Genetic factors identified in female sexual dysfunction

August 13 2012

At least two genetic factors are involved in female sexual disorder symptomatology in addition to non-shared environmental effects, according to the results of a twin study published online Aug. 2 in *The Journal of Sexual Medicine*.

(HealthDay) -- At least two genetic factors are involved in female sexual disorder (FSD) symptomatology in addition to non-shared environmental effects, according to the results of a twin study published online Aug. 2 in *The Journal of Sexual Medicine*.

Andrea Burri, Ph.D., of King's College London, and colleagues conducted a study involving 1,489 female twins aged 18 to 85 years to determine the genetic and environmental factors associated with the major subtypes of FSD. The participants included 244 monozygotic twin pairs, 189 dizygotic twin pairs; and 623 women who participated without

their co-twin.

The researchers found that the model which best fit FSD was an ACE Cholesky model, which included additive genetic effects and non-shared environmental effects. Significant genetic sharing was seen between desire, arousal, lubrication, and orgasm, in addition to genetic sharing between arousal, lubrication, and orgasm, which was independent of desire. These effects were small to modest (7 to 33 percent). A third of the covariance between these dimensions was suggested to be genetic, based on bivariate heritabilities. Lubrication and orgasm shared the least amount of genetic correlation with desire. Non-shared environmental effects were stronger than genetic effects and more dimension-specific.

"In conclusion, our results show FSD to be etiologically heterogeneous in terms of its underlying genetic and environmental factor structure," the authors write. "Specific sexual dimensions were found to be influenced by two common genetic factors as well as relatively dimension-specific non-shared environmental factors."

More information: Abstract
Full Text (subscription or payment may be required)