A patient navigation program to enhance access to care for underserved patients with a suspicion or diagnosis of cancer in Mexico City

Alexandra Bukowski, Enrique Soto-Perez-de-Celis, Wendy Ramos-López, Sandra L San Miguel, Jessica St. Louis, Paul E Goss, Yanin Chavarri-Guerra

**Background:** High cancer mortality rates in low- and middle-income countries (LMICs) are partially driven by advanced stages at diagnosis and limited access to cancer care. In Mexico, the interval from problem identification to start of cancer treatment can be up to 7 months, largely due to health system delays. Patient navigation (PN) is an intervention whereby trained healthcare workers (“navigators”) help patients overcome barriers to healthcare access to improve times to diagnostic and treatment resolution.

**Objective:** Evaluate the feasibility of implementing a PN program to reduce time to referral to a cancer center for patients with suspicion or diagnosis of cancer at a public general hospital in Mexico City.

**Methods:** Patients seen at Hospital General Ajusco Medio with suspicion or diagnosis of cancer who required referral to a specialized cancer center for diagnosis or treatment were enrolled in this single-arm pilot feasibility study. A navigator assisted with appointment scheduling, paperwork, obtaining timely results, transportation, and other barriers to care. Demographic, economic, and psychosocial data were collected at baseline and post-intervention. The primary goal was to have ≥70% of patients obtain an appointment at a cancer center ≤3 months from enrollment.

**Results:** 70 patients were enrolled (median age 54, range 19-85; 56% female) with the following tumor sites: 31% (n=22) genitourinary, 24% (n=17) gastrointestinal, 19% (n=13) endocrine, 10% (n=7) hematologic, 2% (n=2) breast, and 13% (n=9) other. 96% (n=67) of patients reported ≥1 barrier to cancer care access; the most common barriers were financial burden (n=50) and fear (n=37). Median times to referral and cancer specialist appointment were 7 days (range 0-49) and 27 days (range 1-97), respectively. 91% (n=64) of patients successfully obtained appointments at a cancer center within 3 months.

**Conclusions:** Implementing a PN program in this context is feasible and may shorten referral times to specialized cancer care by overcoming barriers to healthcare access among underserved patients in LMICs.
My contributions:

I was the lead research coordinator on the Boston-based team for this PN program and worked directly with the Mexico City team on experimental design; data collection, interpretation, and analysis; and publications for this project. More specifically, I worked directly with PI and co-PI to design the project, including setting research goals, conceiving navigator’s roles, and creating research questionnaires; and I traveled to Mexico to assist in conducting the training program for the new navigator and research team. I designed the study questionnaires that collected general patient demographic, economic, clinical, and satisfaction data. I also designed the data collection tools (apps for the patient questionnaires that were accessible on tablets in the hospital and an electronic database of patient files). I regularly met with research team based in Mexico City for data collection progress reports and troubleshooting. I interpreted data delivered to us from the Mexico City team insofar as it related to project design, navigator roles, and data collection practices, using this information to direct and improve the design of future PN programs elsewhere. I served as first author on two viewpoint/commentary articles regarding the role and potential of PN in LMICs, as contributing author on two posters presented during the course of the project, and as contributing author on the final manuscript (in progress) – these roles included performing literature searches, writing, and editing.