Michael S. Gutter (msgutter@vt.edu) Professor, Department of Agricultural and Applied Economics

References

- Carrera, Pricivel M., Hagop M. Kantarjian, and Victoria S. Blinder. 2018. "The Financial Burden and Distress of Patients with Cancer: Understanding and Stepping-up Action on the Financial Toxicity of Cancer Treatment." CA: A Cancer Journal for Clinicians 68 (2): 153–65. https://doi.org/10.3322/caac.21443.
- de Souza, Jonas A., and Rena M. Conti. "Mitigating Financial Toxicity Among US Patients With Cancer." *JAMA Oncology* 3, no. 6 (June 1, 2017): 765–66. https://doi.org/10.1001/jamaoncol.2016.4850.
- de Souza, Jonas A., Bonnie J. Yap, Fay J. Hlubocky, Kristen Wroblewski, Mark J. Ratain, David Cella, and Christopher K. Daugherty. "The Development of a Financial Toxicity Patient-Reported Outcome in Cancer: The COST Measure." *Cancer* 120, no. 20 (October 15, 2014): 3245–53. https://doi.org/10.1002/cncr.28814.
- Knight, Thomas G., Allison M. Deal, Stacie B. Dusetzina, Hyman B. Muss, Seul Ki Choi, Jeannette T. Bensen, and Grant R. Williams. "Financial Toxicity in Adults With Cancer: Adverse Outcomes and Noncompliance." *Journal of Oncology Practice* 14, no. 11 (November 1, 2018): e665–73. https://doi.org/10.1200/JOP.18.00120.
- Meeker, Caitlin R., Daniel M. Geynisman, Brian L. Egleston, Michael J. Hall, Karen Y. Mechanic, Marijo Bilusic, Elizabeth R. Plimack, et al. "Relationships Among Financial Distress, Emotional Distress, and Overall Distress in Insured Patients With Cancer." *Journal of Oncology Practice* 12, no. 7 (July 1, 2016): e755–64. https://doi.org/10.1200/JOP.2016.011049.
- National Cancer Institute. 2019. Financial toxicity and cancer treatment (PDQ)-health professional version. https://www.cancer.gov/about-cancer/managing-care/track-care-costs/financial-toxicity-pdq
- Singleterry, Jennifer. 2017. *The Costs of Cancer: Addressing Patient Costs.* American Cancer Society Cancer Action Network (Washington, DC). https://www.acscan.org/policy-resources/costs-cancer.
- Szurek SM, Hall J, Cho HD, Guo Y, Shenkman EA. 2021. The UF Health Cancer Center Catchment Area Profile Report 2021.
- Weir, Hannah K., Trevor D. Thompson, Sherri L. Stewart, and Mary C. White. 2021. "Cancer Incidence Projections in the United States Between 2015 and 2050." *Preventing Chronic Disease* 18 (June): 210006. https://doi.org/10.5888/pcd18.210006.
- Yabroff, K Robin, Angela Mariotto, Florence Tangka, Jingxuan Zhao, Farhad Islami, Hyuna Sung, Recinda L Sherman, S Jane Henley, Ahmedin Jemal, and Elizabeth M Ward. 2021. "Annual Report to the Nation on the Status of Cancer, Part 2: Patient Economic Burden Associated With Cancer Care." *JNCI: Journal of the National Cancer Institute* 113 (12): 1670–82. https://doi.org/10.1093/jnci/djab192.
- Zafar, S. Y., Peppercorn, J. M., Schrag, D., Taylor, D. H., Goetzinger, A. M., Zhong, X., & Abernethy, A. P. (2013). The financial toxicity of cancer treatment: a pilot study assessing out-of-pocket expenses and the insured cancer patient's experience. *The oncologist*, *18*(4), 381–390. https://doi.org/10.1634/theoncologist.2012-0279