RESEARCH ARTICLE

Health insurance acceptance of female labour force: A special focus on reproductive health

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Abstract

Objective: To measure the demand for health insurance policy with special focus on maternity services among working women.

Method: The cross-sectional study was conducted in Lahore, Pakistan, from October 15 to November 15, 2018, after approval from the Punjab Economic Research Institute, and comprised public and private school teachers of reproductive age. The primary data was collected using a structured questionnaire. Logit model was used to determine the factors affecting the interest level in maternal health insurance.

Results: Of the 110 teachers, 54 (49 %) were from private schools and 56 (51%) from public schools. The overall age range was 21-49 years, with 64 (58%) aged 31-40 years. Also, 79 (72%) teachers had completed 16 years of education. Of the total, 63 (57%) respondents were willing to buy maternal health insurance. Income, age, awareness and the type of preceding delivery were important determinants of the willingness to pay for maternal health insurance.

Conclusion: Providing full insurance coverage during maternity was expected to give financial relief and to also ensure better health conditions of the teachers on re-joining the work.

Keywords: Maternal health insurance, Female teachers, Logistic regression, Willingness to pay.

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Introduction

Illness and disease can befall anyone irrespective of gender, but it is observed that women planning a family are more at risk due to various antenatal and postnatal health uncertainties and issues. To counter the unpredictability of health, it is important to have a certain mitigation or risk management plan that would not only help in reducing the unforeseen costs, but would also prevent and minimise the damages or losses incurred in case of a health crisis. In such a scenario, health insurance can be beneficial as a risk management tool, as a comprehensive maternal health insurance can protect women against health hazards at a crucial stage of life.

As more females are entering the labour market, their awareness regarding health issues is also increasing and consequently the demand for health facilities is rising. Recent trends show that labour-force participation rate of women in Punjab is almost one-third to the male labour force participation rate.[1] Working women usually prefer to opt for private hospitals due to the high-quality health and maternity services. The Punjab Health Survey 2016 indicated that about 47 percent deliveries are facilitated in private health facilities compared to 26 percent in public facility. The usage of private-sector clinics and hospitals has also increased over the years.[2] There is a heavy reliance on private-sector medical facilities in Punjab and childbirth in a private hospital has become quite expensive. The out-of-pocket expenditure is very high.[3] This high dependence on out-of-pocket payments results in reduction of financial resources of the households and there is also growing evidence that high number of women facing healthcare debt have faced issues in payment for the medical bills incurred.[4]

The maternal mortality rate (MMR) in Pakistan for 2015 was significantly high at 178 per 100,000 live births.[5] According to the World Health Organisation (WHO), every country should make efforts to bring an end to preventable maternal mortalities and achieve the universal MMR of 70 deaths per 100,000 live births by 2030.[6] Accomplishing this goal in Pakistan would not be possible without strategic and appropriate health interventions which would provide access to skilled maternal care and, most importantly, a financial plan for such interventions.[7]

In Pakistan, there has been significant focus on policy interventions to improve mother and child healthcare, but little attention has been given to the benefits that health insurance can bring to the women who fall in the low-income category of employees. Moreover, research related to health insurance in Punjab with particular focus on women planning a family is scarce. Of the total 910,461 school teachers in Punjab, 649,575 are female teachers.[8]

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Despite such a high number of female teachers, their salary packages are inadequate to meet their household expenditures.[9] With such budget constraints, maternal health may be overlooked and not given priority compared to other immediate expenditures. As females form a very high percentage of the education sector workforce, it is pertinent to analyse how different structural factors, such as income or availability of maternal health insurance, may impact their healthcare decisions so that a wider picture regarding maternal health insurance can be drawn.

While analysing the important determinants which affect women's use of maternal healthcare services in Turkey, health insurance coverage was found to be an important factor in using healthcare services considered vital to reduce infant, child and maternal mortality rates.[10] According to several studies, it has been established that in various low- and middle-income countries (LMICs), such as Cambodia, Indonesia, Ghana and Rwanda, health insurance coverage increased the usage of maternal healthcare services.[11]

The significance of maternal health insurance can also be gauged from the improvement in various maternal health indicators in Ghana where it has been reported that the insured women compared to the uninsured ones had considerably fewer birth complications (1.4 percent vs 7.5 percent); had mostly used skilled care during pregnancy (65 percent vs 47 percent); had higher rates of births at a health facility (75 percent vs 53 percent); and had a minimum of three prenatal check-ups (86 percent vs 72 percent).[12] In Bangladesh, it was witnessed that women in areas that were provided health insurance had higher rates of availing the antenatal and postnatal care along with higher number of births in a health facility.[13]

In order to reduce out-of-pocket expenditure, health insurance is a very effective tool for health and financial management. Health insurance not only reduces the severity of unpredictable payments, but also increases utilisation of healthcare facilities and the overall health-seeking behaviour.[14] Research has established that there is unequal distribution of health insurance coverage and not in line with socio-economic and employment data.[15]

The current study was planned to measure the demand for health insurance policy with special focus on maternity services among female teachers.

Subjects and Methods

The cross-sectional study was conducted in Lahore, Pakistan, from October 15 to November 15, 2018, and comprised public and private female school teachers aged 21-49 years. After approval from the ethics review committee of the Punjab Economic Research Institute (PERI), the sample size was calculated using the formula:[16]

$$n = \frac{N\ Z2\ V2}{Nd2+Z2V2}$$

Where, n = sample size of the study; N = Total target population; Z = Normal variate at 95 percent precision level; d = Acceptable error 10 percent; V = Guessed variability among sampling units 0.50.

The sample was raised from among teachers at randomly selected private and public schools from different geographical locations of Lahore district based on scientific sampling methodology. There were 3784 schools in the private sector and 597 in the public sector. The estimated number of female teachers in public and private girls' schools was around 10,000 each and equal proportional sample was targeted. The data of schools was directly obtained from the respective office of the school education department.

After taking consent, the respondents were interviewed in their respective schools. Data was collected using a pretested questionnaire. The draft questionnaire was first tested under realistic conditions to determine its suitability for eliciting the requisite information. The questionnaire was further modified in the light of the pre-testing. The data was analysed using descriptive statistics.

Logistic regression was used in order to estimate the results. The categorical variable 'Interest of the working women for health insurance' (INT) was taken as the dependent variable the value of which was "1" if the respondent was interested in getting health insurance scheme, and "0" if the respondent was not interested.[17] The independent variables were the age of the respondent (AGE), respondent's income level (RINC), awareness of the maternity health insurance (AWRNS) and delivery type (DTYPE). The general form of the model was INT = f(AGE, RINC, AWRNS, DTYPE). The results were reported in odds ratios (Ors), and any value >1 showed positive change regarding the interest of the respondent.

Results

Of the 110 teachers, 54 (49.09%) were from private schools and 56 (50.91%) from public schools. The overall age range was 21-49 years, with 63 (58.18%) aged 31-40 years. Also, 79 (71.82%) teachers had completed 16 years of education 63 (57.27%) belonged to upper middle-income group 65 (59.27%) were interested in maternal health coverage; and the amount the women were willing to pay ranged from Pak Rupee (PKR) 200 to PKR 2,000 per month (Table-1).

Table-1: Demographic characteristics (n=110).

Items	Frequency (Percentage)
Age of the Respondents (Years)	
≤ 30	42 (39.09%)
31-40	63 (58.18%)
40-49	5 (02.73%)
Education (Complete Years of Schooling)	
≤ 14	1 (00.91%)
14	18 (16.36%)
16	79 (71.82%)
18	12 (10.91%)
School Type	
Private	54 (49.09%)
Public	56 (50.91%)
Family Income (PKR)	
≤ 25000	3 (03.00%)
26000-50000	26 (23.65%)
51000-100,000	63 (57.27%)
>100,000	18 (16.36%)
No. of Children of the Respondent	
0	16 (14.6%)
1-2	71 (64.5%)
3-4	23 (20.9%)
Delivery Type	
C-section	69 (62.4%)
Normal Delivery	41 (37.6%)
Total Expenditures Incurred on Delivery of Last Child (PKR)	
≤ 10000	11 (10.13%)
10000-50000	54 (49.03%)
50000-100,000	32 (29.03%)
>100,000	13 (11.81%)
Interested in Purchasing Maternal Healthcare Insurance	
Yes	65 (59.27%)
No	45 (40.73%)
Willingness to pay (Premium for Maternal Health Insurance in PKR)	
Minimum	200
Maximum	2000

Source: Authors' calculations.

Table-2: Logistic regression.

Variable	Odds Ratio	Std. Err.	Z	P>z
Income of Respondent	0.99	0.00	-1.76	0.07
Age of Respondent	0.88	0.05	-2.15	0.03
Awareness of Maternal Health Insurance	1.87	0.92	1.28	0.20
Type of Delivery	1.64	0.77	1.07	0.28
Constant	63.6	129.70	2.04	0.04

The logistic model indicated that increase in respondent's income and age reduced their interest of accepting the health insurance policy while awareness of the respondents about health insurance policy, and the preceding delivery being a Caesarean Section (CS) indicated more interested in having health insurance policy to meet the expenditures Even though CS was not statistically significant (Table-2).

Discussion

The findings indicated that the coverage of health insurance was low, with only one out of eight respondents ever having had a health insurance policy and only one-third of the women having awareness about maternal health insurance. This lack of knowledge acts as a hindrance to subscription.[18] A study found a strong link between education and maternal healthcare. Our sample comprised educationally advantageous women, but surprisingly their knowledge regarding maternal health insurance was considerably low.

The negative association of income with interest in maternal health insurance showed how increase in income made it easier for women to make out-of-pocket expenditures on delivery and other maternal health expenses. This implies that women in low income groups would need maternal health coverage to address financial barriers that limit access to healthcare.[19] To meet demand of maternal health services of women in lower income bracket, it is, therefore, essential that they are provided such services on low premiums.[20] This might strengthen connection of lower income women with better health coverage and health systems.[21]

Empirical literature on the relationship between age and maternal health insurance provides mixed evidence. For instance, studies in India and Honduras found the proportion of women obtaining maternal health services reduced as age increased.

A study[22] found strong association between the age of the respondents and their willingness to pay for health insurance, while another study found no association between age and maternal health-seeking behaviour.[23] The current results suggest that as age of the women increased, their interest in obtaining maternal health insurance declined. This can be attributed to the fact that with an increase in age, probability of bearing a child declines. Moreover, since our sample only had teachers who were employed, an increase in age can also be interpreted as an increase in experience. Greater experience is associated with higher incomes that may enable women to make such catastrophic out-of-pocket expenditures. The findings of the current study are in contrast to what has been reported by an earlier study[20] which indicated that older women had higher utilisation of maternal health services, and adhered to the recommendation of at least four antenatal care (ANC) visits compared to the youngest age group which had people aged 15-19 years.

In the light of the findings, the current study recommends that policy-makers should look into the possibility of separate health insurance schemes for female educators as a means to have a healthier female teacher population and, resultantly, a more motivated teacher workforce. This area can be explored solely by the health department or in collaboration with the education department. The possibility of private-sector investment in this crucial area can also be explored.

Conclusion

Providing full insurance coverage during maternity was expected to give financial relief and to also ensure better health conditions of the teachers on re-joining the work.

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Conflict of Interest: None.

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