

Exploration of the Need for Integration of Cervical Cancer Information into Postnatal Services at Primary Health Care Centers in Ibadan Nigeria

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ABSTRACT

Background: Cervical cancer (CC) is a preventable disease yet it is one of the leading causes of death, especially in low-income countries. In Nigeria, information on CC is yet to be part of routine health talk at Postnatal Clinics (PNC) at the Primary Health Care (PHC) level. The PNC would however have been a good avenue to reach women at risk of CC. This study explored health care workers (HCWs)' willingness to integrate CCS services (CCSS), and women's readiness to uptake the services at PHCs in Ibadan, Nigeria.

Method: A qualitative study design was employed in this study. Data were collected through four sessions of Focus Group Discussions (FGDs) among the women attending PNC, and 20 Key Informant Interviews (KIIs) for health workers in PHC facilities. The Atlas.ti software, version 8 was used for the analysis. Thematic contents from the study were presented as quotes and streams of thoughts.

Results: Information on CCS is currently excluded from the list of PNC activities such that most women have never heard of the need for CCS. They were interested in receiving CCS information and services. Women pleaded for the integration of CCS information in PHC clinic activities but preferably in a free or subsidized format in order to encourage utilization of the services. Challenges identified were mainly a shortage of manpower and a lack of training on CCS.

Conclusion: Health workers were willing to integrate CCS services in PHC activities, however, recommended recruitment of more hands to ensure effective service delivery in line with National health policy on PHC in Nigeria.

Keywords: Cervical cancer screening, postnatal care, primary health care services, reproductive women integration.

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1. INTRODUCTION

Globally, cervical cancer (CC) is rated as the fourth most common cancer among women and the second most diagnosed cause of gynaecological cancer affecting women of reproductive age [1]–[3]. Current global estimates indicate that 604000 women were newly diagnosed with cervical cancer and 342000 women died from the disease in 2020 [4]; however, CC can be prevented or reversed through early detection measures [5]. This preventable disease is one of the leading causes of death, especially in low-income countries [6].

Although, both preventive and curative measures exist in Nigeria, there are still over 40 million women who are at risk of developing CC [7]. The measures of the reductions of CC are mainly through human papilloma virus (HPV) vaccination which is a primary preventive measure and screening as a secondary measure [7]–[12]. Most of these women are not aware of cervical cancer and its preventive measures [10]–[12]. Some cervical cancer educational and screening programs have been implemented in Nigeria by researchers; nevertheless, screening uptake has remained low as CCS has been more of opportunistic [13], [14]. Cervical cancer screening programmes in Nigeria have remained opportunistic. Despite the few programmes for CC prevention and control in Nigeria [15], [16], the women are increasingly experiencing CC, with an unacceptable mortality [15], [17], [18] as there is no continuity or structure in the programmes.

While over 53 million women of 15 years and older are at risk of CC in Nigeria [18], around 15,000 women were diagnosed with the disease in Nigeria in 2018, and more than 10,000 lost their lives. Many affected women preferred alternative care services such as religious or traditional healing centres, over hospitals [11], [18]. A rise in CC mortality rate in Nigeria is projected to be 63 percent for those above age 65 years and by 50 percent rise for those below 65 years by 2025 [19], [20]. Women above 18 years who had ever been screened for the disease in the country was close to 9% [20], while over 30% coverage was reported in high and upper middle-income countries [21], [22]. Access to CC screening exercises was observed to significantly reduce CC mortality [23], [24], while many women, especially in rural areas, present with advanced stage of CC due to the non-availability of screening programmes [25], lack of awareness and information [24]; delay-in seeking health care and -by health care providers' delay in referring patients to tertiary care facilities [26]–[28].

Anene-Okeke *et al.* [20] observed that there is an estimated 23,640 health facilities in Nigeria, and about 86% of the estimate were PHC facilities. Pregnant women visit PHC facilities for their ante-natal care (ANC), and nursing mothers also converge at an appointed period for a post-natal care (PNC) [29]. Little has been done in exploring the effectiveness of integrating cervical cancer screening information into postnatal services of the PHCs, which is the closest facility to the people in rural and urban Nigeria communities [30]–[33].

Targeting PHCs for CC screening awareness, information, and other related programs, may be a good measure for achieving its eradication by 2030 [34]. This study explored possible challenges to integration of cervical cancer screening information into postnatal services and women's desire to be screened for cervical cancer screening in the primary health centers in Ibadan, Nigeria.

2. METHODS

2.1. Study Design and Sampling

This study utilised qualitative study design to source data from health workers and women attending PNC in Ibadan North local government area (IBNLGA), Oyo State Nigeria. The study area is Ibadan, the capital of Oyo state in South West Nigeria. The study was conducted in four selected primary health care facilities in IBNLGA, Oyo state, Nigeria. Ibadan North LGA is located in Oyo State, South Western Nigeria. Ibadan North is an Urban LGA with an estimated population of 201,430, mostly inhabited by Yoruba ethnic group. The LGA houses major institutions, and hospitals like University of Ibadan, University College Hospital, Ibadan. It also has several industrial and commercial centres [35].

The study was conducted among health workers in four primary health care facilities in Ibadan North local government, Oyo State, Nigeria, and women attending PNC and immunisation clinics across PHCs, in the study area. Initial record review of the clinics indicated that the number of women per visit was 30 to 40, out of which samples of participants were made.

2.2. Inclusion Criteria for the Study

Considering the fact that the World Health Organization (WHO) discourages screening for women below age 25 [36], inclusion criteria for age of participants in this study was fixed at age 25–49 years for women attending PNC or immunisation clinic, while women that have had hysterectomy were excluded from participating in the study. Four PHC facilities were surveyed with one focus group discussion (FGD) conducted in each facility among women attending PNC. Also, at least three to four of the health centre coordinators, their assistants and Medical Officer of health were interviewed from each facility making 20 health workers overall. All the participants were duly informed about the study and the procedure for data collection.

2.3. Ethical Principles of Research

The Oyo State Ministry of Health Ethics Committee approved the study with approval number AD13/479/44414A. Permission was also obtained from the Local Government agencies overseeing the facilities. Confidentiality was observed as the respondents were anonymized such that their names were replaced with numbers and the information, they provided remained untraceable to them. Written informed consent for participation was duly obtained from all the participants.

The Field staff, who are skilled in social research, were trained on the use of the tools for data gathering namely FGD guide and KII guide as well as for taking informed consents from the participants.

2.4. Instrument for Data Collection

A moderator and a note taker conducted each FGD session among the women as well as the key informant interviews (KIIs) carried out among the health workers. All sessions of FGDs and KIIs were audio recorded with approval of the participants. All audio files generated from all interviews and FGDs were labelled and transcribed verbatim. The transcriptions were edited for flow of thoughts without losing the original idea of the respondents. Also, all audio recorded were transferred to a labelled folder on a system on daily basis in order to allow easy retrieval and for easy identification.

2.5. Analysis

Each transcription was uploaded into Atlas.ti software, version 8 for analysis. The software enabled generating codes and nodes along thematic dimensions of the study. For easy referencing of quotes and analysis in the text, participants were abbreviated as ‘CNO for chief nursing officer’, ‘MO for medical officer’, ‘CHO for chief health officer’, ‘JCHEW for junior CHEW’, and ‘SCHEW for senior CHEW’. Network of thoughts and ideas were analyzed to tease out the thematic and analytical findings from the study. The analysis also enabled content explanation of highly relevant selected quotes, memos, networks and streams of thoughts.

3. FINDINGS

3.1. Common Services and Information Provided in PNC Clinics in PHCs

Postnatal Service form a major part of maternal and child health (MCH) care in PHC activities in Nigeria. The PHC is widely embraced in most rural Nigerian communities, with MCH care services being well patronised by pregnant women. Concerning common topics discussed with women; health workers (HCWs) discussed issues bothering on health and hygiene practices with women, though it is not clear in the narrative if they expand services to incorporate emerging diseases in their health talk. Health workers reinforced ‘personal and environmental hygiene’ and ‘the care for newborn’ as paramount topics often discussed with women during PNS session. A participant noted; “*firstly, we talk about their hygiene and environmental hygiene and we talk about the care of newborn*” (CNO, Idi-Ogungun PHC). Another CNO expressed that they often educate women on ‘Personal and environmental hygiene, we talk about depression, then we discuss the danger signs of pregnancy. Then we prepare them for delivery’.

In comparison, however, more health education topics are covered with women when they visit clinics for PNC meetings. Mothers are more encouraged, by HWs, to be more vigilant of their health status as noted here:

“Most of the things we discuss with them are based on health education. We guide them on how to take care of

themselves, from head to toe; and we tell them about breast examination, most especially that they should examine their breast every month. Those that have not resumed their menstruation, we ask them to pick a date and they should be doing it on that date” (CNO, Idi-Ogungun PHC).

Health Care Workers (HCWs) in PN clinics also educate mothers on how to care for their babies and children. In this clinic, more emphasis is often on newborn while they touch on issues of exclusive breastfeeding for newborn from zero to six months, when to start complementary feeding and proper bathing and care for babies. Women are also educated and encouraged to ‘bring babies and children for immunisation’, while importance of vaccination for mothers and immunisation of their babies was always being mentioned at each PNC meeting’. A participant expressed that mothers who were preparing for complementary feeding would be made to come to the clinic in order to be taught how to prepare and have good nutritious meals for their babies:

“The next thing is nutrition. Yes, so we spend time telling them, teaching them on the benefit of exclusive breastfeeding that’s for the first six months of life, and then introducing other meals at 6 months of age. Then, we also even demonstrate; we go as far as cooking, the women come together, they cook for themselves and they dance and have fun” (M O, Idi-Ogungun PHC).

Family planning is also a major topic often discussed with mothers during clinic visitation. Mothers are educated on types of family planning, and benefits of family planning to their health and children. In one PHC, a chief nursing officer explained the major activities they run through on family planning session for their clients:

“... and then we ask them to come for family planning. We have 24 or 48 hours Post IUD. That we advise those that want it, you know it is by choice, it’s not by force. For those that want it, we tell them that they should come for insertion. And here there is no operation, so there is no contra-indication of that IUCD. Then, for those that want insertion, we tell them that whenever they are ready, they should come and take it; we tell them all the side effects, and we examine them before we place them on it” (CNO, Idi-Ogungun PHC).

Mothers were also encouraged to bring their children to the clinics if they discovered that their children were not feeling well or had a fever and ‘we see a lot of patients bringing their babies for illnesses like airway infections, and malaria fever (MO, Idi-Ogungun PHC). Discussants complement the HCWs expressions about educating mothers on care for babies, issues of family planning, and immunisation among others. In one FGD session, it was discussed:

“The hygiene . . . , how we can take care of our children, how we can give them good food, breastfeeding, then erm . . . what do they call it? Family planning. Breastfeeding, starting from six months. If we want to feed our children regular food, we start from six months old before introducing it to them; a child that is less than six months, we are not to give them regular food, rather we should breastfeed them, that that is okay for them” (FGD, Idi-Ogungun PHC).

In the mothers’ focused discussion group, participants were in agreement with what the health workers reported.

They generally expressed that “mothers were informed about the milestones and stages of immunisation a child needs to pass through and take and how to take care of themselves and their babies”. A discussant explained that they were made to know that “immunisation for children should not be missed for a child, because immunisation plays relative importance in disease prevention and for aiding growth for the child”.

3.2. Nature of Access to Information on CC and CCS

In the same vein, HCWs confirmed that CC was not part of the common topics that they regularly discussed with women either at ANC or PHC meetings except on rare occasions when special outreaches were organised “It is not very common to us here, except for sometimes; there are some doctors that come for outreach and there are some NGOs that come once in a blue moon and they talk about cervical cancer” (CNO, Idi-Ogungun PHC). One condition that makes a HCW discussed CC with women is if a woman returns for a family planning. A participant expressed that CC is very important, but that HWs mostly skipped the topic as it is not seen as a major concern.

Most of the time, we don't talk about it. It's not that it is not important, but sometimes we do forget to talk about it. At the family planning unit, there is no way they would not talk about it because they would examine women before family planning is done. They need to know about the condition of their cervix; we tell them that if they spot blood at the time they were not menstruating, they need to come to see the doctor (CNO, IBN LGA).

Most times, risk factors were mentioned to women to observe and avoid where necessary. For instances, HCWs advised women to avoid early sexual exposure for young women, and to avoid multiple sexual partners:

“We mention risk factors too, a few times, the risk factors can be multiple sexual partners, early sexual exposures. And we make them to understand that it is also preventable, by taking the vaccine. It's a vaccine preventable disease” (MO, Idi-Ogungun PHC).

However, HCWs expressed that even though, they may not discuss CC at all times, most times health education and information they offer often bother on need for women's consciousness and regular attention to observe their body especially in cases of any abnormal vaginal discharges. Women are often told to observe the colour and smell of such discharge and should be ready to visit the nearest PHC centre to seek further help. A chief nursing Officer (CNO) noted that women are often being asked:

Is there any discharge that is still coming out? Do they observe or feel like... if anything that is abnormal is still coming out of their private part? That one will... tell us what to do, then we ask them if there's any complaint generally, mainly concerning discharge from their private parts, the colour if they are still having discharge, what is the colour? Is it offensive? How is it coming? Then we discuss so many things (CNO, Sango PHC).

Women are also guided to monitor the cases of prolonged menstruation beyond a normal duration. A community health Officer (CHO) also corroborate that they tell women that:

When your period does not stop between 1 to 5 days, and she's doing it for a month nonstop, if she likes herself, she must come in so that we would check whether it is cancer because some people believe that if they are doing family planning the blood cannot stop, but it is not like that; they ought to come to the clinic to see the doctor, so that the earlier the better. Early detection, you know, it is better (CHO, Idi-Ogungun PHC).

The FGD showed that low knowledge of CC and CCS was demonstrated by women that attended PNC clinics in this study. Most women in this study had heard very little or nothing about CC let alone CCS. Women in group discussions expressed that they had never heard about CC and hearing it in the focus group discussion was the first time. Most women indicate that HCWs in their respective facilities had never discussed CC with them: “No, we have not heard it before from our clinics”. Women who had little information about CC reportedly gathered it from a ‘cancer awareness programme rather than from/during PNC clinics. A discussant expressed that she heard that:

“sexually active people are prone to having CC but I didn't hear it from the clinic; I heard it when there was a programme I attended, that was mainly based on cervical cancer awareness. That was at Ilorin” (FGD Participant, Bashorun PHC).

3.3. Access Issues to CCS Services: Expert Testimony on CCS Service for Women

There was no CCS offered in any of the facilities surveyed in this study, hence the women have very limited access to CCS in those facilities. The main reason is “because such service requires trained personnel to handle” (HCWs, Sango). “We are not doing the screening here. We do refer them to either UCH or Oni & Sons, because we know in that place, they would get doctor for it, and that can attend to them” (CHO, Sango PHC).

Health care workers also attributed the lack of CCS facilities in PHC centers to:

✓ not having enough space: “I cannot say the main reason, but to me, maybe because we don't have enough space” (Nurse, Sango PHC).

✓ low patronage for the service discourages its promotion/people were not asking for the service: “people don't often come to ask for cervical cancer screening. I think that's the major reason, and then there haven't been cases of it here” (Nurse, Agbowo PHC).

✓ The lack of expertise and courage inhibit CCS for more than three years even though the reagent was still available:

“I cannot say it's not available, we use to do it once in a while, we still have the reagent. So, what we do is that we gather the clients, then we have somebody (an expert) that we can contact, but we have not been doing... it has been a while that we did it, like 3 years ago” (Nurse, Agbowo PHC).

✓ Women do not often ask for CCS because majority of them are only prompted for screening when they see signs and symptoms:

“You know that screening is not that they have the issue, you just want them to check. You know in this environment, if people don't need something, they won't be triggered to

take necessary action. So, if you ask them to just take the screening without them having any symptom, they might not take it seriously, but if we have the screening here, and we convince them, they will be ready to do it" (Nurse, Agbowo PHC).

3.4. Willingness for CC Screening: What Influencing Factors Could be Responsible?

Women's desire for CC screening was discussed with HCWs and with women. Their narratives elicited two major perspectives. Most women might desire for screening for cervical cancer at PHCs level, while other women may not desire to be screened for CC at PHC. Concerns were raised that factors such as the lack of both the service and human resources for the screening, the cost of the screening, and the issue of locations of the screening could influence women's desirability for cancer screening. A nurse however, expressed the possible influence of adequate counselling on CC for women in order to get their interest:

"... I wouldn't know if they would want to get screened until we talk to them. I believe if we talk about it to them, they might have interest in doing the test. Maybe because of the cost; I wouldn't say maybe unavailability of space, and personnel issue. Also, the staffs are not many; it could be part of it" (CNO, Idi-Ogungun PHC).

The mode of the screening could serve as hindrance for some women. Participants, ascertain that it would be very hard for them to do such screening if the screening processes would expose their private parts to anyone conducting it for them. In one group, a discussant noted that:

"The process of cervical screening; if it has to do with exposing one's private part to be checked, that might be a little difficult" (FGD, Sango PHC).

However, the importance of awareness creation for CCS was emphasized as significant in achieving acceptance of the screening. The HCWs reinforce the awareness creation as very important instrument for women to know about the exercise and to be educated concerning signs and symptoms of CC. A nurse perceived that if they do not hide any information about CC for women during counselling, which should explain the purpose of the screening, and its perceived benefit of early screening, most women would definitely show interest to be screened, saying: "if we introduce it to them and if we tell them the indication about it, they will be interested". The nurse also ascertained that "My own perception is that it will help people to know their status concerning the cervix and it will help them to prevent or to manage it if they have it" (Nurse, IBN LGA). Knowledge of early warning signs and symptoms, training on the causes, and availability of treatment for CC were also emphasised as being important by HCW as captured here:

"Some women may have interest in doing the cervical test so far they know or they were trained or were given or were informed about what can cause it, and what are the signs and symptoms they would see. When there is awareness, they would be able to access the services, so they would be interested to know about it" (Nurse, IBN LGA).

The FGD participants generally emphasized the use of multiple locations and approaches for increasing awareness, and not limited to health centres alone, but also

printing flyers, going to air, religious centres and even at community levels for people to be informed about CC. A statement by one of the participant in line with the above assertion: "For instance, if not because of your coming here now, many of us have not heard about it before, so moving about the health centres, then maybe printing of flyers, you know it will also enlighten... especially... Even in churches, in mosques, community meetings so let people know about it" (FGD, Sango PHC).

Availability of the service at the health centres, and corresponding accessibility of the service by women were the concerns of a Medical Officer in one of the PHCs. The participant perceived the combination of awareness raising, health education, availability and accessibility of the service, and competency of health staff handling the service, would encourage a lot of women to develop interest in the screening irrespective of the level of their education as narrated here:

"I think once it is made accessible, many people will do it. Just like family planning, just a little orientation and everything and of course the turn up rate is very high. You find out that almost every... In fact, as low as uneducated that you assume many of them are, they are regular with their family planning, they know about it and are willing to take it. So, I believe if it is made more accessible, if it is brought down to the health care centre level, for instance, I'm sure many people will be interested" (MO, Idi-Ogungun PHC).

The general opinion of the participants is that CCS activities should be carried out at each health centre where nursing mothers attend post-natal clinics. "At the end of enlightenment programmes, women who desired to be screened should be allowed to do it right there in such clinic without referring them to another distant hospital or centre", expressed in a women's group discussion. A nurse also corroborated the perception of screening access and location perceiving that sending women to another clinic for screening might discourage many women who wanted to be screened at the centre, as indicated in this narrative:

"For postnatal, people also come here every three months, six months, so within that period of time, make use of that opportunity to enlighten people more and then if the screening is readily available, it will be easier to tell them to take it at that point, because telling them to go to other facilities to get the screening done, might not really be as effective as having it here, for them to do it" (Nurse, Agbowo PHC).

The FGD showed that almost all the women who participated in this study desired screening for CC and also to know its causes and prevention. One of the FGD participants captured the opinion of other participants as follows:

"We will like to participate. But we still want to know how it can be gotten, its causes, and then what can be done to prevent it, that's all. Everything; What are the causes, how can a person avoid it, and what are the treatment for it" (FGD Participant, Idi-Ogungun PHC).

3.5. Integrating CCS Information into PNC Services: Implementation Strategies

The move to integrate CCS exercise into PNC routines was warmly accepted. Most participants showed a pleasurable perception that if CCS is integrated into PNC

clinic procedures, more women would be accessible to information, and have better understanding of it, as it would serve as process and form of awareness to women. Women attending PNC clinics would also become agents of awareness and mobilization for other women in the community. In a group discussion, a discussant said *“it’s important because... it’s a form of awareness, so, the more they discuss it, the better for the people to know about it”* (FGD Participant, Bashorun PHC). Narratives from HCWs also corroborated that such integration would enhance the opportunity to give information on CC and CCS to women and at the same time enable women know early and faster about their status through screening:

“During the health education and during the counselling, they (health workers) will be able to counsel them and tell them the advantages of this CCS” (CNO, Ibadan North LGA). Discussants also expressed assurance in the integration of the service in PNC clinic in chorus *“Yes, yes, it will help people to know more about cancer”* (FGD, Idi-Ogunfun PHC). Narratives from HCWs indicated a corroboration of the opinion of women in this study. For example, HCWs expressed that in spite, the fact that many women still don’t believe that such disease exist, due to their ignorance; for never heard it hitherto when they go for PNC, thus, including CC education into PNC clinic routines would improve its screening awareness, and increase screening service utilization before the case gets out of hands for many women.

3.6. Possible Challenges to the Integration of Cervical Cancer Screening into Postnatal Services

The HCWs identified challenges that could mitigate against implementation of the CCS program in the PNS routines. Participants observed that as there were very few trained staff to deliver the various services rendered by PHCs; apparently, adding up another program as CCS program would require additional staff to oversee and implement such service, in order to avoid delaying of patients or PNC attendees. Other HCWs also confirm that services may not be rendered optimally without having competent hands on ground:

“When you have many things to do, and the staff on duty are not many, then you now tell me your complain, ... what of other people that are waiting when there are no many hands on duty” (Nurse, IBN LGA).

The participants assertively requested urgent recruitment for more staff to ease up their current workload. Junior health staff observed that *“for the service to be accessible to women, there is need for specialists or trained staff to oversee the program”*. Participants alluded that the reason for the requirement is that *“several PHC facilities did not have a medical doctor and only Matrons that normally be in charge of these facilities oversee everything; adding up this program to their work schedule to deliver might not be possible”*. Another narrative reads:

“We call this place primary health centre. It’s supposed to be available here. The reason that this thing should be available here is that they can do it for those pregnant women, if we have a good doctor. You know that it is only Matron that is here, and Matron cannot be doing that thing, they palpate

and all this thing. So, we need more personnellspecialist for it” (CHRN, Agbowo PHC).

An observation, pertaining to what the PHC guideline stipulate as job description in their standard of operation procedure (SOP), was made by HCWs. There was a concern that PHCs might not be effective to carry out CCS program due to its job descriptions limit since they refer a lot of cases to secondary or tertiary hospitals as noted here:

“... I think, because it is a PHC Centre, and PHC has job limit. You know, there are limit to what they can do; most cases they refer. They refer to Adeoyo, they refer to UCH for specialist care” (SCHEW, Basorun PHC).

Workspace for the screening exercise to take place was also a concern. It was noted that screening exercise should be provided in a separate room or space: *“but to me, issue of space should be looked into while planning for this program because we don’t have enough space”* (CNO, Sango PHC). She also expressed that, *“all the instrument, all the test kits and commodities, should be available at all times”*.

Cost of obtaining the CCS could be a challenge that can inhibit utilization. Access to the service at free of charge or at highly subsidized rate would encourage more women to participate than being expensive. Furthermore, participants suggested that such screening exercise should not be left in the hands of private hospitals for its tendency to reduce patronage and adequate access due to possible high cost: *“you know if it is private, it may be more expensive, if cervical screening is ceded to private hospitals alone”* (FGD Participant, Sango PHC). In another group, discussants pleaded for subsidy on CCS as a way to attract patronage:

“Okay, after the awareness, the understanding of the CC, the screening and all of that, I don’t know if it is a subsidized screening, or does the screening require payment? Peradventure the payment is not too costly. If at all we will have to pay, is it not expensive? So, all of this should be put into consideration. The cheaper it is, the better it becomes” (FGD Participant, Bashorun PHC).

The HCWs also observed the perceived susceptibility of women to CC as having negative influence on some women’s mind set; no matter the talk or counsel for them saying *“some of them... no matter how you talk, they would continue to reject their susceptibility to CC”* (Nurse, IBN LGA).

4. DISCUSSION

This study examines the Postnatal services in PHCs, CCS information, women’s willingness to participate in the screening, and integration of CCS into PHC activities with possible challenges in Ibadan. One of the specific objectives for the study was to evaluate women’s willingness to be screened for CC in PHCs. This was highly acceptable to women. Although, most women had never heard of screening for CC at various PHCs, they are willing to have information about CC and be educated on the aetiology of the disease in order to avoid experiencing it. This finding is in line with findings by previous studies [37]–[40]. The PHCs, charged with championing discussion and awareness on CC are not doing such because CC is not in the job description services rendered by PHCs in

Nigeria [31]. Topics discussed at PNC are mainly centred on personal hygiene, danger signs, environmental hygiene, immunisation and breastfeeding; these are within the contents of PHCs [31], [33] in Nigeria.

Need for awareness raising on CC and promoting screening exercise were emphasised by the participants in this study. For women, especially, to accept CCS exercise, the issue of adequate awareness was raised by all the discussants who participated in this study. This is in line with previous studies [41]–[44] where the importance of creating awareness to promote acceptance of screening was emphasised. It was implied that when people are aware of the programme, there is an increased tendency for women to go for the screening.

Conversely, in implementation, awareness creation of such program should not be limited to health centers alone but should be on air, taken to religious centres, and doing community awareness through fliers for people to understand. A locally accepted language will play a critical role in understanding. Ensuring availability and accessibility are all part of the potential implementation strategies that could really encourage women to participate in the program. The opinion of HCWs seeking for trained personnel to handle the service at various centres would help in the continuity of the program. This concurs with the effect of overwhelming job descriptions and workload saga often faced in service delivery [20], [45], [46]. By implication, having an additional staff through the program will be highly beneficial to the HCWs.

Women participants expressed their willingness to go for the screening but the cost of the screening could be a source of discouragement if the service is not subsidized or made free [47], [48]. Invariably, availability of the service is not enough for people's willingness to be tested but the issue of cost should as well be looked into. Of course, the issue of cost would be from two major perspectives. On one hand, from the perspective of health workers who opined that getting additional staff would go a long way in assisting CCS service rendering to women. This means that some cost would be expended to hire additional staff as well as the running cost of the programme. On the other hand, women participants were highly interested in knowing about the financial implications of accessing the service. There was a clear eager that the service should be affordable to people [40], [49], [50]. Conversely, there is likelihood for service running cost to increase while community members seek for free or highly subsidized financial cost to access the service [25], [43].

5. CONCLUSION

PHC facilities are available and accessible to clients at rural level including the women of reproductive age. It is highly patronized by pregnant women and nursing mothers for postnatal care services. It is yet uncommon for health workers to discuss CCS in ANC and PNC sessions, but women are open to the motion of need for integration of CCS services and awareness creation into PNC routine. This is without prejudice to women's levels of educational attainment. Health workers shared the opinion that integrating women's education on CC and CCS within PNC

clinic would attract higher benefit, not only to people at grassroots but also to Nigerian health systems.

Women are also optimistic that infusion of CC screening, and awareness creation in PNC, would expand people's knowledge, reduce the level of ignorance on CCS at community and household levels, and increase CCS patronage for women. However, for successful implementation of CCS, employment of competent hands, trained for the service is a major recommendation, to be followed by subsidised financial cost or free service at first phase of the implementation for smooth prevention of cervical cancer in Nigeria and Africa.

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CONFLICT OF INTEREST

There is no known conflict of interest.

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