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Original Research Paper Gynecology

Theme: Evaluation of the Quality of ANC in Matola District

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ABSTRACT Antenatal care promotes the connection of the woman and her family to the formal health system, increasing the likelihood of women using health services and contributes to good health throughout the life cycle of women. Inadequate care during pregnancy interrupts the relationship established, affecting both the woman and her family. The study has objective to evaluate quality of ANC offered to pregnant women in Matola district. Quantitative and descriptive study was conducted, and verified 146 health books of mother's after deliver and observed 20 antenatal care visits. Only 56.3% had four visits, 39 (26.7%) of the books presented complete procedures, while 73.3% of books was incomplete, only 2 (1.4%) presented all exams and most 48 (32%) made only two exams. According to the data presented, it was realized that the established standards are not fully met. Efforts should be made in order to achieve higher levels in ANC.

KEYWORDS : Pregnancy, antenatal care, quality evaluation

ANC care is a practice of women's vigilance during pregnancy, where women are given advice on lifestyle habits, their personal and perinatal hygiene; Counseling, preparing her for motherhood. Even in this practice, it is guided in relation to the non-use of medications that are harmful to the concept, the small complaints are treated, and it's made the prevention and detection of pathologies specific to or related to pregnancy. (Rezende,1999).

The Ministry of Health of Mozambique says that, a woman is considered to have been assisted by prenatal services when she attends five consultations. In addition to the number of consultations, it is also important the stage in of the pregnancy when the woman presented at first consultation, so it should start in the first months of pregnancy (10th and 16th weeks), although for some pathologies such as the prevention of neural tube diseases and syphilis, assistance should ideally start before conception. (IDS - Mozambique, 2011)

Cochrane's literature review concluded that there is no risk approach that can effectively prevent maternal death. Screening for risk factors in developing countries has shown that complications such as dystocia and postpartum hemorrhage can't be predicted effectively. This does not lead us to underestimate the value of ANC in the detection and treatment of pregnancy-related complications, but there is strong evidence for the effectiveness of the content and frequency of visits. This is an opportunity to alert for risks associated with pregnancy and to discuss the plan and options for a professional assisted delivery. There is also evidence that targets can be achieved with a limited number of queries. However, ANC has not lost its importance as an effective and potential instrument to provide better use of services. (Bullough, C. 2005).

Aspects of ANC such as weight and height monitoring have no impact on maternal mortality, the risk approach for women with the possibility of complications has very little effect, other interventions in the ANC, such as the diagnosis and treatment of anemia and the management of sexual disease improves the health of women, without necessarily reducing the risk of death. Interventions in the prenatal consultation can't expect to reduce maternal death, and currently the focus is on improving maternal health and increasing the surviva of newborns. (WHO, 2003) The purpose of the present study was to evaluate the quality of ANC assistance offered to pregnant women according to the Kessener index. And it highlights the analysis of records of the process of ANC follow - up, the interpersonal relationship established. The decision on the methodology to be used underlies the importance and interconnection that the registrations represent because they help to verify situations detected in the consultation and that have been corrected, but that in some way need to be re-evaluated and given due follow, because they serve as a bridge in decision-making on the way of delivery or the type of care that the woman deserves, given her background.

ANC is considered at present as a way to improve the health of women and not a predictor of risk of maternal death. Its improvement must be achieved by welcoming the woman in a pleasant way, allowing the communication aspects to be the focus of the consultation, so that the partner's presence is encouraged, making in participate in the process and allows the woman to feel the need to make the health unit for childbirth, all these aspects should be recorded in the women's book, which does not occur regularly.

DONABEDIAN (1992) quoted by Castro, M., said that there is three dimensions are established for quality: technical, interpersonal and environmental. From the theories of DONABEDIAN, (1992); Castro, M., developed a conceptual framework for the understanding of health quality, based on the concepts of structure, process and results. DONABEDIAN (1992) quoted by Castro, M.*et al* 2010.

In this study, the quality evaluation focused on the content of the consultations, affirmed by (COUTINHO, 2003), as the predictor of the prognosis of the birth, showing that the evaluation of the content of the consultation shows the aspects that predict the prognosis of birth, and on the other hand this approach reminds us of the vision of improving the quality of health of the woman and child that constitutes the current focus of ANC consultation, at the present time. According to ANVERSA, E. **et al**. (2012), several indices are suggested to assess quality, among which the Kessener index, proposed in 1973 (in Adequacy of prenatal care utilization (APNCU), proposed by Ketelchuken in 1994, and the index of Takeda (1993), who modified the Kessner index, reducing the number of consultations and increasing the gestational age of the first consultation to the age of twenty weeks (ANVERSA) *et al*.

According to COUTINHO apud FERNANDES (2006), he created some criteria based on the index developed by Kessener apud Fernandes (2006) and analyzes ANC quality through categorization in 3 complementary levels and increasing complexity (levels 1, 2 and 3) And subdivides each level into appropriate, intermediate and inadequate, which facilitates the identification of possible existing problems.

Table no1 : Score to evaluate the quality

Level 1: The start and number of consultation	Level 2: Basic complements	Level 3 Procedures in the ANC
Adequate: initiation of prenatal care before 14 weeks of gestation and 6 or more visits.	Adequate: one ABO-Rh blood type record, hematocrit and hemoglobin, two blood glucose registers, VDRL	Adequate - uterine height, gestational age, edema and weight five or more records, BCF (4 or more records), fetal presentation (two or more records)
Inadequate: initiation of prenatal care after 27 weeks of gestation or 2 or fewer prenatal visits.	Inappropriate: No record of ABO-Rh, hemoglobin and hematocrit, fasting blood glucose, VDRL and Urine type 1.	Inadequate - two or less notes of uterine height, gestational age, blood pressure, edema, weight and BCF, or no record of fetal presentation
Intermediate - all intermediate situations between adequate and inadequate	Intermediate: any basic examination	Intermediates - other situations

(COUTINHO apud FERNANDES, 2006 quoted by Fonseca. L, 2011)

Methodology:

The study was based on analysis of records and observation of the ANC offered in 3 Health Centers of the District of Matola, with an attached maternity hospital were selected, those who have a birth coverage of approximately 90% (IDS-2011).146 puerperal passbooks were checked in the first 24 hours postpartum and 20 antenatal visits were observed in the third trimester. There was no preset the number of participants per Health Centers, however, these were included at random, through visits to maternity wards on alternate days. The observation of the consultations was done through visits on alternate days, in each second consultation was observed until the four visits were completed each day, and the observations were limited through information saturation.

Sampling was non-probabilistic for convenience, where the women passbooks were included in the maternity unit at the time of the study. The calculated sample size, with a margin of error of 5% and a 95% confidence interval, was 399. Of these, only 146 passbooks were included and 20 CPN were observed.

As a tool was used a datasheet adapted from the women's book, WHO observation guide for the model of 4 consultations. The database was made in the EXCEL 2010 package and transferred to the Epi-Info type program for analysis and processing.

To evaluate the quality of the prenatal consultation, the Kessener index was used, adapting it to the reality of the study.

The study had as a limitation, the time that did not allow the inclusion of the 399 budgets originally planned, the fact that professionals and users were not interviewed, did not allow a better triangulation of the data for a better understanding of the process.

Results:

Most of the passbooks verified in the study were pregnant women who underwent their ANC in Matola district Health Centers, and although they were visited in an equal number of days, the Matola II Health Center had most of the sample with 41.8% of the total population. The results are presented based on the aspects of the process.

The following are the aspects that may negatively influence the health of the woman and the fetus, especially the records of obstetric history, vital signs evaluation, laboratory tests and supplements made by the pregnant woman.

We can verify that 66.4% of the passbooks had no record on obstetric history. Vital signs that should be assessed at all visits were not recorded in all passbooks, and a substantial number of passbooks had incomplete information. Most of the pregnant women had no record of taking supplements such as ferrous Salt and among those who had records of the intakes were not always complete.

Table no2 : Registration of information in a passbook

Information	Registration	No Registration	Incomplete Registration	**Total**
Obst. History	15(10%)	97(66.4%)	34(23.3%)	146(100%)
Registration of Procedures				
Blood Pressure	52(35.6%)	23(15,8%)	71(48,6%)	146(100%)
Weight	112(76,7%)	12(8,2%)	22(15,1%)	146(100%)
Edema	139(95,2)	6(4,1%)	1(0,7%)	146(100%)
Medication Registration				
Menbendazole	128(87,7%)	14(9,6%)	4(2,7%)	146(100%)
Fansidar	14(9,6%)	86(58%)	46(31,5%0	146(100%)
Ferrous salt	48(32,9%)	22(15,1%)	76(52,1%)	146(100%)
Analysis Registration				
Blood group	2(1,4%)	144(98,6%)	-	146(100%)
Blood count	51(34%)	95(65,1%)	-	146(100%)
Glycemia	7(4,8%)	139(95,25)	-	146(100%)
Urine	56(38,4%)	90(61,1%)	-	146(100%)
Syphilis	51(34,9%)	95(65,1%)	-	146(100%)
HIV	138(94,5%)	8(5,5%)	-	146(100%)

It was verified that 6 patients had one (4.1%) ANC in pregnancy and 46 (31%) had 3 ANC during pregnancy and the 4 recommended ANC were performed by 45 (30%) of the sampled women.

Table no3 : Frequency of registration of prenatal consultations in the sample

Nº ANC	Frequency	Percentage
1	6	4,1%
2	19	13,0%
3	46	31,5%
4	45	30,8%
5	15	10,3%
6	10	6,8%
7	4	2,7%
9	1	0,7%
Total	146	100%

Regarding the distribution of analysis by pregnant women, it was verified that of the 146 passbook, 6 (4.1%) did not undergo any examination during pregnancy, and only 2 (1.4%) did all the analysis of the first semesters. Most of the pregnant women did between 1 and 4 analysis planned during prenatal care.

Table no4 : Frequency of recording of analyzes

Nº ANALISES	Frequency	Percentage
0	6	4,1%
1	43	29,5%
2	48	32,9%
3	37	25,3%
4	10	6,8%
6	2	1,4%
Total	146	100,0%

In the consultations observed, it was noticed that the gynecological and breast examination was done in only one consultation of the 20 ANC's observed. The HIV test was done for most of the pregnant women, unlike the syphilis test that was performed in only one patient. Tests for HIV screening were packed in place; medicines like ferrous salt were in clean, locked containers.

The interpersonal relationship was not effective between the nurses and the patients, since they did not focus the procedures or

counseling on the patient's complaints, the majority of the patients were not greeted, the procedures were not explained before they were performed, the counseling was made and finished without the verification that they were understood by the patient, and the patient was not invited to collaborate actively to the issues addressed in the counseling, making her realize the importance of heparticipation.

The patient had three moments of the consultation; therefore, the observations and tests of the patients were not done in a single moment which may have contributed negatively to the patient's comfort. The question of privacy and confidentiality was observed, because at each visit observed, the patient was alone in the office. The room was clean, and the screened-in marquise, however the sheet used for observation marquise was the same for all. Instruments for assessing vital signs were present in the office, although in two patients the manometer was the same for several offices. There was no ANC norms were observed in accessible places.

Discussion:

The procedures of the ANC are fundamental to prevent the appearance of preventable complications, through a timely and appropriate screening of several conditions. During the verification of the passbooks, it was verified that Obstetric History was not registered in 66.4% of the passbooks, considering that it is an essential aspect to decide on the path of birth, and where it should occur, the lack of registration of this Information can limit the continuity of care for women and in some situations complications such as uterine rupture and hemorrhages among other conditions can arise due to lack of information such as past cesarean section and other chirurgical intervention , that could help for decision making. From the observations made it was noted that this question is asked the pregnant women, which leads us to believe that the registers were not valued or that the unregistered passbooks could be prim gravidae.

Of the vital signs evaluated in the pregnant women and recorded in the notebook, blood pressure was evaluated in 35.6% of the population studied in all the consultations, considering that it is a vital sign of such importance, its evaluation helps in the early detection of increased blood pressure that can culminate with fatal consequences such as pre-eclampsia and eclampsia. Regarding the evaluation of edema and weight, despite the fact that most of the passbooks are registered, still others do not present records, which may indicate a lack of evaluation. Importantly, these vital signs should be effectively monitored in all pregnant women, since it aids to detect diseases such as hypertension and gestational diabetes.

Regarding medication and supplementation in pregnancy, 14 (9.6%) did not receive Mebendazole supplementation, leading to a risk of developing parasites, which combined with the lack of effective supplementation with ferrous salt, in 67.2% of the patients can lead to anemia and its complications. Still in relation to the intermittent and presumptive treatment of Malaria, 58.9% of the passbooks did not present a register, being able to develop malaria and its complications at any time during pregnancy.

98.6% of the passbooks did not present the blood group and Factor Reshus, which are recommended for all women at first pregnancy and all multiparous women who did not, and all pregnant women who have doubts about the examination according to WHO. In the sample, it was found that only 2 (1.4%) had registered the examination, which could contribute to an unfavorable prognosis for the fetus, the development of fetal erythroblastosis among others.

Diabetes screening through the blood glucose test was not recorded in 95.2% of the books, which may lead to a lack of early diagnosis of diabetes during pregnancy and to counseling for pregnant women.

According to the WHO, in the model of 4 ANC, two urine tests are recommended, one in the first and the other in the second visit to detect proteinuria in nulliparous or pregnant women with hypertensive antecedents, however in the sample 61.6% of the passbooks did not present the exam which may lead to a sub-diagnosis of urinary infections that may culminate in miscarriages or the development of hypertensive diseases.

Although (IDS) 2011 reports a high prevalence of syphilis cases, most of the verified registries did not present the syphilis test, which certainly contributes to a high prevalence of undiagnosed cases among the population, and a possible increase in congenital malformations .

Of the 146 registered passbook only registered 34.9%, according to (SUCA, R.2008), the non-detection of infected pregnant women, results in absence of treatment and impossibility of prevention of the disease in the newborn and his Mother.

The HIV test was recorded in most of the passbooks, 138 (94.5%), which is a positive fact for the detection of seropositivity among pregnant women. It is noted here that the ANC is an opportunity to perform the test for the woman and have a follow-up, in this case the passbooks that were not registered, although the minority, may have missed the opportunity to take the test or we can still be before patients who had the test on time, but still this result should be recorded. In the observations made it was noted that most of the users performed the examination.

Through the presented data, there is devaluation in the registries considering the importance of these for the information system, to determine the epidemiological profile of the population and the possibility of these to serve for decision making and as a legal instrument of the assistance dispensed. (Anversa, E.) 2002 The fact that we have incomplete information in the woman's book makes us agree with a study by (SUCA, R.) 2008 that according to which the evaluation of the quality of the ANC can be influenced by the precariousness of the registries, since without them there is no possibility to affirm that a certain procedure was done or not and still limit the continuity of attention to women. The fact that the woman had 3 consultation moments reflected in the time she took to a consultation, which, together with the fact that she is not greeted by the nurse, contributes negatively to an effective interpersonal relationship and even convenience, not allowing the pregnant woman feel welcome which may negatively influence the reduction of health center use. It is also a factor in the absence of the pregnant woman from the consultation or us for childbirth, which is why we found users who did not have the 4 consultations planned by WHO. The fact that there is no effective relationship does not help to explore the affective values of the pregnant woman and even work on the psychological aspects, communication so that the pregnant woman can expose the doubts of the gestational period and find answers to her fears, in short the interpersonal relationship would help the pregnant woman to feel respected and accepted. In this case interpersonal communication may have been influenced by the present observer. According to Castro, M. The quality of ANC involves all activities developed by professionals and patients. Professionals should be attentive to the needs and expectations of patients, seeking to listen to them, clarifying their doubts and offering the necessary information and guidance.

The relationship within the process is important to prepare the woman for delivery, from the beginning of pregnancy, to obtain guidance and clarification of doubts about the birth as a natural process. That is why it is the duty of the professionals to accept with dignity the woman as a subject of law, which is what sustains the basis of humanization, and understands, to understand the neighbor in its complexity, totality, individuality and its relations with society.

It was noteworthy that the environment for the consultation was clean, and that privacy and confidentiality aspects were taken into

account, but it was noted that the fact that the same sheet is used for all users means that there may be a strong focus Of transmission of infections among users.

In all the consultation offices there were equipment and medicines, necessary for the ANC, and it is not possible to see the fact that the passbooks presented without information or with incomplete information. The lack of registration leads us to reflect on what is actually done in the consultation.

Assessment of the quality of prenatal consultation:

The following criteria were defined as ANC quality criteria in the district of Matola, adapted from the kessener index, where it was defined:

Number of ANC 4 = with score of 4; Prenatal consultation procedures such as weight, blood pressure and MI edema evaluation in all consultations with a score of 3, results from 6 analyzes with a score of 6, supplements with medications (only Ferrous salt and Mebendazole) with a score of 2 . Like this:

Table no5 : Assessment of the quality of prenatal consultation

Procedures	**Score**
Number of ANC	4
Clinical Procedures in ANC	3
Record of analyzes made	6
Distribution of Supplements	2
Total	**15**

A pregnant woman with a maximum score of 15 was not found, the score was lowered to 14, and the consultation was classified in the district of Matola in two categories.

All pregnant women with a score between 1 (one) and 10 (ten) were considered to have had insufficient prenatal evaluation. The second category belongs to all pregnant women with a score between 11 (eleven) and 14 (fourteen) were considered to have had an acceptable prenatal evaluation. Acceptable for 134 (91.8%) and insufficient CPN for 12 (8.2%).

As all pregnant women must have a prenatal care that involves the verification of all the questions that help to improve the health of women, we understand that pregnant women who had insufficient prenatal care had a great predisposition for the development of different pathologies and even to give birth to newborns with congenital disturbs.

Conclusion:

The CPN in the Matola District is acceptable considering the parameters defined from the Kessener index. The lack of complete records of NPC data in a woman's notebook can have serious consequences for the continued care of women and make decision making difficult. It may also mean that a certain procedure has not been done, which may contribute to the return of preventable conditions through an adequate prenatal control.

The observations corroborated with the data verified in the carnets, since certain procedures and even aspects related to communication were not taken into account in the consultations which contributes negatively to the interpersonal relationship and may cause inhibition of the pregnant woman to use maternity wards .

Recommendations:

That more studies be done involving interviews with professionals and users, and that more elements are sought for better triangulation of the data, considering the different prisms. That this study serves to awaken managers, the academic community, and health professionals about what can be done to improve the quality of ANC.

The Department of Reproductive Health defines more effective strategies that allow the ANC to be done observing the established norms.

Improve the training and supervision of staff performing ANC. Disclosure of standards among SMI nurses, Periodic training regarding prenatal care.

References:

1. Bullough C. et al, Estratégias atuais para a redução da mortalidade materna, setembro de 2005, 12 (9); 1180-8, disponível em http://www.ncbi.nlm.nih.gov/pubmed/16101594 acessado em 11 de setembro de 2013
2. Browne's, J. & Dixon, G. Cuidados pré-natais, 11º ed, Churchill-Livingstone, Edinburg - Londres, 1978.
3. Caroli G. Quão eficaz é o atendimento pré-natal na mortalidade materna e prevenção séria Morbidade, por meio da evidência, 15 de Janeiro de 2001; Suppl 1; 1-42 disponível em Http://www.ncbi.nlm.nih.gov/pubmed/11243499 acessado em 12 de Outubro de 2013.
4. Carroli. Revisão sistemática da OMS de ensaios controlados randomizados de cuidados pré-natais de rotina. Http://www.ncbi.nlm.nih.gov/pubmed/11377643 acessado em 10 de Outubro de 2013.
5. CASTRO, M. *et al*, Qualidade do pré-natal: prospectivo prospectivo de EGESSAS, Rene Magazine, vol. 11, edição especial, 2010. P. 78-81, Http://www.revistarene.ufc.br> Capa> V11 acessado em 20 de Novembro de 2014.
6. Departamento de equidade, pobreza e determinantes sociais da saúde (EIP / EQH), relatório da OMS sobre desigualdades na saúde materna e infantil em Moçambique, Janeiro de 2007.
7. Fonseca, L. *et al*; Avaliação da qualidade do atendimento pré-natal prestado às gestantes utilizando o Sistema Único de Saúde, a Teresina. Revista interdisciplinar NOVAFAPI Teresina V4 n2, P4045, Abril-Maio-Junho de 2011. acessado em Http://www.novafapi.com.br/sistemas/revistainterdisciplinar/v4n2/pesquisa/p6_v4n2..pdf em 30 de maio de 2013.
8. Fonseca, L. *et al*. Cuidados pré-natais fornecidos a mulheres grávidas usando o sistema de saúde único. Rv. NOVAFAPI interdisciplinar, Teresina, V4 n2, p40-45, Abr-May-Jun.2011. http:www.novafapi.com.br/sistemas/revistainterdisciplinar/v4n2/pesquisa/p6_v4n2.pdf; acessado em 10.10.2013.
9. FERNANDO, B. M. *et al*. Avaliação do risco habitual de cuidados pré-natais realizados por enfermeiros de obstetra em um centro de nascimento. RECOM, Rv Nursing Center West JAN / Março de 2011.
10. Jandrey, C. Avaliação da qualidade do processo de pré-natal na rede pública do Município de Cachoeirinha / RS, Porto Alegre, 2005. http://www.lume.ufrgs.br/bitstream/handle/10183/12348/000480933.Pdf?a 20 de Novembro de 2014.
11. Lincentto, O. *et al*; Atenção pré-natal, Oportunidades para o recém-nascido africano, Capítulo 2, OMS. Acessado em http://www.who.int/pmnch/media/publications/aonsectionIII,_2.pdf em 13 de Outubro de 2013.
12. Libera, B. Avaliação do pré-natal a partir das perspectivas de mulheres puérperas e profissionais de saúde, Universidade Federal do Rio de Janeiro. Ciência e Saúde Coletiva - 2011.Http: //www.scielosp.org/pdf/csc/v16n12/34.pdf acessado em 20 de Outubro e 2013
13. Ministério da Saúde; Cuidados pré-natais, padrões e manuais técnicos, 3ª edição, Brasília, 1998. http://abenfo.redesindical.com.br/arqs/manuais/100.pdf, acessado 10.10.2010.
14. Ministério da Saúde, avaliação das necessidades de saúde materna e neonatal em Moçambique (parte II) -MISAU, 2007.
15. Ministério da Saúde, Padrões Nacionais de Atenção Pré-natal, Pós-parto e Pós-parto, Moçambique - Maputo, 2008. hptt: //www.misau.gov.mz.
16. Mc. Cormick, M. e Siegel, cuidados pré-natais, eficácia e implementação, imprensa da Universidade Cabridge, United Kigdom, 1999.
17. Queiroz, DT et al; Observação de participantes na pesquisa qualitativa: conceitos e aplicações na área de saúde, R. enferm UERJ, Rio de Janeiro, 2007 Abr / Jun; 15 (2): 276-83, acessado em http://www.facenf.uerj.br/v15n2/v15n2a19.pdf em 20 de Outubro
18. Rezende, M; Obstetrícia Fundamental, 8ª edição, editor Guanabara koogan, Rio de Janeiro, 1999.
19. SOUSA, S. Método de coleta de dados por entrevista, 2009, disponível em http://eportefolio-mie.blogspot.com/2009/11/metodo-de-recolha-de-dados-por.html acessado em 29.09.2013.
20. Silveira, D. *et* al., Cuidados pré-natais na rede básica: avaliação da estrutura e processo, Cad. Saúde Pública, Vol.17, num.1, Rio Janeiro 2001. Acessado em http: //dms.ufpel.edu.br / ares / handle / 123456789/30 em 19 de Outubro.
21. SOUSA, L. Satisfação das gestantes no pré-natal em relação aos serviços prestados na cidade de Sertão S. António, Porto Alegre, 2005, disponível em Http://www.lume.ufrgs.br/bitstream/handle/10183/12357/000480821.pdf?sequence=1, acessado em 19 de Outubro.
22. Trevisan, M. *et al*, Perfil de cuidados pré-natais entre os usuários do sistema de saúde individual no sul de Caxias, Ver. Bras. Ginecol. Obsteto. Vol 24 n ° 5, Rio de Janeiro, Junho de 2002. acessado em http://www.scielo.br/pdf/rbgo/v24n5/10650.pdf em 11 de Outubro de 2013.
23. Villar, julgamento aleatório randomizado de J. Antenatal para avaliação de um novo modelo de cuidados pré-natais, Lancet, 19 de maio de 2001, 35799268): 155-64 disponível a partir de Http://www.ncbi.nlm.nih.gov/pubmed/11377642 acessado em 10 de Outubro de 2013.
24. Organização Mundial de Saúde, Atenção pré-natal nos países em desenvolvimento: análise das Tendências, Níveis e diferenciais, 1990-2001, OMS, 2003.
25. WHO, Antenal Care em países em desenvolvimento. Promessas, conquistas e oportunidades perdidas, análise de Tendências, Nível e diferencial 1990-2001;
26. Organização Mundial da Saúde 2003. 26. SUCA, R26. SUCA, R. *et al* Em Avaliação da assistência pré-natal em unidades básicas do Município são Paulo. Rv Latino-americana de Enfermagem, Novembro-Dezembro de 2008.

http:// wwweerp.usp.br/rlae acessado Junho 2013.
27. Secretaria do Estado de Saúde de São Paulo, Atenção a gestante e a puérpera no SUS-SP. Manual Técnico do pré-natal e puerpério. São Paulo: SES/SP 2010.
28. Oba,M. *et al* A precariedade de registos da assistência pré-natal em uma unidade básica de saúde do município de Ribeirão preto, Revista latino – americana, Enfermagem_ Ribeirão Pretov6-n1-p.53-61-Jan-1998.
29. Li- Gang Yang *et al*. Syphilis test availability and Uptake at medical facilities in southern China, Bull word health Organ,89:798-805/2011 acessado em 10 de Julho de 2013