Informal Payments during Childbirth: Magnitude, Determinants and Strategies for Improving Maternal and Child Health at Public and Non-Profit Hospitals in Uganda

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Abstract: Background: Informal payments during childbirth is a growing concern in many developing countries including Uganda yet there is limited understanding of their magnitude and determinants in Public and Private Not for Profit (PNFP) hospitals in Uganda. Aim: To establish the level of private health expenditure, in the form of informal payments and their determinants, for care during childbirth in public and PNFP hospitals in Kasese district, Uganda. Methods: The study population consisted of 389 mothers who had just given birth from Bwera and Kilembe Mines Hospital, selected through systematic random sampling. Results: Over 31% and 3.6% of the mothers in the Public and PNFP Hospitals respectively gave informal payments during childbirth. The average total informal payments given in the Public Hospital was Uganda Shillings (UGX) 65,750 while that in the PNFP Hospital was UGX11,000. Thirty-six percent and 15.1% of the mothers in the Public and PNFP Hospitals respectively also offered gifts. The average total amount for the gifts was UGX 10,500; and 12,600 in the Public and PNFP Hospitals respectively. Gifts and informal payments constituted 48% of the total costs paid during childbirth—which are never reflected in the official payment system. Informal payments were higher for the public hospital (p<0.001); deliveries made by caesarean section (p<0.001); and admissions beyond three days (p=0.003). Conclusion: In addition to official payments during childbirth, mothers incur costs in form of gifts and informal payments in both Public and PNFP hospitals. They form an important part of the private health expenditure that is rarely acknowledged in planning for maternal health services.

Keywords: Informal payments, childbirth, maternal and child health, health financing, Uganda

1. Background

Informal payments for health care are a growing concern in many developing countries including Uganda. They are very common during childbirth (Ensor 2004; Gaal and McKee 2005; Uganda Inspectorate of Government (IoG), 2008). While some patients give informal payments willingly for reasons such as to express gratitude or expedite care, other patients feel compelled to make these ‘unofficial’ payments to get quality services or even any care at all (Allin et al., 2006; Lewis, 2007). Although these payments have a negative effect on equity and efficiency of health care provision, they are often neglected by policy makers (Kornai 2000; Cohen, 2012) especially in estimating the cost of health care. Health workers in Uganda are prohibited, by policy, from taking informal payments. Health services including care during childbirth, are meant to be provided free of charge in public hospitals. The Private not-for-profit (PNFP) hospitals on the other hand charge user fees on all their services except those paid for through government subsidies or by another interested party like a donor (Ministry of Health (MoH), 2014). Despite this, the Government of Uganda acknowledges that informal payments are rampant among frontline health workers (MoH, 2011). According to the third national integrity survey, 43% of the households consider health workers as corrupt; and that informal payment is among the commonest forms of corruption in hospitals (IoG, 2008). However, no studies have estimated the magnitude of informal payments incurred during child birth. Also, the comparison of determinants of informal payments during care for childbirth across public and PNFP hospitals remains largely unexplored. Therefore, this study sought to address this information gap.

1.1. The Problem Statement

Paying for childbirth care services places a high financial burden on women (WHO, 2010). In Uganda, a considerable amount of this money paid for childbirth care in hospitals is in form of informal payments (Levin et al., 2000). They are thought to negatively affect the quality of care offered to mothers during labor and delivery. For example, there
are many incidences reported in the media of mothers who were neglected for failure to pay informal payments demanded by health workers. Two reported maternal deaths and one case of uterine rapture have since been attributed to failure of the mothers to raise and pay the informal payments so demanded (The Observer, 5 August 2012; Daily Monitor, July 14, 2014; Kaye et al., 2014). Whereas these cases might be an extreme, it’s anticipated that many more women silently suffer in the hands of the health workers who demand such payments across many hospitals—both public and PNFP.

Informal payments also increase patients’ costs for care; hinder access to and reduce demand for care. They may also lead to patients to forego or delay care (Uka, 2013). Therefore, if not effectively addressed, these payments could hinder utilization of hospital delivery services that have persistently remained low at 58% much below the national target of 90% (MoH, 2014).

However, there is limited understanding about the extent to which informal payments for care during childbirth do occur in public and PNFP hospitals in Uganda in general and Kasese district in particular. This lack of information makes the estimation of the actual size of private health expenditures and determination of future funding requirements for maternal health difficult for policy decision makers.

Also, there is a dearth of knowledge about whether and how informal payments for care during childbirth occur in both public and PNFP hospitals; and a comparison for their determinants in the two settings. This makes designing strategies to reduce informal payments for maternity services hard. This study therefore contributed to the body of knowledge on understanding how much mothers spent on informal payments; and why a mother could accept or reject offering an informal payment during childbirth.

1.2. Study Objectives

The broad objective of the study was to establish the level of private health expenditure in the form of informal payments; and their determinants for care during childbirth across public and PNFP hospitals in Kasese district. Specifically, the study set out:

- To determine the financial costs, in form of informal payments, to consumers for childbirth services in Bwera and Kilembe Mines Hospitals in Kasese District
- To establish the determinants of informal payments for childbirth services in public and private not for profit hospitals in Kasese District
- To identify strategies that could be employed to reduce informal payments for delivery care services in hospitals

2. Methodology

2.1. Study Design

This was a comparative cross-sectional study conducted between July 2015 to April 2016. It applied both qualitative and quantitative techniques of data collection. Given the sensitivity of the study, the triangulation of methods helped to complement each other and filled any gaps had one approach been used.

2.2. Study Area

The study was conducted in Bwera and Kilembe Mines Hospitals in Kasese District, Western Uganda. Bwera hospital is the only (Public) government owned hospital in the district. It was started in 1995. It has a bed capacity of 120 beds. It offers a wide range of preventive, curative and rehabilitation services. This includes maternal, new born and child health services. Kilembe Mines Hospital, on the other hand is a general PNFP hospital of 100-bed capacity. It has been in operation since 1951, when it began as a medical facility supporting the mine personnel, and has been serving the general community with preventive, curative and rehabilitation services. It is jointly managed by the Catholic Diocese of Kasese and Kilembe Mines.

2.3. Study Population

The primary study respondents were mothers who had delivered in Bwera and Kilembe Mines Hospital, after they had formally been discharged, but before they left the hospital. The secondary respondents included health workers, mother’s attendants and the administration of the hospitals.

2.4. Study Variables

The study dependent variable was the amount of informal payments made during the current childbirth. The independent variables included: demographic information such as age, gender, marital status, level of education; main occupation, average monthly household income; type of delivery; type of hospital; and parity.

2.5. Sampling Procedures and Sample Size Determination

Bwera and Kilembe Mines Hospitals were included into the study purposively being the only government and PNFP hospitals in Kasese District. The study sample for each day was selected through systematic random sampling. The sample size for the quantitative data was determined using the statistical formula published by Keish & Leslie (1996)

\[ N = \frac{p(1-p)Z^2}{d^2} \]
Where \( N \) is the required sample size
\[ \text{p} \] is the estimated prevalence of informal payments in Kasese (i.e. 50% since it’s unknown)
\( Z \) is the confidence level at 95% (i.e. 1.96)
\( d \) is the acceptable degree of error (5% in this case).

\[ N = \frac{0.5(1-0.5)}{0.05^2} \times 1.96^2 = 0.09 \times 3.8416 = 0.9604 \times 384 = 384 \]

However, data was collected from 389 respondents. Based on the average deliveries that occurred in Bwera and Kilembe Mines Hospital in Financial years 2013 and 2014, the proportions of respondents for each hospital was 1.8:1 respectively. Thus data was collected from 250 respondents in Bwera Hospital and 139 from Kilembe Mines Hospital.

2.6. Data Collection and Quality Control Procedures

Pre-tested and interviewer administered questionnaire was used to collect data from mothers. Semi structured interview guide and focus group discussion guide were used to collect data from hospital administrators, and health workers/caregivers respectively. Research assistants were trained in the methodology, tools and ethical considerations for the study. A local language (Lhukonzo) was used to ensure that the respondents understood and give the correct responses. Validation of data was done on daily basis and any observed discrepancies addressed immediately. The principle investigator supervised the overall data collection.

2.7. Data Processing and Analysis

Data checking and cleaning: This was done by the researcher on daily basis. Quantitative data was entered Epi Data 3.1 and analyzed using STATA 12.0.

Univariate analysis: This was used to establish frequency and percentage distributions of the different characteristics in the study population; the T-test was used to compare the means. Bivariate analysis: This was used to establish the statistical associations between the dependent and independent variables using cross tabulations, the chi square test and ANOVA where the dependent variable was continuous. Multivariate analysis: Whenever needed multivariate analysis was used to determine whether the observed association between the dependent variable and any variable was causal or spurious (false) by controlling for confounding and interaction between variables. This was based on the likelihood test p-values; and the adjusted odds ratios.

2.8. Qualitative Data

On the other hand, qualitative data was transcribed and translated. It was thematically analyzed progressively as it was collected. Raw data was organized and ordered; coded and sorted. The information was classified according to themes and domains and presented in form of taxonomies that reveal emerging patterns.

2.9. Ethical Considerations

2.9.1. Approval of the Study Protocols

The researcher sought ethical approval from Ethics Review Committee of the School of Research and Postgraduate Studies, Uganda Christian University.

2.9.2. Permissions

As part of the District entry process, the researcher sought permission to conduct the study in the District from Chief Administrative Officer, through the District Health Officer, Kasese District Local Government. In order to access the study population, the researcher sought authorization from the respective Medical Superintendents of Bwera and Kilembe Mines Hospitals.

2.9.3. Voluntary Participation and Informed Consent

The researcher ensured that all respondents participated voluntarily and consented to do so. The researcher provided all the necessary information to facilitate this. This included explaining: the purpose of the study; what was involved in terms of time and tasks; what would happen to the data collected from them; who would see it; how it may be used; and the safeguards that will be implemented to protect confidentiality. The other information included the risks and benefits there may be in participating; who is associated with the research – investigators, supervisors, sponsors, and institutions; and how they could be contacted in case of need; and that they had the right to opt out of the study.

2.9.4. Privacy and Confidentiality

One-on-one interviews were conducted in a confidential setting outside but near the hospital. Anonymous questionnaires were used to collect data. The researcher safeguarded confidentiality of completed questionnaires which were kept locked.

2.9.5. Social and Cultural Sensitivity

The researchers took into consideration the local language commonly used (Lhukonzo) to facilitate communication. The questionnaire was thus translated. The interviews were conducted after the mother has been
discharged in order not to interrupt the care being given but also to ensure the mother becomes freer to disclose any sensitive information.

3. Results and Discussions

3.1. Description of the Respondents

Majority 250 (64.27%) of the respondents were from the public hospital, i.e. Bwera Hospital. Majority 144 (37.02%) of the respondents were in the age group of 20-24. More females (12.34%) had no formal education compared to 7.2% for their spouses. More than a quarter (25.19%) of the mothers earned a monthly income of less than Uganda Shillings (UGX) 50,000 while only 2.06% of their spouses earned less than UGX 50,000. Details of the demographic and other characteristics are shown in Table 1. Note that UGX3,700 is equivalent to 1 $.

| Characteristic                      | Freq (n) | Percentage (%) |
|-------------------------------------|----------|----------------|
| Hospital of delivery                |          |                |
| Kilembe                             | 250      | 64.27          |
| Bwera                               | 139      | 35.73          |
| Age group of respondents            |          |                |
| 15-19                               | 79       | 20.31          |
| 20-24                               | 144      | 37.02          |
| 25-29                               | 113      | 29.05          |
| 30-34                               | 38       | 9.77           |
| 35-39                               | 13       | 3.34           |
| 40-44                               | 2        | 0.51           |
| Marital status                      |          |                |
| Married                             | 336      | 86.38          |
| Single                              | 35       | 9.00           |
| Separated                           | 14       | 3.60           |
| Widowed                             | 4        | 1.03           |
| Occupation of mother                |          |                |
| Farmer                              | 198      | 50.90          |
| Trader                              | 108      | 27.76          |
| Civil servant                       | 40       | 10.28          |
| Professional in private sector      | 9        | 2.31           |
| Student                             | 16       | 4.11           |
| House wife                          | 18       | 4.63           |
| Occupation of Spouse                |          |                |
| Farmer                              | 124      | 31.88          |
| Trader                              | 126      | 32.39          |
| Civil servant                       | 64       | 16.45          |
| Professional in private sector      | 32       | 8.23           |
| Student                             | 37       | 9.51           |
| Unspecified                         | 6        | 1.54           |
| Level of Education of mother        |          |                |
| No formal education                 | 48       | 12.34          |
| Primary level                       | 147      | 37.79          |
| Secondary level                     | 132      | 33.93          |
| Tertiary institution                | 45       | 11.57          |
| University                          | 16       | 4.11           |
| Unspecified                         | 1        | 0.26           |
| Level of Education of spouse        |          |                |
| No formal education                 | 28       | 7.20           |
| Primary level                       | 95       | 24.42          |
| Secondary level                     | 127      | 32.65          |
| Tertiary institution                | 76       | 19.54          |
| University                          | 22       | 5.66           |
| Unspecified                         | 41       | 10.54          |
| Monthly income of mother            |          |                |
| 4,000-49,000                        | 98       | 25.19          |
| 50,000-99,000                       | 78       | 20.05          |
| 100,000-290,000                     | 128      | 32.90          |
| 300,000-490,000                     | 47       | 12.08          |
| 500,000-690,000                     | 8        | 2.06           |
| 700,000 and above                   | 1        | 0.26           |
| Unspecified                         | 29       | 7.46           |
### Table 1: Characteristics Of The Respondents

| Characteristic                      | Freq (n) | Percentage (%) |
|-------------------------------------|----------|----------------|
| Monthly income of Spouse            |          |                |
| 4,000-49,000                        | 8        | 2.06           |
| 50,000-99,000                       | 43       | 11.05          |
| 100,000-290,000                     | 130      | 33.42          |
| 300,000-490,000                     | 111      | 28.53          |
| 500,000-690,000                     | 29       | 7.46           |
| 700,000 and above                   | 8        | 2.06           |
| Unspecified                         | 60       | 15.42          |
| Parity of mother                    |          |                |
| 1                                   | 121      | 31.11          |
| 2                                   | 118      | 30.33          |
| 3                                   | 63       | 16.20          |
| 4                                   | 43       | 11.05          |
| 5                                   | 24       | 6.17           |
| 6                                   | 9        | 2.31           |
| 7                                   | 5        | 1.29           |
| 8                                   | 4        | 1.03           |
| 9                                   | 1        | 0.26           |
| Unspecified                         | 1        | 0.26           |

#### 4.2. Costs Incurred During Childbirth

#### 4.2.1. Types of Costs

Mothers from both the public (government) and PNFP hospitals incurred costs in form of official payment, gifts and informal payments as shown in table 2.

| Did You Pay...? | Bwera Gov't Hospital Freq (%) | Kilembe Mines PNFP Hospital Freq (%) | Total Freq (%) |
|-----------------|--------------------------------|-------------------------------------|----------------|
| Official payments? |                                |                                     |                |
| Yes             | 168 (67.2)                     | 139 (100.0)                         | 307 (78.92)    |
| No              | 82 (32.8)                      | 0 (0.00)                            | 82 (21.08)     |
| Gifts?          |                                |                                     |                |
| Yes             | 90 (36.0)                      | 21 (15.1)                           | 111 (28.53)    |
| No              | 160 (64.0)                     | 118 (84.9)                          | 278 (71.46)    |
| Informal payments? |                                |                                     |                |
| Yes             | 79 (31.60)                     | 5 (3.60)                            | 84 (21.59)     |
| No              | 171 (68.4)                     | 134 (96.40)                         | 305 (78.41)    |

Table 2: Proportion of Mothers Who Incurred Costs For Child Birth Services

This study has established that 78.92% (67.2% in Bwera Government Hospital and 100% in Kilembe Mines PNFP Hospital) of mothers officially paid for their childbirth services. While the proportion of mothers paying for these services would be expected in PNFP Hospital since it’s a private health facility, it might suggest that the hospital does not implement its user fee waiver policies; and thus its mechanisms to protect the poor are weak. This finding also reveals that maternity services including childbirth are not necessarily free of charge even in government (public) hospitals.

#### 4.2.2. The Magnitude of the Costs Incurred

The study also established the amounts of money paid officially, in informal payments and equivalents of gifts as shown in table 3.
### Variable payments

| Variable                        | Bwera Hospital | Kilembe Mines Hospital |
|---------------------------------|---------------|------------------------|
| Total amount paid in official payment (UGX) | 3,219,400     | 14,311,000             |
| Average official amount paid (UGX) | 19,200        | 102,950                |
| Standard Deviation (UGX)        | 21,500        | 62,000                 |
| Minimum (UGX)                   | 2,000         | 40,000                 |
| Maximum (UGX)                   | 255,000       | 304,000                |
| **Gifts**                       |               |                        |
| Total amount offered in gifts (UGX) | 944,000     | 265,000                |
| Average value of gift offered (UGX) | 10,500      | 12,600                 |
| Standard Deviation              | 4,800         | 5,000                  |
| Minimum (UGX)                   | 4,000         | 5,000.00               |
| Maximum (UGX)                   | 20,000        | 30,000.00              |
| **Informal payments**           |               |                        |
| Total informal payments made    | 5,194,500     | 55,000                 |
| Average                         | 65,750        | 11,000                 |
| Standard Deviation              | 25,600        | 5,500                  |
| Minimum                         | 3,000         | 5,000                  |
| Maximum                         | 100,000       | 20,000                 |

Table 3: Amounts of Money Incurred as during Childbirth

While the average amount officially paid for childbirth services was UGX 57,100, there were mothers who had paid as high UGX 225,000 and UGX 304,000 in Bwera Hospital and Kilembe Mines Hospital respectively. This, incurred as out of pocket, was considerably a lot of money for some households that it could affect the household’s capacity to meet other basic needs during that month and or thereafter.

There is a lot of controversy in the literature on whether or not a small maternal health care expenditure is a problem; or huge expenditure is a cause of concern. However, Mukherjee et al., (2013) asserts that a small cost of maternal health care does not necessarily mean that it does not cause impoverishment—depending on the household’s capacity to pay. Some studies have indicated that as low as 10% of total household being spend on health care can force a household to a state where they decide either to forgo maternal health care or sacrifice consumption of other goods, including basic needs sometimes (Wagstaff and vanDoorslaer, 2003; Russell, 2004; Xu et al., 2005). Since the average total household income for the respondents who accessed care from Bwera Hospital was UGX 349,100, it can thus be loosely concluded that households who paid over UGX 35,000—who constituted over 42% of all respondents in Bwera Hospital could be impoverished by official payments for childbirth services.

While the incidence of paying informal payments in the PNFP Hospital was low (3.6% compared to 31.6% in the Public Hospital), 28.3% of the mothers paid gifts (compared to 36.0% in the Public Hospital). Given the thin line between an informal payment and a gift (Lewis, 2000), they need to be closely monitored. Together with the informal payments, they made 48% the total costs incurred during childbirth—which are never reflected in the official payment system.

#### 4.3. Determinants of Informal Payments

Table 4 below shows a significant association between making informal payments and hospital of delivery (public or PNFP) (p=0.000); number of days in hospital (p=0.000); type of delivery (p=0.000); giving gifts (p=0.007); and income of spouse (p=0.031).
| Variables                      | Categories                  | Informal payments | P-value |
|-------------------------------|-----------------------------|-------------------|---------|
|                               | Yes N (%)                  | No N (%)          |         |
| Hospital of Delivery          | Bwera (Public)             | 79 (31.60)        | 171 (68.40) | 0.000 |
|                               | Kilembe (PNFP)             | 5 (3.60)          | 134 (96.40) |       |
| Age group                     | 15-19                      | 18 (22.78)        | 61 (77.22)  | 0.111 |
|                               | 20-24                      | 24 (16.67)        | 120 (83.33) |       |
|                               | 25-29                      | 23 (20.35)        | 90 (79.65)  |       |
|                               | 30-34                      | 13 (34.21)        | 25 (65.79)  |       |
|                               | 35-39                      | 5 (38.46)         | 8 (61.54)   |       |
|                               | 40-44                      | 1 (50.00)         | 1 (50.00)   |       |
| Marital status                | Married                    | 76 (22.62)        | 260 (77.38) | 0.000 |
|                               | Single                     | 3 (8.57)          | 32 (91.43)  |       |
|                               | Separated                  | 3 (21.43)         | 11 (78.57)  |       |
|                               | Widowed                    | 2 (50.00)         | 2 (50.00)   |       |
| Occupation of mother          | Farmer                     | 40 (20.20)        | 158 (79.80) | 0.533 |
|                               | Trader                     | 28 (25.93)        | 80 (74.07)  |       |
|                               | Civil servant              | 8 (20.00)         | 32 (80.00)  |       |
|                               | Professional in            | 2 (22.22)         | 7 (77.78)   |       |
|                               | private sector             |                   |           |       |
|                               | Student                    | 1 (6.25)          | 15 (93.75)  |       |
|                               | House wife                 | 5 (27.78)         | 13 (72.22)  |       |
| Occupation of the spouse      | Farmer                     | 23 (18.55)        | 101 (81.45) | 0.794 |
|                               | Trader                     | 30 (23.81)        | 96 (76.19)  |       |
|                               | Civil servant              | 16 (25.00)        | 48 (75.00)  |       |
|                               | Professional in            | 7 (21.88)         | 25 (78.13)  |       |
|                               | private sector             |                   |           |       |
|                               | Student                    | 1 (14.29)         | 6 (85.71)   |       |
| Level of education of mother  | No formal education        | 10 (20.83)        | 38 (79.17)  | 0.404 |
|                               | Primary level              | 25 (17.01)        | 122 (82.99) |       |
|                               | Secondary level            | 35 (26.52)        | 97 (73.48)  |       |
|                               | Tertiary institution       | 35 (24.44)        | 34 (75.56)  |       |
|                               | University                 | 3 (18.75)         | 13 (81.25)  |       |
| Level of education of spouse  | No formal education        | 7 (25.00)         | 21 (75.00)  | 0.100 |
|                               | Primary level              | 17 (17.89)        | 78 (82.11)  |       |
|                               | Secondary level            | 21 (16.54)        | 106 (83.46) |       |
|                               | Tertiary institution       | 25 (32.89)        | 51 (67.11)  |       |
|                               | University                 | 6 (27.27)         | 16 (72.73)  |       |
|                               | Unspecified                | 0 (0.00)          | 1 (100.00)  |       |
| Attendance for ANC           | Yes                        | 76 (20.77)        | 290 (79.23) | 0.000 |
|                               | No                         | 6 (37.50)         | 10 (62.50)  |       |
| No. of days spent in Hospital | 1-3                        | 20 (7.60)         | 243 (92.40) |       |
|                               | 4-6                        | 64 (55.17)        | 52 (44.83)  |       |
|                               | 7 and above                | 0 (0.00)          | 9 (100.00)  |       |
| Type of delivery              | Caesarean section          | 59 (71.95)        | 23 (28.05)  |       |
|                               | Normal Delivery            | 25 (8.14)         | 282 (91.86) |       |
| Giving gifts                  | Yes                        | 14 (12.61)        | 97 (87.39)  | 0.007 |
|                               | No                         | 70 (25.18)        | 208 (74.82) |       |
| Mother’s income               | 1,000-30,000               | 11 (21.15)        | 41 (78.85)  | 0.560 |
|                               | 30,001-50,000              | 15 (16.85)        | 74 (83.15)  |       |
|                               | 50,001-100,000             | 18 (21.18)        | 67 (78.82)  |       |
|                               | 100,001-300,000            | 24 (26.67)        | 66 (73.33)  |       |
|                               | 300,001-500,000            | 10 (25.00)        | 30 (75.00)  |       |
|                               | 500,001-750,000            | 0 (0.00)          | 4 (100.00)  |       |
| Income of spouse              | 1,000-30,000               | 1 (33.33)         | 2 (66.67)   | 0.031 |
|                               | 30,001-50,000              | 3 (14.29)         | 18 (85.71)  |       |
|                               | 50,001-100,000             | 15 (22.39)        | 52 (77.61)  |       |
|                               | 100,001-300,000            | 20 (16.13)        | 104 (83.87) |       |
|                               | 300,001-500,000            | 27 (27.84)        | 70 (72.16)  |       |
|                               | 500,001-750,000            | 6 (54.55)         | 5 (45.45)   |       |
|                               | 750,000 and above          | 0 (0.00)          | 6 (100.00)  |       |

Table 4: Factors Associated with Amount of Informal Payments
After adjusting for the effects of the other significant factors identified, hospital of delivery (<0.0001), type of delivery (<0.0001), giving gifts (0.002), income of spouse (0.026) and number of days spent on admission (0.01) were all still significantly associated with the odds of making informal payments.

| Variable                                      | Coefficient | Standard error | 95% Confidence Interval | p-value |
|-----------------------------------------------|-------------|----------------|-------------------------|---------|
| Hospital of delivery (Kilembe-1 Bwera-0,)     | -39640.97   | 6495.27        | -52605.58               | <0.001  |
| No. of days of admission >3 days-1, ≤ 3 days-0.| 13675.4     | 4458.65        | 4775.9                  | 0.003   |
| Type of delivery C/Section-0 Normal delivery-1| -31416.94   | 4652.34        | -40703.05               | <0.001  |

Table 5: Factors Affecting Informal Payments Adjusted for Confounding Factors

These findings, like others in the region (Kankeu, 2014) established that informal payments are more prevalent in Public than PNFP hospitals. Mothers who delivered from Kilembe Mines PNFP Hospital were over 12 times less likely not to pay an informal payment than those who delivered from Bwera Government Hospital (OR=12.4, 95%CI 4.88-31.43). The rather wide range of the confidence interval could be attributed to the sample size of this study.

Similarly, while only 21% of the women who participated in the study had delivered by caesarean section, 70.24% of them paid informal payments. There was a strong statistical relationship between the total informal payments and the type of delivery (p<0.0001), where the mothers who delivered normally were 29 times less likely to pay informal payments (OR=28.93, 15.38-54.44). In a related study in (Kaitelidou et al., 2012) found that 78% of the women who had a caesarean section paid at least one informal payment.

Lastly, the Number of days of admission were significantly associated with giving unofficial (p=0.01). Those who stayed over three days were over 6 times likely to pay an informal payment than those who were admitted for three days and below (OR=6.32, CI 3.87-10.34). Again, literature to validate this was not obtained. However, the qualitative data indicated that the more the patient stayed within the hospital, the more she remained in touch with ‘enablers’ of informal payments such as being asked by health workers. While examining the effect of informal payments was not a core objective of this study, it emerged during FGDs and in-depth interviews that lack of informal payments was a probable cause for prolonged admissions. It was reported particularly in Bwera Hospital of incidences where mothers who needed caesarean sections but could not afford the “doctor’s airtime” or “doctors transport”—a local term adopted to refer to informal payments particularly for surgical procedures, were often neglected and would thus stay longer on the ward.

4.4. Policy and Programming Implications for the Study

This study has demonstrated that, while informal payments are neglected, they constitute a significant proportion for financing childbirth services. In the public hospital, the total amount paid as informal payments and gifts were twice that paid as official payment. They are prevalent even where services are paid for in the PNFP hospital or cost sharing options are available in public hospital. It thus forms a part of the private health expenditure for Maternal Health Services rarely included in the national health statistics.

These payments affect the poor even more than the official payments because there is no possibility of applying exemption policies; and they direct the supply side to the provision of services that are profitable (i.e. attract a higher amount of informal payment such as cesarean section) than that which is effective; and to the patients who have the ability to pay rather than those most in need (Keitalidou et al., 2012). It’s probably the worst way of financing maternal health services in Uganda and will require consumer protection mechanisms especially for the poor mothers in both public and PNFP hospitals.

Findings for this study suggest that informal payments were not associated with demographic characteristics except level of income of the spouse. This in part re-affirms the role of male partner involvement in not only financing maternal health but the wider spectrum of child birth planning. Also, there is generally strong evidence from more than 31 studies conducted between 1995 and 2010 that informal payments are common to support insufficient health care budgets (Stepurko et al., 2010). Therefore, a critical need to reflect and improve on the health care budget that has persistently remained below 10% of the national budget over the years (MOH, 2015), cannot be over emphasized.

Lastly, this study has in part demonstrated that unlike demographic characteristics of the mother, the misguided beliefs that informal payments are necessary; lack of knowledge or information on rights along with absence of supply-side control mechanisms create an ‘enabling environment’ for informal payments to thrive more so when a poor quality of service was perceived as were the case in a public hospital (Bwera), cesarean sections and over 3 days of hospitalization. Efforts to mainstream rights based programming even at local (hospital) level; and community empowerment to improve the quality of maternity services should form an integral part of health service planning, delivery, monitoring and reporting.
4.5. Specific Recommendations

| Objective | Key Issue(s) | Recommendation | Actor |
|-----------|--------------|----------------|-------|
| Financial costs for childbirth | Official payments for childbirth are incurred as out of pocket expenditures by over 67% in the Government Hospital and 100% in the PNFP; taking a great percentage of household income; with no or weak mechanisms for protecting the poor | 1. Pilot subsidizing some childbirth services especially on essential medicines and cesarean sections in PNFP hospitals 2. Explore risk pooling mechanisms for childbirth services including community health insurance 3. Expedite the Public Insurance Scheme in Public Health Hospitals | Uganda Ministry of Health (MOH); Ministry of Finance, Planning and Economic Development (MOFPED) Kilembe Mines Hospital administration MOH |
| | Thirty-six percent of the mothers who delivered in Bwera Hospital and 15.1% from the PNFP Kilembe Mines Hospital offered gifts during childbirth. There is “normalization” for giving and receiving gifts to the extent that some gifts are now being demanded | 1. The Hospitals need to develop policy against gifts 2. The Hospital Administration needs to devise means to increase detection of gifts so that they are not a barrier to access to care 3. Periodic community dialogues and awareness rising on sexual and reproductive health rights and obligations of mothers | Hospital Management Committees for Bwera and Kilembe Mines Hospital Community leaders & civil society organizations |
| | Over thirty-one percent of the mothers who delivered in Bwera Hospital and 3.6% from the PNFP Kilembe Mines Hospital paid informal payments. Informal payments for cesarean section in Bwera Hospital is at the verge of being institutionalized and normalized. | 1. Raise more awareness on unacceptability of unofficial payments 2. Publicize on public noticeboards and other platforms the services that are free and pricelists for items that are paid for 2. Conduct regular dialogues with communities and health workers to harmonize expectations and increase responsibility of each party 3. Conduct regular social accountability mechanisms such as community score cards for childbirth services 4. Strengthen implementation of hospital policies on user fees collection and management; and professional codes of conduct for the various health workers | Hospital Administration Bwera Hospital Management Professional councils (such as the Uganda Medical and Dental Practitioners Council) and Associations |

Determinants for informal payment | Mothers accessing childbirth services from a government hospital, cesarean sections and number of days of paid more informal payments. This related more on the actual or perceived quality of service associated with each variable | 1. Improve quality of maternity health services through institutionalized service improvement plans; and community based monitoring for quality services 2. Put mechanisms to report (such as free hotlines, suggestion boxes), investigate and respond (such as disciplinary committees) to complaints from the public 3. Review the user fees policy for Bwera Hospital to strengthen collection and management of the fees; explore performance based incentives for cesarean sections in Bwera Hospital | Hospital Management Committee Bwera Hospital management |

5. References

i. Allin S, Davaki K, Mossialos E (2006). Paying for “free” health care: the conundrum of informal payments in post-communist Europe. Global Corruption Report. Special focus-corruption and health. London UK: Pluto; 2006, pp. 63–70.

ii. Cohen, N. (2012). Informal payments for health care – the phenomenon and its context. Health Economics, Policy and Law, 7(3), 285 - 308.
iii. Daily Monitor July 14 2013 available on http://www.monitor.co.ug/OpEd/Editorial/Maternal-deaths-call-for-more-than-debates/-/689360/1913776/-/2qqjewz/-/index.html accessed 16/6/2014

iv. Ensor T (2004). Informal payments for health care in transition economies. Social Science & Medicine 2004;58:237–46.

v. Gaal P, McKee M. 2005. Fee-for-service or donation? Hungarian perspectives on informal payment for health care. Social Science and Medicine 60: 1445–57.

vi. IoG, 2008. Inspectorate of Government, the 3rd national integrity survey report. Kampala, Inspectorate of Government.

vii. Kaitelidou ch D, Tsirona CS, Galanis PA, Siskou Ch O, Mladovsky P, Kouli PG, Prezerakos PE, Theodorou M, Sourtzi PA Liaropoulos LL (2012): Informal payments for maternity health services in public hospitals in Greece. Health Policy 109 (2013) 23–30.

viii. Kaye D. K, Kakaire O, Nakimuli A, Osinde M.O, Mbalinda S.N, and Kakande N (2014): lived experiences of women who developed uterine rupture following severe obstructed labor in Mulago hospital, Uganda. Reproductive Health 2014, 11:31

ix. Kenkeu T.H, Boya S et al., (2014). How do supply-side factors influence informal payments for healthcare? The case of HIV patients in Cameroon. THE INTERNATIONAL JOURNAL OF HEALTH PLANNING AND MANAGEMENT Int J Health Plann Mgmt (2014)

x. Kornai J. 2000. Hidden in an envelope: gratitude payments for medical doctors in Hungary. In the paradoxes of unintended consequences Dahrendof L et al., (eds). Central European University press: Budapest and New York

xi. Levin, A., M. McEuen, T. Dymatraczenko, F. Ssengooba, R. Mangani, and Van Dyck G (2000). Costs of Maternal Health Care Services in Three Anglophone African Countries. Bethesda, MD: PHRPlus,

xii. Lewis M (2000). Who is paying for health care in Eastern Europe and Central Asia? Washington, DC: Human Development Sector Unit, Europe and Central Asia Region. The World Bank.

xiii. Lewis M (2007). Informal payments and the financing of health care in developing and transition countries. Health Affairs 2007;26(4):984–97.

xiv. MoH (2011): The second National Health Policy. Kampala, Ministry of Health

xv. MoH (2014): The national policy on public private partnership in Health. Kampala. Ministry of Health

xvi. Mukherjee1 S, Singh A, Chandra1 R (2013): Maternity or catastrophe: A study of household expenditure on maternal health care in India. Health S (2013) 109-118

xvii. Stepurko, T., Pavlova, M., Gryga, I., Muraskiene, L. & Groot, W. (2013). Informal payments for health care services: the case of post-soviet republics Lithuania and Ukraine. In: Morris, J. & Polese, A. (eds). The Persistence of Informal Economic Practices in Post-Socialist Societies (Ashgate series in Urban Anthropology). Palgrave Macmillan. Forthcoming.

xviii. The observer Sunday 05 August 2012
http://www.observer.ug/index.php?option=com_content&view=article&id=20231:jinja-doctor-arrested-over-expectant-mothers-death

xix. Wagstaff, A. and vanDoorslaer, E. (2003) Catastrophe and impoverishment in paying for health care: With applications to Vietnam 1993-1998. Health Economics, 12, 921–932

xx. WHO. (2010). Gender and Primary Health Care Renewal: a discussion paper. World Health Organisation, Geneve

xxi. Xu K, Evans D.B, Kadama P, Naboyonga J, Ogwang O.P, Nabukhonzo P, Aguilar A.M (2005): Understanding the impact of eliminating user fees: Utilization and catastrophic health expenditures in Uganda, Social Science & Medicine 62 (2006) 866–876