

PERCEPTION AND EXPERIENCE OF POST-PARTUM WOMEN TOWARDS BIRTH COMPANIONS: FACILITY-BASED STUDY IN A TERTIARY HOSPITAL AND ITS CATCHMENT HEALTH CENTERS IN ADDIS ABABA, ETHIOPIA

Kidist Gizachew, MD, MPH¹, Tewodros Getinet, BSc, MSc.², Delayehu Bekele, MD, MPH¹

ABSTRACT

INTRODUCTION: Birth companion refers to a person who provides support to laboring women during childbirth. Various studies have shown the benefits of birth companions. The objective of this study was to assess the attitude of mothers towards the involvement of birth companions during childbirth at St. Paul's Hospital Millennium Medical College (SPHMMC) and its selected catchment health centers.

METHODOLOGY: The study used a cross-sectional study to determine the perception of postpartum mothers on the involvement of birth companions during childbirth.

RESULT: The study included a total of 393 postpartum women. The finding from the study showed that although the majority (72.3 %) women has a positive attitude towards birth companions almost all (98.7%) were not allowed to have companions during labor. Among postpartum women, 27.7% have a negative attitude towards the involvement of birth companions. The commonest reasons mentioned by post-partum women for having a negative attitude toward this included need for privacy, religious values, and fear of overburdening family members with stress.

CONCLUSION: The findings from this study showed that most women were declined the option of having a birth companion despite their desire to have one. There could be several reasons for this low practice of birth companionship, hence barrier analysis and a mitigation plan based on that is recommended. The study has also shown the desire to have a birth companion isn't universal among laboring women in our setup. There is a need to understand the socio-cultural values of the individual woman before embarking on complete implementation of the involvement of birth companions.

KEYWORDS: Birth companions, post-partum women, Ethiopia

(The Ethiopian Journal of Reproductive Health; 2022; 14;51-58)

1 Department of Obstetrics and Gynecology, School of medicine, St. Paul's Hospital Millennium Medical College, Addis Ababa, Ethiopia

2 Department of Biostatistics, School of Public health, St. Paul's Hospital Millennium Medical College, Addis Ababa, Ethiopia

INTRODUCTION

The commitment to decrease maternal mortality and morbidity has initially focused on increasing the availability of, and access to, facility-based childbirth. And with the increasing access to health care facilities, there has been a shift towards increasing quality of care.

Quality of care is defined by WHO as both provision of technically competent care (use of evidence-based practices for the routine care and management of complications, as well as actionable health management information systems and functional referral systems) and enhancement of women's experience of care (informative and comprehensible communications, care delivered with respect for women's dignity, choices and their autonomy in decision-making, and the availability of social, emotional and practical support)¹.

In line with WHO's recommendations the Ethiopian Growth and Transformation Plan, a national five-year development plan, has put expanding access and ensuring the quality of health services as one of its objectives². Birth companion has been mentioned by WHO as one of the most cost-effective methods to ensure the quality of care and increase a positive childbirth experience³.

A positive childbirth experience is one that fulfills or exceeds a woman's prior personal and socio-cultural beliefs and expectations. This positive childbirth experience principally constitutes giving birth to a healthy baby in a clinically and psychologically safe environment with continuity of practical and emotional support from a birth companion(s) and kind, technically competent clinical staff³.

A birth companion refers to a person who provides support to laboring women during childbirth. This support system was an integral part of the traditional delivery process. It is neglected with the medicalization of the labor process since its importance was not appreciated, hence laboring women's access to such a traditional support system was restricted. But evidence show that the involvement of birth companions has multifaceted benefits.

Various randomized controlled trials have shown that the involvement of a birth companion is associated with better maternal and neonatal outcomes. A Cochrane qualitative synthesis has shown birth companions provide informational support, emotional support, and practical support, and companions act as advocates to laboring women⁴.

Implementation of the practice of involving birth companions is affected by the allocation of resources, organization of care, facility-related constraints, and cultural inclinations⁵. The trend of routine involvement of birth companions should be preceded by studies that assess women's perception of this practice.

Though there are studies done in our setup to assess the level of respectful and compassionate care in health facilities, most of these studies didn't assess the extent of involvement of birth companions. They also didn't mention the mother's preference with regard to this practice^{6,7}. This study was done to bridge this gap.

Therefore, our objectives for this study were to find out the attitude of postpartum women who delivered at SPHMMC and its selected catchment health on the involvement of birth companions. The study also sought to determine the prevailing practice regarding birth companions' involvement in labor wards of SPHMMC and its selected 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 a reference 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.

This study targeted postpartum women who delivered in these facilities. The study was conducted from September to December 2019.

Study design

The study used a cross-sectional study design to assess the perception of the women towards the involvement of birth companions.

Study population

The study population of this study is post-partum women, who delivered in the selected health facilities from September to November 2019.

Sample size and sampling method

The study included a sample size of 393 post-partum women who delivered in the selected health care establishments. The sample size is determined using the formula for cross-sectional study design.

The study subjects were sub-divided between the referral hospital i.e. SPHMMC, and its selected catchment health centers proportionally based on the number of patients the facilities serve.

Where: N = the desired sample size

Z = standard deviation at the required confidence level

p = proportion of post-partum women who accept the involvement of birth companions

q = $1-p$

d = desired level of precision i.e., margin of error

g = design effect

A proportion of 58 % is taken from a similar study that was conducted in Ghana which showed that 58 % of the women preferred to have a lay companion during facility-based labor and delivery⁸.

$$\text{Thus } N = \frac{1.96^2 * 0.58 * 0.42}{0.05^2}$$

Working out of the above equation and adding a 5 % non-response rate, set the sample size to 393 respondents.

The study was conducted in SPHMMC and three of its catchment health centers. There are 16 catchment health centers that have linkage to SPHMMC. Among this three were chosen randomly. The selected health centers are Kolfe, Lukanda, and Mikililand health centers. The number of post-partum women selected from each center was assigned proportionally to the number of deliveries

per month these institutions have. All women who delivered in these facilities were included until the allocated sample size was reached.

Those women who are clinically unstable during the data collection and those that delivered via cesarean section were excluded from the study.

The pretest was conducted on 10 % of the above sample, i.e. 39 mothers who gave birth at Ras Desta hospital and health professionals on duty in the same hospital from 1-15 October 2019.

Data collection

Data on the ongoing practice and on the preference of women with regard to the involvement of birth companions at the facilities was collected using exit interviews with women who delivered at the selected health facilities. Trained enumerators who are not involved in labor ward activities collected the desired data and information.

Data quality control

To ensure the quality of the collected data prior orientation or training on data collection methodologies and close supervision throughout data collection was carried out by the principal investigator. Data was also assessed for completeness and accuracy before entry into Epidata.

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 regard to the involvement of birth companions was conducted.

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. 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 a volunteer basis.

Operational definition

Birth companion is an adult male or female, selected by a pregnant woman, who provides her

with continuous physical and emotional support throughout labour and birth.

Results

Socio-demographic characteristics of study participants

This study was undertaken in SPHMMC and selected three catchment health centers and the data were collected from November to December 2019 GC. SPHMMC had a total of 982 deliveries in the study period. Of these deliveries, 71% were in the labor ward and the rest were at the emergency obstetrics out patient department. And 95.2 % of the deliveries were singleton deliveries.

During the study period, the labor ward team included obstetrics and gynecology consultants, seven residents, six midwives, and three interns. There was also a duty team with a comparable number of residents, midwives, and interns.

Among the health centers, Kolfe health center has the largest number of deliveries in the study period. At this health center, the total number of deliveries was 170.

To give a brief overview of the health facilities that were included in the study SPHMMC had the largest space. During the study period, the hospital had a total of 4 active labor beds and 8 second-stage couches which are classified among 12 rooms. But

due to lack of space, the laboring mothers were placed randomly on the available bed i.e those in the active first stage of labor can be kept in second stage couches and vice versa. Postpartum mothers were also left in the place they delivered for hours. The labor ward has curtains on one of the rooms but the other rooms had broken hangers and bent screens which exposes 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.

The study included a total of 393 post-partum women. Of these, the majority 305 (77.6%) were from SPHMMC. The rest were from three health centers namely Kolfe, Lukanda, and Mikililand health centers. These were selected using random sampling from 16 assigned under SPHMMC.

The mean age in years of post-partum women is 27 years. The majority of the post-partum women i.e. 92.4% are married and the majority of study participants have primary school-level education. (Table 1)

Table 1: Socio-demographic characteristics of post-partum women included in the study

		Total number	Percentage
Marital Status of women	Married	363	92.4
	Single	25	6.4
	Widowed	3	0.8
	Divorced	2	0.5
Religion	Orthodox Christian	171	43.5
	Islam	120	30.5
	Protestant	100	25.4
	Catholic	2	0.5
Level of education	No formal education	45	11.5
	Primary school	247	62.8
	Secondary school	58	14.8
	Tertiary school	31	7.9
	Advanced degree	8	2
	Missing	4	0.01

With regards to the income of the post-partum women included in the study, the maximum yearly income was 600,000 Ethiopian birr per year with a mean of 36,752 birr. The missing values on this variable were 29.

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

Among the post-partum women included in the study 72.3 % has a positive attitude towards birth companions while 27.7 % have a negative attitude. (Table 2)

Table 2: Post-partum women's opinion on routine involvement of birth companions

Attitude on routine involvement of birth companions		Positive attitude		Negative attitude	
Age	under 18	5	1.2%	2	0.5%
	18 to 24	72	25.4%	22	5.5%
	25 to 30	158	55.6%	50	12.7%
	31 to 35	39	13.7%	25	6.4%
	36 to 40	8	2.8%	8	2.8%
	above 40	2	0.7%	2	0.7%
	Total	284	72.3%	109	27.7%
Religion	Orthodox Christian	118	30 %	53	13.5%
	Protestant	80	20.4 %	20	0.5%
	Catholic	1	0.3%	1	0.3%
	Islam	85	21.6%	35	8.9%
	Total	284	72.3%	109	27.7%
Marital Status	Married	270	68.7%	93	23.7%
	Single	9	9.7%	16	4%
	Widowed	3	0.8%	0	-
	Divorced	2	0.5%	0	-
	Total	284	72.3%	109	27.7%
Level of education	No formal education	30	7.6%	15	3.8%
	Primary school	172	43.8%	75	19%
	Secondary school	49	12.5%	9	2.3%
	Tertiary school	23	5.8%	8	2%
	Advanced degree	7	1.9%	1	0.2%
	Total	281	71.5%	108	27.5%
Number of children	< 2	204	51.9%	67	17%
	3-6	79	20.1%	42	10.7%
	>6	1	0.3%	0	-
	Total	284	72.3%	109	27.7%

Although most of the women were in favor of having a birth companion almost all of the post-partum women (98.7%) were not allowed to have companions during labor and during their stay at labor wards. There were only five women who were allowed to have a birth companion accompany them during labor. Among these women, three were accompanied by their husbands, one by her mother and the other by her friend. Three of these women were staff of the hospital, and it was mentioned as

the reason they were allowed to have companions. Though less than 2 % of post-partum women were allowed to have companions, open-ended questions asked to post-partum women showed that the majority of the women, 39.7 %, would have preferred their husbands to accompany them during labor. (Table 3) The majority of the women who preferred their husbands to accompany them during labor said they want him to share the pain. One of the women explained that "he should know

and understand the pain and suffering I am going through, and he should understand what it takes to get a child". The other explanation given by post-partum women for preferring their husbands is that he is the only person with them, they love him so

much and he is the only person who can see them exposed. One post-partum mother explained by saying "I am a Muslim and according to my religion he is the only person who is allowed to see me exposed".

Table 3: Preferred labor companion by post-partum women involved in the study

Preferred companion	Frequency	Percent
Husband	156	39.7
Mother	55	14
Sister	35	8.9
Mother-in-law	9	2.3
Friend	7	1.8
A lay woman who provides support throughout labor	17	4.3
Other	7	1.8
Total	286	72.8

Those post-partum women who preferred their mothers or mothers-in-laws to accompany them during labor mentioned reasons such as they have been through labor already and that they will understand and help them better than others. Among those women who preferred their sisters, sisters-in-laws, or friends to accompany them they explained that they are comfortable around them and they could ask them what they want.

There were also women who preferred lay women to accompany them and the reason was they didn't want to stress their family members and these women might be able to help them similarly to health professionals.

Post-partum women who didn't want birth companions mentioned reasons such as the need for privacy, religious restrictions, worry about overburdening their family with stress, worsening the already crowded environment, and desire to go through the pain alone. According to one woman "The place is filled with people, I don't want to add my family into this besides, I don't think other than health professionals' others will help me."

DISCUSSION

A Cochrane systematic review has clearly showed that women who had continuous intrapartum support were less likely to have intrapartum analgesia, operative birth, or have dissatisfaction with their childbirth experiences⁴. The benefit of birth companions was also emphasized by WHO⁹. Bowser and Hill have identified seven categories of disrespect and abuse during childbirth which includes abandonment of care and women being left alone during labor and birth¹⁰.

Despite these findings which strongly support birth companionship our study showed that almost all women were denied the opportunity of being accompanied by a companion of their choice. This constitutes one aspect of abusive care during childbirth. The fact that, of the few women who were given this service, majority were working in the institution shows there is discrimination based on specific patient attributes^{6, 10}.

There could be many reasons mentioned as barriers to the provision of birth companionship which might have also contributed to the very low practice in our study^{12, 13}. These include health care providers concern about the role of the companion and possible interference with activities in the labor

ward, allocation of resources, organization of care, facility-related constraints and cultural inclinations. Further detailed exploration of the specific reasons for the low utilization of birth companionship in the set up should be done and plans to mitigate the barriers should be implemented.

Though our finding show that majority of our women want a birth companion, studies done in developing countries show that there is a need to anticipate difficulties with its implementation. A study done in Malawi has shown uneducated birth attendants weren't able to provide proper care. The study has also shown the need to enlighten women on purpose of birth companions unlike the midwives¹¹.

Our study has showed that 27.3 % of the postpartum women has negative attitude towards birth companions. The reasons mentioned includes need for privacy, religious restrictions, stress about overburdening their family with stress, worsening the already crowded environment and desire to go through the pain alone. A mixed method study done among pregnant women attending ANC in Ghana on preference of women on the involvement of birth companions has also shown that the general belief all women want companions is disputable⁸. In another study done in Debre Markos Ethiopia it was only 57.45% of the pregnant women who expressed desire to have birth companion in labor¹⁴. The finding from our and these additional studies signify the importance of having an individualized assessment to understand the underlying cultural and religious belief of the woman before embarking upon universal implementation of birth companions.

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. Contrary to the existing practice majority of the women want their partners or family members of their choice to accompany them. There could be several reasons for this low practice of birth companionship, hence barrier analysis and a

mitigation plan based on that is recommended. The reason mentioned by the few postpartum woman who had negative attitudes towards birth companions is the fear of exposure in front of others. The presence of women who disapprove of this practice points to the necessity of closer look of the underlying cultural and religious belief of the society before embarking upon universal implementation of the routine involvement of birth companions.

List of Abbreviations

ANC-	Antenatal care
ETB-	Ethiopian Birr
SPHMMC-	St. Paul's Hospital Millennium Medical College
WHO-	World Health Organization

Conflict of interest

The authors have no declaration of conflict of interest.

Acknowledgment

The authors would like to thank the St Paul's Hospital Millennium Medical College (SPHMMC) for funding the research work within the College and its affiliate health facilities. The authors would like to thank Dr. Ewenet Gebrehana for her invaluable insight and continuous support.

CORRESPONDING AUTHOR

Kidist Gizachew- MD, MPH

Department of Obstetrics and Gynecology, School of medicine, St. Paul's Hospital Millennium Medical College, Addis Ababa, Ethiopia

Email: tadelemmakidist@gmail.com

REFERENCES

1. WHO. 2020. Companion of choice during labour and childbirth for improved quality of care
2. Ministry of finance and economic development. 2010. Growth and transformation plan 2010/11 to 2014/15 : Federal democratic republic of Ethiopia . Available at; <https://www.greengrowthknowledge.org/national-documents/ethiopia-growth-and- transformation-plan-i>
3. WHO. 2018. Recommendations on intra-partum care for a positive childbirth experience. Geneva: World Health organization
4. E.D. Hodnett, S. Gates, G. J. Hofmeyr, and C. Sakala. 2011. Continuous Support for Women during Childbirth. *Cochrane Database Sys Rev*:7:CD003766. Doi: 1002/14651858.CD003766. pub5
5. Tamar Kabakian-Khasholian and Anayda Portela.2017. Companion of choice at birth: factors affecting implementation. *BMC pregnancy and childbirth* 17:265. <http://link.springer.com/article/10.1186/s12884-017-1447-9>
6. Anteneh Asefa and Delayehu Bekele. 2015. Status of respectful and non-abusive care during facility based childbirth in a hospital and health centers in Addis Ababa, Ethiopia. *Reproductive health* 12:33. <http://doi 10.1186/s12978-015-0024-9>
7. Kiros Terefe Gashaye, Adino Tesfahun Tsegaye, Getachew Shiferaw, Abebaw Gebeyehu Worku, Solomon Mekonen Abebe. 2019. Client Satisfaction with the existing labor and delivery care and associated factors among mothers who gave birth in University of Gondar teaching hospital; Northwest Ethiopia: Institution based cross-sectional study. Open Access. <http:// doi.org/10.1371/journal.pone.0210693>
8. Dzomeku MV.2011. Maternal satisfaction with care during labor: A case study of the Mampong- Ashanti district hospital maternity unit in Ghana .*International journal of Nursing and midwifery* 3: 30-34Tuncalp Ö, Were WM, MacLennan C, Oladapo OT, Gulmezoglu AM, Bahl R, Daelmans B, Mathai M, Say L, Kristensen F, Temmerman M, Bustreo F. 2015. Quality of care for pregnant women and newborns—the WHO vision. *BJOG* 22:1045-9.<http://onlinelibrary.wiley.com/doi/10.1111/1471-0528.13451/pdf>
9. Tuncalp Ö, Were WM, MacLennan C, Oladapo OT, Gulmezoglu AM, Bahl R, Daelmans B, Mathai M, Say L, Kristensen F, Temmerman M, Bustreo F. 2015. Quality of care for pregnant women and newborns—the WHO vision. *BJOG* 22:1045-9.<http://onlinelibrary.wiley.com/doi/10.1111/1471-0528.13451/pdf>
10. Diana Bowser, Kathleen Hill, Exploring Evidence for Disrespect and Abuse in Facility-Based Childbirth - Report of a Landscape Analysis, USAID-TRAction Project, Harvard School of Public Health University Research Co., LLC September 20, 2010
11. Banda, G Kafulafula, E Nyirenda, F Tauro, L Kalilani .2010. Acceptability and experience of supportive companionship during childbirth in Malawi .*BJOG* 117:937–945.DOI: 10.1111/j.1471-0528.2010.02574.x. www.bjog.org
12. Kabakian-Khasholian T, Portela A. Companion of choice at birth: factors affecting implementation. *BMC Pregnancy Childbirth*. 2017 Aug 31;17(1):265. doi: 10.1186/s12884-017-1447-9. PMID: 28854903; PMCID: PMC5577840.
13. Rungreangkulkij S, Ratinthorn A, Lumbiganon P, Zahroh RI, Hanson C, Dumont A, de Loenzien M, Betrán AP, Bohren MA. Factors influencing the implementation of labour companionship: formative qualitative research in Thailand. *BMJ Open*. 2022 May 27;12(5):e054946. doi: 10.1136/bmjopen-2021-054946. PMID: 35623758; PMCID: PMC9327797.
14. Assfaw HM, Abuhay M, Asratie MH. Desire for Birth Companionship Among Pregnant Women Attending Antenatal Care in Debremarkos City, Northwest Ethiopia: Magnitude and Associated Factors. *Front Glob Womens Health*. 2022 Apr 7;3:823020. doi: 10.3389/fgwh.2022.823020. PMID: 35464775; PMCID: PMC9021547.