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Proportion of Disrespectful and Abusive Care during Childbirth among Women in Khartoum State-2016

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Abstract The access to good quality hospital care during childbirth has been identified as a key strategy in increasing maternal and infant survival. In spite of that, home delivery was 79.5% according to the Sudan 2010 Household Survey. Previous evidence tells that one of the major factors deterring pregnant women from delivering at a health facility is disrespectful and abusive treatment by the health care providers. This study attempted to measure the proportion of disrespectful and abusive care (D&A) during childbirth among women in Khartoum state in 2016 and to determine the types of D&A within selected health facilities. A descriptive cross-sectional study was carried out in three hospitals in Khartoum State, Sudan. The distribution of the sample to health facilities was made proportionately based on the number of clients who received childbirth services at each facility. Using a semi-structured questionnaire, 263 mothers were interviewed in which the disrespect and abuse during childbirth was measured under seven categories using 15 performance indicators that were pre-set by Bowser & Hill's landscape analysis. Respondents who experienced at least one category of D&A were 77.2%. The proportion of women who had a low, medium and high level of D&A was 39.3%, 32.3% and 5.6% respectively. The most common categories of D&A were found to be Non-confidential care (79.8%), Non-consented care (71.5%) & Abandonment of care (21.7%). The proportion of D&A during childbirth is very high, these findings should alert all stakeholders who aim at reducing maternal mortality. Presence of protocols that regulate respectful and non-abusive care was identified but these results raise the question of adherence to protocols; therefore, health administrators should study and validate these protocols and their proper implementation.

Keywords: *disrespect, abuse, childbirth, Sudan, Khartoum*

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1. Introduction

Maternal health is the health of women during the pregnancy, childbirth and postpartum period. In every country and community worldwide, pregnancy and childbirth are important events in the lives of women and families; However, these events are still the leading causes of death, disease and disability among women of reproductive age in developing countries [1]. One of the main indicators of maternal health status is the maternal mortality ratio (MMR) which is defined as the number of women who died from pregnancy related causes per 100,000 live births [2]. According to the Sudan 2010 Household survey the maternal mortality ratio was 219 per 100,000 live births in the country [3]. To overcome this problem, the reproductive health unit at The Ministry of Health jointly with the World Health Organization (WHO) and the United Nations (UN) agencies paid special attention to maternal health service packages, they concluded that facility-based deliveries was fundamental to decrease the MMR. However, there are subjective reports and qualitative evidence that some women experience disrespectful or abusive care at the hands of health personnel in facilities during labour and delivery which progressively deter some women from coming to facilities and consequently undermine the efforts to decrease the MMR [4,5]. A landscape analysis by Bowser and Hill's explored the evidence of disrespect and abuse during facility based childbirth in 2010, categorized these behaviours into seven types: physical abuse, non-consented care, non-confidential care, non-dignified care, discrimination, abandonment of care and detention in facilities. Numerous factors can contribute to this experience that Bowser and Hill and others grouped into: individual and community-level factors related to D&A, lack of legal and ethical foundations to address D&A, lack of leadership, lack of standards and accountability and provider prejudice due to training and lack of resources [4,6].

The issue of D&A is linked to the issue of women preferences of where to give birth. The literature pointed out the instances where the D&A deter women from coming to facilities. Umbeli and his colleagues found that

financial problems and the cost of hospital services were the main reason for choosing home delivery; followed by lack of privacy at hospitals, easy previous delivery at home and fear of hospital atmosphere [7]. Evidence from Nigeria also suggests that women do not seek maternal health care at hospitals and clinics due to prior embarrassing experiences or the fear of being humiliated by the healthcare staff [8]. In addition, studies in Chile revealed that the discouraging attitude of health-care workers in public hospitals influenced the women's decision of delivering in private hospitals [9]. Furthermore, several reports from Kenya show that insults, lack of dignity and respect make mothers fearful of seeking care at health facilities [10]. In Burundi, women who hear of other women being detained in hospitals delay seeking care which can lead to additional complications and risky medical situations [11].

In this regard, the Sudan 2010 Household Survey found that, the percentage of women aged 15-49 years whose most recent live birth was delivered at home was 79.5%. The same survey reflects that the maternal deaths occurred mainly at community level (70%) [3]. A woman may face disrespectful and abusive care at facility from the time she presented to facility to the time of discharge [4]. The woman firsts present to outpatient clinic where the doctor evaluates her and determines the best labour approach for her. Then, according to this decision the woman will either go to the vaginal delivery or caesarean section ward. The normal delivery ward is mainly run by midwives. However, women for caesarean section will encounter other cadre in the theatre such as anaesthetists, theatre nurses, general doctors and specialist doctors. The waiting time for labour varies according to women's status and gravidity. The average duration of first labour is approximately eight hours and that of subsequent labours is five hours. Culturally in Sudan, men (with the exception of health care providers) are not allowed to enter the labour ward. The final place of stay is the post-natal ward where the waiting time is two hours for vaginal delivery and three days for caesarean section mode.

A little understood component of the poor quality of care experienced by women during childbirth in facilities is disrespectful and abusive behaviour by health workers and other facility staff [4]. This problem is recognized globally, however, there is culture of silence about it everywhere. In Sudan, discussion about D&A is usually limited to personal conversation despite the psychological trauma perceived by women. Hence, this study is conducted to determine the proportion and types of disrespectful and abusive care during childbirth among women in Khartoum state in 2016 and to identify presence of protocols and interventions that promote the respectful and non-abusive care.

2. Materials and Methods

2.1. Study Design

This is a descriptive cross-sectional Hospital based study.

2.2. Study Setting

The study was conducted in Khartoum State, the capital of Sudan. The total population of the state by the end of 2014 was found to be around 6 million. Omdurman Maternity Hospital, Saad Abu-Aleila teaching hospital and Khartoum north teaching hospital were randomly selected for this study.

2.3. Study Population

The study population consisted of mothers who had given birth vaginally or via Caesarean section within the six weeks postpartum. Mothers who refused to participate in the study were excluded.

2.4. Study Sampling

$$Cochran's\ formula\left(n = Z^2 pq / e^2\right)$$

{Where n=sample size. Z=normal standard deviation =1.96. p = prevalence= 78%. q = 1-prevalence. e=margin of error = 0.05}, was used to estimate the sample size with assumptions of 5% margin of error and 95% confidence. Since there are no previous Sudanese studies in this field, the prevalence figure of 78% from an Ethiopian study was used to obtain a proxy estimate of the sample size. As a result, the study's sample size was calculated to be 263 women. The response rate was 100%.Sampling technique was multistage random sampling. The mean number of deliveries during June and July (2 months preceding data collection period) in each of the three hospitals was used to determine the number of subjects targeted in each hospitals as the result the proportion was 70.5%, 18.5%, 11% for Omdurman Maternity hospital, Khartoum north teaching hospital and Saad Abu-Aleila teaching hospital respectively. Thus 189, 49, 29 mothers were interviewed from these hospitals respectively, total coverage two days per week for each hospital from 1st of August to 8st of September 2016.

2.5. Data Collection

The main technique was interviewing the eligible cases using semi-structured pre-tested questionnaire which took approximately 25 minutes to be complete. A face to face interview with medical director of each of the three hospitals was done to identify if there is protocols and interventions that promote respectful and non-abusive care. Level of D&A during childbirth were measured under seven categories using 15 performance indicators that were pre-set by Bowser & Hill's landscape analysis, other pertinent variables (socio-demographic values, obstetric features) were addressed in the questionnaire.

2.6. Data Analysis

The SPSS 20 package was used for data analysis. Verification criteria were dichotomized responses (YES) or (NO) to objectively identify reported events of D&A. For categories of D&A with more than one verification criterion, a woman was labelled as disrespected and abused in respective of category if she reported yes to at least one of the verification criteria during childbirth. Using scoring system, we build D&A score, in which we categorized the D&A into low, medium and high level according to the number of criterion a mother could face. When a mother faced one or two forms of D&A we regard it as having low level of D&A regardless of the D&A type;

three and four criterion match the medium level; four and more match the high level. Descriptive statistics were done for all variables (frequency and percentages for socio-demographic data, obstetrics feathers and the 15 D&A criterion). Age was summarized by mean and standard deviation. To compare reporting of D&A in respect to the other variables, qui-square test was used to test the relation between the dependent variable D&A and independent ones (socio-demographic data and obstetrics feathers).

3. Results

3.1. Socio-Demographic and Obstetric Features of the Study Participants

Of the total number of women who agreed to participate in the study (n = 263), 58.6% were aged 25-35 years (mean 27.99±6 years SD). The proportion of respondents who were attended primary school was 32.3% and 83.7% were housewives. Thirty-two per cent of respondents were from western Sudan, only 2.7% were non-Sudanese and the remaining respondents were almost equally distributed from other zones of Sudan. During the study, 81% of respondents have an estimated average monthly household income of 1000-<2000SDG (1 SD equivalent to 0.067 $). Fifty-five per cent of the mothers are multigravida and 25.5% of the mothers were primi-gravida, 65.4 % reported no history of miscarriage. Nearly all respondents had attended at least one antenatal care (ANC) visit with approximately 73% had attended 5 or more ANC visits during her last pregnancy. The majority of respondents presented to the study's facilities for childbirth 84.4 %. The rest of them came for others reasons including mother or neonatal illnesses and Postpartum Follow up. Regard to mode of delivery of the participants, 50.2% was vaginal delivery and the most common companion was their mothers (51.3%).

3.2. Proportion of Disrespectful and Abusive Care during Childbirth in Khartoum State

In order to compute the overall prevalence of disrespect and abuse during childbirth, all 15 verification criteria were checked, and 203 mothers faced at least one form of disrespect and abuse; the overall proportion of disrespect and abuse during childbirth was .77. The proportion of women who had a low level of D&A was 39.3%, medium level was 32.3% and 5.6% had have high level of D&A as shown in Figure 1.

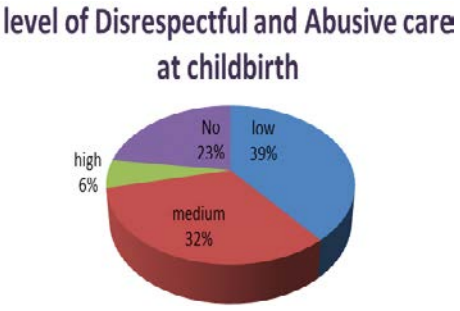

Figure 1. Level of D&A, proportion of disrespectful and abusive care during childbirth among women in Khartoum state/ Sudan, 2016

3.3. Categories and Types of Disrespect and Abuse Reported By Participants during Childbirth

3.3.1. Physical Abuse

12.5% of respondents claimed that they experienced ill-treatment characterized by physical, verbal or emotional insult. And of those, 58.3% reported that service providers used verbal insult. Percentage of Midwives who were practiced D&A was found to be the highest among other health care provider's percentages (38.3%).

3.3.2. Consented Care

With respect to women's right to information/informed consent, service providers did not introduce themselves and did not obtain consent or permission from patients prior to any procedure in 35% of cases. Periodic updates of labour progress were not given to respondents in 23.6% of cases.

3.3.3. Confidential Care

Regarding privacy and confidential care, service providers did not use curtains or other visual barriers to protect the mother's privacy during childbirth in 32.3% of cases (mostly from Khartoum north teaching hospital (53%) of total Khartoum participant when compared to 29.2%, 6.8% of Omdurman maternity hospital, Saad Abualelia teaching respectively) & 16.3% of mothers reported that their files are not stored in cabinets with limited access.

3.3.4. Dignified Care

Under this category, polite speaking was not used by service providers in 8.7% of childbirths, and 4% of respondents reported the occurrence of insults/intimidation or threats/coercion by service providers.

3.3.5. Equitable Care/Discrimination

Regard to the equitable care free of discrimination, 6.1% of the participant reported discrimination mainly due to their socio-economic status (33%). Only 2% of respondents reported the use of unclear or difficult language by providers.

3.3.6. Abandonment of Care

Regard to this category, 21.7% of mothers reported that they have been left without attention during the course of labour. Worthy noted that 46.8% of them described this delay as being reasonable, however the other 38.7% said it isn't reasonable and they can't tolerate it at all. The reminder reported it as being intentional delay. Four respondents mentioned that was no response at all.

3.3.7. Detention of Care

Only five respondents reported that birth certificate or father national identification number was detained at the health facility for not being able to pay costs associated with childbirth. As shown in Table 1.

3.4. Presence of Protocols and Interventions That Promote the Respectful and Non-Abusive Care in Study Areas

All hospital admitted that there were protocols and guidelines regulate patient's rights.

Table 1. Types of D&A, Proportion of Disrespectful And Abusive Care During Childbirth Among Women In Khartoum State/ Sudan, 2016

Type of D & A	Category	Subcategory	Frequency	Percentage
Physical Abuse	Insult	Verbal	21	58.3
		Physical	3	8.3
		Emotional	1	5.6
		Verbal and emotional	10	27.8
	Service provider	Midwife	14	38.3
		Doctor	9	26.5
		Nurse	9	26.5
		Ward cleaner	1	2.9
		Anaesthetist	1	2.9
		security team	1	2.9
	Against culture	Yes	2	0.8
		No	261	99.2
Consented care	Self-introduction	Yes	171	65.0
		No	92	35.0
	Respond to questionspolitely	Yes	229	87.1
		No	34	12.9
	Periodic updates	Yes	201	76.4
		No	62	23.6
Confidential care	Confidential files	Yes	220	83.7
		No	43	16.3
	Ward with curtain	Yes	181	68.8
		No	82	31.2
	Close curtain at during exam	Yes	178	67.7
		No	85	32.3
Dignified care	Speaks politely	Yes	240	91.3
		No	23	8.7
	Makes intimidation, threats or coercion	Yes	11	4.2
		No	252	95.8
Equitable care free of discrimination	Discrimination	Yes	16	6.1
		No	247	93.9
	Reasons for discrimination	Tribe	1	6.7
		Socioeconomic status	5	33.3
		Education	4	26.7
		Appearance	2	13.3
		All	3	20.0
Abandonment of care	Instant response	Yes	206	78.3
		No	57	21.7
	Reasonability of delay	Reasonable delay	29	46.8
		Non-reasonable delay	24	38.7
		Intentional delay	5	8.1
		No response	4	6.5
Detention of care	Presence of detention	Yes	5	1.9
		No	258	98.1

Table 2. Relationship Between Physical Abuse And Mode Of Delivery, Proportion Of Disrespectful And Abusive Care During Childbirth Among Women In Khartoum State/ Sudan, 2016

Physical abuse	Vaginal delivery	Caesarean section	Total	Exposed
YES	22	11	33	0.6667
NO	110	120	230	0.4783
Total	132	131	263	0.5019
	Point Estimate		95% Conf. interval	
Odd ratio	2.1818		.95857 5.210809 (exact)	
Attr. Frac.ex.	0.5416		-.0432206 .8080912 (exact)	
Attr. Frac. Pop	0.3611			

Chi 2 (1)=4.10 Pr>chi 2=0.0429.

3.5. Relationship between D & A and Socio-Demographic and Obstetric Features

The only statistically significant relationship was found to be between physical Abuse and mode of delivery. The p-value = 0.043 see Table 2.

4. Discussion

This study investigated the proportion and types of disrespectful and Abusive care faced by women during childbirth in different institutional settings using quantitative methods. Seventy-seven of the interviewed were identified as having faced at least one form of D&A during childbirth. Nearly, the same proportion was found in Addis Ababa, Ethiopia [5]. The recall bias in our study was minimized since most of mothers were interviewed immediately after childbirth and before discharge from the health facility. However, this time period doesn't allow for an understanding of how time and situational circumstances may affect women's perceptions of D&A which may be critical to their decision. The majority of respondents were experienced non-confidential care as a most prevalent component of D&A in the studied health facilities It's account for 79.8%, more specifically the service provider doesn't close curtain or other visual barrier during childbirth 32.3% (of these 31.2% women reported no curtain of other visual barriers within the ward). This reflects good ethical view for health care providers in Khartoum state but resources (curtain & other visual barriers) limits the standard care. Attendance of unknown & unwanted person during childbirth has been reported to be associated with dissatisfaction in women using childbirth services in Jordan [13]. The problem of maintaining privacy in the studied health facilities are due to presence of large number of medical students who might have interfered with women's privacy. This lack of intimacy may affect the continuity of care that women receive from health institution. The study by Umbeli and his colleagues that carried out in Omdurman 2013 to find why women prefer to deliver at home spelled out the same thing, lack of privacy was found to be among the main reasons that judge the mother's preferences (7).

The second prevalent type of D&A in our study was non-consented care (71.5%). The same behaviour was found in Ethiopia with all participants perceived violating right to information, informed consent & choices/preference.

In Tanzania the most reported category of D&A in post-partum interview was abandonment of care which opposes the meaning of "continues supportive care". According to systemic review on the importance of continuous support during childbirth, continuous support has clinically meaningful benefit for the health of a woman & her new-born, however this study demonstrates that 21.7% of women were left without attention during the course of childbirth (health care providers didn't come quickly when mother calls, which might negatively affect maternal & neonatal health) but most women 46.8% described this delay as being reasonable as the health care providers appropriately estimate when they will be delivered.

In our study, only 5 respondents were perceived detention in a health facility, in contrast to baby's & mother detention in previous studies [4,14,15,16], this study reported new type of detention in which birth certificates of babies or father national identification number were taken in health facility for not being able to pay costs associated with childbirth, other women were told that there will be no Caesarean section unless money was paid. All these actions might cause other mothers to refrain from giving birth in public health institutions & act as a barrier to the effective utilization of public maternity services.

There is statistically significant difference between overall insult & mode of delivery (P value<0.05). Vaginal delivery was associated with high proportion of insults (verbal, physical & conational). Women who are delivering with this mode experiencing severe pain that stresses the provider in charge. Unlikely for Caesarean section with use of anaesthesia, women had less or no pain during delivery, also the provider have greater control over timing and setting of caesarean section which let him perceive these cases as more serious, therefore behaving more professionally with the patients.

In our sample, the women mainly suffered discrimination based on their socio-economic status followed by level of education. This goes in line with focus group discussants who reiterated that being low status and less educated leads to discriminatory behaviour on the part of the health care provider because he/she knows that this woman will be more likely to accept that sort of treatment and this is why they get treated this way [4]. A report from South Africa describes 13 statements by health workers that providing explanations to less educated women are not a good use of time as they just can't understand [16].

In addition to categories of D&A presented that were pre-set by Bowser and Hill's see Table 1 and included in calculation of overall responses given by women, this study demonstrates new forms:

- Absence of information given on ward environment e.g. most of the women did not know where is the bathroom?
- Discrimination with providing better services to some women due to social relationship such as friendship, neighbourhood, recommendation by someone etc.….
- Women required to share a bed in post-natal ward which disrespect privacy and dignity and in spite of that beds were not clean and not covered with bed sheet.

All hospital admitted that there were protocols and guidelines regulate patient's rights. For instance, if a mother suffered D&A, a process starts by writing her case and presented to the Medical Manager (MM), the MM formulate small technical committee for further investigation, however, one MM reported that these cases are very few and always solved by mutual consent and never faced one case that escalated upon because Sudanese people are very forgiving and emotionally overwhelmed.

Budget and time constraints prevented us from having a larger sample which would provide greater precision of estimates & more power to discern association. Our analysis doesn't include provider or health system characteristics & thus doesn't address systemic driven of disrespectful & abusive care.

5. Conclusions

The levels of D&A during childbirth among women are very high, these findings should alert all stakeholders who aim at reducing maternal mortality. Presence of protocols that regulate respectful and non-abusive care was identified but these results raise the question about adherence to protocols. Hence. Health administrators & service providers should study and validate these protocols and their proper implementation. Also, authorities should improve quality of work environment for providers and train them on respectful maternal care. And, researchers should conduct further researches to explore providers & facility level factors as contributor to D & A.

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Ethics Approval and Consent to Participate

Ethical clearance had been received from the Department of community medicine at faculty of Medicine, U of K, Khartoum state Ministry of health department and Hospitals that were included. Participants were consented before their participation in the study.

Competing Interests

All authors declared that they have no competing interests.

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Authors' Contributions

AA and DE conceived the study and provided overall leadership. AA and DE conducted the study with supervision by AM and AA. AA coordinated the data collection and DA was responsible for overall data management. AA and DA wrote the first draft of the manuscript with support from AM and AA. All authors reviewed and approved the final manuscript.

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