Mental illnesses, such as anxiety and depression, may be significantly elevated among women with ovarian cancer, according to results of a study presented April 10 at the virtual American Association for Cancer Research Annual Meeting 2021 (Abstract 900). Moreover, they may die sooner than their counterparts who do not have cancer, said the study’s lead author, Siqi Hu, a PhD candidate in the Department of Family and Preventive Medicine at the University of Utah and Huntsman Cancer Institute, Salt Lake City.

Ovarian cancer is often diagnosed at a much later stage, is difficult to treat, and has a 5-year relative survival rate of just 48.6 percent in population-based studies, Hu told a pre-conference press briefing. Although there have been many studies on self-reported quality of life among ovarian cancer patients, research investigating mental disease diagnoses among ovarian cancer survivors with long-term follow-up is sparse.

There have been few studies until now that have investigated mental illness rates among this patient population, Hu said. “Mental health issues are important for cancer patients as they face major disruptions to their lives and deal with the toxic side effects of cancer treatment. It is important to be aware that mental health may change over the course of diagnosis and treatment. Cancer patients may need regular mental health consultations to identify issues such as depression and anxiety, and early intervention will help improve their quality of life.”

“Mental health screening among ovarian cancer patients is needed,” Hu said. “It is important to be aware that mental health may change over the course of diagnosis and treatment. Cancer patients may need regular mental health consultations to identify issues such as depression and anxiety, and increased support may contribute to prolonging the lives of ovarian cancer survivors.”

Mental illness can also present cancer treatment problems for patients, as well as difficulty communicating with caregivers. It has also been linked to increased risk for suicide, extended hospital stays, and reduced survival outcomes.”

She said that future research should explore the role that various aspects of treatment play in patients’ mental health, while ongoing research may also help oncologists and patients better understand and prepare for the psychological effects of cancer treatment.

There were some limitations to the study. First, since the investigation utilized electronic medical records data, less severe mental illnesses that did not necessitate medical care may have been under-represented, she said. Also, she pointed out that the high mortality rate of ovarian cancer patients may have resulted in survival bias.

Hu said that future research will examine the role that various aspects of treatment play in patients’ mental health. She also noted ongoing research may help oncologists and patients understand and prepare for the psychological effects of cancer treatment.

Study Details
Hu and her colleagues collected data from the Utah Cancer Registry and were able to identify 1,689 ovarian cancer patients diagnosed between 1996 and 2012. They next matched them up with 7,038 women without cancer from the general population. Patients were matched by age, birth state, and follow-up time. Electronic health records were analyzed to identify mental health diagnoses among the women, excluding those that occurred before the women were diagnosed with cancer.

Mental health diagnoses were identified from electronic medical records and statewide health care facilities data. Cox proportional hazard models were used to estimate hazard ratios (HRs).

They discovered that the risk of depression was 3.11 times higher in the first 2 years after an ovarian cancer diagnosis, and 1.67 times higher 2-5 years post-diagnosis. The risk of anxiety disorder among ovarian cancer survivors was 3.54 times higher in the first 2 years after diagnosis and 1.86 times higher 2-5 years post-diagnosis. The risk of adjustment disorder was more than 3 times higher in patients with ovarian cancer than in those who did not have ovarian cancer.

Ovarian cancer survivors who had a mental health diagnosis experienced an 80 percent increased risk of death (HR=1.80, 95% CI=1.48-2.18) and a 94 percent increased risk of death if that diagnosis was for depression (HR=1.94, 95% CI=1.56-2.40). Higher risks of mental illnesses were observed among ovarian cancer survivors throughout the follow-up periods of 0-2 years and 2-5 years after cancer diagnosis. Multidisciplinary care is needed to monitor and treat mental illnesses among ovarian cancer survivors.

“During the past few decades, immense progress was made to decrease mortality for patients with ovarian cancer by improving surgical procedures, chemotherapy regimens, and advanced radiologic imaging techniques,” Hu said. “There will be an increasing number of ovarian cancer survivors and their survivorship experience is a concern.”

Cancer treatment and later diagnosis year were associated with increased risk of any mental illness at 0-2 years. Distant-stage cancer was an important risk factor compared to early-stage for both mental illness and depression among ovarian cancer survivors in all time periods.

Ovarian cancer patients who had a mucinous histology subtype had 47 percent decreased risk of any mental illness and 67 percent decreased risk of depression at 0-2 years, compared to those with high-grade serous histology subtype. In addition, a baseline comorbidity score of 1+ an older age at diagnosis (>60 years old) increased risk of depression at 0-2 years and >5 years after cancer diagnosis, respectively, she noted. The team also found that ovarian cancer patients who had received a mental health diagnosis were 1.8 times more likely to die prematurely than those who did not.

Based on previous research, Hu said that she expected patients would have an increased risk of mental health disorders; “however, the risks were far higher and persisted over a longer time period than we expected.”

The study suggests that patients with ovarian cancer would benefit from comprehensive mental health services during and after cancer treatment.

“Mental health screening among ovarian cancer patients is needed,” Hu said. “It is important to be aware that mental health may change over the course of diagnosis and treatment. Cancer patients may need regular mental health consultations to identify issues such as depression and anxiety, and increased support may contribute to prolonging the lives of ovarian cancer survivors.”

Kurt Samson is a contributing writer.