



## Examining Pregnant Women's Knowledge Scores On The Topic Of Reducing The Sex Ratio.

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### ABSTRACT

In the experimental group, counselling was statistically shown to be beneficial in increasing information about reducing the sex ratio and changing women's attitude towards female feticide. It is necessary to raise awareness on the falling sex ratio and female feticide. A rise in crimes against women and a subsequent crisis in social health are both predicted outcomes of the current gender gap. Medical professionals have a responsibility to raise public awareness. In order to improve the female sex ratio and prevent female feticide, one's attitude is crucial. Changing attitudes requires more than just legislative protections; counselling and health education play crucial roles in this regard.

**KEYWORDS:** Women's, Sex Ratio, Knowledge, Crimes, Awareness

### INTRODUCTION

In the 1991 Indian census, the female sex ratio in Maharashtra was 934, but by 2001, it had dropped to roughly 922. The gender breakdown in Satara district is as follows: men 52% and females 48%. There are 915 males for every 976 females in the city. In the city of Karad, there are 841 men and 803 females, making up 52% of the population, according to the 2001 Indian census. Began in 1994 with an emphasis on gender equality. The course has a strong emphasis on gender problems. Because of gender inequality, males in patriarchal countries have a disproportionate say over family matters such as work and education, marriage age and girls' educational opportunities, and the availability and use of health, nutrition, and family welfare programmes. R C H is dead set on reducing the imbalance via efficient initiatives.

The sex ratio is defined differently in different countries. In India, it is the number of females per thousand men, whereas generally, it is the number of males per hundred females. Among the world's few nations, India's sex ratio has remained stagnant year after year. In India, the sex ratio has been steadily falling since the early 1900s. In the most recent Indian census of 201, the population was estimated to be 933. The fall in the sex ratio may be explained by a number of variables, one of which being the rise in female foeticide and sex selective abortion. Stopping abortions on women based on their gender is one of the most important avoidable causes. Every year, over 70 lacs incidents of sex selective abortion are recorded in India, and these cases do not discriminate based on socioeconomic status, geographical location, or religious affiliation.

### LITERATURE REVIEW

**Dr. Dajinder Kaur et al (2019)** There were 914 men for every 1000 females in the 2011 census, up from 927 in 2001 and 945 in 1991, when the sex ratio was 6 years old. Since the beginning of census operations, India's population has had a low and deteriorating sex ratio. The cultural, social, economic, and ethical foundations and principles of Indian society are jeopardised by this tendency, which highlights the inferior position of women. Based on a literature assessment of previous studies on topics such as gender ratios, prenatal sex selection, the decreasing proportion of female children in India, and other gender imbalance-related topics, this study draws on secondary data.

**Nandita Saikia et al (2018)** The majority of these preventable female fatalities happen in India and China while the victims are young. For each of India's 35 states, union territories, and 640 districts, we hoped to calculate the excess female under-5 mortality rate (U5MR). Methods: Our team used the 2011 census data to obtain district-level estimates of U5MR by sex using the summary birth history approach, also known as the Brass method. We estimated the impact and severity of extra female mortality at the district level using data from 46 nations where there is no indication of gender bias for mortality. To shed light on the factors that contribute to district-level excess mortality, we conducted a thorough statistical and geographical investigation. What we found: From 2000 to 2005, there was an excess of 18.5 U5MR per 1000 livebirths in India, with a 95% confidence interval of 13.1-22.6. This translates to an estimated 239 000 extra deaths year, ranging from 169 000 to 293 000. While over 90% of districts saw an increase in female mortality, the majority of India's total cases were concentrated in the four northernmost states: Uttar Pradesh, Bihar, Rajasthan, and Madhya Pradesh. The primary factors that indicated an increase in female mortality were a lack of economic growth, gender inequality, and high fertility rates. Postnatal discrimination against females in India is strongly clustered, according to geographical study.

**V.Hari Prasad Reddy et al (2019)** The current quiet emergency is the falling sex ratio at birth. Still, the situation is genuine, and the longer it lasts, the more dire and terrifying it will become for humanity and civilization as a whole. The sex ratio at birth is equal to the number of male babies born to every female baby. Despite a decline in the child sex ratio

to 914 in 2011, the lowest-ever sex ratio at birth remains significant since it indicates a persistent preference for male offspring. In 2011, the overall sex ratio reached 940, up seven points from 933 in Census 2001, but the child sex ratio fell to 914, down from 927. Child Sex Ratio (CSR) measures the ratio of females to boys between the ages of 0 and 6, whereas Sex Ratio measures the number of women to 1,000 men. The overall sex ratio has gone up, but the drop in the child sex ratio, which is a result of the drop in the sex ratio at birth, is still causing worry. Shockingly, the most recent census data (2011) reveals 914 females, the lowest child sex ratio since independence, down from 927 in 2001.

**Neethu George et al (2021)** The societal commitment against female children may be examined via the child sex ratio (CSR) and the overall sex ratio. In 2011, CSR dropped from 927 to 919, as reported in the 2011 census. According to several studies, parents' sex selection tactics account for the low sex ratio at birth, which favors boys. Although there was a larger death rate for male children, the ratio for female children was decreasing. The main reason for the poor CSR is gender discrimination and female infanticide. With an emphasis on Tamil Nadu, this article seeks to illuminate the problem among India's states and suggests some solutions.

**Fengqing Chao et al (2021)** The poster was shown during the 2021 Annual Meeting of the Population Association of America (held virtually that year because of the COVID-19 pandemic) on May 7th, 2021. There is a substantial gender bias in Pakistan, favouring males over girls. The majority of the data on sex preference comes from studies conducted after birth, when female infant death rates are greater than male rates. There has been very little discussion of prenatal gender discrimination in Pakistan, which shows up as an exaggerated sex ratio at birth (SRB; the ratio of male to female newborns). Our goal is to find the provinces in Pakistan that have an uneven SRB and to estimate the SRB and missing female births by province from 1980 to 2018. From all available surveys and censuses, we created an enormous SRB database consisting of 740,602 birth records. To aggregate various data sources and provide yearly estimations of SRB across provinces along with the corresponding uncertainty, we use a Bayesian hierarchical time series model. Since 1980, our model has shown that Balochistan has had an SRB imbalance, with a maximum predicted for 1997 at 1.121 with a 95% credible interval.

## RESEARCH METHODOLOGY

A research study's sample is a chosen subset of the population. Women who were pregnant and visiting a prenatal clinic were included in the current research. Two hundred pregnant women who visited the prenatal clinic at K.H. Karad are included in the sample. Participants who showed up to the prenatal clinic for their scheduled appointments were randomly selected one by one until a total of eight samples were collected daily. (After all participants gave their informed permission, samples were divided into an experimental and control group using a lottery system.) Using both descriptive and inferential statistics, the data was examined with regard to the study's aims. Superb statisticians oversaw the development of the data analysis strategy.

## DATA ANALYSIS

**Table No 1 Item wise correct response of knowledge score about decreasing sexratio in primi gravid women in both the groups for item no1, 4, 5, 7, 11 and 15.**

Sr. No	Item (Item number in the questionnaire)	Correct response	Primi		Chi- Square (P Value)
			Control group 100 n (%)	Experimental group 100 n (%)	
1	You should know about sex of baby (item no 1)	No	45 (45.4)	46(45.6)	0.0040 (0.9494)
2	Male children can perform last rituals for their parents (item no 4)	No	30 (30.2)	30(29.6)	0.042 (0.8358)
3	Worried about financial support from family members if you get girl child (item no 5)	No	30(30.2)	24(24.4)	0.4286 (0.5127)
4	Worried about financial support for taking care of girl child (item no 7)	No	25(24.8)	24(23.6)	0.1963 (0.6578)
5	You feel you are helpless to take decision to have girl child (item no 11)	No	32 (31.6)	28(28.2)	0.379 (0.2403)
6	Do you feel female child is less as asset and more burden (item no 15)	No	13(13.4)	12(12.4)	0.2225 (0.6371)

With the right answer "no" for each of these six questions, the knowledge items in the above table are complete. The results showed that the percentage of primigravida women in the control and experimental groups who answered "No" was not significantly different ( $p > 0.05$ ).

Knowledge item 1 had the highest amount of "No" replies, followed by item 11. The percentage of those who said "no" to knowledge item number 15 was far lower, however.

**Table No 16769 Item wise correct response of knowledge score about decreasing sex ratio in multi gravid women in both the groups for item no1, 4, 5, 7, 11 and15.**

Sr. No	Item (Item number in the questionnaire)	Correct response	Multi		Chi-Square (P Value)
			Control group 100 n (%)	Experimental group 100 n (%)	
1	You should know about sex of baby (item no 1)	No	33 (33)	34 (33.6)	0.04052 (0.8405)
2	Male children can perform last rituals for their parents (item no 4)	No	28 (27.6)	24 (24.4)	2.743 (0.0977)
3	Worried about financial support from family members if you get girl child (item no 5)	No	25 (24.8)	24 (24.4)	0.02157 (0.8832)
4	Worried about financial support for taking care of girl child (item no 7)	No	22 (22.4)	23 (23)	0.05129 (0.8208)
5	You feel you are helpless to take decision to have girl child (item no 11)	No	28 (28.2)	28 (27.8)	0.01984 (0.8880)
6	Do you feel female child is less as asset and more burden (item no 15)	No	5(4.8)	7 (7 )	2.179 (0.1399)

With the right answer "no" for each of these six questions, the knowledge items in the above table are complete. Results showed that the percentage of pregnant women who answered "no" did not change significantly between the control and experimental groups ( $p > 0.05$ ).

The first knowledge item had the most "No" replies. The percentage of those who said "no" to knowledge item number 15 was far lower, however.

**Table No 3 Item wise correct response of knowledge score about decreasing sex ratio in primi gravid women in both the groups for item no 2, 3, 6, 8,9,10,12,13 and 14.**

Sr. No	Item (Item number in the questionnaire)	Correct response	Primi		Chi-Square (P Value)
			Control group 100 n (%)	Experimental group 100 n (%)	
1	Do you know about the decrease in female sex ratio (item no 2)	yes	87 (87.2)	89 (89.4)	0.01047 (0.9185)
2	What is mean by sex detection (item no3 )	yes	58 (58.2)	57(56.6 )	0.2617 (0.6089)
3	Do you know the husband or wife is responsible for getting female child (item no6)	yes	39(39.4)	38 (38.2)	0.1516 (0.6970)
4	As a female you will help to increase femalesex ratio in the next decades (item no 8)	yes	79 (78.8)	80 (80.4)	0.3941 (0.5301)
5	Dowry system is the main cause behind decrease in female sex ratio (item no 9)	yes	70 (70.2)	71 (70.8)	0.04327 (0.8352)
6	You should have girl child (item no 10)	yes	91 (91)	94 (93.6)	2.378 (0.1231)
7	Govt. action (PNDT) is helpful to reduce sex determination (item no 12)	yes	77 (77.2)	77 (77)	0.005664 (0.9400)
8	Do you feel that sex determination is a tradition (item no 13)	yes	57 (57.2)	58 (58)	0.06551 (0.7980)
9	India is having more sex determination than any other country (item no 14)	yes	79 (78.8)	80 (79.6)	0.09713 (0.7553)

With the right answer "Yes" to each of these nine questions, the knowledge items in the above table are complete. The results showed that the percentage of primigravida women in the control and experimental groups who answered "yes" did not change significantly ( $p > 0.05$ ). A very small percentage of people answered "yes" to knowledge item number 6, whereas the highest number of affirmative replies came from items 2 and 10.

**Table No 4 Item wise correct response of knowledge score about decreasingsex ratio in multi gravid women in both the groups for item no 2, 3, 6, 8, 9,10,12,13 and 14.**

Sr.No	Item (Item number in the questionnaire)	Correct response	Multi		Chi- Square (P Value)
			Control group 100 n (%)	Experimental group 100 n (%)	
1	Do you know about the decrease in female sex ratio (item no2)	yes	88 (88.2)	87 (87)	0.3314 (0.5648)
2	What is mean by sex detection (item no3)	yes	65 (65)	64 (64.4)	0.03941 (0.8426)
3	Do you know the husband or wife is responsible for getting female child (item no6)	yes	45 (45.4)	46 (45.6)	0.004033 (0.9494)
4	As a female you will help to increase femalesex ratio in the next decades (item no 8)	yes	78 (78)	75 (74.8)	1.420 (0.2334)
5	Dowry system is the main cause behind decrease in female sex ratio (item no 9)	yes	66 (65.6)	66 (66.2)	0.04005 (0.8414)
6	You should have girl child (item no 10)	yes	84 (84.4)	83 (83.2)	0.2652 (0.6066)
7	Govt. action (PNDT) is helpful to reduce sex determination (item no 12)	yes	77 (77.2)	81 (81)	0.1057 (0.7451)
8	Do you feel that sex determination is a tradition (item no 13)	yes	51 (50.6)	50 (50)	0.03600 (0.8495)
9	India is having more sex determination than any other country (item no 14)	yes	78 (78)	79 (79.4)	0.2923 (0.5887)

With the right answer "Yes" to each of these nine questions, the knowledge items in the above table are complete. The results showed that the percentage of pregnant women in the control and experimental groups who answered "yes" did not change significantly ( $p > 0.05$ ). The number of "Yes" replies was highest for knowledge item #2, followed by number 10. Knowledge item #6 had a relatively low percentage of yes responses.

**Table No 5 Total of knowledge score of Control and Experimental Group (Cross tabulation)**

Total KNOWLEDGE score	Control Group			Experimental Group		
	Primi	Multi	Total	Primi	Multi	Total
2	1	3	4	1	2	3
3	5	1	6	5	7	12
4	10	11	21	11	9	20
5	23	38	61	28	6	34
6	7	4	11	7	2	9
7	10	5	15	5	5	10
8	5	8	13	8	9	17
9	10	4	14	6	7	13
10	9	3	12	4	32	36
11	3	12	15	6	8	14
12	9	8	17	14	6	20
13	5	1	6	5	3	8
14	3	2	5	0	4	4
Total	100	100	200	100	100	200

**Control group:** - Only 6 out of the 12 women in the control group who were first-time mothers and 4 out of 12 women who were carrying multiples had a total knowledge score of 2 or 3 about reducing the sex ratio. On the other hand, 41 first-time mothers and 24 mothers-to-be in the control group had overall knowledge scores ranging from 6 to 10. The knowledge scores of 6 multi-pregnant women and 5 primi-pregnant women were quite high, ranging from 13 to 14. Out of the experimental group, only a small fraction, six primi gravidae and nine multi gravidae, had knowledge scores ranging from two to three about reducing the sex ratio. In contrast, the entire knowledge score ranged from 6 to 10 among the 30 primi gravid and 55 multi gravid experimental group participants. Out of the total number of pregnant women surveyed, 5 had a knowledge level of 13 or 14, while 7 had a score of 14 or above.

**Table 6 Distribution of existing level of knowledge of pregnant women regarding decreasing sex ratio**

Level of knowledge								
Group	Control Group				Experimental Group			
	Poorn (%)	Averagen (%)	Goodn (%)	Chi-square (p value)	Poor n (%)	Averagen (%)	Good n (%)	Chi-square (p value)
Primi gravid	9 (9.2)	83 (83)	8 (7.8)	2.516 (0.281)	10 (9.8)	81 (81.2)	9 (9)	1.362 (0.506)
Multi gravid	8 (8.2)	81 (81.2)	10 (10.6)		8 (8.4)	81 (80.8)	11 (10.8)	
Total	17 (8.7)	164 (82.1)	18 (9.2)		18 (9.1)	162 (81)	19 (9.9)	

According to the statistics in the table above, most primi gravid and multi gravid women had ordinary knowledge, while only a small percentage of both groups had excellent knowledge. The knowledge of primi gravid and multi gravid women is not significantly different, as shown by the calculated chi-square value.

**Table7 Distribution of existing level of knowledge of pregnant women regarding decreasing sex ratio**

Level of knowledge								
Group	Primi gravid				Multi gravid			
	Poorn (%)	Averagen (%)	Good n (%)	Chi-square (p value)	Poorn (%)	Average n (%)	Good n (%)	Chi-square (p value)
Control Group	9 (9.2)	83 (83)	8 (7.8)	0.622 (0.733)	8 (8.2)	81 (81.2)	11 (10.6)	0.026 (0.987)
Experimental Group	10 (9.8)	81 (81.2)	9 (9)		8 (8.4)	81 (80.8)	11 (10.8)	
Total	19 (9.5)	164 (82.1)	17 (8.4)		16 (8.3)	162 (81)	22 (10.7)	

The majority of primi gravid and multi gravid women had mediocre knowledge, while very few had strong knowledge, according to the statistics in the table above. There was no statistically significant difference in the amount of information on feticide known by pregnant women in the control and experimental groups, since the computed chi-square value was not significant.

## CONCLUSION

The variables impacting the sex ratio are shown well in the current research. The number of girls in India was lower than in most other nations. The use of ultrasound machines for the purpose of female genital mutilation has escalated to the level of an organized crime. Raising public awareness of the issue and educating people about the daughter's duty in assisting the parents in their old age are necessary efforts to eradicate female foeticide, since the legislation alone will not be enough.

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