Fertility Transition in Nepal: Role of Women's Autonomy

Context

Nepal has observed a decline of 3.73 births in last 35 years when the fertility transition began on 1970s. In 1976, total fertility rate (TFR) was as high as 6.33 (Pradhan, Aryal, Regmi, Ban, & Govindasamy, 1997). Fertility started declining thereafter slowly and steadily and reached to 2.6 births per women by 2011 (MoHP, New ERA and Marco International, 2012). The decline was slow until 1990s. A decline of 1.73 births was observed in earlier 20 years while a decline of 2.5 births in last 15 years. Within the decline of 2.0 births in last one and half decade, the later half contributed a decline of 1.5 births, which demographers consider as unprecedented.

Problem

Within the two schools of thoughts – socioeconomic development and organized family planning- of fertility transition, the later is largely determined by earlier variables. The proximate determinants of fertility are not independent of background variables. The increase in the use of contraception is closely associated with the status of female. It is argued that the increasing control of female on fertility is the leading cause of fertility decline in most of the countries of world. Women's autonomy is the prime factor for increasing women's control in fertility and thereby contributing to fertility decline (Jejeebhoy, 1995; Knodel and Jones, 1996; World Bank, 1995).

Despite recognizing the crucial role of women's autonomy, there are fairly few studies whether women's autonomy has contributed in reduction of fertility in context of Nepal. Niruala and Lawoti (1998) attempted to correlate women's autonomy with reproductive behaviour in two urban settings of Nepal. But their effort was limited to some specific contraceptive variables. Earlier to the study of Niraula and Lawoti, Morgan and Niraula (1995), and Niraula and Morgan (1996) discovered the context specific difference in women's autonomy but they did not provide reproductive impact of the differential autonomy, being specific to changing demographic scenario.

Although, there are perceived influences of women's improved status in reproductive behaviours, empirical evidences to approve this influences are considerably lacking in case of Nepal. A research gap is observed whether there is an observable links between women's autonomy and fertility performance in demographic linage of Nepal. There are also arguments and counterarguments in the improvement of women's status which has been examined in this study using data from 1996, 2001, 2006 and 2011 NDHS. Additionally, women's autonomy is influenced by context specific variables. We have considered contextual factors such that socio-economic and demographic factors in women's autonomy and its influence on fertility behaviour.

Theoretical framework

Despite having unavoidable dependence with fertility process, women enjoy less liberation on fertility decision. This study raises a fundamental question on women's liberation on fertility decision. This liberation occupies two distinct forms- liberation from third party decision and liberation from self (Berofsky, 2007). These two concepts reinforce each-other to form a basic dimension of autonomy. This study embodies the combined dynamics of autonomy in relation to demand and decision of number of children. Recalling Immanuel Kant's argument on autonomy as it is assuming authority over the use of their [those restricted] rationale capacities (Reath, 2006), women's independent rationale choice of children governs the future course of fertility. Demand of children is a rationale choice alike the exercise of self-determination.

This study is based on theory of personal autonomy (Taylor, 2005) which reinterprets the concept of Dyson and More (1983) arguing that one can manipulate personal environment only when s/he is

liberated from self. Although, quantitative measuring of liberation from self is always under question, this study attempts to define personal autonomy by some proxy indicators that are used in Nepal Demographic and Health Survey.

Methods and models

List of variables

Indirect Independent	Direct Independent variable=X _i	Dependent variable=Y _i
Variables= Z _i		
Women's education (WE _i)	Decision on use of women's income (DI _i)	Children ever born (CEB _i)
Husband's education (HE _i)	Decision on healthcare of women (DH _i)	Birth in past one year (B _i)
Age of women (AoW _i)	Decision on major household purchase	Current use of
Place of residence (PoR _i)	(DMH _i)	contraception (UC _i)
Occupation of women	Decision on purchase of daily household	
(OoW _i)	needs (DDH _i)	
Women's exposure to media	Decision on visits to relatives (DVR _i)	
(WEM _i)	Justification of wife beating (JWB _i)	
Spousal age difference (AD _i)	Decision on use of contraception (DC _i)	
Number of children dead	_	
(CD _i)		

Impact of background characteristics on women's autonomy

Logistic regression model has been used to estimate the impact of background characteristics on women autonomy using the following econometric model:

$$AI_{i} = \ln\left(\frac{P_{AI_{i}}}{1 - P_{AI_{i}}}\right)$$

= $\beta_{1} + \beta_{2}WE_{i} + \beta_{3}HE_{i} + \beta_{4}AoW_{i} + \beta_{5}PoR_{i} + \beta_{6}OoW_{i} + \beta_{7}WEM_{i} + \beta_{8}AD_{i} + \varepsilon_{i}$

Where AI is women's autonomy indicator and takes values of X_i in the above table.

Impact of women's autonomy on fertility

Ordinary least square model has been used to estimate the impact of women's autonomy on demand of children (children ever born) using the following model:

$$Y_{i\dots n} = \beta_1 + \beta_{i\dots n} X_{i\dots n} + \beta_{i\dots n} Z_{i\dots n} + \varepsilon_i$$

Findings

Hypothesis 1: Women's autonomy is influenced by contextual factors (couple's education, place of residence, occupation, spousal age difference and exposure to media).

Result: This hypothesis is approved. The analysis provides evidences to approve this hypothesis. Women with better education, living in urban area, having professional employment and exposure to media are more likely to make self decision on use of income, own health care, major and daily household purchases, visit to relatives and disapprove wife beating while husband's education and spousal age difference are unable to show consistent and significant influence on women's decision making power. In

some instances, husband's education status has played negative role indicating that the potential spousal educational gap may reduce women's decision making power.

Hypothesis 2: Women's autonomy has an inverse impact on demand of children while a positive impact is observed on use of contraception.

Result: This hypothesis is partially supported since all indicators of women's autonomy do not exhibit inverse relationship with demand of children. However, the inverse influence is stronger than the positive influence. In general, results approve that women's who make self or joint decision prefer low fertility. Likewise, results approve that women who make self or joint decision on specified constructs are more likely use contraception.

Hypothesis 3: The influence of women's autonomy on fertility and reproductive behaviour reduces when influence of contextual factors are considered.

Result: Women's education, exposure to media, female occupation and place of residence dominate impact of women's autonomy on fertility behaviour.

Conclusions

Women's education and labour force participation key to increasing personal autonomy. Women's participation in household decision making is increasing. Women are exercising agency factor due to increasing access in education, employment and other opportunities which in turn has influence on reproductive behaviour. Women are redefining the social, cultural and family structure and dynamics leading to redefine reproductive roles including fertility. This study also approves that women's control over decision making has shown significant impact on control over fertility decision which can be an important factor for sustained fertility in Nepal.

Besides these, this study also raises some questions on the indicators used by the DHS to measure women's autonomy. The inconsistency in the responses and limitation of the indicators to some perceptional attributes warns for reviewing the existing indicators to capture dynamics of women's autonomy. Likewise, the conventional approach of women's autonomy argues that self-control over the household and individual affairs is the indicator of women's autonomy. But the results from this study show that as the women's status improves they are likely to take joint decision. Therefore, the scope of women's autonomy should be redefined to incorporate joint decision under the purview of autonomy but should be cautious whether women have informed and independent participation in the decision.

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