

# Assessments of Knowledge and Attitudes of Pregnant Women of Antenatal - and Post Ntenatal Care, Al- Seef Primary Health Care Center, in Basra City

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#### Abstract

Background: Antenatal Care means care before birth and includes education, counseling, screening and treatment to monitor and to promote the well - being of the mother and fetus. Most previous studies done on knowledge and attitude of women toward ANC were community based done on general women of child bearing age. Until now little has been known about knowledge and attitude of women who are currently using ANC services Objective: to assess knowledge and attitudes of pregnant women concerning antenatal and postnatal care who attend in al-seef primary health care center in Basra cityMethodology: A descriptive analytic study carried on (100) pregnant women who attend primary health care centers in Basra city in al-seef primary health care center, during the period from November 2014 to February2015 . The data were collected through interview and use questionnaire format. Validity and Reliability of the questionnaire were determined through panel of experts and pilot study, data were analyzed through the application of descriptive statistical analysis and inferential statistical analysis. Results: The results revealed that (49%) of pregnant women their ages ranged between 15-24 years, (30%) were primary school education, (89%) from house wife. (72%) had 1-3 gravida, (60%) had 1-3 para, 26% had 1-2 abortion and 78% attended primary health care center 1-2 visits only. The result indicates that there is no significant relationship between sociodemographic characteristic and type of sample of pregnant women concerning antenatal -postnatal care, while there is significant relationship between number of prenatal -postnatal care visits and (age, education, occupation, smoking husbands, number pregnancy number children and place of labor) of the pregnant women. **Recommendations:** The study recommended an emphasis on health education for mothers' awareness of the importance of regular visits to primary health care center during pregnancy.

Keywords: Knowledge, Attitude

### 1. INTRODUCTION

### 1.1 Background

Antenatal Care (ANC), is given different meanings by different scholars, among others the meaning that says, "Antenatal Care means care before birth and includes education, counseling, screening and treatment to monitor and to promote the well - being of the mother and fetus"(1). In short it is the care that a woman receives during pregnancy that helps to ensure healthy out comes for women and newborn (1). It is a key entry point for pregnant women to receive a multiple range of health services such as nutritional support and prevention or treatment of anemia; prevention, detection and treatment of malaria, tuberculosis and sexually transmitted infections (2). Antenatal Care is an opportunity to promote the benefits of skilled attendance at birth and to encourage women to seek postpartum care for themselves and their newborn. It is also an ideal time to counsel women about the benefits of child spacing (3). However, Antenatal Care have such attractive benefits and strategies, according to the United Nations Millennium Development Goals, every year, at least half a million women and girls die as a result of complications during pregnancy, childbirth or the six weeks following delivery. Almost all (99%) of these deaths occur in A number of studies indicate that the Antenatal Care utilization rate is still low due to many factors that need to be examined such as socio demographic factors, knowledge of social support. They conclude that eliminating such factors is important to increase the women's participation in Antenatal Care. Developing countries this shows that the Antenatal care activity is very weak in developing country.

The main reasons that hinder the use of Antenatal Care are different from Country to Country. But the reason experienced in developing countries are nearly similar such as; hemorrhage, followed by eclampsia, infection, abortion complications and obstructed labor. Other issues are lack of knowledge and preparedness about reproductive health in the family, community and health provider (4)

Antenatal Care is the most important method for detecting pregnancy problems in the early period, Because Antenatal care is the best mechanism to minimize maternal mortality, and give good information for pregnant women about their birth and how to prevent related problems. The best and most advantage of Antenatal Care is to protect the health of women's and their infants as well as indicating the danger signals that will be occurred and needs to be further treated by advanced health professionals (5).

Many women from different studies have mentioned that women's are embarrassed when visiting an PCH. With improved knowledge about the benefits of PHC and the importance of a positive attitude toward it,



these women will come to understand that PHC's medical procedures and interventions will do much to save their lives and improve their children's health. In this way they will be motivated enough to overcome their reluctance. In many ways, changing attitudes and behavior are the most challenging tasks, but are also the least costly. Proper educational campaigns and the improved dissemination of information are investments for the long-term. Most previous studies done on knowledge and attitude of women toward PHC were community based done on general women of child bearing age. Until now little has been known about knowledge and attitude of women who are currently using PHC services. Therefore this study will help to know how much percentage of women came to benefit from this very important service of women's health know about it and have good attitude about ante natal care services. The aim of this study is to assess knowledge and attitudes of pregnant women regarding the benefits of Antenatal care utilization in AL-seef primary health care center In Basra.

### 1.2- introduction and definition of the antenatal care

WHO define antenatal care as that care which is routinely provided for all pregnant women at primary care level or every aspect of care from screening to intensive life support provide to any women while pregnant and up to delivery (6).

Antenatal care, which it's'1901. (6) is necessary for :

- 1- The maintenance of good health for the mother and fetus.
- 2- The prevention of complication.
- 3- The early detection and management of any pathological case (7,8)

General aim of antenatal care: the aim to achieve at the end of the pregnancy a healthy mother and baby. Components of antenatal care  $^{(9,10)}$ 

- 1- Pre-natal screening examination.
- 2- Identification of high risk female.
- 3- Selective supplement and immunization.

4-Health education

Schedule of antenatal visits:

- -Up to 28 weeks (weeks):-every four weeks.
- -From (28-36) weeks:-every two weeks.
- -From 36 up to delivery:-week.

Antenatal care is care routinely provided for all pregnant women at primary care level, or every aspect of care form screening to intensive life support provided to any women while pregnant and up to delivery (11).

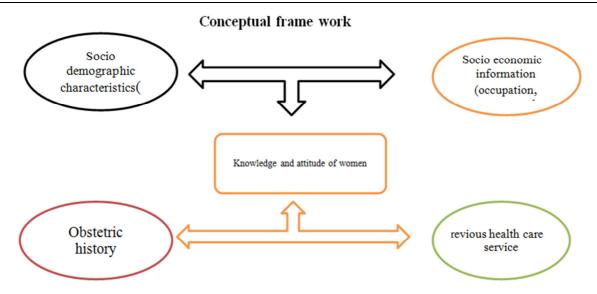
### 1.3 Introduction and definition of the postnatal

Postnatal care is pre-eminently about the provision of a supportive environment in which a woman, her baby and the wider family can begin their new life together. It is not the management of a condition or an acute situation. This guideline has been written within a conceptual framework which places the woman and her baby at the center of care, appreciating that all post care should be delivered in Partnership with the woman and should be individualized to meet the needs of each mother-infant dyad. The guideline aims to identify the essential 'core care' which every woman and her baby should receive, as appropriate to their needs, during the first 6–8 weeks after birth, based upon the best evidence available. A key component of the guideline is information to empower the woman to care for her baby and herself so as to promote their longer-term physiological and emotional well-being. The guidance on the information which the healthcare professional should offer women and their Partners/families is listed, for convenience,

The postnatal period – defined here as the first six weeks after birth – is critical to the health and survival of a mother and her newborn. The most vulnerable time for both is during the hours and days after birth. Lack of care in this time period may result in death or disability as well as missed opportunities to promote healthy behaviors, affecting women, newborns, and children. (12)

This guideline aims to identify the essential core (routine) care that every woman and her baby should receive in the first 6–8 weeks after birth, based on the best evidence available. Although for most women and babies the postnatal period is uncomplicated, care during this period needs to address any deviation from expected recovery after birth. This guideline give advice on when additional care may be needed and these recommendations have been given a status level (Indicating the degree of urgency needed in dealing with the Problem) (13)





#### **OBJECTIVE OF THE STUDY**

#### 3.1. General Objective

The overall objective of the study was to assess the knowledge and attitudes of pregnant women about the benefits of antenatal care in AL-seef primary health care center In Basra.

### 3.2. Specific Objectives

- To identify the pregnant women's knowledge about antenatal care
- To asses pregnant women's attitude towards the use of antenatal care.
- To determine the factors associated with knowledge and attitude of pregnant women on antenatal care

### 3.3. Study Variables

### **Dependent variable:**

- \* Knowledge of pregnant women
- \*Attitude of pregnant women

### **Independent variables:**

Women and partner socio economic factors (, marital status, educational level)

Socio economic information and media exposure (occupation)

Obstetric history (parity, Gravid, age at first delivery, Place of most recent delivery)

Previous health care service (those mothers who were received antenatal care for their most recent pregnancy in the health facility)

### Methodology:

A descriptive study, which is appropriately structured for the assessment of knowledge and attitude concerning prenatal and post care for women who attend AL-seef primary health care center In Basra.

Through during this period from November 2014 to February 2015 . A purposive "non–probability" sample consisted (100) pregnant women who attend AL-seef primary health care center, Construction of the questionnaire was through an extensive review of literature and previous studies. It comprised of Part One: Sociodemographic Characteristics, Part Two: Reproductive History, Part Three: This part concerning the knowledge of pregnant women about pre-post natal care, and four part concerning attitudes this parts includes the following domains: \*Visits to primary health care center; it was comprised of 4 multiple choice questions. \*Medical examinations &services it was comprised of 6 multiple choice questions. \* Vaccines it was comprised of 5 multiple choice questions. \*Minor discomfort during pregnancy, it was comprised of 5 multiple choice questions. \* Healthy practices during pregnancy (including six healthy practices ,which are related to (nutrition ,exercise , rest and sleep , cleanliness ,risk factors ,and breast feeding) ,each practice include 4-6 multiple choice questions. And there were 12 statements .

### How Assess the Pregnant Women's knowledge:-

**Knowledgeable**: 24 questions were asked for the knowledge part, each correct answer was given one mark and no mark was given for wrong answer and women with mean score for knowledge questions of 0.5 are considered to be knowledgeable.).

Attitude on antenatal care: There were 12 statements with 5-point Liker Scale agreement options to measure



the attitude level which were given 1 to 5 marks. The attitude score were further be divided to two levels which are good attitude and poor attitude using the mean attitude score.

#### **Results:**

**Table 1:** Participants' socio-demographic characteristics and some related variable attending in alseef primary health care center in Basra city

meanin care center in basia	City						
Variables	Group	F	%	χ2	df	sig	CS
Age Groups	15-24	49	49	134.6	12	0.0	HS
	25-34	40	40				
	35-44	10	10				
	45+	1	1				
Mean = $26.29 \pm SD = 7.38$							
Education level		F	%	Χχ2	df	sig	CS
	Not read and write	13	13	134	12	0.001	HS
	read and write	9	9				
	Primary school	30	30				
	Secondary school	27	27				
	Institute or more	21	21				
occupation		F	%	χ2	df	sig	CS
_	House wife	89	89	100	1	0.000	HS
	Government employee	11	11				
		F	%	χ2	df	sig	CS
Smoking in husbands	Yes	88	88	13.6	6	0.03	S
-	No	12	12				
Types of sample	Antenatal	21	21	-	3	0.07	NS
_	Postnatal	79	79				

df=degree of freedom; f. =Frequency; HS= Highly significant; NS= Non-significant;  $\chi$ 2=chi-square, CS=Correlated Significant, Sig.=significant;

## **χ2-** Chi-square test; %=percentag

Table (1) demonstrates that the highest percentage of the study sample (49%) were in age

Group of (15 - 24 yrs.)With mean  $(26.29\pm7.38)$ , the majority of the study sample (29%) on Secondary school, the result indicated that the highest percentage were un employed (house wives) and they accounted for 89%. Regarding to the Smoking in husband the majority was yes (88%), the majority of the type sample are postnatal (79%).

Table 2: Reproductive history of women attending in al-seef primary health care center in Basra city

Variables	Group	F	χ2	df	sig	CS
Number of pregnancy	1-3	72	152	21	0.00	H.S
	4-6	25				
	7-9	3				
Number of children	nil	16	58.5	3	0.000	H.S
	1-3	60				
	4-6	20				
	7-9	4				
			χ2			
Years between delivery	≥2years	65	-	=.	0.08	N.S
	< 2years	35				
Number abortion	nil	79	-	-	0.07	NS
	1-3	21				
			χ2			
Place of most recent delivery	Home	20	35.1	6	0.00	HS
	Primary clinic	6				
	hospital	79				

df=degree of freedom; f. =Frequency; HS= Highly significant; NS= Non-significant;  $\chi$ 2=chi-square, CS=Correlated Significant, Sig.=significant;

### **χ2-** Chi-square test; %=percentage

Table (2) show that the Parity of study sample was The highest percentage (72%) was for those with (1-3) parity, and the Years between delivery (65%) for those with ( $\geq$ 2years) years, for the number abortion the highest percentage (79%) they no abortion ,and the last part of Place of most recent delivery the highest



percentage (79%) the prefer place was hospital.

**Table 3**: Knowledge on antenatal care and postnatal among women attending in al- seef primary health care center in Basra city

center ii	n Basra city			
Dom	Items of Pregnant women (knowledge) of prenatal care and post natal	No. of subjects with correct answer	Percentage (%)	.Ass
1	Do pregnant women need to go for antenatal check-up	33	60(%)	Success
2	If yes is it required to go for PHC even if there is no complication during pregnancy	16	16(%)	Failure
3	Should first antenatal check-up bed one in the first 3 months	60	60(%)	Success
4	For at least how many times does pregnant woman need to come for antenatal follow up throughout her pregnancy	45	45(%)	Failure
5	Is it necessary to give inj. TT during pregnancy	77	77(%)	Success
6	If yes, how many times inj. TT should be given	23	23(%)	Failure
7	Does pregnant woman need vitamin supplement	59	59(%)	Success
8	Is it necessary to take iron folic acid tablet during pregnancy	80	80(%)	Success
9	If yes how many ion folic acid has to be taken during pregnancy	87	87(%)	Success
10	Do pregnant woman need to take extra food as compared to non- pregnant state	70	70(%)	Success
11	Does pregnant woman need to undergo the following test during her antenatal check-up	59	59(%)	Success
12	Blood screening for hemoglobin level	50	50(%)	Success
13	Blood pressure examination	48	48(%)	Failure
14	Blood sugar level	39	39(%)	Failure
15	Can high blood pressure affect the fetus growth	48	48(%)	Failure
16	Do diabetic women have higher risk of having big babies	68	68(%)	Success
17	Where is the ideal place a pregnant woman should deliver her baby	74	74(%)	Success
18	Urine examination for the pregnant women should be carried in	56	56(%)	Success
19	when felling abnormal secretions post labor visit PHC	79	79(%)	Success
20	The most important vitamins that Should be taken- during pregnancy are	80	80(%)	Success
21	Pregnant go to the doctor immediately when feeling pain	41	41(%)	Failure
22	Initiate breastfeeding to the new born	78	78(%)	Success
23	The sleep for the pregnant woman is more 8 hours'	85	85(%)	Success
24	Important visit PHC after labor	77	77(%)	Success

This table shows that there is he higher percentage with (9) item found (87%) with correct answer, and lower percentage for correct answer with (2) item found (16%).

Table 4.Attitude towards antenatal care among women attending in al- seef primary health care center in Basra city

NO	Statements	Strongly Disagree, Disagree & Neutral	Strongly Agree & Agree
1	Early antenatal booking is good for my pregnancy	33	67
2	I will go for antenatal booking before the third month of my pregnancy	83	17
3	I believe that vitamin supplement is good for the fetus	27	73
4	I should go for antenatal checkup if I am pregnant	18	82
5	Antenatal follow up is good to monitor mother's and fetus' health	41	59
6	I will allow the doctor to take my blood for screening	33	67
7	I will allow the doctor to check my blood pressure	50	50
8	I will check my blood sugar level if I am pregnant	20	80
9	I am willing to do ultrasounds can during my pregnancy	11	89
10	I plan to deliver in the hospital if I am pregnant	26	74
11	I will do early preparation for the delivery	66	34
12	I am ready to face any pregnancy and delivery complication	35	65

**Table** 4.Attitudetoward antenatal care among women attending in al- seef primary health care center in Basra city

This table shows that there is he higher strongly disagree with item (2) item found (83%), and the higher strong agree answer with (9) item found (89%).



#### Discussion

Many women from different studies have mentioned that women's are embarrassed when visiting an PHC. With improved knowledge about the benefits of PHC and the importance of a positive attitude toward it, these women will come to understand that PHC medical procedures and interventions will do much to save their lives and improve their children's health. In this way they will be motivated enough to overcome their reluctance. In many ways, changing attitudes and behavior are the most challenging tasks, but are also the least costly. Proper educational campaigns and the improved dissemination of information are investments for the long-term.

The study presents asymptomatically the following

Interpretation of the evidence is supported by the available literature and research studies.

Antenatal care is the care of the mother during pregnancy .its primary aim is to achieve a healthy mother and baby at the end of a pregnancy Antenatal care coverage is one of the maternal and reproductive health indicators <sup>(14)</sup> world health organization recommends a minimum of four PHC visits initiated during the first trimester .provision of quality antenatal care and delivery services is a widely acknowledged means of improving the health status of pregnant women and the possibility of a good outcome following delivery , of all the major thrusts of the safe motherhood initiative ,antenatal care remains one intervention with potential of significantly reducing maternal morbidity and mortality.

The study finding shows the (49%) of the study sample were with in age group 15-24 years, with (Mean =26.29  $\pm$ SD =7.38). Darline (2004) reported that age of less than 18 year is at risk of physical immaturity and old mothers of 35 year old or more are higher risk of fetal morbidity and mortality (3). The educational level for 29% of the study sample was Secondary school. Obah (2010) reported that mothers of poor level of education, poor life habits, maltreatment stress and depression in addition young mother are at greater risk of leaving school or attaining a lower level of education (4).

It is believed that women's education is important for understanding health messages and to be able to make decisions regarding their health and care. The findings on determinant factors shown that, although significant association was found between educational status and knowledge of the women, attitude was found to be affected by education status.

The majority (89%) of pregnant women's were housewives. Buman (2004) reported that woman's employment during pregnancy may have adverse effect on her child health specially risk of low birth weight preterm (5). Results revealed that (79%) postnatal,

**Smoking in husband:** This finding reveals that (88%) of husband were smoker, were heavy smoker .Krisa, (2009) reported that several studies have suggested that smoking may be associated with decreased fertility among both women and men.

With table Reproductive history of the parity (79%) there have (1-3) child and, (79%) no abortion and (80%), (79%) the women visiting after delivery. Accordingly in this study it was found that women who had visited health facilities during their previous pregnancies were less likely to have positive attitude for attending antenatal care services and they prefer hospital delivery place (79%).

.Johan (2000) mentioned that adequate prenatal visits provide more information about the extent of provider content.

### Table 3. Knowledge of Pregnant Women's regarding Health Practices during Pregnancy.

The findings indicated that the items for most of the study assessed as success in regarding to (Nutrition). WHO, (2007), a well-balanced diet will provide adequate nutrition for the mother and the fetus during pregnancy. Mothers should be advised to increase intake of protein, calcium, iron and folic acid to ensure proper health of both parties (9). Buman (2004) reported that during pregnancy mother eating for both herself and her baby .At least in the later stage of pregnancy ,she needs to consume more energy than usual pregnancy also increase nutrient requirements .It is important that the mothers diet contains sufficient protein ,iron ,calcium, folate ,and vitamin C and D for the formation of the baby's muscles ,bones ,and teeth ,and to make hemoglobin most extra nutrients are obtained simply by eating balanced diet that satisfies the increased energy requirements (5).

The item (Risk factors during pregnancy) the result indicated that most of the study group were success. Karen, (2004) reported that pregnant women and fetus and neonate who are at risk will have increased risk of morbidity or mortality before or after delivery. risk assessment is part of routine prenatal care .pregnant women how had good information about what is the risk factors during pregnancy are more likely to have healthy mom and healthy babies(15).

The item (Rest and Sleep) the result indicates that there is a defective response for the study group. Reported that pregnancy is not the time, however, to take up strenuous exercise for the first time and all pregnant women need to sleep enough time (6).

The item (Breast feeding) the result indicate that most of the study group were success .WHO,(2007)reported that in developing country setting, the most important potential advantage of exclusive breast feeding for 6months-versus exclusive breast feeding for 4months followed by partial breast



feeding to 6months-relates to infectious disease morbidity and mortality especially that due to gastrointestinal infection(15). WHO,(2007) reported that in the last years recommendation for the optimal duration of exclusive breast feeding for 4-6 months, with the introduction of complementary foods there after (9). WHO,(2007) reported in addition to providing essential nutrients to infants, benefits of breast feeding for both children and their mothers have been reported. Reports of the benefits for children include decrease in incidence of otitis media, lower risk of obesity, and lower risk of asthma (17).

Attitude toward antenatal care among women attending in al- seef primary health care center in Basra city

Most previous studies done on knowledge and attitude of women toward PHC were community based done on general women of child bearing age. Until now little has been known about knowledge and attitude of women who are currently using PHC services. Therefore this study will help to know how much percentage of women came to benefit from this very important service of women's health know about it and have good attitude about ante natal care services. The aim of this study is to assess knowledge and attitudes of pregnant women regarding the benefits of Antenatal and post natal care in al- seef primary health care center in Basra city.

"Attitude" is a state of readiness or tendency to respond in a certain manner when confronted with certain stimuli, is mostly dormant and is expressed in speech or behavior only when the object or situation is encountered (17). It is person's affective feelings of like and dislike. So in this study, attitude refers to expectant mother's affective feelings of like and dislike to antenatal services. Thus, the pregnant women's personal experience to antenatal services can be positive or negative.

According to the study conducted in Nigeria attitude of pregnant women towards antenatal services was positive.

Education was positive while pregnant women with no formal education and primary educations were negative respectively (20).

In this study only 67% 0f the women had knowledge of that first antenatal check-up has to be done in the first 3 months of pregnancy. Similarly, 40.5 % of women agreed or strongly disagreed as they will go for antenatal booking before the third month of their pregnancy. These finding might give insight as there is still need for more effort for improving the women's knowledge on this important contributors of maternal health.

It is believed that women's education is important for understanding health messages and to be able to make decisions regarding their health and care. The findings on determinant factors shown that, although significant association was not found between educational status and knowledge of the women, attitude was found to be affected by education status. As education level decrease the probability of having good knowledge also decreases. (21)

In this study found strong agree with believe the supplement is good for the fetus. And willing to do ultrasound can during pregnancy

Similar finding was obtained from study done in an urban area of Imphal East, India in which 55.2%, 34.2% and 54.1% of the women interviewed knew correctly the minimum ante-natal checkup during pregnancy.

### Recommendation

- ❖ In a long run, women empowerment through education and income generating activities as well as involvement of husbands during information education and communication are recommended
- ❖ Information, education and communication on PHC must be intensified in order to reach all segments of the population. Specific Adolescent is considered risk so they need more interesting and regular prenatal care visits
- Community health practitioners, public health educators and social workers should plan appropriate technique to modify the attitude of some pregnant women on the concept of antenatal services.
- Mass media should play a significant role in presenting the benefits of prenatal care like early diagnosis and treatment of some possible complications during pregnancy
- Future research should be directed to conducting including both urban and rural community to provide national data. With large number
- ❖ Providing more education and training courses for health team especially nurses to improve their knowledge and to take their roles in teaching and giving advices and instruction to pregnant women during prenatal care.

#### **References:**

- Adewoye KR1, Musa IO2, Atoyebi OA 1, Babatunde OA1. Knowledge and Utilization of Antenatal Care Services by Women of Child Bearing Age in Ilorin-East Local Government Area, North Central Nigeria. International Journal of Science and Technology. Volume 3 No.3, March 2013
- 2 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

- 3 Yang Ye, Yoshitoku Yoshida, Md. Harun-Or-Rashid And Junichi Sakamoto. Factors Affecting the Utilization of Antenatal Care Services Among Women In Kham District, Xiengkhouang Province, LAO PDR. Nagoya J. Med. Sci. 72.  $23 \sim 33$ , 2010
- 4 Ojo.A textbook for midwives in the Tropics (5th ed), London: Holden and Stoughton. 2004
- 5 Effendi R, Isaranurug S, Chompikul J. Factors related to the utilization of antenatal care services among postpartum mothers in PasarRebo General Hospital, Jakarta, Indonesia. J Public Health Dev. 2008; 6: 113–122
- 6 .RooneyC .Antenatal Care and Maternal Health :How Effective Is It ?A review of evidence (WHO /MSM/92-4)WHO,GENEVE.1992.
- 7 .Revised 1990 Estimates of Maternal Mortality .A new Approach by WHO and UNICEF,GENEVA, 1996.
- 8 .Ramakvishnam ,G.Text Book of Obstetric.3rd (edit).S-chanced and Company Ltd .New Delhi .1996;P:106.
- 9 .Abdel,R.Omran Community Medicine In Developing Countries.J.B.LippincottCompany, Philadelphia U.S.A 1974;p:386.
- 10 Calvin,j.h.hacker/Moore essentials of obstetric and gynecology.2ndedit.w.b.sounders company,u.s.a,1992;p:82
- 11 WHO.Coverage of maternity care. A tabulation of available information [internet].Geneva:who;1998[cited2009 sep20].available from: http://www.who.int
- 12 Charlotte Warren, Pat Daly, LallaToured, Pyande Mong.E-mail: MNCAH@who.int
- www.nice.org.uk, nice@nice.org.uk, 0845 033 7780.
- 14 .WHO ,Select indication for monitoring reproductive health ,progress in human reproductive research ,NO .45,UNDP/UNFPA/WHO/world bank :1998:6
- WHO; research progress report; WHO/FHE/MSM/94;18,1987-1992 program
- 16 John, L. Prenatal Care: 2000:106: available at http://1997:76,755
- 17 Isaac Banda, Charles Michelo, Alice Hazemba. Factors Associated with late Antenatal Care Attendance in Selected Rural and Urban Communities of the Copperbelt Province of Zambia Medical Journal of Zambia, Vol. 39, No. 3. 2012.
- WHO, UNICEF. Revised 1990 Estimates of Maternal Mortality: A New Approach by WHO and UNICEF. Geneva: WHO and UNICEF. In Shiffman J and Okonofua F. E.The State of Political Priority for Safe Motherhood in Nigeria.BJOG.114: 127- 133. 2007
- 19 Center organization for statistic and information tecnology, kurdistan statistic regional office, unicef, ministry of health .multiple indicator cluster survey ,2006.monitoring the situation of children and women .findings from Iraq .viol 1:final report.geneva:unicef regional office;2007.
- SudhanshuSharma.Knowledge, attitude and belief of pregnant women towards safe motherhood in a rural Indian setting Manju Sharma. Vol. 1 No. 1, 13-18, September 2012
- Rosalia, A. M. & Muhammad, J. J. Knowledge, attitude and practices on antenatal care among orangasli women in Repel, Nigeria Sembelian. Malaysian. Journal of public health medicine, 11(2), 13-21(2011).