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Original Research Article

## Frequency and factors associated with women's mistreatment in obstetric units in Guinea

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### ABSTRACT

**Background:** In Guinea, women's mistreatment during maternal health care remains under-documented. The aim of this study was to analyse the frequency and factors associated with mistreatment in obstetric units in Guinea.

**Methods:** This was a cross-sectional analytical study conducted in January and February 2023 in five prefectures from the country's different regions. A total of 324 women were surveyed on discharge from obstetric consultations/care. Factors associated with mistreatment were identified using multivariate logistic regression with a p value  $\leq 5\%$ . Analysis was performed using Stata 16.0.

**Results:** One-third of the women surveyed reported having suffered mistreatment in the antepartum period, during labour and/or in the postpartum period. In addition to physical and verbal violence, several other types of mistreatments were reported, including neglect, informal payment and lack of consent. Women receiving care from a midwife were six times more likely to experience physical violence than those receiving care from a physician ( $p=0.009$ ). Those who went to a prefectural hospital were three times more likely ( $p=0.05$ ) to suffer such violence than those who went to a regional hospital. Women with no formal education were 90% less likely to be verbally abused than those with higher education ( $p=0.03$ ). Women living in rural areas were 70% less likely to suffer other types of mistreatments than those living in urban areas ( $p=0.01$ ). Those who went to a rural health centre or a prefectural hospital were six times and 4.5 times more likely to be subjected to these types of mistreatments, respectively, than those who went to a regional hospital.

**Conclusions:** Prioritising training in respectful care for midwives in all health facilities, for health staff in rural health centres and prefectural hospitals, and improving the equipment of these health facilities would help to reduce mistreatment in obstetrics in Guinea.

**Keywords:** Childbirth, Clients, Guinea, Healthcare facilities, Mistreatment, Obstetrics

### INTRODUCTION

Maternal mortality is a heavy burden in sub-Saharan Africa, with the highest rate worldwide (546 per 100,000 live births).<sup>1</sup> One of the factors contributing to maternal mortality is disrespectful and abusive treatment during

pregnancy and childbirth, which can result in poorer health outcomes for women and newborns. Such abusive treatment can discourage patients from attending health facilities (using health services) or seeking advice from qualified staff, with the risk of greater exposure to unwanted pregnancies, risky behaviour, failure to detect

complications, and maternal or infant mortality.<sup>2</sup> Since 2015, the World Health Organisation (WHO) has been using the term “mistreatment” instead of “obstetric abuse”.<sup>3,4</sup>

Mistreatment in obstetrics has been reported in numerous studies, especially during childbirth. In India, a study found that public sector facilities performed worse than private facilities in terms of lack of privacy ( $p < 0.001$ ).<sup>5</sup> This was also the case in Kenya, where 32.5% of adolescent girls were mistreated during childbirth.<sup>6</sup> Another multi-country study in Guinea, Myanmar, Ghana and Nigeria revealed a varied typology of mistreatment during childbirth, including cases of physical violence, verbal abuse, abandonment and neglect.<sup>7</sup>

In Guinea, a study in 2015 confirmed the presence of mistreatment of women during childbirth in healthcare facilities; this mistreatment included physical violence, verbal abuse, abandonment and neglect.<sup>8,9</sup>

The poor material conditions of health facilities and the constraints of health staff predisposed to the occurrence of this mistreatment. Another study in 2017-2018 revealed a prevalence of 33.6% of verbal violence and 15% of physical violence in the country; other types of violence identified were lack of consent, painful vaginal examinations and lack of pain relief, as well as neglect of the parturient.<sup>7</sup> The population groups most at risk were adolescents and young people, women with no schooling and primiparous women.

However, these data on mistreatment in Guinea only cover women’s experiences during childbirth (per partum). They do not cover the antepartum or postpartum periods. As such, this article will examine the mistreatment reported in obstetric units in Guinea as a whole, and thus answer the following research question: What are the frequency and factors associated with the mistreatment of women during the provision of antenatal, delivery and postpartum care in health facilities in Guinea in 2023? The specific aim of this study was to determine the frequency of mistreatment and specifically during the antepartum, per partum and postpartum periods, by type of mistreatment, and also to assess the factors associated with this mistreatment.

## **METHODS**

### ***Study design and period***

This was a cross-sectional analytical study carried out in January and February 2023 in Guinea.

### ***Study setting***

#### *General setting*

Guinea is located in West Africa, with a population of over 13 million in 2020. Its socio-economic situation is marked by a high level of poverty (55.2% of the population live

below the poverty line). The country has a high illiteracy rate (66%), with 73% of women and 53% of men illiterate, and a primary education rate of 86%. Only 68% of households have access to drinking water and 19% to electricity. There is a high level of vulnerability among women of reproductive age (15 to 49), and poor access to sexual and reproductive health services for adolescents and young people (only 10 out of 38 health districts have such services).<sup>10</sup> The proportion of women with no formal education is high, at 68.9%, which prevents them from accessing and understanding information about their health and their sexual and reproductive rights, thereby preventing them from making free choices about their care.

### *Specific setting*

To ensure national representativeness, the study was carried out in 5 prefectures covering the country’s four natural regions: Labé, Faranah, Boké, Dabola and Guéckédou. In each of the selected prefectures, data collection covered: a regional or prefectural hospital, an urban health centre and a rural health centre. Data were collected from clients on discharge from consultations or care in obstetrics units.

### ***Study population***

Data were collected from women on discharge from obstetric units in the 5 prefectures selected.

### ***Sampling***

The rural health centre of the most populated sub-prefecture was selected in each of the 5 prefectures. These were: Sannoun (Labé), Banian (Faranah), Kolaboui (Boké), Bissikrima (Dabola) and Guéndembou (Guéckédou). The urban health centres were selected by random draw using Random Generator Plus software.

The sample size of women interviewed was calculated using the formula  $n = z^2 \times p(1-p) / e^2$ , where n: sample size, z: confidence level, e: margin of error,

p: prevalence of mistreatment (16% for physical violence) in Guinea, as reported in a previous study.<sup>7</sup>

A minimum of 206 women was therefore required for the study. To compensate for the non-response rate, this sample size was maximised by 20%, giving a total of 248 women. Based on availability, this sample was extended to 324 women.

### ***Study variables***

The dependent variables for this study were physical violence, verbal violence and other types of mistreatments (neglect, lack of consent, informal payment, lack of pain relief, lack of communication, perceived lack of hygiene, etc.). Each of these variables was dichotomous (with yes

or no modalities). The independent variables included the woman's age, religion, place of residence, level of education, occupation, number of children, history of the mistreatment, obstetric period of the mistreatment (antepartum, per partum, postpartum), the profession of the care provider (physician, midwife, nurse/technical health worker), the type of health facility where the woman used the services (regional hospital, prefectural hospital, urban health centre, rural health centre).

### Data collection

Data were collected by fifteen interviewers and supervisors through individual interviews, using a structured electronic questionnaire on tablets. Data collection took place from 20 January to 16 February 2023. The women were approached and interviewed just as they were discharged left the health facilities.

### Data analysis

The data were analysed using Stata software version 16.0. Descriptive data were presented as proportions with confidence intervals or means with standard deviations.

To identify factors associated with mistreatment, a univariate analysis was first performed using the Chi-

square test; variables with a p value  $\leq 0.20$  were included in the multivariate logistic regression model. The associated factors were analysed separately according to the respective dependent variables.

### Ethical considerations

The study protocol was approved by the National Ethics Committee for Health Research in Guinea under number 162/CNERS/21 of 01 November 2021. Before administering the questionnaire, free and informed consent was obtained from each participant.

## RESULTS

### Women's profile and reasons for using obstetric services

A total of 324 women aged between 18 and 45 were interviewed; of these, those aged between 20 and 24 were the most represented (30.9%) (Table 1). The majority were Muslim (88%) and lived in urban areas (67.0%). Women with no formal education (49.4%) and with two or more children (61.7%) were also more represented.

The main reasons why these women used obstetric services were antenatal care (50.9%), childbirth (16.9%) and obstetric ultrasound (12.9%) (Table 1).

**Table 1: Socio-demographic characteristics of clients and reasons for attending obstetric units in 15 health facilities in Guinea, 2023.**

| Variables              | Hospital<br>(n=171 clients) |      | Urban health centres<br>(n=75 clients) |      | Rural health centres<br>(n=78 clients) |      | Total<br>(n=324 clients) |      |
|------------------------|-----------------------------|------|--|------|--|------|--------------------------|------|
|                        | N                           | %    | N                                      | %    | N                                      | %    | N                        | %    |
| <b>Age (in year)</b>   |                             |      |  |      |  |      |                          |      |
| 18-19                  | 35                          | 20.5 | 10                                     | 13.3 | 12                                     | 15.4 | 57                       | 17.6 |
| 20-24                  | 42                          | 24.6 | 32                                     | 42.7 | 26                                     | 33.3 | 100                      | 30.9 |
| 25-29                  | 44                          | 25.7 | 15                                     | 20.0 | 22                                     | 28.2 | 81                       | 25.0 |
| >30                    | 50                          | 29.2 | 18                                     | 24.0 | 18                                     | 23.1 | 86                       | 26.5 |
| <b>Religion</b>        |                             |      |  |      |  |      |                          |      |
| Christian              | 28                          | 16.4 | 8                                      | 10.7 | 3                                      | 3.8  | 39                       | 12.0 |
| Muslim                 | 143                         | 83.6 | 67                                     | 89.3 | 75                                     | 96.2 | 285                      | 88.0 |
| <b>Residence</b>       |                             |      |  |      |  |      |                          |      |
| Urban                  | 140                         | 81.9 | 74                                     | 98.7 | 3                                      | 3.8  | 217                      | 67.0 |
| Rural                  | 31                          | 18.1 | 1                                      | 1.3  | 95                                     | 96.2 | 107                      | 33.0 |
| <b>Education level</b> |                             |      |  |      |  |      |                          |      |
| No formal education    | 87                          | 50.9 | 29                                     | 38.7 | 44                                     | 56.4 | 160                      | 49.4 |
| Primary                | 35                          | 20.5 | 19                                     | 25.3 | 21                                     | 26.9 | 75                       | 23.1 |
| Secondary              | 30                          | 17.5 | 16                                     | 21.3 | 12                                     | 15.4 | 58                       | 17.9 |
| Professional           | 11                          | 6.4  | 8                                      | 10.7 | 1                                      | 1.3  | 20                       | 6.2  |
| Higher                 | 8                           | 4.7  | 3                                      | 4.0  | 0                                      | 0.0  | 11                       | 3.4  |
| <b>Profession</b>      |                             |      |  |      |  |      |                          |      |
| Housewife              | 52                          | 30.4 | 17                                     | 22.7 | 20                                     | 25.6 | 89                       | 27.5 |
| Tailor                 | 36                          | 21.0 | 21                                     | 28.0 | 23                                     | 29.5 | 80                       | 24.7 |
| Trader/Shopkeeper      | 36                          | 21.0 | 18                                     | 24.0 | 18                                     | 23.1 | 72                       | 22.2 |
| Pupil/Student          | 23                          | 13.5 | 7                                      | 9.3  | 5                                      | 6.4  | 35                       | 10.8 |
| Civil servant          | 2                           | 1.2  | 0                                      | 0.0  | 1                                      | 1.3  | 3                        | 0.9  |

Continued.

| Variables                                    | Hospital<br>(n=171 clients) |      | Urban health centres<br>(n=75 clients) |      | Rural health centres<br>(n=78 clients) |      | Total<br>(n=324 clients) |      |
|--|-----------------------------|------|--|------|--|------|--------------------------|------|
|  | N                           | %    | N                                      | %    | N                                      | %    | N                        | %    |
| Others                                       | 22                          | 12.9 | 12                                     | 16.0 | 11                                     | 14.1 | 45                       | 13.9 |
| <b>Number of children</b>                    |                             |      |  |      |  |      |                          |      |
| 0 children                                   | 26                          | 15.2 | 15                                     | 20.0 | 11                                     | 14.1 | 52                       | 16.1 |
| 1 child                                      | 43                          | 25.2 | 14                                     | 18.7 | 15                                     | 19.2 | 72                       | 22.2 |
| 2 children and more                          | 102                         | 59.6 | 46                                     | 61.3 | 52                                     | 66.7 | 200                      | 61.7 |
| <b>Reason for consultation in obstetrics</b> |                             |      |  |      |  |      |                          |      |
| Prenatal consultation                        | 25                          | 14.6 | 69                                     | 92.0 | 71                                     | 91.0 | 165                      | 50.9 |
| Labour/delivery                              | 47                          | 27.5 | 3                                      | 4.0  | 5                                      | 6.4  | 55                       | 16.9 |
| Pregnancy pathology                          | 9                           | 5.3  | 3                                      | 4.0  | 8                                      | 10.3 | 20                       | 6.2  |
| Postpartum                                   | 17                          | 9.9  | 1                                      | 1.3  | 1                                      | 1.3  | 19                       | 5.9  |
| Abortion/Miscarriage                         | 5                           | 2.9  | 0                                      | 0.0  | 0                                      | 0.0  | 5                        | 1.54 |
| Obstetrical ultrasound                       | 42                          | 24.6 | 0                                      | 0.0  | 0                                      | 0.0  | 42                       | 12.9 |
| Surgery/hospitalization                      | 18                          | 10.5 | 0                                      | 0.0  | 0                                      | 0.0  | 18                       | 5.6  |

Table 2: Types and forms of mistreatment in obstetric units reported by clients.

| Types of violence/ mistreatments                       | Hospital<br>(n=62) |      | Urban health centres<br>(n=20) |      | Rural health centres<br>(n=23) |      | Total<br>(n=105) |      |
|--|--------------------|------|--------------------------------|------|--------------------------------|------|------------------|------|
|  | N                  | %    | N                              | %    | N                              | %    | N                | %    |
| <b>Physical violence</b>                               | 31                 | 50.0 | 12                             | 60   | 11                             | 47   | 54               | 51   |
| <b>Abdominal pressure</b>                              | 24                 | 77.4 | 9                              | 75.0 | 9                              | 81.8 | 42               | 77.6 |
| <b>Painful gynaecological examination</b>              | 10                 | 32.3 | 2                              | 16.7 | 4                              | 36.6 | 16               | 29.6 |
| <b>Hit</b>   | 1                  | 3.2  | 0                              | 0    | 1                              | 9.1  | 2                | 3.7  |
| <b>Pinch</b>   | 0                  | 0    | 0                              | 0    | 0                              | 0    | 0                | 0    |
| <b>Kick</b>  | 1                  | 3.2  | 0                              | 0    | 0                              | 0    | 1                | 1.9  |
| <b>Slap</b>  | 0                  | 0    | 1                              | 8.3  | 1                              | 9.1  | 2                | 3.7  |
| <b>Tying up</b>  | 0                  | 0    | 0                              | 0    | 0                              | 0    | 0                | 0    |
| <b>Other physical violence</b>                         | 2                  | 0    | 0                              | 0    | 0                              | 0    | 2                | 3.7  |
| <b>Verbal violence</b>                                 | 29                 | 46.7 | 10                             | 50.0 | 13                             | 56.5 | 52               | 49.5 |
| <b>Shout</b>   | 23                 | 79.3 | 8                              | 80   | 9                              | 69.2 | 40               | 76.9 |
| <b>Scolding</b>  | 13                 | 44.8 | 2                              | 20   | 7                              | 53.9 | 22               | 42   |
| <b>Insult</b>  | 6                  | 20.7 | 3                              | 30   | 1                              | 7.7  | 10               | 19.2 |
| <b>Threatening</b>                                     | 2                  | 6.9  | 0                              | 0    | 2                              | 15.4 | 4                | 7.7  |
| <b>Negative remarks about the woman</b>                | 5                  | 17.2 | 2                              | 20   | 1                              | 7.1  | 8                | 15.4 |
| <b>Mocking</b>   | 2                  | 6.9  | 0                              | 0    | 1                              | 7.7  | 3                | 5.8  |
| <b>Other verbal violence</b>                           | 1                  | 3.45 | 0                              | 0    | 0                              | 0    | 1                | 1.92 |
| <b>Other types of mistreatments</b>                    |                    |      |                                |      |                                |      |                  |      |
| Perceived neglect                                      | 62                 | 100  | 20                             | 100  | 23                             | 100  | 105              | 100  |
| Informal payment                                       | 40                 | 64.5 | 16                             | 80   | 18                             | 78.3 | 74               | 70.5 |
| Lack of availability of beds and consultation tables   | 29                 | 46.8 | 11                             | 55   | 11                             | 47.8 | 51               | 48.6 |
| Lack of hygiene  | 33                 | 53.2 | 6                              | 30   | 10                             | 43.5 | 49               | 46.7 |
| Women's autonomy                                       | 26                 | 41.9 | 9                              | 45   | 13                             | 56.5 | 48               | 45.7 |
| Access to water and fluids                             | 28                 | 45.2 | 6                              | 30   | 11                             | 47.8 | 45               | 42.9 |
| Lack of consent  | 32                 | 51.6 | 4                              | 20   | 2                              | 8.70 | 38               | 36.2 |
| Lack of confidentiality                                | 20                 | 32.3 | 8                              | 40   | 9                              | 39.1 | 37               | 35.2 |
| Access to water and fluids                             | 28                 | 45.2 | 6                              | 30   | 11                             | 47.8 | 45               | 42.9 |
| Lack of communication between provider and the woman   | 17                 | 27.4 | 5                              | 25   | 8                              | 34.8 | 30               | 28.6 |
| Lack of pain relief during childbirth or after surgery | 11                 | 17.7 | 1                              | 5    | 5                              | 21.7 | 17               | 16.2 |
| Lack of discretion                                     | 6                  | 9.7  | 4                              | 20   | 1                              | 4.4  | 11               | 10.5 |
| Stigma/discrimination                                  | 1                  |      | 2                              |      | 2                              |      | 5                | 4.9  |

**Table 3: Factors associated with client mistreatment in univariate analysis.**

|  | Physical violence |          |         | Verbal violence |         |         | Other types of mistreatments* |         |         |
|--|-------------------|----------|---------|-----------------|---------|---------|-------------------------------|---------|---------|
|  | OR                | IC 95%   | P value | OR              | IC 95%  | P value | OR                            | IC 95%  | P value |
| <b>Age group (in year) of woman</b>                |                   |          |         |                 |         |         |                               |         |         |
| 18-19  | 1.0               | 0.5-2.6  | 0.917   | 0.8 ns          | 0.3-2.0 | 0.588   | 1.11 ns                       | 0.6-2.2 | 0.757   |
| 20-24  | 0.7 ns            | 0.3-1.5  | 0.296   | 0.9 ns          | 0.3-1.6 | 0.400   | 0.6 ns                        | 0.3-1.1 | 0.103   |
| 25-29  | 0.9 ns            | 0.4-2.0  | 0.824   | 1.5 ns          | 0.5-2.5 | 0.701   | 0.9 ns                        | 0.4-1.6 | 0.713   |
| >30=ref  |                   |          |         |                 |         |         |                               |         |         |
| <b>Woman's religion</b>                            |                   |          |         |                 |         |         |                               |         |         |
| Christian=ref                                      |                   |          |         |                 |         |         |                               |         |         |
| Muslim   | 0.3**             | 0.2-0.7  | 0.004   | 0.4*            | 0.2-0.8 | 0.010   | 0.4*                          | 0.2-0.9 | 0.023   |
| <b>Woman's place of residence</b>                  |                   |          |         |                 |         |         |                               |         |         |
| Urban=ref  |                   |          |         |                 |         |         |                               |         |         |
| Rural  | 1.1               | 0.5-1.9  | 0.958   | 1.3             | 0.7-2.4 | 0.364   | 0.8 ns                        | 0.5-1.3 | 0.354   |
| <b>Women's education level</b>                     |                   |          |         |                 |         |         |                               |         |         |
| No formal education                                | 0.7               | 0.1-3.5  | 0.684   | 0.4             | 0.9-1.6 | 0.179   | 1.1 ns                        | 0.3-4.5 | 0.848   |
| Primary  | 1.0               | 0.2-5.3  | 0.969   | 0.8             | 0.2-3.3 | 0.736   | 1.8 ns                        | 0.4-7.2 | 0.422   |
| Secondary  | 1.6               | 0.3-8.1  | 0.590   | 0.6             | 0.1-2.7 | 0.533   | 1.8 ns                        | 0.4-7.3 | 0.441   |
| Professional                                       | 0.2               | 0.0-3.0  | 0.264   | 0.1             | 0.0-1.6 | 0.110   | 0.1                           | 0.0-1.6 | 0.110   |
| Higher = ref                                       |                   |          |         |                 |         |         |                               |         |         |
| <b>Woman's occupation</b>                          |                   |          |         |                 |         |         |                               |         |         |
| Housewife  | 0.7               | 0.1-7.6  | 0.736   | 0.5             | 0.0-5.9 | 0.588   | 1.7 ns                        | 0.1-9.5 | 0.667   |
| Tailor   | 0.2               | 0.0-2.1  | 0.160   | 0.2             | 0.0-2.3 | 0.199   | 0.5                           | 0.0-5.9 | 0.581   |
| Trader/shopkeeper                                  | 0.5               | 0.0-6.2  | 0.610   | 0.6             | 0.0-7.2 | 0.702   | 1.1 ns                        | 0.1-3.1 | 0.922   |
| Pupil/student                                      | 0.6               | 0.0-7.4  | 0.685   | 0.3             | 0.0-4.4 | 0.404   | 0.9 ns                        | 0.1-1.2 | 0.946   |
| Civil servant = ref                                |                   |          |         |                 |         |         |                               |         |         |
| Others   | 0.1               | 0.1-1.5  | 0.095   | 0.2             | 0.1-1.2 | 0.103   | 0.5                           | 0.0-0.0 | 0.661   |
| <b>Number of the woman's children</b>              |                   |          |         |                 |         |         |                               |         |         |
| 0=ref  |                   |          |         |                 |         |         |                               |         |         |
| 1  | 2.9               | 0.9-9.4  | 0.076   | 3.6             | 0.9-3.3 | 0.056   | 1.3 ns                        | 0.6-2.9 | 0.446   |
| >2   | 2.6               | 0.9-7.8  | 0.079   | 3.6*            | 1.1-2.1 | 0.040   | 1.4 ns                        | 0.7-2.7 | 0.367   |
| <b>History of mistreatment of women</b>            |                   |          |         |                 |         |         |                               |         |         |
| No=ref   |                   |          |         |                 |         |         |                               |         |         |
| Yes  | 11.7***           | 5.5-24.8 | <0.001  | 12.6***         | 5.9-6.7 | <0.001  | Vide                          |         |         |
| <b>Obstetrical period affected by mistreatment</b> |                   |          |         |                 |         |         |                               |         |         |
| Antepartum   | 0.2*              | 0.1-0.4  | 0.001   | 0.3*            | 0.1-0.6 | 0.001   | 0.4                           | 0.2-0.8 | 0.005   |
| Perpartum ref                                      |                   |          |         |                 |         |         |                               |         |         |
| Postpartum   | 0.6               | 0.2-1.9  | 0.398   | 1.1             | 0.3-3.4 | 0.884   | 0.9                           | 0.3-2.5 | 0.785   |
| <b>Profession of care provider</b>                 |                   |          |         |                 |         |         |                               |         |         |
| Physician =ref                                     |                   |          |         |                 |         |         |                               |         |         |
| Midwife  | 3.9**             | 1.5-10.2 | 0.006   | 1.9             | 0.9-4.4 | 0.105   | 0.8                           | 0.5-1.5 | 0.550   |
| Nurse  | 1.4               | 0.3-6.1  | 0.676   | 1.1             | 0.3-4.0 | 0.847   | 0.7                           | 0.3-1.8 | 0.531   |
| <b>Type of healthcare facilities</b>               |                   |          |         |                 |         |         |                               |         |         |
| Regional hospital =ref                             |                   |          |         |                 |         |         |                               |         |         |
| Prefectural Hospital                               | 2.5*              | 1.1-5.6  | 0.023   | 1.3             | 0.6-2.9 | 0.505   | 4.2***                        | 2.2-8.1 | <0.001  |
| Urban health centres                               | 1.4               | 0.4-1.8  | 0.480   | 0.9             | 0.4-2.0 | 0.715   | 1.2                           | 0.6-2.5 | 0.522   |
| Rural health centres                               | 1.2               | 0.4-1.6  | 0.717   | 1.1             | 0.5-2.4 | 0.806   | 1.4                           | 0.7-2.8 | 0.289   |

\*p<0.05, \*\*p<0.01, \*\*\*p<0.001; Note: OR: Crude Odds ratio. CI 95%: 95% confidence interval; \*Other types of mistreatments: Neglect. Informal payment. Lack of confidentiality. Lack of access to water and fluids.

### Frequency of mistreatment

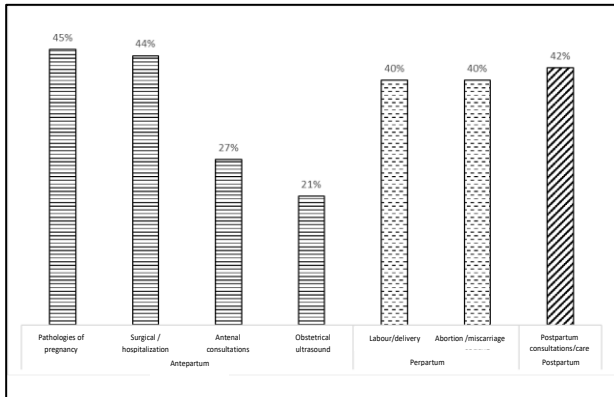
One third (32.7%) or 106 of the clients who had attended obstetric units reported having been subjected to acts of mistreatment, with proportions varying from 36.3% in hospitals to 26.7% in urban health centres and 30.8% in rural health centres.

### Proportion of mistreatment cases according to reasons for consultation

Mistreatment was reported in all aspects of consultations and care in obstetric units, whether antepartum (59.3%), per partum (48.8%) or postpartum (5.9%). In the antepartum period, mistreatment was observed during



consultations for pregnancy-related pathologies (45%), surgical care or hospitalisation (44%), routine antenatal consultations (27%) and obstetric ultrasound visits (21%) (Figure 1). In the per partum, mistreatment was observed during labour or delivery (40%) and abortion or miscarriage care (40%). Mistreatment during postpartum consultations/care was reported by 42% of women.



**Figure 1: Cases of mistreatment by reason for consultation.**

**Types of mistreatments in obstetrics**

Table 2 shows the frequency of mistreatment by type. Physical and verbal violence were reported by 51% and 49.5% of the women respectively. Other significant types of mistreatments were perceived neglect (100%), informal payment (70.5%), lack of hygiene (46.7%), lack of consent (36.2%), lack of confidentiality (35.2%) and lack of pain relief (16.2%).

Among physical violence, the main forms cited were abdominal pressure and painful gynaecological examination (64.7% and 24.6% respectively). As for

verbal violence, the main forms reported were “shouting” (49%), “scolding” (24.7%) and rarely “insulting” (11.2%).

**Factors associated with mistreatment in obstetrics**

*Factors associated with physical violence*

In the univariate analysis, the factors associated with the occurrence of physical violence during obstetric care were the woman’s religion, her profession, her history of mistreatment, the obstetric period concerned by the mistreatment, the profession of the healthcare provider and the type of health facility used by the woman (Table 3).

However, in multivariate analysis, only the obstetric period concerned by the mistreatment and the profession of the healthcare provider were associated with physical violence (Table 4). Women receiving obstetric care during the antepartum period were 70% less likely to experience physical violence, compared with women receiving care during the perpartum period (ORa: 0.3; 95% CI: 0.1-0.7; p=0.01). Women receiving care from a midwife were 4.5 times more likely to experience physical violence than those receiving care from a doctor (ORa: 4.5; 95% CI: 1.4-15.1; p=0.014).

*Factors associated with verbal violence*

The factors associated with verbal violence in the univariate analysis were the woman’s religion, the number of children she had, her history of mistreatment and the obstetric period concerned by the mistreatment (Table 3). However, in multivariate analysis, only the woman’s level of education was the main factor associated with verbal violence; those with no education were 90% less likely to experience verbal violence, compared with those with higher education (ORa: 0.1; 95% CI: 0.0-0.8; p=0.027) (Table 4).

**Table 4: Multivariate analysis of factors associated with client mistreatment.**

| Variables                           | Physical violence (Iroc = 0.870 = 87%) |         |         | Verbal violence (Iroc = 0.837 = 84%) |         |         | Other types of mistreatments (Iroc = 0.731 = 73%) |         |         |
|-------------------------------------|--|---------|---------|--------------------------------------|---------|---------|---|---------|---------|
|                                     | OR                                     | IC 95%  | P value | OR                                   | IC 95%  | P value | OR  | IC 95%  | P value |
| <b>Age group (in year) of woman</b> |  |         |         |                                      |         |         |   |         |         |
| 18-19                               | 1.6 ns                                 | 0.4-7.2 | 0.526   | 1.3 ns                               | 0.3-5.7 | 0.719   | 1.6 ns  | 0.5-5.1 | 0.452   |
| 20-24                               | 1.0 ns                                 | 0.4-3.0 | 0.943   | 0.9 ns                               | 0.3-2.6 | 0.910   | 0.9 ns  | 0.4-2.0 | 0.788   |
| 25-29                               | 0.7 ns                                 | 0.3-1.9 | 0.534   | 1.0 ns                               | 0.4-2.5 | 0.936   | 0.9 ns  | 0.4-1.8 | 0.710   |
| >30=ref                             |  |         |         |                                      |         |         |   |         |         |
| <b>Woman’s religion</b>             |  |         |         |                                      |         |         |   |         |         |
| Christian and other=ref             |  |         |         |                                      |         |         |   |         |         |
| Muslim                              | 0.4 ns                                 | 0.1-1.4 | 0.158   | 0.4 ns                               | 0.1-1.1 | 0.086   | 0.6   | 0.2-1.6 | 0.332   |
| <b>Woman’s place of residence</b>   |  |         |         |                                      |         |         |   |         |         |
| Urban =ref                          |  |         |         |                                      |         |         |   |         |         |
| Rural                               | 0.6 ns                                 | 0.2-2.2 | 0.440   | 1.0 ns                               | 0.3-3.3 | 0.967   | 0.3*  | 0.1-0.8 | 0.019*  |
| <b>Women’s education level</b>      |  |         |         |                                      |         |         |   |         |         |
| No formal education                 |  |         |         |                                      |         |         |   |         |         |
| No formal education                 | 0.1 ns                                 | 0.0-1.1 | 0.063   | 0.1*                                 | 0.0-0.8 | 0.027   | 0.8 ns  | 0.2-4.3 | 0.845   |
| Primary                             | 0.1 ns                                 | 0.0-1.4 | 0.096   | 0.2 ns                               | 0.0-1.7 | 0.146   | 1.3 ns  | 0.2-7.2 | 0.741   |

Continued.

| Variables  | Physical violence (Iroc = 0.870 = 87%) |          |         | Verbal violence (Iroc = 0.837 = 84%) |          |         | Other types of mistreatments (Iroc = 0.731 = 73%) |          |         |
|--|--|----------|---------|--------------------------------------|----------|---------|---|----------|---------|
|  | OR                                     | IC 95%   | P value | OR                                   | IC 95%   | P value | OR  | IC 95%   | P value |
| Secondary  | 0.2 ns                                 | 0.0-2.1  | 0.287   | 0.2 ns                               | 0.0-1.3  | 0.094   | 1.0 ns  | 0.2-5.4  | 0.971   |
| Professional                                       | 0.1 ns                                 | 0.0-2.5  | 0.166   | 0.1 ns                               | 0.0-1.4  | 0.086   | 0.1   | 0.0-1.6  | 0.109   |
| Higher =ref  |  |          |         |                                      |          |         |   |          |         |
| <b>Woman's occupation</b>                          |  |          |         |                                      |          |         |   |          |         |
| Housewife  | 0.8 ns                                 | 0.0-21.4 | 0.920   | 0.4 ns                               | 0.0-11.2 | 0.622   | 0.6   | 0.0-14.3 | 0.750   |
| Tailor   | 0.3                                    | 0.0-8.7  | 0.486   | 0.2 ns                               | 0.0-6.5  | 0.392   | 0.2   | 0.0-4.7  | 0.311   |
| Trader/shopkeeper                                  | 0.7 ns                                 | 0.0-18.1 | 0.841   | 0.6 ns                               | 0.0-14.9 | 0.755   | 0.4 ns  | 0.0-9.8  | 0.583   |
| Pupil/student                                      | 0.7 ns                                 | 0.0-17.4 | 0.828   | 0.3 ns                               | 0.0-7.4  | 0.458   | 0.3 ns  | 0.0-7.8  | 0.482   |
| Civil servant =ref                                 |  |          |         |                                      |          |         |   |          |         |
| Others   | 0.1                                    | 0.0-3.0  | 0.179   | 0.2 ns                               | 0.0-3.9  | 0.256   | 0.3 ns  | 0.0-7.8  | 0.514   |
| <b>Number of the woman's children</b>              |  |          |         |                                      |          |         |   |          |         |
| 0=ref  |  |          |         |                                      |          |         |   |          |         |
| 1  | 1.7 ns                                 | 0.4-7.5  | 0.453   | 2.6 ns                               | 0.6-11.9 | 0.218   | 1.3 ns  | 0.4-3.6  | 0.671   |
| >2   | 3.2 ns                                 | 0.6-16.0 | 0.153   | 3.0 ns                               | 0.6-15.5 | 0.190   | 1.5 ns  | 0.5-4.6  | 0.509   |
| <b>Obstetrical period affected by mistreatment</b> |  |          |         |                                      |          |         |   |          |         |
| Antepartum   | 0.3*                                   | 0.1-0.7  | 0.010   | 0.4 ns                               | 0.2-1.0  | 0.061   | 0.5 ns  | 0.2-1.1  | 0.069   |
| Perpartum  |  |          |         |                                      |          |         |   |          |         |
| Postpartum   | 1.0                                    | 0.2-3.9  | 0.956   | 2.2 ns                               | 0.6-8.3  | 0.229   | 1.4 ns  | 0.4-4.8  | 0.592   |
| <b>Profession of care provider</b>                 |  |          |         |                                      |          |         |   |          |         |
| Physician=ref                                      |  |          |         |                                      |          |         |   |          |         |
| Midwife  | 4.5*                                   | 1.4-15.1 | 0.014   | 1.5 ns                               | 0.5-4.4  | 0.436   | 0.9 ns  | 0.4-2.0  | 0.704   |
| Nurse  | 3.1                                    | 0.5-19.0 | 0.210   | 1.4 ns                               | 0.3-6.6  | 0.697   | 1.2 ns  | 0.4-4.0  | 0.741   |
| <b>Type of healthcare facilities</b>               |  |          |         |                                      |          |         |   |          |         |
| Regional hospital=ref                              |  |          |         |                                      |          |         |   |          |         |
| Prefectural hospital                               | 2.2                                    | 0.7-6.3  | 0.135   | 1.0 ns                               | 0.3-2.7  | 0.953   | 3.6***  | 1.5-8.0  | 0.002   |
| Urban health centres                               | 1.5 ns                                 | 0.5-5.0  | 0.459   | 1.1 ns                               | 0.4-3.7  | 0.796   | 1.7 ns  | 0.7-4.42 | 0.283   |
| Rural health centres                               | 2.3 ns                                 | 0.5-11.0 | 0.314   | 1.6 ns                               | 0.3-6.9  | 0.528   | 4.8*  | 1.4-17.1 | 0.015   |

\*p<0.05, \*\*p<0.01, \*\*\*p<0.001; Note: OR: Crude Odds ratio. CI 95%: 95% confidence interval; \*Other types of mistreatments: Neglect. Informal payment. Lack of confidentiality. Lack of access to water and fluids.

### Factors associated with other types of mistreatments

In univariate analysis, the factors associated with other types of mistreatments were the obstetrical period concerned by the mistreatment and the type of health facility used (Table 3). In multivariate analysis, only the place of residence and the type of healthcare facility were associated with other types of mistreatments; women living in rural areas were 70% less likely to suffer such mistreatment than those living in urban areas (ORa: 0.3; 95% CI: 0.1-0.8; p=0.019) (Table 4). Those who went to a rural health centre or a prefectural hospital were six times more likely (ORa: 4.8; 95% CI: 1.4-17.1; p=0.015) and 3.6 times more likely (ORa: 3.6; 95% CI: 1.5-8.0; p=0.002) to suffer such mistreatment, respectively, compared with those who went to a regional hospital.

## DISCUSSION

Our study revealed that mistreatment is indeed present in obstetric units in Guinea, as reported by a third (32.7%) of the women. Mistreatment occurred during the different obstetrical periods, i.e. antepartum, per partum and postpartum. Physical and verbal violence (respectively 51.0% and 49.5% of the women surveyed) were among the

main types of mistreatments. The other types of mistreatments were client neglect (cited by almost all the women), informal payment (70.5%), lack of consent (36.2%) and lack of confidentiality (35.2%). Provider's profession and the type of health facility were associated with the occurrence of physical violence, while the woman's level of education was the main factor associated with verbal violence. Residence and type of health facility were the factors associated with other types of mistreatments.

Our study shows the frequency of mistreatment in obstetrics in Guinea. This frequency concerns the antepartum, per partum and postpartum periods. The high frequency of mistreatment in obstetric units has also been reported by many other authors. A multi-country study (Ghana, Guinea, Myanmar and Nigeria) revealed that more than a third of women were victims during childbirth.<sup>7</sup>

The types of mistreatments reported by other authors are similar to our findings, including physical and verbal violence, neglect, informal payment, and lack of privacy/confidentiality and consent.<sup>5,6,13</sup> A study in Kawa Zulu Nathal in South Africa on access to post-abortion care

cited other types such as stigma, lack of analgesics and early discharge from hospital.<sup>14</sup> In Brazil, the authors found a causal association between mistreatment during childbirth and reduced use of postnatal health services, both for women and newborns.<sup>15</sup>

In the antepartum period too, mistreatment has been cited as an obstacle. In Malawi, for example, the patient-healthcare provider relationship appears to have a major impact on participation in antenatal consultations. Mothers reported that health workers often mistreated or belittled them during visits.<sup>16</sup> Informal payment is another obstacle to pregnant women attending health facilities, according to authors in Mozambique.<sup>17</sup>

A South African study also reported that teenage girls felt mistreated and discriminated against by healthcare staff, which discouraged them from attending antenatal consultations. The authors suggest that health workers should receive support and regular training in the provision of youth-friendly antenatal care.<sup>18</sup> Another multivariate review study of women's experience of antenatal care identified poor relationships between women and health care providers and failure to adhere to professional standards of care as the main issues.<sup>19</sup>

The high frequency of mistreatment in obstetrics in Guinea is thought to be linked to the lack of competence of health providers in respectful maternity care. Yet, mistreatment during provision of obstetric services could result in women being reluctant or even refusing these services. This could have negative repercussions on maternal and foetal morbidity and mortality.

According to our results, women living in rural areas and those with no formal education were more likely to suffer mistreatment in obstetrics. Similar results have been reported in Ethiopia, Palestine and India.<sup>20-22</sup> Our results could be explained by the lack of knowledge among rural and uneducated women (compared with educated and urban women) about their rights to sexual and reproductive health care and respectful maternity care. This lack of knowledge would therefore influence their perceptions of the behaviour of healthcare providers, leading them to under-report cases of mistreatment.

This study also shows that, according to women's self-reports, midwives are more likely to mistreat women during care. A study in Sweden also reported a lack of trust and safety when women experienced staff with poor attitudes and using jargon including threats of violence from midwives and also when the experience during childbirth was compared to that of rape.<sup>23</sup> The high susceptibility of midwives to abuse during care could be explained by the fact that their main duties are more related to obstetric care, compared to doctors or nurses. However, the lack of training in patient-centred care and respectful maternity care among this group of providers could also explain this susceptibility. The issue at stake in women's exposure to mistreatment when using midwives is

women's poor perception of and reluctance towards the services offered by midwives.

Lastly, our results suggest that among health facilities, rural health centres were the most associated with the occurrence of mistreatment. This could be explained by the lack of human resources, the high workload and the lack of equipment in such facilities. This implies a lack of quality obstetric care in the country's rural health centres.

The strength of this study is that it covers services during the different obstetric periods (antepartum, per partum and postpartum), unlike previous work which only covered childbirth in Guinea. It was also carried out in the various regions of the country, thus making it possible to take into account the various regional realities in relation to the phenomenon of mistreatment of women in obstetrics.

As a limitation, it should be noted that the data in this study were only collected from women when they discharged from the health facilities. These data could therefore be strengthened by direct observation during the services provided.

### ***Implications for research and practice***

Future research on mistreatment in obstetric units should cover more healthcare facilities and consider using direct observation of services provision.

For practices, the following recommendations should be taken into account: introduce and develop training for health workers in respectful maternal health care, with a focus on midwives and staff in rural health centres and prefectural hospitals. Raise awareness among rural women with no formal education of their rights to sexual and reproductive health in general and to respectful obstetric care in particular, while guiding them on what to do in the event of mistreatment in obstetrics. Improve the equipment of health facilities, particularly rural health centres and prefectural hospitals, in terms of the provision of obstetric care

### **CONCLUSION**

Mistreatment of women in obstetric units is a real health problem in Guinea, reported by a third (32.7%) of women consulting in obstetric units. This mistreatment was observed in the antepartum, per partum and postpartum periods. It included verbal and physical mistreatment as well as various other types of mistreatments. The factors associated with their occurrence were the place of residence, woman's education level, the profession of the health care provider and the type of health care facility.

### ***Recommendations***

To reduce the phenomenon of mistreatment in obstetric units in Guinea, this study suggests training health workers, particularly midwives, in respectful maternal



health care, as well as improving equipment and increasing staffing levels in health facilities, mainly rural health centres and prefectural hospitals. It also recommends that rural women with no formal education be made aware of their rights to sexual and reproductive health in general, and to respectful obstetric care in particular.

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