Factors affecting the exposure of rural married females towards sex selective abortions: A study from South Punjab, Pakistan

Tehmina Sattar[1], Muhammad Aslam[2], Saima Jabeen Joiya[3]

ABSTRACT

This descriptive cross-sectional study was conducted to determine the factors affecting the exposure of rural married females towards sex selective abortions in South Punjab, Pakistan. A total of 429 respondents were interviewed. The results of the study revealed that females aged 25-37 years, being less educated (illiterate), having low socio-economic status, existence of more than two daughters and undergone forceful clinical abortion becomes more engaged in sex selective abortions in the study vicinity. In conclusion, age, mother education, socio-economic and occupational status, having daughters and differential modes of abortions inclined the women to select the sex of their fetus before birth. The major recommendations are to strengthen the governmental intervention to mainstream the gender equality and neutrality acts for reducing the high risk Sex Selective Abortions (SSA) in the study vicinity.

Keywords: Rural, Married female, Sex selective, Abortion, Factors, Gendercide,

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INTRODUCTION

Sex Selective Abortion (SSA) is now considered as a salient public health issue across the globe. This phenomenon is idiomatically known as "gendercide" in various Asian countries with longstanding histories of female infanticide[1]. Sen attributed this gender biased unwanted and intentional abortion of female fetuses as "missing women" and reported that the estimated population of these missing women was going to increase across the globe[2]. According to World Health Organization (WHO), low income countries in the Asian subcontinent have poor reproductive health service provision to the married females resulting in gender biased termination of unwanted female fetus[3,4].

1. Lecturer of Sociology, Bahauddin Zakariya University, Multan, Pakistan
2. Associate Professor of Statistics, Bahauddin Zakariya University, Multan Pakistan
3. Senior Registrar of Pediatrics, The Children's Hospital and The Institute of Child Health, Multan.

Correspondence:
Muhammad Aslam
Associate Professor, Bahauddin Zakariya University, Multan, Pakistan
aslamasadi@bzu.edu.pk

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This gender biased preferences for a particular sex (i.e. son) is intertwined with SSA of female fetus either through physical violence or utilization of new biotechnical methods[5]. The daily average of SSA shows the skewness of gender biased data in China, India and Pakistan (with 1756.3, 2332.6 and 318.9 abortions/day, respectively)[6]. Based on these empirical facts, the major rationale behind conducting the present research is to highlight the gender biased sex selection and resultant abortion as a unique form of violence against women before birth[7]. The striking empirical facts derived from Population Research Institute (PRI) (2016) illustrated that Pakistan reported sum of sex selected abortions from 2000-2014 is 1,280,228 in comparison with India i.e. 12,771,043. It also illustrates the yearly average of sex selected abortions of 116,384 in Pakistan which round off to be its daily average of 318.9 in comparison with 2332.6 in India[8].

To best of our knowledge, this is the unique and first research investigating and documenting the data from the pregnant women visiting Basic Health Units (BHUs), interlinked health professionals and birth attendants i.e. Lady Health Visitors (LHVs), Lady Health Workers (LHWs), medical staff members, nurses and "daaes" etc. about executing this illegal act of SSA in the rural vicinities of South Punjab, Pakistan. Based on the above said rationale of the study, we have conducted this study with an objective to find out the factors affecting the female exposure of married females towards SSA's.

METHODOLOGY

This descriptive cross sectional study was carried out in three

divisions (Multan, Bahawalpur and DG Khan) of South Punjab, Pakistan during 15th July 2016-29th October, 2016. The study was conducted using survey research design to collect the data keeping in view the attitude and behavior of the married females. Related this, the sample size was calculated on the basis of available estimated prevalence of females' intensions towards SSA in the study vicinity. A sample of 429 married women was taken from BHUs through multistage sampling nine technique. In order to achieve the study objectives, 4-month/later pregnant women after the ultrasound report of having a female fetus were the target population. Conversely, infertile women and those having dormant fertility i.e. they were suffering from acute or chronic reproductive disease but they were not declared as infertile were also excluded.

The study was conducted through interview schedule as a tool for quantitative data collection. As the topic was sensitive, therefore, ethical considerations were needed to be followed. For this purpose, a written informed consent was ensured before the data collection process. The research was approved by Institutional Review Board (IRB) in Institute of Social and Cultural Studies (ISCS), University of the Punjab, Lahore. The data was analyzed by using "Statistical Package for Social Sciences (SPSS), Version 21.0". Univariate (frequency and percentages) and bivariate analysis (binary logistic regression) were used to analyze the coded data. As the dependent variable was in the dichotomous form (0=not having any exposure towards SSA, 1= having exposure towards SSA), therefore, binary logistic regression analysis was performed. The female exposure towards SSA was calculated through frequency of abortions in the reproductive age span of the married females. Afterwards, this frequency was computed and resultant two categories were formed through coding transformation. Afterwards, the Odds Ratio's (ORs) were computed for each category and the model fit was tested and evaluated by using the Hosmer-Lemeshow goodness of fit test.

RESULTS

A total of 429 married females were interviewed regarding the factors affecting female exposure towards SSAs. Table-I shows that more than half of the married women (N=256, 59.67%), aged 25-34 years, have 3.77 times (95% CI: 2.43-4.66, p<0.01) more exposure of SSA in comparison with the married females in the age bracket of 15-24 years (i.e., N=32, 7.46%). In addition, the influence of education level shows that 26.11% married females with primary education have 0.56 times less experience of SSA (p<0.01) in comparison with the illiterate women (N=177, 41.26%). In other words with approximation, if an illiterate married women experiences two SSAs then a married woman with primary education experiences once for such abortion. However, the exposure of SSA for the married women with secondary or higher education is slightly different from those of illiterate married women. As per wealth index is concerned, married females living with high wealth index (N=49, 11.42%) have more than half times (OR = 0.43, 95% C.I: 0.10-2.18, p-value<0.01) less experience towards SSA in comparison with low wealth index women.

However, the married women with middle wealth index have slightly less likelihood for having SSA as compared to those with low wealth index. Moreover, the results shows that married females who have no daughter become 0.65 (95% CI: 0.15-0.44) times less exposed towards SSA while comparing with those having already more than two daughters. It is reported that the married females are more than three times likely to experience SSA, forcefully done at clinics or using some modern biotechnical methods as compared to the females experiencing abortions through physical violence (as reference category) (Table-I).

Table-I: Frequencies distribution and binary logistic regression analysis for factors affecting rural married females towards SSA in south Punjab Pakistan (N=429)

	Demographic factors	N (% of sample)	OR's (95% CI)*	p-value
Age in years	15-24 years	32 (7.46%)	1 (RC)*	
	25-34 years	256 (59.67%)	3.77 (2.43-4.66)	<0.01
	35-44 years	141 (32.87%)	1.76 (0.69-1.83)	<0.05
Education level	Illiterate	177 (41.26%)	1 (RC)	
	Primary education	112 (26.11%)	0.44 (0.24-0.72)	<0.01
	Secondary education and above this	140 (32.63%)	0.96 (0.77-1.24)	<0.01
Wealth index	Low wealth status	211 (49.19%)	1 (RC)	
	Middle wealth status	169 (39.39%)	0.95 (0.50-1.45)	<0.01
	High wealth status	49 (11.42%)	0.39 (0.21-0.45)	<0.05
Occupational status	Currently working	297 (69.23%)	1 (RC)	
	Not working	132 (30.77%)	2.98 (1.21-1.38)	0.14
Number of daughters already present	More than 2 daughters present	174 (40.56%)	1 (RC)	
	1-2 daughters present	211 (49.18%)	0.75 (0.56-0.97)	<0.05
	No daughter present	44 (10.26%)	0.35 (0.15-0.44)	<0.01
Mode of abortion	Through physical violence	104 (24.24%)	1 (RC)	
	Forcefully done at clinic	168 (39.17%)	3.83 (1.88-4.29)	<0.01
	By using modern biotechnical methods	157 (36.59%)	3.66 (3.31-4.74)	<0.01

RC= Refers to reference category which shows that all the other categories of the variables are evaluated with respect to this reference category

CI= Refers to the confidence interval at 95% level of significance

DISCUSSION

In compliance with the present findings, a study held in South Asian region authenticated that younger age of the women and their low education become the major factors of female exposure towards SSA. Contrariwise, educated women have negative opinions about daughters' devaluation before birth[9]. Another study also revealed that educated mothers are less inclined towards usage of SSA techniques in comparison with uneducated females[10,11].

Similarly, previous studies in South Asian context including Pakistan and India revealed that low socio-economic status coupled with residential area (rural settlers) of the married females became predictors for their biased preferences towards sex of child before birth[12,13]. Another supported study also exemplified that women who have more than two daughters in their prior children were more exposed towards SSA's in comparison with the women who had more than two sons[14]. In consistent with the present findings, previous studies in India and Pakistan also revealed that sex selection in pursuit of male child is paralleled with verbal, emotional and physical abuse[15,16].

The study strengths are uniqueness of the phenomenon, empirical investigation and validation of tool through pre-testing. Conversely, the limitations are small sample size, limited access towards recorded data, dearth time, inadequate financial resources and inability to apply triangulation research design on study. Therefore, the researchers should fill this research gap in their future empirical studies.

The need of the day is to strengthen the governmental intervention to mainstream the gender equality and neutrality acts for reducing the high risk SSA in the study vicinity.

CONCLUSION

It is concluded that factors such as age of the mother, her education, wealth index, occupational status, number of daughters already present and mode of abortion are the major determining factors affecting the female exposure towards sex selective abortions.

CONTRIBUTION OF AUTHORS

Sattar T: Conceived idea, Literature review, Data collection, Manuscript writing

Aslam M: Designed research methodology, Data compiling, Data analysis, Data Interpretation, Manuscript writing

Joiya SJ: Data Interpretation, Final critical review of manuscript

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