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Assessment of the Knowledge and Attitude of Pregnant Women Regarding the Benefits of Antenatal Care Service Utilization at Rundu Clinic Namibia.

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Abstract

Good knowledge and attitude towards antenatal care services benefits is highly effective intervention and has an enormous potential to prevent both maternal and neonatal mortality. The purpose of the study was to assess the knowledge and attitude of pregnant women regarding the benefits of antenatal care services utilization at Rundu clinic. A quantitative method with cross sectional descriptive study design was employed. The study population was all pregnant women attending antenatal care at Rundu clinic during the study period. A simple random sampling method was used to collect data from pregnant women who were accessible during the study. Informed consent was obtained from participants before data collection. Data was collected with self-administered questionnaire among 80 pregnant women visited Rundu clinic during data collection period. Data was analyzed using SSPS version 24 and findings were presented in tables. Participant's ages were ranged from 18-48 years. More than half 59 (73.75%) of the participants were single mothers and n=43 (53.75%) of the participants were multigravida. The study revealed good knowledge and positive attitude towards ANC service utlization. The study concluded that although most participants are knowledgeable and have good attitude towards benefits of antenatal care services utilization, health education should be strengthened to ensure that all pregnant women have good knowledge and attitude towards ANC services.

Key words: Antenatal care, knowledge, attitude, pregnant women, Antenatal care, utilization

1. Introduction and background

The World health Organization (WHO) [1] defined Antenatal care (ANC) as an umbrella that offers medical procedures provided by skilled birth attendants to pregnant women. These medical procedures are done in order to ensure the best health outcomes for both mother and unborn fetus during pregnancy and postpartum [1]. ANC is a crucial strategy in reducing maternal and neonatal mortality by enabling the identification and mitigation of risk factors early in pregnancy [2]. ANC reflects the quality of care given to pregnant women before birth and hence with good ANC most of complications affecting pregnant women and unborn neonates are preventable.

It is estimated that every minute at least one woman dies from complications related to pregnancy and childbirth while about 20 more women suffers from injuries and infections [3] .Studies done in developing countries identified that an overwhelming majority of maternal and neonatal complications occur due to lack of knowledge, infrequent ANC attendance, poor access to maternal health care and negatives attitudes among pregnant women regarding the benefits of ANC [3, 4]. In a similar study done by Shafqatet al.,[5] it was indicated that women of some

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population groups remained systematically and consistently disadvantages in terms of access to and use of maternal and reproductive health services due to inadequate or lack knowledge and negative attitudes toward ANC benefits.

According Ambreen, & Shah, [6] knowledge connected to health is measured to be one of the significant factors that permit women to understand their right and condition of health and allow them to seek for suitable health services. The level of knowledge and attitudes of pregnant women towards ANC services benefits differs in different parts of the world. Study done in Shanghai , China identified that with increase in educational status among pregnant women , the adequacy of knowledge also increased however, the multiparas were found to have poorer knowledge on ANC services compared to Primigravida [7]. Furthermore, in Metekel Zone, Northwest Ethiopia, the study revealed that socio-demographic factors could also influence the knowledge such as women being in the urban area, possessing a radio and education status of secondary school and above were more likely to be knowledgeable about benefits of ANC utilization [8]. Study conducted in Copper belt Province of Zambia to identify factors associated with late antenatal care attendance in selected rural and urban communities found that insufficient knowledge about ANC influenced late ANC attendance [9] . Regarding the attitude of pregnant women, Rosaliza & Muhammad [10] conducted the survey in Pakistan about provision and utilization of routine antenatal care. The study identified that attitude towards ANC at the government health facilities was mostly negative 57.7% due to long waiting queue to get the service and nurses negative attitude towards clients . In another cross sectional study conducted using two strategies cluster sampling at 24 selected villages in the Kham district of Xiengkhouang Province, in Japan identified that 61.9 % of study participant had negative attitude towards ANC [7].

The Millennium Development Goal outlines the international commitment to measurably reduce maternal mortality and neonatal mortality rate by the year 2015 , [11] .However, most of Sub-Sahara African countries including Namibia did not meet this goal. Namibia, has also recorded an ascending trend in neonatal mortality rate. The neonatal death rate had increased from 27/1000 live births in the year 2000 to 29 per 1000 live births in 2007, however it decline minimally in 2013 at 20 per 1000 live birth [12] .Furthermore, although the maternal mortality rate decreased from 449 per 100,000 live births in 2006 / 2007 to 385 per 100,000 live births in 2013 maternal and neonatal mortality rate in Namibia remain unacceptably higher.In Namibia, ANC service is provided at no cost in all state health facilities around the country. However, the number of women who received only one ANC visits has decreased from 86% in 2006 to 73.6% in 2013 while the women who received at least four ANC visits reduced from 70.4% in 2006 to 62.5% in 2013 , [12]. The reduction could be a result of several factors such as, inadequate information, attitudes of health care providers, inability to afford transport, and cultural influences [13] . According to Rundu, maternity cohort 2017 from June to December 2017, 1095 patient delivered in that hospital. However, among 1095 women who delivered only 420 started ANC in the first trimester, 375 started on second trimester while 280 started on third trimester and 20 patients are unbooked. To alleviate such factors, pregnant women required to be knowledgeable and show good attitude toward benefits of ANC services. Women that are

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knowledgeable about the benefits of ANC services utilization exercise the good attitude toward ANC. Due the results above and the fact that no study of this kind was conducted in Kavango east region, it draws the researchers' attention to study on the knowledge and attitude of pregnant women regarding the benefits of ANC services utilization in Rundu clinic.

2. Aim and Objectives

The aim of this study was to assess the knowledge and attitude of pregnant women regarding the benefits of ANC service utilization at Rundu clinic, Namibia.

3.Research design and methods

The researchers chose a quantitative research approach, because this method was suitable to the nature of this study, which was to assess the knowledge and attitudes of pregnant women regarding the benefits of ANC. Therefore, a quantitative research approach using descriptive design was employed to collect and analyses the data.

3.1 Study population

The research population for this study was all pregnant women attending their ANC at Rundu clinic district irrespective of the trimester of their pregnancies, who were willing to participate. Weekly attendance of pregnant women at this health facility range from 20 to 26. The total monthly antenatal visits in this facility are about 100 visits.

3.2 Exclusion criteria

Exclusion criteria were the pregnant women below 18 years old because of the challenges to access guardians for accent.

3.3 Sampling and sample size

Simple random sampling method was used, as it was convenient because it is unbiased and allows every participant to have an equal chance of being included in the study. This method allows representation of the entire population and therefore gives clear and concise results. Moreover, the underlying interest of sampling is to make inferences from samples to populations in understanding unknown facts about the population [14]. Yamane's (1967) formula for sample selection was used to calculate the sample as follows' = $N \div (1+ N \times \alpha^2)$. Whereby the sample size; N is the population size under study and α is the level of significance was 0.05. Therefore, the sample size calculation was $n=100 \div (1+100 \times 0.05^2) = 80$. Whereby the sample size; N is the population size under study and α is the level of significance, which was 0.05. The sample size was 80 participants.

3.4 Data collection tool and methods

In this study, a questionnaire with structured questions was developed based on the literature and ANC guidelines to collect the data. The questionnaire was developed in English and translated in Rukwangali as it is the common language spoken in Rundu and all the participants were able to

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understand. The questionnaire consists of ten questions on knowledge and ten questions on attitude with Likert scales . Data was collected with interviewer led questionnaire during November 2018. This data collection method was used as it is considered suitable for use so that the researchers will be able to clarify questions and due to the higher illiteracy level 18.7% at Kavango region [12].

3.4 Data analysis

The collected data was checked for completeness, entered, edited, cleaned and analysed using SPSS Verssion24. The Likert scale was rated for 1 for "agree" and 2 for "disagree". The questions on knowledge and attitude where 8 each with the Likert scale of two points at each question thus the minimum score was 8, maximum was 16 . Knowledge were rated good if the participant scored 5 to 8 , and poor level of knowledge was rated to the scores between 9 to 16. In addition , attitude were rated good or positive if the participant scored 6 to 10 , and poor attitude was rated to the scores between 9 to 20. It should be noted that the participants answer correct if they agreed to the question and is the reason why good knowledge and attitude is considered when the person score less points.

4. Research ethics

The permission to conduct the study was obtained from the Ministry of Health and Social Services in Namibia, the University of Namibia Research Ethical Committee, and Management of Rundu clinic as well as from the participants.

This process and issues of confidentiality was stipulated in the written consent form. The consent form was given to the participants and they were asked to indicate their willingness to participate in the study by signing it. All participants signed the consent form. The privacy and dignity of the participants were respected, and their judgments and opinions remained strictly confidential. Names and other identifiers were changed to protect the privacy of the participants. The participants had the right to choose voluntarily whether to participate or not without any risk incurring. Information was given to them indicating that they had the right to withdraw from the study at any time, without any negative consequences. The participants were also informed that in case the outcomes of the study would be published in a peer- reviewed journal; however, their identification would remain anonymous. Moreover, participants were informed that there were no individual benefits for participating in the study, but the outcome may assist in implementing interventions, which may improve their knowledge, and attitudes regarding the benefit of ANC.

5. Results

5.1 Socio-demographic characteristics

Out of the 80 calculated sample size a total number of 80 women agreed to participate in this study making this a 100 percent response rate. The socio- demographic characteristic consisted of the following: age of respondents, marital status, educational background and reproductive history.

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Age

Table 1 below indicate age group with participants' ages ranging from 18-48years. More than half of the participants were ranging between 18-25 years n=35 (43.75%), n=17(21.3%) were aged between 26-29 years, n=21(26.2%) were participants between the age of 30-38 years and n=7(8.75%) were aged between 41-48 years.

AGE	FREQUENCY	PERCENTAGE %
18-25	35	43.75
26-29	17	21.3
30-38	21	26.2
41-48	7	8.75
Total	80	100

Table 1. Participants' age

Education background

As shown in table 2, n=40 (50%) of the participants attended primary school while n=26 (32.5%) attended secondary school and n=14(17.5%) of the participants indicated that they attended tertiary education.

EDUCATIONAL STATUS	FREQUENCY	PERCENTAGE %
Attended primary school	40	50.0
Attended secondary school	26	32.5
Attended Tertiary education	14	17.5
Total	80	100

Table 2: Education background

Marital status

Table 3 shows that, n=59(74 %) of the participants were single, n=20(25%) were married and n=1(1%) participant was divorced.

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MARITAL STATUS	FREQUENCY	PERCENTAGE %
Single	59	74
Married	20	25
Divorced	1	1
Total	80	100

Table 3: Participants marital status

Reproductive history

Table 4 indicates that 38.75% of the participants were primigravida, 57.5% were multigravida, and 3. 75%. represents grand multiparas.

REPRODUCTIVE HISTORY	FREQUENCY	PERCENTAGE %
Primigravida	31	38 .75
Multigravida	46	57.5
Grand multipara	3	3.75
Total	80	100

Table 4: Participants reproductive history

5.2 Knowledge on benefits of utilization of antenatal care services among pregnant women

Table 5 indicates the analysis of the study regarding the knowledge of the participants on ANC services utilization benefits. The analysis reveals that n= 78 (97.5%) agreed that pregnant women should go for ANC check up while , n=2 (2.5%) did not agree. Regarding weather pregnant women can go for ANC even if there are no problems during the pregnancy (90%) agreed to the statement while n=8 (10%) disagreed. Participants n=72 (90%) agreed that it is recommended that pregnant women should start with their first ANC within the first 3 months of gestation Furthermore , n=71 (88.75%) of the participants agreed that pregnant women should be given Tetanus Toxoid immunization. Moreover n=79. (98.75%) of the participants agreed that pregnant women should be given vitamins and iron supplement during pregnancy and (87.5%) of the participants agreed that pregnant women should undergo HIV test during ANC checkup. In addition , all participants n=80 (100%) agreed that pregnant women should deliver at the hospital.

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VARIABLES	AGREE	DISAGREED
1. Pregnant women should go for ANC checkup throughout her pregnancy.	78 (97.5%)	2 (2.5 %)
2. The pregnant women are required to go for ANC even if she has no health problem during the pregnancy.	72 (90%)	8 (10%)
3. It is recommended for every pregnant women to start with antenatal care first visit within the first 3 months of gestation .	72 (90%)	8 (10%)
4. It necessary for the pregnant women to be immunized against Tetanus Toxoid	71 (88.75)	9(11.25%)
5. Pregnant women should be given vitamins and iron supplement during pregnancy.	95 (98.75%)	1(1.25%)
6. Pregnant women should undergo HIV test during ANC .	95 (98.75%)	1 (1.25%)
7. Pregnant woman should deliver her baby at the hospital.	80 (100%)	0 (0%)
8. Pregnant woman should attend ANC at least more than 4 times throughout her pregnancy.	95 (98.75 %)	1 (1.25%)

Table 5 : Knowledge on antenatal care

5.3 Attitude on antenatal care

Table 6 contain 10 questions about pregnant women attitudes towards benefits of ANC.services utilization. Partcipants n=78 (97.5%) agreed that early antenatal care is good for their pregnancy however n=2 participants (2.5%) disagreed. Furthermore , 81.25% of the participants agreed that they will go for antenatal care before the third month of their pregnancy and 90% of the participants agreed that vitamin supplement is good to them and to the unborn baby. r.Anothern92.5% participants agreed that alcohol drinking will affect the unborn baby or baby growth while 96.2% of the participants agreed that smoking is not good for their baby. .Futhermore all participants agreed that ANC follow up is good to monitor mothers and baby condition and 97.5%of the participants agreed that they will allow doctor or midwives to take their blood for diseases screening All participants also agreed to allow the midwives to check their blood pressure while 96.25% of the participants r agreed to continue with ANC even if they are not feeling sick. Suprisingly , all participants agreed that they will deliver their baby in the hospital.

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VARIABLES	AGREE	DISAGREE
1.Early antenatal care is good for my pregnancy.	78 (97.5%)	2 (2.5%)
2.I will go for antenatal care before the third month of my pregnancy.	65 (81.2%)	15 (18.75%)
3. I believe that vitamin supplement is good for the me and to the unborn baby .	72 (90%)	8 (10%)
4. I believe alcohol drinking will affect my unborn baby or baby growth	74 (92.5%)	6 (7.5%)
5. I believe smoking is not good for my unborn baby	77 (96.25%)	3 (3.75%)
6. It is important to go for ANC follow up so that midwives monitor mothers and unborn baby condition	80 (100%)	=0 (0%)
7. I will allow doctor or midwife to take my blood for screening of diseases .	78 (97.5%)	2 (2.5%)
8. I will allow the midwife to check my blood pressure	80 (100%)	0 (0%)
9. I will continue with ANC even if I am not feeling sick	77 (96.25%)	3 (3.75%)
10. I will deliver my baby in the hospital	80 (100%)	0(0%)

Table 6; Participants attitudes on antenatal care services utilization

6. DISCUSSION

Participants who took part in this study were pregnant women ranging between the ages of 18-48 years old, whereby more than one third of the participants were between the ages of 18-25. The current study reported some pregnant women who were below 20 years. According to Fatusi & Hindin, [15] due to lack of knowledge of ANC benefits young pregnant women are faced with pregnancy-related complications, as the second leading cause of death among girls aged 15–19 in Sub-Saharan Africa. The current study reported contrary findings than in latest study conducted by Orboi et al., [16] where by 88.4% of participants were in safe category of age 20-35 ages.

The literature reports that, pregnant women possessing an education status of secondary school and above were two times ,three times more likely to be knowledgeable about benefits ANC [8]. Contrary, although current study reported higher percentage of pregnant women who only attended up to primary school, most of participants were knowledgeable about ANC benefits and showed positive attitudes. This may be attributed to fact that in Namibia. ANC service is provided at no cost in all state health facilities. Pregnant women receive health education at no

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cost, for example, on nutrition, breastfeeding, and health educational interventions that promote health behaviors to improve maternal and neonatal health through better knowledge. Prophylaxis treatment is also given such pregamol tablets to prevent anemia during pregnancy and blood investigations such as full blood count and sexual transmitted diseases screening is conducted.

The current study results indicate that most of the participants were single. This reveals that there is a great prevalence of single pregnant women than married women. Of interest , yet not surprising as the Namibia Statistics Agency, [17] identified that the majority of the Namibian population 59% is single while 35% were married . This high rate of single pregnant women has negative influence on ANC initiation and follow-ups. .According to [16] on their study on factors influencing four visits antenatal care in primary health centre in Sanggeng Manokari district, West Papua province, identified that lack of husband support affected ANC visits. In their study pregnant women who did not have husband's support had ANC visits irregularly by 2,087 times greater than pregnant women who had good husband support [16]. The current study finding is contrary to a comparative study conducted by Fekadu,et al [18] in Northwest Ethiopia Northwest Ethiopia which identified that 81.32% of participants were married.

This study identified higher rate of multiparas women who attended ANC. This could be attributed to the fact that women who had more than one pregnancies might be more aware about the benefits of ANC as they have been given same information over and over again with each pregnancy and have more confidence in having a healthy delivery compared to primigravida. It has been stressed that one crucial component of ANC is to provide information related to benefits of ANC.The current study finding is contrary to study done by [18] which pointed out that primigravida are associated with frequent ANC visits.

Literature has identified knowledge as a crucial tool among different groups of women as dynamics affecting the recognition and operation of health services [19] . Equally, health workers can use knowledge as suitable tool in guaranteeing sustainable acceptance of antenatal services among pregnant women. Studies have demonstrated higher level of knowledge on antenatal care [9].This was also seen in the current study group. The overall scoring demonstrated an understanding on benefits of ANC. Current study reported higher percentage on aspect of knowledge concerning benefits of ANC, in comparison finding that was obtained from study done in Rural Area of Lahore (Akhtar et al., 2018).

The key entry point to ANC is for pregnant women to receive multiple range of information such as proper nutritional, prevention or treatment of anemia, detection and treatment of malaria, hypertensive disorders, and sexually transmitted infections (Berhe et al., 2014). This information may help to prevent complications that may arise during pregnancy. Therefore is very crucial that pregnant women start ANC as soon as possible. Participants n=72 (90%) agreed that it is recommended that pregnant women should start with their first ANC within the first 3 months or immediately when they find out that they are pregnant. Current study reported higher percentages than 65.5% reported on study done in Southwestern Nigeria about Knowledge and Attitude of Women and Its Influence on Antenatal Care Attendance (Ogunba&Abiodun, 2017).

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In a study 85 % agreed that pregnant women should attend, antenatal checkup at least 4 times and 25% disagreed. The results of this study are higher than 32.8 % reported in study done by (Ogunba&Abiodun, 2017). The 25 % decreased reported in current study, it is of interest, yet not surprising, because the proportion of women who received only one ANC visits has decreased from 86% to 73.6% in 2006 to 2013. According to Demographic Health Survey of Namibia, women who received at least four ANC visits also reduced from 70.4% to 62.5% in 2006 to 2013 respectively (MoHSS) and ICF International 2014. Timely use of ANC allows delivery of vital services, such as, counseling about HIV, screening for other sexual transmitted diseases, hepatitis, syphilis and treatment. Encourage pregnant women about the benefits of starting ANC within 3 months is an imperative intervention in allowing them to enrich their experiences as well as supporting their strength to better appreciate ways to protect their health and that of their unborn fetus. Importantly once, they become knowledgeable about benefits of timely ANC in, they might take better care of their own health.

About 88.75% agreed that women should get Tetanus Toxoid immunization. However, there are some pregnant women who do not understand the importance of Tetanus Toxoid immunization. Tetanus toxic immunizations protect neonates against neonatal tetanus, which is still major cause of neonatal death and if the mother is not immunized with adequate doses of TT vaccine neither she nor the fetus is protected against TT at delivery as cited in (Muhammad-Idris, Shehu, &Isa, 2017).For full protection of neonate, a pregnant woman should receive around two injections of the vaccine during pregnancy. If a pregnant woman has been already vaccinated during a previous pregnancy, however, she might need only one or no doses for the current pregnancy. Every woman need five doses thus, provide lifetime protection. The current study finding shows that there is still a need for more effort to refine the women's knowledge on these imperative contributors of maternal and neonatal death. Current study reported similar findings with study done by Muhammad-Idris, Shehu, & Isa (2017) in Nigeria were despite high knowledge women did not finish recommended doses of TT that was due to lack of vaccine stocks coupled with cultural and religious beliefs, however in Namibia no reason was stipulated , therefore results of both studies should be compared with caution. However, study done by Akhtar et al (2018) reported 51.1%, which is less when compared to 81.25 % reported in current study.

In this study 98. 75 % of participants pointed to the significance of acceptable iron and vitamins intake during pregnancy. This study reported higher findings when compared to 92.3% knows that pregnant women needs vitamin supplement in study done by Akhtar et al [20] .

The findings on the current study attitude score towards service utilization on the participants revealed that women had positive attitude toward benefits of ANC. There were 10 questions, which were asked about the attitude, and women strongly agreed (100 %) that ANC visits are good to monitor mothers and fetus condition, women allow nurses to check their blood pressure and deliver their baby in the hospital. Current study finding are similar to [10] in their studies on attitude towards ANC utilization revealed that most pregnant women had appositive attitudes. Contrary result was reported in a cross sectional study conducted using two strategies cluster sampling at 24 selected villages in the Kham district of Xiengkhouang Province, Nagoya Japan

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were 61.9 % of study participants had a negative attitude towards ANC utilization [7]. The attitude of pregnant woman reviewed either as positive or negative or unclear. Negative attitude most of the time might be due to lack of understanding to the benefits of ANC toward herself and unborn fetus. However literature reported that attitudes of pregnant women influenced by various factors which includes health care attitudes, long waiting hours at ANC clinics, lack of privacy and cultural hinders [10; 13]. On the other hand, positive attitude for example, the participation of pregnant women in ANC is influenced by how well informed are pregnant women. Pregnant women who are well informed would have positive attitudes about the benefits of ANC and are likely to understand that ANC's medical procedures and interventions are aimed to improve, save their lives and of their neonates. In this way, they might be motivated enough to attended ANC visits. However, changing attitude is the most difficult task, but is also the cheapest way of improving pregnant women's health.

7. Conclusion

The study concluded that overall pregnant women are knowledgeable and have positive attitudes regarding ANC benefits. Although pregnant women are knowledgeable, there are certain aspects of antenatal care, whereby some have less knowledge in such as; when to start with ANC visits and the importance doses tetanus toxoid vaccine The study recommends that information, education and communication on ANC benefits must be intensified in order to reach all segments of the population. It is further recommended that benefits of attendance of ANC should be emphasized; especially when to start ANC as well as how many doses of tetanus toxoid vaccines required for lifetime protection.

8. Limitation

This study was conducted in semi-urban area of RunduKavango East, Namibia with small sample size therefore the findings for this study is only applicable to sampled population.

Reference

[1] World health Organization. (2016) WHO recommendations on antenatal care for a positive pregnancy experience. Geneva, Switzerland.

[2] Bhutta, Z. A., Chopra, M., Axelson, H., Berman, P., Boerma, T., Bryce, J., & de Francisco, A. (2010). Countdown to 2015-decade report (2000–10): taking stock of maternal, newborn, and child survival. *The lancet*, *375*(9730), 2032-2044. https://doi.org/10.1016/S0140-6736(10)60678-2

[3] Kalayou K Berhe, Haftom G Welearegay, Gerezgiher B Abera, Hailemariam B Kahsay and Alemayehu B Kahsay. Assessment of Antenatal Care Utilization and its Associated Factors Among 15 to 49 Years of Age Women in ayderkebelle, Mekelle City 2012/2013; A Cross sectional study. American Journal of Advanced Drug Delivery. 062-075, 2014. DOI: 10.7176/JHMN

[4] Igbokwe ,C .(2012).Knowledge and attitude of pregnant women towards antenatal services in Nsukka Local Government Area of Enugu State, Nigeria.Journal of Research in Education and Society 3(1). http://icidr.org/doc

[5] Shafqat, T., Fayaz, S., Rahim, R., &Saima, S. (2015). Knowledge and awareness regarding antenatal care and delivery among pregnant women. *Journal of Medical Sciences*, *23*(2), 88-91.

[6] Ambreen, I., & Shah, M. (2018). Assessing knowledge of married women regarding antenatal care. *Nurse Care Open Acces J*, *5*(4), 238-242.doi: 10.15406/ncoaj.2018.05.00154

Akpan-nnah, E. M., Mboho, M., & Akpabio, I. I. (2017). *Socio-Cultural Variables and Type of Birth Outcome of Women in Primary Health Care Facilities in Ikot Ekpene , Nigeria*. *39*(2015), 20–30.

[7] Yang Ye, Yoshitoku Yoshida, Md. Harun-Or-Rashid and Junichi Sakamoto (2010) Factors Affecting the Utilization of Antenatal Care Services among Wo0men in Kham District, Xiengkhouang Province, LAO PDR. Nagoya J. Med. Sci. 72. 23 ~ 33.

[8] Duko, B., Tadesse, B., Gebre, M., &Teshome, T. (2017).Awareness of Anemia and Associated Factors among Pregnant Women Attending Antenatal Care, South Ethiopia. *J Women's Health Care*, *6*(409), 2167-0420.

[9] Banda, I., Michelo, C., &Hazemba, A. (2012). Factors associated with late antenatal care attendance in selected rural and urban communities of the copperbelt province of Zambia. *Medical Journal of Zambia*, *39*(3), 29-36.110594-304802-1-PB%20(1).pdf

[10] Rosaliza, A. M. & Muhammad, J. J. (2011). Knowledge, attitude and practices on antenatal care among orangasli women in Repel, Nigeria Sembelian. Malaysian. Journal of public health medicine, 11(2), 13-21.http://dx.doi.org/10.7563/SSD_01_01_02

[11] WHO, UNICEF, World Bank group, United Nation. (2018).Levels and trends in child mortality report. Accessed at https://www.unicef.org/publications/index_103264.html

[12] The Nambia Ministry of Health and Social Services (MoHSS) and ICF International. 2014. *The NamibiaDemographic and Health Survey 2013.*Windhoek, Namibia, and Rockville, Maryland, USA: MoHSS and ICFInternational.

[13] Muntenda, B.M .2011. *The perception of women regarding obstetric care in public health facilities in a peri-urban area of Namibia.*University of Western Cape.

[14] Christensen, L. B., Johnson, B., Turner, L. A., & Christensen, L. B. (2011). Research methods, design, and analysis.

Vol. 4, No. 02; 2020

ISSN: 2581-3366

[15] Fatusi, A.O. &Hindin, M.J. (2010) Adolescents and youth in developing countries: Health and development issues in context. Journal of Adolescence, 33, 499-508. doi:10.1016/j.adolescence.2010.05.019

[16] Orboi, Msen, Ruru & Mallongi (2019) The Factors Influencing Four Visited Antenatal Care in Primary Health Centre in Sanggeng Manokari District, West Papua Province International *Journal of Science and Healthcare Research* (4) 1 ; 202-210.

[17] Namibia Statistics Agency. (2013). Namibia 2011 Population and Housing Census Main Report. Windhoek, Namibia.

[18] Fekadu, A., Yitayal, M., Alemayehu, G. A., Abebe, S. M., Ayele, T. A., Tariku, A., &Gelaye, K. A. (2019). Frequent Antenatal Care Visits Increase Institutional Delivery at Dabat Health and Demographic Surveillance System Site, Northwest Ethiopia. *Journal of pregnancy*, *2019*. https://doi.org/10.1155/2019/1690986

[19] Shama , S, Sharma., M .(2011).Knowledge, attitude and belief of pregnant women towards safe motherhood in a rural Indian setting. Vol. 1 No. 1, 13-18, September 2012 19.

[20] Akhtar, S., Hussain, M., Majeed, I., & Afzal, M. (2018). Knowledge Attitude and Practice Regarding Antenatal Care among Pregnant Women in Rural Area of Lahore. *InternationalJournal of Social Sciences and Management*, *5*(3), 155-162. http://dx..doi.org10.18203/2394.6040.ijcmph20162035