Journal of
Health, Medicine and Nursing
(JHMN)

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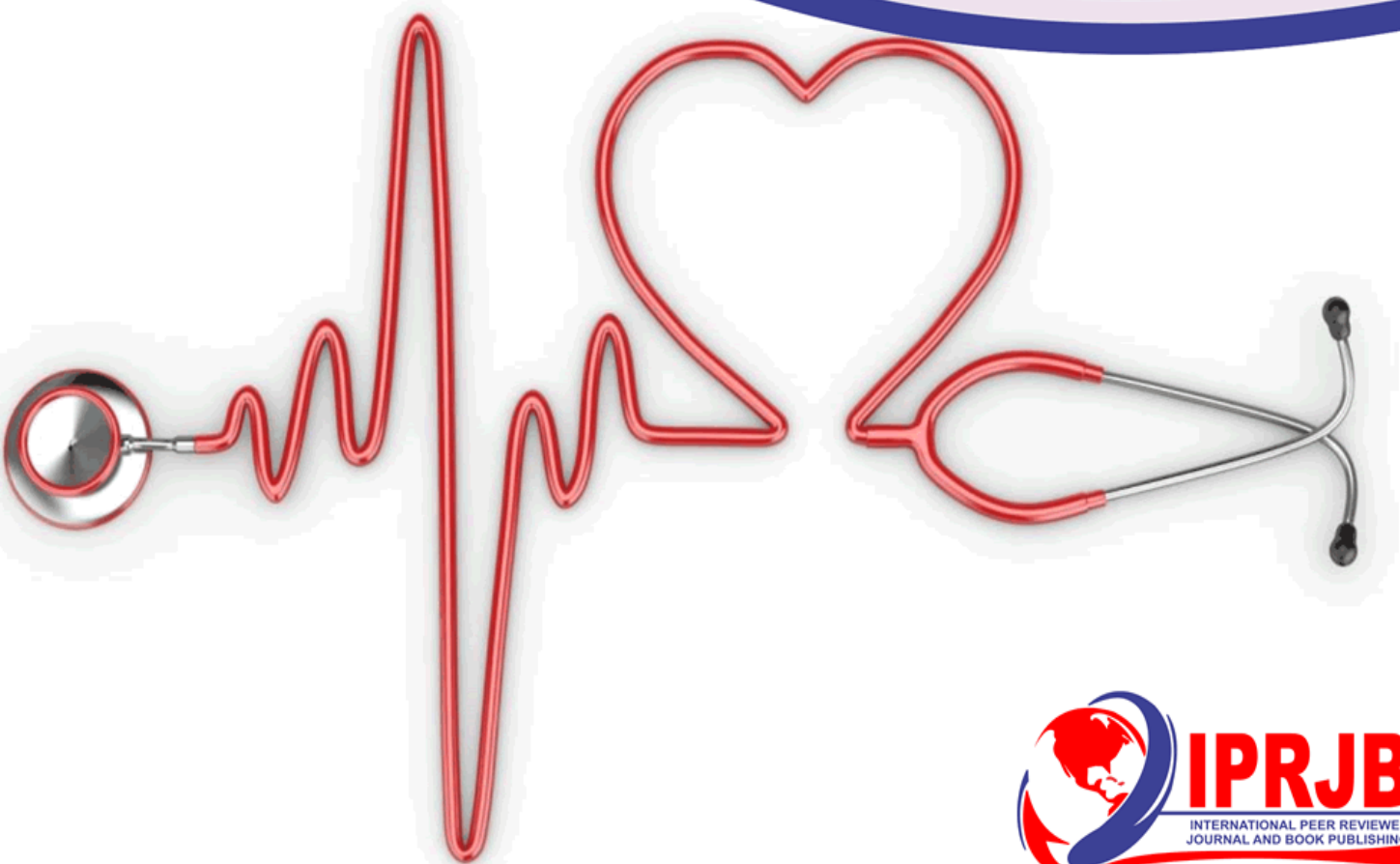
Fardowsa Omar, Dr. Felix Musili and Dr. Onditi Kodhiambo M



IPRJB
INTERNATIONAL PEER REVIEWED JOURNAL AND BOOK PUBLISHING

Journal of Health, Medicine and Nursing
ISSN 2520-4025 (Online)
Vol.5, Issue 1. No.4, pp 48- 59, 2020

IPRJB
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www.iprjb.org

SOCIO-DEMOGRAPHIC AND ECONOMIC FACTORS ASSOCIATED WITH ANC ATTENDANCE AMONG WOMEN OF REPRODUCTIVE AGE

[1*] Fardowsa Omar
[1]Post Graduate Student:Kenyatta University
*Corresponding Author's Email: firdows60@gmail.com

[2] Dr. Felix Musili
Senior Lecturer: Department of Obstetrics and Gynecology; Kenyatta University

[3] Dr. Onditi Kodhiambo M
Lecturer: School of Pharmacy; Kenyatta University

Abstract

Purpose: The research was done to determine the socio-demographic and economic factors associated with ANC attendance among women of reproductive age.

Methods: The study used descriptive cross-sectional community based survey. The study area is Guriel district in Galmudug state Somalia. The target group of the study were women of reproductive age from 15-49 in Guriel district. Guriel has population estimated around 150, 000,(UNDPA). Gurriel district was purposively selected for the study. The district had 4 villages namely Hawlwadaag, Dalsan, Tawakal and Wadajir. Hawlwadaag and Dalsan were randomly selected for the study though folded pieces of paper. Hawlwadaag had a total of 852 Households and Dalsan had 704 Households. The respondents were selected from the households using systematic random sampling with an interval of 3. The first respondent from the household was selected using simple random sampling through folded pieces of paper. Every 3rd Household selected from the villages was interviewed until the required number of respondents was reached.Since the population was a large the sample size was determined by using Fisher's et al (2003) formula. The sample size was 384. Data from the questionnaires was cleaned, coded and entered into Microsoft excel and later exported to SPSS version 22.0. Descriptive statistics such as frequency tables, and percentage was used to summarize Quantitative variable. Inferential statistics was obtained by Chi square at 95% confidence level was used to ascertain statistically significant of the variables at p-Value <0.05, and to test null hypothesis.

Results: The findings indicated that most socio-demographic factors influenced ANC attendance. In the study marital status, education level, and parity showed significant statistical association with ANC attendance. The study findings showed that most economic factors played significant role in determining ANC attendance among respondents.

Unique Contribution to Theory, Practice and Policy: The researcher recommended that the state governments and community based organizations should educate the women on income generating activities as well as offer them loans to be economically empowered.

Key Words: *Social Demographic, Economic factors, ANC Attendance, Reproductive Age*

1.0 INTRODUCTION

Antenatal care attendance have been influenced by various socio-demographic factors such as education level, age, marital status, and parity. The education increases female decision-making power within the household, builds greater confidence, and capability to make decisions regarding their own health (Maligana Mathe, 2017). In addition, WHO&UNICEF emphasized that education can enhance participation of women in their health. It also powerful way to uplift people out of poverty and ill health (Adib, et al, 2017).Education plays an important role as it compels myths, misconception issues, and fear of HIV testing.

Age is other socio-demographic factor that influences access antenatal care attendence. Some studies showed that women in lower age group were more likely to attend antenatal care for more than four times compared to their older ones, because when Women are still young they don't aware the pregnancy related issues and need to get more help in the health facility, while the older women who might have had several deliveries with experiencing any challenges may not see the need to attend antenatal clinic (MaliganaMathe, 2017). If antenatal care is not offering youth-friendly services, this scares some of the teenagers and would make them feel out of place, as this will negatively affect utilization of ANC.

Marital status can influence antenatal care attendance, a study done in Rwanda found that women, who were single, divorced or widowed and women who had no support from family, relative or friend were at a high risk of poor access and utilization of ANC services(Akashi Rurangirwa,IngredMogren , and Nyinrazinyoye, et al 2017).There is another study that is contrary to this one, a survey was done in Nigeria showed that married women were less likely to seek antenatal care services than their single counterparts, and the reason that has been suggested was that married women are not financially independent and have to seek permission from their spouses and mother-in-law to visit ANC (Adeniye Fagbamigbe , and ErhaborIdemudia,2015).

Parity is one of socio-demographic factors that affect ANC attendance. A study conducted on determinants of maternal health service utilization in Ethiopia showed that women who had only one birth were more likely to use maternal health services such as ANC, SKBA, and PN services. The possible justification may be that women with higher parity may have developed self-confidence not to attend ANC, and to deliver at home, (ShegowTarekegn, Leslie Lieberman, and Vincentas Giedraitis, 2014). A study done in Kenya also showed that a woman of high parity are less likely to initiate ANC on time or to make recommend number of visits, assuming that they are experienced(Jean Christophe, et al, 2010).

Antenatal care attendance may be influenced by socio-economic factors like occupation, employment, poverty, and income level. The occupation status is socio-economic factor associated with utilization of services(Joyce chaptum, and Moses Gitonga, 2014) stated that the type of occupation is related to the economic power which will translate to the ability to access the services if it cost involving. Those who were employed were likely to utilize maternal health services. This could be attributed to their level of income since with employment; one is likely to

have good financial status as compared to one who is unemployed. This could also contribute to better decision- making ability especially if it involves financial matters.

2.0 METHODOLOGY

The study used descriptive cross-sectional community based survey. The study area is Guriel district in Galmudug state Somalia. The target group of the study were women of reproductive age from 15-49 in Guriel district. Guriel has population estimated around 150, 000,(UNDPA). Gurriel district was purposively selected for the study. The district had 4 villages namely Hawlwadaag, Dalsan, Tawakal and Wadajir. Hawlwadaag and Dalsan were randomly selected for the study though folded pieces of paper. Hawlwadaag had a total of 852 Households and Dalsan had 704 Households. The respondents were selected from the households using systematic random sampling with an interval of 3. The first respondent from the household was selected using simple random sampling through folded pieces of paper. Every 3rd Household selected from the villages was interviewed until the required number of respondents was reached.Since the population was a large the sample size was determined by using Fisher's et al (2003) formula. The sample size was 384. Data from the questionnaires was cleaned, coded and entered into Microsoft excel and later exported to SPSS version 22.0. Descriptive statistics such as frequency tables, and percentage was used to summarize Quantitative variable. Inferential statistics was obtained by Chi square at 95% confidence level was used to ascertain statistically significant of the variables at p-Value <0.05, and to test null hypothesis.

3.0 RESULTS

3.1 Socio-demographic factors

The study administered 384 questionnaires to women of reproductive age who must have get at least one pregnancy. The study was conducted between December 2018 to February 2019. Duly filled and returned questionnaires were taken into account and considered for analysis. After data checking and cleaning, 384 questionnaires were deemed fit for analysis representing a response rate of 100%.

The results showed that 30.2% of the respondents were aged between 25-29 years followed by 26.0% who were aged between 15-24 years. The estimated mean age of respondents was 28 years. Concerning marital status, the researcher found out that 74.5% were married followed by 18.2%) who were divorced. Regarding level of education, the results revealed that 44.2% of the respondents had no formal education , while 44.0% had primary level of education. When the respondents were asked on the number of deliveries they had had, 34.6% of them had more than six deliveries followed by 16.1%) who had 4 deliveries. The results were as shown in the table 1 below:

Table 1: Socio-demographic characteristics of the respondents

	Frequency	Percentage (%)
Age		
15-24	100	**26.0**
25-29	116	30.2
30-34	95	24.7
35-39	46	11.9
40-44	16	4.1
45-49	11	2.9
Total	384	100.0
Marital status		
Married	286	74.5
Divorced	70	18.2
Widowed	18	4.7
Separated	10	2.6
Total	384	100.0
Level of Education		
No formal education	169	44.0
Primary	170	44.2
Secondary	42	10.9
Tertiary	3	0.78
Total	384	100.0
Number of Deliveries		
One	26	6.8
Two	60	15.7
Three	55	14.3
Four	62	16.1
Five	48	12.5
six or more	133	34.6
Total	384	100.0

3.1.1 Influence of socio demographic factors on ANC attendance

The study sought to determine the influence of socio-demographic factors on ANC attendance. The results showed that 70 (34.1%) of the respondents aged between 25-29 years had attended ANC. There was no association between age of the respondent and ANC attendance (p*=0.062). The results showed that 161 (78.0%) of the respondents who were married attended ANC. There was significant association between marital status and ANC attendance (p=0.035). Concerning highest educational level attained, the research found out that 95 (53.0%) of the respondents who had no formal education did not attend ANC. There an association between level of education and ANC attendance (p*=0.001). The study further revealed that 73 (40.0%) of the respondents who had six or more children had not attended. There was a significant statistical association between number of children and ANC attendance (p*=0.019). The results were as shown in the table 2 below.

Table 2: Association between socio-demographic factors and ANC attendance (n=384)

Independent Variable	Respondent response	Dependent variable (ANC attendance) Yes(N=205)	No (N=179)	Statistical significance	Odds ratio	p-value
Age	15-24	44(21.5%)	56(31.3%)	X^2 =10.401	1.0	-
	25-29	70(34.1%)	46(25.7%)	df=5	1.9	0.017
	30-34	52(25.4%)	43(24.0%)	p*=0.062	1.5	0.135
	35-39	29(14.1%)	17(9.5%)		2.2	0.033
	40-44	6(2.9%)	10(5.6%)		0.76	0.627
	45-49	4(2.0%)	7(3.9%)		0.73	0.629
Marital status	Married	160(78.0%)	126(70.4%)	X^2 =12.941	1.0	-
	Divorced	39(19.0%)	31(17.3%)	df=3	0.98	0.930
	Widowed	3(1.5%)	9(5.0%)	p*=0.004	0.15	**0.001**
	Separated	3(1.5%)	15(8.4%)		0.19	**0.023**
Highest educational level attained	No formal education	74(36.0%)	95(53.0%)	X^2 =18.857 df=3	1.0	-
	Primary education	97(47.0%)	73(40.8%)	p*=0.001	1.7	**0.015**
	Secondary	33(16.0%)	9(5.0%)		4.7	**0.001**
	Tertiary	1(0.5%)	2(1.1%)		0.64	0.728
No of children	1	22(10.7%)	4(2.2%)	X^2 =13.425 df=5	1.0	-
	2	33(16.0%)	27(15.0)	p=0.019	0.2	**0.006**
	3	30(14.6%)	25(14%)		0.2	**0.008**
	4	33(16.0%)	32(17.9%)		0.19	**0.003**
	5	24(11.7%)	18(10%)		0.2	**0.019**
	6 or more	63(30.7%)	73(40%)		0.16	**0.001**

3.2 Economic factors

Seventy four percent of the respondents were house wives, while only 1.3% where employed. Fifty percent and forty two percent of the respondent's husband were casual labor and business men respectively. Four percent were employees from private and public institutions. Thirty Eight percent of the household's income level were between 50-100$, while 5.9% of the household's income level were more than 250$.

Table 3: Economic characteristics of the respondents

Variable	Frequency	Percentage (%)
Respondent's Occupation		
House wife	284	73.9
Business women	59	15.4
Unemployed	36	9.4
Employed	5	1.3
Total	384	100.0
Husband's Occupation		
Casual laborer	144	50.7
Business	120	42.3
Salaried employed	20	7
Total	284	100.0
Level of Income $		
<50	79	21.3
50-100	142	38.3
150-200	93	25.0
200-250	35	9.4
> 250	22	5.9
Total	371	100.0

3.2.1 Relationship between economic factors and ANC attendance

The researcher sought to determine whether economic factors influenced ANC attendance. The results revealed that 128 (72.0%) of the respondents who were house wives did not attended ANC. There was a significant statistical association between respondents occupation and ANC attendance (p*=0.001). When the respondents were asked about their Husband occupation, 76 (62.3%) of those whose husband were casual workers did not attend ANC. There was an association between the occupation of the husband and ANC attendance (p=0.035).

Concerning the household monthly income, the study revealed that 61 (35.5%) of the respondents whose household income was below $ 50 did not attend ANC. There was a statistical significant association between monthly household income and ANC attendance (p= <0.001). The results were as shown in the table 4 below.

Table 4: Economic factors associated with ANC attendance

Independent Variable	Respondent response	Dependent variable (ANC attendance) Yes(N=205)	No (N=179)	Statistical significance	Odds Ratio	p-Value
Respondent's Occupation	House wife	156(76.0%)	128(72%)	X^2 =18.828	1.0	-
	Business women	39(19.0)	20(11.1%)	df=3	1.6	0.001
	Unemployed	8(3.9%)	28(15.6%)	p*0.001	0.23	0.115
	Employed	2(0.9	3(1.7%)		0.54	0.51
Husband's occupation	Casual laborer	78(48.1%)	76(62.3%)	X^2 =6.733	1.0	-
	Business men	79(48.8%)	41(33.6%)	df=2	1.9	0.009
	Salaried employed	5(3.1%)	5(4.1%)	p=0.035	1.2	0.676
Household monthly income	<50	18(9.0%)	61(35.5%)	X^2 =45.345	1.0	-
	50-100	78(39.2%)	64(37.2%(	df=4 p=0.001	4.1	0.001
	150-200	62(31.2%)	31(18.0%)		6.8	0.001
	200-250	27(13.6%)	8(4.7%)		11	0.001
	> 250	14(7.0%)	8(4.7%)		5.9	0.001

3.3 ANC Attendance

The researcher sought to find out the number of respondents who had attended ANC, the results showed that 53.5% of them attended ANC while the rest 45.5% did not attended. The results were as shown in the figure 1 below:

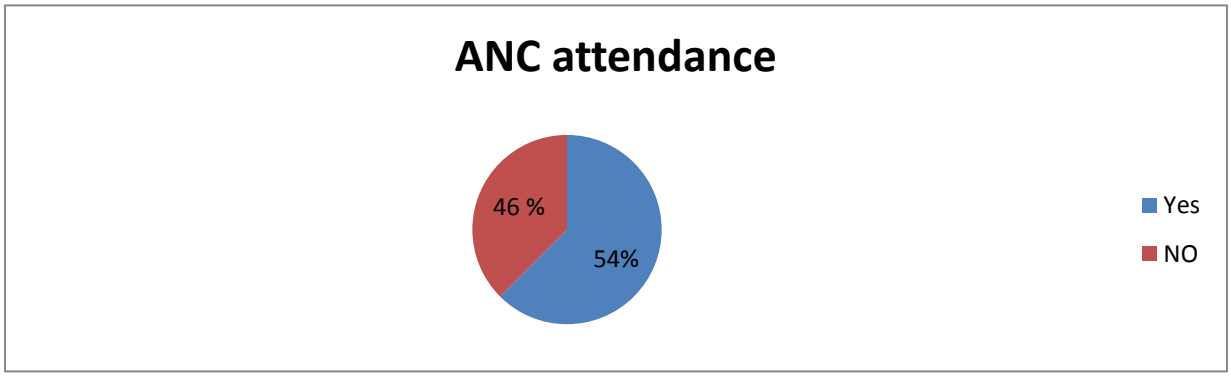

Figure 1:ANC Attendance

4.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

4.1 Summary

4.1.1 Socio-Demographic Factors

The study showed that 54% of the respondents attended ANC in Guriel district. This is higher compared to Huriwaa district in Mogadishu where ANC attendance was 13%, (SOS hospital, 2018). ANC visit by women of reproductive age in Somalia was too low compared to neighbouring countries. This can be attributed to the insecurity cases, cultural issues and low level of education among Somalia women. Antenatal care attendance in Somalia for at least one ANC visit was 26%, Kenya was 58 %, and Ethiopia was 62 % (KDHS, 2014, UNICEF, 2014, and EDHS, 2016).These high levels of ANC attendance in Guriel could be attributed to the fact that, 96.8% of the respondents reported that ANC services were culturally acceptable. Additionally majority (62.5%) of the women were aware about the ANC services. This compares with a study done in Nigeria which stated that level of awareness about ANC services may have probably influence positively women's level of maternal health services usage, particularly ANC services. (Umar Jabril, 2017).

Thirty four percent of the respondents aged between 25-29 years had attended ANC. KDHS, 2014 reported that antenatal care is slightly more common among mothers age 20-34 compared with those outside of this age group. In the study there was no association between age of the respondent and ANC attendance (p*=0.062) This is contrary with a study that done in Nepal which found that age is statistically significant for ANC attendance (Srijana, Pandey and Supensra Kark, 2014). Marital status and education level of the respondents, and parity were found to be significant for ANC attendance**.** The study showed that widowed and separated respondents were less likely to attend the ANC compared to married respondents (Odd ratio 0.15 and 0.19 with p-value 0.001 and 0.023) respectively. This study is similar with a study done in Rwanda which stated that widowed and separated women made fewer ANC attendances compared to married women (Akashi Andrew, Ingrid Mogren , and Laetia Niyirazin yoye ,et al, 2017). The reason maybe that widowed women have no husband support, while married women have husband support especially if the husband is educated and has good income as this can increase the chances to take his wife to health facility.

The research found that respondents who had secondary level of education were 4.7 more likely to attend ANC services compared to respondents who had no formal education with p-value < 0.001. KDH, 2014 reported that education is associated with receiving the recommended number of ANC visits 43 percent women with no education attended four or more ANC visits compared with 69 percent of women with secondary or higher education .This is consistent with a study carried out by (Brian Muyunda, Mpundu Makosa, Choolwe Jacob,et al, 2017), who reported that women who had higher education levels were more likely to attend at least four ANC visits compared to those with no education. This could be attributed to the assumption that educated women tend to have a greater awareness of the existence of ANC services and its advantages. Additionally educated women are more aware of health problems, know more about the availability of health care services, and utilize the information more effectively than non-educated women. An increase in women's education will tend to increase their health seeking behaviour. This was similar to a study done in Pakistan that found that higher levels of education

tend to positively affect health-seeking behaviours, and education may increase a woman's control over her pregnancy (Sumera Aziz Ali, 2018).

The respondents who had two up to six or more children were less likely to attend ANC compared to respondents who had one child. The result is with agreement with study done in rural Ghana , which stated that women with one child were more likely to attend ANC compared to a women with two to four children, (Michael Boah, Abraham B Mahama , and Emmanuel A . Ayamga, 2018). The reason could be when women are in their first pregnancy they fear about the pregnancy and they need to seek help from the health facility, while older women who might have several deliveries without complications may not see the need to attend antenatal clinic. Grand multiparity is common in this area at 34.6 Percent of the respondents have six or more children.

4.1.2 Economic factors

Respondent's occupation, husband's occupation and the level of income of the respondents was found to be significant for ANC attendance. The results revealed that respondents who were businesspersons were 1.6 more likely to attend ANC compared to housewives with p-value <0.001. The result is agreement with study done in Ghana which reported that occupation of the mother is statistically significant for ANC attendance , (Jones Asafo , Peter Agyie and Dadson Awunyo, 2018). Respondents whose husband had business were 1.9 more likely to attend ANC compared to respondents whose husband had casual labor with p-value 0.009. This in line with study done in Ethiopia which revealed that occupation of the mother is statistically significant for ANC attendance,(Daselew Zalle,. Bekele Belyihun , and Desalegn Admassu, 2014).

Moreover respondents whose household income was between 200 to 250 $ were 11 more likely to attend ANC compared to respondents' whose household income were below 50$ with p-value <0.001.This could be attributed to the fact that to access to ANC services requires direct and indirect costs which might be a problem to some respondents. The study result is consistent with a study carried out by (SrijanaPandey and SupendraKaka ,2014), who reported that women in households with high income were three times more likely to receive ANC services than women in the households with low income. There is an assumption that as the level of the income of the households increases the likelihood to attend ANC service increases.

4.2 Conclusions

The study concluded that most socio-demographic factors influenced ANC attendance. In the study marital status, education level, and parity showed significant statistical association with ANC attendance**.** The study findings showed that most economic factors played significant role in determining ANC attendance among respondents.

4.3 Recommendations

Based on the study findings, the state governments and community based organizations should educate the women on income generating activities as well as offer them loans to be economically empowered.

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