Does Schooling of women translate to positive health outcome: A study of rural North India?

Introduction

Health is a good indicator to measure the well-being of the people of a country. The "United Nations" has used it to compute the "Human Development Index." Indian women have high mortality rates particularly during child birth and their reproductive years. Prior researches have highlighted the causality of education and health through autonomy and utilization of health care (Jejeebhoy 1995, Jeffery and Basu 1996, Ganguli 1998, Bloom et. al. 2001, Walque 2007) still the pathways are not persuasive to establish a robust causal relationship . This paper re-explores the trodden paths the neo-classical literature has taken and tries to unpick the pathways in the scenario of development in the field of education and health through government sponsored programmes like Family Planning Programs, Maternal and Child Health Programs, National Rural Health Mission. Mass media and mobile phones have penetrated the rural India today in such a scenario how are just few years of schooling spent early in women's lives translate to positive health outcomes after marriage. In what way are the educated women different than their uneducated counterparts in influencing their nutritional and reproductive health?

Anemia is low level of hemoglobin in the blood. This results from nutritional deficiency of iron, folate, Vitamin B12 and some other vital nutrients. Iron deficiency is the most widespread form of malnutrition. In India anemia affects almost 56% of the women (NFHS-III 2005-2006). Anaemia may play a role in maternal mortality as it has detrimental health effects on women. On the other hand, less than 18.5 kg/m² Body Mass Index (BMI) indicate under nutrition which is related to chronic energy deficiency and thus morbidity. Reproductive morbidity can also capture reproductive health of women as it is a hindrance to reproductive goals (Qadeer 1998; Sagar 1994). Reproductive morbidity can further affect pregnancy related complication, congenital infection, infertility and chronic pain (Zurayk et al. 1993; WHO 1990). A proper understanding of the health status of women and education particularly in rural India can provide helpful information for policy interventions in nutritional and health care programs for women in rural areas as well as socio-economic development through intervention research.

Theoretical Background:

In this paper we are investigating individual women's schooling and various intermediary variables which female schooling is thought to impact directly. These intermediary variables in turn affect health outcomes. As mentioned earlier that schooling has direct, indirect and joint effect on Health. In our paper we try to explore all the above effects but here we have mainly accounted for the indirect effects.

Furthermore the causal relationship between education and health operate at two levels i.e. individual and aggregate. The aggregate level variables like mass education, Family planning programme and employment intervention of women, conditions individual level causal link between education and Health. Female education is thought to bring about change in taste and aspiration as well as "Ideational Change". Educated women are thought to be more receptive to printed as well as audio-visual media (T.V. and Radio). The responsiveness to information is a professed pathway by which schooling effect health outcomes (Walque, 2006). Investigation has also been on the curriculum of schooling which causes a jump into the "modern world" according to Basu, 2002. Schooling teaches girls discipline, self-restrain, patience, routine and obedience of authority and confidence (Jeffery and Basu 1996; Amin, 1996. This is the "hidden curriculum or unwritten curriculum" (Holsinger and Kasarda, 1975). Interestingly the education health link has been examined at aggregate and individual level where national level factors like mass media and Family planning program and increased employment opportunities also has positive health outcomes at individual level. Bhat (2002) empirically tested the role of schooling in Child survival, fertility, mother-infant interaction and social attitudes. Findings show that mothers with more schooling (beyond primary level), used health services more frequently and effectively than their uneducated counterparts. We now arrive at the still unanswered query that addresses the level of education needed to start the change, what schooling imparts to young girls which help them to take decisions as adults, causal linkage at individual and aggregate level. Researchers (Cleland and Jejeebhoy 1996; Jeffery and Basu 1996) have also explored the threshold effect i.e. after completion of definite years of schooling; further years of schooling significantly render lower fertility outcomes and better reproductive health.

In all the above pathways we mainly try to isolate the "psycho-social processes" (Le Vine et. al. 1991), which schooling attendance gives to an educated women as opposed to just improved access to reproductive, maternal and child health facilities. Educational status improves access to resources, awareness and information about health risk and health seeking behaviour. Education can also lead to increased contraceptive knowledge which finally affects the reproductive health through its effect on fertility outcomes (Ganguli 1998) or directly influence reproductive health through use of contraception and prevention of sexually transmitted diseases.

Data and Research Methods

This profile focuses on Nutritional Status and own health seeking behaviour, Reproductive health and health promoting behaviour. In Nutritional Status we look into Anaemia, Body Mass Index (BMI)

National Family Health Surveys-III (2005-'06) data has been used for married women of age 15-49 years for rural India for the northern states which are, Jammu Kashmir, Himachal Pradesh, Haryana, Punjab, Rajasthan, Madhya Pradesh, Uttrakhand, Uttar Pradesh, Bihar, Jharkhand, Orrisa and Chattisgarh, West Bengal, Gujarat, to examine the gross and net effect. Our paper gathers from bivariate and multivariate analysis (logistic regressions).

Dependent Variables:

Anaemia among Women: In this study we have taken moderate or severe anemia (less than 10g/dl) and mild or no anemia (10.0g/dl or higher) as two categories (Dichotomous response variable).

Body Mass Index: The dichotomous response variable used to measure nutritional status has two categories: BMI < 18.5kg/m^2 and BMI≥18.5kg/m^2.

Presence of any Reproductive Health Problem(RHP): The third dependent variable considered in the present study is any one or more symptoms of reproductive health problems (i.e. any self reported reproductive health problem or not reported problem in the last 12 months)

Health seeking behaviour: (In the past three months visited a health facility or camp for treatment of self? Yes/No, Received Antenatal Care Yes/No, Institutional Deliveries? Yes/no), Treatment sought for any self reported RHP? Yes/No.

Health Promoting Behaviour: Consumption of nutritious food? (Weekly or daily and occasionally or never), Knowledge about AIDS and its transmission? Yes/No, Condom use every time when having sex? Yes, No)

Explanatory Variables:

The standard of living is particularly strongly related to chronic energy deficiency. Nutritional anemia as well as low BMI which show chronic energy deficiency increases fatigue is related to the income of the household and thus the standard of living. A number of variables were chosen to represent the socio-economic factors. The independent and intermediate variables for the individual analysis are: Respondents currently working (Yes/No), Religion (Hindu, Muslim, Others), Ethnicity (SC, ST, OBC, Others) women educational level (no education, primary, secondary and higher secondary), Husband's educational level (low, medium and high) , standard of living index (low, medium and high), Knowledge about condom, Women involved in decision making about own health (Yes/No), Allowed to go to health facility(Yes/No), Decision making regarding using contraceptive, Exposure to mass media(Yes/No), Source of information about AIDS.

Expected findings:

Findings illustrate that though the pathways of schooling are murky but with at least 8-10 years of schooling responsiveness to information show a significant effect leading to health promoting behaviour. Besides, gross effect of health outcomes is due to the socio-economic conditions rather than just schooling. With exposure to mass media odds of health seeking behaviour and health promotional behaviour also increases. Anemia and BMI is also related to income effect rather than number of years of schooling. As socio-economic factors affect health of women so the Government should make available free health provisions, Health awareness. Standard of living is important for nutritional health; hence supplementary nutrition program for the poor women should be there. The existing nutritional programs are not adequate for the poor. Moreover in India the nutritional program specifically focus on pregnant and lactating mother but the focus should be more on poor women. Secondary education for girls is also an important means to combat poor health status of women. With this research we can further look into the intra-household decision making on food allocation.