

Prevalence of unintended pregnancy among women attending anc at pawe general hospital metekel zone beneshagul gumuz northwest ethiopia in 2022

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Research Article

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Abstract

Background- Unintended pregnancy is a pregnancy that is mistimed, unplanned, or unwanted at the time of conception. Unintended pregnancy is an important public health problem of women of child bearing age, because of their negative outcomes on health and of social for both mothers and children. It creates serious health consequences for women, children and family.

Objective- The objective of this study was to assess prevalence of unintended pregnancy among women attending antenatal care at pawe general hospitals Metekel zone Benshagul Gumuz, Northwest Ethiopia 2022.

Methods- A facility based cross sectional study design was conducted from April 7, 2022 to May 5, 2022. Systematic random sampling technique was used to select participants for the assessment. A total of 311 women attending antenatal care were interviewed to examine sets of variables using questionnaire. Data analysis was analysis by using SPSS software and Prevalence of unintended pregnancy was determined along with the corresponding 95%CI.

Result: - The current study found out the prevalence of unintended pregnancy among current pregnant women were 80(25.7%) among the study population, which is 24(7.7%) for mistimed and 56(18%) for unwanted.

Conclusion

The prevalence of unintended pregnancy among women attending ANC at pawe general hospital was high, and Health profession worker should strengthen the service to women with emphasis on creation of awareness, on misconceptions, knowledge and practice of family planning methods

What is already known on this topic?

- Unintended pregnancy is the primary cause of intended abortion.

What this study adds

- The prevalence of unintended pregnancy is higher in the study are.

Introduction

An unintended pregnancy is a pregnancy that is mistimed, unplanned, or unwanted at the time of conception or pregnancy that occurred when no children were desired or earlier than the desired point of time [1, 2].

Unintended pregnancy is an important public health issue in developed and developing countries because serious consequences for women and their families, including the possibility of maternal

death, unsafe abortion, delayed prenatal care, low birth weight baby, poor maternal mental health and poor child health outcomes. Each year, an estimated 80 million unintended pregnancies, both mistimed and unwanted, occur globally [3].

The amount of time a woman typically spends avoiding unwanted or mistimed pregnancies has increased in recent decades, because urbanization and social and economic development have lead many couples to want fewer children [4].

Globally 4 million unintended pregnancy ends in spontaneous termination, 42 million in induced abortion and 34 million in unintended births each year [5]. In 2012, 85 million pregnancies worldwide, representing 40 percent of all pregnancies were unintended and Throughout the world, child bearing age women cope with the heavy burden of unintended pregnancy[6].

In sub-Saharan Africa, approximately 14 million unintended pregnancies occurs every year and The low contraceptive prevalence, with only 22% of married women currently using modern contraceptive methods, and the highest level of unmet need for contraception of all world regions has contributed to the high rate of unintended pregnancy in the region[7]. In Ethiopia the prevalence of unintended pregnancy is 29% [8].

So the underlying cause of high prevalence of unintended pregnancy needs further investigation and appropriately addressed by reproductive health programs. This study was conducted to provide evidence and source of information on the prevalence of unintended pregnancy in pawe general hospital.

Methods

Study design and period

Health facility-based cross-sectional study was done from April 7, 2022 to May 5 2022 at pawe general hospital.

Study setting

Pawe is one of the seven woreda of metekel zone in Beneshagul Gumuz Regional State located 565 Kilometers away from Addis Ababa, the capital city of Ethiopia to the northwestern direction and 390km from region capital city assosa. The total population of pawe woreda is 69322. The woreda has one General hospital, three health center and 20 health post.

Pawe hospital is a governmental hospital owned by Beneshagul Gumuz health bureau at which all service is given including maternal and child health service. Pregnant mothers attend ANC at pawe

general hospital referred from health centers. The total ANC service was around 6000 in 2020/2021.

Study population

The study included randomly selected consenting mothers who attend ANC at Pawe general Hospital during the data collection period.

Sample size and sampling

Sample size was determined by single population proportion formula. The previous prevalence of unintended pregnancy from a study conducted in beita kaffa zone Ethiopia is 26 % [9].

In this regard, a 5% level of significance (two-sided) or the hypothesis of no significant difference and a power of 80% was assumed. Based on the above assumption the sample size was 296 and after considering a 10% of non-response rate the final sample size was 326 mothers.

The study participants were selected by using systematic random sampling techniques. The sampling interval (K) was obtained by dividing the total number of women attended in one month by the total sample size (500/326), and the K value becomes approximately 2. The starting unit was selected by using the lottery method.

Study Variable

Dependent Variable

Unintended pregnancy (Yes/No)

Independent Variable

Socio-demographic factors: maternal age, residence, religion, ethnicity, maternal occupation, marital status, family income, family size, and educational status.

Obstetrics factors: gravidity, parity, history of abortion, number of abortion, desired family size,

Operational definitions

Unintended Pregnancy: unintended pregnancy is a pregnancy that is mistimed, unplanned, or unwanted at the time of conception.

Unwanted Pregnancy: is a pregnancy which has occurred after a woman has reached her desired family size and did not want a child or any more children.

Mistimed pregnancy: is a pregnancy which has occurred without the wish of the woman at the specific time of occurrence of the pregnancy, but she has a desire to be pregnant and have a child or children sometime in the future.

Data collection tools

A structured interviewer-administered questionnaire was used to collect the quantitative data which were adapted from relevant works of literature and modified to the local context [ANNEX I].

Questionnaires were first prepared in the English language, then it was translated into Amharic by an individual who has a good working knowledge of these languages, then retranslated back into English to check the consistency. The questionnaire consisted of socio-demographic and obstetric factors.

Data quality control

The data collectors and supervisors were trained for two days by the investigators. The questionnaire was pre-tested before the actual data collection period on 5% (17) mothers at Chagni primary hospital, which has similar characteristics to the study population to ensure the clarity of the questionnaire, to check the wording, and to confirm the logical sequence of the questions. After necessary modifications and correction was done to standardize and ensure its reliability and validity additional adjustments were made based on the results of the pre-test.

Data collection procedures

The data were collected by trained two diploma midwives and supervised by one BSc midwife. During the data collection period, daily supervision was done for data completeness.

Data processing, analysis, and interpretation

The data were entered into Epi.info version 7.1, edited and cleaned for inconsistencies, missing values, and outliers, then exported to SPSS version 23.0 for analysis. Then the score for each mother was summed and categorized. Frequency tables, figures, and descriptive summaries were used to describe the study variables.

RESULT

Socio demographic characteristics

A total of 311 pregnant women were participated for the study with a response rate of 95.4%. Of the study respondents, 129(41.5%) were in the age group of 20-24. About 173(55.6%) were lived in urban areas and 290(93.2%) were currently married. Concerning the ethnic group of the respondents 187(60.1%) was Amhara followed by Oromo 50(16.1%) and 118(37.9%) were Orthodox followed by Muslims 92(29.6%). Fifty five (17.7%) and 51(16.4%) attended secondary and primary level respectively. Of the women, 191(61.4%) were housewives and 127(40.8%) had family size less than two (**Table 1**).

Obstetrics characteristic of the women

Among the respondents 171(55.0%) had been pregnant for two times and 24 (7.7%) had history of abortion. Out of the total 24 abortions 14(58.3%) were one time abortion. Concerning the ideal desired

number of children 138(44.4%) of them reported that their ideal desired number of children was one. Among all respondents 178(57.2%) reported that their inter pregnancy gap to be one to two years (**Table 2**).

Prevalence of unintended pregnancy

The prevalence of unintended pregnancy among current pregnant women were 80(25.7%), which is 24(7.7%) for mistimed and 56(18%) for unwanted (**Figure 1**). Among 80 unintended pregnancy victims the most frequent reply given as the reasons for failure to avoid unintended pregnancy were non use of contraceptive 51 (63.7%).(**Figure 2**).

Discussion

The prevalence of unintended pregnancy among study participants was found to be 25.7% on which, 24(7.7%) for mistimed, and 56(18%) for unwanted. This

finding is relatively lower as compared with study conducted in Gana that the prevalence of unintended pregnancy were 70% [10]. Tanzania, 45.9% (32.5% mistimed and 13.4% unwanted) [11], Damote Gale Woreda, Southern Ethiopia which is 42.4% (10.5% mistimed and 31.8% unwanted) [3], Ganji Woreda ,Oromia Region ,Ethiopia which is 32% (21% mistimed and 11% unwanted) ([2], jimma 36.5% of which 97 (27.2%) were unwanted and 33 (9.3%) were mistimed[13], and Addis Abeba 38.7%[8]. These differences might be due to socio demographic status. Another variation might be attributed to the differences in terms of study setting, design, population and awareness created with regard to adverse about unintended pregnancy for the general community

In contrast the prevalence of this study was higher than study conducted in Senegal 14.3% [14] and Ethiopia 23.5% from this 10.6% was unwanted and 12.9% was mistimed [11]. This difference might be due to difference in study design, socio-cultural characteristic of the respondent, study setting, educational status and accessibility health service to provide family planning and counseling.

Limitation of the study

This study has certain limitations. Recall bias might be introduced on some of the questions that required the women to recall past information such as history of previous abortion. In addition, this study did not assess factors that may influence unintended pregnancy.

Conclusion

The prevalence of unintended pregnancy among women attending ANC at pawe general hospital was high 80(25.7%). Health profession worker should strengthen the service to women with emphasis on

creation of awareness on misconceptions, knowledge and practice of family planning methods is important to minimize the prevalence.

Declarations

Ethical Approval and Consent to Participate

Ethical clearance was obtained from the Institutional Review Board of Bahir Dar University, College of medicine and health sciences. The study was conducted in accordance with relevant ethical guidelines and regulations, including the principles of the declaration of Helsinki. A letter of permission was also obtained from the medical director of the hospital. The purpose of the study was explained to each mother. At the time of data collection, written informed consent was obtained from each mother for those ages greater than or equal to 18 years and from parents/guardians for those ages less than 18 years. All respondents assured that the data would not have any negative consequences on any aspect of their life.

Contributors

ANB, was responsible for the conception of the research idea, study design, data collection, analysis and interpretation, and supervision. ANB and ZA participated in the data collection, entry, analysis, and manuscript write-up. Both authors have read and approved the final manuscript.

Competing interests

The author declares that they have no conflict of interest regarding this work or the publication of this paper.

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Data availability statement

All related data have been presented within the manuscript. The data set supporting the conclusion of this article is available from the corresponding author upon reasonable request

References

1. Bearak J, Popinchalk A, Alkema L, Sedgh G. Global, regional, and subregional trends in unintended pregnancy and its outcomes: estimates from a Bayesian hierarchical model. *Lancet Glob Health*. 2018;6(4):e380-e389.
2. Amin F, Howden P, Peyman NA. Risk Factors of Unplanned Pregnancies in a Group of Iranian and New Zealander Women. *European Journal of Scientific Research*. 2009
3. World Health Organization. Unsafe abortion incidence and mortality: Global and regional levels in 2008 and trends during 1990–2008. Geneva: World Health Organization; 2011.
4. Santelli J, Rochat R, Hatfield-Timajchy K, Gilbert BC, Curtis K, Cabral R, et al. The Measurement and Meaning of Unintended Pregnancy. *Perspectives on Sexual and Reproductive Health*. 2003;35(2):94-101.
5. Shaym T, Jacqueline D, Marks C. Unintended pregnancy: toward understanding the issues and addressing the need gaps. Geneva; 2016.
6. Sedgh G, Singh S, Hussain R. Intended and Unintended Pregnancies Worldwide in 2012 and Recent Trends. *Studies in Family Planning*. 2014;45(3):301-314.
7. Hubacher D, Mavranetzouli I, McGinn E. Unintended pregnancy in sub-Saharan Africa: magnitude of the problem and potential role of contraceptive implants to alleviate it. *Contraception*. 2008;78(1):73-78. Central Statistical Agency (CSA) [Ethiopia], ICF International.
8. Ethiopia Demographic and Health Survey 2016. Addis Ababa, Ethiopia, and Calverton, Maryland, USA: CSA and ICF International; 2017.
9. Mulugeta S, Tilahun T, Admasu B. Unintended pregnancy and associated factors among ever pregnant women in Bitu Woreda, Kafa Zone, Southwest Ethiopia 2015. Jimma: Jimma University; 2015
10. Eliason S, Baiden F, Quansah-Asare G, Graham-Jolly RC, Dounis D, Awusabo-Asare K. Determinants of unintended pregnancies in rural Ghana. *BMC Pregnancy and Childbirth*. 2014;14:261.
11. Exavery A, Kigozi G, Augustine R. Predictors of mistimed and unwanted pregnancies among women of childbearing age in Rufiji, Kilombero, and Ulanga districts of Tanzania. *Reproductive Health*. 2014;11:21.
12. Teshome FT. Prevalence of Unintended Pregnancy and Associated Factors among Married Pregnant Women in Ganji Woreda, West Wollega Oromia Region, Ethiopia. *Science Journal of Public Health*. 2014;2(2):92-101.
13. Ameyu G, Demie T, Ejigu AK. Prevalence of unintended pregnancy and associated factors among pregnant mothers in Jimma town, southwest Ethiopia: a cross sectional study. *BMC Women's Health*. 2019;19(1):92.
14. Gillespie D, Ahmed S, Tsui A, Radloff S. Family planning and the burden of unintended pregnancy. *Open Access Journal of Contraceptives*. 2010;1:1-15

Tables

Figures

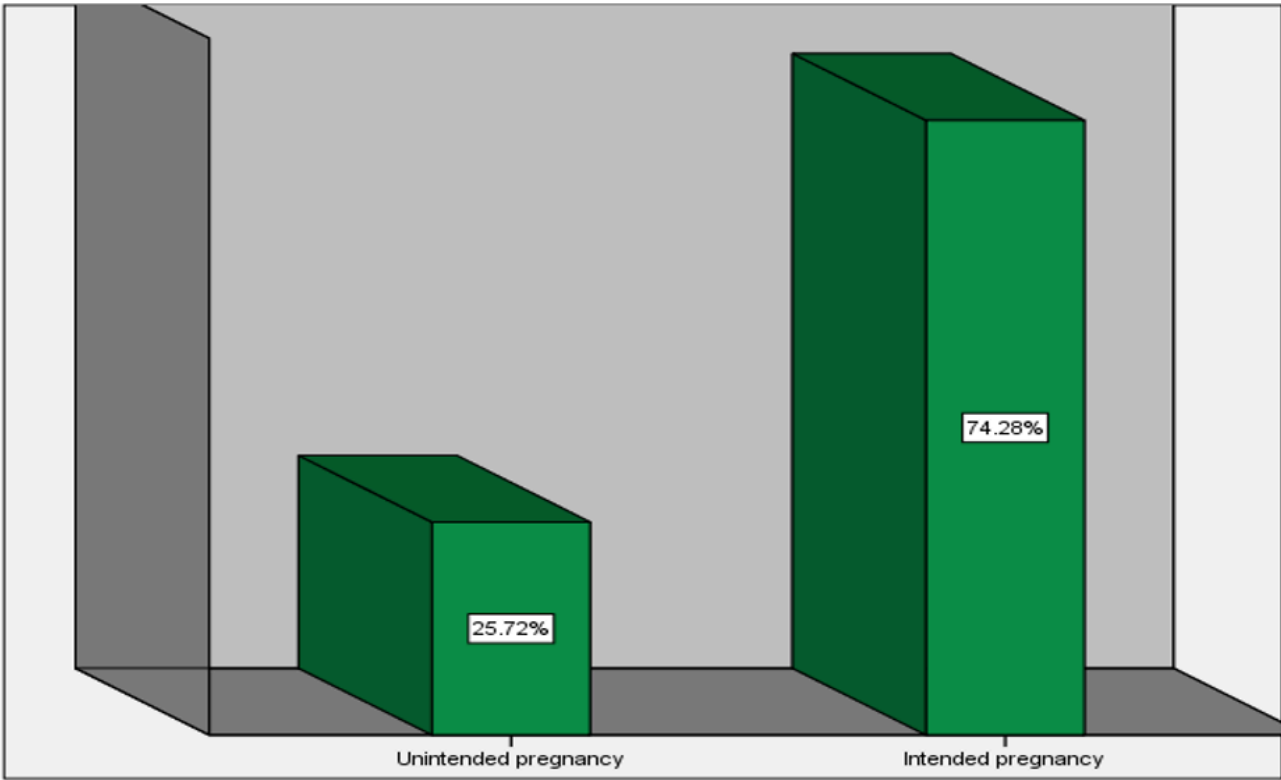


Figure 1

Percentage distribution of intended and unintended pregnancies among women attending ANC at pawe general hospital from April –May 2022

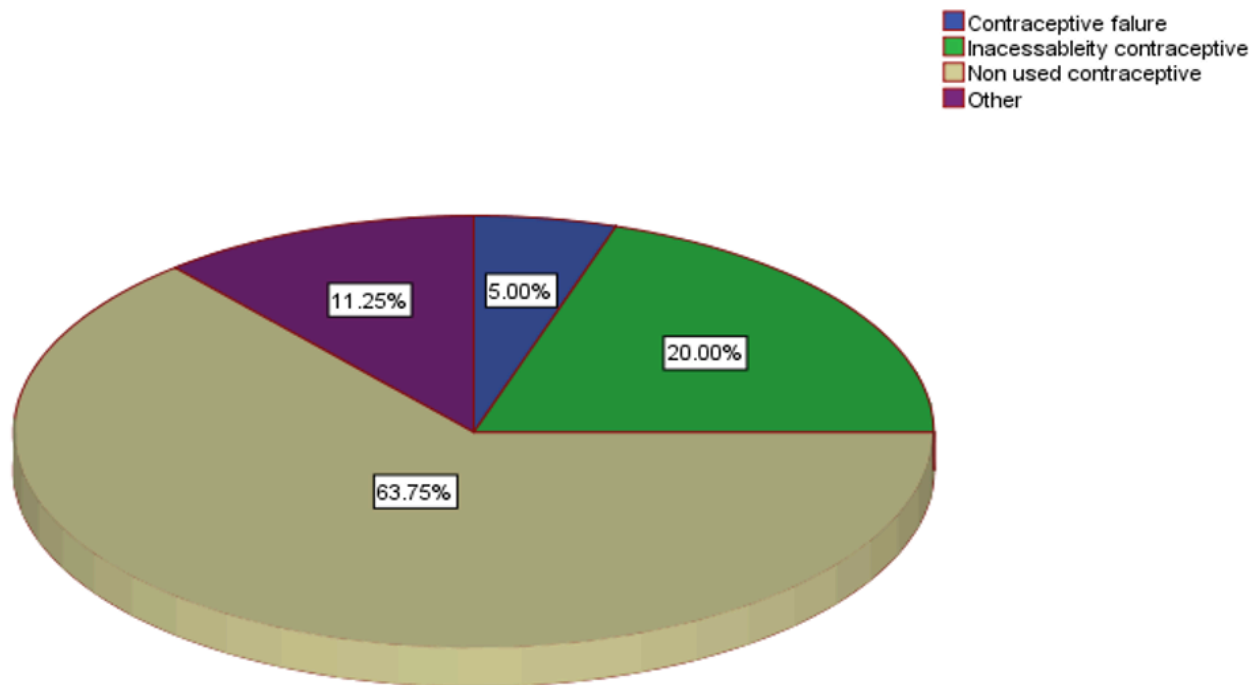


Figure 2

Percentage of respondent's response to failure to avoid unintended pregnancy among women attending ANC at pawe general hospital from April to May 2022.

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- [ANNEXIUNINTENDED.docx](#)
- [Tables.docx](#)
- [STROBStatement.docx](#)