

Gender Preference among Women Attending Antenatal Clinic in a Tertiary Hospital in Southwest Nigeria

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Abstract

The preference for the male child in Africa is as old as the African culture. However, there is the need to document if there has been a change in this preference among women in the reproductive age group in view of increasing education and westernization. In this cross-sectional prospective study, 202 randomly selected consenting antenatal women were interviewed using a structured questionnaire. The collected information was analyzed using SPSS version 20. The mean age of participants was 29.9 ± 9.9 years. Majority (68.3%, n=138) were educated and in monogamous marriages (93.6%, n=189). Most had gender preferences (62.9%, n=127) and male preference was higher (43.1%, n=87). Male was preferred across all ages, parities and educational levels. However, male preference reduced as education increased. Women whose last children were boys had reduced male preference compared to those whose children were girls (22.4% v 62.0%). Those with 1 existing male child had almost equal male/female preferences (26.1% v 24.6%) and those with 2 existing male children had less male preference (13.3% v 46.7%). The preference for male child increased as the number of female children increased, (44.2% v 11.6%), (72.2% v 5.6%) and (83.3% v 0.0%) for 1, 2 and 3 respectively. The overall SPI was 2.18. Most women in this study preferred the male gender; a good proportion had no gender preference. The most educated group had less preference, daughter preference slowly increased with the number of existing male children and male preference increased drastically with the number of existing female children.

Keywords: Gender preference; Son preference index; Parity

Introduction

In Nigeria, like in most African and Asian countries where traditional structure of the family is patrilineal, sons are generally preferred to daughters [1]. In these countries, sons are seen as the old age insurance for their parents as they are the ones who remain around to look after them, continue the family name and business after the daughters had been married away to other places. Male children in another context serve as insurance for their mothers in event of widowhood as only sons can inherit lands and properties of their fathers in some African cultures just like in some Asia cultures [2,3]. The birth of a son causes intense celebration in the household compared to the birth of a daughter [3]. In some part of West Africa, it is believed that a woman is not entrenched in her husband's home until she has given birth to a male child [4,5].

Studies suggest that socioeconomic factors play no role in reducing male gender preference in Africa. It was found that preference for male children is the same across different socioeconomic levels [4,6]. It has also been documented that in sub-Saharan Africa, there is no correlation between religion and gender preferences [6].

Biologically, it is the man who genetically determines the sex of his offspring at fertilization, most of the times, it is the woman who suffers the consequences of repeated birth of female children. Women who repeatedly give birth to females are more likely to have frequent maternities in an attempt to bear a son, in the process they jeopardizes their health and raise family sizes too large for the supportive capacity of their families. In fact, gender preference has been fingered as the

cause of the high fertility rates in countries where this is higher than the world average [4]. It is also known that repeated birth to female children birth is a cause of marital disharmony, divorce and the polygamy [4]. A study on Nigeria showed that women with female as first born are significantly more likely to end up in a polygamous union, to be divorced, and to be the head of the household; they also have significantly more children [4].

Although, male gender preference is said to be prevalent in Africa and by extension Nigeria, there has been a stable sex ratio over time ranging from 107:100 (male: female) to 104:100 across most parts of Nigeria [7-9]. Survival rates as well as health outcomes are generally better for girls than for boys in sub-Saharan Africa. This might be the reason why gender preference studies are scanty in sub-Saharan Africa [10,11]. In 2004, males accounted for 50.4% of the total world population and in the absence of selective manipulations; human secondary sex ratio is commonly assumed to be 105-107 male births per 100 female births [12]. In most Asian countries, male gender preference has been associated with sex-selective abortion of female fetuses and female infanticide. In 2001, India had 100 boys: 92.7 girls ratio among children under 6 years, this has reduced to 100 boys: 91.4 girls and it is one of the lowest in the world [13]. The drastic male gender preference leading to the sex selective illegal abortions and daughter infanticide has resulted in estimated 30 to 70 million "missing" women in India [14].

Though sex-selective illegal abortion and infanticide are not documented yet in Nigeria, a current trend among Nigerian antenatal women is the prenatal gender determination of their fetuses through non-medically indicated ultrasonography [15,16]. This tendency is noted to have some consequences, it either positively reinforces

bonding between the mother and the fetus if the fetus is the gender preferred by the mother or negatively affects bonding if not the gender desired. This eventually may affect the level of care the child receives through infancy and childhood and bear heavily on the child's survival. In the extreme, it can lead to sex-selective illegal and unsafe abortions with its dire consequences on the mother and on the long run begin to skew population ratio against the female gender. The level of anxiety is also said to be high in pregnant women not carrying the preferred gender [15,17].

Despite the documented preference of the male gender in some parts of the world, including Nigeria, this study was carried out to determine how strong this preference is currently in our reproductive age women, the effect of socio-demographic and previous obstetric outcomes on the preferences.

Materials and Method

This prospective cross sectional study was carried out at the antenatal clinic of the Obafemi Awolowo University Teaching Hospital, Ile-Ife, in Southwest Nigeria. Institutional ethical clearance was obtained for the study and 202 verbally consenting women attending the clinic were interviewed using a predesigned structured questionnaire. Information concerning socio-demographic factors and previous obstetric outcomes were obtained. All information obtained were analyzed using SPSS version 20 and results obtained were expressed in proportions. Son Preference Index (SPI) was calculated thus [18]:

$$\text{SPI} = \frac{\text{number of women who preferred a son in index pregnancy}}{\text{number of women who preferred a daughter in index pregnancy}}$$

Results

The mean age of the study participants was 29.9 ± 9.9 years and majority of the women (43.1%, n=87) were in the age group 20-30 years with a mean parity of 1.0. Majority (68.3%, n=138) had post secondary education and are in monogamous marital setting (93.6%, n=189). Most participants had gender preferences (62.9%, n=127) and (37.1%, n=75) had no preference. Majority of the participants (43.1%, n=87) preferred the male gender and only (19.8%, n=40) preferred the female gender. Among women with gender preferences, male gender was preferred across all ages, all parities and all educational levels; however, as educational level increased, gender and male preferences also reduced (Table1).

Variables	Total N=202	Son preference N=87	Daughter preference N=40	No Preference N=75	SPI
Age distribution(years)		N (%)	N (%)	N (%)	
20-30	117(57.9)	52 (44.5)	24 (24.5)	41 (35.0)	2.17
>30	85 (42.1)	35 (41.2)	16 (18.8)	34 (40.0)	2.19
Parity					
0	78 (38.6)	37 (47.4)	14 (18.0)	27 (34.6)	2.64
1	52 (25.7)	18 (34.6)	13 (25.0)	21 (40.4)	1.38
>1	72 (35.7)	32 (44.4)	13 (18.1)	27 (37.5)	2.46
Educational level					

None	3 (1.5)	2 (66.7)	0 (0.0)	1 (33.3)	0
Primary	2 (1.0)	2 (100)	0 (0.0)	0 (0.0)	0
Secondary	59 (29.2)	31 (52.5)	10 (17.0)	18 (30.5)	3.1
Post Secondary	138 (68.3)	52 (37.7)	30 (21.7)	56 (40.6)	1.73
Family setting					
Monogamous	189 (93.6)	82 (43.4)	38 (20.1)	69 (36.5)	2.16
Polygamous	13 (6.4)	5 (38.4)	2 (15.4)	6 (46.2)	2.5

Table 1: Socio-demographic factors and gender preferences in index pregnancy.

Out of the 124 women who had previous confinements 46 (37.2 %) preferred male gender 21, (21.1%) preferred female gender and 48 (38.7%) had no preference (Table 2). Majority of those whose last confinements were boys largely had no preference (43.1%) and male preference also reduced in index pregnancy (22.4% v 34.5%). Conversely, majority of those whose last confinements were girls preferred boys in current pregnancy (62.0% v 8.0%). Women with one existing male child, had no obvious difference in male/female gender preference (26.1% v 24.6%) and those with 2 existing male children had reduced male preference (13.3% v 46.7%) (Table 2). The preference for male gender increased as the number of female children increased, (44.2% v 11.6%), (72.2% v 5.6%) and (83.3% v 0.0%) for 1, 2 and 3 respectively (Table 2). The overall the son preference index (SPI) in this study was 2.18.

Variables	Total	Male preference	Female preference	No preference	SPI
Outcome of last confinement	N=124	46 (37.2)	26 (21.1)	48 (38.7)	
Male baby	58 (28.7)	13 (22.4)	20 (34.5)	25 (43.1)	0.65
Female baby	50 (24.8)	31 (62.0)	4 (8.0)	15 (30.0)	7.75
Dead baby	16 (7.9)	6 (37.5)	2 (12.5)	8 (50.0)	3
Number of existing male children	N=86	20	25	41	
1	69 (80.2)	18 (26.1)	17 (24.6)	34 (49.3)	1.06
2	15 (17.4)	2 (13.3)	7 (46.7)	6 (40.0)	0.29
3	1 (1.2)	0 (0.0)	0 (0.0)	1 (100)	0
4	1 (1.2)	0 (0.0)	1 (100)	0 (0.0)	0
Number of existing female children	N=78	42	7	29	
1	52 (66.7)	23 (44.2)	6 (11.6)	23 (44.2)	3.83
2	18 (23.0)	13 (72.2)	1 (5.6)	4 (22.2)	13

3	6 (7.7)	5 (83.3)	0 (0.0)	1 (6.7)	0
4	2 (2.6)	1 (50.0)	0 (0.0)	1 (50.0)	0
Overall SPI = 87/40=2.18					

Table 2: Outcome of last confinement, existing children and gender preferences in index pregnancy.

Discussion

Gender preferences in different regions and nations of the world depend largely on the traditional and cultural practices of the people. Majority of women in this study had gender preferences (62.9%) and the preference for the male gender was more than for female (43.1%, n=87) v (19.8%, n=40). Thus the overall son preference index (SPI) in this study was 2.18. This is similar to what was observed in some parts of Southeast Asia, North Africa and parts of sub-Saharan Africa [6,13]. Even though this study did not set out to elicit the rationale behind the study participant's choices, the strong patrilineal culture in Nigeria with the several advantages that are adduced to a son in the family such as continuation of the family name, businesses and inheritance of landed properties in the event of death of their fathers might underlie the higher preference for sons [1-3]. Studies in most countries in Latin America and Europe show balanced preferences for both sexes [19,20]. Interestingly, daughter preference has been reported in Portugal, Czech Republic, Lithuania, Turkey and Portugal. Similar preference was also reported in Latin America and the Caribbean [20].

The mean age of women in this study was 29.9 ± 9.9 years. Son preference was seen across all age groups though this was more in the women 20-30 years of age. This is also similar to the finding in a study in India [21]. Women in this study were born largely between the late 80s and early 2000; this is a period when western education and civilization have been largely entrenched in Nigeria and one would have expected that the effects of these should have greatly whittled down sons preference but this is not the case.

Most participants in this study had post secondary education (68.3%). It was observed that son preference was higher among the group with gender preference irrespective of level of education. However, as educational level increased, gender and son preferences also reduced. This to some extent supports some previous studies that reported mother's education as the single most significant factor for balanced gender preferences inferring that a woman's education might change her perceptiveness regarding a daughter's role in the family and reduce her son preference. Also, educated women are better empowered and are less likely to be threatened by lack of male children compared to their less educated counterparts [4,6,21]. A study in India however suggests that mother's education is not strong enough as a single factor to reduce son preference in a community where cultural beliefs have entrenched this preference [22]. This might presuppose a delicate balance between culture and education on issues of gender preferences as seen in our study which is also in keeping with what was found among Igbo women in South East, Nigeria [17].

Previous documented studies on the effect of parity on gender preferences observed that emotional and psychological needs are the basis of having children in women at low parity and that gender preferences become usually prominent at the 3rd and 4th child [23]. In our study, it was observed that this was not so, gender preferences were prevalent even in women with low parity and this agrees with a survey in south west Nigeria carried out among 100 selected Yoruba women,

74% of the respondents said they prefer a male child as a first born [24]. We also observed that the type of marital setting the women are involved in did not change their son preference.

The outcome of the last confinement showed varied effects on gender preferences in the index pregnancy. Majority of women whose last confinements were boys preferred daughters in current pregnancy and those whose last babies were girls preferred boys in index pregnancy. Surprisingly, most of those who suffered perinatal loss in the last confinements showed boy preference in current pregnancy. This study also showed that as the number of male children increased, the preference for daughters gradually increased, conversely, as the number of female children increased, son preference drastically increased. This may be because a woman who already had a male child is only seeking to have a daughter for some balance but not desperately. However, this is not so in a woman who is yet to have a son, her male gender preference escalates with the number of already existing daughters. This is similar to findings in India and Nepal where studies showed that the birth of only female children in family significantly increased the desire for male or more children [25,26].

In conclusion, most women in this study preferred the male gender though a good proportion had no gender preference. The most educated group had less gender and male preferences, daughter preference gradually increased as the number of existing male children increased and male preference escalated as the number of existing female children increased.

Conflict of Interest

The authors declare no conflict of interest.

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