ABSTRACT

Aim: To uncover information gap on the health extension program contribution in improving access, the study explored the lived experiences towards creating enabling environments for contraceptive service provision and use in light of the health extension program.

Methods: Interpretative phenomenological design was employed for the study. Data were collected using focus group discussions, individual in-depth interviews and key informant interviews. Analysis was done using an interpretive phenomenological analysis framework including phases of data immersion, transcribing, coding, theme development and phenomenological interpretation through the hermeneutic circle.

Results: The finding captures the contribution of the health extension program in accelerating/decelerating contraceptive use in the study area. Contraceptive services organization, access and extension in the era of the health extension program were presented. Since the beginning of the program, contraceptive use has alarmingly improved as witnessed by both the service users and providers. The linkage of primary health care with the community organization, a women development army and the one-to-five network are among the major contributed factors for the outcomes.
**Conclusion and Recommendation:** The study concludes that the health extension program has given a special momentum in shaping the principles of PHC. The study revealed that women witnessed encouraging involvements in contraceptive service access and use. Hence, the study recommends that the experiences of women development armies and other networks have to be strengthened. Moreover, the existing community networks should be strengthened through proper evaluation and feedback.

**Keywords:** Health extension program; contraception; phenomenology; primary health care.

**ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>WHO</td>
<td>World Health Organization;</td>
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<tr>
<td>PHC</td>
<td>Primary Health Care;</td>
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<tr>
<td>MOH</td>
<td>Ministry of Health;</td>
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<tr>
<td>HEP</td>
<td>Health Extension Program;</td>
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<tr>
<td>HEW</td>
<td>Health Extension Worker;</td>
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<tr>
<td>SNNPRG</td>
<td>South Nation, Nationalities and People’s Regional Government;</td>
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<tr>
<td>FGD</td>
<td>Focus Group Discussion;</td>
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<tr>
<td>IPA</td>
<td>Interpretive Phenomenological Analysis;</td>
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<tr>
<td>ICPD</td>
<td>International Conference on Population and Development</td>
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**1. INTRODUCTION**

The provision of modern contraceptive services in developing nations began because of the strong push from developed nations in the 1960’s [1-4]. However, lack of strong governments’ commitments along with limited resources and the underlying socio-cultural factors remain major impediments for the expansion of the services in many developing nations [5]. Among the notable challenges to be mentioned in the process of service provision is the access to contraceptive services affected by a lack of well-structured institutions in terms of availability of health professionals and material inputs [6].

To narrow the gap between developed and developing nations towards contraceptive service access and use, the Primary Health Care Declaration (PHC) provides guidance that played a significant role [7,8]. PHC has clarified a meaningful health strategy for reducing maternal and child morbidities and mortalities in the developing nations [9]. Moreover, PHC has bridged the gap between institutional health service delivery and community demands through a community-based service delivery modality [10].

Ethiopia has realized that health issues require the involvement of multiple sectors and collective undertakings. Based on this understanding, the country revitalized the primary health care approach by identifying key stakeholders and sectors to involve in the implementation of health-related activities and actions [11,12]. The Ethiopian Ministry of Health (MOH) has taken numerous measures to improve the health status of its population after the development the transitional government health policy [12]. One of the major steps the MOH has taken was the government paid community-based health service delivery, the health extension program (HEP) in 2003 [13-15].

The HEP is an innovative approach constituting a paradigm shift in Ethiopia’s health service delivery creating strong links between the mainstream institutional health service and community-based health service expansion [16]. The peculiar aspect of the health extension program is that the service providers are all women except in a few pastoral villages and permanent employees of the government. They serve in the rural villages where they were grown, live and, are permanent employees of the government. This was different from the former practice which was based on volunteerism.

The HEP is expected to improve access to health care through increased availability and acceptance as workers largely share similar cultural backgrounds and speak the same language as the community they serve [17-19].

In spite of half a century or more contraceptive services in Ethiopia and encouraging engagements of the government and health workers, there are limited research outputs that reveal the depth of the lived experiences of service users, health workers and health leaders about how service organization and extension affects the outcome, with particular emphasis on the HEP. This study sought to explore the ways that leaders in the health system, health care providers and the service users attempt to create an enabling environment for contraceptive service provision and its use in light of the HEP.
The study was conducted by aiming to describe patterns of a provision of contraceptive services and capture the perspectives of health care providers, leaders, and service users’ and their lived experiences on enabling conditions of the contraceptive service organization, provision, and use with respect to the HEP.

2. MATERIALS AND METHODS

2.1 The Research Context

The study was conducted in three districts of Sidama Zone designated by Hawassa University as technology villages for research and technology transfer. The three study districts were selected conveniently for their accessibility out of the six ones. Hawassa University is located in the Sidama Zone, one of the thirteen zones in the Southern Nations Nationalities and People’s Regional state (SNNPRG) of Ethiopia. Sidama Zone is located in the south-eastern part of the region and is bordered with Oromia Regional state on the south, east and north and with Wolaita Zone in the west [20].

2.2 Study Design

The study employed an interpretive (hermeneutic) phenomenological approach which is appropriate for understanding the life worlds of the study participants. It focuses on describing the meanings given by the individuals and how these meanings (the experiences of health care workers, health leaders and service user women enable contraceptive services provision and use) influence the access to the service and use [21-23]. The approach further considers the importance of the expert knowledge of the researcher as a valuable guide to the inquiry [24].

2.3 Data Collection

Data collection was conducted from September 2013 to May 2014. The study employed focus group discussions (FGDs), individual in-depth interviews and key informant interviews for data collection. Three female research assistants with educational and professional experience were employed. Selection of study participants completed through the collaborative efforts of the research assistants, health extension workers, and local women, and the community leaders. A purposive sampling method was used to include well-informed participants in the study as key informants, focus group discussants and in-depth interviewees to explore the depth of their lived experiences [25,26].

The study participant selection was done on the basis of: 1) women s’ capability to illustrate the phenomena, 2) women’s experiences of the modern contraceptive method for at least one year, and 3) health leaders at different hierarchies (health institute, district, zonal, regional and ministerial level) and the health extension workers.

Nine focus group discussions were conducted with the average number of 8 participants. For the, Nineteen individual in-depth interview women of reproductive age from nine kebeles were involved. Eighteen key informants were involved in the interview based on the designated position they hold in their respective institutions (Additional file 1). Semi-structured FGDs and interview guides were developed for the interview and the participants were encouraged to speak up about their experiences. It further deepened discussions and reflections on the life experiences of the study participants [27-29].

2.4 Data Analysis

This study used the guiding principles of interpretive phenomenological methodology. Interpretive phenomenological analysis enables viewing the practice or phenomenon in such a way that considers the close interaction between the participants and researchers as part of their “being in the world” [30,31]. In this sense, the final presentation of the data thus becomes an intersubjective representation of the topic of the study. An adapted flow diagram from the interpretive phenomenological analysis (IPA) was used to guide the analysis (Additional file 2).

The process of data transcription and analysis was conducted in two languages. Transcriptions were carried out on all the audio-taped materials verbatim, first in Amharic and then in English (Additional files 3-5). Materials were also translated back to Amharic by a professional linguist. After that, the Amharic translation was given to the principal investigator to check for consistency.

Field notes were organized under the guiding research questions. Data immersion was done by reading the transcripts for several times. In the data immersion process, several visits were made to consult the study participants as a first step in identifying descriptive codes and
checking preliminary interpretations. Margin notes and descriptive coding were then completed for all the materials. Data reduction was done in a step-by-step approach, beginning with the transcripts, followed by descriptive coding, and then distilling this material into themes by bringing similar ideas and concepts together.

Themes were identified using side notes and were guided by the research questions. The analysis process made use of the idea of a hermeneutic circle; in brief, the back and forth iterative linking of data from both perspectives of the researcher and study participants. These steps were done by re-visiting the transcripts after major themes had been identified to interpret connections between the initial data and our later refinements [29,30,32]. Summarized reports were presented to study participants about the phenomena derived from their shared experiences. Their feedbacks were incorporated in line with the experience of the researcher. Quality assurance or trustworthiness of the results used four criteria: credibility (truth value), transferability (applicability), dependability (consistency), and conformability (neutrality) suggested in the literature [33].

3. RESULTS

The findings of this study are organized under the respective questions relating to create an environment conducive to contraceptive uptake and use.

3.1 Trends and Patterns of Contraceptive Service Provision in Connection to the HEP

3.1.1 Health managers and service provider's perspectives

In Ethiopia contraceptive service provision began before fifty years by voluntary non-governmental organizations (NGO) such as the Family Guidance Association of Ethiopia, and others. Gradually the service was integrated into the health service system. However, its progress was slow until 2005. Contraceptive service expansion and method mix have sharply increased since 2005 in the study area. Almost all the study participants boldly expressed that the health extension program has contributed to the current state of contraceptive affairs in expansion, availability and methods mixes.

Study participants pointed out that the health extension program has brought contraceptive services closer to residents living and working places. In doing so, it has improved unconditional access to the service.

The health extension program, unlike the previous approach, extended the services to the household level through home visits and other community-based distribution options using community-based organizations such as women development armies. The health extension workers being female and recruited from the same kebeles where they services, have created comfort for women to access services. They share similar culture and speak the same language and being female creates a favorable environment for women to ask whatever questions they desire. Study participants substantiated these conclusions:

The health extension program has improved access and utilization to communities and households. Gender parity of the health extension workers with plenty of health service users, the women is another important issue received attention. This offered an exceptional opportunity to women by reducing the gender mismatch between the service providers and service users. On top of the above, the health extension program eases the time needed for service as the service has come close to the clients, reduced travel and waiting time. This also improved both availability and convenience for clients.

The study revealed that the establishment of the health extension program helped strengthening the services link within the primary health care units and the community. This further contributed to the current state of contraceptive use progress. More specifically, community mobilization using women development armies, a one-to-five network [1] through model households are notable experiences to learn from.

Key informants succinctly explained the service organization, its linkages, and collaborative undertakings at the community level. The health extension workers closely work with the women development armies and a one-to-five community networks to ensure the expansion of contraceptive service within their catchment area. This further substantiated by citations from the study participants and a district level manager explained the issue as follows:
Health professionals from health centers are assigned to support and supervise health posts. The district health office in its part works closely with both the health center and health post. The linkage is not only limited to the family planning program but also is extended to other health services (health extension packages).

Similarly, another experienced health extension worker has given her experience in this regard by clearly indicating:

The relationship of health extension workers with the family, community, and administration was strong and collaborative. Our relation is very strong it is like a relationship between family members. Our home to home visit program helped us to understand our community. Our collaboration with women development armies and a one-to-five network system have been additional merit for the expansion of the services. We also use other community organizations such as ‘edir’ and ‘kuteba mehiber [2]’. We work collaboratively with all these organizations, networks and systems. Generally, we have established a strong working relationship starting from an individual woman to the community level.

3.1.2 Service user women’s perspectives

Experiences of service user women towards contraceptive service availability and accessibility in the era of health extension programs are congruent with the health service manager and service providers’ articulations.

Women explained that, unlike the previous main streamed health institutions experiences, now they comfortably express their feelings to access health services. They openly share their feelings as the health extension workers are from the same localities. When the health extension workers visit clients’ houses, women easily talk to them and even invite to have coffee or food. Because of such interaction, the extension workers feel at home and well acquainted with the service users.

Daname, a woman in the focus group discussion who has used contraceptive service from various sources elaborated the service access difference and the convenience now and previously:

_I paid 270 ETB for contraceptive service (surgical implant) at Yirgalem hospital before the access to contraceptive service improved. I also waited for five days to get service in addition to paying a service charge as stated above. Now the situation is different. Service accessibility was greatly improved. Now we got service here at our kebele by our children. This is a big change. We don’t have a problem with waiting for long hours for services, no need to go daily to queue up for services. We receive services at one stop shot._

Similarly, another woman in one of the focus group discussions vented:

_More specifically, we have got better health services both for our children and ourselves since the establishment of the health post in our kebele. We were troubled to medicate our children who were born before the establishment of this health post, we moved here and there looking for health services. Now we are grateful to both our God and our government for them for availing the health post in our kebele. We got relief and our children are growing well and healthy (Baliessie, a mother of 5 children and 30 years old)._ 

Loetie, a 25-year-old woman used contraceptive service for five years explained her lived experience as how she has been benefited from the service as:

_Things are different today. Instead of going far away looking for the service, now I am accessing contraceptive service here in my kebele with a short walk distance. Before the health extension program, one was experienced walking long distances and required to pay for contraceptive service. Thus, the long-distance walk, time and financial barriers hampered from service users in the pre-health extension era. Now thanks to our God and the government, we receive health information daily._

Moreover, women expressed that the health extension workers are the first sources to bring contraceptive information and services to them. Majority of women started using contraceptive services after the health extension program. They also mentioned that the health extension program has improved their knowledge and skills toward other health issues in an integrated manner.

This is further supported by the excerpts from other participants:

_I was not aware of contraceptive use and related benefits before the health extension program. Health services were not accessible in our_
localities before this program and we were ignorant about health services such as contraceptive use and vaccination. When the health extension program has been established in our kebele, the worker started to inform us about various health extension packages including contraceptive use and related benefit, (Dalbe, a 27 years old used contraceptives for 7 years).

[1] a one-to-five network means a model woman in one of the five neighboring households; act as a team leader (due to her outstanding performance on the health extension program) for all development-related affairs in that team.

4. DISCUSSION

4.1 Towards an Enabling Environment for Contraceptive Use

The perception of participants in the study regarding the environment in relation to contraceptive service is discussed in this section and includes: 1) the service organization that includes accessibility, availability, acceptability, and convenience 2) the premises of rights approach for service provision 3) special contributions of health extension program as an innovative primary health care strategy towards contraceptive service.

4.2 Contraceptive Service Organizations (Content and Process)

The study has indicated that until recently, the access and availability of services were weak in the country. The findings confirmed this claim, as, at the early stages of the health extension program, only oral contraceptive pills were available at health posts. Currently, couples of methods are available including short term methods (pills and injectable) and long term methods (Implant) at the health posts provided through a health extension program. Thus, the availability of more methods increases as one goes up in the hierarchy of health services delivery institutions.

Consistent experiences were observed among service users, services providers and health services managers with regards to contraceptive service availability, accessibility and convenience. This indicates that there are some improvements in coordination and communication among stakeholders concerning the service processes and contents. Except for a few, all of the participants’ experiences showed that contraceptive service availability, accessibility and quality are improving. Exception is noted concerning the injectable contraceptive method availability.

Lack of a particular method, an injectable contraceptive (which is more likely accepted by users), may pose a challenge to further expand and sustain contraceptive service [34]. Switching from one method to another ought to be due to defined medical reasons or the choice of the client, but the current shortage-related switching is another hindrance that may overshadow service quality and expansion. The shortage of widely acceptable contraceptive methods could hamper service expansion and negatively affect the good feedback towards the HEP. The irregularity in availing preferred methods may contrast the established service norms, which states that the service delivery should provide adequate attention to socio-cultural and personal experiences [35-38].

Ethiopia’s health extension program: An important link in contraceptive uptake. Contraceptive service provision currently exhibits a unique pattern about its coverage and quality. The service has existed for almost five decades, but the rate of service coverage expansion has remained sluggish. As has been indicated in many empirical evidences [39,40], the service coverage showed tremendous improvement in contraceptive prevalence.

The study further examined which factors contributed to the remarkable improvement in contraceptive use or whether there is any defined connection to the new innovative community-based health extension program. The service providers, health managers, and service users’ experiences indicated that the health extension program has made a unique contribution to rapidly improving access to and convenience of these services for women. The participants’ experiences indicated that the health extension program brought services closer to women where they live and work compared with the former strictly institutionalized approach of service delivery. Bringing services closer to women has allowed for improved service access and use to suit women.

The services in each kebele (health post) have allowed women to easily access the services by avoiding long walking distances, long waiting times and requirements of permission from their
husbands. The closer the service to women, the easier for them to hide their status of service use if they feel uncomfortable of disclosing it. Studies support this finding that any service to be promoted and used by the target group should fulfill certain conditions including physical, financial, and socio-cultural aspects. Bringing services closer to the potential users increases the possibility of actual use [41,42].

Another peculiarity of the health extension program concerning contraceptive service is that the program has removed many obstacles and barriers that hampered women's potential for service use. A unique issue related to health extension workers is almost all are women who were recruited from the kebeles in which they serve. This has removed the gender, language, and cultural barriers between service providers and users (almost all contraceptive users in the study area are women). This experience is in congruence with studies elsewhere state that the attitude and behavior of health professionals should align with the society's culture, values, and norms to motivate clients to use services [43,44].

The health extension workers speak the same language, share a similar culture, and are women of the same gender. These conditions have established environments conducive to using and accessing the services that they need. This is evidenced by women's experiences as they proudly show the difference in the patterns of service access by comparing their pre-health extension program service inquiries. They were forced to walk longer distances and required to pay for services and in most cases looked for a translator to explain their feelings to the health professional. By the time they reached the health institutions, they often faced a discrepant gender (male health professionals) or who could not speak their language. As a result, they were not motivated to go to the health institutions to seek services [17-19].

The health extension program further improved contraceptive service access through the home visiting program. From its inception, the health extension program was mandated to extend health services to the household level through regular home visiting. An increased cultural merit of health extension workers (their better acceptance by community members while visiting homes) is that they were female, unlike their male counterparts who usually were seen suspiciously by the husband. This is connected to cultural aspects and the domestic work patterns in which most rural women stay home doing domestic duties and thus, are easily accessible for a health extension worker to provide services during their home visits.

The study has also elucidated another dimension of the health extension program from the participants' life-worlds related to contraceptive service. Study participants' experiences unveiled that the health extension program had ensured the principles and philosophy of primary health care in Ethiopia. The program created wonderful opportunities to improve collaborations within and outside the health care systems. The health extension program is closely supported by the health center, where a designated health professional is assigned to regularly supervise and support the health extension workers. The supportive supervision and institutional collaboration continues until it reaches the highest level. The health system closely works with partners at various levels to fill gaps either technically or materially. Many study findings show that health service delivery approaches that do not leave room for inter-sectorial cooperation and that do not ensure community involvement are never satisfactorily accessible, acceptable, or sustainable [19,39,43,44].

The health extension program is also networked at the kebele level by closely working with the community. The health extension workers participate in the kebele affairs and receive support from the kebele administration. They are members of the kebele command post, which is responsible for overall affairs. Furthermore, the health extension workers closely function with the women development armies, one-to-five networks, and model household women. This has established strong linkages between the health extension program and the community members at a basic level. Thus, it is through such channels that information and services flow until they reach the households and target women.

The strong collaboration between the health extension workers and the current contraceptive user women, has established a synergy in information dissemination channels that reaches the current non-user women in the community. The current service-user women, through the one-to-five network in their neighborhood, initiate discussion on contraceptive use and its benefits by sharing their life experiences with non-user counterparts. Perry and Roger (2014) argue that
if the health service delivery approach offers attention to the multiple dimensions of health determinants and involves all stakeholders, the service uptake increases tremendously. Gulzar and Ali (2008) also agree that the client's family planning service use behavior is largely influenced by the relationship between the service provider and the client. This study has proved that female health extension workers have greatly improved contraceptive service uptake by extending service to households through the home visitation.

4.3 Strengths and Limitations

The limitation of the study is that the scope only limited to the three districts of the six university technology village. Another possible limitation is that the study has not considered current non-users’ perception of the benefits of contraception. Husbands are also not considered in this study as the prime purpose of the study is to explore the experiences of service user women and service providers.

The delimitation of this study is explained in terms of the study purpose, the selection of study area and selection of study participants.

5. CONCLUSION

The study concludes that the contraceptive service organizations process and content, are encouraging and improvements made in service access. The contribution of the HEP for these improvements has been unique and it has given a special picture in shaping the ideals of PHC. The study revealed that outstanding inter-sectorial collaboration and community networks function better than any other health programs in the country. Women revealed encouraging involvement in the process of contraceptive service access and use in their organizations such as development armies and the one-to-five network.

6. RECOMMENDATIONS

To ensure the continuity of a sustainable contraceptive service organization, and access, this study, therefore, has come up with the following recommendations. In order to ensure the evidence-based service provision and propel contraceptive service use in a way that consistently respects human rights and sustainable use:

- Strengthen the existing community networks through proper evaluation and feedback and create strategies on how to improve men’s involvement in reproductive health services, including contraception, in a manner that respects, protects and fulfills women’s rights.
- Establish mechanisms to share the experiences of women development armies, a one-to-five network to expand the inclusion of men and elders to broaden contraceptive services to the current non-user and ensure sustainability.
- Special preparation is needed to avail of the contraceptive methods without discontinuation.

DATA AVAILABILITY

The data for this study is available in the form of transcripts. All the three sources transcripts are attached as supporting documents.

ADDITIONAL FILES

Additional file 1. Study participants’ profile.
Additional file 2. Data analysis flow diagram adapted from IPA (Smith, et al, 2009, pp. 82-100).
Additional file 3. Transcription of individual in-depth interview.
Additional file 4. Transcription of FGD.
Additional file 5. Transcription of Key informant interview.

CONSENT AND ETHICAL APPROVAL

We obtained ethical clearance from the University of Saskatchewan Research Ethical Review Board in Canada and Hawassa University Institutional Review Board in Ethiopia (Additional file 6). Signed consent forms were obtained from the study participants and participants were assured rights to participate or withdraw from the study (additional file 7). Study participants were informed about communication of the study finding in various meetings, workshops and publications and verbal consents were obtained.

COMPETING INTERESTS

Author has declared that no competing interests exist.
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