# ATTITUDE AND KNOWLEDGE OF PREGNANT WOMEN ATTENDING ANTENATAL CLINIC AT ST. LUKE'S HOSPITAL, ANUA IN UYO, NIGERIA TOWARDS CONGENITAL ANOMALIES

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#### **ABSTRACT**

Context: The birth of a congenitally abnormal child is an event that affects all the family members, and both their internal and external relationships.

Objective: To know the attitude and knowledge of women visiting an antenatal clinic in Uyo, Nigeria on congenital anomaly.

Study Design: This study was a descriptive cross-sectional study using structured questionnaire with a sample population consisting of 600 pregnant women attending antenatal clinic at St Luke's Hospital, Anua in Uyo, Nigeria.

**Results**: The attitude of respondents towards children with birth defect was that of pity, 286 (47.7%); resentment, 28(4.7%); and wanting to help, 243 (40.5%). The attitude of respondents in helping their children with birth defect was mostly to seek medical help, 505 (86.6%); 76 (13.0%) would seek spiritual help, while 2 (0.4%) would abandon the child. In addition to this 513 (87.7%) will feel bad if they had a child with birth defect. Their knowledge of the causes of congenital anomally was good: maternal intake of non prescribed drugs, maternal intake of herbal medication, maternal infection during pregnancy, failed attempted abortion (ranging from 59.2% to 81.2%); except for that of environmental pollution/radiation (48.8%), which was poor and spiritual attack (56.7%), which was wrong. Most respondents, 531 (88.5%) believed that congenital anomally is a big burden to parents

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Conclusion: More public enlightenment was advocated to help parents prevent/cope better with the consequences of having children with congenital anomalies, as proper understanding of parent's attitude is necessary for the success of treatment and proper rehabilitation.

Key words: congenital anomaly(birth defect), women, antenatal clinic, attitude, knowledge, public enlightenment

### INTRODUCTION

Birth defect is a big problem and a source of infant morbidity and mortality globally, with concurrent factors of ignorance and low socioeconomic status making it even worse for developing countries <sup>1</sup>. Studies have shown that birth defect contributes to infant mortality, the great majority of these deaths occurred during the first year of life <sup>1</sup>. The birth of a congenitally abnormal child is an event that affects all the family members and both their internal and external relationships <sup>2</sup>. It usually requires a reassessment of the normal family activities <sup>3-6</sup>. The majorities of families cope with the situation relatively well and are able to continue their life normally 6,7. However, coping with a physically or intellectually disabled child is a highly individual process, and there is evidence to suggest that some families may never adjust fully to this event <sup>6</sup>.

Parental understanding of chronic illnesses is associated with improved compliance with medical care, and the proper understanding of parent's attitude is necessary for the success of treatment and proper rehabilitation 8. Several studies have shown that understanding of illness by

children, adolescents, and adults with congenital heart diseases (CHD) remains unsatisfactory <sup>9,10</sup>. Maternal reactions to children with cleft lip are different across cultures. These differences need be considered when administering care on international surgical missions <sup>11</sup>.

In a Chinese study, employers showed a comparatively less favorable attitude to persons with cleft palate <sup>12</sup>. Clefts are also associated with various health complications, including feeding, speech, growth, and physical health problems such as recurrent ear infections 13-16. Several studies have described the psychological and social burden related to clefts through age. Children born with clefts have been reported to face a challenging psychological adjustment, mainly thought to result from a low level of satisfaction with facial appearance as well as inadequate acquisition of social skills to enable this adjustment <sup>17</sup>. In addition, a higher risk for developmental problems, including cognitive performance, has been reported <sup>18</sup>. Part of the treatment for clefts extends throughout adolescence, during which psychological adjustment has been reported to be a problem as well <sup>17</sup>.

There has been paucity of knowledge of parents especially women in this part of the world on their attitude towards children with congenital birth defect. This necessitated this study on the attitude of women visiting the antenatal

clinics of St. Luke's Hospital, Anua in Uyo, Nigeria, towards children with congenital anomalies.

#### **MATERIALS AND METHODS**

This study was a descriptive cross-sectional study with sample population consisting of 660 mothers attending antenatal clinic at St. Luke's Hospital, Anua in Uyo, Akwa Ibom State of Nigeria. Questionnaires were served on the women while on their routine antenatal visit. Consent was received from the subjects after explanation of the purpose of the study and assurance of strict confidentiality. Approval was also obtained from the hospital's Ethical Committee.

The following information was contained in the questionnaire; age of respondents, number of children of respondents, educational level of respondents, attitude towards children with birth defect, attitude of respondents towards helping their children with birth defect, emotional state of respondents towards their children with birth defects, respondents attitude towards the burden of birth defects, attitude towards the advantages of public enlightenment, respondents knowledge of causes of birth defect.

At the end of the exercise, six hundred respondents completed and returned their questionnaires. Analysis was done using simple descriptive statistics and presented as percentages and frequency tables.

Table 1: Educational level of the respondents N = 567

	11 – 307	
Educational Level	Frequency	Percentage (%)
None	11	1.9
Primary	40	7.1
Secondary	151	26.6
Tertiary	365	64.4

Table 2: Attitude of respondents toward children with birth defect

Responses	Frequency	Percent
Pity	286	47.7
Resentment	28	4.7
Wanting to help	243	40.5
No response	43	7.2
Total	600	100

Table 3: Attitude of respondents towards helping their children with birth defect

Responses	Frequency	Percent
Seek medical help	505	86.6
Seek spiritual help	76	13.0
Abandon the child	2	0.4
No response	17	2.8
Total	583	100.0

Table 4: Emotional state of respondents towards their children with birth defects

Responses	Frequency	Percent
Feel bad	513	87.7
Feel good	22	3.8
Feel indifferent	50	8.5
No response	15	2.5
Total	585	100.0

Table 5: Respondents attitude towards the burden of birth defects

Questions	Yes No			I Don't know		
	Freq	%	Freq	%	Freq	%
Is it a big burden to parents?	531	88.5	16	2.7	53	8.8
Should support groups be formed for parents with birth defect infants?	538	89.7	39	6.5	23	3.8
Would more public education reduce the occurrence of birth defect?	519	86.5	64	10.7	17	2.8

Table 6: Respondents knowledge of causes of birth defect

Questions		Yes		No		I Don't know	
	Freq	%	Freq	%	Freq	%	
Can spiritual attack cause birth defect?	340	56.7	69	11.5	191	31.8	
Can maternal infection lead to birth defect?	429	71.5	42	7.0	129	21.5	
Can failed attempted abortion lead to birth defect?	487	81.2	50	8.3	63	10.5	
Can maternal intake of herbal medication lead to birth defect?		64.3	90	15.0	124	20.7	
Can maternal intake of non prescribed drugs lead to birth defect?	355	59.2	170	28.3	75	12.5	
Can genetic factors cause birth defect?	421	70.2	70	11.7	109	18.2	
Can maternal alcohol intake and smoking cause birth defect?	440	73.3	60	10.0	100	16.7	
Can environmental pollution and radiation cause birth defect?	293	48.8	110	18.3	197	32.8	

## **RESULTS**

A total of 572 (95.3%) of the respondents were married, while 28 (4.7) were single.

Age of respondents:

A total of 46 (7.8 %) of the respondents were less than 20 years. 336 (57.2 %) were between 21-30 years, 156 (26.6 %) were between 31-40 years and 49 (8.4%) were greater than 40 years.

Number of children of respondents:

A total of 20 respondents had no children. 92 had one child each, 115 had two children each, 76 had three children each, 85 had four children each, while 212 had five or more children.

Educational level of respondents:

A total of 11 (1.9%) respondents had no formal education, 40 (7.1%) had primary education, 151 (26.6 %) had secondary education and 365 (64.4 %) had tertiary education (Table 1).

Attitude towards children with birth defects:

A total of 286 (47.7%) respondents felt pity for children with birth defects. 28 (4.7%) felt resentment, and 243 (40.5%) had the feeling of wanting to help 43 (7.2%) (Table 2)

Emotional state of respondents towards their children with birth defects:

A total of 513 (87.7%) respondents would feel bad. 22 (3.8%) would feel good, and 50(8.5%) would be indifferent (Table 3). Attitude of respondents towards helping their children with birth defect:

A total of 505 (86.6%) respondents would seek medical help. 76 (13.0%) would seek spiritual help, while 2 (0.4%) would abandon the child (Table 4).

Respondent's attitude towards the burden of birth defects:

531 (88.5%) felt that birth defect is a big burden to parents, while, 16(2.7%) did not (Table 5).

Attitude towards the advantages of public enlightenment:

A total of 519 (64%) believed that more public education will reduce the occurrence of birth defect and help parents

cope better with children with birth defect, while 64 (10.7%) did not. Also, 538 respondents believed that support groups should be formed for parents who have children with birth defect (Table 5).

Respondent's knowledge of causes of birth defect:

317 (52.8%) believed that spiritual attacks can cause birth defect. 132 (22%) did not, while 151 (25.2%) did not know whether spiritual attacks can cause birth defect. 429 (71.5%) believed that maternal infection can cause birth defect, 42(7%) did not, while 129(21.5%) did not know whether maternal infection can cause birth defect. 487 (81.2%) believed that failed attempted abortion can lead to birth defect, 50 (8.3%) did not, while 63 (10.5%) did not know whether failed attempted abortion can cause birth defect. 386 (64.3%) believed that maternal intake of herbal medication can lead to birth defect, 90 (15%) did not, while 124 (20.7%) did not know whether maternal intake of herbal medication can cause birth defect. 355 (59.2%), thought that maternal intake of non prescribed drugs can lead to birth defect, 170 (28.3%) did not, while 75 (12.5%) did not know whether maternal intake of non prescribed drugs can cause birth defect (Table 6).

Other factors included; genetics, maternal alcohol and smoking, environmental pollution and radiation. A total of 421 (70.2%) believed that genetic factors can cause birth defect, 70 (11.7%) did not, while 109 (18.2) did not know whether genetic factor can cause birth defect. 440 (73.3%) believed that maternal alcohol intake and smoking can cause birth defect, 60(10%) did not, while 100 (16.7%) did not know whether maternal alcohol and smoking can cause birth defect. In addition to this, 293 (48.8%) believed that environmental pollution and radiation can cause birth defect, 110 (18.3%) did not, while 197 (32.8) did not know whether environmental pollution and radiation can cause birth defect (Table 6).

### **DISCUSSION**

Parents of children with birth defect are usually under both financial and emotional pressure. Often times in our culture the children are hidden from public view, spiritual attacks are often blamed for the cause of the defect. This has been supported by the finding of this study where some respondents claim that spiritual attack can cause birth defect; and despite the high educational profiles of our respondents, some would still seek spiritual help, if they had a child with birth defect. In our study, most of the respondents would feel bad if they had a congenitally abnormal child. Vidhya and Raju 19 reported that most parents feel guilt and embarrassment. Our result is in line with this report.

The results showed that most of the respondents would have a sense of pity or wanting to help if they had a child with congenital anomaly, and that children with congenital anomalies are a great burden to their parents. This result is in line with previous studies <sup>19,20</sup>. Their studies showed that parents of handicapped children reported less satisfactory marriages, less social support, lower physical well-being than parents of non handicapped children <sup>19,20</sup>. Thus, there is a wide difference in marriage between parents of mentally handicapped and non-handicapped children.

A study on attitudes of pregnant women regarding termination of pregnancy for fetal abnormality showed that the majority of pregnant women would terminate pregnancy for lethal fetal anomaly and for an anomaly causing mental or physical handicap, even in late pregnancy <sup>21</sup>. This report is at variance with the attitude of our respondents, who felt pity and were ready to help the children with birth defect, with most of them seeking medical help. A few would seek spiritual help, with only a few willing to abandon their children. As most respondents were ready to seek medical help, this is an indication of their educational level, as most of them had a tertiary education, as also reported in other studies <sup>22,23</sup>.

Birth defect is a big burden to parents and many parents will feel bad if they had a child with congenital anomaly. Despite the high awareness of the causes of birth defect amongst respondents, there is poor knowledge on environmental pollution and radiation which is very significant in the Niger Delta towns of Nigeria where Uyo is a part. Here, crude oil pollution and environmental degradation is rampant <sup>24-26</sup>. It is reported that proper understanding of parent's attitude is necessary for the successful treatment and proper rehabilitation of congenital abnormal children <sup>8</sup>.

Attitude of parents attending antenatal clinic in St. Luke's Hospital in Uyo, Nigeria to congenital abnormal children is not much different from any part of the world, but being aware of some of the predisposing factors is low even among those with higher educational level. There is need to mount more public enlightenment to educate the populace on the risk factors for congenital anomaly and educate parents on how to cope with children with congenital anomalies.

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