



Woman's autonomy on maternal health service utilization and associated factors in Ambo town, west showa zone, Ethiopia

Adugna Olani¹, Tadele Yadessa² Fikadu Yadessa³

^{1,3} School of Nursing and Midwifery, Institute of health, Jimma University, Jimma, Ethiopia

² Department of Midwifery, Collage of Medicine and Health Sciences, Mizan Tepi University, Ethiopia

Abstract

Background: Maternal mortality is a major public health problem in low- and middle-income countries. Evidence shows that adequate health service utilization and empowering the women on decision making about own health to have positive impact on improving maternal health care utilization and key to tackle maternal morbidity and mortality

Objectives: The objective of this study was to assess the women's autonomy of deciding on their maternal health service utilization & associated factors in Ambo Town, Ethiopia.

Methods: Community based cross-sectional study was conducted on 381 women of having under five children from March 3-April 3 2018. Face to face interview was carried out to collect data using structured questionnaires. Multi stage sampling method was used to get required sample. The collected data was entered to Epidata 3.1 and transported to SPSS version 22 for data analysis. Descriptive statics, binary and multiple logistic regression analysis was conducted to identify factors associated with autonomy of women. The independent variables having P value <0.05 in multiple logistic regression analysis was taken as significant association and reported using p-value and adjusted odd ratio.

Result: Out of 381 women, more than half (55.6%) had higher autonomy of decision making regarding their maternal health service utilization. Parity; number of living children; Educational status of women; exposure to media; marriage type and age at marriage were significantly associated with women's autonomy.

Conclusion: women's autonomy of decision making on their maternal health service utilization plays a central role on reduction of maternal mortality and morbidity and still needs strong focus. Socio-demographic and socio-cultural factors were found to influence women's autonomy.

Keywords: women, autonomy, maternal health service utilization, Ethiopia

Introduction

Autonomy is multidimensional concept and difficult to quantify. It embraces women's ability to formulate strategic choices, control resources, and participate in decision-making [1, 2]. It can be considered as essential component affecting maternal health service utilization but has got little or no attention [3]. Maternal mortality is a major public health problem in low- and middle-income countries. Evidence shows that adequate health service utilization and empowering the women on decision making about own health to have positive impact on improving maternal health care utilization and key to tackle maternal morbidity and mortality [4, 5, 6, 7].

Worldwide, specifically in sub-Saharan Africa, 303,000 women die with complications resulted during pregnancy, childbirth and postpartum period and three delays are the leading causes [8, 9]. Ethiopia is one of the countries among sub-Saharan Africa accounting high, 412 maternal death per 100000 live births according to Ethiopian demographic and health survey (EDHS) of 2016 [10]. Maternal health seeking behavior of women is poor, abandoned to make their own decision by their husband, poorly understood and consider women as neglected groups in Ethiopia [11]. The study revealed that the decision-making authority of women is 46% and 52% in Ghana [12] and Uganda [13] respectively. It is low in Kenya [14] (36%). Higher decision-making practice of the women is directly associated with good reproductive

health service utilization and vice versa [15, 16]. In many countries including Ethiopia, women's autonomy is independently influenced by their sociodemographic statuses, control over earnings and partner's level of education in which it's key to determining health seeking behavior of maternal and child health [17, 18].

There is limited information on the study area about level of women autonomy on reproductive health service utilization. Therefore, this study aims to investigate the autonomy of women on decision making on their maternal health care utilization and associated factors in Ambo town, Oromia regional state, west Ethiopia.

The findings of this study will help to notify health planners and program managers in Ethiopia to promote gender equality, attain wider use of healthcare services among women, enable the women to exercise their reproductive right and discourage harmful traditions beliefs (cultures) having impact on women's autonomy. For policy makers it will help to consider strategies to increase utilization of maternal healthcare services and address gender inequality.

Methods and Materials

Ambo town is the capital of west Showa zone in Oromia regional state of Ethiopia which is 114 km far from the capital city Addis Ababa. It has 6 kebeles and total population of which 83053. The total reproductive age women are 18379 and women having under five years

children are 13645. The town has 17303 households according data received from the town health office. Community based quantitative cross-sectional study was conducted from March 03 to April 03 2018. All reproductive age women were considered as source population. Among them those women having under five age children in the town were study population. The sample size for this study was determined using a single population proportion formula as follows after considering the following assumptions. $n = (Z_{\alpha/2})^2 \times p(1-p) / d^2$, Where n = Sample size, $Z_{\alpha/2}$ = Confidence level at 95% = 1.96, P = proportion of women who had higher autonomy score in decision making regarding their own health care, from study conducted in Bale zone Oromia region (41.4) (23), d = margin of error 5%. By substituting the values, it comes= 372. By adding 10% of non-response rate on calculated sample size, the final sample is $37+372 = 409$.

Sampling techniques was Simple random sampling was employed to reach the eligible women after getting the list from all kebeles which was 13645. Then we used simple random sampling to select 409 of women having under five children from sampling frame.

Data was collected using structured questionnaires prepared in English and translated to Afan Oromo (local language). The questionnaire was pretested before commencement of actual data collection. The questionnaire contains three parts: socio demographic characteristics, socio cultural part and questionnaires' assessing women's autonomy of decision making on maternal health service utilization. Data collection was conducted after obtaining permission from concerned officials and verbal informed consent from the respondents. Four BSc mid-wives who have experience of data collection were recruited. Two days raining was provided for them on objectives of the study and the tool.

To assure Data quality control, one week before actual survey pretest was carried out in 5% (20) of study population and necessary modification was made before going to actual data collection. The principal investigator had made an ongoing supervision and checking each day during the data collection to ensure the quality of data by checking filled questionnaires. Concerning data analysis. the collected data was entered to Epidata 3.1 software and exported to SPSS version 22 for data analysis. Variables with (p-value ≤ 0.25) on bivariate analysis were included in the multivariable logistic regression analysis. The results were presented in the form of tables, figures, and text using frequency and summary statistics such as mean, standard deviation, and percentage. The degree of association between the independent and dependent variables was analyzed using the odds ratio with 95% confidence interval. Women's autonomy was measured by using the composite index of the three constructs of women's autonomy: control over finance, decision-making power and extent of freedom of movement. A composite measure for each construct was created using the sum of equal weighted binary (1 for higher degree of autonomy versus 0 = otherwise) and three input variables (2 = stands for women who were able to decide independently, 1 = stands for joint decision and 0 = otherwise). Based on these values the overall score will be 27. Therefore, those women who scored half of the total score i.e. 13.5 and above were considered as highly autonomous while those who scored less than 13.5 were said less autonomous [19].

Results

Socio-demographic characteristics

Out the total 409 sampled women, 381 completed the questionnaire making the response rate 93.15%. The mean (\pm SD) age of women was 29.2(\pm 6.0) years. Most of the women 346 (91.1%) were married. Eighty-three percent 317(83.2%) of women were Oromo followed by 46(12.1%) Amhara by ethnicity. Thirty eight percent 147(38.3%) of women and forty-four 169 (44.4%) of the husbands have attended tertiary education. 178 (46.7%) and 137(36%) of the women were orthodox and protestant religion follower respectively. Forty-seven 182 (47.8%) of the women and forty-eight 184 (48.3%) of their husband were merchant and sixty-eight 260 (68.2%) of the women earn \geq 1001ETB per month and seventy-three 281(73.8%) were using media (Table1)

Socio cultural factors

Regarding age of marriage, sixty- nine 265(69.6%) of the women married at their age of \geq 18years and seventy-seven 294 (77.2%) of the women have monogamy marriage type. Seventy-two 276(72.4%) of the women's family structure was nuclear and sixty-eight 260 (68.2%) of the partners have moderate (5-10years) spousal age difference. Sixty-four 244 (64%) of the women responded that the gender role expectation by husband in the society were equality.

Factors associated with women's autonomy

Regarding the education status of the women, as we go from no formal education to tertiary education level, the odds of having lower autonomy decreased. For read/write, primary, Secondary and tertiary the AOR&CI at 95%, 0.22 [.001-.527], .021[.001-.782], .012[.000-.463], .007[.000-.271] respectively.

In this study, those women who were in \geq 5 parity were less likely by 97.6% to have higher autonomy as compared to those who were in 1 to 2 parity [AOR: .024 (95% C.I: .007-.079)].

Women who had 3-4 living children had by 98.9% higher odds of increased autonomy as compared to women who had 1-2 living children [AOR:.011 (95% C.I: .002-.066)], and the odds of having higher autonomy decreased by 90% as the women's children get larger in number (\geq 5) {AOR [95%CI].094(.016-.556)}

Women who had not exposure of media had by 99.2% times a lower odd of having higher autonomy as compared to women those who had exposure to media [AOR: .008 (95% C.I: .001-.079)]. The women those who married at age of \geq 18years are by 96.2% more likely to have higher autonomy as compared to their counterparts (those who married at the age of 18 years old, AOR&CI at 95%.038[.003-.418].

Discussion

This community-based study has attempted to assess the autonomy of women on decision making regarding their maternal health service utilization and associated factors in Ambo town Ethiopia. The study revealed that, women found to have higher autonomy of decision making regarding their maternal health service utilization is 55.6% in Ambo town West Showa Ethiopia. This finding is somewhat higher compared to the study conducted in Ghana [12] which is

nearly half (49.2%) of the maternal health service utilization is independently decide by husbands and women have very little autonomy on deciding about their maternal health service utilization. This discrepancy may be due to the variation in study design, year of study, the way the study used to measure the autonomy of the woman, sociocultural difference between the two countries and the strong government effort on women empowerment in decision making position at home level in Ethiopia.

This finding is also higher than the study conducted in same region of Bale zone [19] which only 41.4% had higher autonomy on decision making on their maternal health service utilization. This difference may be due to the fact that the difference in study area (this study involved the town women only) and study period, in Ethiopia over the period of time (since the study conducted in Bale) there is strong commitment and effort has been made by Ethiopian government on maternal health.

Regarding the education status of the women, as we go from no formal education to tertiary education level, the odds of having lower autonomy decreased. For read/write, primary, Secondary and tertiary the AOR&CI at 95% .022 [.001-.527], .021[.001-.782], .012[.000-.463], .007[.000-.271] respectively. This finding is in line with the study conducted at Nepal (4). The reason may be due to the fact that well educated women can challenge their husband in order to have equal voice in decision making concerning their day to

day life at their home and also are hoped to have knowledge about maternal health. Women who had not exposure of media had by 99.2% times a lower odd of having higher autonomy as compared to women those who had exposure to media [AOR: .008 (95% CI: .001-.079)]. This finding is in agreement with the study conducted in Bale Ethiopia.

The women those who married at age of >=18years are by 96.2% more likely to have higher autonomy as compared to their counterparts (those who married at the age of 18 years old, AOR&CI at 95%.038[.003-.418].This finding is by far different from study conducted at Bangladeshi, this may be due to the fact that there may be socio cultural difference among the two countries which the age of marriage at Bangladeshi [20] was 13.5 that resulted in restriction of women’s autonomy, and the sample size variation may also. Over all, this study showed that parity, number of living children, educational status (women’s), exposure to media, marriage type and age at marriage were significantly associated with women’s autonomy. This indicates that empowerment of women in terms of education has unreplaceable role in enhancing them to decide on their maternal health service utilization autonomously. This is because poor knowledge is associated with less autonomy to decide about own health and to less utilization, to have many children (not using modern contraceptive), early marriage, less knowledge of the health impact of poly gamy marriage type.

Table 1: Socio-demographic characteristics of women Ambo town 2018

Variables	Frequency	percentage
Monthly income		
<=500	102	26.8
501-1000	19	5.0
>=1000	260	68.2
Marital status		
married	346	91.1
unmarried	11	2.9
widowed/divorced	24	6.0
Religion		
orthodox	178	46.7
protestant	137	36.0
catholic	18	4.7
Muslim	16	4.2
other	32	8.4
Ethnicity		
Oromo	317	83.2
Amhara	46	12.1
Tigre	8	2.1
Gurage	10	2.6
Parity		
1-2	139	36.5
3-4	128	33.6
>=5	114	29.9
Number of living child		
1-2	247	64.8
3-4	105	27.6
>=5	29	7.6

Table 2: Socio cultural factors on women’s autonomy Ambo town 2018

Marriage type	frequency	percentage
monogamy	294	77.2
polygamy	87	22.8
Age at marriage		
<=18yrs	116	30.4
>=18yrs	265	69.6

Family structure		
nuclear	276	72.4
extended	105	27.6
Spousal age differences		
little(<5yrs)	121	31.8
moderate(6-10yrs)	260	68.2
Gender role expectations in a society		
Male dominance	137	36.0
Equality	244	64.0

Table 3: Multivariable logistic regression models for factors associated with women's autonomy Ambo town 2018.

Variables	Women's autonomy status		P.value.	AOR	[95%CI]	
	L.autonomy	H.autonomy			Lower	Upper
Parity						
1-2	50(36)	89(64)		1		
3-4	63(49.2)	65(50.8)	.002	.173	.058	.513
>=5	56(49.1)	58(50.9)	.000	.024	.007	.079
Number of living children						
1-2	125(50.6)	122(49.4)		1		
3-4	41(39)	64(61)	.000	.011	.002	.066
>=5	3(10.3)	26(89.7)	.009	.094	.016	.556
Educational status(Women's)						
illiterate	3(37.5)	5(62.5)		1		
read/write	83(93.3)	6(6.7)	.018	.022	.001	.527
primary	7(20)	28(80)	.036	.021	.001	.782
Secondary.	21(20.6)	82(79.4)	.018	.012	.000	.463
Tertiary.	55(37.7)	91(62.3)	.008	.007	.000	.271
Exposure to media						
yes	78(27.8)	203(72.2)		1.0		
no	91(91)	9(9)	.000	.004	.000	.040
Marriage type						
monogamy	83(28.2)	211(71.8)		1.0		
polygamy	86(98.9)	1(1.1)	.000	.000	.000	.012
Age at marriage						
<=18yrs	87(75)	29(25)		1.0		
>=18yrs	82(30.9)	183(69.1)	.008	.038	.003	.418

Conclusion

More than half of women were found to have higher autonomy of decision making regarding their maternal health service utilization. Women status (parity, number of living children, educational status), Socio economic (exposure of media) Socio cultural factors (marriage type and age at marriage), being in a monogamous marriage, being in >=18 years old age of marriage, having exposure to media were positively associated with women's autonomy. Women those who have high autonomy utilize more maternal health care services than women with restricted or low autonomy. Specifically, women who have high physical, financial and decision-making autonomy utilize more maternal health care services than women with restricted or low autonomy. Therefore, these factors should be taken into account while designing interventions in improving maternal health service utilization.

Declaration**Ethical Approval and consent to Participate**

Ethical clearance: Ethical clearance was obtained from The Institution Review Board (IRB) of Jimma University Institute of Health. Permission letter was sought from Ambo town health office. Finally, oral consent obtained from each study participants before making interview and confidentiality of the data also was ensured.

Consent for publication

Not applicable

Availability of data and material

Data is available at any time

Competing Interests

The authors declare that we don't have any competing interests

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