

Awareness and Desirability of the Nigerian Antenatal Women about Analgesia Use during Childbirth.

A. Oladokun*, I. O. Morhason-Bello*, O. R. Eyelade**,
B. O. Adedokun***, J. O. Akinyemi***, I. F. Adewole*

SUMMARY

Objective: To assess the level of awareness and desirability of antenatal women about use of analgesia during childbirth.

Design: This was a cross-sectional survey.

Settings: The study was conducted at the Antenatal Clinic of the University College Hospital – a public tertiary health institution located in Ibadan, South-west Nigeria.

Subjects: Six hundred and fifty consented women were recruited from 1st October 2005 till 30th of March 2006.

Results: Of the 650 subjects, 249(38.3%) were aware of analgesia use in labour and their sources of information were through media (30.9%), antenatal counselling (22.9%), friends/relations (17.3%), internet (5.6%) and others – literature/lectures/symposium (22.9%). The only factor that influence awareness on logistic regression model was occupation, as health care workers were 17.9 times more likely than the unemployed (OR 17.87 95% CI 17.38 – 43.28). Three hundred and nine (47.5%) of respondents desired analgesia use during childbirth and the commonest method preferred was intramuscular injection (45.0%). Only parity significantly influenced the desirability on bivariate analysis ($p = 0.001$).

Conclusion: This study shows that the level of awareness of analgesia use in labour is low among the Nigerian antenatal attendees; but there is a significant proportion of those with previous delivery experience desiring its use in their subsequent childbirth. It is recommended that health awareness creation should be vigorously pursued to enlighten the Nigerian populace of the benefit of analgesia while making efforts at introducing the more effective methods in our health care institutions.

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INTRODUCTION

Childbirth still remains a significant marital responsibility of an African woman and it is often characterized with fears and

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From:*Department of Obstetrics and Gynaecology, **Department of Anesthesia, ***Department of Epidemiology, Medical Statistics, and Environmental Health, College of Medicine, Ibadan, Nigeria.

Correspondence: Adesina Oladokun, Department of Obstetrics and Gynaecology, College of Medicine, University College Hospital, Ibadan, Nigeria. Mobile phone: 234-8033285279.

E-mail: sinaoladokun@yahoo.com.

anxiety resulting mostly from the associated painful experience¹⁻⁴. In many settings in Nigeria, labouring women are left to their fate to cope with the distressing pain of childbirth and many express their agony by either shouting uncontrollably or sometimes become so irritable of their environment and the attending health care providers. Today many health care institutions within Nigeria lack protocol for the management of labour pain despite the overwhelming evidences of its usefulness^{5, 6}. The adduced reasons for this unacceptable deficiency include lack of manpower, cost of care and so on⁵. Worse still, majority of the antenatal health care health education sessions do not exhaustively discuss the various options of labour pain management.

Over the years, many interventions have been adopted at ensuring a pain free labour⁷ and they ranged from use of non-medical methods such as social support^{8, 9}, hypnosis¹⁰, acupuncture^{11, 12}, aromatherapy, hydrotherapy^{13, 14} to analgesia – opioids (pentazocine, pethidine and fentanyl)¹⁵, inhalational agents¹⁶ and regional methods (Epidural)^{17, 18}. Anecdotal evidence from many Nigerian communities have shown that only few health care institutions offer pregnant women opioids analgesia sporadically during childbirth with no clear protocol; while majority were not offered anything due to non-availability, cost and lack of expertise.

Client choice of a medical intervention is dependent mainly on the level of awareness about the significance of such method¹⁹. Furthermore, the correct perception of any intervention could be traceable to the source of information^{19, 20}. Previous studies in Nigeria have attempted to determine the profiles of women that will prefer analgesia during childbirth and the outcomes shows conflicting findings - on factors such education and parity^{6, 21}. However, little have been done regarding describing sources of information and associated factors as well as how this will affect their subsequent desire for analgesia. Therefore, awareness of use of analgesia and its' desirability by the antenatal women may provide the necessary impetus for popularization of the service and better insight for any modifications to suit their needs. It is on this basis that this study aims to assess the level of awareness and desirability of antenatal women about use of analgesia during childbirth.

METHODOLOGY

This was a descriptive survey, conducted amongst women attending antenatal clinic of the University College Hospital, Ibadan, Oyo state, Nigeria. The hospital is a tertiary public health institution that serves women within Ibadan metropolis and its environs. During each clinic, all consenting

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pregnant women were recruited till the desired number of subjects was reached. The tool used for the study was a self administered structured questionnaire. The information obtained included sociodemographic profile, awareness and desirability about analgesia use during childbirth.

Data was obtained from 1st October 2005 till 30th of March 2006. The statistical analysis was performed using the Statistical Package of Social Science 12.0 software. Bivariate analysis was used to explore the effect of sociodemographics on the dependent variables (awareness and desirability of analgesia) using the chi-square test. Thereafter, multivariate analysis was performed using logistic regression model. The statistical significance was set at 95% confidence level.

RESULTS

A total of six hundred and fifty pregnant women attending antenatal clinic were interviewed during the study period. The modal age group was 25 – 34 years with a mean of 30.9 years (SD=4.5). Majority (82.0%) had post-secondary education. Two hundred and ninety-six (45.5%) women were professionals in different fields while 78 (12.0%) were health workers. About three hundred and seventy five (57.7%) of respondents had previous delivery experience. Of this, one hundred and fifty (40.1%) rated their previous childbirth pain experience as severe, while about 37.5% rated it as moderate, and the rest (22.4%) described the pain as mild (Table 1).

Two hundred and forty-nine (38.3%) respondents are aware about the use of analgesia during labour and the sources of their knowledge were through media (30.9%), antenatal clinic counselling session (22.9%), others – literature/lectures/symposium (23.3%), friends/relations (17.3%) and internet (5.6%). Three hundred and nine respondents (47.5%) desired to use analgesia during their next childbirth. The commonest preferred method was intramuscular injection (60.0%) while others desired inhalation (27.4%) and Epidural (11.6%) methods (Table 1).

Bivariate analysis between the awareness of respondents about use of analgesia during childbirth and their profile revealed a statistically significant association with age group ($p = 0.042$), higher educational level ($p = 0.000$) and occupational status ($p = 0.000$) (Table 2). Further analysis using logistic regression to adjust for confounders showed that only occupation was significantly associated. Health workers were about 17.9 times more likely than the unemployed to be aware of the use of analgesia during childbirth (OR 17.87 [95% CI] 7.38 – 43.28) (Table 3). In addition, only parity of the respondents ($p = 0.001$) significantly influenced the desirability for analgesia use during subsequent childbirth with bivariate analysis (Table 4).

Table 1: Characteristics of Respondents

Characteristics	Frequency	Percentage
Age Group (n=650)		
15 – 24	43	6.6
25 – 34	469	72.2
>=35	138	21.2
Education (n=650)		
Up to Primary	26	4.0
Secondary	91	14.0
Post-secondary	533	82.0
Occupation (n=650)		
Unemployed	115	17.7
Trader	122	18.8
Artisans	39	6.0
Professional	295	45.5
Health workers	78	12.0
Parity (n=650)		
0	275	42.3
1+	375	57.7
Rating of Labour pain (n=375)		
Mild	84	22.4
Moderate	141	37.5
Severe	150	40.1
Knowledge of Analgesia (n=650)		
Yes	249	38.3
No	401	61.7
Source of information on analgesia (n=249)		
Media	77	30.9
Friends/relations	43	17.3
Internet	14	5.6
ANC counseling	57	22.9
Other	58	23.3
Desire for analgesia in labour(n=650)		
Yes	309	47.5
No	341	52.5
Choice of analgesia in labour pain (n=309)		
Inhalation	85	27.4
Intramuscular injection	173	60.0
Epidural injection	36	11.6
Others	15	5.0

Table 2: Association between awareness of Analgesia use during childbirth and sociodemographic profile of the antenatal women (n = 249).

Variables	% within the group (awareness for analgesia)	p-value
Age Group (years)		
15 – 24	20.9	0.042*
25 – 34	40.1	
> = 35	36.5	
Education		
Up to Primary	4.3	0.000*
Secondary	25.3	
Post-secondary	41.9	
Occupation		
Unemployed	33.0	0.000*
Trader	24.8	
Artisans	20.5	
Professionals	34.0	
Health workers	90.9	
Parity		
0	37.4	0.748
1+	38.6	

* Statistically significant ($p < 0.05$)

Table 3: Logistic regression model for predictors of awareness of analgesia use during childbirth.

Variables	OR	p-value	95% CI
Occupation			
Unemployed (ref)	1.00	-	-
Trader	0.61	0.090	0.34 – 1.08
Artisans	0.46	0.082	0.19 – 1.11
Professionals	0.94	0.797	0.58 – 1.53
Health workers*	17.87	0.000	7.38 – 43.28
Age group (years)			
15 – 24 (ref)	1.00	-	-
25 – 34	1.91	0.114	0.86 – 4.27
>= 35	1.84	0.176	0.76 -4.45

Ref – reference group; * statistically significant ($p < 0.05$)

Table 4: Desirability of use of analgesia during childbirth (n =309).

Variables	% within the group (Desired Analgesia)	p-value
Age Group (years)		
15 – 24	50.0	
25 – 34	46.8	0.633
> 35	51.7	
Education		
Primary	42.9	
Secondary	47.8	0.885
Post-secondary	48.3	
Occupation		
Unemployed	53.6	
Trader	52.1	
Artisans	35.5	0.254
Professionals	44.6	
Health workers	52.8	
Parity		
0	37.3	
1+	53.2	0.001*

* Statistically significant ($p < 0.05$)

DISCUSSION

Labour pain has been described as one of the worst imaginable pain to humans. Various professional organizations have unanimously noted that refusal of any medical practitioners to offer a pain relief during childbirth amounts to professional neglect and incompetence^{7, 22}. Despite this pronouncement, women are still left with the liberty to either accept or reject the offer²³.

In this study, majority of those with previous childbirth experience rated their labour pain moderate to severe. Although the recount of labour pain experience in this study was not quite recent compared to other studies that were conducted within hours of delivery, the description of the severity of pain was similar²⁴. This may further justify the need for analgesia and other pain relief measures amongst Nigerians in labour.

The awareness of analgesia use during childbirth among the study population is higher than earlier studies conducted in Nigeria that reported between 27 and 30 percent, but this is far lower than over 80 percent reported in developed countries^{25, 26}. This observed difference signifies the urgent need for more

advocacy and enlightenment by health care providers to their clients. It is also interesting to note that the majority of the respondents had knowledge of analgesia through other means apart from the antenatal clinic counselling session.

Of the significant variables noted to influence the awareness of analgesia use during childbirth in this study using bivariate analysis, only occupation of the respondents was found to be an independent predictor on further analysis by the logistic regression model. The higher level of knowledge demonstrated by health workers compared to others may not be unconnected with their background professional training and exposure. It is therefore obvious that information reinforcement should be employed on others regarding the benefit of analgesia use in labour during antenatal care.

Surprisingly, less than half of the population sampled desired analgesia use during childbirth. It is probable that this finding may be as a result of a fairly large population of respondents that were nulliparous, who may not have appreciated the severity of labour pain and the accompanying relieve from analgesia use. The commonest choice of analgesia by the respondents was intramuscular injection. This preference may be as a result of its popular use in many health care facilities/ maternity homes in Nigeria⁵. Furthermore, majority of those that took part in this study have not been opportuned to either use inhalational or epidural methods during childbirth. Therefore, it may be difficult to fairly compare the preferences of these techniques. The desire for the least effective method of pain relief^{15, 27} by the Nigerian women rather than other more reliable techniques signals a gap in knowledge and this needs to be addressed. This is necessary to prevent undue client barrier when methods such as epidural and inhalational agent are eventually introduced. The only factor that significantly influenced the desirability for analgesia in subsequent childbirth was parity, as there was a higher proportion of those with previous parous experience preferring to use pain relief methods. This finding further confirms that the pain experienced during labour needs to be relieved.

In conclusion, this study shows that the level of awareness of analgesia use in labour is low among the Nigerian antenatal attendees. There is also a significant proportion of those with previous delivery experience desiring its use in their subsequent childbirth. It is recommended that health awareness creation should be vigorously pursued to enlighten the Nigerian populace of the benefit of analgesia to control childbirth pain. Efforts at introducing the more effective methods in our health care institutions should be made.

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