

## Perineal Hygiene in the Puerperium: the Niger Delta Experience

Chris I Akani, Cosmos E Enyindah

Department of Obstetrics & Gynaecology, College of Health Sciences, University of Port Harcourt, Port Harcourt, Nigeria

### Abstract

**Background:** The puerperium is the period after the delivery of the placenta up to end of six weeks. The postnatal mother is at high risk of morbidity and mortality from sepsis. Appropriate perineal hygiene may play a significant role in reducing the extent of the problem.

**Objectives:** To evaluate the knowledge and practice of perineal hygiene among postnatal mothers admitted into the postnatal ward of University of Port Harcourt Teaching Hospital (UPTH).

**Methods:** A cross sectional descriptive study among postnatal mothers admitted into the postnatal wards of University of Port Harcourt Teaching Hospital between 1<sup>st</sup> July and 31<sup>st</sup> December 2006. A systematic random sampling method was used. Fishers Exact and Chi Square tests were used for data analysis.

**Results:** A total of 224 questionnaires out of 250 were retrieved. Most (99.6%) of the respondents had some form of formal education. Most of the booked respondents (56.9%) used sanitary pads for perineal hygiene. The sanitary towels were mainly purchased from patent medicine stores/ open markets with burying and burning as dominating major modes of disposal. Majority of the booked respondents (90%) had knowledge regarding application of pad from vulva to anus and the cleaning of perineal area from front backwards. About 88% of the booked and 52% of the unbooked populations had knowledge and appropriate practice regarding cleaning of perineal area after each emptying of bladder/bowel. Most of the respondents (77.2%) never had any puerperal complications.

**Conclusion:** Majority of the booked as opposed to the unbooked postnatal mothers in University of Port Harcourt Teaching Hospital had good knowledge and practice regarding perineal hygiene. Thus antenatal care and formal education may be regarded as sine-que-non in maintaining good perineal hygiene among postnatal mothers.

**Key Words:** Perineal Hygiene, Puerperium, Niger Delta

### Introduction

The puerperium refers to the period after the delivery of the placenta up to the end of six weeks. During this period the parturient recovers from the effects of pregnancy and labour; the organs undergo involution, lactation gets established, the mother comes to face the reality of having to care for another human being<sup>1,2</sup>.

Social and psychological issues exert major influences on the puerperium. The elation that follows a safe childbirth is universal but the care the woman gets afterwards varies, governed as it is by culture, tradition and economic conditions<sup>3</sup>. In some societies, she is pampered luxuriously for 40 days or longer and a feast marks the day when the live born baby is named or baptized. In other societies, economic and other pressures force the puerperal woman to resume work outside the home within days or even hours of

spontaneous delivery. Above all, severe illness may not be farfetched. The trials and burden of most lethal complications of pregnancy and especially labour transcend into the puerperium resulting in more maternal deaths taking place in the puerperium than in pregnancy and labour combined. The damage is from lack of universal antenatal care coverage, failure to provide effective hospital based treatment of emergency obstetric complications and lack of awareness on health matters such as perineal hygiene on the part of the women themselves. It is significant that, compared with pregnancy and labour, the puerperium is the least studied<sup>3,4</sup>.

*Correspondence:* Dr C E Enyindah,  
Department of Obstetrics & Gynaecology,  
College of Health Sciences, University of  
Port Harcourt, Port Harcourt, Nigeria.  
E- mail: cosenyi @yahoo.co.uk

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

Demographic Characteristics	Number(Frequency)		Percentage
	Booked	Unbooked	
<i>Age Groups</i>			
10- 19	13(54.2%)	11(45.8%)	10.7%
20- 29	44(52.4%)	40(47.6%)	37.5%
30- 39	60(53.4%)	52(46.6%)	50.0%
40- 49	1(25.0%)	3(75.0%)	1.8%
<i>Educational Level</i>			
None	-	1(100%)	0.4%
Primary	-	18(100%)	8.0%
Secondary	12(12.5%)	84(87.5%)	42.9%
Tertiary	106(97.2%)	3(2.8%)	48.7%
<i>Parity</i>			
1	30(62.5%)	18(37.5%)	21.4%
2- 4	84(53.5%)	73(46.5%)	70.1%
..	4(21.1%)	15(78.9%)	8.5%
<i>Occupation</i>			
Housewife	14(20.6%)	54(79.4%)	30.4%
Public Servants	40(83.3%)	8(16.7%)	21.4%
Trading	28(58.3%)	20(41.7%)	21.4%
Civil Servants	22(68.8%)	10(31.2%)	14.3%
Students	12(60%)	8(40%)	8.9%
Others	2(25%)	6(75%)	3.6%
<i>Marital Status</i>			
Single	12(60%)	8(40%)	8.9%
Married	106(51.9%)	98(48.1%)	91.1%

The aim of this study therefore was to evaluate the knowledge and practice of perineal hygiene among postnatal mothers admitted into the postnatal ward of University of Port Harcourt Teaching Hospital (UPTH).

### Subjects and Methods

This was a cross sectional descriptive study among postnatal mothers admitted into the postnatal ward of the University of Port Harcourt Teaching Hospital between 1<sup>st</sup> July 2006 and 31<sup>st</sup> December 2006. Port Harcourt is the capital of Rivers State in the south- south (Niger delta) geopolitical zone of the Nigeria. As the nerve centre for oil prospecting and industrial activities, it plays host to many Nigerians and multinational expatriates. Therefore data from this centre would largely reflect what obtains in most other cosmopolitan cities in the country.

A systematic random sampling technique was employed and the data gathering instrument utilized was a structured anonymous self administered questionnaire. This was pre- tested prior to distribution and necessary corrections made. Data collected from each patient included

among others; the socio-demographic characteristics (including booking status), types of sanitary towels used, source of sanitary towels, habits such as hand washing after perineal cleaning, perineal cleaning after each emptying of bladder/bowel, disposal of used sanitary pads and puerperal complications amongst others. The mothers were classified as booked or unbooked for analysis. A booked mother is one who registered and had her antenatal care and labour in University of Port Harcourt Teaching Hospital. An unbooked mother was one whose first visit to the Teaching hospital was her emergency admission in labour.

Statistical analysis was with Chi Square Test and Fisher's Exact Test. A p. value of 0.05 or less was considered statistically significant.

### Results

A total of 224 questionnaires out of 250 were retrieved giving a questionnaire retrieval rate of 90.0%. Out of this, 118(52.7%) were booked mothers while 106(47.3%) were unbooked mothers. The respondents were aged 16- 44 years; of which 112 (50.0%) were between 30- 39

**Table 2: Disposal of Sanitary Towels**

Method	Number(Frequency)		Percentage
	Booked	Unbooked	
Burnt	70(62.5%)	42(37.5%)	50.0%
Buried	40(58.8%)	28(41.2%)	30.3%
Toilet	8(20%)	32(80%)	17.9%
Washing	-	4(100%)	1.8%

years followed by 84(37.5%) in the 20- 29 years age bracket (Table 1). The ages of the mothers did not statistically significantly influence their booking status ( $c^2 = 3.154$ ,  $df = 3$ ,  $p = 0.368$ ). The educational level of the respondents showed that about 48.7% had tertiary education, 42.9% had secondary education with about 0.4% not having any formal education. The educational level of the mothers statistically significantly influenced their booking status ( $c^2 = 170.176$ ,  $df = 3$ ,  $p = 0.000$ ). Regarding parity; 48(21.4%) were primipara while 157(70.1%) were multipara. Only 19(8.5%) of the respondents were grandmultiparous. The parity of the mothers statistically significantly influenced their booking status ( $c^2 = 9.561$ ,  $df = 2$ ,  $p = 0.008$ ). About one third of the respondents; 68(30.4%) were housewives while less than ten percent (8.93%) were students. Similarly about 204(91.07%) of the respondents were married while 20(8.93%) were singles. The marital status of the mothers did not statistically significantly influence their booking status ( $c^2 = 0.472$ ,  $df = 1$ ,  $p = 0.492$ ).

Figure 1 illustrates the type of sanitary towels used by the respondents. While most of them; 204(91.0%) used pads, only 16(7.2%) and 4(1.8%) used toilet roll and wrapper respectively. In the same vein; about two-third of the respondents procured their sanitary towels from patent medicine stores and open markets with only 40(17.9%) procuring it from pharmacy (Figure 2).

**Table 3: Puerperal Complications**

Method	Number(Frequency)		Percentage
	Booked	Unbooked	
Genital Tract Discharge	6(18.7%)	26(81.3%)	14.3%
Dysuria	4(33.3%)	8(66.7%)	5.3%
Genital Tract Itching	1(25%)	3(75%)	1.8%
Perineal Dermatitis	1(33.3%)	2(66.7%)	1.4%
None	173	-	77.2%

Most of the sanitary towels were properly disposed as shown in Table 2; buried 68(30.3%), burnt 112 (50.0%) with those using wrapper (1.8%) recycling after re- use. The booking status of the mothers statistically significantly influenced their methods of sanitary disposal ( $c^2 = 26.952$ ,  $df = 3$ ,  $p = 0.000$ ). About 92% of the booked respondents and 55% of unbooked parturients indicated the awareness of handwashing before changing sanitary pad. Similarly 90% of booked respondents and 55% of unbooked respondents had knowledge regarding application of pad from vulva to anus and the cleaning of perineal area from front to backwards. About 88% of the booked population and 52% of the unbooked population had knowledge and appropriate practice regarding cleaning of perineal area after each bladder/ bowel emptying.

As shown in Table 3, majority of the respondents (77.2%) never had any puerperal complications while a few had genital tract discharge (14.3%), dysuria (5.3%), genital tract itching (1.8%) and perineal dermatitis (1.4%). Strangely the booking status of the mothers did not statistically significantly influence the puerperal complications ( $c^2 = 1.212$ ,  $df = 3$ ,  $p = 0.750$ ). However the educational level of the mothers had a statistically significantly influence on the puerperal complications ( $c^2 = 17.979$ ,  $df = 6$ ,  $p = 0.006$ ).

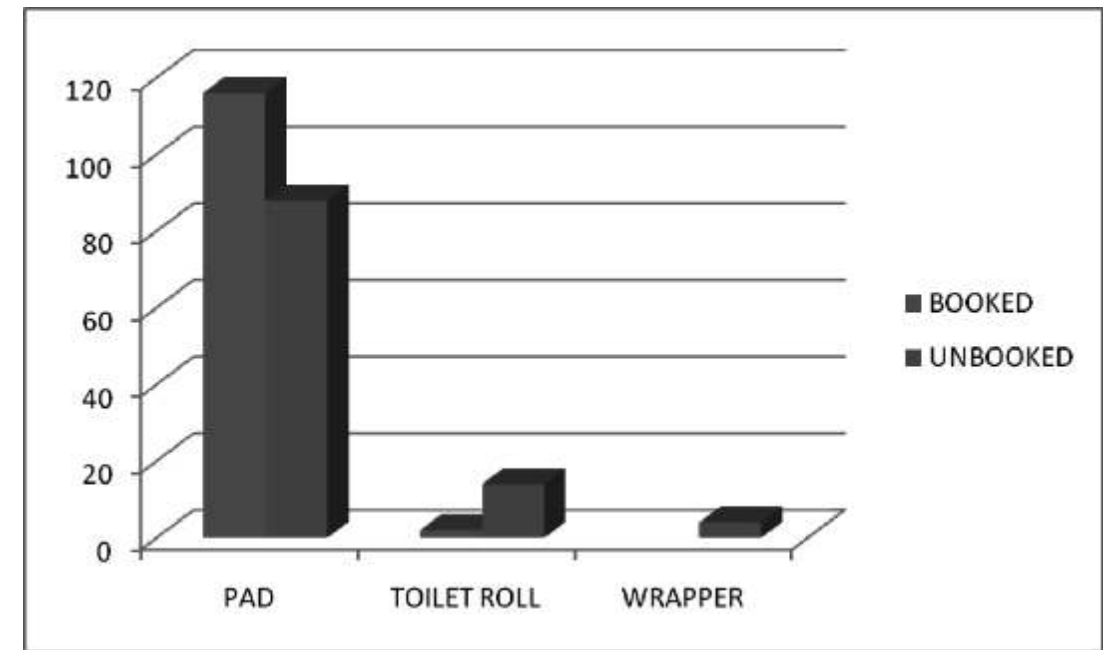


Figure 1. Types of Sanitary Towel Used

**Discussion**

Occasionally, women ignore the simple principles of perineal hygiene. The perineum is the region of the body between the anus and the vulva<sup>5</sup>. Organisms that colonize the urethra arise in the lower bowel and persist on the area just outside the anus and the urethra and on the perineal skin in between<sup>6</sup>. For heavy patients, the deep skin folds provide a sanctuary for bacteria where they can flourish (dark, warm and moist

conditions). Thus the post partum mother is at high risk of morbidity and mortality from sepsis. The prevention of known contributory factors and early effective intervention are the key to reducing the extent of the problem<sup>7</sup>.

The results from the study revealed that few of the respondents were less than 20 years and greater than 39 years with virtually all with some form of formal education. This may be due to the

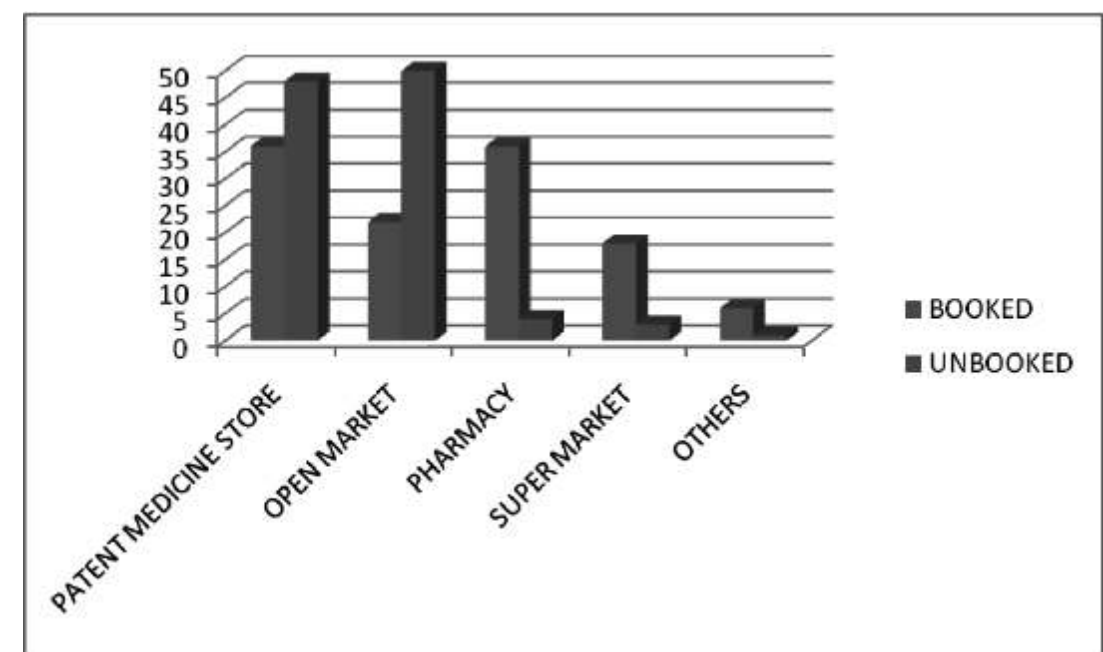


Figure 2: Sources of Sanitary Towels

quest for academic achievement early in life before marriage among the predominantly Christian population in Port Harcourt and the fact that most parturient are beginning to accept family planning;<sup>8</sup> thereby reducing reproduction in the fifth decade of life.

Majority of the respondents especially among the booked mothers used sanitary pads as opposed to toilet roll and wrapper. This may be related to the level of education of the parturient and hygiene rich antenatal talk sessions in the hospital. However they preferred to source for the sanitary towels in the patent medicine stores and open markets rather than registered pharmacy shops and supermarkets. This may be due to the limited hours of operation of the later coupled with associated bureaucratic bottle neck despite shortfalls in the quality and sterility of some of the sanitary towels in the patent medicine stores/open markets.

The sanitary towels were better disposed among the booked parturient than unbooked parturient which may also be in keeping with the benefits of formal education and antenatal care. This

commendable attitude is vital practice in the disposal of blood contaminated items more so in face of rising Human Immuno Deficiency Virus (HIV) pandemic. In the same vein, most of the booked respondents indicated the awareness of hand washing after cleaning perineal area as well as the practice of hand washing before changing sanitary pad. The proper way of application of pad from vulva to anus, cleaning of perineal area from front to backwards as well as cleaning of perineal area after each emptying of bladder/bowel were also reported by most of the respondents especially the booked parturient. The need to review the long term impact of poor genital care amongst rural/urban parturient with limited access or use of ante-natal care cannot be over emphasized

In conclusion, majority of the respondents especially the booked parturient knowledge and practice regarding perineal hygiene was found satisfactory. Similarly since perineal hygiene impact greatly on maternal health and is a veritable ingredient in reducing puerperal infections, we advocate well designed perineal hygiene at formal and informal settings.

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