

“It’s just to protect myself”: Qualitative analysis of post-coital pregnancy prevention in DRC, Ghana, Kenya and Nigeria

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Short abstract

Understandings of contraception tend to focus on pre-coital methods; post-coital methods of pregnancy prevention are rarely considered beyond emergency contraceptive pills (ECP). We use framework analysis to analyse qualitative data (in-depth interviews, focus group discussions, key informant interviews) conducted with women and men in 2021-2023 in four African countries: DRC, Ghana, Kenya and Nigeria. We consider how post-coital methods are presented, understood and discussed. A wide range of post-coital methods are reported, including: ECP, other pharmaceuticals used post-coitally (e.g.: deworming tablets, painkillers, antibiotics), and non-pharmaceuticals (e.g.: drinking cold water/alcohol/saltwater, ingesting herbal concoctions, douching, standing / squatting / grunting). A focus on post-coital methods expands theorising about pregnancy prevention to situate diverse post-coital products and practices in people’s reproductive lives, including in relation to non-/use of pre-coital contraceptive methods. Detailed understanding of what people do and use, and why, helps broaden understanding of the role of pregnancy prevention in people’s lives. It calls attention to improved measurement and reporting of the full range of pregnancy avoidance practices, to better inform program and policy approaches. Understanding post-coital behaviours and methods offers additional insights into the ways in which pregnancy prevention is understood and practised in people’s lives.

1.0 INTRODUCTION Understandings of contraception tend to focus on pre-coital modern methods. People's use of post-coital methods of pregnancy prevention are rarely considered beyond emergency contraceptive pills (ECP). Standard cross-national surveys (e.g.: DHS, PMA) include questions about contraception that include ECP in the responses, however large-scale survey evidence about any other post-coital pregnancy prevention practices is absent. Reported rates of current use of ECP among all women are relatively low compared to the levels reported by unmarried sexually active women: Ghana (2022) 2.8% all women vs. 11.5% sexually active unmarried women; Kenya (2022) 0.6% vs 2.6%; Nigeria (2018) 0.2% vs. 2.2%. The low visibility of post-coital methods in the evidence base reflects in part programmatic and policy emphases on long-acting reversible contraception (LARC)¹ in many African countries and evidence of under-reporting of ECP and other coitally-dependent contraception in surveys. Efficacious post-coital pregnancy prevention includes IUD insertion and emergency contraceptive pills (ECP); ECP are the only efficacious post-coital method that can be self-administered². The "emergency" of ECP is located within the occurrence of at least one of these circumstances: contraceptive non-use, contraceptive failure, and sexual assault where contraception was not used³. This very restricted view of post-coital practices and behaviours invisibilises diverse practices that are central to many people's reproductive lives, including so-called traditional contraception. Moroole et al's (2021) review of African indigenous contraception identified a group of practices that they referred to as "indigenous emergency contraception", which includes a diverse set of post-coital practice including douching and consumption of herbs / plants or other materials.

To situate the role of post-coital methods within the broader context of pregnancy prevention, we need to better understand how and why people use post-coital methods – including but not limited to ECP. Do people use post-coital methods because they did not anticipate having sex? Or are post-coital methods seen as standard contraceptive practice, and preferred to pre-coital methods? A focus on post-coital methods offers opportunities to expand our theorising about pregnancy prevention to situate diverse post-coital products and practices in people's reproductive lives, including in relation to non-/use of pre-coital contraceptive methods. Detailed understanding of what people do and use, and why, helps broaden understanding of the role of pregnancy prevention in people's lives. It can also inform programs and policies by providing a more complete and complex picture of the full range of contraceptive practices employed by individuals. Our analyses answer the research question: How are post-coital pregnancy prevention practices understood and used by men and women in DRC, Ghana, Kenya and Nigeria?

2.0 METHODOLOGY This paper presents secondary analyses of qualitative data from the "Re-examining Traditional Method Use" project (TEAM-UP Study). The study sought to better measure the prevalence of 'traditional' methods of contraception and understand women's and men's motivations for using these. Mixed-method (quantitative and qualitative) data were collected in four phase urban and rural sites in four African countries: Democratic Republic of Congo (DRC), Ghana, Kenya, and Nigeria. Data collection was conducted by the African Institute for Development Policy (AFIDEP), with partners who led the research in their respective locations (University of Kinshasa (UNIKIN) and the Population and Health Research Institute (PHERI) in DRC; the Regional Institute for Population Studies (RIPS) at the University of Ghana; Akena Associates and the College of Medicine at the University of Ibadan in Nigeria).

2.1 Qualitative data and analysis: This paper analyses qualitative data generated from two phases of the TEAM-UP data collection (Table 1). The pilot data (2021), comprising focus group discussions (FDGs) and key-informant interviews (KIIs), complement in-depth interviews (IDIs) conducted during the main data collection period (2022). Interviews were conducted in English and languages specific to each site (French, Lingala, Swahili, Kikongo, and Tshiluba in DRC; Ga, Twi, and Ewe in Ghana; Swahili and Kamba in Kenya; and Hausa, and Yoruba in Nigeria).

¹ Bullington, B.W. et al. 2023. Prevalence of non-preferred family planning methods among reproductive-aged women in Burkina Faso: results from a cross-sectional, population-based study. *Sexual and Reproductive Health Matters*, 31(1), p.2174244. Chang, W., & Tumlinson, K. (2021). Free access to a broad contraceptive method mix and Women's contraceptive choice: evidence from sub-Saharan Africa. *Studies in family planning*, 52(1), 3-22. Nandagiri, R. (2021). What's so troubling about 'voluntary' family planning anyway? A feminist perspective. *Population studies*, 75(sup1), 221-234. Senderowicz, L. et al. (2021). 'I haven't heard much about other methods': quality of care and person-centredness in a programme to promote the postpartum intrauterine device in Tanzania. *BMJ Global Health*, 6(6), e005775.

² T. Palermo, J. Bleck, E. Westley Knowledge and use of emergency contraception: a multicountry analysis *Int. Perspect. Sex. Reprod. Health.*, 40 (2) (2014)

³ Strong, J. (2024). "Even when you write with a pencil there is an eraser to clean it": Examining men's conceptualisations of and involvement in emergency contraceptive use in Accra, Ghana. *Social Science & Medicine*, 344, 116635.

Table 1: TEAM-UP qualitative data sample sizes, by country.

| Country | Pilot Sample | Main study sample IDs |
|---------|--------------------|-------------------------------|
| DRC | data not available | 36 women, 9 men [Kinshasa] |
| Ghana | 14 FGD; 22 KII | 110 women; 44 men |
| Kenya | 16 FGD; 20 KII | 77 women; 34 men |
| Nigeria | 12 FGD; 20 KII | 77 women; 34 men |

2.2 Analyses: We used framework analysis for all qualitative data. The framework was designed by JS and EC tested during an in-person workshop (EC, JS, ND, NA) and through subsequent virtual conversations with the entire authorship team. Transcripts were then split among the team, with JS, EC, JC, FO, and AN conducting the analysis. The framework analysis was designed to capture the full range of post-coital practices and behaviours reported by respondents, including but not limited to emergency contraceptive pills (ECP). These data were analysed to create key themes around understandings of, motivations for, and use of post-coital practices for pregnancy prevention within discussions around sex, reproduction, and contraception.

2.3 Ethics: In each study country, ethical approvals were sought from appropriate authorities and granted. In the DRC, the National Ethical Committee approved the research (decision No.259/CNES/BN/PMMF/2021 du 1er/06/2021). In Ghana, the University of Ghana Ethics Committee for the Humanities approved the study (ECH 131/ 20-21). In Kenya, the AMREF Ethics and Scientific Review Committee (AMREF– ESRC P 1299-2022) and the National Commission for Science, Technology and Innovation (NACOSTI/P/22/19360) both provided clearance, whilst in Nigeria, the National Health Research Ethics Committee of Nigeria provided ethical approval (NHREC/01/01/2007-15/03/2021).

3.0 RESULTS Our analyses identified a typology of post-coital practices (ECP; non-ECP pharmaceuticals; non-pharmaceuticals). We first describe and explore this typology, and then present four cross-cutting themes we identified.

3.1 Typology of post-coital practices: Post-coital pregnancy prevention methods can be classified into a three-way typology: i) Emergency contraceptive pills (ECP), often identified by a brand name. ii) Other, non-ECP, pharmaceuticals used post-coitally with the intention of pregnancy prevention iii) Other post-coital practices and behaviours. Our classification does not assume that only one post-coital method was used following sex. For example, a respondent explained: *I took two Dorgino tablets after I'd had sex [...] But before taking Dorgino, I would wash myself right after intercourse and then sit on a bucket of water for 30 minutes. When you sit on a bucket full of water, you're going to feel how the sperm flows.* (Woman, Kinshasa). It also does not assume exclusive use of post-coital methods, as many people reported current or previous use of a broad range of methods.

3.1.1 ECP: ECP were referred to either by their brand names or by generic names such as “post-pill”. For many women who talked about their use of ECP, it was a “routine” rather than “emergency” part of pregnancy prevention: *When I have intercourse at a bad time, I use it to avoid pregnancy [...] I learned about it from my husband, and we buy it at the pharmacy [...]* [Woman, Kinshasa]. Women who had used or were using ECP tended to be neutral or positive about using ECP. There were rare examples of ECP dislike: *am also pissed that I had to use that one [ECP] [...] I really don't like it [...] It was an emergency [...]* [Woman, Mombasa]

Like all other forms of contraception there are beliefs and understandings, for example: *The P2, she [an unmarried woman] should not try it, I don't know much about it but I have Googled and found out that it has infections if you use it more than three times it causes infections.* [Woman, Mombasa]. Younger men mentioned ECP: *There is that...when you do sex with a woman, can be a student or....there are those medicines called E-pills [...] if you finish [ejaculate]... and you give her that and eats them, pregnancy will not occur [...]* [FGD, younger men, Mombasa]. FGD often identified unmarried women and adolescents as users of ECP: *Maybe for me for example who is in school and maybe I got a*

sponsor or a sugar daddy and I want him to educate me without my parents knowing, then the sponsor is forced to buy me the pills and every time we have sex I take them and am okay and I go home and when my parents give me the school fees I pocket and no one will know and such is life. [FGD younger married women, Mombasa]

3.1.2 Other post-coital pharmaceuticals: Women reported using a variety of non-ECP pharmaceuticals, switching between different drugs. In this example, a woman describes having used a pharmaceutical (Dorgino – also reported as an abortifacient), deworming tablets (Decaris) and antibiotics (tetra). *That's how I started with Dorgino and then I thought I'd try again with Decaris, which also worked. I said to myself that I'd try Tetra again, but only with Tetra I could not do it because it's bitter [...] To avoid suffering with children, I protect myself and avoid getting pregnant.* [Woman, Kinshasa]. Women's descriptions of using other pharmaceuticals closely mirror the instructions for ECP. In this example, a woman described her use of deworming medication (Tanzol): *I often use a condom; if I don't feel like using it, I take the pill; I drink the "Tanzol" at the end of intercourse [...] if we've had sex at night, we'll have to wait until around 7 or 8 a.m. when the pharmacy opens to get it.* [Woman, Kinshasa]. *Prevention is better than cure, because mistakenly the sperm can enter so I take flagyl immediately. If the withdrawal was successful, then we don't use flagyl* [Woman, Adamawa]

3.1.3 Other post-coital practices and behaviours: Across contexts, diverse post-coital practices understood to prevent pregnancy: *When I release into her by mistake, maybe I'm not sure whether or not I release into her, she will takes hot drink (alcoholic drink, gin).* [Man, Lagos]. *After having sexual intercourse with my husband, I drink one sachet and use one to wash my vagina. [...] if my period is due and I don't go for the injections, I use the water method first, then go for the injections.* [Woman, Greater Accra]. Although drinking water was widely reported across contexts, scepticism about the effectiveness of drinking water and urinating was expressed: *I know of drinking chilled water and straining to pee the semen away after sex but I haven't tried that before so I don't know if it is true or not* [Woman, Greater Accra]. *[...] once I explain to her (herbalist) that my husband and I had something together last night and that she should sell herbal mixture for me [...] referred to as "Washing and Setting".* [Woman, Lagos]

3.2 Post-coital methods: In the second section we focus on four cross-cutting themes that we identified in our data, present – to a greater or lesser extent – in all four countries.

3.2.1 Accessibility: Accessibility – economic, geographic, cognitive, psycho-social, administrative – of post-coital methods was a key theme across contexts, irrespective of which post-coital methods were used: *if that happens [husband does not withdraw], I just run to the shops.* [Woman, Mombasa]. In Ghana, the advertising of ECP brands was referred to by multiple participants: *ooh, oral contraceptives [ECP] are everywhere [giggle]. They advertise it on the radio, on the TV, everywhere. When you go to the hospitals too you will see their labels there.* [Woman, Greater Accra]. In DRC the use of “doctors” in TV adverts that emphasised efficacy was highlighted: *Often I used to drink Aleze [ECP brand], that's what I've always drunk [...] I used to take it because I was afraid of getting pregnant [...] What I found effective was the Aleze, as I tried it for the first time it worked and I saw the TV advert as it was done by doctors, so it's effective, I preferred that to the pills.* [Woman, Kinshasa]

The availability of ECP at local stores at relatively affordable cost was a feature of men's and women's accounts in DRC: *we get it at the pharmacy [...] I'm usually the one in charge of buying it at the pharmacy. [...] The pharmacists don't ask us many questions because I know what I'm using myself. I go to the pharmacy, ask the question, and if there's any, they sell it to me.* [Man, Kinshasa]. *it's easy to find Aleze [ECP brand] at the drugstore, and sometimes I drink it even on the road.* [Woman, Kinshasa]

Although some women found it difficult to buy ECP: *As soon as I walk into a pharmacy, if I find there are a lot of people, I freeze until I'm alone with the salesperson. They would often hand over the product on the sly so that people wouldn't notice. So it wasn't easy to buy. I was ashamed.* [Female, Kinshasa]. For adolescents, the ability to buy ECP over the counter was identified as critical to their accessibility: *mostly they [adolescents] use pills [ECP], it will suspicious and problematic if they go to the health facilities and ask for injections but emergency pills are easily accessible in pharmacies.* [FGD, younger

married men, Mombasa]. The accessibility and trustworthiness of other pharmaceuticals – especially deworming treatments in DRC – was reflected in the prevalence of their use: *I know that people have been taking dewormers for a long time, I heard about taking the medicine where I lived, people said that if you go out with a man, you have to take the medicine* [Woman, Kinshasa]

3.2.2 Post-coital method mix[ing]: In people's accounts of their approaches to pregnancy prevention, post-coital methods are woven into their use of a wide range of other contraceptives, of varying efficacy:

I've never consulted a doctor I just use the calendar; I do the withdrawal; or I ask my partner to take a pill [...] it's my partner who buys because I'll forget and it's really in the rare cases; she doesn't take it often. [Man, Kinshasa]

[...] I quickly take the modern drug called post pill [...] I can also say my husband and I both decided on the withdrawal because he is aware of it when he is pulling out during climax but about the drugs, I don't think he knows. I will just take it myself, at least he has done what he wants to do, and I know I don't want to get pregnant. [Woman, Lagos]

3.3.3 Alternatives to pre-coital [hormonal] methods: People's explanation for choosing post-coital methods in comparison to other pregnancy prevention methods frequently focused on the side-effects of hormonal contraception:

We looked at the consequences of other methods. For example, an injection can raise or lower blood pressure, and we decided that if we made a mistake, it would be better to use the pill [ECP]. [Man, Kinshasa]

There were several elements that seemed important to me in making a choice about my strategy [non-ECP pharmaceutical] [...] and the consequences that modern methods could bring about, change in the menstrual cycle, abundance of bleeding in certain cases. [Woman, Kinshasa]

3.3.4 Fitting with people's sex/ual lives: Irrespective of which other – if any – pregnancy prevention methods people were using, post-coital methods served a critical role in responding to people's needs. For example, spontaneous and unplanned sex: *I can count the days, but I can't control it, because a sudden urge for sexual intercourse can come (from husband) without any warning, without me knowing whether I'm in a good or bad period [...] before I started using the pill [ECP], I used to count the days, but I stopped since I've been using the pill, which is now a solution* [Woman, Kinshasa]. Infrequent sex, linked to travel for work, meant that for some people post-coital methods served a logic of not needing to use pre-coital methods: *Because my husband does (not) stay around, he comes and goes. So I saw the method is not an everyday thing is just some days, so I choose to use the Epill. [...] he is always travelling [...] because it is only to be used once, like once you have sex you use it the next day so I felt it is the one that suits me.* [Woman, Mombasa]

4.0 Conclusion: Our qualitative data and analyses demonstrate the important role that diverse post-coital pregnancy prevention practices play in people's lives. Many people who would be classified in surveys as "non-users" are using an array of post-coital methods; even if many of these methods have no proven efficacy for pregnancy prevention, their use demonstrates that men and women are making deliberate efforts to avoid pregnancy, including sourcing and paying for post-coital methods. The field's very limited and narrow understanding of post-coital practices – almost entirely focused on and evidenced by emergency contraception pills -- makes invisible the important roles and logics of decisions and choices to use post-coital methods. It also reinforces binary labels, such as contraceptive "user" or "non-user", that mis-represents individual use of pregnancy avoidance methods. Some of the use of ECP that people described fulfils the established framing of "emergency"; for many people, however, much more complex factors underpin the logic of using post-coital strategies. We argue in this paper that the evidence base about pregnancy prevention is enriched by a deeper understanding of the range of practices – non-efficacious and efficacious – to better understand how pregnancy prevention is understood and practised in people's lives.