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Going Nuclear? Family Structure and Young Women's Health in India, 1992–2006

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Introduction

For decades, scholars have theorized that industrialization, urbanization, and educational expansion lead to a decline in extended families and complementary rise in nuclear families (Adams 2010). Some have suggested that such transitions benefit young married women because their health is better living in nuclear families (Santow 1995). For this study, I examined the theoretical basis of the second argument and suggest possible important benefits of living in patrilocal extended families that counteract any negative effects. Using data from India, I evaluated whether young married women's family structure is indeed changing over time and whether their health is the better for it. I did not examine whether any changes in family structure are due to industrialization, urbanization, educational expansion, or other factors.

The belief that extended-family living has a negative influence on young married women's health arises from the position of daughters-in-law in a patrilocal extended family, wherein young women occupy the bottom of the gender and generational hierarchies in their husbands' families (Das Gupta 1999). However, extended families may also present advantages for young women's health that outweigh any disadvantages.

In India, the disintegration of the extended family has reached the level of "popular cliché" (Shah 1996), but scholars have challenged this belief. Some have found evidence of an increase in nuclear families (Ram and Wong 1994), but others have found growth of extended families (Wadley and Derr 1993) or have suggested that any changes are only fluctuations in the life cycle of the extended family (Caldwell et al. 1984). Others have contended that although the extended family was featured in historical Hindu texts, it has never been the dominant practice (D'Cruz and Bharat 2001). This raises the question of how relevant extended-family living actually is for young married women in India. Do most of them live in extended families, and are their residence patterns changing over time?

Although the daughter-in-law position in patrilocal extended families figures prominently in the literature as one reason for young women's poor health, there appears to be no direct examination of whether there actually is

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such an effect. Using data from India, this study examined whether young married women living in nuclear families have better health than those in patrilocal extended families. It also examined the relevance of extended-family structure for young married women by exploring how common it is for them to live in such families, whether their family structure is changing over time, and the implications of any changes in family structure for young women's health.

This study examined two sets of opposing hypotheses:

Hypothesis 1a: Young married women living in nuclear families have better health than young married women living in patrilocal extended families.

Hypothesis 1b: Young married women living in patrilocal extended families have better health than young married women living in nuclear families.

Hypothesis 1c: Family structure has no causal effect on young married women's health. Any observed differences in young women's health by family structure are due to selection.

Hypothesis 2a: The health advantage of living in a nuclear family is mediated in part by young women's decision-making power.

Hypothesis 2b: The health advantage of living in a patrilocal extended family is mediated by economic status and emotional and social support.

A Nuclear Advantage? The Position of the Daughter-in-Law

Daughters-in-law play an essential role in continuing the patrilineal family line and are an important source of labor (Jacobson and Wadley 1977). However, any individual daughter-in-law is not a member of the patriline and can be replaced by another woman. This position shapes how family members interact with daughters-in-law in ways that may harm their health. For example, family members may be reluctant to invest resources to secure health care, including maternal health services (Jeffery and Jeffery 2010).

Daughters-in-law often engage in long hours of onerous work, the importance of which provides an incentive for families to refuse daughters-in-law time to rest or travel to access health care (Barua and Kurz 2001). In addition, daughters-in-law may receive less and lower-quality food, which harms their nutrition (Chorgade et al. 2006). Compared with women in nuclear families, daughters-in-law have little control over family decisions and are usually not able to challenge the health-care decisions made on their behalf (Allendorf 2007a, 2007b).

An Extended Advantage? Economic Status and Social Support

Although patrilocal extended-family living may present disadvantages, it also presents compensating benefits, as determined by a family's economic resources. Extended families own more assets and have better living conditions, including higher-quality housing materials, sanitation facilities, electricity, and piped water–assets that can be shared among family members (Niranjan, et al. 2005).

One Indian study found that extended households have greater daily income per person than nuclear households (Murthy et al. 1985).[1] Thus, daughters-in-law should benefit from these advantages, meaning they may be able to work less, be better able to take time off to rest during illness or childbirth and use health care.

Daughters-in-law may also benefit more from emotional and social support from co-resident sisters-in-law and mothers-in-law who can provide labor backup (Jeffery and Jeffery 1997) and reduce the burden of child care (Albrecht et al. 1994). In places where women do not travel alone, extended family members can help women access health services by accompanying them (Mumtaz and Salway 2007). Supportive relationships can reduce stress and may be especially important when women practice purdah and have limited interactions outside their household (Wadley and Derr 1993). Patrilocal extended-family living may also protect women from domestic violence, which is a risk factor for poor health (Ellsberg et al. 2008).

No Causal Advantages? Selection Into Family Structure

Any observed differences in the health of young women by family structure may be due to selection into family type. Previous research has shown that factors correlated with family structure are also associated with women's health (D'Cruz and Bharat 2001), such as region, religion, caste, education, urban residence, landholding, and occupation. Extended families are more common in the North, among higher-caste Hindus, higher education levels, and higher economic classes. Overall, this pattern suggests that women in extended families are more likely than those in nuclear families to have characteristics that are associated with better health.

Data Analysis

The data used in this study come from the Indian National Family Health Survey (NFHS), collected in 1992–1993 (IIIPS 1995), 1998–1999 (IIPS and ORC Macro 2000), and 2005–2006 (IIPS and Macro International 2007). The NFHS is a cross-sectional, nationally representative survey

1 The pattern of extended families having higher economic status than nuclear families may be unique to contexts with a cultural preference for living in extended families. Van Hook and Glick (2007) noted that in the United States and some Latin American countries, where there is no cultural preference for patrilocal extended-family living, extended families are formed because of extreme economic need and, thus, are worse off than nuclear families.

of households and women of reproductive age. I limited the sample of women to those who were of an appropriate age and marital status to be daughters-in-law: currently married women aged 15–29 who were usual residents of the household and were living with their husbands, but not their natal families.

The analysis proceeded in four main steps. First, I explored the relevance of patrilocal extended-family living for young women and the extent to which their family structure has changed over time.

Steps 2 and 3 examined the connections between family structure and health, using a Heckman two-stage model approach to adjust for selection into family type (Heckman 1979) to address the main question of whether there is a nuclear or patrilocal extended-family advantage. This step tested Hypotheses 1a, 1b, and 1c. These models include exogenous controls associated with both family structure and health: region; urban residence; religion/caste; age; education; husband's education; and for maternal health care, parity and facility accessibility.

Step 3 tested Hypotheses 2a and 2b by examining whether any nuclear-family advantages are mediated by young women's decision-making power and whether any patrilocal extended-family advantages are mediated by economic status.

In Step 4, I explored the implications of any changes in family structure for young women's health. Predicted probabilities simulated the percentage of young women that would experience the health outcomes as family structure changed over time. I calculated predicted probabilities of the health outcomes under different distributions of family structure, using the main set of models from Step 2.

Discussion and Conclusion

The percentage of young married women residing in nuclear households increased from 1992 to 2006. This result suggests that young women in India are indeed "going nuclear." Despite this trend, the majority of young women remained in patrilocal extended families throughout the period. This is consistent with analyses of other non-Western countries, which found substantial proportions of people residing in extended families in the 1990s and early 2000s (Ruggles and Heggeness 2008).

Contrary to the literature, young women living in nuclear families do not have better health than those in patrilocal extended families. For three of the eight outcomes examined, there was no significant difference in young women's health by family structure. Of the five outcomes for which there was a significant difference, four are for patrilocal extended families. Young women living in patrilocal extended families are more likely to use antenatal care and delivery assistance, more likely to consume milk and curd at least weekly, and less likely to report physical violence. On the other hand, young women in nuclear families are more likely to consume meat, fish, and eggs on a weekly basis.

These results support the role of economic status as a mediator of the patrilocal extended-family advantage; however, the models may not fully adjust for selection into family type, and other explanations may apply. The boundary between family types is often ambiguous (Brown and Manning 2009). Family members can share resources and influence decision-making across households, especially when they live nearby (Seymour 1999). Thus, even young women residing in nuclear families may be exposed to the influence of the patrilocal extended family.

Another explanation may lie in changes in family relations over time. Put simply, the patrilocal extended family may have been kinder and gentler for daughters-in-law in the 1990s and 2000s than it was in the past. Many studies describing the plight of daughters-in-law in patrilocal extended families are based on ethnographies from the 1950s-1980s (Jeffery et al. 1989). Ethnographers who revisited their field sites describe changes in family relations over time (Minturn 1993), including improved marital bonds, leading to more even distribution of food, and young women's new high levels of education and earning power shifting the balance of power toward daughters-in-law (Saavala 2001).

This study found that patrilocal extended families may be at least as, or even more, beneficial than nuclear families in regions with a preference for such living arrangements. However, given the constraints of cross-sectional data, this study presents a static view where young women are observed in one family type at one point in time instead of charting the dynamic process in which women usually start in a patrilocal extended family and later transition into a nuclear family.

Other studies show that the number and nature of transitions across family types affect well-being (Williams et al. 2011), and that early-life conditions affect health later in life (Wen and Gu 2011). Thus, future research should collect longitudinal data and explore the impact of trajectories across family types on women's health.

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