

## EVALUATION OF KNOWLEDGE OF HUSBANDS' OF PRIMIGRAVIDA ON ANTENATAL CARE AND BIRTH PREPAREDNESS IN OGBOMOSO, SOUTH-WEST, NIGERIA

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### ABSTRACT

**Background:** Antenatal care (ANC) is one of the pillars of safe motherhood. For a successful pregnancy outcome, the support of the family especially the husband cannot be over emphasized.

**Objective:** To assess the knowledge of husbands' of primigravidae on ANC using the knowledge score.

**Methodology:** Cross sectional descriptive study among consenting husbands of primigravidae attending the ANC at Tertiary and Secondary Health facilities in Ogbomoso with the aid of a structured, pre-tested, self-administered questionnaire given to the primigravidae to be filled by their husbands and brought back at their next visit.

**Result:** The mean age of respondent was  $30.6 \pm 5.3$  years. The mean knowledge score was  $13.55 \pm 6.27$ . Only 45.4% of respondents have knowledge score above the mean. The educational status ( $P < 0.001$ ), Occupation ( $P < 0.001$ ), Type of marriage ( $P = 0.005$ ) and average income earned per month ( $P < 0.002$ ) were statistically related to the level of knowledge.

**Conclusion:** The knowledge of husbands' of primigravidae on ANC was poor. There is great need to increase the sensitization of husbands of primigravidae on ANC, as each member in the family has a role to play in the course of pregnancy, towards the delivery of a healthy baby to a healthy mother. However, improving level of education, provision of more skillful employment opportunities and improving the remuneration of people will go a long way in achieving this objective.

**KEYWORDS:** Husbands' of Primigravidae, Knowledge, Antenatal Care and Birth Preparedness

### INTRODUCTION

Antenatal care (ANC) is an umbrella term used to describe the medical procedures and care that are carried out during pregnancy. Antenatal care is one of the four pillars of the safe motherhood initiatives (<http://www.healthizen.com/pregnancy/antenatal-care.aspx>). The overall aim of antenatal care is to produce a healthy mother and baby at the end of pregnancy and is essential to reduce maternal morbidity and mortality, low-weight births and perinatal mortality (Rani M et al. 2007). Proper antenatal care can lead to marked reduction in maternal morbidity and mortality, by early detection and management of potential complications (Raymond T et al. 2010). Seventeen per cent of all direct and indirect deaths of antenatal mothers were due to improper antenatal care (National Childbirth Trust London 2008).

Becoming a father is the major step in a man's life. It can also be a daunting one. Yet it is an experience usually treated as insignificant in comparison with that of becoming a mother. Antenatal education programmes specific to men are needed to enhance expectant fathers' involvement in pregnancy and parenting (Shefner-Rogers CL and Sood S 2004). The partners' main role in pregnancy is to nurture and respond to the pregnant woman's feelings of vulnerability. In recent years leaders in child birth education have recognised the vital role of the partner in pregnancy and child birth ([http://www.ehow.com/how\\_2001413\\_take-care-wife-while-she-pregnant.html#ixzz1Y7K9jR42](http://www.ehow.com/how_2001413_take-care-wife-while-she-pregnant.html#ixzz1Y7K9jR42)). Like the pregnant woman, the expectant father also undergoes psychological, social and physical changes during pregnancy.

Current trend is that most of the families are nuclear families. Husband is the one who shares all the physical and psychological feelings of the spouse. By creating awareness in husbands of antenatal mothers regarding the importance of antenatal care, it can reduce the maternal, perinatal, neonatal mortality and morbidity and thereby achieving the Millennium Development Goals 4 and 5.

Among the several options available, creating awareness among husbands appears to be an important pre-requisite. The husband can be a stabilising influence, a good listener to an expression of doubts and fears, and a source of physical and emotional reassurance for the pregnant woman ([http://www.ehow.com/how\\_2001413\\_take-care-wife-while-she-pregnant.html#ixzz1Y7K9jR42](http://www.ehow.com/how_2001413_take-care-wife-while-she-pregnant.html#ixzz1Y7K9jR42)). Men's supportive stance is an essential component for making women's world better. Men's knowledge about pregnancy-related care and a positive gender attitude enhances maternal health care utilization and women's decision-making about their health care, while their presence during antenatal care visits markedly increases the chances of women's delivery in the health institutions

(<http://www.measuredhs.com/pubs/pdf/FR175/16Chapter16.pdf>, Peter S and Hubley J 2004 and Persis H 1999).

A study conducted in Maharashtra, India, to assess the husband's involvement in antenatal care revealed that 39 percent of the husbands were not aware of the need of antenatal care and 52 percent were not accompanying their wives for routine antenatal care. The study suggested that husbands may be put off by the belief that maternity is women's affair. So there is a need for educating the husbands about the importance of antenatal care (Rohini PP et al 2004).

A similar study conducted in Bangalore showed that husbands had inadequate exposure to reproductive health matters and little or no involvement in meeting the wives' needs during pregnancy. This study displayed the husbands' involvement in antenatal care (Reddamma GG 2010).

A study conducted in Northern Nigeria on husbands' participation in antenatal care revealed that men had inadequate knowledge regarding antenatal care. Only 32.1% of husbands accompanied their wives, at least once to the hospital for antenatal check-up. The Researcher concluded that the husbands' knowledge regarding antenatal care should be improved (Iliyasu Z et al).

Mullany et al from their study in Nepal on the impact of husbands in antenatal health education services on maternal health practices, revealed that educating pregnant women and their male partners together yield a greater net impact on maternal health behaviours compared with educating women alone (Mullany BC et al 2007).

Each member in a family has a role in pregnancy just as the woman does. However, not all men are able or willing to attend antenatal care because of cultural habituation and their personality. The pregnant woman and her husband should be offered opportunities to attend participant-led antenatal classes, including teaching sessions (Mullany BC et al

2007, Lawoyin TO et al 2007, Nisar N and White E 2003, and Aparajita C 2012). The aim of this study was to determine the knowledge of husbands of primigravidae on antenatal care by knowledge score and factors that may influence it.

## **MATERIALS AND METHODS**

### **Study Location**

This study was carried out at Ladoko Akintola University of Technology Teaching Hospital (LTH) Ogbomosho, a tertiary health care centre and General Hospital, Sunsun, a secondary health care facility in Ogbomosho. On an average of 600 primigravidae attend the ANC of both hospitals each year. The two sites were selected for the study on the basis of geographical proximity, feasibility of conducting the study and availability of sample population.

### **Study Population**

The study population included consented husbands of primigravidae attending the antenatal clinic of LTH Ogbomosho and General hospital, Sunsun, Ogbomosho, between 1<sup>st</sup> February and 31<sup>st</sup> July 2014.

### **Study Design**

This was a cross sectional study among consenting husbands' of primigravidae attending the ANC in LTH, Ogbomosho and General Hospital, Sunsun, Ogbomosho.

### **Sampling Technique**

Simple randomized sampling technique was used for allocating study number to participants. Twenty five participants were picked randomly at each ANC of the hospitals till sample size was reached. Multiple allocations were avoided by first excluding women whose husbands had previously been administered the questionnaire. For assurance of returns of questionnaires, the pregnant women's phone numbers were obtained for easy follow up.

### **Sample Size Determination**

A sample size of 240 was obtained using the modified Lesler Fisher's formula (Armitage P et al 2002) and mean knowledge score of the husbands' of primigravidae from previous study was 56% (Reddamma GG 2010).<sup>11</sup>

## **DATA COLLECTION INSTRUMENTS**

The questionnaire was structured and pre-tested before use. The pre-testing of questionnaire was done among 20 married security men of LTH and ambiguous questions were re-structured. The questionnaire has two sections; Section A: was employed to collect the demographic data including age, tribe, religion, educational status and occupation and Section B was employed to know about respondent's knowledge on antenatal clinic and determine knowledge score.

The questionnaires were self-administered. Each given to the consented primigravidae to be filled by her husband and returned on her next ANC visit. The questionnaires were also interpreted in local languages for those that could not understand English language.

## **INCLUSION CRITERION**

Consenting husbands of primigravidae attending antenatal clinic at LTH Ogbomosho and General Hospital, Sunsun, Ogbomosho during the study period.

## EXCLUSION CRITERION

Non-consenting husbands of primigravidae

## METHOD OF DATA ANALYSIS

The raw data from the field was screened for inconsistencies. Analysis of data was by computer using statistical package for social sciences (SPSS) version 20 of windows evaluation version.

Descriptive statistics were used for assessing their demographic characteristics. Chi square test was used to establish association between knowledge and demographic variables. Statistical significant was put at  $p < 0.05$  at confident interval (CI) at 95%. Each correct answer was scored 1 and wrong answer or don't know was scored 0. Total maximum score obtainable is 25. Those that score above the mean score were rated good while those that score below the mean score were rated poor (Rohini PP et al 2004).

## RESULTS

Two hundred and forty (240) questionnaires were distributed. The age of respondents ranged between 19–45 years with a mean age of  $30.6 \pm 5.29$  years, age range 26-30 years constituted the largest age group (35.4%). Majority (60%) were Christians and 37.9% had secondary level of education while 32.1% had tertiary level of education. Almost half of participants 47.1% were semi-skilled and 83.3% were married in a monogamous setting. The average income earned per month by 27.9% of respondents was between ₦18,000 - 40,000 (\$93 -206) per month areas shown in Table 1.

Figure 1 show the respondents' sources of information concerning antenatal care. Personal efforts (82) and health care personnel (68) were the most predominant source of information on ANC, whereas educational institutions (38) and books (42) were the least sources of information on ANC.

Majority of respondents (92.5%) considered ANC as necessary for any pregnant woman, whereas 7.5% of respondents considered ANC as unnecessary. Only 43.8% of respondents had ever accompanied their wife to ANC, majority (56.2%) have not accompanied their wives to ANC. Reasons for not following their wives included; too busy – 53(39.3%), ANC meant only for women 35(25.9%), not necessary 23(17.0%), no enough money 13(9.7%) and other non-specified reasons 11(8.1%).

When asked on situation they considered as “danger signs” in pregnancy, more than half of respondents considered bleeding per vaginam (66.3%), cessation of fetal movement (61.3%), loss of consciousness (58.8%), swelling of hands and feet (55.8%), abdominal pain (58.3%), convulsion (55.4%) and drainage of liquor (55.4%) as danger signs of pregnancy. Only 49.2% and 44.2% considered fever and vomiting respectively as danger signs. Details in Table 2.

Majority (57.9%) do not have any savings specific for antenatal emergencies. Majority of the respondents (83.8%) preferred their wives to deliver in hospital, whereas 6.7% preferred home, 6.3% preferred mission houses and 3.2% preferred traditional birth attendants. More than half(56.3%) of respondents were willing to participate during delivery. Fifty seven percent (56.7%) of them will allow their wives to use contraception after delivery. The most preferred method of contraception was male condom (24.1%), followed by withdrawal method (16.7%), injectables (14.2%), oral pills

(12.1%), female condom (10.4%), IUCD (8.8%), rhythm method (8.3%) and implants (5.4%). The reasons given by the respondents for not supporting contraception include; fear of side effects (24.2%), wanting more children (18.8%), lack of knowledge (8.8%), lack of access to contraception (7.1%), too expensive (5.8%), and non- availability (5%).

The knowledge score of respondents about ANC ranged between 3 and 24. However, the mean knowledge score was 13.55±6.27, and the median score was 14.0. Only 45.4% of respondents had knowledge score above the mean.

Table 3 shows cross-tabulation between the various socio-demographic characteristics of respondents with knowledge score. It revealed that the educational status ( $\chi^2$ -85.764; P value- 0.001), occupation ( $\chi^2$ -54.454; P value- 0.001), type of marriage ( $\chi^2$ -4.602; P value- 0.056) and average income earned per month ( $\chi^2$ -31.973; P value- 0.002) were statistically significant.

**Table 1: Socio-Demographic Characteristics of Participants**

VARIABLES	FREQUENCY	%
<b>AGE GROUP</b>		
16 – 20	5	2.1
21 – 25	32	13.3
26 – 30	85	35.4
31 – 35	80	33.3
36 – 40	28	11.7
41 – 45	10	4.2
<b>EDUCATIONAL STATUS</b>		
None	31	12.9
Primary/Arabic	30	12.5
Secondary	91	37.9
Tertiary	77	32.1
Postgraduate	11	4.6
<b>OCCUPATION</b>		
Unskilled	36	15.0
Semi-skilled	113	47.1
Skilled	34	14.2
Professional	57	23.8
<b>TYPE OF MARRIAGE</b>		
Monogamous	200	83.3
Polygamous	40	16.7
<b>AVERAGE INCOME PER MONTH</b>		
<18,000	36	15.0
18,000 – 40,000	67	27.9
40,000 – 100,000	42	17.5
>100,000	32	13.3
Don't know	63	26.3

**Table 2: Knowledge of Danger Symptoms and Signs of Pregnancy**

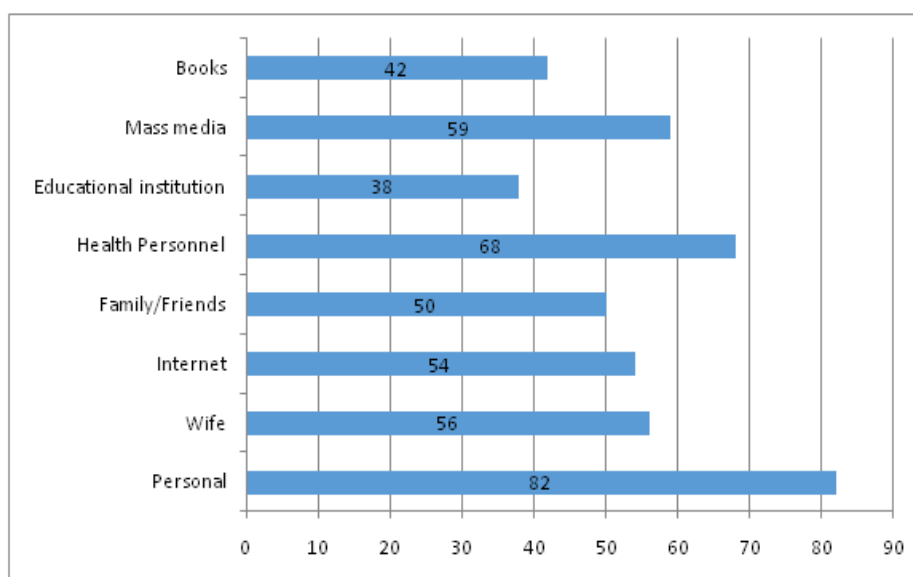
Symptoms	Yes n(%)	No n(%)	Don't Know n(%)
Swelling of hand and feet	134(56.8)	67(27.9)	39(16.3)
Convulsion	133(55.4)	49(20.4)	58(24.2)
Loss of consciousness	141 (58.8)	53 (22.1)	46 (19.2)
Fever	135 (56.3)	71 (29.6)	34 (14.2)
Pale appearance	118 (49.2)	89 (37.1)	33 (13.8)
Cessation of fetal movement	147 (61.3)	54 (22.5)	38 (15.8)
Abdominal pain	140 (58.3)	60 (25.0)	39 (16.3)
Drainage of liquor	133 (55.4)	54 (22.5)	53 (22.1)
Vomiting	106 (44.2)	95 (39.6)	39 (16.3)

Vaginal bleeding	159 (66.3)	43 (17.9)	38 (15.8)
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**Table 3: Relationship between Socio-Demographic Variables and Knowledge Score**

Sociodemographic Variables	Knowledge Score		$\chi^2$	P Value
	$\leq$ mean n (%)	$>$ mean n (%)		
<b>AGE GROUP (YEARS)</b>				
16 – 20	4 (80)	1 (20.0)	7.326	0.198
21 – 25	22 (68.8)	10 (31.2)		
26 – 30	49 (57.6)	36 (42.4)		
31 – 35	37 (46.2)	40 (53.8)		
36 – 40	13 (46.4)	15 (53.6)		
41 – 45	6 (60.0)	4 (40.0)		
<b>EDUCATIONAL STATUS</b>				
None	28 (90.3)	3 (9.7)	85.76	0.001*
Primary/Arabic	25 (83.3)	5 (16.7)		
Secondary	63 (69.2)	28 (30.8)		
Tertiary	11 (14.3)	66 (85.7)		
Postgraduate	4 (36.4)	7 (63.6)		
<b>OCCUPATION</b>				
Unskilled	24 (66.7)	12 (33.3)	54.454	0.001*
Semiskilled	83 (73.5)	30 (26.5)		
Skilled	15 (44.1)	19 (55.9)		
Professional	9 (15.8)	48 (84.2)		
<b>TYPE OF MARRIAGE</b>				
Monogamous	103 (51.5)	97 (48.5)	4.602	0.023*
Polygamous	28 (70.0)	12 (30.0)		
<b>AVERAGE INCOME PER MONTH</b>				
<18,000	24 (66.7)	12 (33.3)	31.973	0.001*
18,000 – 40,000	41 (61.3)	26 (38.8)		
40,000 – 100,000	4 (33.3)	28 (66.7)		
>100,000	7 (21.9)	25 (78.1)		
Don't know	45 (71.4)	18 (28.6)		

$\chi^2$  –Chi Square \* P value significant at  $p < 0.05$ .



**Figure 1: Respondents Sources of Information**

## DISCUSSIONS

The study was carried out in Ogbomoso, a major town in Oyo state that is predominantly inhabited by the Yoruba ethnic group. This could account for its influence on the knowledge of husbands' primigravidae on ANC in the study environment. The Yoruba in south-western Nigeria are one of the most educated tribes in Nigeria, the study showed that 74.6% of the respondents have at least secondary school education, thus many husbands of primigravidae might have access to lots of information on ANC.

Sixty three percent (62.5%) of the respondents have ever sourced for information regarding antenatal care. However, personal efforts and health care personnel were the most sources of information on ANC. This was different from what was obtained by Redemma GG 2010, whereby majority (71%) were using their relatives as a source of knowledge, 39% from TV, 35% from friends, 11% from newspaper, 10% were using magazines, 5% from cinema and 7% from radio as a source of information. The educational background of the studied participants might account for this difference.

Majority of respondents (92.5%) considered ANC as necessary for any pregnant women, whereas 7.5% of respondents considered ANC as unnecessary. This was quite different from what was obtained in Maharashtra, India (Rohini PP et al 2004) where 39% of the husbands were not aware of the need of antenatal care.

Only 43.8% of respondents had ever accompanied their wife to ANC, majority (56.3%) have not accompanied their wives to ANC, this was higher than what was obtained by Lawoyin TO et al 2007 in Northern Nigeria, where only 32.1% of husbands accompanied their wives at least once to the hospital for antenatal check-up. The proportion of male partners that participated in at least one ANC visit in Gulu, Uganda was 65.4% Raymond T et al 2010.

When asked on situation they considered danger signs in pregnancy, more than half of respondents considered bleeding per vaginam (66.3%), cessation of fetal movement (61.3%), loss of consciousness (58.8%), swelling of hands and feet (55.8%), abdominal pain (58.3%), convulsion (55.4%) and drainage of liquor (55.4%) as danger signs of pregnancy. Only 49.2% and 44.2% considered fever and vomiting as danger signs. This finding was slightly higher than the report by Iliyasu in northern Nigeria who reported that more than half (51.9%) considered bleeding, about a third considered convulsions (37.8%) and loss of consciousness (33.2%) as danger signs. Others considered a pale appearance in the mother (21.6%) and cessation of fetal movement (15.4%) as danger signs. Fever was considered a serious sign by only 4.1 percent of respondents (Iliyasu et al. 2010). The difference may be due to differences in the socioeconomic and educational status of the populace between the studied geographical areas. Only 42.1% of the respondents had savings specific for antenatal emergencies, majority (57.9%) do not have any savings. This was however, higher than Iliyasu's findings in northern Nigeria, where only 19.5% of respondents made savings for obstetric emergencies and a mere 10.5 percent identified a decision-making process in case of obstetric emergency (Iliyasu et al. 2010). The difference between these findings may be due to the differences in the educational and socioeconomic status of the population between the studied geographical areas. Majority of the respondents (83.8%) preferred their wives to deliver in hospital, whereas 6.7% preferred home, 6.3% preferred mission house and 3.3% preferred traditional birth attendants, similar to Redemma GG 2010 findings,<sup>11</sup> which revealed that most (91%) of them preferred hospital delivery and nine percent preferred home delivery.

Majority (56.3%) of respondents were willing to participate during delivery, a finding lower than what was the report by Redemma GG 2010 in which 71% were willing to participate during delivery. The differences may be due to

cultural beliefs of the studied community.

The knowledge score of respondents ranged between 3 (12%) and 24 (96%), total score of 25 (100%). The mean knowledge score was  $13.55 \pm 6.17$  (54.2%), while the median score was 14.0 (56.0%). and, These findings were closely similar to a descriptive study conducted by Redemma GG 2010 in Bangalore to assess the knowledge of husbands of primigravida mothers regarding antenatal care among 100 husbands, The overall mean knowledge score obtained by the husbands' of primigravidae was 27.76 (55.52%)  $\pm 6.13$  and median score was 27 (54%), total score was 50. There is association between the knowledge score of husbands' of primigravidae and socio-demographic variables like educational status (P value < 0.001), Occupation (P < 0.001), type of marriage (P value < 0.023) and average income earned per month (P value < 0.001), which was similar to Redemma GG 2010 findings who also found association between the knowledge score of husbands of primigravida and socio-demographic variables like age group (P < 0.01), Education (P < 0.001), income of participants (P < 0.01).

## CONCLUSIONS

The knowledge of husbands' of primigravidae on ANC is poor, there is great need to increase the sensitization of husband of primigravidae on ANC as each member in a family has a role to play in pregnancy towards the delivery of a healthy baby to a healthy mother at the end of pregnancy. However, improving the socioeconomic status of the populace especially improving level of education, provision of more skillful employment opportunities and improving the remuneration of people will go a long way in achieving this.

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