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Ultrasound in Prenatal Period of Mothers and Their Concepts of Coming Baby

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Abstract

Background: Ultrasound the latest method to investigate the position and situation of the placenta and determine the sex of the coming baby. The aim of the study was to identify the desire of the pregnant mothers to know the sex of the coming baby. This cross-sectional study was conducted at IBN Sina D-Lab, Mirpur-2, Dhaka, Bangladesh. The mean age with standard deviation of the respondents was 26.9±4.98. Majority were higher (Master Degree) educated (29.4%). Most of them were (43.1%) house wife and 44.1% was incomeless. Almost hundred percent (92.16%) subjects wanted to know the sex of their coming baby. These results suggest that women's understanding of ultrasound does not meet the requirements of informed choice.

Keywords: Ultrasound, Pregnant Mother, Prenatal, Sex Determination Technology, Sex of the Coming Baby.

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INTRODUCTION:

Ultrasound is the most modern technology and very easy to use. The least side effect, cost effectiveness, availability, reliability, and ability to diagnosis correctly make it most popular in present era. With advances of ultrasound technology and the increase in prevalence of women having second trimester ultrasound testing is essential in present day (Kohut et al. 2002). Major congenital malformations are present in 2–5% of newborns and account for 20–30% of all perinatal deaths worldwide (Singh, 1998). Thirty to 50% of serious birth defects are detectable by second trimester ultrasound screening (America, 2013). In the United States, approximately 2% to 3% percent of newborn infants have a major structural malformation (Dugoff, 2002). Most congenital anomalies occur in newborns of healthy low-risk women with no known family history of genetic concern. Among the prenatal diagnostic technologies—amniocentesis, chorionic villous biopsy, and ultrasonogram are commonly known as sex determination technologies (SDT) in India (Varma 2002). But these techniques are used to determining genetic problems with fetuses, on the other hands have also been used for the purpose of detecting sex and aborting female fetuses (Volti, 1995; Weinberg, 1997). Many developing countries like- India, Bangladesh are patriarchy society. Especially in India sons are viewed as benefits, contributing to present and future family income, whereas daughters are seen as costs, draining family wealth. In Indian society, without producing a son, the women felt worthless in the eyes of their spouse, relatives, and neighbors (-). Many have opposed SDT on the grounds of dis- crimination against women and nurturing the patriarchy (Arora, 1996; Forum, 1994; Kapur, Khan, & Radhakrishnan, 1999; Kishwar, 1995; Lingam, 1998; Muzumdar, 1998).

METHODS

A descriptive cross-sectional study was conducted at IBN Sina D-Lab, Mirpur-2, Dhaka, Bangladesh. Data were collected with pre tested, modified and semi- structured questionnaire. Study subjects were pregnant mothers who came under ultrasound screening. Sample size was 102. Data were entered and analyzed using SPSS software 25

version. Results were expressed in number, percentage, mean ± SD in table and figures.

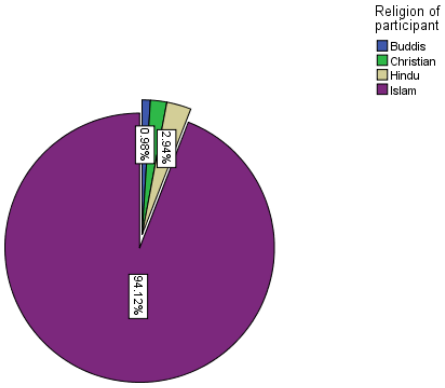
RESULTS:

Table 1: Demographic information of respondents (n=102)

	Age in Years		
Variables	Mean±SD	Minimum-Maximum	Total Number
Age	26.9±4.98	18-40	102
Age at marriage	20.99±3.97	14-30	102
Age at first baby born	22.99±4.26	15-37	78
First pregnant	22.42±3.8	14-30	24
Total			102

The respondent's mean age with standard deviation was 26.9±4.98. Age of respondent was at pregnant time, minimum 18 and maximum 40 years. But the first pregnancy was at minimum 14 and maximum 30 years of age. First baby was born at minimum age 15 and maximum 37 years age.

Figure 1: Distribution of the religion of the respondents (n=102)



The most of the respondents (94.12%) were Muslims and rest of them were Hindus, Christian and Buddis.

Table 2: Socio-economic characteristics of the Respondents (n=102)

Education of the respondents		
Variables	Frequency	Percentage
Up to class five	6	5.9
Up to class ten	26	25.5
Up to class twelve	10	9.8
Honors	27	26.5
Masters	30	29.4
Others	3	2.9
Total	102	100.0
Profession of the respondents		
Business	16	15.7
Govt. job	2	2.0
House wife	44	43.1
Others	20	19.6
Private job	16	15.6
Teacher	4	3.9
Total	102	100.0
Income per month of the respondents		
Zero/No income	45	44.1
5,000 to 15,000 BDT	15	14.7
15,001 to 30,000 BDT	29	28.4
30,001 to 45,000 BDT	10	9.8
45,001 to 60,001 BDT	2	2.0
60,001 to 75,000 BDT	1	1.0
Total	102	100.0

Majority of the respondents were higher (Master Degree) educated (29.4%), Honors completed 26.5%, and 25.5% obtained Secondary School Certificate. Rest of them were also educated but in lower levels. Although obtaining higher education, most of them were (43.1%) house wife. Only 2% was Govt. job holder. Become house wife, most of them were (44.1%) incomeless. Financially solvent or independent was 28.4%, their income per month was 15001 to 30,000 BDT. Only 1% respondent was in maximum 60,001 to 75,000 BDT income level per month.

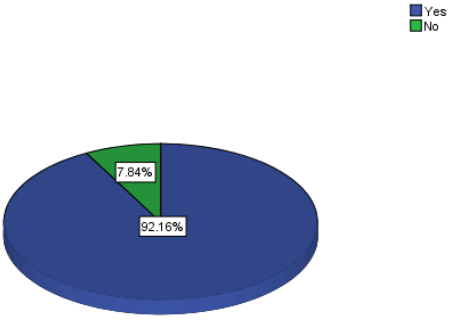
Table 3: Socio-economic distribution of the husband of the respondents (n=102)

Education level of the husband of the respondents		
	Frequency	**Percentage**
Others	3	2.9
Up to class five	4	4.0
Up to class ten	17	16.7
Up to class twelve	8	7.8
Honors	18	17.6
Masters	51	50.0

Profession of husband of the respondents		
Business	16	15.7
Govt. job	5	4.9
Labor	4	3.9
Others	6	5.9
Players	1	1.0
Private job	68	66.7
Teacher	2	2.0
Monthly income of husband of the respondents		
5,000 to 15,000 BDT	14	13.7
15,000 to 30,000 BDT	37	36.3
30,001 to 45,000 BDT	16	15.7
45,001 to 60,000 BDT	26	25.5
60,001 t0 75,000 BDT	2	2.0
75,001 to 1,00,000 BDT	3	2.9
>1,00,000 BDT	4	3.9
Total	**102**	**100.0**

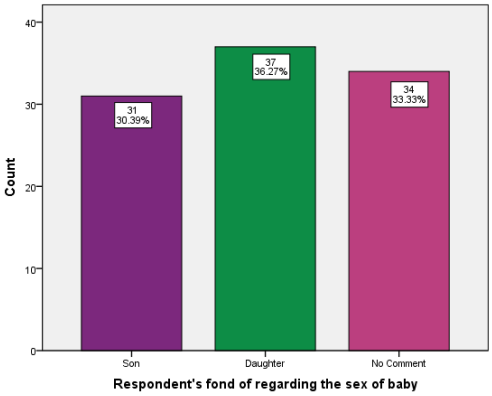
Half of the respondents were higher (Master Degree) educated (50.0%), Honors completed 17.6%, and 16.7% obtained Secondary School Certificate. Lowest percentage of the subjects were technical or others educated. Although obtaining higher education, most of them were (66.7%) private job holders. Only 4.9% was Govt. job holder. Income more than 1,00,000 BDT was for 3.9.

Figure 2: Distribution of the respondents regarding their desire to know the sex of the coming baby (n=102)



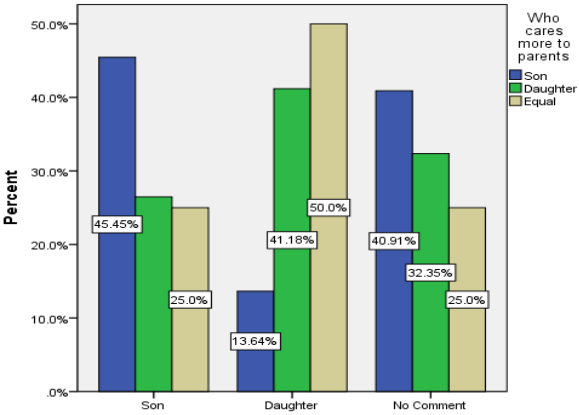
Very near to hundred percent (92.16%) subjects wanted to know the sex of their coming baby.

Figure 3: Distribution of the women's choice producing baby regarding sex determination (n=102)



From this study the results showed that 30.39% mother want to birth son baby, 36.27% mother for daughter and 33.33% like equally son or daughter.

Figure 4: Distribution of the children regarding care to the parents (n=102)



The study claimed that the mothers got 45.45% services from son, 29.55% from daughter who (mothers) want to birth son baby. On the other hands, the mothers who want to give birth daughter, they receive 50% care from their daughter and 13.64% from son.

DISCUSSION:

The mean age ± SD of the respondents was 26.9±4.98. Due to socio-economic situation some girls go under marriage at immature age. Though the law and legislation do not support their marriage. Some of them got first pregnancy at minimum 14 and maximum 37 years of age. First baby was born at minimum age 15 and maximum 40 years age. Although all of them were educated many of them were incomeless due to house wife (43.1%).

The study found 92.16% subjects wanted to know the sex of their coming baby without any reason and pressure. 36.27% mother want to birth daughter. But an Indian study showed the Haryana State has introduced "The Apni Beti Apna Dhan" to improve the social acceptability of girls by making them financially independent. It gives Rs. 500 (approximately $12) within 15 days of each girl's birth and invests Rs. 2,500 (approximately $60) on behalf of the girl, which eventually matures to Rs. 36,000 (approximately $850) (Kapur, Khan, & Radhakrishnan, 1999).

The study also showed that the mothers who love son baby, got 45.45% services from son, 29.55% from daughter. On the other hands, the mothers who want to give birth daughter, they received 50% care and services from daughter and 13.64% from son. In India a study showed as sons are the increasing the number of sons and viewed as benefits, contributing to present and future family income, whereas daughters are seen as costs, draining family wealth (Bose, 2001; Census, 2001; Varma, 2002).

CONCLUSION:

This study was conducted only to the women's view, not sharing with them. Here, the sample size is small and conducted in urban area in one Diagnostic Center. Women with different incomes, education, religions, castes, and sites may have different opinions.

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