
Optimising health through preconception care services: A qualitative exploration of the knowledge, uptake and need in the Nigerian health care system

Oludoyinmola O. Ojifinni^{1*}, Latifat Ibisomi^{2, 3}

¹School of Clinical Medicine, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, Gauteng, South Africa

²Division of Epidemiology and Biostatistics School of Public Health, University of the Witwatersrand, Johannesburg, Gauteng, South Africa

³Nigerian Institute of Medical Research, Lagos, Nigeria

*Correspondence: oludoyinmola.ojifinni@wits.ac.za

Introduction

Evidence from research shows that health problems such as nutritional insufficiencies and vaccine preventable diseases; behavioural issues like exposure to tobacco and alcohol; genetic conditions like sickle cell disease and environmental risks like exposure to radiation negatively impact maternal and child health¹. These problems can be mitigated through effective biomedical, behavioural, and social interventions delivered before conception^{1,2}. Hence, the need for preconception care (PCC), a specialized care targeted at women of reproductive age before pregnancy to detect, treat or counsel them about pre-existing medical and social conditions that may militate against safe motherhood³. PCC is also beneficial for men as their preconception health affects their biologic and genetic contributions to pregnancy outcomes⁴. The WHO PCC package is an evidence-based set of interventions addressing 13 areas: nutrition, genetics, environmental health, infertility, sexually transmitted infections, interpersonal violence and substance use³.

PCC improves the health status of potential parents and optimises health towards ensuring a healthy pregnancy experience by allowing time for behavioural interventions to take effect before conception occurs⁵. This is especially true when routine health care is integrated with a couple's reproductive plans through PCC irrespective of the couple's desire for a baby subsequently^{6,7}. PCC is however not routinely available in most low- and middle-income

countries including Nigeria despite the need demonstrated by the poor reproductive health outcomes. This qualitative study therefore explored and documented the existing preconception practices, described the knowledge, perception, felt need for PCC service provision and uptake among health workers, women and men of reproductive age and assessed the feasibility of incorporating PCC services within the existing models of reproductive health services in Nigeria.

Methods

We used an explorative qualitative design following a pragmatic approach. This included were focus group discussions (FGDs), key informant and in-depth interviews (KIIs and IDIs) at the community, health system and policy interphases. We purposively selected participants including 45 women and men of reproductive age and 12 religious leaders for FGDs. In addition, we conducted KIIs with two community leaders and IDIs on nine women who had pre-existing medical conditions, 9 nurses, 16 specialist physicians and 13 policy makers (seven at regional and six at national level). We used thematic data analysis that comprised a hybrid of inductive and deductive coding to analyse the data generated.

Highlights from the study

1. Some existing cultural, traditional and religious practices aim at improving maternal health in the preconception period.
2. The provision of PCC within the health system is unstructured as there are no policies to direct the services. PCC is thus provided in an opportunistic manner, usually at the discretion of the health provider based on the patient's past history or as demanded by clients.
3. Despite having regular contact with the health system women who had chronic health conditions had no awareness of PCC and its potential benefits to them.
4. There is a need to provide a formal, structured PCC program with guidelines to streamline the practices, harness existing programs and practices for integration with the health system.
5. There are opportunities within the existing health-related policies for the integration of PCC into the health system.

Key findings

The study revealed the influence of multiple factors on the feasibility of PCC through their impact at the individual, family, community, health system and policy levels (Figure 1).

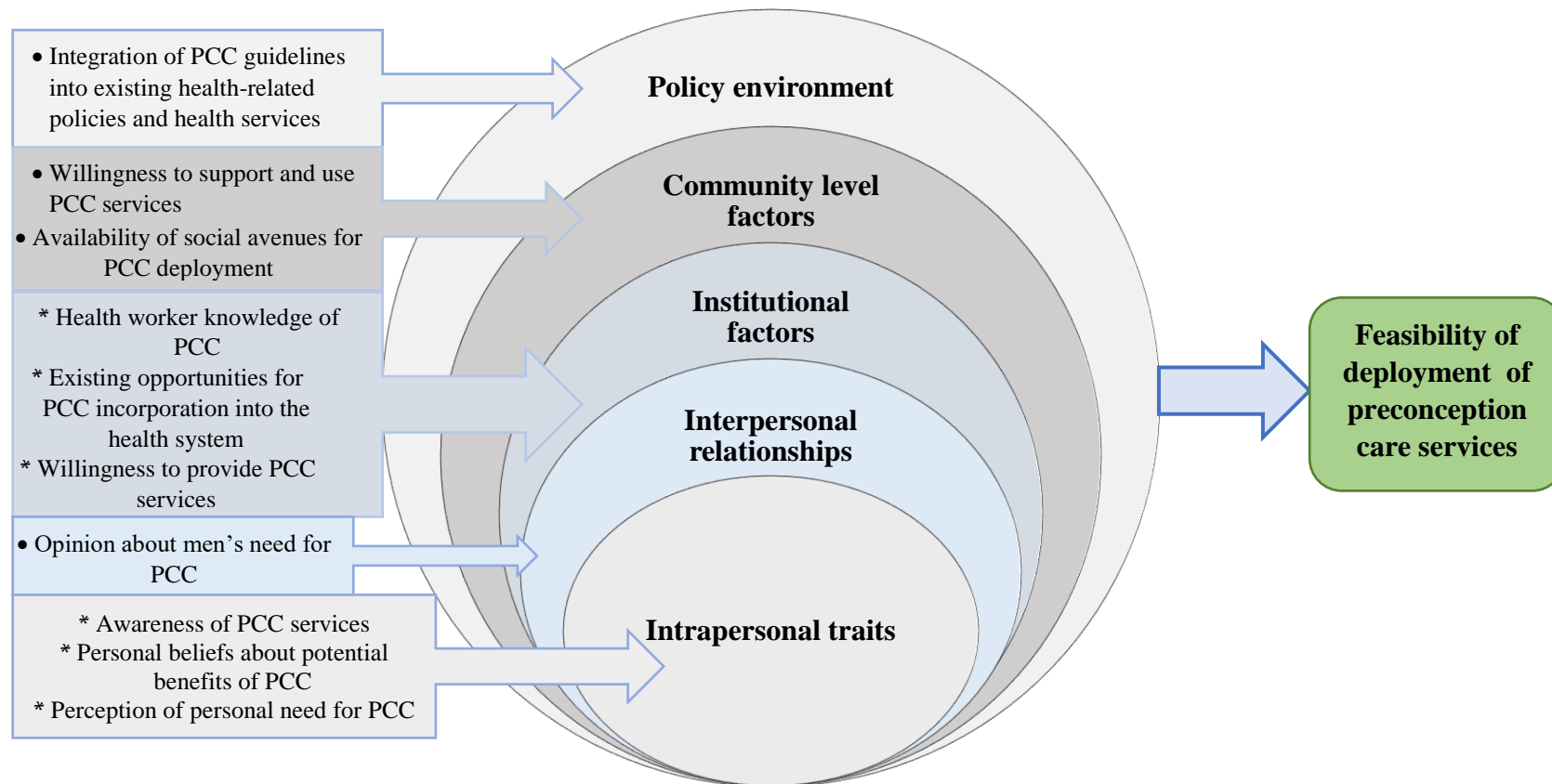


Figure 1 Conceptual Framework for the Factors Influencing the Feasibility of Preconception Care Service Deployment

1. At the intrapersonal level, women who had pre-existing conditions believed they could have benefitted from PCC if they had been aware of it prior to their pregnancy. However, most were unaware of PCC and none notified their health providers about their pregnancy intention before conception missing the opportunity to have their health optimised or medications adjusted or changed⁸.
2. Awareness of PCC at the community level was generally high and attitude positive as the service is believed to have potential benefits for improving pregnancy outcomes. Participants also stated their willingness to support and use the service and opined that the community would support PCC with improved awareness about its benefits^{9,10}.
3. Opinions varied on the relevance of PCC for men particularly among men with some in support while others queried men's need for PCC¹¹.
4. Regarding institutional factors, health workers described potential benefits of PCC for physical health, financial and psychological preparation for pregnancy and emphasised its importance for preventing complications especially among women with chronic, pre-existing medical conditions like hypertension and diabetes^{12,13}.
5. Health workers also described opportunities within the health system for incorporation of PCC services and stated their willingness to provide PCC once the needed structures are in place¹³.

Policy implications and recommendations

The key challenge to PCC service deployment in Nigeria is the establishment of a policy. Policy backing ensures provision of funds for staff training, procurement of equipment needed for screening services and program promotion at community level. The foundation for integration of PCC already exists in some health-related policies. Specific PCC guidelines can be integrated into the National Health Policy, Adolescent Health Policy, School Health Policy, Family Life and HIV Education curriculum and other documents to direct the PCC services. A team of experts needs to be identified to develop the framework for integration of PCC into the existing health-related policies to guide the deployment of the services in a structured manner. This structure will require algorithms for referral, stepwise direction on what should be done in different contexts and the inclusion of social avenues for delivery of PCC services. Working documents can be developed from these that will be used in practice.

Funding mechanisms for PCC service should be included in the policy guiding PCC service provision. This can provide a foundation for the inclusion of PCC in the National Health

Insurance and Community-Based Health Insurance schemes. This will reduce the need for out-of-pocket payment and encourage uptake of PCC services. Funding considerations in the policy should also include the provision of adequate infrastructure for service delivery, health worker training and improving awareness at the community level through the incorporation of mass media, online services, nongovernmental organisations, faith-based organisations, and civil societies.

Conclusion

The attitude towards the provision and use of PCC services was positive among the study participants as they described potential benefits to the health of women, men, and children within the community. Although they acknowledged that PCC has great promise for improving reproductive health outcomes, it was apparent that many women and men do not use the services and health care workers neither recommend nor provide the services as often as they should. While this may be attributed to the absence of specific PCC guidelines for health workers to follow, it is also a pointer to the need to provide training and improve awareness among health workers as well as raise awareness about PCC at community level. Potential barriers to the provision and uptake of PCC highlighted in the study include lack of awareness of the benefits of PCC, perceived absence of personal risk. Overall, this PhD study has shown that the feasibility of PCC deployment in the Nigerian health system will be influenced by policy level factors, health system-related issues, community and individual-level factors.

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