Young Married Women Contraceptive Use and Associated Factors in Rural Ethiopia: Community Based Cross-Sectional Study

Tariku Dingeta^{1*}

Lemessa Oljira¹

Alemayehu Worku²

Yemane Berhane³

¹School of Public Health, College of Health and Medical Sciences, Haramaya University, Harar, Ethiopia

²Department of Epidemiology and Biostatistics, School of Public Health, Addis Ababa University, Addis Ababa, Ethiopia

³Department of Epidemiology, Addis Continental Institute of Public Health, Addis Ababa, Ethiopia

Abstract

Introduction: Unintended pregnancies among Ethiopian young married women are more than double of married women above 25 years. Moreover, young married women had the highest unmet needs and lowest contraceptive use compared to older women. On the other hand, contraceptive studies in Ethiopia were combined younger and older women ignoring the difference and also mostly limited to socio-demographic and reproductive factors. This paper is therefore aimed to assess the level of contraceptive utilization and associated factors among young married women in Eastern Ethiopia.

Methods: A community based cross-sectional study was conducted among 14-24 years married women living in Kersa Demographic Surveillance System site. A total of 3039 women were interviewed by trained data collector using structured questionnaire. Adjusted Odds Ratio (AOR) with 95% Confidence Intervals (CI) was used to determine the relationship between contraceptive utilization and associated factors using hierarchal multivariable logistic regression analysis.

Results: The mean (±SD) age of study participants were 19.6(2.6) years. Among the study participants only 369(14.1%) (95% CI: 12.8-15.5) were currently using the contraceptive methods. Belief in contraceptive myths was negatively associated with young women contraceptive use (AOR= 0.71; 95% CI: 0.59-0.87). Injunctive norm (AOR=2.3; 95% CI=1.8-2.8), descriptive norm(AOR= 1.8; 95% CI:1.24-2.6), decision making autonomy (AOR=2.0; 95% CI: 1.1-3.8), spousal communication (AOR=1.4; 95% CI: 1.04-1.9), physical intimate partner violence(AOR=1.3; 95% CI: 1.12-1.9), exposure to FP information (AOR=1.6; 95% CI: 1.2-2.1), contraceptive knowledge(AOR=1.8; 95% CI: 1.3-2.4), age 20 years and above (AOR=2.5; 95% CI: 1.5-4.1), and grade five and above educational status (AOR=1.7; 95% CI: 1.23-2.4) were significantly associated with young married women contraceptive use

Conclusion: Low proportion of young married women were using the contraceptive method. There were intrapersonal, interpersonal and social factors that influence young married women contraceptive use. Young mother need to be targeted by FP interventions to dispelled misunderstanding and myths regarding contraceptives methods and able to challenge traditional social norms.

Introduction

More than 20% of 15-19 adolescent and 60% 20-24 young adult women in sub-Saharan Africa are in marital union and most of them have a child within the first year of marriage [1-5]. Young age motherhood is associated with more unintended and shorter intervals pregnancies which is linked to a higher risk of death and disability than older women [5, 6]. In Ethiopia, owing to the high rate of early marriage and subsequent cultural pressure for childbearing unintended pregnancies among married young women are more than double than that of married women above 25 years of age [3, 7, 8].

Poor utilization of contraceptive methods is a key contributory factor for the unintended pregnancies and difficulties of fertility regulation among young women [9-11]. Despite contraceptive initiation at earlier life is correlated with future contraceptive use [12] less than a fourth of married young women in developing countries are utilizing contraceptive methods compared to 60% or more married women aged 30 or more years [13]. Moreover, young age mother not only have lower use but also high levels of unmet need and unsatisfied demand for contraception compared to adult married and sexually active unmarried young women [14, 15].

Effective use of contraceptive methods influenced by a wide range of factors, which needs to be understood and considered when developing policies and programs to improve young women contraception [16, 17]. On top of this, socio-cultural factors that influence young women contraceptive uptake in sub-Saharan Africa are complex and different among countries which signify the inapplicability of one-size-fits-all approach [13]. Literature also noted the need for broader shifts in cultural norms regarding contraception at the early years of marriage to increase contraceptive uptake besides improving access to contraceptive services [12]. However, the available knowledge that guides family planning intervention in the region in general and in Ethiopia, in particular, is not sufficient to improve contraceptive uptake among married young women. Although few studies have examined the influence of individual and institutional factors on contraceptive use, ignored social level influences. Even, studies that looked contraception-related social factors combine younger and older women although young women, who face pressures to conceive, likely different. Thus, within an effort to improve contraceptive uptake in Ethiopia particularly among young women, it is essential to understand the level of contraceptive

uptake and associated factors that shape the contraceptive use. This paper is therefore, aimed to determine the prevalence of contraceptive use and associated factors among married young women in Ethiopia.

Methods and Materials

Study setting and population

A cross-sectional study was conducted from March 9 to May 29, 2018 among young women in Kersa Demographic and Health Surveillance System (Kersa HDSS) site, Kersa District, Eastern Ethiopia. Out of the 38 kebeles found in the district, 24(21 rural and 3 urban) of them are included under Kersa HDSS site. The site constitutes 26,061 households and 29,210 women of reproductive age of which 11% are 15-24 ever married young women [18]. The Kersa HDSS database was used as a sampling frame to identify the list of households in which married young woman found. The names of the eligible participants and their household IDs were retrieved from the database. Finally, all 3102 less than 25 years married women in each of the identified households were interviewed.

Variables and Measurements

The outcome variable was contraceptive use which was measured by asking participants if they were currently doing something or using any method to delay or avoid getting pregnant. If the respondent answered affirmatively, she was then asked what type of contraceptive method she was currently using. The independent variables selected for analyses were: Injunctive norm (perceptions of support from people in social network) was measured by asking the married young women's perceptions of their husband, mother in-law, peers and mother approval of using a contraception at young age using the items adapted from other literature[19,20]. The items scale ranges from strongly disapprove (1) to strongly approve (5) with possible total scores range from 4 to 20 a higher score indicating believe that the referent are more supportive of their contraception use with a good reliability (Cronbach's alpha = 0.84). The descriptive norm (perceptions of peers' contraceptive use) was assessed by single item adapted from Sutton and Walsh-Buhi[21] asking the respondent to consider her peers (women who are similar to her) and how many were using contraceptive method with the response ranges from 'none' (1) to 'all' (5). The higher the score indicates the stronger the likelihood that respondents thought their peers were using the contraceptive method. Beliefs of contraception related myth was measured using a 5-item index

adapted from literature in which women responded whether they disagreed (scored as 1), unsure (scored as 2), or agreed (scored as 3) with satisfactory reliability (Cronbach's alpha 0.74) [22]. The index score range is 5–15 and a higher score indicates high misconception of contraception. Young women's contraception self-efficacy was measured using the 5 items adapted from a validated scale [23] and the response is based on a 5-point Likert scale, where "Completely Sure (5)" to "Not at all Sure (1)" with good reliability scale (Chronbach'salpha=0.86). The overall contraceptive use self-efficacy score was constructed by summing the item's score and dividing by the number of item [24]. Spousal communication was measured using 5-items scale with response options ranges from Always =5 to Never=1. The overall spousal communication scale was constructed by summing the items score and dividing by the number of items and a higher scale score indicates a higher level of inter-spousal communication. One of the key factors was self-perceived women's household decision-making autonomy which was measured using 10items adapted from literature [25-27]. Item response options included: wife alone, wife and husband together, husband alone, respondent and other person, and someone else. For the measure of overall decision-making autonomy, we converted all indicators into binary variables where responses of wife alone or wife and husband together scored as 2 and all other responses scored as 1. The scale score was the sum of item scores divided by the number of items and ranges from 1 2. Moreover, other factors including social-demographic characteristic, incident of physical abuse

Data collection and Analysis

Data were collected though face to face interview by trained interviewer using a pretested questionnaire prepared in English and translated into the local language (Afan Oromo). The supervisors closely supervised the data collection process moving house to house and checked the filled questionnaire on a daily basis. The study was approved by the Ethical Review Committee of Haramaya University. The filled questionnaires were double entered into EpiData Version 3.1 and analyzed using STATA 14 statistical software. Hierarchical multivariable logistic regressions was used to identify the association between contraceptive use and independent variables. The variable with p-value ≤ 0.25 in bivariate analysis was included in each model and the final model was constructed by the variables with p-value ≤ 0.05 in each of the preceding model. The Pearson Chisquare and Hosmer–Lemeshow goodness-of-fit tests were used to test for model fitness.

by their partner and exposure FP information were also measured by standard questions.

Results

Among the 3102 married young women contacted 3039 were interviewed making the response rate of 97.9%. Majority of the study participants 1995(65.2%) were more than 18 years of age with mean (\pm SE) age of 19.6(\pm 2.6). Most of the participants were rural resident 2864(92.4%) and muslim in religion 2996 (97.2%). More than half of the participants 1628(53.5%) had no formal education. Majority of the married young women 2,176(70.2%) had at least one child among which more than half 1225(56.3%) (n=2176) had only one child. Most of the study participant 2818(92%) knew at least one contraceptive method. Injectable (81.9%), implants (77.25) and pills (64.2%) were the most commonly known contraceptive method while only 145(4.1%) knew Intrauterine Contraceptive Device (IUCD). Among the study participants, 695(22.9%, 95% CI: 21.4%-24.4%) were reported ever use of contraceptive methods while 369(14.1%, 95% CI: 12.8-15.5) were currently using the contraceptive methods. Injectable was the most used method account 174(47.2%) and most 364(98.6%) were using contraception to delay rather than limit pregnancies. Only few young women 17(4.6%) of the contraceptive users began to use contraception prior to first birth. Being on breast-feeding and/or not seen menstruation after gave birth were among the main reasons for not using contraceptive methods among contraceptive non-users. The prevalence of unmet need for contraception among married young women in the study area was 1014(34.6%, 95% CI: 32.9%-36.4%) and nearly all were 978(96.4%) for spacing (table 1). The total demand for contraception was 48.7% (sum of unmet need and using contraception) and only one-third (28.9%) of the married young women's contraceptive demand was satisfied.

In the multivariable logistic regression belief in contraceptive myths or misconception (AOR=0.71; 95% CI: 0.58-0.86), injunctive norm (AOR =2.3; 95% CI 1.8-2.8), descriptive norm (AOR =1.8; 95% CI 1.24-2.6), household decision-making autonomy (AOR=2.0; 95% CI: 1.2-3.8), spousal communication(AOR=1.4; 95% CI: 1.05-1.9), experience of physical IPV (AOR=1.3; 95% CI: 1.1-1.7), higher contraceptive knowledge (AOR=1.8; 95% CI: 1.3-2.4), recent exposure to FP information (AOR=1.6; 95% CI: 1.2-2.1), age 20 years and above (AOR=2.5; 95% CI:1.5-4.1), and grade five and above educational status(AOR=1.7; 95% CI: 1.23-2.4) were significantly associated with higher likely hoods of contraceptive use(table 2).

Conclusion

Our findings indicate that most of the married young women were not using contraceptive method while they want to space pregnancies for two or more years. There were individual, interpersonal and social factors that influence young married women's low contraceptive utilization. Multilevel contraceptive intervention including strategies to enable young women to be more autonomous and able to challenge traditional social norms that limit access to contraceptive services is needed. Young mother need to be targeted by FP interventions to dispelled misunderstanding and myths regarding contraceptives methods and able to challenge traditional social norms.

Table 1: Socio-demographic and reproductive characteristics of married young women in Kersa districts, Eastern Ethiopia

Variables	Answers	Frequency	%
Age participants	14-17	609	19.9
	18-19	629	20.6
	20-24	1820	59.5
Current residence	Rural	2,864	92.4
	Urban	235	7.6
Religion	Muslim	2996	97.2
	Orthodox	81	2.6
	Protestant	6	0.2
Level of education (n=3055)	No education	1628	53.5
(,	Primary(1-4 grade)	588	19.2
	Lower secondary and higher	833	27.3
Ever pregnant	No	616	20.2
	Yes	2,431	79.8
Ever gave birth	No	869	28.4
	Yes	2189	71.6
Had at least one child	No	926	29.8
	Yes	2,176	70.2
Current contraceptive use	No	2,246	85.9
•	Yes	369	14.1
Types of method used	Pill	9	2.4
	Depo-Provera	174	47.2
	Implants	172	46.6
	Standard Days Method	14	3.8
Purpose of using the contraceptive method.	Spacing birth	364	98.6
	Limiting birth	5	1.4
Total unmet need	Yes	1014	34.6
	No	1919	65.4
Types of unmet need (n=1014)	Unmet need for spacing	978	96.4
	Unmet need for limiting	36	3.6

Table 2: Factors associated with young women contraception living in Kersa HDSS, Ethiopia, 2018 Table 4:

Variable	Frequency(%) of contraception	Crude OR (95% CI)	Final Model
Age of women	•	,	
14-17 years	26(4.3)	1	
18-19 years	65(10.4)	2.6(1.6-4.1)	1.6(0.9-2.7)
20-24 years	277(15.54)	4.1(2.7-6.2)	2.5(1.5-4.1) ***
Educational status of women			
No education	129(8.2)	1	1
Primary	94(16.4)	2.2(1.7-2.9)	1.4(0.94-2.0)
Secondary and higher	135(16.5)	2.2(1.72-2.9)	1.7(1.23-2.4)***
Desired number of children		0.82(0.8- 0.9)	0.94(0.86-1.01)
Believes in Contraceptive myths		0.55(0.47-0.65)	0.71(0.59-0.87) ***
Self-efficacy for contraception		1.2(1.15-1.22)	1.14(0.94-1.4)
Knowledge of family planning			
High knowledge	239(15.9)	2.14(1.7-2.7)	1.8(1.3-2.4) **
Low knowledge	117(8.12)	1	1
Spousal communication			
High	248(18.5)	3.1(2.4-3.9)	1.4(1.05-1.9)*
Low	113(7.0)	1	1
Physical IPV: Yes	156(15.2)	1.5(1.2-1.8)	1.3(1.1-1.7)**
No	210(10.7)	1	1
Residence: Rural	290(12.5)	1	1
Urban	71(36.0)	3.9(2.8-5.4)	1.4(0.92-2.1)
Injunctive norm		3.3(2.8-3.8)	2.3(1.8-2.8)***
Descriptive norm		1.8(1.65-2.02)	1.8(1.24-2.6)**
Women's household decision mak	ing	2.4(1.5-3.8)	2.0(1.2-3.8)**
autonomy	1. 4		
Exposure to FP information in the		2.7(2.2.2.4)	1 ((1 0 0 1)**
12 months : Yes	180(20.3)	2.7(2.2-3.4)	1.6(1.2-2.1)**
No	185(8.8)	1	1

References

- 1. Digitale, J., et al., Correlates of Contraceptive Use and Health Facility Choice among Young Women in Malawi. The ANNALS of the American Academy of Political and Social Science, 2017.669(1):93-124.
- 2. Central Statistical Agency, C.S.A.E. and Icf, Ethiopia Demographic and Health Sruvey 2016. 2017, CSA and ICF: Addis Ababa, Ethiopia.
- 3. UNFPA, The Status Report on Adolescents and Young People in Sub-Saharan Africa: Opportunities and Challenges. 2012: 7 Naivasha Road, Sunninghill, Johannesburg, 2157 South Africa.
- 4. Efevbera, Y., et al., Girl child marriage, socioeconomic status, and undernutrition: evidence from 35 countries in Sub-Saharan Africa. BMC Medicine, 2019. 17(1): 55.
- 5. United Nations's Children's Fund (UNICEF). Progress for Children: Achieving the MDGs with Equity. 2010, New York: UNICEF.
- 6. UNFPA, The United nations Population Fund: Marrying too young: end child marriage. 2012 605 Third avenue, new York, nY 10158, USa.
- 7. EFMoH, Federal Democratic Republic Of Ethiopia Ministry Of Health(EFMoH) National Adolescent And Youth Health Strategy (2016-2020). 2016.
- 8. Habte, D., et al., Correlates of Unintended Pregnancy in Ethiopia: Results From a National Survey. PLOS ONE, 2013. 8(12): p. e82987.
- 9. Tnelly, L. and I. Ngwenya, Sexual Reproductive Health And Rights For Adolescents In Sub Saharan Africa. 2014 World YWCA.
- 10. WHO, Early marriages, adolescent and young pregnancies: Report by the Secretariat. 2011: Geneva
- 11. Chandra-Mouli, V., et al., Contraception for adolescents in low and middle income countries: needs, barriers, and access. Reproductive Health, 2014. 11(1):1
- 12. Digitale, J., et al., Correlates of Contraceptive Use and Health Facility Choice among Young Women in Malawi. Ann Am Acad Pol Soc Sci, 2017. 669(1): 93-124.
- 13. Haider, T.L. and M. Sharma, Barriers to family planning and contraception uptake in sub-Saharan Africa: a systematic review. Int Q Community Health Educ, 2012. 33(4): 403-13.
- 14. MacQuarrie, K.L.D., Unmet need for family planning among young women: levels and trends, in DHS Comparative Reports No. 34. 2014, ICF International: Rockville, Maryland, USA.
- 15. Radovich, E., et al., Who Meets the Contraceptive Needs of Young Women in Sub-Saharan Africa? Journal of Adolescent Health, 2018. 62(3): 273-280.
- 16. Kelly Ackerson and R. Zielinski, Factors influencing use of family planning in women living in crisis affected areas of Sub-Saharan Africa: A review of the literature Midwifery 54 (2017) 35–60, 2017
- 17. McClendon, K.A., et al., Intersections of girl child marriage and family planning beliefs and use: qualitative findings from Ethiopia and India. Culture, Health & Sexuality, 2017: 1-16.
- 18. Dheresa, M., et al., One in five women suffer from pelvic floor disorders in Kersa district Eastern Ethiopia: a community-based study. BMC Womens Health, 2018. 18(1): 95.
- 19. Mayaki F. and Kouabenan, D.R. Social norms in promoting family planning: a study in Niger. South African Journal of Psychology, 2015. 45(2): p. 249-259.
- 20. Bader V.G. Influences On Contraceptive Use Among College Women. PhD dessertation, The University Of Missouri-Kansas City. 2015. Aviable at: https://mospace.umsystem.edu/xmlui/bitstream/handle/10355/45537/BaderInfConUse.pdf?seq uence=1&isAllowed=y. in Nursing 2015

- 21. Sutton J.A. and Walsh-Buhi, E.R. Factors influencing college women's contraceptive behavior: An application of the integrative model of behavioral prediction. J Am Coll Health, 2017. 65(5): p. 339-347.
- 22. Abdulmumin Saad, et al., Misconceptions and current use of contraception among women of reproductive age in six major cities in Nigeria. The European Journal of Contraception & Reproductive Health Care, 2018
- 23. Wegs, C., et al., Community Dialogue to Shift Social Norms and Enable Family Planning: An Evaluation of the Family Planning Results Initiative in Kenya. PLOS ONE, 2016. 11(4): p. e0153907.
- 24. CARE USA. Women's Empowerment Multidimensional Evaluation of Agency, Social Capital and relations(WEMEASR): A tool to measure women's empowerment in sexual, reproductive and maternal health programs. 2014 Author: Atlanta, GA.
- 26. Hameed W, Azmat SK, Ali M, et al. Women's empowerment and contraceptive use: the role of independent versus couples' decision-making, from a lower middle income country perspective. *PLoS One*. 2014;9(8): e104633.
- 26. CARE USA.Women's Empowerment Multidimenssional Evaluation of Agency, Social Capital and relations(WEMEASR): A tool to measure women's empowerment in sexual, reproductive and maternal health programs: A tool to measure women's empowerment in sexual, reproductive and maternal health programs Author: Atlanta, GA; 2014
- 27. Haque SE, Rahman M, Mostofa MG, Zahan MS. Reproductive health care utilization among young mothers in Bangladesh: does autonomy matter? *Women's health issues: official publication of the Jacobs Institute of Women's Health*. 2012;22(2): e171-80.