Socio-reproductive and demographic factors affecting the decision making of ever married fertile females towards want of another child in future: A study of state based hospitals in Multan, Pakistan

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ABSTRACT

This cross sectional study centered around exploring the underlying factors behind fertility preferences of the married females. The data was collected from 2505 ever married fertile females in their reproductive age span who were utilizing antenatal or postnatal health care services from state based hospitals of the study vicinity. The empirical results of the study illustrated that elderly women in late reproductive age span i.e. >35 years, being secondary or highly educated, residing in urban areas, having educated marital partner and being non-occupational are the major demographic factors that inclined the females attitude towards less want of another child in future. Moreover, having no children (either sons or daughters'), no birth in past 5 years/past year and never using contraceptives are the major socio-reproductive factors that directly affect the high fertility preferences of the married females in future. High female education, adequate awareness campaigns, ideological transformation as well as role of media are the major recommendations that can alter the fertility intensions and future birth rate of the study vicinity.

Keywords: Demographic factors, Socio-reproductive, Decision making, Fertile females, State based, Child

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INTRODUCTION

Fertility preference in the preceding literature has been a notable point of debate due to its complexity of measurement[1,2]. It mainly refers to intended control over the reproductive behavior of a person. This concept is fundamental and necessitates direct attitudinal measurement through want of another child in future[3]. Moreover, the concept also entails female desire towards ideal family size and her subsequent reproductive transitions[4]. Considering this, fertility preferences of women is a well-defined and thought provoking prerequisite for measuring the sex ratios and population planning programs[5].

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Parallel to fertility preference, previous studies conferred that son preference is a gender driven integrated phenomenon that has gained prominence in various global and South Asian regions[6-9].

In highly stratified societies, male dominating cultural norms are stringent in which the decision making power of married females resides with her husband[10]. Accordingly, three major microlevel theories i.e. Becker theory of female autonomy, Easterline theory of relative economic deprevation, and Caldwell theory of fertility transition empirically explained women decision making in understanding the fertility preferences of married women over the period of time[11]. In acquiescence with these theories, a study conducted in United States of America stated that fertility intensions are guided by the usage of contraceptive avalability which permits the women to accomplish their reproductive goals more easily[12].

The geographical area of Pakistan still shows high fertility rate due to social networks and pressure groups[13]. Moreover, the other socio-reproductive and demographic factors such as intimate relationships, marriage, education, norms, number of children, contraceptive usage and female occupational statuses which fluctuates the female desire for ideal family size[13,14]. The significance of this study lies in complex interrelationship of cultural norms, social sanctions, orthodox culture, religion and ideational structure which regulated the reproductive behavior of the married females[15-17]. Taking into consideration these theoretical deliberations, it is evident that fertility preferences centered on dissatisfaction of couples from the prior sex order

of their children. Apart from this global context, Pakistan is in the middle of demographic transition. Henceforth its Total Fertility Rate (TFR) is high as the women are more inclined towards large family size[18]. Based on these research proclamations, the major objective of the present research was to assess the socio-reproductive and demographic factors behind female want of another child in future.

METHODOLOGY

This attitudinal cross-sectional survey research design was carried out in two public sector hospitals i.e. Nishtar Hospital and Fatima Jinnah Women Hospital during 20th January 2017-15th October, 2017. A semi-structured interview schedule was used to collect the data from 2505 ever married females in their reproductive age span (15-44 years approximately). The women were sampled out through two stage stratified sampling technique in which hospitals were selected which was followed by selection of fertile females through de-facto simple random sampling technique. In this method, the women who were present on the day of data collection were randomly selected, giving an equal probability of selection to every woman. From each hospital, the women who were married, still have reproductive age span ranging from 15-44 years and were taking prenatal, antenatal or postnatal health care services were included. Conversely, the married women who were visiting the hospital for some general purpose such as attenders with patient or taking prescription/medication from doctors or they are not in the reproductive age span were excluded.

The present research treats fertility as a form of manifestation of behavioral conduct based on biological innate needs of a person[19]. Accordingly, the instrumentation was constructed comprising of socio-reproductive and demographic factors affecting the fertility intensions of married females in study vicinity. After designing the instrumentation and data collection, statistical analysis was conducted in SPSS (version-21). The recoding was done according to the dimensions of fertility preferences variable. The recoded categories of response variable (fertility preferences) were 0=Do not want another child in future, 1=Want another child in future. Henceforth, the data shows that the reproductive behavior of married women can be accurately assessed through fluctuation in these two categories. Consistent with predictor variables[20], the odd ratios indicate that independent variables are responsible for making changes in the response variable.

RESULTS

A total of 2505 female were studied. The results of the present study depicted that married women aged >35 years (n=1039, 41.5%) have 0.763 times less longing for the want of another child in future (95% CI: 0.697-1.836, p=0.000 <0.01) in comparison with the respondents who were in 15-24 years of age bracket (n=534, 21.3%). Moreover, the females who were educated up to secondary level or > (n=504, 20.1%) becomes 0.858 times less inclined towards the addition of another child in family (Upper and lower limits: 0.747-1.986, p=0.000 <0.01) as compared to the married females who were illiterate (n=1666, 66.5%). The data also divulged that the respondents whose husbands were educated up to secondary level or > (n=1442, 57.6%) becomes 0.769 times less inclined towards want of another child in their family (95% CI: 0.375-0.974, p=0.016 <0.01) in comparison with the women whose husbands were illiterate in the study vicinity (n=911, 36.4%). The empirical facts also validated that ever married females residing in rural areas have two and a half times (i.e. 2.723) more positive attitude towards having another child in future (95% CI: 1.566-4.785 p=0.000 <0.001) in comparison with urban settlers (n=957, 38.2%). Additionally, the respondents which were not occupational (n=1873, 74.8%) were more than double times more inclined towards increasing their family size through longing of a child in comparison with the working women (n=632, 25.2%).

The respondents having 1-4 children in the age bracket of 5 years and < (n=1236, 49.4%), have more than ten times (10.584) positive attitude towards longing for another child in her family (p=0.000 <0.05) in comparison with the women who have >4 children in the age bracket of 5 years and < (n=964, 38.4%). In addition, the married women who have no son in their prior children (n=639, 25.6%) were more than fourty one times more inclined towards want of another child i.e. 41.486 (p=0.000 <0.01) in comparison with the women who have >2 sons in their prior children (n=685, 27.3%). Moreover, the respondents who have no daughter in their prior children (n=747, 29.8%) becomes more than ten times more inclined towards want of another child in future (95% CI: 9.538-12.469, p=0.000 <0.01) as compared to the married females who have >2 daughters in their prior children (n=556, 22.2%). The birth history in past 5 years shows that the respondents who have no birth in past five years (n=1074, 42.9%) have two and a half times more positive attitude towards want of another child (2.550, 95% CI: 1.507-3.597 <0.05) in comparison with the females who have one or more births in past 5 years (n=1431, 57.1%).

In approximation, the empirical results also show that the married females who have never used contraceptive methods for limiting their family size (n=1337, 53.4%) become more than four times more inclined towards their positive fertility (Lower and upper limits: 3.769-4.533) as compared to the females who use modern methods of contraceptives (n=951, 37.9%). Conversely, the results demonstrate insignificant role of birth in past year with changing the attitude of married females towards another child in future.

DISCUSSION

Aforementioned studies depicted that there has been profound changes in fertility rate of South Asian countries such as Pakistan[21] and India[22]. Among many underlying causes of these changes, female inclination towards biased sex order of their children is the most prominent one[23]. In compliance with the present findings, a national level empirical study depicted that fertility preference is the culturally driven unified phenomenon in which married females are expected to reproduce sex preferred children in Pakistan[24].

Table-I: Socio-reproductive and demographic factors affecting married females future intensions towards want of another child (N=2505)

Variables		Frequency n (%)	OR^ (95% CI*) (Unadjusted)	p-value	Significance
Demographic factors					
Age in years	15-24 years	534 (21.3%)	1 (RC)[#]		
	25-34 years	932 (37.2%)	0.462 (0.385-1.556)	0.000	<0.01
	>35 years	1039 (41.5%)	0.763 (0.697-1.836)	0.000	<0.01
Education level	Illiterate	1666 (66.5%)	1 (RC)		
	Primary level	335 (13.4%)	0.693 (0.627-1.766)	0.000	<0.01
	Secondary level + Higher level	504 (20.1%)	0.858 (0.747-1.986)	0.000	<0.01
Place of residence	Urban	957 (38.2%)	1 (RC)		
	Rural	1548 (61.8%)	2.723 (1.566-4.785)	0.000	<0.001
Wealth index	Low socio-economic status	998 (39.8%)	1 (RC)		
	Middle socio-economic status	983 (39.3%)	0.279 (1.237-1.537)	0.104	Ns[a]
	High socio-economic status	524 (20.9%)	0.321 (0.615 to 0.839)	0.571	Ns
Husbands education	Illiterate	911 (36.4%)	1 (RC)		
	Primary level	152 (6.0%)	0.909 (0.649-1.774)	0.000	<0.01
	Secondary level + Higher level	1442 (57.6%)	0.769 (0.375-0.974)	0.016	<0.01
Working status	Currently working	632 (25.2%)	1 (RC)		
	Not occupational	1873 (74.8%)	2.239 (1.121-2.748)	0.080	<0.01
Socio-reproductive factors					
Number of children 5 years and <	>4 children	964 (38.4%)	1 (RC)		
	1-4 children	1236 (49.4%)	10.584 (9.418-11.895)	0.000	<0.05
	No children	305 (12.2%)	54.350 (44.764-65.990)	0.000	<0.05
Presence of sons	>2 sons in prior children	685 (27.3%)	1 (RC)		
	1-2 sons in prior children	1181 (47.1%)	5.724 (4.990-6.566)	0.000	<0.01
	No son in their prior children	639 (25.6%)	41.486 (35.331-48.714)	0.000	<0.01
Presence of daughters	>2 daughters in their prior children	556 (22.2%)	1 (RC)		
	1-2 daughters in their prior children	1202 (48.0%)	2.581 (2.281-2.920)	0.000	<0.05
	No daughter in their prior children	747(29.8%)	10.906 (9.538-12.469)	0.000	<0.01
Births in last 5 years	One or more births	1431 (57.1%)	1 (RC)		
	No birth	1074 (42.9%)	2.550 (1.507-3.597)	0.000	<0.05
Birth in past year	Have birth	516 (20.6%)	1 (RC)		
	No birth	1989 (79.4%)	1.458 (0.415-0.505)	0.211	Ns
Pattern to use contraceptives	Use modern methods	951 (37.9%)	1 (RC)		
	Use traditional methods	217 (8.7%)	1.942 (1.661-2.271)	0.000	<0.05
	Never used	1337 (53.4%)	4.133 (3.769-4.533)	0.000	<0.05

^OR= Odd Ratios [#]RC= Reduction Coefficient *****CI= Confidence Interval [a]Ns= Not significant

Resultantly, the ideal family size expected by the couple and their future fertility desire changes towards want of another child[25]. In support of this argument, a study conducted in India revealed that son preference is directly related with fertility intensions of the married females[26]. These findings further illustrate that although expectation for sons remains vibrant but fertility rate decline with increasing age of married women (especially after 30 years of age) [27].

In contrary to this argument, another study illustrates that socio-cultural expectation for son always inclined the women to reproduce without considering the limitation in age of the married female[28]. In consistent with the present findings, previous studies reveal that age of mother is inversely proportional to birth of another child in future. In late reproductive age span (i.e. 35 and above years), the mothers wish for another child decreases but still wish for son fluctuates the fertility behavior in late reproductive age span[29]. Past empirical evidences also supported that more education is necessary for gender sensitive societies in which women became more confident about their social goals and fertility preferences[30]. Contraceptive usage is also the major determining factor for female' future intensions towards having another child. It always remains a strongest factor for fertility transitions but son preference, lack of female autonomy over her reproductive behavior and societal negative reaction towards contraceptive usage declines its effectiveness for decreasing the family size[31,32].

CONCLUSION

In conclusion, presence of already existing children, birth norms in the past, age, education, place of residence and working status of the females are the factors that directly affects the fertility preferences of females for their future. Accordingly, female education, adequate awareness campaigns, ideological transformation as well as role of media are the major recommendations that can alter the fertility intensions and future birth rate of the study vicinity.

CONTRIBUTION OF AUTHORS

Sattar T: Conceived idea and study design, Statistical analysis, Data interpretation
Usman A: Final proof reading, Drafting of the article
Saleem U: Data collection, Proof reading of article

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