

Searching for Answers

'His, Hers, and Ours' research helps American Cancer Society understand and address cancer disparities.

Darla Kendzor and Michael Businelle are using grants from the American Cancer Society to fund research about cancer disparities.



Darla Kendzor, Ph.D. and Michael Businelle, Ph.D., assistant professors at The University of Texas School of Public Health, Dallas Regional Campus and members of the UT Southwestern Harold C. Simmons Cancer Center, are passionate about their work which aims to understand and reduce cancer disparities. Their interests and research are complementary, and working together has allowed this married couple to benefit from each other's strengths. "We have both received grants from the American Cancer Society to fund our research and have learned a lot through our ongoing collaborations," Kendzor says.

Lung cancer continues to be the leading cause of cancer death, and smoking is the primary cause of lung cancer. Sadly, smoking prevalence is disproportionately high among socioeconomically disadvantaged individuals. Other modifiable cancer risk factors, such as poor diet and insufficient physical activity, are also increasingly concentrated among individuals of low socioeconomic status. Kendzor and Businelle's research focuses on understanding why socioeconomically disadvantaged individuals are more vulnerable to cancer. They are also developing innovative interventions to reduce these cancer disparities. Kendzor is examining stress, neighborhood factors, and psychosocial resources as potential links between socioeconomic

status and modifiable cancer risk factors (like physical activity, smoking, alcohol use) using smartphone technology. Businelle's research uses smartphones to identify and automatically intervene upon risky situations that have high relapse potential in socioeconomically disadvantaged smokers who are trying to quit. In related studies, Drs. Kendzor and Businelle are using financial incentives and smartphone technology to increase smoking cessation and promote healthy behavior changes at Parkland Hospital and the Bridge Homeless Shelter.

Businelle says, "Tobacco kills far more people in Texas than alcohol and other drugs, DWI, homicide, suicide, AIDS, and accidents combined. Money invested in reducing tobacco-related cancer disparities is money well spent." Says Kendzor, "It costs \$70,000 to treat one lung cancer patient in the first year following diagnosis. It is far less expensive to prevent cancer than it is to treat it." ■

OTHER MAJOR CANCER RESEARCH BREAKTHROUGHS THROUGH NATIONAL RESEARCH PROGRAMS INCLUDE:

- Dramatic increase in cure rate for childhood leukemia with combination chemotherapy
- Pap test to determine cervical cancer
- Mammography as gold standard to screen for breast cancer
- Lumpectomy plus radiation as less invasive breast cancer for treatment of breast cancer
- PSA test for prostate cancer screening
- Discovery of cancer-causing oncogenes and tumor suppressor genes
- Use of tamoxifen and Herceptin to reduce the risk of second or first treat breast cancer
- Development of HPV vaccine for cervical cancer