Informal payments for family planning: prevalence and perspectives of women, providers, and health sector key informants in western Kenya

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Abstract: Informal payments are off-the-record financial transactions made by patients to their healthcare providers. Providers in low- and middle-income countries solicit informal payments from patients to purchase additional supplies, supplement wages, or for other reasons. Informal payments reduce equitable access to healthcare services and undermine efforts to ensure universal health coverage. This study used multiple data collection methods to estimate the prevalence of informal payments, describe the impact, and explore feasible solutions for curbing this practice in western Kenya. Facility-level data were collected in 60 public sector facilities (contributing 142 mystery client visits and, in a subsample of 10 facilities, 253 client-provider observations). We conducted 8 focus groups with current and prior contraceptive users, 19 key informant interviews, and 2 journey mapping workshops. Providers solicited informal payments in 25% of mystery client visits and 13% of client-provider observations; the median amount of money requested from mystery clients was 1 USD. Focus group and journey mapping participants reported informal payments are a financial barrier and contribute to unintended pregnancy; key informants suggested greater community monitoring of facilities is key for reducing this behaviour.

Keywords: Kenya, healthcare providers, quality of care, informal fee payments, bribery, intrinsic motivation, incentives, community empowerment, coercion, corruption

Introduction

There is increasing recognition that out-of-pocket costs can reduce access to essential health services in low-income countries. Consequently, universal health coverage (UHC) has emerged as a key priority of the World Health Organization (WHO). UHC provides high-quality patient-centred care and financial risk protection for vulnerable populations who may struggle to pay user fees. Many low- and middle-income countries (LMICs) are taking steps to implement UHC with the goal of realising more accessible high-quality care and more equitable health financing. However, there has been little discussion of the potential impact of informal payments on UHC.

Informal payments are off-the-record and sometimes illegal payments that users make to healthcare providers outside of official, scheduled fees. Such payments have been documented extensively within public sector service provision...
in LMICs, including within the health sector.\textsuperscript{2–8} Although informal payments are sometimes referred to as “bribes” or “corruption”, a growing literature suggests these terms may not be interchangeable. For example, a bribe implies a *quid pro quo* arrangement, where a patient pays a provider prior to receiving treatment in order to guarantee access or quality of care. If a patient were to pay a provider after receiving a treatment, as an expression of gratitude, they would be rendering an informal payment but not a bribe. Patients may also be unaware that they are being asked to pay an amount that exceeds the official cost of services. In either scenario, the informal payment would not necessarily constitute an act of corruption on the part of the patient. Providers’ rationales for soliciting or accepting informal payments can also vary. They may be attempting to cover the cost of under-funded facility expenditures (e.g. shortages of supplies), respecting a culture of gift-giving, or augmenting their own salaries. Informal payments may take the form of cash or in-kind remuneration. The acceptability and legality of each type of payment and rationale vary by context.

While the true prevalence and impact of informal payments are not well-known, in many LMICs, they constitute an important fraction of out-of-pocket payments for health services.\textsuperscript{3} Informal payments contribute to catastrophic health expenditures and can have long-term financial consequences.\textsuperscript{9} They also contribute to inequities in access to services, either creating absolute barriers to care or creating a “two-tier system” within the public sector in which those who can afford to pay are granted greater access and quality than those who cannot.\textsuperscript{10,11} At a population level, the presence of informal payments is associated with negative health outcomes, including lower rates of skilled birth attendance and higher rates of under-5 mortality.\textsuperscript{12}

Informal payments may constitute a sizable portion of health system financing, particularly in contexts with intense budget shortfalls.\textsuperscript{13,14,15} In other words, as public investment in health is reduced, providers may solicit informal payments to restock supplies and supplement staff incomes that have failed to keep pace with inflation. Yet, the use of informal fees to fill gaps in public spending is problematic. A system in which providers, rather than government officials, make decisions about who pays – and how much – is unable to protect the most vulnerable segments of the population. Among those living in poverty, even modest informal payments could result in significant financial hardship. Further, the lack of transparency that often accompanies a system of provider-initiated informal payments may reduce consumer confidence that they are being treated fairly. And, importantly, as more countries move towards UHC, a system of informal payments will undermine the success of these efforts to eliminate financial barriers to care.\textsuperscript{11}

**Informal payments for family planning**

The last 15 years have seen increased awareness and documentation of informal payments associated with labour and delivery.\textsuperscript{3,5,15–21} However, there has been less attention paid to the practice of informal payments in other types of sexual and reproductive health (SRH) services, including family planning. Only a few studies have investigated whether informal payments may constitute a barrier to care in SRH. For example, in western Uganda, informal payments were found to be a barrier to HIV testing and service provision.\textsuperscript{22} In western Kenya, mystery client data collected among 19 higher-volume facilities found three out of every four mystery clients seeking the pill were asked to pay a small informal fee.\textsuperscript{7} More recently, a study using nationally representative data from Kenya collected in 2014 found that 49% of public sector family planning clients reported paying a fee to obtain services;\textsuperscript{23} it is worth noting that this estimate is based on retrospective client self-reports and the amount of time that passed between the participant’s facility visit and their interview, as well as the participant’s ability to distinguish between formal and informal payments, may impact the accuracy of this estimate.

**The Kenyan context**

Kenya’s national Ministry of Health launched UHC in late 2018. The national UHC launch was the start of a two-phase strategy that began with a pilot of the programme in four of Kenya’s 47 counties including Kisumu County in western Kenya. Subsequent county-level advocacy has led to an accelerated UHC expansion, with the goal of making healthcare available and accessible to all households in Kenya.

Increased availability of healthcare services will, theoretically, lead to increased access to contraception. In Kenya, the prevalence of contraceptive use has increased substantially over the
previous five decades. Concurrently, the total fertility rate (TFR) has dropped from more than eight children per woman to nearly four children. Yet, one out of every five women will give birth before she turns 18 years of age. The desire to limit and/or space births is widespread in Kenya, with family planning understood as a key strategy both for attaining ideal family size and reducing the maternal mortality ratio of approximately 350 maternal deaths per 100,000 live births.24

In Kenya, out-of-pocket payments, typically rendered as official user fees, have historically made up a large proportion of healthcare financing.23,25 Concerns about cost barriers to care have led successive Kenyan governments to reduce and ultimately abolish user fees for select public sector services, including maternity care and family planning.23,26,27 Yet little is known about whether informal payments may have taken the place of the previous official user fees in Kenya; this may be due, in part, to low awareness of informal payments within the research community as well as challenges inherent in measuring illicit provider behaviours. Historically, few large-scale demographic surveys have included measures of informal fees. Among those countries, like Kenya, that have implemented measures of out-of-pocket payments, the retrospective and self-reported nature of these measures may introduce recall or other types of information bias; a review of prior studies of informal payment estimation found the most common length of recall was 12 months and measures consistently relied on patient self-reports.28 Additionally, the phrasing of questions related to out-of-pocket payments may combine informal payments with other out-of-pocket expenses such as registration fees and transportation costs, making it difficult to untangle informal payments from valid fees and other expenses.

Therefore, while recent studies suggest that informal payments may be pervasive, limitations of existing datasets result in a lack of knowledge of the true prevalence of informal payment solicitation in Kenya. Furthermore, few prior studies investigate the impact of informal payments on family planning clients, with most qualitative study components centred on provider, rather than patient, perspectives.28 Studies conducted elsewhere suggest the impact of informal payments go beyond financial hardship to include erosion of trust in the health system, disrespect, and denial of care; yet these impacts have not been investigated in the context of family planning provision in Kenya.29 Our study, therefore, provides several advantages over prior investigations into informal payments. By employing well-trained mystery clients making real-time reports of service delivery, we were able to calculate a less biased estimate of the prevalence and amount of informal payments for family planning services. Further, by employing a mixed-methods study design, we were able to explore the lived experiences of Kenyan women subjected to informal fee solicitation in public sector health facilities and solicit locally grounded solutions from key informants. The multiple and diverse approaches we employed to study informal payments were necessitated by the hidden nature of this illicit provider behaviour.29

Our study took place in western Kenya, a region of the country characterised by high rates of total fertility, relative to the national average. Several counties in western Kenya report an average TFR that exceeds five births per woman, well above the national average TFR of 3.9. Approximately 57% of women of reproductive age in this region have a desire to limit childbearing, and only about 70% of women of reproductive age in the region have had their demand for family planning (for either spacing or limiting) satisfied by a modern contraceptive method.29

In this paper, we seek to address three major gaps in the literature and to open a path for future research in this area. Specifically, the purpose of this paper is to: estimate the prevalence of informal payments within public sector facilities in Western Kenya using innovative data collection methods; describe women’s perceptions of the impact of informal fees; and explore locally acceptable approaches to curbing informal payments.

Methods
Data for this analysis are nested within a larger study designed to identify and contextualise facility-level barriers to family planning use in Western Kenya. Our mixed-methods study included multiple data collection methods including mystery clients (MCs), observations of client-provider interactions (CPIs), focus group discussions (FGDs), key informant interviews (KIIs), and journey mapping activities. All data were collected between October 2018 and February 2019.
Sample of public healthcare facilities
We purposively selected five of the 10 counties comprising Western Kenya. These five counties collectively cover areas inhabited by the four main tribes that reside in western Kenya and therefore offer a reasonable representation of the overall regions of Western and Nyanza Kenya. Within these counties, we randomly sampled 60 public-sector facilities, stratifying by the county to allow for an even distribution of 12 facilities in each of the five counties, and by facility type, a designation that included three categories: (1) dispensaries (the smallest public facility type); (2) health centres; and (3) sub-county/county hospitals. Within each county we randomly selected six dispensaries, three health centres, and three hospitals; facilities were selected from the Kenya Master Health Facility List, which lists all public facilities in each county in Kenya and is updated annually. In addition to MC observations, our facility-level data collection included observations of CPIs in a subset of 10 facilities (six dispensaries, two health centres, and two hospitals) located in Kisumu and selected at random.

Approach
Mystery Clients
In MC visits, a data collector pretends to be a real patient who is seeking services from a provider who is unaware that the encounter is for research purposes. We employed 15 female MCs to assess the frequency of informal payments across our sample of facilities. MCs were fluent in the local language and possessed strong recall ability and a willingness to standardise their clothing and hairstyles to the local context during facility visits. MCs presented at facilities using their own demographic characteristics rather than assigned profiles: seven were married and all were between 21 and 35 years with zero to two children. When seeking family planning services, all MCs were assigned a “preferred” method, in the event the provider asked them to indicate the method they wished to use. Three MCs were assigned the intrauterine device as their preferred method and the remaining 12 MCs were evenly split between the pill, the injectable, and implantable contraception. MCs arrived at the facility by 8:30am, presented as new family planning clients, and interacted with the family planning provider at the facility. MCs recorded their observations via a short electronic questionnaire within 30 minutes of their visit.

A total of 180 MC visits were conducted, with each of the 60 facilities receiving a visit from three different MCs (three total visits to each facility). In 38 MC visits, the provider or facility refused (due to provider bias towards unmarried or nulliparous women or due to requirements for HIV or pregnancy tests prior to offering family planning) or were unable (due to stockouts or lack of trained staff) to offer the MC a family planning method. As a result, data on informal fee solicitation could only be collected during the remaining 142 MC visits, which occurred in 56 of the 60 facilities. Of these 142 MC visits, 73% were with female providers. Seventy-four per cent of MC visits were with nurses/nurse midwives, 10% were with clinical officers, and 6% were with a student/trainee, community health volunteer (CHV), or lab technician. In the remaining 10% of visits, the MC was unsure of the provider’s cadre.

Observation of the Client-Provider Interaction (CPI)
We conducted third-party observations of the interaction between providers and real family planning clients in 10 facilities. Both providers and clients were invited to participate via an informed consent protocol. A trained female enumerator was present in each facility for 10 consecutive weekdays, during which time she invited all family planning clients to participate. All women seeking family planning were eligible for participation in the study.

On average, 2–3 family planning clients presented each day at each of the 10 facilities, for a total of 253 CPI observations (three clients refused). Seventy per cent of those observed were current family planning users when they arrived at the facility; 20% were non-users with past use while 10% arrived at the facility having never used family planning. A total of 20 providers were observed, all of whom were nurses/nurse midwives. Most providers observed (18 out of 20) were female.

Focus Group Discussions
We conducted eight FGDs from four of the five study counties, with one county dropped at random to streamline data collection logistics. We opted for FGDs (rather than IDIs) with former and current family planning users because we sought to identify group norms and common
and diverse experiences around seeking family planning services from public sector facilities. Women were eligible if they were current or former family planning users between the ages of 18 and 49. Focus groups were stratified by current versus prior family planning use and urban versus rural residence. The FGD participants were identified through assistance from CHVs, who approached potential participants and sought their permission to be contacted by study team members. CHVs approached 240 women, of whom 88 agreed to participate and provided their phone numbers. In total, 55 women participated, while 33 either indicated they would not be able to attend when contacted by study staff the day before or failed to arrive on the morning of the FGD. Each FGD had six to eight participants ranging in age from 18 to 46, with the mean age across all eight groups ranging from 26 to 36 years of age.

All FGDs took place in a private, quiet, neutral location convenient to the participants’ place of residence. Each FGD was led by a trained female moderator using a semi-structured questionnaire of 18 predetermined questions designed to explore barriers women face in accessing contraception. FGDs ranged from 81 to 128 minutes (average 103 minutes). Participants were encouraged to communicate in the language with which they felt most comfortable. Two FGDs were conducted primarily in Luo, one in Ekegusii, and five in Kiswahili.

**Key Informant Interviews**

Key informants were purposively selected with the goal of including participants from a variety of senior-level positions within both the public and private sectors of healthcare delivery in western Kenya. A snowball sampling technique was used to identify the key informants. The first point of contact was the Head of Reproductive Health within the County Health Department for each county. A total of 27 key informants were contacted; all initially agreed to participate but eight were unable to participate due to repeated scheduling conflicts. Our final sample of 19 key informants included senior staff from public and private sector healthcare facilities, non-governmental public health organisations, and government officials in each of the participating counties. Each interview was conducted by an experienced and trained enumerator using a semi-structured questionnaire of 19 predetermined questions to explore feasible and promising solutions to the barriers women face in accessing contraception. Interviews ranged from 32 to 91 minutes (average 55 minutes) and were conducted in English.

**Journey Mapping**

We synthesised data from all study components to create two draft journey maps to visually represent how patients and providers, respectively, interact with the healthcare system when seeking or providing family planning services. We then invited patients and providers to comment on the completeness of these maps. Journey maps visually represent a sequence of touchpoints where the user interacts with the organisation or system. In the commercial sector, journey maps are used to identify every consumer interaction with the company and then to identify ways to optimise the emotional experience in order to improve the consumer–brand relationship and improve customer retention. We used the journey maps to stimulate discussion about barriers to service provision and to assess whether we had captured a complete picture of facility-level barriers to family planning use in western Kenya. In each of our two maps, we listed reasons why patients or providers might be obstructed from progressing towards the end goal of women’s voluntary uptake of family planning. Recruitment was limited to Kisumu to ensure logistical feasibility. We recruited 10 participants for each of the two workshops. Eligibility criteria and recruitment procedures for the *patient* journey mapping workshop were identical to those used for the FGDs (described above). The nine participants (one cancellation) in the patient journey mapping workshop ranged in age from 27 to 41 years and were all married and current family planning users, with parity between two and four children. For the *provider* journey map, all currently employed public sector providers were eligible to participate. Recruitment was done using snowball sampling in which a public sector nurse well-known to the study PI was the first point of contact. Of the 12 providers (sampling goal exceeded) who attended the provider journey mapping workshop, nine were female, ages ranged from 27 to 52 years, and years providing family planning services were 2–12.

Participants were asked to make suggestions for improving the comprehensiveness of the journey map and were then prompted to distinguish
which barriers occurred most often, which were the most impactful on family planning use, and which were the most important to address. This methodology is intentionally subjective to allow for inclusion of patient and provider perceptions, motivations, and areas of satisfaction/dissatisfaction. The journey mapping workshops were conducted in English and Kiswahili, lasted four to five hours, and were conducted in a private meeting room at a hotel in Kisumu, moderated by an experienced Kenyan researcher who was fluent in both English and Kiswahili and was intimately familiar with the project objectives.

Analysis

Quantitative Data
We estimated the prevalence of informal payments using data collected during both MC and CPI observations. We computed the number of visits or observations for which an informal payment was solicited or made and then divided this number by the total number of MC visits (n = 142) or CPIs (n = 253), respectively. This resulted in the total prevalence or frequency of informal payments observed for each data collection method. Additionally, data on the amount of money requested from clients was recorded and used to calculate the median amount of payment requested across different types of contraceptive methods. All descriptive analyses were performed using Stata 14.

Qualitative Data
We performed a content analysis of our qualitative data with a largely naturalistic stance, a “data-near” interpretation strategy that stays close to the data (i.e., does not engage in over-interpretation) to produce qualitative description.31 We deductively developed a provisional list of prefigured codes before data were collected, based on the research questions and key concepts of interest, as recommended by Miles and Huberman.32 Additionally, we inductively allowed new codes to emerge.

Transcripts were read in their entirety for a holistic sense, with memo writing about possible emergent codes and themes. Coding was performed in NVivo 11.0 by two team members who both coded all transcripts (LB and LO). LB was a female doctorally prepared American nurse with graduate training and experience in qualitative research methods and expertise in family planning service delivery. LO was a female Kenyan public health professional with training in qualitative research methods. Coders engaged in daily Skype sessions to resolve differences, work through uncertainties, and maintain an audit trail. After transcripts were coded, themes were identified and examined in detail for nuance and divergent cases. Data saturation was sought and assessed during analysis with the use of journey mapping as a member-checking procedure.

Mixed Methods
We used a mixed-methods approach to triangulate data from multiple sources and perspectives. Because informal payment systems are enacted covertly, we were motivated to collect data in multiple ways to elicit information about the prevalence and nature of this phenomenon; each of the different data collection approaches described above are also summarised in Table 1. For example, the MC approach is well-suited for observing covert provider behaviour while CPI observations allow for observing provider interactions with actual clients. FGDs provided critical context for our estimates of the prevalence of informal payments while KIIs allowed us to ascertain whether this practice is commonly acknowledged and was also used to solicit locally grounded solutions.

We used a parallel/simultaneous mixed-methods design to collect quantitative and qualitative data in the same time period before data analysis began.33 Qualitative and quantitative data were analysed independently and were integrated in the interpretation. Qualitative and quantitative data integration was additionally rendered as journey maps. Focus group, KII, MC, and CPI observation protocols focused on the same phenomena. The MC and CPI observation procedures used structured data collection tools to produce quantitative data, with a small volume of qualitative data in open fields.

Ethical approval and informed consent
With the exception of healthcare providers participating in the MC study, all study participants were enrolled in this study via an informed consent process and provided both verbal and written consent to participate. The University of North Carolina at Chapel Hill and the Kenya Medical Research Institute provided IRB approval for all data collection activities following careful review of all study protocols. Informed consent was necessarily waived for healthcare providers and facility managers participating in the MC.
Table 1. Methodologies employed to assess the prevalence and impact of informal payment solicitation among 56 public sector healthcare facilities in western Kenya, 2018–2019

| Brief Description of Procedure | Family planning mystery client observations | Observations of client provider interactions during family planning provision | Focus group discussions with current and former family planning clients | Key informant interviews with health sector stakeholders | Family planning patient and provider journey mapping workshops |
|--------------------------------|---------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| Data collectors pretended to be real family planning clients seeking services from public sector providers; providers were unaware that the mystery client was collecting data for research purposes. | Third party data collectors were present in the consultation and/or exam room during family planning provision and observed the interaction between real patients and their providers. | A facilitator-led discussions among groups of six to eight women of reproductive age to identify group norms and common and diverse experiences around seeking family planning services from public sector facilities. | An interviewer held in-depth one-on-one interviews with knowledgeable individuals who can provide first-hand perspectives on family planning provider behaviours and feasible, practical, and acceptable solutions to informal payments. | We created patient and provider journey maps to visually represent a sequence of touchpoints where the family planning clients interact with the public sector health system. In the commercial sector, journey maps are used to identify every consumer interaction with the company and then to identify ways to optimise customer retention. |

**Advantages**

- Enables researchers to observe how providers behave when they are unaware they are being watched and produces valid estimate of the prevalence of informal fees; well-suited for measuring hidden behaviours such as informal fees.
- Not subject to recall bias or participant confusion over legitimate versus illegitimate fees.
- Enables researchers to capture the larger and nuanced impacts of informal payments on women seeking family planning.
- Enables researchers to solicit feasible, practical, and culturally appropriate solutions to informal payments.
- Enables researchers to assess whether they have captured a complete picture of facility-level barriers to family planning use such as informal payments.
portion of the study to avoid interfering with the study design.

**Results**

The prevalence and nature of informal payments

In the 56 facilities contributing data on informal payments solicited from MCs, informal payments were solicited during 25% of visits or 36 out of 142 MC visits. These 36 visits were distributed across 25 of the 56 facilities (or 45%). Of the 25 facilities in which an informal fee was solicited, two facilities solicited fees from all three MCs, seven facilities solicited from two MCs, and 16 facilities solicited from just one of the three MCs. There was no significant or meaningful relationship between fee solicitation and county, facility type, provider cadre or gender, or MC characteristics (age, marital status, or parity).
In 10 of the 36 MC visits in which the provider solicited an informal payment, providers offered a reason for the payment (in the other 26 visits, the providers did not indicate why they asked for payment). For example, when charging the MC, the provider sometimes asked for the fee as a sign of appreciation to be used for a tea, soda, or pocket money \( (n = 7) \). For example, a MC reported, “When I inquired whether I need to pay anything for the method she told me the service is free, but she requested that I buy her a soda after the service.” Of note, in this context, a request for tea or soda is not intended to literally solicit tea or soda but rather indicates the provider is requesting money, as a sign of appreciation, for their own personal use. Similarly, another MC commented on the way the provider solicited payment, “The provider also said that he can take a little cash as it PLEASES me as a sign of appreciation to his service.” In two of these cases, the provider further elaborated they were asking for payment because the procedure was “tiresome” or “complex”. In addition, women in FGDs described providers asking for tokens of appreciation, such as a soda, and both key informants and participants in the patient journey mapping workshop confirmed this custom. Key informants added that public-sector providers might seek informal payments to motivate themselves or because their employers were late paying them.

In a few cases \( (n = 3) \), MCs reported they were asked for a fee to cover the cost of supplies such as Elastoplast or gloves, or to cover transport to a facility with sterilisation tools. Women in FGDs also described being asked for payment for supplies, including gloves, speculums, sterilisation of LARC insertion supplies, needles, reagents, cotton, iodine, or Elastoplast.

Across the 10 facilities in Kisumu County where CPI observations were conducted, a total of 20 providers were observed, four of whom solicited informal payments. This resulted in informal payments being solicited in 13% of observations (32 out of 253 observations). One of the four providers solicited 23 of the 32 payments. For comparison, when we restrict our MC analysis to just those facilities included in the CPI component, informal payments were solicited in 36% of visits. Informal fees collected during CPI observations were collected primarily for injectable contraception \( (n = 21) \) and also for implant \( (n = 9) \) or IUCD \( (n = 1) \) removal; in one instance a fee was collected for implant insertion.

The amount of the informal payment varied depending on the method type. MCs were asked to pay a median price of 50 (range 50–200; \( n = 10 \)) Kenyan Shillings (KSH)* for injectables, a median price of 50 (range 50–100; \( n = 6 \)) KSH for pills, a median price of 100 (range 50–200; \( n = 12 \)) KSH for implants, and a median price of 350 (range 50–500; \( n = 8 \)) KSH for the intrauterine device (IUCD). Across all four of the methods offered to MCs, the median charge was 100 (range 50–500) KSH. In CPI observations, the amount solicited for injectables was consistently 50 KSH while the median fee for implant removal was 200 KSH. One client was observed paying 400 KSH for IUCD removal and another paid 180 KSH for implant insertion. Of note, one provider charged different women different amounts for implant removal, ranging from 200 to 300 KSH.

Of this provider, the enumerator commented, “The provider told one client that she charges 300 for removing implant but for her case she was given a discount and hence paid 250.” Similarly, during the FGDs, women specifically described having been asked for 50–150 KSH for injectables and 200–300 KSH for implants.

Enumerators observing the CPIs provided additional details in an open-text box which described the covert manner in which providers often collect informal payments, for example:

“Client gave out 200 (KSH) for implant removal which she gave the provider who did not give out any receipt and the way the money was taken showed that nobody was supposed to see.”

“Client paid 200 (KSH) for implant removal and the provider pocketed the money without giving any official receipt even though the facility has a cash office where all payments should be done.”

Informal payment systems were widely recognised by women in the FGDs, key informants from the healthcare sector, and participants in both the patient and provider journey mapping workshops, though not all said they had personally observed the practice. Women in focus groups described how providers specified that payments were largely requested for the family planning commodities (the methods themselves). Some women expressed the expectation that pills and injectables would be free but other methods would

\*At the time of the study, 1 US Dollar equaled approximately 100 Kenyan Shillings.
not be. Participants in both the patient and provider journey mapping workshop confirmed that they had witnessed or heard about informal payment for family planning commodities.

In the provider journey mapping workshop, participants confirmed that they had asked patients (or had heard of patients being asked) to pay for supplies, which was characterised as a legitimate reason to solicit an informal payment. In contrast, personal gain (i.e. feeling the need for “big things” or feeling that provider salaries do not allow for “all the things he or she needs”), was not considered a valid reason to seek funds from a patient.

Impact of informal payments

The impact of informal payments varied. In FGDs, some women described simply paying at the time of service and obtaining their desired family planning method. Other women indicated that they could only pay for family planning if they forwent other necessities: “I pay because I was in need. So I had to pay and not get my vegetables” (FGD, Busia, Current User).

Others could not afford the fees; rural women were seen as being particularly price sensitive. In the patient journey mapping workshop, informal payments were characterised as occurring often, being impactful, and being a priority problem for researchers to address. Many women described how public facilities might be stocked out of methods, so they would be told to purchase their family planning method at a pharmacy and bring it to the public facility for administration. One participant described receiving instructions to purchase family planning from a pharmacy that the provider owned.

Some women expressed frustration about the unpredictability of pricing. When women exchanged information with each other about fees charged at different facilities, the information was not always reliable, and different providers at the same facility might charge different amounts. Not anticipating the payments, women would travel to the facilities without cash and would subsequently leave unserved. Confusion about what, precisely, is free led to women arriving at facilities unprepared to pay for ancillary services for which charges are officially sanctioned:

“They say they must test my urine and you have to pay for it, yet maybe you don’t have the money. So that hinders you because you thought everything is for free and you are forced to go back without getting the service.” (FGD, Bungoma, Discontinued User)

Women frequently described having to make multiple trips to obtain family planning. In both FGDs and patient journey mapping workshops, these delays due to unanticipated informal fees were described as putting women past their deadline for the next dose and resulting in an unintended pregnancy: “When I do not have fifty shillings, even when my days have elapsed, I would not go, till I get the fifty shillings, it’s then that I can return for the injection” (FGD, Kisumu, Discontinued User).

Other women could not obtain the money and did not return for family planning: “Because of the frustration, [women] will say, ‘Let me go away my dear, even if it is getting pregnant, let that be so’” (FGD, Kisii, Current User). Key informants also linked informal payments to contraceptive discontinuation and non-use, which in turn contribute to unintended pregnancy.

Focus group participants, key informants, and providers expressed a range of attitudes towards informal payment systems. Some women expressed an understanding of informal fees as improper: “I know at the government it’s free but am told that you pay money to be served” (FGD, Kisii, Current User) and “it’s not supposed to be that way” (FGD, Kisii, Discontinued User). Women in the journey mapping workshop described learning that family planning should be free through the media. The informal payments were explicitly identified as a deterrent: “they should not ask for money. That money is what makes women afraid” (FGD, Busia, Discontinued User). However, many others described their experiences in a neutral manner.

Women in focus groups and patient journey mapping workshops described how informal payments disrupt women’s strategies for covertly acquiring family planning when they lack partner support.

“You find that maybe you do not have money, but he has money so if you ask for money from him, that you need it for family planning he will not give you. So, this can make you even become pregnant because you are still waiting to get your own money.” (Patient Journey Mapping Participant)

In contrast, during their journey mapping workshop, public sector providers did not characterise informal payments as common, impactful, or a priority issue that needed to be addressed.
Some key informants characterised informal payments negatively, as “lacking integrity” (KII, Private Sector/NGO High-Level Staff), “greedy” (KII, Public Sector provider), “corrupt” (KII, two Public Sector Providers), “mistrust” (KII, Private Sector NGO High-Level Staff), “vice” (KII, Private Sector NGO High-Level Staff) or “criminal” (KII, Senior Government Official). Among key informants, there was not a consensus about whether free family planning meant free method or a free visit, including commodities, supplies, and labour.

Some characterised eliciting fees for family planning itself as wrong but suggested asking for payments for supplies was reasonable (KII, Private Sector NGO High-Level Staff). In the patient journey mapping workshop, fees for supplies were described as happening much less often, being less impactful, and being less important to address than fees for commodities.

Addressing informal payments
In the focus groups and patient journey mapping workshops, Kenyan women emphasised that informal payments were an important barrier to family planning that should be addressed. Some specified that family planning services should be entirely free of charge; others emphasised the need for consistency and transparency: “They should let us know that if the method is for free let it be free of charge and if payments are supposed to be made, let it be flat rate everywhere” (Patient Journey Mapping Participant). The patient journey mapping dialogue also included a suggestion to hold a forum to enhance both provider empathy and accountability:

“So that they understand that sometimes a woman lacks money and when she goes to the facility for a method that is supposed to be free, she is charged. Yet she doesn’t have the money, so she ends up going back home without her method … Donors who give out these family planning do not know that the providers are charging.”

Key informants also characterised informal payments as an important issue and described efforts currently underway to address the problem. For example, multiple key informants described facilities discouraging and disciplining providers for soliciting informal payments. However, weak supervision was seen as undermining these efforts by creating an enabling environment for providers to avoid detection and disciplinary action. In particular, newly hired providers at remote referral centres were identified as prone to soliciting informal payments because they were often dissatisfied with their salary and left unsupervised when more senior members were attending trainings. Public sector providers perceived informal payments to be more likely to occur at public dispensaries or health centres than at hospitals, where any fees were formalised and paid through a cashier, rather than to the provider.

Another solution offered by multiple key informants was to ensure that the government provided free supplies alongside the free family planning commodities, as informal fees are often solicited when supplies are out of stock. Key informants also identified low and/or late wages as additional areas for the government to intervene, as providers paid too little or too late may be more motivated to solicit informal payments. A key informant expressed frustration that providers who requested informal payments because they were unhappy with their salaries did not address it with the management. Another key informant indicated that, in addition to stagnated salaries, providers were not receiving promotions that were due, potentially further contributing to providers’ motivation to solicit informal payments.

Finally, key informants discussed the need for increased feedback mechanisms and community involvement in order to address informal fees. One key informant reported that their clinic had a suggestion box and they invited patients to report if they were asked for fees. Another reported success in altering provider behaviour by mediating dialogues between providers and the community following an incident where providers had alienated women in the community by extracting informal payments. A third key informant spoke about her desire to see community members organise and advocate for themselves collectively, drawing on public responses to maternal mortality as a model for collective action. Community mobilisation and involvement were seen as a potential pathway for educating citizens about family planning and their rights to free family planning.

Discussion
Although informal payments in healthcare settings have been reported in a wide range of
contexts, empirical literature documenting the nature and the impact of informal payments is limited. In this study, we used a novel combination of methodologies to estimate the prevalence of provider solicitation of informal fees, to unpack the effect that such solicitations have on women seeking family planning services in western Kenya, and to identify locally sourced strategies to curtail solicitation of informal payments.

We found that family planning providers in participating facilities solicited payments from their clients in 13–25% of visits, depending on the measurement strategy used. We assume the CPI data offer a less accurate estimate of informal payment prevalence (13%) given providers may be aware that this behaviour is not allowed. Providers would therefore modify their performance when they are under observation by a third party – resulting in a prevalence estimate from CPI data that is just over half the estimate produced by MC data (25%). When we restricted our MC data analysis to only the 10 facilities where CPI data were also collected, we found informal payments were solicited in 36% of visits; therefore, we can be confident that the variation in estimates between CPI and MC data sources is not a result of the inclusion of different facilities.

Amounts solicited varied, with long-acting reversible contraceptive methods costing more than short-acting methods. The median amount reported by MCs was 1 USD. This amount is the equivalent of half a day’s pay for more than one-third of Kenyans living below the international poverty standard of 1.90 USD/day. The prevalence of informal payment solicitation in our analysis differs from the results recently published by Radovich et al., in which half of public sector family planning clients reported paying a fee; it is notable that our methods and the region included in data collection differ between these two studies. The study produced by Radovich et al. analysed nationally representative data of client retrospective self-reports, while our study was restricted to Western Kenya and employed the mystery client approach – a potentially more valid estimate of informal payments as mystery clients perform within a minimal recall period of 15–30 minutes and are trained to recall the exact amount of payment and to discern the difference between legitimate registration fees and informal payments. Further, data in the Radovich paper were collected in 2014 and efforts to reduce informal payments in the following four years may have succeeded.

Reasons given for payment solicitation varied, with providers asking for cash to cover the cost of the commodity or associated supplies as well as requesting money (aka “soda”) as a sign of appreciation. In both KIs and provider journey mapping workshops, participants indicated that they believed charging informal fees to offset the cost of supplies was appropriate, if unfortunate. They felt that such supplies should be covered by the government and/or donors providing contraceptive commodities, but that in the meantime providers had no choice but to pass the cost on to the patient. In contrast, payments that were viewed as pertaining to providers’ personal needs/wants were roundly criticised in KIs. Payments solicited to help cover gaps in salary were viewed in a moral grey zone, with key informants indicating that such solicitations were improperly directed at clients, but a reality given contextual factors. These distinctions between the different motivations for soliciting payment and their subsequent rationalisation are coherent with findings from other countries and contexts, including transitional economies, where charges motivated by personal survival receive tacit acceptance.

Interestingly, MCs noted that providers asking for a soda or other payment as a sign of appreciation gave the impression that the payment was up to the discretion of the client. Although providers in this study did not comment on this type of scenario, it is possible providers believe inviting a gift to be at the discretion of the client will protect them from charges of corruption and bribery. This may be the result of recent news reports of Kenyan providers facing criminal charges after demanding bribes. Anthropological work on informal payments in the health sector in Ukraine provides some insight on this phenomenon of leaving informal payments to the discretion of the patient; in a 2009 study, a key informant pithily explained, “If I receive it, it is a gift. If I demand it, it is a bribe” [p.53]. Similar distinctions have been reported by providers in Tanzania, China, and Bulgaria.

Despite nuanced provider and key informant perspectives on different types of informal payments, family planning clients did not make such distinctions. Women who participated in focus groups discussions and journey mapping workshops highlighted what they viewed as the unpredictability and arbitrariness of solicitations.
They noted that informal payments create a barrier to accessing family planning services, particularly for women attempting to use contraception covertly. Multiple women denounced what they felt was the unfairness of fees, especially against the backdrop of government campaigns around free family planning services. Further complicating this is the fact that women may be dependent on providers for repeat services. Thus, the solicitation of a “gift” or payment of appreciation may be seen by women as a factor that may influence future care, thus eliding the distinction between a gift and a bribe.3,10,14 These results suggest that fully curbing the practice of informal payments may require transparent and visible policies banning even discretionary payments, as patients may feel pressured to pay even when providers do not outright demand payment.

Key informants offered multiple pathways for discouraging informal payment solicitation. These solutions ranged from improving the health system – such as increasing sanctions or providing adequate supplies and wages – to fostering greater community involvement and monitoring of provider performance. The evidence base for such strategies is limited, although social accountability efforts have garnered attention in recent years as a promising approach to improving the quality of family planning services.38,39 One specific social accountability approach, known as the Community Score Card, was implemented and evaluated in Malawi to assess the impact on reproductive health outcomes; researchers found increased service delivery and client satisfaction in the intervention arm, compared to control communities, as well as 57% higher contraceptive use, although the study did not specifically measure the impact of scorecard activities on informal payments.40 Schaaf and Dasgupta29 describe a social accountability effort specifically designed to reduce demands for informal payments for maternal health services in Uttar Pradesh, India. While the intervention increased the agency and empowerment of participating community members, healthcare providers were strongly reluctant to cease demands for informal payments. The authors acknowledged that those taking up the challenge of addressing informal payments have “assumed a supremely difficult task”.

Kenya aims to increase the modern contraceptive prevalence rate from 61% to 66% by 2030. To do this, the country intends to increase budgetary allocation to family planning, broaden access to family planning services – especially among poor people – and address family planning barriers.41 One promising strategy to facilitate these goals is to include family planning in the national health insurance scheme that currently offers free maternity services to pregnant women, known as Linda Mama. The inclusion of family planning in this programme would help to address funding shortages by allowing health facilities to be reimbursed for family planning provision. Facilities eager to capture these reimbursements would be better incentivised to offer family planning. Currently, facilities are not reimbursed for any extra supplies or for the provider’s time and effort spent in the provision of family planning services. As UHC expands to additional counties in Kenya, there is an urgent need to advocate for inclusion of contraceptive commodities, supplies, and provider effort in the UHC budget and benefits package. Ensuring inclusion and prioritisation of contraception in UHC could potentially reduce the proportion of contraceptive financing from informal payments.42

In addition, in 2017, the Kenyan Ministry of Health adopted a national costed implementation plan (CIP) to identify resources for adequate family planning financing, with the goal of averting nearly 2 million unintended pregnancies annually.43 The CIP identifies several challenges facing the family planning programme in Kenya including devolution of health, commodity stock outs, and inadequate financing. Informal payments, however, were not included, although they are known to predispose patients to catastrophic health expenditure44 and may lower the utilisation of family planning services. Informal payments in public facilities have the potential to derail the Ministry’s ambitious targets. This study – one of the first to reliably document the magnitude of informal payments in the provision of family planning services, using MC data to ensure high validity of results – is thus an important contribution to the discussion of barriers to family planning use in Kenya.

Limitations

A commonly acknowledged limitation of CPI observations is the Hawthorne effect, where knowledge of observation changes behaviour. The discrepancy in our prevalence estimates across two distinct measures may be a result of
the Hawthorne effect, as fewer providers solicited fees when accompanied by an external observer than when visited by a MC. However, our inclusion of data from MCs provides an opportunity to compare differences in the frequency of informal payments between CPI observations and a methodology that is not subject to the Hawthorne effect. It is possible that the different prevalence in informal payments between the two methodologies represents the difference in the percentage of client interactions for which the provider feels justified in soliciting fees and those visits in which they recognise they are engaging in harmful behaviour.

Within our individual focus groups and the patient journey mapping workshop, we recognise that our recruitment strategy and eligibility criteria may have excluded some of the women most sensitive to barriers to family planning care, such as adolescents. Although women as young as 18 were eligible, our participants skewed older so we may not have fully captured the experiences of younger women. In particular, the data collected in our patient journey mapping workshop are missing crucial information about barriers that may be unique or more pronounced for adolescents, unmarried or nulliparous women, and those who are not current family planning users. Additionally, we did not stratify focus groups by marital status, and being in FGSDs with married women may have inhibited disclosure from women engaging in non-marital or transactional sexual behaviour. Finally, journey mapping is a nascent methodology for assessing facility-level barriers within the public healthcare system. In particular, little guidance exists for transferring this approach from the commercial sector, where rigorous research methodology may be lacking. We drew on principles of quality and rigour from naturalistic qualitative inquiry to guide our use of journey mapping.45

We also acknowledge limitations in the interpretation and generalisability of estimates of informal payment prevalence given the facility data were not weighted to account for the probability of selection within each of the five counties, nor were adjustments made for the multiple observations conducted at each facility. Similarly, we are unable to assess whether certain types of women – such as those in the lower wealth quintiles – were more or less likely to be asked for informal payments. Given the evidence that informal payments are regressive and those with more resources might not be asked to pay in some circumstances,29 our inability to track this equity concern is worth noting.

Conclusion
In this study, informal payments were frequently solicited, potentially creating an important cost barrier for the most vulnerable women. Such solicitations may be tied, in part, to budget shortfalls in the public sector. Increased government financing will be critical for ensuring timely and adequate wages as well as sufficient family planning supplies and commodities. Greater clarity, transparency, and visibility of policies prohibiting informal payments – even those left to the discretion of the patient – may help to curb this behaviour. Additionally, key informants encouraged efforts that mobilise and involve communities in the monitoring of public facilities in order to increase provider accountability and empower patients.

When providers solicit informal payments, public sector family planning is no longer free. Women who are the most price sensitive find themselves unable to utilise the contraceptive they desire. As Kenya continues to roll out UHC, eliminating informal payments will be key.

Ethical approval and informed consent
Ethical approval for the study protocol was provided by both University of North Carolina at Chapel Hill and the Kenya Medical Research Institute.

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Résumé

Les paiements informels sont des transactions financières non comptabilisées réalisées par des patients en faveur de leur prestataire de soins de santé. Dans les pays à revenu faible ou intermédiaire, les prestataires sollicitent des

Pagos informales son transacciones financieras extraoficiales efectuadas por pacientes a su prestador de servicios de salud. En países de bajos y medianos ingresos, los prestadores de servicios solicitan pagos informales de sus pacientes para
paiements informels de leurs patients pour acheter des fournitures supplémentaires, compléter leur salaire ou d’autres raisons. Les paiements informels réduisent l’accès équitable aux soins de santé et sapent les efforts pour garantir une couverture santé universelle. Cette étude a utilisé des méthodes multiples de collecte des données pour estimer la prévalence des paiements informels, en décrire l’impact et explorer des solutions réalisables pour juguler cette pratique dans le Kenya occidental. Les données au niveau des établissements ont été recueillies dans 60 centres du secteur public (avec 142 visites de clients mystères et, dans un sous-échantillon de dix entres, 253 observations de l’interaction entre clients et prestataires). Nous avons mené huit discussions par groupes d’intérêt avec des utilisateurs actuels et passés de contraceptifs, 19 entretiens avec des informateurs clés et deux ateliers de cartographie du parcours des patients. Les prestataires avaient demandé de paiements informels dans 25% des visites de clients mystères et 13% des observations de l’interaction entre clients et prestataires ; le montant médian d’argent demandé aux clients mystères était de 1 dollar US. Les participants aux groupes d’intérêt et aux ateliers de cartographie ont indiqué que les paiements informels représentaient un obstacle financier et contribuaient à des grossesses non désirées ; les informateurs clés ont estimé qu’un suivi communautaire plus actif des centres était essentiel pour réduire ce comportement.