Gender Roles and Women's Health in India

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Abstract
One of the main determinants of the poor health status among women in India is a women's disadvantaged gender role. This study aims to identify the factors that affect women's health, and particularly focuses on women's ability to make decisions in a family concerning health-related issues and education. The data are from the India Human Development Survey-II (IHDS-II), 2011-12 (ICPSR 36151), which includes nationally representative samples across India. Women who have more decision making power within a family had better self-reported health. Women who are more educated have better self-reported health. Self-reported women's health status was dependent on the rank of castes to which the women belonged. Our results suggest that decision-making power and education play a key role in improving the health outcomes for women in India. Health promotion programs for women in India should include a platform for gender roles and decision-making capacity.
Keywords: women's health; gender roles; decision-making power; India

1. Introduction

Women in India experience a number of risk factors related to poor health, including poor maternal health, violence against women, and malnutrition (Saha & Saha, 2010). Poor maternal health of women in India is of the up most concern with the maternal mortality ratio being very high in India, at 174 per 100,000 live births (World Health Organization, 2015). In addition, at least one in three women in India will experience physical and/or sexual violence victimization at some point in their lives (Jain, 2013). Being a victim of violence has a significant negative impact on health (Kamimura, Ganta, Myers, & Thomas, 2014). Finally, women in India also experience one of the highest rates of malnourishment as compared to women in other developing countries (Sharma, 2015).

One of the main contributors to the poor health status of women in India is women's disadvantaged gender role (Patel et al., 2006). Gender is a term that describes, "the characteristics that a society or culture delineates as masculine or feminine" (Nobelius, 2004). Gender roles are socialized characteristics that males and females encompass based on their biological sex (Blackstone, 2003). Ecological perspective suggests that the foundation for gender roles are generated through the interactions of individuals within their communities and environments (Blackstone, 2003). Women's health issues related to gender roles are associated with disadvantages that women experience from gender inequality within their communities and families. Gender inequality is common in India (Himabindu, Arora, & Prashanth, 2014) due to India having a paternalistic culture, which enhances the unequal power differential between men and women (Ram, Strohschein, & Gaur, 2014). Because of societal standards and family beliefs, women have few options available to direct their life course (Ram, Strohschein, & Gaur, 2014; Shettar, 2015). Equal relationships between genders may lessen the health inequality between men and women (Oncel, 2015).

Social and economic factors often determine differences in health status between men and women (Vlassoff, 2007). For example, women and men in society take on various roles within their environment, thereby exposing the different genders to varying diseases and illnesses (Vlassoff, 2007). In addition, the cultural environments of a society can put women at risk for poorer health over their lifespan (Ram, Strohschein, & Gaur, 2014). The

purpose of this research is to examine the association between gender roles and the health of women in India using nationally representative data. To identify the factors that affect women's health, our team focused on women's decision-making capacity in a family concerning health-related issues and education. This information will help to elucidate what factors in Indian society could affect women's health and thus, allow possible solutions to the gender inequality of India to be presented.

2. Methods

2.1 Data and sample

The secondary data set used for this analysis is a part of the India Human Development Survey-II (IHDS-II), 2011-12 (ICPSR 36151), which includes nationally representative samples from 42,152 households in 1,503 villages and 971 urban neighborhoods across India. The response rate was 85% out of the IHDS-I participants. The data set used for this analysis is one of the 14 data sets, the DS3: Eligible Women. This date analyzed were from married women ages 15-45 (N=28,301). The detailed information of the entire analysis, including data collection procedures, is available at http://www.icpsr.umich.edu/icpsrweb/DSDR/studies/36151.

2.2 Ethics

The original collectors are the investigators of the National Council of Applied Economic Research (NCAER), New Delhi, and the University of Maryland. Ethical approval was obtained from these organizations. As the current analysis is based on secondary data that are already available in public domain in an anonymized manner, the researchers did not need further IRB approval. The original collector of the data, ICPSR, and the relevant funding agency bear no responsibility for the use of the data or for interpretations or inferences based upon such uses.

2.3 Measures

2.3.1 Gender roles

Gender roles were characterized by the perceptions or beliefs of the women about their ability to make decisions in their lives. Gender roles were measured based on whether a participant could make decisions on the following matters (yes or no): 1) What to cook on a daily basis; 2) What to do if you fall sick; and 3) To visit a health center alone. The first two items reflect a woman's role in the household and the third item is a proxy for prompt access to medical care. Each measure was included in the analysis separately.

2.3.2 Perceived self-reported health status

Perceived self-reported health status was measured using a five point Likert scale (1= very good, 5= very poor). Lower scores indicate better health on a scale of 1-5.

2.3.3 Socio-demographic characteristics

The following socio-demographic characteristics were included in the analysis: age (in years), the number of children alive (to indicate childbearing burden), caste (as a measure of socio-economic status), education, and the traditional practice of using a ghungat/burkha/purdah/pallu (a veil that covers a woman's face or hair) as a lifestyle choice. Meanwhile, actual income, land ownership, and employment were not included because a wide variety of factors (e.g. location of their residence, family size, availability of industry) can affect these factors. In addition, the data do not specify whether each participant lived in an urban or rural area.

2.4 Statistical analysis

The data were analyzed using SPSS version 22. Descriptive statistics were analyzed to obtain mean and standard deviation for continuous variables and frequency and percentage for dichotomous variables. Multiple linear regression analysis was conducted to predict self-reported general health by independent variables (gender roles) and control variables (participant characteristics). The Kurtosis statistics for the dependent variable was 0.47 and thus the distribution was asymmetric and did not have significant skewness.

3. Results

Table 1 presents participant characteristics and descriptive statistics. The average age of the sample was 32.76 years and the average number of children alive was 2.36. About a third of the participants were in the scheduled caste (the lowest rank of the caste) or tribe (below the lowest caste). About a third of the participants reported no education. Nearly 60% practiced ghungat/burkha/purdah/palu. The average level of self-reported health was 2.02 (SD=0.82) with lower scores indicating better health on a scale of 1 to 5. The frequency and percentage of answering yes to the gender role measures were as follows: 1) Decides what to cook on a daily basis (92.4%); 2) Decides what to do if you fall sick (84.1%); and 3) Can visit health center alone (permission needed or not) (68.0%).

Table 2 shows the results of the regression analysis. The following factors were significantly associated with poor health: older age, larger number of children, no education, and practicing ghungat/burkha/purdah/pallu.

Those women who had less disadvantaged gender roles as reflected by more self-reported decision-making power had better health. The results regarding gender roles and their association with health were supported when general health scores were compared using independent samples t-tests by comparing with or without each gender role (not shown in the table).

4. Discussion

This study examined the association between gender roles and the health of young and middle age women (ages 15-45) in India. It has three main findings. First, women who have more decision making power have better self-reported health. Second, woman who are more educated have better self-reported health. Third, self-reported women's health status was dependent on the rank of caste to which the women belonged.

The results of this analysis indicate that woman who perceive or believe that they have more ability to make decisions in their lives have better self-reported health. Previous studies found that women who have decision-making power are more likely to utilize maternal health care services than those who do not (Adhikari, 2016; Bloom, Wypij, & Das Gupta, 2001; Senarath & Gunawardena, 2009). In addition, other studies found that (Ghuman, 2003; 1Morgan, Stash, Smith, & Mason, 2002) restrictive gender roles led to less decision-making power which negatively impacted health care decisions (Senarath & Gunawardena, 2009). In addition, less restrictive women's roles are related to better outcomes of child growth in India (Shroff, Griffiths, Adair, Suchindran, & Bentley, (2009). The association between gender roles and the health of women in India is complex. The levels of a women's gender roles can change during their life cycle (e.g., younger women, and widowed women who do not have a support from a son have restrictive gender roles) (Das Gupta, 1995).

The data that indicated educated women have better self-reported health agrees with other studies, which found that educational attainment is an important determinant of health status (Baker, Leon, Greenaway, Collins, & Movit, 2011). Education enables women to have greater knowledge about healthcare and current medical practices, which can lead to better health care decisions. Further studies are needed to better define or delineate the factors associated with women's health in India.

The finding that self-reported women's health was impacted by caste agrees with previous studies that show that the caste system in India and gap in socioeconomic position contributes to fewer resources (Kamimura, Ganta, Myers, & Thomas, 2014; Mohindra, Haddad, & Narayana, 2006). Women who are in a lower caste are more likely to experience barriers that will limit access to maternal health care services than those in a higher caste (Saxena, Vangani, Mavalankar, & Thomsen, 2013). This is an important finding because castes are socially fixed and cannot be changed by an individual. Future research should examine whether women's health will improve, regardless of their castes, if women receive empowerment interventions and education.

This data analysis has some limitations. This analysis examined cross-sectional data and limited the examination of causal relationships between variables. While the data set included a wide range of social and health information, it did not define the context of the data – for example, there is no information about family's perspectives of levels of women's gender roles. The analysis does not allow for predicting long-term health. The caste variable included only two categories because some of the castes had a very small percentage of participants (especially, Brahmin and scheduled tribes). This analysis did not cluster women from the same villages/neighborhoods because some of the villages/neighborhoods had less than 10 participants while others had more than 4000 participants. Despite the limitations, this study increased the knowledge about gender roles and women's health in India and provided information for future research aimed at improving the health status of women in India.

5. Conclusion

This study contributes to a greater understanding of the impact of gender roles on women's health in India. Our results suggest that decision-making power and education play a key role in improving the health outcomes for women. Future research should further examine what decision-making power and gender role-related practice implementations would help improve health of women in India.

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Table 1. Socio-demographic characteristics of participants and descriptive statistics

% (frequency)	
No education	34.4 (9,717)
Scheduled caste or tribe	30.6 (8,666)
Practice ghungat/burkha/purdah/pallu	59.7 (16, 873)
Decide what to cook on a daily basis	92.4 (26,133)
Decides what to do if you fall sick	84.1 (23,789)
Can visit health center alone	68.0 (19,230)
Mean (SD)	
Age	32.76 (7.46)
Number of children alive	2.36 (7.46)
General health[a]	2.02 (0.82)

N=28,276.

[a] Lower scores indicate better health on a scale of 1-5.

Table 2. Factors associated with general health associated with gender roles[a]

	Model 1		Model 2	
	B	p-value	β	p-value
Age	0.01	<0.01	0.01	<0.01
Number of children alive	0.03	<0.01	0.03	<0.01
Scheduled caste or tribe	0.01	<0.01	0.01	<0.01
No education	0.12	<0.01	0.11	<0.01
Practice ghungat/burkha/purdah/pallu	0.06	0.49	0.05	0.40
Decides what to cook on a daily basis			-0.06	<0.01
Decides what to do if you fall sick			-0.05	<0.01
Can visit health center alone			-0.05	<0.01
(Constant)	1.63		1.73	<0.01
Model fit				
R^2	0.02		0.02	
F	124.02		83.26	
P-value	<0.01		<0.01	

Multivariate multiple regression. p-value denotes significance from multivariate regression analysis.

B - Coefficients

[a]Lower scores indicate better health on a scale of 1-5.