

Perspective of Health Workers on Birth Companions Involvement in Maternal Care: Mixed Method Study in Addis Ababa, Ethiopia

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Abstract

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Background: Birth companions have been shown to improve the quality of care provided to laboring women. There is a lack of study exploring the extent of birth companion involvement in Ethiopia.

Objectives: This study was done to determine the knowledge, perspective, and practice of healthcare providers towards the involvement of birth companions during childbirth.

Methods: The study was done in SPHMMC and three health centers that were randomly selected from the list of catchment health centers of SPHMMC. It used a cross-sectional study design supplemented by a qualitative study design. The quantitative study used a structured questionnaire and was undertaken among 51 healthcare providers, and this was augmented by in-depth interviews of providers.

Results: The finding from the study showed that only 39.2 % of the study participants were knowledgeable about the benefits of birth companions. Two themes emerged from the in-depth interviews, and these are 'benefits noticed with birth companions' and 'challenges faced with birth companions'. Most of the health care providers, 82.4 %, didn't allow birth companions. The reasons mentioned for this include fear of breach of privacy, interference with routine medical care, and risk of litigation/complaints.

Conclusion: The study has shown that most healthcare providers are against the practice of involving birth companions. Since this practice is one way to ensure the quality of care provided, there should be an effort to increase the knowledge of health professionals on the benefits of birth companions. There is also a need for improvement of the work setup.

Keywords: Birth companions, Ethiopia, Health workers, Working environment

Background

Birth companion has been mentioned by the WHO as one of the most cost-effective methods to increase a positive childbirth experience.¹ Various randomized controlled trials have shown that the involvement of a birth companion is associated with better maternal and neonatal outcomes.^{2,3} There are also evidences that verify the positive perception and trust women had in birth companions. Essentially, this emanates from the strong belief of women that the quality of care they receive is improved when they have birth companions.^{4,5}

A study done in SPHMMC and three health centers in Addis Ababa showed that all women who delivered in the hospital and 89.4% of women who delivered in the health centers experienced the violation of the right to information, lack of informed consent, and denied of the opportunity to deliver in a birth position of their choice⁶. This study did not explore the extent of involvement of birth companions claiming the service as something that is lacking in most setups in the country.

According to the 2016 EDHS, the current institutional delivery rate in Ethiopia is 26%.⁷ This is irrespective of the quality of care and satisfaction level of the women who used the health delivery system. Reportedly, there are cases where the quality of the services is regarded by postpartum mothers or their families as less satisfactory. Research shows that women who are dissatisfied with the care they receive from health facilities tend to resort to the traditional system.^{8,9} A cross-sectional study conducted by the University of Gondar showed that only 31% of mothers who delivered in this facility were satisfied with the care they received.¹⁰

This suggests the need that health facilities to work hard to improve the quality of care they provide and hence improve maternal satisfaction. One of the cost-effective interventions that could be undertaken to improve maternal satisfaction and neonatal outcomes is the involvement of a birth companion.

Detailed and empirical studies exploring the perception of health professionals towards birth companions within the Ethiopian health facilities is either totally lacking or at best limited in scope. Thus, this study aimed to determine the level of knowledge, perspective, experience, practice and factors that hinder routine inclusion of birth

companions among health care providers in SPHMMC and selected catchment health centers.

Methods and materials

Study setting

The study was conducted at SPHMMC, and its catchment health centers in Addis Ababa, Ethiopia. The hospital, which serves as a referral health establishment provides delivery service to over 10,000 mothers in a year. On average, the number of monthly deliveries stands at about 1000. This figure does not include deliveries in the 16 catchment health centers. These centers have a well-organized referral and feedback system with the hospital.

The Obstetrics and gynecology department of SPHMMC has around 120 residents and more than 20 obstetricians. It has more than 90 midwives. This study mainly targeted health professionals working at the labor ward of SPHMMC and the selected catchment health centers. The study was conducted from September to December 2019.

The health centers selected for the study were Kolfe, Lukanda, and Mikililand health centers that were selected using simple random sampling from the sixteen health centers assigned under SPHMMC.

Among these institutions, SPHMMC had the largest space. When this study was done the hospital had 4 active labor beds and 8 second-stage couches classified among 12 rooms. But due to lack of space, the laboring mothers were placed randomly on the available place, a bed or a couch. And transfer to the ward in the postpartum period may take longer than two hours. The labor ward has curtains on one of the rooms, but the other rooms have broken hangers and bent screens which expose the rooms to passersby. (Currently, the labor ward is moved to a new building that accommodates a similar number of patients with two patients in each room and absent screens).

The health centers have two separate rooms that separately accommodate women in the first stage of labor and those in the second stage. They have semi-functional screens that can be used for women in either room.

Study design

The study used a mixed method study, a quantitative cross-sectional study supplemented by a qualitative study. The qualitative study was used to have better insight into health workers' perception of birth companions and to uncover their experience with them. The qualitative study used a phenomenological design. It used thematic analysis where themes were developed after the collection of the data.

Study population

The populations of this study are health professionals who work in SPHMMC and its catchment health centers. These professionals include obstetrics and gynecology specialists and midwives who are currently in practice for more than 6 months in these institutions and residents of second year and above. The study included health workers at SPHMMC and its catchment health centers considering similar practices at these institutions because of the referral and continuous feedback system. All levels of health workers are included since there is a homogenous practice with different levels of health care providers.

Sample size and sampling method

The study was conducted in SPHMMC and 3 health centers that are randomly selected among the 16 catchment health centers under SPHMMC. The health professionals included in the study were all health care providers who were involved in the day-to-day activities of the labor ward during the study period in SPHMMC and in the randomly selected catchment health centers during the study period.

The study sites were SPHMMC and three health centers namely Kolfe, Lukanda, and Mikililand health centers that were selected using simple random sampling from the sixteen health centers assigned under SPHMMC.

The cross-sectional study included 51 healthcare providers providing obstetrics and gynecology services during the study period. These are all health care providers who meet the inclusion criteria i.e., those health care providers who have served their institution for more than 6 months, and with regards to residents those that are second year and above and who are willing to participate in the study and who were providing labor ward service during the study period.

The study participants were 8 obstetrics and gynecology specialists, 26 residents, and 17 midwives. In-depth interviews of seven health professionals were also undertaken to further understand the attitude of healthcare providers regarding birth companions.

The sample size for the qualitative data was not determined prior to data collection, aiming for a number where saturation of the collected data is reached. The study used a purposive sampling of health care providers. Obstetrics and gynecology seniors were not included in the in-depth interviews because most of the time they are not involved in the follow-up of the laboring women in the study areas. Midwives and residents are actively involved in the interaction with birth companions. Obstetrics and gynecology seniors are consulted and provide counseling or request informed consent for complicated cases. Since obstetricians and gynecologists only follow patients in rare circumstances they were not included in the in-depth-interviews. Thus, the interviews were undertaken among seven health care providers which includes midwives and residents. This was the sample size where saturation of the collected data was achieved.

Data collection

Data for the quantitative study was collected using self-administered structured questionnaires. Midwives and obstetricians with more than 6 months of experience in the health care establishments and residents of the second year and above were included. The questionnaire is adopted from a similar study that was conducted in Sri Lanka.¹¹

Data for the qualitative study was collected using in-depth interviews as a study tool. An in-depth interview was done among 3 midwives and 4 residents working in the labor ward during the study period. The interviewer used an interview guide. The discussions were tape-recorded.

Data analysis

Once the data gathering is completed, it was then entered into Epidata and cleaned and analyzed using SPSS Version 20.0. Determination of the frequency of the socio-demographic factors and practice regarding the involvement of birth companions was conducted.

The results from the in-depth interview were recorded and transcribed

verbatim in the local language (Amharic) and then translated into English. A coding scheme was developed by the principal investigator. Open code software was used to assist the coding process. Thematic analysis method was used for the analysis of the qualitative data.

Ethical consideration

Ethical approval was secured from the ethical review board of SPHMMC before the start of the study. A support letter was prepared and submitted to heads of selected health centers. Before collecting the study data, consent was obtained from study participants. Study participants were not required to mention their names and participation in the study was on a volunteer basis.

Definition of terms used in the study

These are defined after a thorough review of the works of literature.^{2,12}

Birth companion: anyone who accompanies a laboring woman during the birth process

Doula: a trained lay person who accompanies a laboring woman during the birth process

Knowledgeable on the benefit of birth companions: Those health care providers who mentioned at least three benefits of birth companions.

Results

Acceptance of patients at the Emergency gynecology outpatient department (EGOPD) and admission process

At the health centers, women will be in the waiting area until true labor is established and will be admitted to the active stage room when true labor is diagnosed. When the labor progresses to second stage the women will be transferred to the couches. It is rare for women to deliver on the active stage beds. During this time, family members intermittently see them. On the other hand, at SPHMMC there is no such clear distinction.

In SPHMMC upon arrival at EGOPD, a laboring woman will be accepted by midwives and interns or residents who will evaluate her based on the urgency of the case. The initial person who accepts the referral listens to the fetal heartbeat (FHB) and gives verbal feedback to the person who brought the referral.

After evaluation, the managing team will order baseline investigations and until a bed is found in the labor ward, the woman will be kept either inside the EGOPD or in the corridors. And the team will prioritize among the laboring women in the EGOPD and decide who will be admitted. During her stay in EGOPD, her family members will be easily reachable, waiting for her at the corridors.

Stay in the labor ward

Once a patient is admitted to the labor ward a midwife or a resident will accept her. At the labor ward, she will be evaluated, and someone will be assigned to follow her. Depending on the stage of labor, condition of the laboring woman, and status of the labor ward, the follow-up intensity will vary. Usually, there will be an intermittent follow-up of the laboring woman. There are times the woman will be left alone.

According to one resident 'There is no one single person who will continuously be with her, a midwife, an intern or a resident will follow her, but they have some tasks in between so there are a lot of times she will be left alone. At SPHMMC, follow-ups are assisted by Cardiotocography (CTG) monitoring. If it is spontaneous labor and if she doesn't have any risk, it is only the CTG that will be with her. People will come in to see the CTG and move on. There are also times we listen to the CTG while we are in the next room'.

Socio-demographic characteristics of study participants

The mean age of the health workers included in the study was 30 years with a standard deviation (SD) of 3.6. The longest years of experience in obstetric practice is 15 years while the shortest duration on the service is 2 years as shown in Table 1.

Knowledge, Attitude, and Prevailing practice with regard to birth companions

Among the healthcare providers involved in the study, 39.2 % were knowledgeable about the benefits of birth companions. These are healthcare providers that mentioned at least three benefits of birth companions.

Table 1: Socio-demographic characteristics of health care providers included in the study at SPHMMC and selected catchment health centers

	Total number	Percentage
Marital Status		
Married	30	58.8
Single	21	41.2
Religion		
Orthodox Christian	37	72.5
Protestant	9	17.6
Islam	5	9.8
Profession		
Midwife	17	33.3
Obstetrics and gynecology resident	26	51
Obstetrics and gynecology senior	8	15.7

Seven providers, 3 midwives and 4 residents were interviewed, and the findings are integrated into the quantitative data findings. In-depth interviews were undertaken among providers who were actively involved in labor ward activity. The questions were developed following the findings from the quantitative study to gain further insight on providers perspective. The findings were arranged in the two themes that arose during the interviews. These were 'benefits for the laboring women' and 'challenges with their involvement'.

Of the health practitioners involved in the study, 82.4 % did not allow labor companions. The reasons mentioned include lack of adequate space, busy labor ward, and absence of partition at the labor ward among others (Table 2). Those who allow companions described, they allow them to intermittently see their loved ones and give updates to the family members on how the labor is progressing and if there is a need to undertake further intervention.

Table 2: Reasons for not allowing birth companions mentioned by health care providers involved in the study

Reasons for not allowing birth companions	Total number	Percentage
Lack of adequate space	32	62.75
Busy labor ward	25	49.02
Absence of partitioning at the labor ward	12	23.53
Doubt on the benefit of birth companions	2	3.92
Society do not agree with the practice	3	5.88

Birth companions are involved in few circumstances. Those women who have eclampsia or any condition that deserves frequent follow-up are the ones who will be allowed to have companions. One of the residents

explained 'In SPHMMC there has never been a birth companion unless the woman has eclampsia or something like that and we want someone to restrain or hold a woman, we never allow husbands or anyone for that matter. And the reason is the setup we have, there will be two or more laboring mothers in one place and to allow attendants will breach other women's privacy.'

The post-partum period is the one time where most of the women will be allowed to have companions around.

For the majority of the women who did not get to see anyone whoever is following them will go and get them what they need and pass messages to and from their companions since phones aren't allowed. But there are times the companions would not hear what has happened to the laboring women.

Benefits and challenges faced with the involvement of labor companions

With regards to the benefits of birth companions, 96.1 % of the health care providers believe that there is a benefit in their involvement. (Table 3)

Table 3: Benefits of birth companions mentioned by health care providers involved in the study

Benefits of birth companions	Total number of health care providers	Percentage
Moral support to mothers	47.0	92.16
Improves care by health care providers	16.0	31.37
Facilitate breast feeding	28	54.90
Reduces operative deliveries	13	25.49
Shortens duration of labor	22	43.18
Reduces the need for augmentation	11	21.57
Improves neonatal outcome	9	17.65
Ease of discussion with laboring mothers	2	3.92
Reduces home deliveries	4	7.84
Decrease labor pain	1.0	1.96

The health care providers who were included in the study mentioned that they have faced a breach of privacy, risk of litigation/complaints, interference with routine medical care, risk of theft, and worsened perception of health care providers by involving birth companions. (Table 4)

Table 4: Disadvantages of birth companions mentioned by health workers in the study

Disadvantage	Total number	Percentage
Breach of privacy	23	45.09
Possibility of litigation	13	25.49
Interference with routine medical care	22	43.14
Risk of theft	4	7.84
Worsen distrust of health professionals	1	1.96

The main cause of argument between the health care providers and the companions is the need to be with the laboring woman throughout the labor process. There were situations mentioned by health care providers that have escalated into fights.

One healthcare provider mentioned his experience; 'once I have seen a companion who hit a midwife. This is because the health professional was telling the companion to go out, he wanted to evaluate the woman who was sharing the same room with the woman this companion was with, but he refused, and it turned into a heated debate. This went on for a while and the companion hit the midwife...'

Reasons for not allowing labor companions

The main setback mentioned for the involvement of birth companions is the issue of privacy. The participants mentioned that there will be multiple laboring mothers next to each other without a proper screening. This makes allowing companion of one mother difficult. According to one healthcare provider "There are women who only have male companions; there are Muslim mothers who do not want to be seen by males; so, for the sake of one laboring mother, we should not trespass the right of others. Even if they have female companions it is not fair to be seen by someone you do not know."

The other frequent problem is the existing setup. This includes the presence of laboring rooms without screens, a lack of adequate space to add companions, and a lack of adequate couches and laboring beds. One health worker explained his stand, by saying: "with regards to birth

companions I follow the mass, I do not allow it because of the setup we have."

The caseload is also one hindrance to the involvement of birth companions. At SPHMMC there will be a minimum of 800 deliveries per month and the EGOPD will be crowded with laboring mothers which makes even proper evaluation of patients challenging. The health workers mentioned that there are a lot of laboring mothers at a specific time at the EGOPD and the addition of companions becomes a luxury.

Other factors include; fear of litigation if any complication arises and lack of adequate knowledge on the benefit of birth companions. There are also healthcare providers who mentioned they will not feel comfortable evaluating a laboring woman with family members nearby.

There were conflicting findings with regards to the understanding of the administration's stand on the issue of birth companions. There is a federal Ministry of Health of Ethiopia recommendation and the institution's commitment to abide by that recommendation. However, the institution's rule is to allow companions only in the morning and late in the afternoon. The hospital has hired guards who make sure family members are allowed only during the allocated time. This rule is implemented in the labor wards also. And the restrictions are more stringent in the labor ward.

Discussion

The finding from our study has shown among the health care providers who were involved in the study 39.2% % were knowledgeable of its benefits. There are numerous studies that have shown the multiple benefits of birth companions. A Cochrane systematic review which included fifteen trials involving 12,791 women showed that women who had continuous intrapartum support were less likely to have intrapartum analgesia, operative birth, or dissatisfaction with their childbirth experiences.² The benefit of birth companions was also emphasized by WHO.¹

The federal ministry of health of Ethiopia has prepared a guideline addressing the issue of compassionate, respectful, and caring maternity service. And according to this recommendation, all laboring women should be accompanied by a birth companion of their choice. Though the possibility of implementing this recommendation in the existing system is clearly challenging, the finding from our study has shown the prevailing

practice is far from the ministry's recommendation.

In this study, 96.1% of the health care providers believe that there is a benefit of birth companions. This finding is comparable to the findings of researches done in other African countries.^{5,13} From these, a qualitative study done in Zambia explored the views of 84 mothers and 40 health staff about the involvement of birth companions. In this study, most of the mothers appreciated the emotional and practical support of birth companions and a good number of the health care provider believe that social support will give the women sense of security and help the laboring women.

Of the health practitioners involved in this study, 82.4 % did not allow labor companions. A similar finding was made by a study done in Kenya. Similarly increased involvement of birth companions when the mother is difficult to deal with is also seen.¹⁶ The comparable socio-economic conditions of the two nations might have contributed to the similarity.

The commonest reasons mentioned by health care providers for not involving birth companions in this are similar to other studies which have also shown similar factors affecting implementation. Among these a systematic review that tried to assess the factors affecting the implementation of birth companions has shown that health care providers were concerned about the role of birth companions and their interference with labor ward activities. The reviewers have reached a conclusion about the need to sensitize health care providers on the issue and the need to study factors affecting implementation in different setups.¹⁵ A Cochrane qualitative synthesis has also shown the factors affecting implementation include lack of knowledge among women and health care providers and lack of space.¹⁶

Another study done to understand the feasibility of engaging birth companions within the health facilities of developing countries showed that 58.8 % of obstetricians did not allow labor companions in their wards.¹¹ The reasons mentioned for the lack of the practice of involving birth companions were similar to the hindrances described in our study.

Limitations of the study

The limitations of the study were the limited number of participants, and it was undertaken in an urban setting and may not represent providers living in more conservative settings.

Conclusion

In summary, the findings from our study have shown that labor companions are not part of the routine practice in SPHMMC and its catchment health centers. Though limited in scope, the majority of health professionals have knowledge on the benefits of birth companions. The reasons mentioned by healthcare providers not to involve companions include lack of adequate space and difficulty in ensuring privacy.

Since the involvement of birth companions is one way to ensure the quality of care provided there should be an effort to increase the knowledge of health professionals on the benefits of birth companions and efforts should be made to address the setbacks faced to involve companions. This includes simple measures like providing screens and providing separate rooms for laboring and post-partum women. The authors also recommend further study on ways to incorporate birth companions in resource- constrained settings.

Abbreviations

CTG- Cardiotocography

EDHS- Ethiopian demographic health survey

EGOPD- Emergency gynecology outpatient department

FHB- Fetal heartbeat

SPHMMC: Saint Paul's Hospital Millennium Medical College

WHO- World health organization

Declarations

The authors declare that the work submitted to this journal for publication has not been published before and it is not under consideration for publication anywhere else. If the manuscript is accepted by MJH for publication, authors ensure that the findings included in the submitted manuscript will not be published elsewhere in any language, without the written consent of the MJH.

The corresponding author assures that the submitted manuscript has been read and approved by all co-authors. We report no conflicts of interest (financial or non-financial).

Consent for publication

Participants consented for unanimous sharing of compiled data as approved by the IRB of the college at SPHMMC.

Ethical declaration

The study was approved by SPHMMC's Institutional Review Board (IRB). Informed written consent was obtained from providers involved in the study.

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Authors' contributions

Authors contribution is stated as follows; KG: Conceptualization, Methodology, Formal analysis, original draft. TG: Data analysis, Writing - Review & Editing. DB: Conceptualization, Writing - Review & Editing and Supervision.

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Competing interest

The authors declare that they have no competing interests.

Availability of Data and Materials

The datasets used in the current study or data collection tool are available from the corresponding author with a reasonable request.

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