Parents who have five or more children may face a higher risk of heart disease than those who have only one or two keiki, according to new findings by public health researchers in the Myron B. Thompson School of Social Work at the University of Hawaii at Manoa.

Researchers led by Sara Hipp, a recent graduate of the Office of Public Health Studies program, looked at data from nearly 25,000 participants ages 50 and older who took part in a national health survey. The findings were published in the Journal of Aging and Health.

"Many studies have linked women's reproductive characteristics, such as their age at their first childbirth, with their risk of heart disease later in life," Hipp said. "But there wasn't much known about the association between family size and heart disease, and very few studies have looked at how fatherhood may relate to men's risk of heart disease."

Hipp and her co-authors found that 30 percent of the parents who said they had five or more children had a heart condition, such as coronary heart disease, angina or congestive heart failure. Just 22 percent of those who had only one or two children, and 21 percent of those who had no children, said they had been diagnosed with a heart condition.

Among all the respondents, about one quarter said they'd been told by a doctor within the past two years that they had heart disease.

"Our data showed that, in both sexes, having more children was associated with a greater risk of heart disease," Hipp said. The link remained even when the researchers adjusted for other characteristics that can affect people's risk of heart disease, such as age, race/ethnicity and birthplace.

In women, the association persisted even after researchers adjusted for lifestyle variables, such as whether they smoked or exercised at least twice a week.

"This work is important because it presents sophisticated analyses in a very large sample that not only replicates findings from a number of smaller studies, it also expands this body of work to look at the relationship between parenthood and heart disease in men," said Yan Yan Wu, assistant professor of biostatistics in public health.


Provided by University of Hawaii at Manoa