

Perception of Mothers on Factors Contributing to Puerperal Sepsis in Selected Government Hospital in Lagos State

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ABSTRACT: *Puerperal sepsis is a bacterial infection of the genitourinary tract that occurs after delivery or a miscarriage. In a particular Lagos State government hospital, the study examined how mothers felt about the causes of puerperal sepsis. Structured questionnaires were used to gather data for the cross-sectional design of the study. The mothers' questionnaires, numbering 210 altogether, were collected and analysed with SPSS 22.0. Results indicated that whereas 42.4% of women had a high awareness of puerperal sepsis, 59.0% were unaware of it. Sixty-three percent of respondents also identified low levels of education, ignorance, and living in rural areas as important reasons. In addition, 89% found that the manner of birth was a factor, and 87.1% found that infrequent antenatal clinic attendance was a factor. Low immunity was cited by 64.3% of respondents, whereas 96% cited the location of birth as a contributor to puerperal sepsis. All p-values for tests of correlation between the two sets of variables (factors and perception) were significantly lower than 0.05. Overall, most mothers only had a hazy understanding of what puerperal sepsis entailed. The stigma surrounding puerperal sepsis strongly correlates with socioeconomic standing. Puerperal sepsis awareness was significantly influenced by factors such as birth location, delivery method, and lack of antenatal clinic attendance. Puerperal sepsis risk variables were significantly correlated with mothers' reports of experiencing the condition. The perception of puerperal sepsis among mothers continues to be low; thus, the obstetrics and gynaecological healthcare system should make it a matter of utmost importance to teach pregnant women about it so that their perception about it would have improved before to delivery. Puerperal sepsis is an infection that occurs after childbirth and can lead to serious complications.*

KEYWORDS: puerperal sepsis, perception, factors, mothers, government hospital

INTRODUCTION

In many cultures, childbirth has always been seen with tremendous joyous expectation since it is a normal physiological process. Unfortunately, because to the high rates of maternal morbidity and mortality in impoverished nations like Nigeria, this is not the case everywhere. While giving birth is a natural physiological process, it is complicated by the presence of some disorders, such as infection, that are specific to the puerperium and pose significant risks and dangers to the lives of mothers (Kareem, et al., 2016).

Pregnancy-related sepsis accounts for over 11% (95% uncertainty area 5.9%-18.6%) of maternal fatalities worldwide, making infection a major contributor to avoidable causes of maternal morbidity and mortality. Symptoms associated with pregnancy Consequences of infection include infertility, ectopic pregnancies, and chronic pelvic inflammatory illness (Bonet et al., 2017). Sustainable development objectives have been threatened by pregnancy-related infections such pre-natal, intra-natal, and post-natal fever (infection) (Gon, et al., 2018). Symptoms of puerperal sepsis include: pelvic pain, high body temperature (oral temperature 38.5 °C or above on any occasion), abnormal genital discharge (presence of pus), bad smell or foul odour of discharge, delay in the reduction in the size of the uterus (less than 2 cm / day with in the first Eight days), and a delay in the reduction of the uterine size (less than 2 cm / day with in the first Eight days). Both previous and current research (Demisse et al., 2019; Kareem et al., 2016).

According to the globe Health Organisation (WHO, 2019), about one woman in the globe dies every two minutes from complications during delivery, or 303,000 women every year. Over 358,000 maternal deaths occur annually during labour and childbirth, and 15% are related with puerperal sepsis (WHO, 2019). Puerperal sepsis is the leading cause of tubal occlusion and infertility in women. More than 5.2 million new instances of maternal sepsis are predicted to occur yearly globally, with 62,000 maternal fatalities attributed to the illness (United Nations, 2018). However, only 2.2% of maternal mortality in wealthy nations is attributable to puerperal sepsis (Taskin, et al., 2016). Mortality was caused by direct and indirect factors, respectively, accounting for 77.7% and 22.3%. After obstetric haemorrhage (21.6%), hypertensive disorders in pregnancy (14.4%), and abortion complications (10.8%), puerperal sepsis (30.9%) was the leading cause of maternal mortality in 2016. Puerperal infections/sepsis are the sixth leading cause of death among new mothers and account for 15% of total maternal deaths worldwide among women of reproductive age (WHO, 2019).

The high rate of maternal mortality in Africa due to sepsis is unacceptable; in 2017, over 295, 000 women lost their lives during or shortly after pregnancy or delivery; the vast majority of these deaths (94%) occurred in low and middle-income/resource country settings, yet were entirely avoidable. 86% of the estimated cases were found in countries in Sub-Saharan Africa and Southern Asia (WHO, 2019). According to the Global Burden of Disease Study (2019), the rates of maternal

mortality caused by puerperal sepsis are higher in developing regions of the world, including Africa (9.7%), Asia (11.6%), and Latin America and the Caribbean (7.5%). Puerperal sepsis is one of the illnesses that may be prevented in developing countries, particularly in Sub-Saharan Africa, where 12% of the population bears 95% of the global health burden (WHO, 2019; Taskin et al., 2016).

Puerperal sepsis accounts for 12% of maternal mortality in Nigeria, making it the third highest cause of maternal mortality there. According to Adesokan (2019), the rates of puerperal sepsis in Nigeria, Niger, Uganda, and South Africa are 1.7, 0.22, 1.14, and 0.07 per 100 live births, respectively. Different studies describe varying rates of puerperal sepsis. Puerperal sepsis was shown to have an incidence of 1.49 and 1.36% in Jackim and Margaret, respectively, in 2017. In West Africa, the rate of puerperal sepsis is much lower, at just 0.09%. A research conducted in the Nigerian state of Anambra found that sepsis accounted for 12.1% of all maternal fatalities. In a research on obstructed labour in the State of Gombe in Nigeria, puerperal sepsis was shown to be the most common morbidity. Two investigations conducted in Nigeria (Nigeria centre for disease prevention and control (NCDC), 2019) found that the prevalence of puerperal sepsis was 1.49 and 1.36%, respectively.

One of the main causes of maternal morbidity and mortality is puerperal sepsis. It's a big concern for public health and has long been recognised as a frequent complication of pregnancy that can cause obstetric shock and even death. It's a treatable illness that strikes in the first six weeks after giving birth (WHO, 2016). After depression, HIV/AIDS, TB, abortion, and schizophrenia, it is the sixth major cause of illness burden for women aged 15–44 (Demise et al, 2019). The World Health Organisation (2017) has claimed that most cases of puerperal sepsis are caused by nosocomial infection, and that the risk is 5-10% greater for women who have assisted delivery methods like caesarean section or other forms of surgical birth induction compared to those who give birth naturally. Anaemia during pregnancy, a lengthy labour, repeated vaginal examinations, early membrane rupture, and the use of contaminated or dirty equipment all increase the risk of puerperal sepsis. Puerperal sepsis is avoidable but how people think about taking precautions varies according on their upbringing, level of education, religious affiliation, and other variables. Lack of awareness, as well as certain cultural norms, beliefs, and practises, all contribute to the development of puerperal sepsis (Susannah, et al., 2019).

Puerperal sepsis is commonly misunderstood and unrecognised, especially among those of lower socioeconomic status and those with little or no formal education. Inadequate postpartum hygiene is a global risk factor that contributes to infections. This is because of factors such as poor hygiene and inadequate treatment during labour and delivery (Jackim & Margaret, 2017) and extended labour or amniotic sac rupture. Pregnancy and delivery were perceived by the majority of participants as the most dangerous times for women, and their theories on what causes puerperal sepsis differed greatly from the scientific literature (Kaur et al., 2017). As a result, the global picture of maternal and child morbidity and mortality may be altered if postnatal care were made

available immediately (defined as a set of health treatments given to women within 42 days of giving birth; WHO, 2015).

Most rural mothers have an inaccurate understanding of puerperal sepsis as a result, many of them delay seeking medical attention when they are actually suffering from a common infection. However, a health education programme, household or community-level mass education campaign should be undertaken to distribute information about the signs and symptoms, especially the danger indicators, of puerperal sepsis that require rapid treatment at facilities. Maritim et al. (2017) found that 96% of women with puerperal sepsis had little more than a primary school education, providing more proof that being among mothers with lower socioeconomic position increases their chance of having the condition. This might be because mothers from lower socioeconomic backgrounds have less access to health care, receive less nutritious food, and are less likely to be able to fend off illness.

Anaemia during pregnancy, a lengthy labour, multiple vaginal examinations, premature membrane rupture, and the use of unsterilized or dirty instruments during delivery are all risk factors for puerperal sepsis (David, et al., 2015). Environmental factors such as dust particles, spread from coughing mother, and drinking cold water or playing with water were perceived as the causes of puerperal sepsis, illness was not perceived as serious enough or distance from healthcare facility or lack of money at household for seeking treatment outside, and most of the rural mothers did not know about the severity of puerperal sepsis (Esita and Shrat 2017).

In view of the above, the study assessed the perception of mothers on factors contributing to puerperal sepsis in selected hospital in Lagos State. The study specifically examined.

1. mother's perception of puerperal sepsis in selected hospitals in Lagos state; and
2. the factors contributing to puerperal sepsis among mothers in selected hospitals in Lagos state.

Two hypotheses were formulated in this study:

Ho1: There is no significant relationship between the socio-demographic status and perception of puerperal sepsis among mothers.

Ho2: There is no significant association between mother's perception and factors contributing to puerperal sepsis.

METHODOLOGY

The study was a descriptive cross sectional study used to assess the factors contributing to puerperal sepsis in selected Government Hospital Lagos state, in Ikorodu and Ijede General Hospitals. The target populations of the study were postnatal mothers attending a selected Hospitals in Lagos state, not minding their race, norms, language, age, sex, tribe, marital status and working experience. Primiparous and multiparous mothers, postnatal mothers that had vaginal

birth or cesarean section delivery were considered during sample selection while mothers who are not in postnatal period and Nulliparous women were excluded. Yamane's formula was used to determine the sample size. The calculated sample size was 248.

Proportion sampling method was used to select the wards/units; the table below represent the number of the wards/unit that were recruited for study where participants attending Ikorodu and Ijede

Departments	Maternal and child health emergency	Labour ward	Postnatal ward	Postnatal clinic/ infant welfare clinic	sample size in each hospitals	Total sample size 248
Number of postnatal mothers in Ikorodu GH	37	70	47	58	189	
Proportional calculation	$37 \times 189 \div 357 = 19.6$	$70 \times 189 \div 357 = 36.4$	$47 \times 189 \div 357 = 24.8$	$58 \times 189 \div 357 = 30.2$		
Sample size	20	47	38	25	120.5	144
Ijede GH						
Number of postnatal mothers	36	65	26	41	168	
Proportional calculation	$36 \times 168 \div 357 = 16.9$	$65 \times 168 \div 357 = 30.6$	$26 \times 168 \div 357 = 12.2$	$41 \times 168 \div 357 = 19.2$		
Sample size	27	41	16	19	103.5	104

A simple random sampling technique was used to select participants needed, from the selected Hospitals in Lagos state, this gave all participants equal change of being selected for the study. Questionnaire was used for data collection and consisted of three sections on socio-demographic (10) question, perception of mothers on puerperal sepsis, and factors contributing to puerperal sepsis. Face and content validity of the instrument was carried out by experts in the area of study. Data was collected through the administration of questionnaires. The data collection lasted for about 5 weeks with the help of two research assistants. Questionnaire was analyzed using statistical

package of social sciences (SPSS) software version 23. The socio-demographic data was analyzed with descriptive statistic and presented on table with frequencies percentage, mean and standard deviation. Hypotheses were tested using inferential statistics of Chi-Square and Regression Analysis at 0.05 level of significance.

RESULTS

The analysis was based on a total of 210 fully filled and retrieved questionnaires out of a total of 225 administered. This gave a 93.3% response rate.

Table 1: Respondents' Socio-demographic Characteristics

VARIABLES	Responses	Frequency (n=210)	Percentage	Mean	SD
Age (<i>in years</i>)	Below 20	32	15.2	29.4	2.3
	20 - 30	108	51.4		
	Above 30	70	33.3		
Marital Status	Single	18	8.6		
	Married	187	89.0		
	Divorced/Separated	5	2.4		
Religion	Christianity	118	56.2		
	Islam	79	37.6		
	Others	13	6.2		
Ethnic Groups	Yoruba	189	90.0		
	Others	21	10.0		
Educational Qualification	Non-formal	5	2.4		
	Primary	16	7.6		
	Secondary	79	37.6		
	Tertiary	110	52.4		
Occupation	Unemployed	41	19.5		
	Housewives	17	8.1		
	Self-employed	78	37.1		
	Employees	74	35.2		
Number of children	1 – 3	162	77.1	3	1.05
	4 – 6	44	21.0		
	6 and above	4	1.9		
Place of delivery of the previous birth	Health Facility	181	86.2		
	Traditional Birth Home	14	6.7		
	Home	2	1.0		
	Religious Home	13	6.2		
Total		210	100.0		

Results as shown in Table 1 above, on the respondents' socio-demographic characteristics, indicate that slightly more than half (51.4%) of the respondents were aged between 20-30 years while the least proportion of them were below 20 years of age. Majority (89%) were married and 56.2% were engaged in Christianity. The results on the distribution of the respondents by ethnic groups show that 90% of them were Yoruba. The educational qualifications show that 52.4% had tertiary education while 7.6% had primary education. Also, results show that equitable proportion of the respondents were self-employed and employees at 37.1% and 35.2% respectively. Although very many (86.2%) of them had their last child delivery at health facility, 6.7% and 6.2% were delivered of their last babies at traditional birth attendant and religious homes respectively.

Table 2: Responses on the Perception of mother on Puerperal Sepsis

Question Statements	Responses			Mean	S.D.
	Agreed	Disagreed	Undecided		
Puerperal sepsis is a bacterial infection that affect female genital tract(womb) and occur within 10-42 days after delivery or abortion.	132 (62.9%)	57 (27.1%)	21 (10.0%)	2.37	0.15
When I have fever, lower abdominal pains, chills and smelling vagina discharge after childbirth, I belief I have puerperal sepsis	169 (80.5%)	31 (14.8%)	10 (4.8%)	2.01	0.15
I am confused if low immunity and level of health status can cause puerperal infection but am sure of micro-organisms.	129 (61.4%)	18 (8.6%)	63 (30.0%)	2.01	0.13
I feel having being labour for longtime and frequent hands in the vagina during labour can make one to have puerperal infection.	116 (75.2%)	28 (13.3%)	66 (31.4%)	1.98	0.25
I can't do without having bath at beginning of labour and after giving birth, likewise, I watched my midwife using unused and cleaned instrument for me. With these, I feel free from puerperal infection.	136 (64.8%)	27 (12.9%)	47 (22.4%)	2.41	0.65
I don't panic when I noticed my water broke because my personal hygiene is intact and my baby and I are free from puerperal infection.	189 (90.0%)	19 (0.9%)	2 (0.01%)	2.31	0.69
Puerperal sepsis is not a serious life threatening disease compare to other disease, it is part of a normal childbirth process.	53 (25.2%)	18 (8.6%)	139 (66.2%)	1.14	0.57
If I have infection in my body following childbirth, my baby too will have infection through breastfeeding.	158 (75.2%)	39 (18.6%)	13 (6.2%)	2.47	0.66
I belief attending antenatal clinic regularly will go a long way in preventing puerperal sepsis.	162 (77.1%)	35 (16.7%)	13 (6.2%)	2.69	0.79
I will seek spiritual help if I notice I have puerperal infection because it is the work of devils	173 (82.4%)	32 (15.2%)	5 (2.4%)	2.78	0.36

The results as presented in Table 2 above show that 61% of the respondents were aware of puerperal sepsis as they have heard about it before. Meanwhile, the most prominent source of

information on puerperal sepsis among those have heard about it before was through Healthcare workers as 76.6% reportedly heard about it from them.

In addition, about 63% of the respondents agreed that puerperal sepsis is a bacterial infection that affect female genital tract and occur within 10-42days after delivery or abortion. Also, 80.5% reported that when they have fever, abdominal pains and smelling vagina discharge, they have puerperal sepsis. However, 66.2% reported that they were confused if low immunity can cause puerperal sepsis. Results also show that although 75.2% believed that longtime labouring and frequent vagina examination predispose one to puerperal sepsis and 31.4% were not sure whether infection can be caused by long duration in labour and frequent hands in vagina.

Furthermore, 65% of the respondents reported that they can't do without having bath during labour and after giving birth while 90% reported that they didn't panic when their water broke since they have intact personal hygiene. However, 66.2% of respondent were undecided on whether puerperal sepsis is not a serious life threatening condition compare to others and 75.2% of respondents agreed that baby could also have infection from them through breastfeeding. Also, 77.1% of the respondents reported that regular antenatal attendance could prevent puerperal sepsis, while 82.4% agreed with seeking spiritual help when they have puerperal sepsis.

It was shown that those who had good perception towards puerperal sepsis were 41%. However, 59% did not have good perception on puerperal sepsis.

Table 3: Responses on the Factors contributing to Puerperal Sepsis

Factors	Responses				Mean	S.D.
	Agreed	Strongly Agreed	Disagreed	Strongly Disagreed		
Level of education or ignorance	156 (74.3%)	43 (20.5%)	9 (4.3%)	2 (1.0%)	3.26	0.39
Rural residence	132 (62.9%)	29 (13.8%)	29 (13.8%)	20 (9.5%)	3.69	0.47
Irregular ante-natal clinic attendance	187 (89.0%)	11 (5.2%)	9 (4.3%)	3 (1.4%)	3.75	0.64
Poor nutrition	118 (56.2%)	43 (20.5%)	38 (18.1%)	11 (5.2%)	2.65	0.57
Monthly income	13 (6.2%)	35 (16.7%)	139 (66.2%)	23 (11.0%)	1.01	2.10
Mode of Delivery	183 (87.1%)	25 (11.9%)	2 (1.0%)	0 (0.0%)	3.44	0.62
Place of Delivery	201 (95.7%)	6 (2.9%)	1 (0.5%)	2 (1.0%)	3.72	0.43
Low Immunity	135 (64.3%)	59 (28.1%)	11 (5.2%)	5 (2.4%)	3.56	1.05

The results as presented in Table 3 show that 74.3% of the respondents agreed that level of education or ignorance was a factors contributing to puerperal sepsis. About 63% also agreed that rural residence was a factor contributing to it. In addition, 89% agreed that irregular ante-natal clinic attendance was a factor while 87.1% identified the factor contribute to it as the mode of delivery. About 96% pointed out that a factor contributing to puerperal sepsis was the place of delivery while 64.3% expressed that a factor in this was low immunity. Meanwhile, 62% of the respondent disagreed with monthly income

Testing of Hypotheses

H₀₁: There is no significant relationship between the demographic status and level of perception of puerperal sepsis among mothers.

Table 4: Cross tabulation of Perception of Puerperal Sepsis

	<i>Responses</i>	Level of perception of Puerperal Sepsis		Total	χ^2	p
		High perception	Low perception			
Socio-demographic status of mother	Age	62 (69.7%)	27 (30.3%)	89	89.15	0.00
	Marital status	19 (48.7%)	20 (51.3%)	39		
	Occupation	5 (6.1%)	77 (93.9%)	82		
Total		86 (41.0%)	124 (59.0%)	210 (100%)		

The results as presented in Table 4 above showed that 69.7% of the respondents within the age 20-30 had high level perception about of puerperal sepsis and also 89% who are married had well perception. This was also similar for those who had low perception as a whopping 93.9% of them did not perceive puerperal sepsis as serious condition. The test of the relationship between the variables (demographic status and perception) gave a chi-square value of 89.15 at p=0.00. This p-value was less than 0.05 significant level, hence, the null hypothesis (H₀₁: There is no significant relationship between the demographic status and perception of puerperal sepsis among mothers) was rejected. It was therefore concluded that there was significant relationship between the demographic status and perception of puerperal sepsis among mothers.

H₀₂: There is no significant association between the factors contributing to puerperal sepsis and perception by mothers

Table 5: Cross tabulation of factors contributing to Puerperal Sepsis

<i>Factors contributing to Puerperal sepsis</i>	Perception	Perception of Puerperal Sepsis		Total	χ^2	p	
	<i>Responses</i>	Practiced	Not Practiced				
Mode of Delivery	Agreed	80 (43.7%)	103 (56.3%)	183	41.02	0.032	
	Disagreed	6 (22.2%)	21 (77.8%)	27			
Place of Delivery	Agreed	84 (41.8%)	117 (58.2%)	188	38.02	0.035	
	Disagreed	2 (22.2%)	7 (77.8%)	9			
Irregular ante-natal clinic attendance	Agreed	68 (76.4%)	21 (23.6%)	89	97.64	0.00	
	Disagreed	18 (14.9%)	103 (85.1%)	98			
Total		86 (41.0%)	124 (59.0%)	210 (100%)			
Rural residence		Agreed Disagreed	62.9% 37.1%	37.9% 62.9%	17	38.01	0.001
Level of education		Agreed Disagreed	74.3% 35.7%	35.7% 74.3%	18	40.01	0.00
Monthly income		Agreed Disagreed	33.8% 66.2%	66.2% 33.8%	9	22.05	0.003
Low immunity		Agreed Disagreed	64.3% 36.7%	36.3% 64.3%	7	37.01	0.002

The results as presented in Table 5 show that 43.7% of the respondents who agreed that the mode of child delivery contributing to development of puerperal sepsis but much less (22.2%) of those who disagreed did same. This was also similar for 76.4% of those agreed that irregular ante-natal clinic attendance was a factor contributing to puerperal sepsis as they reportedly perceive puerperal sepsis well. About 74.3% agreed that level of education contributes to Puerperal sepsis.

Meanwhile, 62% of the respondent disagreed with monthly income while 64% agreed that low immunity contributes to development of puerperal sepsis. The test of the relationship between the variables (factors and perception) all gave p-values that were less than 0.05 significant level, it was therefore concluded that there was significant association between the factors contributing to puerperal sepsis and perception by mothers.

Table 6 Linear Regression showing the factors contributing to puerperal sepsis

Source	SS	df	MS		
Mode	1116.51	1	1116.51		
Residual	8467.68	345	24.54		
Total	9584.19	346	27.70		
<i>Variables</i>	<i>Coef.</i>	<i>Std. Err.</i>	<i>T</i>	<i>p> t </i>	<i>[95% Conf. Interval]</i>
Mode of Delivery	0.115	0.0171	6.74	0.000	
Place of Delivery	0.033	0.2691	0.12	0.012	
Regular ante-natal clinic attendance	0.154	0.2514	0.54	0.030	
Monthly income	0.044	0.0238	0.13	0.000	
Rural residence	0.0150	0.0333	0.12	0.010	
Level of education	0.055	0.0156	0.45	0.003	
Low immunity	0.033	0.0234	0.036	0.001	

Prob > F = 0.000

The results as shown in Table 6 indicate that the mode of delivery, the place of delivery, having a regular ante-natal attendance, monthly income, rural residence, level of education and low immunity had significant effect on perception of puerperal sepsis by mother.

DISCUSSION OF FINDINGS

The respondents' socio-demographic characteristics indicate that slightly more than half (51.4%) of the respondents were aged between 20-30 years and majority (89%) were married and 56.2% were engaged in Christianity. This result is in consonance with Taskin, et al. (2016) who report that 67% of the respondents were married and 58.1% Christians. In contrast, however, Gamel, et al., (2020) had less than half of their respondents within the age groups 20-30 years. Sultana, et al. (2018) reported that about 50.7% of the study participants were in the age group 19-29 years and the mean age of the study participants was 29.6±15.9 years. More than seven-tenths (73.3%) of the study participants were Muslims and the majority (24.7%) of the study participants had senior secondary certificate.

The findings of the study also revealed that 63% agreed that puerperal sepsis is a bacterial infection that affect female genital tract and occur within 10-42 days and 81% agreed that fever, abdominal

pain, chills and smelling vagina odour were signs of puerperal sepsis. About 75% perceived that longtime duration of labour and frequent vagina examination can cause puerperal sepsis while 64% perceived that taken bath and use of cleaned instrument could prevent puerperal sepsis, in contrast, Ngonzi, et al., (2016) revealed that the great majority of the studied women had poor score of perception related to the definition, causes, symptom, preventive measures and high risk group in pretest (96.0%) respectively. Meanwhile, these percentages changed to be adequate level of perception in the posttest after receiving the program to (85.0%) with a highly statistical significant differences respectively (P. = 0.000). furthermore, nearly half to two thirds of study sample were always commitment with guideline. The mothers who received and compliance with the guideline regarding puerperal sepsis and its prevention had good perception and practices score in the post-test of the intervention program than in pre-test. In contrast, the findings revealed that 63% agreed that puerperal sepsis is a bacterial infection that affect female genital tract and occur within 10-42 days and 81% agreed that fever, abdominal pain, chills and smelling vagina odour were signs of puerperal sepsis.

Also, findings from the study showed that about 75% perceived that longtime duration of labour and frequent vagina examination can cause puerperal sepsis while 64% perceived that taken bath and use of cleaned instrument could prevent puerperal sepsis. About 96% pointed out that a factor contributing to puerperal sepsis was the place of delivery while 64.3% expressed that a factor in this was low immunity. The study is in correspondence with Gon, et al., (2018) which stated that 3316 obstetrical admissions and out of these 129(3.89%) women with poor level of perception had puerperal sepsis. Most of these women 84(65.11%) were aged 31 years and above, multiparous 101 (78.29%), and unbooked 98 (75.96%) cases. Common risk factors found were absent membranes in 108(83.72%) of the women, delivered or undelivered and mismanaged, referred cases 95(73.64%), are being delivered in this hospital 34(26.35%). Morbidities seen were septicemia in 35 (27.13%) cases, and disseminated intra vascular coagulation in 23 (17.82%) cases, while 11 (8.52%) of the women died.

Taskin, et al. (2016) reported that about 37.4% were disagreed to avoid sexual intercourse during last 2 months of pregnancy prevents puerperal sepsis and about 51.3% were agreed to avoid appearances in crowded and unhygienic places, this will prevent from catching respiratory diseases. The findings reported that most of the study participants had poor level of knowledge regarding prevention of puerperal sepsis. However, the study participants had satisfactory practice level about prevention of puerperal sepsis. It further reveals that educational level and age of the study participants was found statistically significant with knowledge about prevention of puerperal sepsis.

Study found out that about 66.2% of respondent were undecided on whether puerperal sepsis is not a serious life threatening condition compare to others and 75.2% of respondents agreed that baby could also have infection from them through breastfeeding. In similarity, Withers, et al, (2018) showed that mothers had the perception that environmental factors such as dust, unhealthy

household condition, anemia in pregnancy, prolonged labor, frequent vaginal examination, premature rupture of membranes and use of unsterilized/unwashed instruments during delivery. Morbidities associated with puerperal sepsis includes; fever greater than 38.0°C (100.4°F). Although mothers described puerperal sepsis as a serious life threatening disease after childbirth, but most of the mothers could not diagnose whether they have it or not, they see as normal childbirth process. In contrast, the study showed that 62% were undecided on whether puerperal sepsis is a life threatening condition or not.

Study reported that about 75.2% of respondents agreed that baby could also have infection from them through breastfeeding. Also, 77.1% of the respondents reported that regular antenatal attendance could prevent puerperal sepsis, while 82.4% agreed with seeking spiritual help when they have puerperal sepsis. This study is in line with Farzana, et al. (2014) which stated that group of mothers believed that if they have infection after childbirth, their child would also develop infection through breastfeeding while sucking breast milk. Some do perceive that having infection after childbirth is not ordinary, it may be an evil influence.

Also, study showed that those who had good perception towards puerperal sepsis were 41%. However, 59% did not well perceived puerperal sepsis. In contrast, Eshita and Shrat (2017) reported that majority (53%) of the respondents had fair perception, 46% had poor perception while only 1% had good perception level about puerperal infection. In this study, perception level was found to be associated with education level ($P = 0.000$), total monthly family income ($P=0.014$) and age ($P=0.021$) of the respondents. In contrast, these findings shown that those who had good perception towards puerperal sepsis were 41%. However, 59% did not well perceived puerperal sepsis.

The findings of this study also revealed that that 74.3% of the respondents agreed that level of education or ignorance was a factors contributing to puerperal sepsis. About 63% also agreed that rural residence was a factor contributing to it. In addition, 89% agreed that irregular ante-natal clinic attendance was factor while 87.1% identified the factor contribute to it as the mode of delivery. About 96% pointed out that a factor contributing to puerperal sepsis was the place of delivery while 64.3% expressed that a factor in this was low immunity. This correspond with study done by Taskin, et al. (2016) which showed that rural residence ,Mothers with no formal education 37.5% up to primary level of education 34%, total monthly income of the mother or family 23% and 32% respectively, Mothers having 1–2 times antenatal care(ANC)visit 32%), Duration of Labor12–24 hour, vaginal examinations ≥ 5 times, Delivery by c/s, Rupture of membrane > 24 h and those Referred from other health institutions 5.8%,were independent determinants of puerperal sepsis in this study. Majority of determinants of puerperal sepsis were related with pregnancy and childbirth. Therefore, to tackle a problem of puerperal sepsis all concerning bodies should take measures during prenatal, natal and postnatal period. Furthermore, study revealed that rural dwellers were 2.5 times more likely to develop puerperal sepsis compared with that of mothers from urban (Ngonzi, et al, 2015).

CONCLUSION

Majority of mothers had only fair perception of puerperal sepsis. Perception about puerperal sepsis has significant influence on demographic status. Place and mode of child delivery as well as irregular ante-natal clinic attendance had significant effect on the perception of puerperal sepsis.

Recommendations

Based on the results of this study, the following recommendations were made;

1. As perception of puerperal sepsis remains poor among mothers, the obstetrics and gynaecological healthcare system should make it a matter of utmost necessity to educate pregnant women about it so that their perception about it will have improved prior to delivery.
2. A factor contributing to low perception of mothers against puerperal sepsis was irregular ante-natal clinic attendance. It is therefore recommended that women should be sensitized on the dangers of non-attendance as well as the benefits of attending ante-natal care;
3. A number of women reported to have delivered of their babies outside health facilities. Such risky practices should be discouraged through village, religion and market meetings also sensitization.

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