Family communication about health history: Improving heredity knowledge

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This study explores how family communication environments influence conversations about family health history and genetic risk that may improve individual’s general genetic literacy. Using family communication patterns theory (FCPT) (Koerner & Fitzpatrick, 2002), this study investigates the role family communication plays in individuals’ knowledge of genetics. A family member’s genetic risk status has serious implications for other close relatives (Sobel & Cowan, 2003), which makes family communication and sense-making an important area of research. FCPT breaks family communication into two dimensions, conversation orientation and conformity orientation. Conversation orientation is the degree to which families communicate openly about a myriad of topics, and conformity orientation is the degree to which family stresses homogeneity. How the family communicates about health history in terms of genetic disorders likely shapes individual’s overall understanding of genetics (McDaniel, Rolland, Feetham, & Miller, 2006). Indeed, how families talk about family health history informs member’s perspectives toward risk as well as prevention and treatment (Hurley, Miller, Rubin, & Weinberg, 2006). Conversations of family health history can be overwhelming and genetic information can be confusing for individuals. How families communicate about family health history and create norms to manage this information may shape individual members’ general genetic literacy.

To explore the relationships between family communication patterns, family health history communication, and general genetic literacy a survey was conducted with 434 participants. Participants ranged in age from 18 to 68 years of age ($M = 27.58, SD = 10.53$) and self-identified as female ($N = 299$) as well as male ($N = 135$). Participants self-identified as
Caucasian (77.9%), African American (5.8%), Asian (7.8%), Native American (1.8%), Hispanic (11.1%), Middle Eastern (.9%), and .7% preferred not to answer. Respondents rated family healthy history knowledge importance ($M = 5.75, SD = .98$) and 164 have actively collected family health history information while 270 participants have not actively collected family health history. The survey included measures such as general genetic literacy ($M = 6.78, SD = 1.25$), family health history cancer knowledge ($M = 4.30, SD = 1.63$), family health history communication ($M = 4.51, SD = 1.16$), and the Revised Family Communication Patterns Scale. The Revised FCP Scale was broken into two subscales including conversation orientation ($M = 4.68, SD = 1.23$) and conformity orientation ($M = 3.81, SD = 1.28$).

Results from a structural equation model found conversation orientation is directly associated with family health history communication and general genetic literacy (CFI = 1.00, RMSEA = .00). Results also found conformity orientation is directly associated with family health history communication, cancer risk perceptions, and general genetic literacy. Finally, there were indirect effects between conversation orientation ($\beta = .06, p < .05$) and general genetic literacy as well as conformity orientation and general genetic literacy ($\beta = -.05, p < .01$).

This study provides support for how family health communication shapes individual member’s health knowledge. Specifically, this study demonstrates the importance of family communication environment and the resulting family health history communication on general knowledge of heredity.