Compliance of pregnant women with Antenatal Care in Family Health Facilities in Tanta District, Gharbia Governorate, Egypt

Hewiada A. Elshazly[1], Safa H. Elkalash[1],Yasmin M. Marzouk[2]*
[1] Family Medicine department, Faculty of Medicine, Menoufia University
[2] Ministry of Health, Gharbia Governorate

Abstract:

Background: Availability of prenatal care, has played a part in reducing maternal and neonatal death rates. The WHO recommends that pregnant women should receive four antenatal care visits to be complier. **Objectives:** This study was conducted to assess compliance of pregnant women with antenatal care services. Also, it aimed to determine factors affecting it. **Methods:** A cross-sectional study was conducted on 330 pregnant women in third trimester, aged from 18 to 45 years old attending Tanta Family Health Centre and Unit for antenatal care during period from April 2017 June 2017.The data was collected by a predesigned questionnaire which is consisted of: socio-demographic data, obstetric history and compliance of participants with ANC visits. **Results:** Pregnant women who were compliant were (49. 7%). Compliance was evident among women from urban area, who were 2ry educated & their husbands were moderately socioeconomic state. Predictive factors for ANC compliance were good doctor- patient relationships (OR 13.4), women's knowledge about high risk pregnancy (OR 10.6), risky symptoms during pregnancy (OR 9.8) , being sick (OR 5.2), gestational age of 8th month (OR4.7) then presence of obstetric problems in previous& current pregnancies (OR 3.9 & 3.9 respectively).**Conclusion:** Prevalence of ANC compliance was 49.7%, Predictive factors for ANC compliance were doctor- patient relationships, women's knowledge about high risk pregnancy, risky symptoms during pregnancy, being sick, gestational age of 8th month then presence of obstetric problems in previous& current pregnancies.

Keywords: Antenatal visits, Factors affecting, High risk pregnancy, Obstetric problems, Prenatal care, Pregnancy.

Introduction: Pregnancy is the time during one or more offspring develops inside a woman.[1] Compliance describes the degree to which a patient correctly follows medical advice.[2] Antenatal care(ANC) is a type of preventive healthcare defined as the routine care of pregnant women provided between conception and the onset of labour.[3] During ANC visits,the pregnant women will receive medical information on maternal physiological ,biological changes in pregnancy, and prenatal nutrition including prenatal vitamins. Recommendations on management and healthy lifestyle changes are also made during regular ANC visits.[4] The WHO recommends that pregnant women should all receive at least four antenatal visits to spot and treat problems and get immunizations.[3]

Although antenatal care is important for improving the health of the mother and baby, many women do not perform four visits.[3] The ANC is an important for prevention, screening and early detection /treatment any complication.[6] Also, it ensures continued medical surveillance and prophylaxis.[7] Educating mothers on the physiology of pregnancy and labour by demonstrations,

Corresponding author: E-mail: yasminfawzy123@gmail.com

charts and diagrams are important components of ANC.[8] Discussing with the couple about the place, time and mode of the delivery and care of the newborn, prevent possible problems occure to the baby or the mother,[9] motivate the couple about the need of family planning and advice the mother about breast-feeding, post-natal care and immunization are crucial in ANC program.[10]

Several factors affecting the compliance of antenatal care have been identified include :maternal education, husband's education, marital status, parity,cost, household income, women's employment, media exposure, having a history of obstetric complications and ,availability, affordability and easy accessibility of health units where antenatal care is offered increase compliance with antenatal care,[11] place of residence, distance or the time to health facilities,characteristics of health services,women's status in the household , knowledge, attitude, belief and culture.[12] Knowledge of family planning, women's knowledge about danger signs in pregnancy.[13] The aim of this study was to asses compliance of women with antenatal care and to determine factors affecting compliance among pregnant women in Tanta District family health care facilities.

Methods: This study is analytic cross-sectional study which was approved by ethical committee of Faculty of Medicine, Menoufia University. The study was conducted in 15 months (starting from the beginning of January 2017, till the end of March 2018).The study was conducted in Tanta Family Health Center representing the urban population and in Mahalet Rouh Family Health unit representing the rural population.

Three hundred and thirty pregnant women who aged 18 to 45 years at the third trimester who attended to Tanta Family Health center and Mahalet Rouh Family Health Unit for ANC. This sample size was calculated using Epi- info version 7 based on 74% estimated prevalence of compliance of ANC among pregnant women in Egypt [14] with power of study 49.7% marginal error 0.05 and confidence level 95%. It was 280 increasing to 330 pregnant ladies.

Pregnant women aged 18-45 years in the third trimester attended to the selected family health clinics for ANC were included while those in the first and second trimesters were excluded. Pregnant women who met the inclusion and exclusion criteria and attended to Tanta Family Health Centre for three working days per week (selected randomly) during the period from the1st of April 2017 to the 15th of May 2017 were invited to participate in the study, 229 accepted and 21 refused with response rate (91.6%).

Pregnant women who met the inclusion criteria attended to Mahalet Rouh Family Health unit for three days weekly during the period from the 16th of May 2017 to the end of June 2017 and were invited to participate in the study, 101 cases all accepted with response rate (100%).

The study was conducted using a questionnaire which was designed to assess compliance with antenatal care in Family Health Facilities in Tanta District, Gharbia governorate. A structured interview using a questionnaire was conducted. The questionnaire included 2 parts:-

First part: It covered the following items: assessment of personal and socio-economic status.

- Basic identification data**:** such as name, age, sex, marital status, and residence.

- Socio-economic status**:** (Occupation, Education, Computer use, Family, Economic and Home sanitation)**.**[14] The total score calculated was 48 and the socioeconomic level was classified into:

  o Score <40%: Low socioeconomic standard.

  o Score 40 - <70%: Moderate socioeconomic standard.

  o Score ≥ 70%: High socioeconomic standard.

Second part: consist of questions to assess obstetric history (previous &current)**,** history of chronic illness, history of exposure to irradiation, history of previous labors.

Ethical approval: The protocol was done after approval from the Research Committee as well as the Research Ethics Committee. Informed consent was obtained from the participants after explaining the objectives of the research. Confidentiality of data was maintained and the participants were free to participate or not in the study.

Statistical analysis: The results from the study were collected, revised, coded, tabulated and analyzed by statistical package for the Social Science (SPSS Version 20 (using IBM personal computer). Quantitative data were expressed as mean and standard deviations (X±SD). Two types of statistics were included:-

  a. Descriptive statistics (e.g., percentage %, mean and SD).

  b. Analytic statistics included the following tests:

The x^2-test was used for studying the association between two qualitative variables. The *t*- test is test of significance used to compare between two quantitative variables. P-value of less than 0.05 was statistically

significant and less than 0.001 was considered highly significant.

Results: Prevalence of compliance among pregnant women who attended to Tanta Family Health Centre and Mahalet Rouh Family Health Unit, out of 330 studied pregnant women 166 women (50.3%) were noncompliant to ANC, 164 women (49.7%) were compliant (Figure1).

There was a statistically significant difference between compliant and non-compliant group regarding residence (P-value < 0.001) as about (86.6%) of compliant women were from urban areas compared to 52.4% of non-compliant women, women education (P-value < 0.001) as about (52%) of compliant women were 2ry educated compared to about 39% of non- compliant women, husband's education (P-value < 0.001) as about (59%) of compliant women's husbands were 2ry school education compared to (44%) in non-compliant group, women's work(P-value < 0.001) as about (96%) of compliant women were not working compared to (87%) of non-compliant women.

Socioeconomic status (P-value <0.001) as 87.2% compliant women were moderate socioeconomic status compared to (71%) of non-compliant and there was a statistically significant difference between both groups regarding computer use (P-value 0.001) as

about 34% of compliant women sometime use it compared to about 28% of non-compliant group (Table 1).

The most significant socio-demographic factors for prediction of noncompliance of women to ANC visits were husband illiteracy (OR=7.1) followed by moderate socioeconomic level (OR 5.7) then illiteracy of women (OR 4.5) and lastly rural residency (OR=3.8) (Table 2).The most significant benefits which were considered as predictors affecting compliance of women to ANC visits were good relation with health care providers (OR=13.4) followed by the role of ANC visits in detection of high risk pregnancy (OR=10.6) and lastly getting health education about risky symptoms during pregnancy (OR=9.8) (Table 3).

The most significant factors for prediction of compliance among women to ANC visits were being sick (OR=5.2) followed by gestation of the current pregnancy which was 8th month (OR=4.7) then presence of obstetric problems in previous and current pregnancy (OR=3.9 and 3.9 respectively) (Table 4).

Discussion: The study showed that the prevalence of compliance to antenatal care visits among the studied group was 49.7%. Our results were in agreement with study results were conducted in Nigeria and Mauritania which were (51% and 48%

respectively).[15] The findings were very low as compared with the study which had been conducted[16] in Brazil because only 2.5% of all pregnant women fail to attend an antenatal clinic. Also, it does not consistent with the excellent results [17] in Ethiopia, it was 86.3%. The study showed that, the women age didn't significantly affect the compliance of ANC.

These results were in contrary to the study was conducted in Nigeria which found that women who were 25 years and older were more than 2 times more likely to comply with antenatal care than women who were 25 years or younger. [18] And they were in disagreement with the results of Ethiopian study which found that maternal age had a role in antenatal care service compliance.[17]

Regarding the residence of the studied group there was a highly statistically significant difference between compliant and non-compliant women as 86% of the compliant women were from urban area compared to (52%) of non-compliant were from rural area. This study was in agreement with study which was conducted in Vietnam which found that compliance to antenatal care was higher in urban than rural areas.[19]

Concerning the education level of the pregnant women, there was a highly statistically significant difference between compliant and non-compliant women as about

(52%) of compliant women were 2ry educated compared to about (39%)of non- compliant. These results were supported by the study conducted in Ghana by [20] who found that women with higher level of education would increase their compliance to antenatal services and the consequences. Education level of the husband, there was a statistically significant difference between compliant and non- compliant women as about (59%) of compliant women husbands were 2ry school education compared to (44%) in non- compliant women.

Our results were in partial agreement of findings of a study conducted in Nepal and found that the levels of husbands' education increased the level of women getting four or more ANC visits.[21]

The current study showed that, most compliant women were not working as about (96%) compared to (87%) of non-compliant women not working. Our findings were not consistent with studies which were conducted in Ethiopia[12] and Indonesia[22] which found that (57.3%)& (74.5%) respectively of non- compliant women were not working. This study showed that, there was a statistically significant difference between both groups regarding computer use as about (34%) of compliant women sometimes use it compared to about (28%) of non-compliant group. These

findings were supported by studies conducted in Ethiopia, Indonesia and India [12,13,23] and concluded that mothers exposed to mass media were more compliant with ANC visits.

There was a statistically significant difference between both groups regarding socioeconomic status as (87.2%) compliant women were of moderate socioeconomic status compared to (71%) of non-compliant. The findings of our study were in agreement with the study findings which were conducted in Madang [24] and Nepal [21] and concluded that increasing level of socioeconomic status increase compliance with ANC visits.

The present study denoted that the most significant socio-demographic factors for prediction of noncompliance among women to ANC visits were husband illiteracy followed by middle socioeconomic level then women illiteracy and lastly rural residency (OR= 7.1, 5.7, 4.5 and 3.8 respectively).These findings were agree with the results of a study that was conducted in Indonesia by [23] who found that the main predictor of receiving less than four ANC visits was parity followed by a low education level.

The current study showed that the most significant benefit affect compliance of women to ANC visits was good relation with health care providers followed by the role of ANC visits in detection of high risk

pregnancy and lastly getting health education about risky symptoms during pregnancy. Also, in the present study the most significant factors for prediction of compliance of women to ANC visits was being sick followed by 8th month gestational age of the current pregnancy then presence of obstetric problems in previous pregnancy and presence of obstetric problems in the current pregnancy, (OR=5.2, 4.7, 3.9 and 3.9 respectively). Our results were in agreement with the study findings conducted in Ethiopia which found that, maternal age, husband attitude, family size, maternal education, and perceived morbidity were major predictors of antenatal care service compliance.[17]

Limitation of the study: The obtained results cannot be extrapolated due to the studied sample is not representative to all pregnant ladies in Egypt.

Conclusion: Prevalence of ANC compliance was 49.7%, Predictive factors for ANC compliance were good doctor- patient relationships, women's knowledge about high risk pregnancy, risky symptoms during pregnancy, being sick, gestational age of 8th month then presence of obstetric problems in previous and current pregnancies. Predictive factors for noncompliance to ANC were husband illiteracy and his wife, middle socio-

demographic state and lastly living in rural area.

Conflict of interest: There is no conflict of interest.

References:

1. Fritz R, Kohan-Ghadr H, Bolnick J, Bolnick A, Kilburn B, Diamond M, et al.Noninvasive detection of trophoblast protein signatures linked to early pregnancy loss using trophoblast retrieval and isolation from the cervix (TRIC). *Fertility and sterility.2015*, *104*(2), 339-346.

2. Brown MT, Bussell JK. Medication adherence: WHO cares?. In *Mayo Clinic Proceedings*.(2011, April), 86,(4), 304-314.

3. Moller AB, Petzold M, Chou D, Say L.. Early antenatal care visit: a systematic analysis of regional and global levels and trends of coverage from 1990 to 2013. *The Lancet Global Health*. 2017, *5*(10), e977-e983.

4. Pell C, Meñaca A, Were F, Afrah NA, Chatio S, Manda-Taylor L,et al. Factors affecting antenatal care attendance: results from qualitative studies in Ghana, Kenya and Malawi. 2013,*PloS one*, *8*(1), e53747

5. Barker D, Barker M, Fleming T, Lampl M. Developmental biology: support mothers to secure future public health. *Nature News*.2013, *504*(7479), 209.

6. Fraser MR. Bringing it all together: effective maternal and child health practice as a means to improve public health. *Maternal and child health journal* .2013, *17*(5), 767-775.

7. EBCOG Scientific Committee. The public health importance of antenatal care. *Facts, views & vision in ObGyn*.2015, *7*(1), 5.

8. Denktaş S, Poeran J, van Voorst SF, Vos A A, de Jong-Potjer LC, Waelput AJ,et al. Design and outline of the healthy pregnancy 4 all study. *BMC pregnancy and childbirth*.2014, *14*(1), 253.

9. Ghotbi F, Akbari Sene A, Azargashb E, Shiva F, Mohtadi M, Zadehmodares S, Farzaneh F. Women's knowledge and attitude towards mode of delivery and frequency of cesarean section on mother's request in six public and private hospitals in Tehran, Iran, 2012. *Journal of Obstetrics and Gynaecology Research*.2014, *40*(5), 1257-1266

10. Frost JJ, Sonfield A, Zolna M R, Finer L B. Return on investment: a fuller assessment of the benefits and cost

savings of the US publicly funded family planning program. The Milbank Quarterly.2014, 92(4), 696-749.

11. Kisuule I, Kaye DK, Najjuka F, Ssematimba S K, Arinda A, Nakitende G, et al. Timing and reasons for coming late for the first antenatal care visit by pregnant women at Mulago hospital, Kampala Uganda. *BMC pregnancy and childbirth* .2013, *13*(1), 121.

12. Birmeta K, Dibaba Y, Woldeyohannes D. Determinants of maternal health care utilization in Holeta town, central Ethiopia. *BMC health services research*.2013, *13*(1), 256

13. Titaley CR, Dibley M J, Roberts CL. Factors associated with underutilization of antenatal care services in Indonesia: results of Indonesia Demographic and Health Survey 2002/2003 and 2007. *BMC public health*.2010, *10*(1), 485.

14. Fahmy SI, Nofal LM, Shehata SF, El Kady HM, & Ibrahim HK.Updating indicators for scaling the socioeconomic level of families for health research. The Journal Of The Egyptian Public Health Association. (2015), 90(1), 1-7.

15. WHO, *World health statistics 20[15]*: World Health Organization 2015 ,.137-149.http://apps.who.int/iris/bitstream/handle/10665/170250/9789240694439_eng.pdf ;jsessionid=C6F93124E8F968EBFA35F40558765380?sequence=1

16. Victora CG, Matijasevich A, Silveira MF, Santos IS, Barros AJ D, Barros FC. Socio-economic and ethnic group inequities in antenatal care quality in the public and private sector in Brazil. *Health policy and planning*.2010., *25*(4), 253-261.

17. Abosse Z, Woldie M, Ololo S. Factors influencing antenatal care service utilization in hadiya zone. *Ethiopian Journal of Health Sciences* 2010, *20,* (2), 1.

18. Dairo MD, Owoyokun K E. Factors affecting the utilization of antenatal care services in Ibadan, Nigeria.*Benin Journal of Postgraduate Medicine*. 2010,12 (1), 1.

19. Tran TK, Nguyen CT, Nguyen HD, Eriksson B, Bondjers G, Gottvall K, et al. Urban-rural disparities in antenatal care utilization: a study of two cohorts of pregnant women in Vietnam. *BMC health services research* 2011, *11*(1), 120.

20. Asundep NN, Carson AP, Turpin CA, Tameru B, Agidi AT, Zhang K, Jolly PE. Determinants of access to antenatal care and birth outcomes in Kumasi, Ghana. *Journal of epidemiology and global health* 2013, *3*(4), 279-288.

21. Joshi C, Torvaldsen S, Hodgson R, Hayen A. Factors associated with the use and

quality of antenatal care in Nepal: a population-based study using the demographic and health survey data. *BMC pregnancy and childbirth* 2014, *14*(1), 94

22. Agus Y, Horiuchi S. Factors influencing the use of antenatal care in rural West Sumatra, Indonesia. *BMC pregnancy and childbirth* 2012, *12*(1), 9.

23. Pallikadavath S, Foss M, Stones RW. Antenatal care: provision and inequality in rural north India. *Social science & medicine* 2004, *59*(6), 1147-1158.

24. Andrew EV, Pell C, Angwin A, Auwun A, Daniels J, Mueller I, et al. Factors affecting attendance at and timing of formal antenatal care: results from a qualitative study in Madang, Papua New Guinea. *PloS one* 2014, *9*(5), e93025.

Table (1): Socio-demographic characteristics of the studied group

Item	Not compliant (166)		Compliant (164)		Total (330)		X2	P value
	No	%	No	%	No	%		
Age:							1.1	0.6
▪ <20	22	13.3	24	14.6	46	13.9		
▪ 20-30	116	69.9	106	64.6	222	67.3		
▪ >30	28	16.9	34	20.7	62	18.8		
Residence:							45.4	**<0.001***
▪ Rural	79	47.6	22	13.4	101	30.6		
▪ Urban	87	52.4	142	86.6	229	69.4		
Women education:							14.4*	**0.006***
▪ Illiterate/read and write	3	1.8	9	5.5	12	3.6		
▪ Primary	13	7.8	6	3.7	19	5.8		
▪ Preparatory	24	14.5	26	15.9	50	15.2		
▪ Secondary	64	38.6	85	51.8	149	45.2		
▪ University	62	37.3	38	23.2	100	30.3		
Husband education:							22.7*	**<0.001***
▪ Illiterate/read and write	3	1.8	13	7.9	16	4.8		
▪ Literate certificate	1	0.6	0	0.0	1	0.3		
▪ Primary	4	2.4	5	3.0	9	2.7		
▪ Preparatory	22	13.3	7	4.3	29	8.8		
▪ Secondary	73	44.0	97	59.1	170	1.5		
▪ University	63	38.0	42	25.6	105	31.8		
Women work:							8.3	**0.003***
▪ No	144	86.7	157	95.7	301	91.2		
▪ Yes	22	13.3	7	4.3	29	8.8		
Husband work							1.8*	0.2
▪ No	4	2.4	1	0.6	5	1.5		
▪ Yes	162	97.6	163	99.4	325	98.5		
Computer use							8.6	**0.01**
▪ Never	97	58.4	101	61.6	198	60.0		
▪ Sometimes	47	28.3	56	34.1	103	31.2		
▪ Lot of times	22	13.3	7	4.3	29	8.8		
Per-capita income							2.5*	0.5
▪ Not enough+big loan	0	0.0	1	0.6	1	0.3		
▪ Not enough+small loan	0	0.0	1	0.6	1	0.3		
▪ Enough only	76	45.8	80	48.8	156	47.3		
▪ Enough and saving	90	54.2	82	50.0	172	52.1		
Family size							4.1*	0.4
▪ > 7	1	0.6	4	2.4	5	1.5		
▪ 6	0	0.0	1	0.6	1	0.3		
▪ 5	10	6.0	9	5.5	19	5.8		
▪ < 5	155	93.4	150	91.5	305	92.4		
Crowding index							2.3*	0.5
▪ >4	2	1.2	2	1.2	4	1.2		
▪ 4– 2	164	98.8	161	98.2	325	98.5		
▪ < 2	0	0.0	1	0.6	1	0.3		
Socioeconomic level:							16.3*	**<0.001***
▪ Low	1	0.6	3	1.8	4	1.2		
▪ Medium	118	71.1	143	87.2	261	79.1		
▪ High	47	28.3	18	11.0	65	19.7		

*fisher exact test   *P value <0.001 is highly significant

Table (2): logistic regression of sociodemographic factors affecting non-compliance of women to ANC visits

Item	B	OR	CI (95%)	P value
Residence:				
▪ Rural	1.1	3.8	(1.4-7.9)	**0.04**
▪ Urban*	0.00	1		
Woman education				
▪ Illiterate	1.7	4.5	(1.8-8.9)	**0.03**
▪ Basic /secondary	1.5	3.6	(1.6-7.3)	**0.04**
▪ University *	0.00	1		
Husband education				
▪ Illiterate	2.7	7.1	(2.7-9.8)	**0.02**
▪ Basic &secondary	2.1	6.7	(2.3-10.7)	**0.01**
▪ University *	0.00	1		
Mother's work	1.1	1.2	(0.3-2.3)	0.34
Computer use				
▪ Never*	0.00	1		
▪ Sometimes	0.9	1.1	(0.2-4.1)	0.43
▪ Lot of times	0.5	1.4	(0.1-2.3)	0.25
Socioeconomic level:				
▪ Low	0.7	1.3	(0.5-1.9)	0.54
▪ Medium	4.1	5.7	(1.7-9.8)	**0.01**
▪ High*	0.00	1		

Figure (1): Compliance towards antenatal care service

Table (3): logistic regression of benefits affecting compliance of women to ANC visits

Item	B	OR	CI (95%)	P- value
▪ ANC helps in early detecting high risk pregnancy	2.5	10.6	(2.5-23.4)	**0.001**
▪ Blood pressure measurement	0.8	1.2	(0.6-1.7)	0.06
▪ Weighing	0.6	1.7	(0.3-1.9)	0.07
▪ Urine analysis	0.7	2.1	(0.8-3.2)	0.05
▪ Blood analysis	1.1	1.8	(0.7-1.4)	0.43
▪ Ultrasonography	1.5	2.4	(0.8-2.8)	0.76
▪ Information about good nutrition	1.9	5.1	(0.3-3.7)	0.12
▪ Information about risky symptoms during pregnancy	5.7	9.8	(3.6-19.8)	**0.01**
▪ Normal labor	1.4	2.5	(0.5-2.1)	0.79
▪ Appropriate waiting place	0.2	0.9	(0.1-1.3)	0.93
▪ Good relationships with healthcare providers:	9.8	13.4	(4.7-23.4)	**0.002**

Table (4): logistic regression of factors affecting compliance of women to ANC visits

Item	B	OR	CI (95%)	P value
Presence of previous pregnancies	2.1	0.9	(0.5-1.9)	0.23
Mode of previous deliveries ▪ Vaginal delivery* ▪ Caesarian section	 1.4	 1 1.8	 (0.1-4.7)	 0.35
Obstetric problems	4.7	3.9	(2.1-6.9)	**0.04**
Gestational age of the current pregnancy: ▪ 7 Months* ▪ 8 Months ▪ 9 Months	 1.7 1.1	 1 4.7 1.3	 (2.4-11.8) (0.9-2.1)	 **0.03** 0.367
Receiving the service from: ▪ Doctor ▪ Nurse*	 2.3	 2.6 1	 (0.6-6.2)	 0.28
Reasons to begin ANC: ▪ Need to start ANC* ▪ Sickness ▪ Obstetric problems in previous pregnancies ▪ Receiving tetanus toxoid	 1.8 1.6 1.2	 1 5.2 3.9 1.4	 (1.9-7.2) (1.4-8.6) (0.7-3.8)	 **0.02** **0.04** 0.21

الملخص العربي

التزام النساء الحوامل بخدمات الرعاية السابقة للولادة في منشئات صحة الاسرة بمركز طنطا الغربية- مصر

هويدا الشاذلي- صفاء الكلاش- ياسمين مرزوق

الخلفيه لقد ادي توافر الرعاية الروتينية الصحية قبل الولادة ، بما في ذلك الفحص والتشخيص قبل الولادة ، دورا في خفض معدلات وفيات الأمهات أثناء النفاس والإجهاض ، والعيوب الخلقية ، وانخفاض الوزن عند الولادة ، والعداوى الوليدية وغيرها من المشاكل الصحية التي يمكن الوقاية منها.وتوصي منظمة الصحة العالمية بضرورة تلقي النساء الحوامل أربع زيارات سابقة للولادة ليتم اعتبارها ملتزمة. **الاهداف:**هدفت هذه الدراسة إلى تقييم مدى التزام النساء الحوامل لخدمات الرعاية السابقة للولادة وتحديد العوامل المؤثرة على الامتثال بين الإناث الحوامل في مرافق رعاية صحة الأسرة في مركزطنطا. **المنهجية وطرق البحث:**اجريت دراسة مستعرضة على 330 امرأة حامل في المرحلة الثالثة من الحمل ، لرعاية ما قبل الولادة خلال الفترة من بداية أبريل 2017 حتى نهاية يونيو2017 .وقد تم جمع البيانات من خلال استبيان تم تحديده مسبقًا ويتكون من ثلاثة أقسام: البيانات الاجتماعية الديموغرافية للمشاركين ، والتاريخ المرضي للحمل السابق والحمل الحالي والتزام المشاركين بزيارات رعاية ماقبل الولادة. **النتائج:**كشفت النتائج ان النساء الحوامل الملتزمة برعاية ماقبل الولادة يمثلن (7.49 %). كان الامتثال أكثر بين النساء من المناطق الحضرية ، اللواتي كن متعلمات تعليم ثانوي وكذلك أزواجهن ، اللواتي كن ربات بيوت وحالة اجتماعية واقتصادية متوسطة. وكانت العوامل التنبؤية المؤثرة علي الالتزام برعاية ماقبل الولادة هي وجود علاقات جيدة بين الطبيب والمريض ومعرفة النساء باعراض الحمل عالي المخاطر (10.6%) ، والأعراض الخطرة أثناء الحمل وكونهن في حالة مرضية وعمر الحمل الحالي الذي كان هو الشهر الثامن ثم وجود مشاكل التوليد في الحمل السابق والحالي(3.9 %و3.9%) على التوالي. **الاستنتاجات :**كان انتشار الامتثال لرعاية ماقبل الولادة في المجموعة التي خضعت للدراسة (49.7 %) وكانت العوامل التنبؤية المؤثرة علي امتثال النساء لمتابعة ماقبل الولادة هي وجود علاقات جيدة بين الطبيب والمريض ، ومعرفة المرأة بالحمل عالي الخطورة ، والأعراض الخطرة أثناء الحمل ، وكونهن في حالة مرضية ، وعمر الحمل الحالي الذي كان في الشهر الثامن، ثم وجود مشكلات في الحمل السابق والحالي.