



# **Influence of Social Factors on Utilization of Antenatal Care Services: A Case in Njombe Town Council for the Three Health Facilities; Njombe Urban, Idundilanga and ARCS Health Center**

**Augustino Francis Masanje<sup>a++\*</sup>, Given Msomba<sup>a#</sup> and Sosthenes Ruheza<sup>a#</sup>**

<sup>a</sup> *University of Iringa, Tanzania.*

## **Authors' contributions**

*This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.*

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## **ABSTRACT**

The focus of this study was to assess the influence of social factors on utilization of Antenatal Care services in Njombe Town Council. This study was of quantitative whereas, cross section research design was used to capture data at one time. Questionnaire was used to collect data for statistical analysis from pregnant women who acquire and attain ANC services, as three health facilities supported for the collection of qualitative and quantitative data. Questionnaire was found to be suitable as it captured measurable data which were suitable for hypothesis testing. The researcher

<sup>++</sup> *Postgraduate Student;*

<sup>#</sup> *Senior Lecturer;*

<sup>\*</sup>*Corresponding author: Email: [augustinomasanje95@gmail.com](mailto:augustinomasanje95@gmail.com);*

employed Simple random sampling, as it was used to draw out 182 respondents from the targeted population in the context of Njombe Town Council.

Using chi square analysis and mean score analysis, findings revealed that social factors had significant influence on the utilization of ANC services for pregnant women in Njombe Town Council. It was further found out that, husband communication with pregnant women was highly contributing to their partners to effectively utilize ANC services when compared with the communication by pregnant women with the health workers and relatives. Also, it was found out that pregnant women with secondary level of education were utilizing more ANC services when compared with pregnant women with other levels of education. Based on these findings this study concludes that social factors was significant influencing utilization of ANC services. This study recommends that professional training to the health cares for providing health care on ANC services to pregnant women to regularly access ANC services, should be implemented by the government in order to sufficiently improve provision of ANC services hence reduce potential risks for the mother and child throughout the maternity period.

*Keywords: ANC services; utilization of ANC services; influence of utilization of ANC services.*

## 1. INTRODUCTION

Studies have evident that social factors contribute towards influencing on utilizing ANC services. In the past decades, utilization of ANC services was hindered by poor and inadequate information pertaining ANC services as this started from the pregnant women, to their husbands or partners and also to the people whom they were surrounding them that is the relatives and also the health workers as well to whom they sensitized and encouraged the pregnant women on utilizing the ANC services [1]. However, transparency through communication has been shown to be primary factor for predicting the pregnant women to utilize more ANC services. Furthermore, the husband's knowledge on ANC services and how well he communicates with her partner could positively induct the pregnant woman to frequently utilize ANC services [1]. The importance of transparency through communication in influencing ANC services is evident in Andersen's healthcare utilization model (1968). In his theory, the author advocates that enabling factors through family support, imparts useful knowledge and effective communication which in turn increases the belief for health service and seeking for it. This means that, pregnant women will relatively develop high attitudes and seek highly for ANC services when ANC services are exposed and sensitized to them to acquire them for the benefit of both the health of the mother and the child. This is consistent with Omar [2] who empirically established a strong linkage between husband communication, relative communication and health workers communication with the pregnant mothers and utilization of the Antenatal Care

Services as husband communication with their partners made the pregnant women to utilize earlier the services compared to ones who had poor communication with their partners. Furthermore, Mchenga [3] also empirically establish the positive link between education level and communication between pregnant women with their partners, relatives and health workers towards utilizing ANC services. In Tanzania, Mgata [4] found out that, husbands with low level of education lacked of knowledge on ANC services as well as poor communication and low support and hindered their partners to attend for ANC clinics late than other husbands with high education to whom they provided a strong means of communication for their partners to attend clinics. Given this empirical findings, it is clear that transparency through communication and education level of the partner is relatively influencing utilization of ANC services.

## 2. LITERATURE REVIEW

### 2.1 Key Concepts

#### 2.1.1 Antenatal care

Antenatal Care (ANC) is the care given to women during pregnancy with the overall aim of ensuring good health for both mother and unborn child [5]. ANC Services such as education, investigations, examination and treatments contribute to the identification and prevention of pregnancy-related health problems [1]. Antenatal Care is defined through the process where a pregnant woman undergoes maternal period to ensure safe child health growth throughout the period by adhering to clinic follow ups so as the baby can be delivered healthy [6].

### 2.1.2 Utilization of antenatal care

Onasoga [7] explained ANC is a key strategy for reducing maternal and neonatal morbidity and mortality rate. An adequate utilization of Antenatal health Care Services is associated with improved maternal and neonatal health outcomes. ANC which is to be provided by health professionals should be of efficient as it will enable pregnant woman to utilize them efficiently and effectively through the number of clinic checkups [8].

### 2.1.3 Influence of utilization of antenatal care services

These are indicators to which they provide a base for pregnant women to utilize ANC services Geltore, [9] Studies has most commonly identified the influence of Antenatal Care is identified by a number of factors as to some of the following factors influencing Antenatal Care utilization are maternal education, husband's education, Antenatal Care costs, availability of infrastructures to facilitate deliverance of ANC services, household income level, level of employment of the women, exposure from the media, history of obstetric complications and so forth [10].

## 2.2 Theoretical Literature Review

### 2.2.1 Andersen's health care utilisation model

The original model was developed by Ronald M. Andersen, a health services professor in 1968. According to the model, usage of health services (including inpatient care, physician visits, dental care etc.) is determined by three dynamics: predisposing factors, enabling factors, and need. Predisposing factors can be characteristics such as race, living arrangement, age, and health beliefs. For instance, an individual who believes health services are an effective treatment for an ailment is more likely to seek care. Examples of

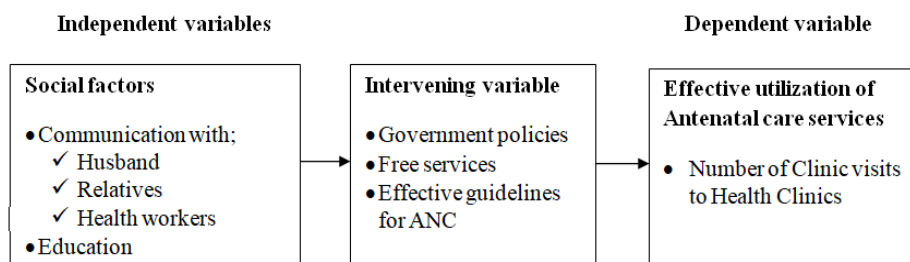
enabling factors could be individual income, family support, access to health insurance, one's community etc. Need represents both perceived and actual need for health care services. As in the current study, the idea of Andersen has posited that, enabling factor as social factor tend to accelerate pregnant women on utilizing ANC services. The applicability of Andersen Utilization model in investigating the influence between social factors and utilization of ANC services is observed in a number of studies. This study used this model to further make an analysis of an influence of social factors and utilization of ANC services.

## 2.3 Conceptual Framework

Based on the model Anderson's Health Utilization model, as noted in the literature above, the following conceptual framework was drawn up in which we will frame our study (Chart 1).

## 3. METHODS

The study adopted qualitative and quantitative approach. As Creswell [11] argued, the quantitative research approach is designed to test the hypothesis and assess its significant relationship in a quantifiable form. In the current study, qualitative approach was used to allow researcher on thematic analysis as data which was collected from the key interviews while quantitative approach, was used to allow a researcher to collect statistical data for hypothesis testing of the significant prediction of social factors on influencing utilization of ANC services. To obtain the statistical data, the author administered a structured interview questionnaires for key informants to whom they had brief knowledge on ANC services in Njombe Town Council. Also, in the study for quantitative data, the survey questionnaire on social factor data had four questions regarding to the indicators which were studied on social



**Chart 1. Conceptual framework**

Source: compiled by author (2023)

factor. First question reflected on education level of pregnant women and the three remaining questions reflected on communication by pregnant women with the husband, relatives and health workers as the participants had to answer in accordance with a 5-point Likert scale. Simple random sampling was used to draw valid sample of 182 respondents from the population who are pregnant women to whom they acquire ANC services from the selected three health facilities. On the other hand, multiple regressions were used to estimate the significant predictive power of social factors on its influence on utilization of ANC services. And for mean score analysis, it was used to analysis a scale of communication by pregnant women with the husband, relatives and health workers [12].

#### 4. RESULTS AND DISCUSSION

##### 4.1 Respondents Profile

In this study, it was necessary to profile respondents' age, education, level of occupation and health facility choice simply because they have been found to moderate the utilization of ANC services. Including these demographic characteristics in the information system studies could help provide a real picture of the community concerning with the acquisition of ANC services in Njombe Town Council. Hence, these demographic information are very important to be included in any social research

as they moderate different respondents' behavior on acquiring ANC services, and they are used to provide a picture of how ANC services have been utilized in area selected in the study (Table 1).

Table 1 have shown a general representation of the major characteristics of the study in terms of respondents' age, level of education, level of occupation and health facility choice. It is shown that there was general representation of the respondents capture enough data to cover the contents of the research objectives.

##### 4.2 Chi-Square Tests on Association between Utilization of ANC and Social Factor

This specific objective was developed to test the hypothesis on the predicting influence of Social factors on utilization of ANC services by pregnant women. Finding using chi square test were presented below on the table as follows;

The results provided in Table 2 above showed that, the association between utilization of ANC services and social factor (level of education and communication of the pregnant mother with husband, relatives and health workers) was statistically significant (p-value of 0.002) and chi-square value was 70.210<sup>a</sup>. Hence there is an association of the social factors and utilization of ANC services.

**Table 1. Descriptive profile**

Descriptive Variables	Measurement	Frequency	Percent
Age	15-25 years	54	29.7
	26-35 years	35	51.1
	36-49 years	93	19.2
	Total	182	100
Level of education	Primary education	59	32.4
	Secondary education	87	47.8
	Diploma education	27	14.8
	Bachelor degree	9	4.9
	Total	182	100
Level of occupation	House wife	52	28.6
	Small business	105	57.7
	Formal employment	23	12.6
	Any other	2	1.1
	Total	182	100
Health facility choice	Government hospital	108	59.3
	Private hospital	58	31.9
	Mission hospital	16	8.8
	Total	182	100

Source: Field Data

### 4.3 Mean Score Analysis on Influence of Social Factor on utilization of Antenatal Care Services in Njombe Town Council

From the specific objective, satisfactory attitudes of the pregnant women towards ANC services, husband, relatives and health workers communication with the pregnant women were taken into account on measuring their mean score. Findings were summarized through summarizing all the statements of influences and assigning values which were 1= strongly agree, 2= agree, 3= neutral, 4= disagree and 5= strongly disagree. The researcher used mean (3.0) as a cut-off point. Therefore, any score of any statement that falls below 3.0 was regarded as negative (disagree) and those that score

above 3.0 were regarded as positive (agree). The findings were presented below in the table as follows;

The results provided in Table 3 above verdict that, the level of satisfaction after receiving ANC services had a mean score of 3.84 which is due to the positive attitudes which were generated from the health workers at the end the clients a satisfied with the services. Furthermore, the results also showed that, communication between the husbands and their partners towards utilizing the ANC services had a mean score of 4.16, Communication between the relatives and the pregnant mothers had a mean score of 4.08 and communication between the health workers and the pregnant mothers had a mean score of 3.61. This implies that, husbands

**Table 2. Chi square test analysis**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	70.210 <sup>a</sup>	40	.002
Likelihood Ratio	66.715	40	.005
Linear-by-Linear Association	19.114	1	.000
N of Valid Cases	182		

**Table 3. Mean score analysis on influence of social factors on utilization of antenatal care services in Njombe Town council**

Indicators	Frequency	Percentage %	Mean
<b>Level of satisfaction</b>			
Strongly agree	34	23.6	3.84
Agree	58	40.3	
Neutral	50	34.7	
Disagree	2	0.7	
Strongly disagree	1	0.7	
<b>Husband communication with partner</b>			
Strongly agree	47	32.6	4.16
Agree	76	52.8	
Neutral	19	13.2	
Disagree	3	0.7	
Strongly disagree	1	0.7	
<b>Communication with relatives</b>			
Strongly agree	39	27.1	4.08
Agree	82	56.3	
Neutral	21	14.6	
Disagree	3	1.4	
Strongly disagree	1	0.7	
<b>Communication with health workers</b>			
Strongly agree	31	21.5	3.61
Agree	41	28.5	
Neutral	59	41	
Disagree	11	7.6	
Strongly disagree	2	1.4	

and the relatives have strong influence to the pregnant mothers on utilizing the ANC services when compared with the relatives and the health workers.

## 5. CONCLUSION AND RECOMMENDATION

Base on the survey findings of this study, it is concluded that social factor is strongly influencing utilization of ANC services in Njombe Town Council. For ANC services to be utilized, it is recommended for professional health training to be given to the health workers to further potentially reduce pregnant complicated diseases. This study recommends that the government should arrange an infrastructural forum for the pregnant women who are working in formal employments to attend more for ANC services.

Furthermore, the study was carried in Njombe Town Council, in order to increase the strong evidence to generalize to other districts surrounding Njombe Town Council, future studies should be done to involve more than one district.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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