Impact of Women’s Education and Contraceptives use on Nepalese Fertility

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Abstract
This article is a review of research and findings on women’s education, contraceptives used and their effect on Nepalese fertility. This paper would also analysis the impact and situation of Nepalese women’s education and how to effect on their contraceptive behavior and fertility outcomes. The material is drawn from a range of Nepali Demographic Health surveys, Nepalese censuses and different (GOs, INGOs) publications. This study investigates the effect of the women education, supply of birth control methods on fertility behavior by exploring the effects of Nepalese’s 59 years’ period of continued fertility responsive policies. Between 1956 and 2002 Nepal had adopted family planning was the main method of birth control. In 2002, the Nepalese Government decided to make easy and legalized abortion as non-contraceptives methods. Due to those policies Nepalese fertility, might be started falling pattern (MOHP, 2014). Development is itself a contraceptive for reducing fertility. Female education, of course, affects or interacts with a wide variety of factors such as age at marriage, high involvement of women on socio-economic sectors and high priority of women employment opportunities outside the home, social mobility, husband-wife communication, religiosity, infant mortality, exposure to contraceptive information and devices, and the like, each of which, in turn, has been proposed to bear directly on fertility.

Keywords: Contraceptives, Family planning, Female education, Fertility, Nepal

Introduction
Fertility refers to the number of live births per women in the population. It represents the actual performance and should not be confused with the ability of capacity to reproduce, which is termed as fecundity, which is biologically identified as between menarche and menopause (MOHP, 2011). The process of population change, fertility is one which occupies a central position in the study of population for several reasons (Bhende and Kanitkar, 2001). Fertility is commonly represented by a TFR. The TFR for worldwide is average 2.5 children and it is 1.7 children per woman for highly developed countries and developing and less developed countries have ranged from approximately 1.8 to 6.0 child per woman.

Sub Saharan, Western and Meddle African countries have 4.8 to 7.6 (Niger) children per women. Likewise, Asian countries have 2.1 children which are more than half from the African region. Historically, fertility rates have been higher in less developed parts of the world (PRB, 2016). In general, high fertility rates in a society can create large populations of young people who are dependent and need sufficient resources for nutrition, child care, health care and education.

Low fertility rates, if sustained over time in a society, can create an aging population with fewer young people, and an increase in dependency as the younger working age population diminishes. Under these circumstances there are fewer younger people to care for the aging (Spielberg, 2007). Most of the developing countries are experiencing high fertility and low mortality resulting rapid population growth. Nepal is also one of the least developed countries where the birth indicators are still high and death rate is low leading to high population momentum. Fertility is one of the principal components of population dynamics that determines size, structure and composition of a population in a country.

Fertility is the total number of live births to the woman that has taken place if the woman were to live to the end of her childbearing years (CBS, 2014). This paper investigates the effect of the supply of birth control methods on fertility by exploring the effects of Nepalese period (1956-2017) of continued Anti-natalist policies. In 2002 AD, Nepal had a very liberal abortion policy and abortion was the non-contraceptive method of birth control.

Moderate socio-economic progress has been achieved in Nepal in the past i.e. after restoration of democracy to till now (1990-2017), with economic growth. The Government of Nepal (GoN) has made great pace in its attempt to meet the targets set out in the previous Millennium Development Goals (MDGs) by 2015 and SDGs by 2030 including reducing fertility as well poverty levels and increasing access to social services. The GoN is now implementing a new Population Prospective Plan (PPP) and fourteenth Development Plan (2013-2017). These policies (PPP) and plans (fourteenth development plans), the Government underscores the important linkages between fertility with better health outcomes, poverty reduction, and eco-

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nomic growth. Progress has been most notable in the achievement of universal primary education enrollment, gender parity in primary education, and many more. However, huge challenges remain in ensuring gender parity in secondary education, reducing infant and child mortality, involvement of women in socio-economic sectors and rising contraceptives prevalence and improving maternal health.

Materials and methods

This paper is reviews of uses and examines the relationship between female education, contraceptive use, and fertility indicators (rates) in Nepal on the basis of the Nepal Demographic and Health Surveys of 1996 to 2016 (five), different population censuses of Nepal and other contemporary references. The main objectives of this article are to find out the relation among Nepalese women and their fertility with different socio-demographic aspects and contraceptives practices and try to find how they influence Nepalese fertility.

This article will try to analyze the relationship between some selective socio-economic, demographic variables and fertility indicators. Female education affects many variables that have been proposed to bear on direct influence on fertility.

The primary causal links of this nature that require simultaneous analysis include the effect of female education on age at marriage and/or first conception, labor force participation, social mobility, economic utility of children, exposure to mass media and printed materials concerning family planning, knowledge and use of contraceptive devices, husband-wife communication, and infant and child mortality. The proposition is concerning female education's indirect effects in the working model.

on the basis of review of different fertility model, John Bongaart’s model has proposed. He had expressed that the relationship of socio-economic and demographic indicators with fertility. All socio-economic and demographic variables of Nepalese women are considered as independent variables Nepalese women’s age at marriage, level of education, occupation, uses of contraception and situation of IMR and CMR considered as intermediate variables and CEB or only the Nepalese women’s fertility is considered as dependent variable.

Results & Discussion

Female education, of course, affects or interacts with a wide variety of factors such as age at marriage, employment opportunities outside the home, social mobility, husband-wife communication, religiosity, infant mortality, exposure to contraceptive information and devices, and the like, each of which, in turn, has been proposed to bear directly on fertility (Kasarda, 1979). A bio-social Approach to limits the low fertility that our biological predisposition towards nurturing behavior plays an important role in the motivation for child bearing does not mean that all women are genetically determinant to become a mother (Felmlee,1993 and Foster, 2000).

Educational Attainment of women and Fertility

Literally, Nepal has low level of literacy. Only 65.1 percent populations are literate, out of them 58.7 percent women are literate (CBS, 2014). Education is a key variable in sustainable development and education itself a contraception for the reducing fertility. It helps to reduce fertility, morbidity and mortality. The increment of the women participation on socio-economic sectors it contributes to women's and girl’s empowerment, to postponement of marriage and to reduce on family size (UNFPA, 1997).

Contraceptives and the level of fertility have negative association which is shown in table 1. The major causes of high rate of fertility of Nepal are creating some major problem such as high population growth as well as unemployment, lack of proper health facilities, rising/falling low level of education, low prevalence of family planning methods and high unmet demand of family planning methods and many more. Various Demographic and Health Surveys of Nepal have intricate that some of the factors that contribute to the high fertility rates among the women of Nepal. These factors considered as age, sexual characteristics of women such as: age at first marriage, age of first sexual relations, and frequency of sexual relations. Others include post-partum amenorrhea2 and abstinence from sexual relations. The descriptive analysis provides evidence on the underlying factors, dwelling (urban-rural) on age group and regional differences on the impact of the level of female education on fertility or level of education on contraceptive use (MOHP, 2017).

![Source: John Bongaarts’s Model (1978)](image)
**Contraceptives Use and Fertility**

In an experimentally designed family planning and health program started in 1968 (FP/MCH) and in 1972 (ICHSP) for women in all over the Nepal, the Nepalese women benefiting from that program had reduced TFR over six child per women to 4.6 child. These programs are also associated with increased woman’s health status, as measured by their BMI, reducing CMR and U5MR (MOH, 1996).

Various studies have been shown that use of contraceptives has strong negative association with fertility. Contraceptives use is the principal variables of responsible for the shift of fertility from high to low fertility. Nepalese fertility has still high i.e. TFR 2.3 per woman (MOH, 2017) comparing other developing as well as neighboring countries.

The NFHS, 1996, reported that about 28.5 percent of women reproductive aged was used least one method of family planning i.e. the contraceptive prevalence rate was 28.5 percent (MOH, 1996). Which is gradually increases and in 2016 out of total women reproductive aged 52.6 percent women are used at least of any method of contraceptives (MOH, 2017). The pace of CPR is too slow as compared to increasing rate of literacy status of women.

Large number of countries in developing regions, at least 20 percent of the married women of reproductive age has an unmet need of contraception (PRB, 2016). In Nepal, large number of women reproductive age has unmet need that is more than higher as 28.6 percent in 2006, 27.3 percent in 2011 and it was decreased at 24 percent in 2016. It means that, a fertility rate of 2.1 is considered replacement rate for a population, the average number of births per women required for a population to replace itself in the next generation. Nepalese fertility is start to reducing pace i.e. the TFR is 2.3 children per women. Family planning programs served most women with unmet need, the demographic impact would be substantial contraceptive prevalence would rise, reducing fertility and slowing population growth. In 2016, unmet need for family planning was added to the 5th MDGs as an indicator for tracing process on improving maternal health (MOH, 2017).

**Conclusion**

This paper carried out the twenty years (1996-2016) of Nepalese fertility and its determining factors respectively. It revealed that for a large proportion of our population, the need for family planning services is not met with despite the existence of National Family Planning Policy since 1991. However, the analysis of recent findings reveals that the unmet need of family planning and fertility has declined slightly. Unmet needs for family planning signify the gap between the reproductive intentions of couples and their actual contraceptive behavior. If measured accurately, it can indicate the potential demand for family planning services and its likely impact on fertility, if the demand is met effectively.

It is concluded that, female education, especially at the secondary and post-secondary levels, increases the likelihood of using contraceptives and reduces fertility. As a result, measures that aim to educate women beyond higher secondary level are needed. The proposed variables are base on proposed framework and divided it’s into two variables then tries to explored their direct or indirect relationship and their impact of overall Nepalese fertility.

It will be concluded that there are inverse relation between independent and dependent variables of Nepal. There is nearly universal knowledge of methods of family planning, but only 52.6 percent women have used these (all) methods and still 24 percent unmet need and about 23.4 percent women are under coverage of contraceptives prospective (MOH, 2017). It would be concluded that access to or use of contraceptives is positively associated with the level of education of woman.

Reducing fertility is important for improving the quality of life of Nepalese women through policy actions. Targets of various population as well as development policies are to reduce fertility (replacement level) through direct and indirect roles for enhancing maternal and child mortality reductions. In rural areas, where majority of the people are residing, utilization of reproductive and maternal health care services are poor or non-existent are more likely to provide more and adequate care thus ensuring their survival and

**Table 1. Prevalence Rate of Women Reproductive Age, Nepal, 1996-2016**

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<td>CPR (%) (Nepal)</td>
<td>28.5</td>
<td>39.3</td>
<td>48</td>
<td>49.7</td>
<td>52.6</td>
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<td>TFR (Per woman)</td>
<td>4.6</td>
<td>4.1</td>
<td>3.1</td>
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attention to their early childhood development requirements. It is expected to play an important role in achieving both the national development goals contained in the PPP, Fourteenth Development Plans, MDGs and SDG goals. However, reducing fertility needs concerted efforts from various stakeholders including the government, the health sector, local level authorities, and communities. It is suggested that efforts to reduce fertility need to set new target measures that aim to educate women beyond the higher secondary level. The government should to extend free education at the higher secondary level is therefore an important measure that may help to reducing Nepalese fertility.

Competing interest

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

References


Population Reference Bureau (2016). World Population Data Sheet. (PRB), Washington DC, USA
