Birth Companions, Health Workers Perspective: Mixed Method Study in St. Paul's Hospital and Millennium Medical College and Its Catchment Centers in Addis Ababa, Ethiopia

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Abstract

Introduction: Birth companions have been shown to improve quality of care provided to laboring women. Various studies have shown the benefits of companion during child birth. The objective of this study was to assess the knowledge, attitude and practice of health care providers towards the involvement of birth companions during child birth in St Paul's Hospital Millennium Medical College (SPHMMC) and its selected catchment health centers.

Methodology: The study used a cross-sectional study which was supplemented by qualitative study design which employed phenomenological design was conducted using in depth interview of health care providers who were on practice during the study period in SPHMMC.

Result: The study included a total 58 health care providers. The finding from the study showed that great proportion of health care providers involved in the study (90 %) have positive attitude towards involvement of birth companions but majority 82.4 % didn't allow birth companions. The commonest reasons mentioned for not involving companions include fear of breach of privacy, interference with routine medical care and risk of litigation/complaints.

Conclusion and Recommendation: The findings from this study showed that majority of the health care providers are against the practice of involving birth companions. Since 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 benefits of birth companions. There is also a need for improvement of the work setup. Simple measures like providing screens, providing separate rooms for laboring and post-partum women will have a significant impact on the quality of care provided.

Plain English Summary

Birth companions are those people who stay with a pregnant woman during pregnancy, labor and childbirth with the objective of providing a pregnant woman with emotional, physical and any other support a woman needs that is supplementary to the care provided by health care providers. Studies have shown their presence has positive impact on outcome of pregnancy.

The practice of involving birth companions during pregnancy and childbirth is not common in Ethiopia. In this study health workers were asked about their practice and their reason for not involving birth companions routinely. A total of 51 health care providers gave responses to structured questionnaire and 8 health care providers participated in in-depth interviews.

Of the 51 respondents 90 % have positive attitude towards involvement of birth companions though majority, 82.4 %, didn't allow birth companions.

The commonest reasons mentioned for not involving companions include fear of breach of privacy, interference with routine medical care and risk of litigation/complaints.

In conclusion majority of the health care providers are against the practice of involving birth companions. Since involvement of birth companions is one way to ensure the quality of care provided efforts should be made to address this reluctance.

Introduction

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

A study done in SPHMMC and three health centers in Addis Ababa assessed the level of respect and non-abusive care accorded to women delivering in health facilities. The findings of this study showed that all women who delivered in the hospital and 89.4% of women who delivered in the health centers experience the violation of right to information, lack of informed consent, and denied of the opportunity to deliver in birth position of their choice.[6] Although this study assessed the various aspects of disrespect and abuse it did not explore the extent of involvement of birth companions claiming the service as something that lack in most setups in the country. The investigators recommended the need to promote women-centered care as this was believed to positively influence women's decision to deliver at health facilities.

In countries where the health delivery systems are well developed and facilitated, maternal mortality and morbidity substantially decreased and the perinatal outcome improved appreciably. The progresses made in these fronts are minimal in developing countries. According to EDHS (2016), the current institutional delivery rate in Ethiopia is 26 %. [7] This is irrespective of the quality of care and satisfaction level provided to 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 less satisfactory. Researches show that women who are dissatisfied with the care they receive from health facilities tend to resort to 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 had to work hard to improve the quality of care they provide and hence improve maternal satisfaction. Number of interventions are available for the formal health delivery system in order to meaningfully improve the maternal satisfaction and the neonatal outcomes. One of these interventions is involvement of birth companion.

Detailed and empirical studies exploring the perception of health professionals and women towards birth companions within the Ethiopian health facilities is either totally lacking or at best is limited in scope. It is speculated that the reason for limited involvement of birth companions might be related to socio-cultural barriers and to the limited awareness of its benefits among health practitioners and child expecting women.

This study is done in two phases wherein the first one assessed the health workers knowledge, attitude and practice with regards to birth companions. This was followed by a second study which assessed post-partum women's perception with regards to involvement of birth companions. The study explored the extent of involvement of birth companions and the factors that restricted the implementation of the practice in labor wards. This part of the manuscript presents the finding from the first of the phase of the study.

The objectives for this study were;

- To determine the level of knowledge on benefits of birth companions among health care providers in SPHMMC and selected catchment health centers
- To find out the attitude of health care providers at SPHMMC and its selected catchment health centers on involvement of birth companions
- To find out the current practice and factors that hinder routine inclusion of birth companions in SPHMMC and its catchment health centers

Methods

Study area and period

The study was conducted at SPHMMC and its catchment health centers in Addis Ababa. The hospital, which serves as 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. The obstetrics department is regularly visited by expatriate obstetricians and has basic facilities that help handle routine and complicated delivery cases.

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.

Study design

The study used mixed method study which used quantitative cross-sectional study which was supplemented by qualitative study. The qualitative study used phenomenological design. It used thematic analysis where themes were developed after collection of the data.

Study population

The study populations of this study are health professionals that work in SPHMMC and its catchment health centers. These professionals include obstetrics and gynecology specialists, residents, and midwives who are currently on practice for more than 6 months in these institutions.

Sample size and sampling method

The health professionals included in the study were all health care providers who were involved in the day today activities of the labor ward during the study period in SPHMMC and in the randomly selected catchment health centers during the study period.

The data for the qualitative study was collected among 7 health care providers. This was collected using in-depth interviews as a study tool, which was conducted among health care providers who are involved in the delivery service at SPHMMC.

Data collection

Data with regards to the perception and practice of health care providers towards the involvement of birth companions in labor wards 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 second year and above were included. The questionnaire is adopted from a similar study that was conducted in Sri Lanka. [11]

In-depth interview was undertaken by the principal investigator, KG, among 3 midwives and 4 residents who were working in the labor ward during the study period. The interviewer used interview guide. The participants were chosen based on the number of years they served in the institution. 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 with regards to involvement of birth companions was conducted.

The results from the in-depth interview were recorded and transcribed verbatim in the local language (Amharic) 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 analysis of the qualitative data.

Ethical consideration

Ethical approval was secured from the ethical review board of SPHMMC before the start of the study. Support letter was prepared and submitted to heads of selected health centers. Prior to the collection of 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 volunteer basis.

Definition of terms used in the study

These are defined after thorough review of the literatures. [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

The cross-sectional study included a total of 51 health care providers who were providing obstetrics and gynecology service during the study period. These were 8 obstetrics and gynecology specialists, 26 residents and 17 midwives.

The mean age of the health workers included in the study was 30 years with a SD of 3.6. Married study participants include 58.8 % of the health care providers. The longest years in obstetric practice is 15 years while the least amount of time on the health care service specifically in the delivery service is 2 years.

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

Knowledge, Attitude and Prevailing practice with regards to birth companions

Among the health care providers involved in the study 39.2 % were knowledgeable on benefits of birth companions.

Among the study participants 90 % has positive attitude towards involvement of birth companions while only 4 % has negative attitude. (Table 4)

From the health practitioners involved in the study 82.4 % didn't allow labor companions. The reasons that were mentioned include lack of adequate space, busy labor ward, lack of partitioning among labor ward beds and doubt on the benefit of birth companions.

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 don't agree with the practice	3	5.88

With regards to benefits of birth companions 96.1 % of the health care providers believe that there is benefit in their involvement. The benefits mentioned were improved moral support to mothers, improved care by health workers, advantages in infant attachment, reduction of interventions, shortened length of labor, ease of communication with mothers, improved trust of health professionals, reduced home deliveries and decreased maternal stress.

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

Table 4: Opinion on involvement of birth companions mentioned by health workers in the study

Opinion on involvement of birth companions	Total number	Percentage
Strongly agree	23	45.1
Agree	22	43.1
Undecided	2	3.9
Disagree	1	2
Strongly disagree	1	2

The health care providers who were included in the study mentioned that they have faced 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 5: 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

Health workers Perspective on involvement of birth companions: Findings from in-depth interview of health workers

In- depth interview of seven health professionals was undertaken to further understand the attitude of health care providers with regards to birth companions.

- Acceptance of patients at the EGOPD and admission process

According to the interview the EGOPD of SPHMMC is run by midwives, interns, residents and obstetricians. Up on 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 FHB and gives verbal feedback to the person who brought the referral but the problem with this practice is usually the person who brought the patient has no association with the managing person at the referring institution. According to one resident 'usually it is the midwives who accept her referral but if there is any free resident he/she will check the referral. If she has a wrong diagnosis for example if her referral says she is a PROM patient and if the woman is shouting due to labor pain the health professionals around will start mocking or telling depending on the time (it will be a yell if it is past mid night, it will be a mock if it in the morning and a tired argumentative tone if it is late in the afternoon with a busy ER), that it is a wrong diagnosis and you shouldn't say PROM if she has labor or explain whatever is wrong with the referral. Usually the person who brought her has no relation with the managing team, it is just the command post or people who work in the ambulance, they get called to take the patient they have no idea what the woman has, or so they say.'

After evaluation the managing team will send baseline investigations and until bed is found the woman will be kept either inside the ER or in the corridors. And the team will prioritize among the laboring women's in the ER and decide who will be admitted.

- 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, status of the labor ward, the follow-up intensity will vary. Usually there will be 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. If it is spontaneous labor and if she doesn't have any risk it is only the CTG who will be with her. People will come in see the CTG and move on. There are also times we listen to the CTG while we are in the next room'.

There are some improvements in the practice that are mentioned by participants. The midwives have classified the rooms among themselves so this improves the possibility of at least one person to be in the room with one of the laboring women.

- Practice on involvement of labor companions at the health facility they work

Majority of the study participants mentioned that they don't involve birth companions on their routine practice. Those who allow companions described they allow them to intermittently see their loved ones and give update to the family members on how the labor is progressing and if there is a need for further intervention.

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 companions, 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 it will breach other women's privacy.'

Post-partum period is the one time where majority of the women will be allowed to have companions around.

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

- Benefits and difficulties they faced with involvement of labor companions

Even those who didn't involve birth companions agreed that there is a benefit in companion involvement. The benefits they mentioned were ease of communication, relief of pain, benefit on attachment and for the mothers to attain birth positioning of choice.

The difficulties mentioned by health care providers during involvement of companions include argument with health workers, frequent nagging, risk of litigation and lack of awareness on the ongoing care the woman is getting and interference due to this.

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 health care 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 involvement of birth companions is the issue of privacy. The participants mentioned that there will be multiple laboring mothers next to each other without proper screen. This makes allowing companion of one mother difficult. According to one health care provider “There are women who only have male companions; there are Muslim mothers who don’t want to be seen by males; so for the sake of one laboring mother we shouldn’t trespass the right of others. Even if they have female companions it is not fair to be seen by someone you don’t know.”

The other commonly mentioned problem is the existing setup. This includes the presence of laboring rooms without screens, lack of adequate space to add companions, lack of adequate couches and laboring beds. And one health worker explained his stand by saying: “with regards to birth companions I follow the mass, I don’t allow because of the setup we have”.

The case load is also one hindrance to involvement of birth companions. At SPHMMC there will be a minimum of 800 deliveries per month and the ER 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 specific time at the ER and 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 health care providers who mentioned they won’t feel comfortable evaluating a laboring woman with family members nearby.

There was conflicting finding with regards to the understanding on the administration stand on the issue of birth companions. There is a MOH recommendation and the institutions commitment to abide with that recommendation. But there is also institutions rule to allow companions only in the morning and late in the afternoons. The hospital has hired guards which make sure family members are allowed only on the allocated time period. This rule is implemented in the labor wards also. And the restrictions are more stringent at labor ward.

Discussion

The finding from our study has shown among the health care providers who were involved on the study 39.2% were knowledgeable of this benefits. There are various studies which showed 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 have dissatisfaction with their childbirth experiences. [2] The benefit of birth companions was also emphasized by WHO.[1]

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 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 showed the prevailing practice is far from the ministries recommendation.

In this study 96.1% of the health care providers believe that there is benefit of birth companions. This finding is comparable to 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 the social support will give the women sense of security and help the laboring women.

From the health practitioners involved in this study 82.4 % didn't 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 study include breach of privacy, interference with routine labor ward activity, lack of space and the volume of work in the labor wards among others. Other studies have also shown similar factors affecting implementation. Among this a systematic review that tried to assess the factors affecting 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 to a conclusion of 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 58.8 % of obstetricians did not allow labor companions in their wards [11]. The reasons mentioned for this practice were similar to the hindrances described in our study.

Conclusion And Recommendation

- The findings from our study showed that labor companions are not part of the routine practice in SPHMMC and its catchment health centers.

- Majority of health professionals have knowledge on the benefit of birth companions, though their knowledge is limited.
- The reasons mentioned by health care providers not to involve companions include lack of adequate space and difficulty to ensure privacy.
- Involvement of birth companions is one way to ensure the quality of service provided and efforts should be made to address the setbacks faced to involve companions.
- Since 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 benefits of birth companions.
- There is also a need for improvement of the work setup. This includes simple measures like providing screens, providing separate rooms for laboring and post-partum women.

Abbreviations

ANC- Antenatal care

EDHS- Ethiopian demographic and health survey

ETB- Ethiopian Birr

SPHMMC- St. Paul's Hospital Millennium Medical College

WHO- World Health Organization

Declarations

Ethical approval and consent to participate

Ethical approval was secured from the ethical review board of SPHMMC before the start of the study. Support letter was prepared and submitted to heads of selected health centers. Prior to the collection of the study data, consent was obtained from study participants. Study participants were not required to mention their names and participation in the study is on volunteer basis. Minors weren't included in the study.

Consent for publication

No information that disrupts anonymity of the study participants was included.

Availability of data and materials

All data used to generate the finding of the study are available from the corresponding author upon request.

Competing interest

The authors declare that they have no competing interest.

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Fund for the research was obtained from St. Paul's hospital millennium medical college. Despite providing fund for the study the institution was not involved in design of the study, data collection, analysis or interpretation of the findings of the study.

Author's contribution

KG helped in proposal writing, data analysis and write-up of the finding of the study. DB and TG have participated in development of study design and write-up of the findings of the study. All authors read and approved the final manuscript.

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