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Research Article

A STUDY TO ASSESS THE PREVALENCE OF MORBIDITY PROFILE AMONG WOMEN'S DURING PREGNANCY AT PRIMARY HEALTH CARE CENTRE IN THIRUMAZHASAI

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ABSTRACT

In most developing countries, pregnancy and childbirth are accepted as normal events of life and it is not surprising that problems associated with pregnancy are also accepted. In developing countries interventions that are known to be effective in reducing maternal and perinatal mortality and morbidity are not universally provided. **Objectives:** Assess the prevalence of morbidity profile in selected demographic variables of antenatal mothers. **Methodology:** Descriptive research design was chosen to assess the prevalence of morbidity profile among women's during pregnancy in primary health care center in Thirumazhasai. The study was conducted in primary health centre in thirumazhasai. In this study population refers to all the antenatal mothers attending the antenatal clinic in the primary health care centre in thirumazhasai. The sample size was 60 antenatal mothers. Non-probability, convenient sampling technique was used. **Result:** Frequency and percentage distribution of the demographic variables among antenatal mothers. It shows that out of 60 samples, among 12 (20%) were in the age group of below 19 years, 39 (65%)were in the age group of 20-30 years, 9 (15%) were in the age group of above 30 years, 32 (53%) were primi gravida, 32 (53%) were got marriage below 19 years. Assess the prevalence of morbidity profile among women's during pregnancy period. It shows that the prevalence of morbidity profile among women's during pregnancy among 60 samples has an obstetric problems, 44 (73%) has anemia, 20 (33%) has increased blood pressure, 17 (28%) has diabetes mellitus, 3 (5%) has seizure during pregnancy, 3 (5%) has cord prolapse, 3 (5%) has premature labor, 9 (15%) has hydraminos, 2 (3%) has ectopic pregnancy. It shows the prevalence of morbidity profile among women's during pregnancy among 60 samples has an non-obstetric problems, 52 (87%) has tenderness and swollen of breast, 59 (98%) has nausea, 59 (98%) has vomiting, 59 (98%) has fatigue and giddiness, 57 (95%) has a headache, 59 (98%) has increased urination.

INTRODUCTION

In most developing countries, pregnancy and childbirth are accepted as normal events of life and it is not surprising that problems associated with pregnancy are also accepted without much ado. A new approach to measuring maternal mortality indicates that there are about 585, 000 maternal deaths annually worldwide, 99 per cent of them in developing countries (AbouZhar and others, 1996). Over 20 million babies are born in India every year[1]. The maternal mortality ratio ranges from 400 to 550 deaths per 100, 000 live births, with wide variations between different states (Bhat and others, 1992)[2]. However, mortality represents just the tip of the iceberg. It has been estimated that for every maternal death, there are over 100 episodes, indicating an overall figure of 62 million morbidities annually (Koblinsky, 1993)[3]. Though these are crude estimates, they highlight the magnitude of the problem.

The detection of high risk pregnancies through antenatal care has been advocated as a good tool to reduce the maternal mortality and morbidity in developing countries. An estimated 15 % of pregnant women's in developing countries' experiences pregnant related complications and nearly 530, 000 women worldwide die annually from pregnant related complication (1994)[4].In developing countries interventions that are known to be effective in reducing maternal and perinatal mortality and morbidity are not universally provided. The WHO estimates that anaemia affects over half of the pregnant women in developing countries.[6] Recent estimates in the developing countries including Nigeria put the prevalence at 60.0% in pregnancy and about 7.0% of the women are said to be severely anaemic[7]. The high prevalence and the aetiological factors responsible for anaemia in pregnancy are multiple and their relative contributions are said to vary by geographical area and by season[8]. While estimates of maternal mortality have been made for most developing countries, information on gynecological and obstetric morbidity is scanty. A few studies on gynaecological morbidity have been conducted in India, but community-based data on obstetric morbidity are rare. A study from South India showed that women suffering from obstetric complications during a previous childbirth were more likely to suffer subsequent gynecological morbidity. This implies that pregnancy-related problems have far-reaching consequences on the overall reproductive health of women, in addition to their contribution to maternal mortality (Bhatia and Cleland, 1995)[9].

Objectives: Assess the prevalence of morbidity profile in selected demographic variables of antenatal mothers**.**

Methodology: A descriptive study was chosen to assess the prevalence of morbidity profile among women's during pregnancy. Approval for this study was obtained from the Institution Review Board at SIMATS. The setting of the study is a primary health care center in Thirumazhasai. The samples were selected by using non probability convenient sampling technique. The data were collected from the 60 samples those who are attending antenatal clinics in the primary health care center. The samples who meet the inclusion criteria and those who gave consent to participate in the study wereselected for the study samples.Exclusion criteria: A women who was in the puerperium period, women who had any major and chronic gynecological problems such as cervical cancer, those not willing to participate in the study.The data collection was collected by using questionnaires on the demographic variables, self structured questionnaires to assess the prevalence of morbidity profile among women. The study period is from 16.02.2018 to 17.02.2018.. The collected data were analyzed by using descriptive and inferential statistics.

Results: Frequency and percentage distribution of the demographic variables among antenatal mothers. It shows that out of 60 samples, among 12 (20%) were in the age group of below 19 years, 39 (65%)were in the age group of 20-30 years, 9 (15%) were in the age group of above 30 years, 32 (53%) were primi gravida, 24 (40%) were second gravida, 4 (7%) were multigravida, 32 (53%) were got marriage below 19 years, 25 (42%) were got marriage between 20 – 30 years, 39 (5%) were got marriage above 30 years, 4 (7%) were has a history of stillbirth, 4 (7%) were has a history of abortion. Regarding prevalence of morbidity profile among women's during pregnancy period. It shows that the prevalence of morbidity profile among women's during pregnancy among 60 samples has an obstetric problems, 44 (73%) has anemia, 20 (33%) has increased blood pressure, 17 (28%) has diabetes mellitus, 3 (5%) has seizure during pregnancy, 3 (5%) has cord prolapse, 3 (5%) has premature labor, 9 (15%) has hydraminos, 2 (3%) has ectopic pregnancy. It shows the prevalence of morbidity profile among women's during pregnancy among 60 samples has an non-obstetric problems, 52 (87%) has tenderness and swollen of breast, 59 (98%) has nausea, 59 (98%) has vomiting, 59 (98%) has fatigue and giddness, 57 (95%) has headache, 59 (98%) has increased urination, 58 (97%) has food aversion, 48 (80%) has heart burns, 58 (97%) has burning sensation during urination, 5 (8%) has fever during antenatal period, 58 (97%) has backache, 51 (85%) has abdominal pain, 51 (97%) has muscle cramps, 50 (83%) has shortness of breath, 47 (78%) has constipation, 35 (58%) has urinary tract infection, 45 (75%) has itching and rashes, 53 (88%) has swelling in legs, hand, abdominal wall, 5 (8%) has vaginal discharge with foul smell, 11 (18%) has vaginal bleeding before 8 months, 10 (17%) has vaginitis, 18 (30%) has varicose vein, 10 (17%) has vaginal spotting, 29 (48%) has frequent urination.

Table 1: Frequency and percentage distribution of the demographic variables among antenatal mothers (N =60)

S.No.	Demographical variables	Frequency	Percentage
1	**Age**		
	Below 19 years	12	20%
	20 – 30 years	39	65%
	Above 30 years	9	15%
2	**Parity**		
	Prim gravid	32	53%
	Second gravid	24	40%
	Multi gravid	04	07%
3	**Age at marriage**		
	Below 19 years	32	53%
	20 – 30 years	25	42%
	Above 30 years	3	5%
4	**History of Still Birth**		
	Yes	04	07%
	No	56	93%
5	**History of Abortion**		
	Yes	04	07%
	No	56	93%

Table 1 shows that out of 60 samples, among 12 (20%) were in the age group of below 19 years, 39 (65%)were in the age group of 20-30 years, 9 (15%) were in the age group of above 30 years, 32 (53%) were primi gravida, 24 (40%) were second gravida, 4 (7%) were multigravida, 32 (53%) were got marriage below 19 years, 25 (42%) were got marriage between 20 – 30 years, 39 (5%) were got marriage above 30 years, 4 (7%) were has a history of stillbirth, 4 (7%) were has a history of abortion.

Table 2: Assess the prevalence of morbidity profile among women's during pregnancy period. (N =60)

Problems	Types of morbidity profile	Frequency	Percentage
Obstetric Problems	Anemia	44	73%
	Increased blood pressure	20	33%
	Diabetes mellitus	17	28%
	Seizure during pregnancy	03	5%
	Cord prolapse	05	5%
	Premature labor	05	5%
	Hydraminos	15	15%
	Ectopic pregnancy	02	3%
Non - Obstetric Problems	Tenderness and swollen breast	52	87%
	Nausea	59	98%
	Vomiting	59	98%
	Fatigue and giddiness	59	98%
	Headache	57	95%
	Increased urination	59	98%
	Food aversion	58	97%
	Heart burns	48	80%
	Morning sickness	58	97%
	Burning sensation	55	92%

	Fever during pregnancy period	5	8%
	Backache	58	97%
	Abdominal pain	51	85%
	Muscle cramps	51	85%
	Shortness of breath	50	83%
	Constipation	47	78%
	Urinary tract infection	35	58%
	Itching and rashes	45	75%
Non - Obstetric Problems	Swelling in legs, hands, abdominal wall	53	88%
	Vaginal discharge with foul smell	5	8%
	Vaginal bleeding before 8 months	11	18%
	Vaginitis	10	17%
	Varicose vein	18	30%
	Vaginal spotting	10	17%
	Frequency of urination	29	48%

Table 2 shows that the prevalence of morbidity profile among women's during pregnancy among 60 samples has an obstetric problems, 44 (73%) has anemia, 20 (33%) has increased blood pressure, 17 (28%) has diabetes mellitus, 3 (5%) has seizure during pregnancy, 3 (5%) has cord prolapse, 3 (5%) has premature labor, 9 (15%) has hydraminos, 2 (3%) has ectopic pregnancy.It shows the prevalence of morbidity profile among women's during pregnancy among 60 samples has an non-obstetric problems, 52 (87%) has tenderness and swollen of breast, 59 (98%) has nausea, 59 (98%) has vomiting, 59 (98%) has fatigue and giddness, 57 (95%) has headache, 59 (98%) has increased urination, 58 (97%) has food aversion, 48 (80%) has heart burns, 58 (97%) has burning sensation during urination, 5 (8%) has fever during antenatal period, 58 (97%) has backache, 51 (85%) has abdominal pain, 51 (97%) has muscle cramps, 50 (83%) has shortness of breath, 47 (78%) has constipation, 35 (58%) has urinary tract infection, 45 (75%) has itching and rashes, 53 (88%) has swelling in legs, hand, abdominal wall, 5 (8%) has vaginal discharge with foul smell, 11 (18%) has vaginal bleeding before 8 months, 10 (17%) has vaginitis, 18 (30%) has varicose vein, 10 (17%) has vaginal spotting, 29 (48%) has frequent urination.

Figure 1: Frequency Distribution of Obstetric Morbidity Profile of Womens during Pregnancy

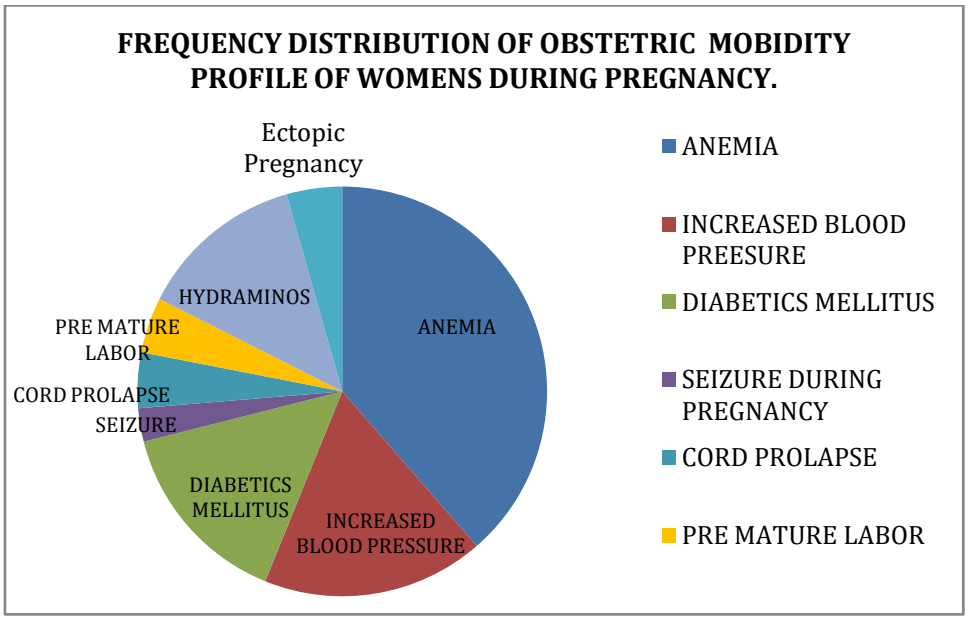
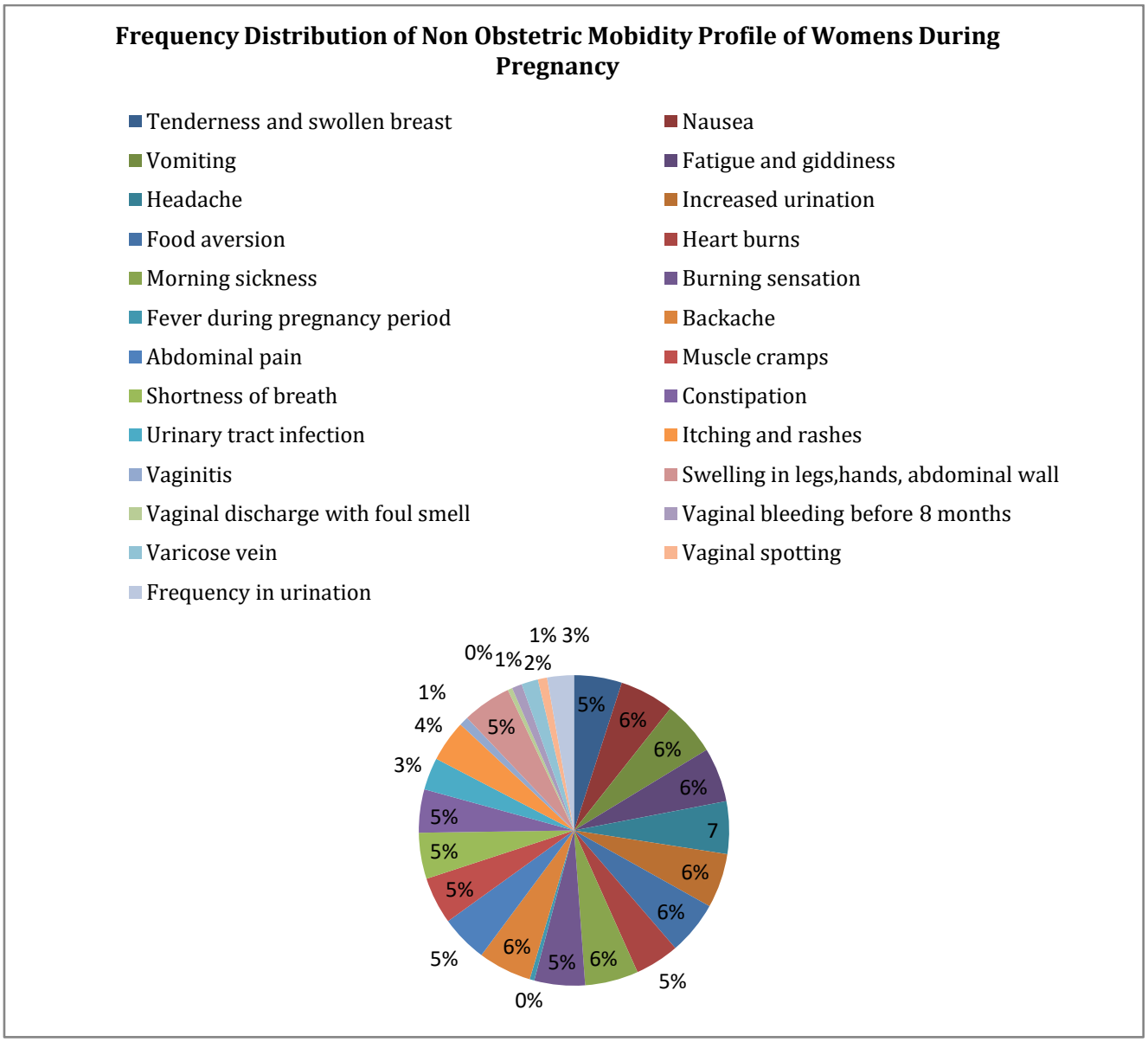


Figure 1 shows that the prevalence of morbidity profile among women's during pregnancy among 60 samples has an obstetric problems, 44 (73%) has anemia, 20 (33%) has increased blood pressure, 17 (28%) has diabetes mellitus, 3 (5%) has seizure during pregnancy, 3 (5%) has cord prolapse, 3 (5%) has premature labor, 9 (15%) has hydraminos, 2 (3%) has ectopic pregnancy.

Figure 2: Frequency Distribution of Non Obestetric Morbidity Profile of Womens During Pregnancy



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DISCUSSION

The present study is the first, to our knowledge, to involve the use of population-based data to summarize the prevalence of maternal morbidity during labor and delivery hospitalizations in the community health Centre. There are many studies on the prevalence and determinants of maternal mortality but very less work has been done on maternal morbidity. G Rama padma stated study showed a high prevalence of maternal morbidity in rural areas of Andhra Pradesh[18]. The present study reported a higher prevalence anaemia (86.91%), pregnancy induced hypertension (7.9%) and a lower prevalence of urinary tract infections (0.37%), gestational diabetes (0.55%). Whereas, T. Ruwanpathirana et al study reported a higher

prevalence pregnancy induced hypertension (9.6%), gestational diabetes (4.6%) and a lower prevalence of urinary tract infections (2.5%)[19]. Anaemia is one of the most common complications during pregnancy and could cause adverse pregnancy outcomes. It is a public health problem not only in developing but also in industrialized countries. In the present study, the overall prevalence of anaemia is 73%. According to the WHO classification of the public health importance of anaemia, it was a moderate public health problem among the pregnant women in our study. The results of a study in Pakistan showed that patients with low income comprised a higher portion of patients with anaemia compared to those with a high income.[20] This is likely related to the lack of information about adequate nutrition during pregnancy, economic factors and the inaccessibility of health care centres. Interestingly, our study also indicated that pre-pregnancy BMI < 18.5 kg/m^2 was a predictor of anaemia, which may be due to the inadequate nutrition during pregnancy. Previous studies have shown an association of anaemia with low education status.[21] and multiparity[21.] However, we did not find this association in our study. This might have been due to variations in the methods and study subjects involved. These predictors of anaemia (including age, income, area, pre-pregnancy BMI) may provide clinical guidance. Women with these risk factors should appropriately increase their nutrition during pregnancy, and pregnant women diagnosed with anaemia should take iron supplements.[23] Hypertension was detected in 33% among the pregnant women. This complicates 7-10% of Pregnancies. The disease is a symptomatic initially and if detected early one can prevent eclampsia, IUGR and other complications. Eclampsia is responsible for 12% of maternal deaths.[24] The association between GDM and anaemia has not been well reported. In our study, we observed that anaemia reduced the prevalence of GDM. Lao et al. reported that the prevalence of GDM is reduced in iron deficiency anaemia. These results indicate that haemoglobin level is positively associated with the prevalence of GDM. Our study also first reported that anaemia is associated with polyhydramnios, which may occur in parallel with the GDM outcome.[25] According to this study results, we recommended than that mentioned proper screening and identification of high risk pregnancy. to be used for all pregnant women. comparative study of obstetric outcome of Moreover, Health education sessions should be patients with pregnancy induced hypertension: conducted for all females, especially pregnant women, economic considerations.

CONCLUSION

Maternal morbidity is notably high, while most of them were not life-threatening. They are more likely to have marked influence on their well-being and long-term health status. Most conditions could be addressed through provision of health promotion and preventive interventions. Health education at community level is necessary to create awareness about importance of ante natal care, institutional delivery and post natal care in addition with increasing rate of literacy and women empowerment.

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REFERENCES

1. IIPS (International Institute for Population Sciences) (2003). National Family Health Survey (Mumbai).
2. Loudon, I. (2012). Death in Childbirth: An International Study of Maternal Care and Maternal Mortality, 1800-l950 (Oxford, Clarendon Press).
3. Measham, A.R. and R.A. Heaver (2006). India's Family Welfare Programme: Moving to a Reproductive and Child Health Approach, Directions in Development (Washington DC, World Bank).
4. Rohde, J.E. (2015). Removing risk from safe motherhood International Journal of Gynecology and Obstetrics 50: Supplement 2, pp. S3-S10.
5. Srinivasa, D.K., K.A. Narayan, A. Oumachigui and G. Roy (2011). Prevalence of Maternal Morbidity in a South Indian Community, Ford Foundation Study, (Pondicherry, Department of Community Medicine, Jawarhal Institute of Postgraduate Medical Education and Research).
6. Hoyert DL. Maternal mortality and related concepts. Vital Health Stat 2007;3 (33):1–13.
7. Callaghan WM, Creanga AA, Kuklina EV. Severe maternal morbidity among delivery and postpartum hospitalizations in the United States. Obstet Gynecol. 2012;120 (5):1029–1036.
8. Kuklina EV, Meikle SF, Jamieson DJ et al. Severe obstetric morbidity in the United States: 1998-2005. Obstet Gynecol. 2009; 113 (2 part 1):293–299.

9. Berg CJ, MacKay AP, Cheng Q, Callaghan WM. Overview of maternal morbidity during hospitalization for labor and delivery in the United States: 1993-1997 and 2001-2005. Obstet Gynecol. 2009;113 (5):1075–1081.
10. Mann S, Pratt S, Gluck P et al. Assessing quality in obstetrical care: development of standardized measures. Jt Comm J Qual Patient Saf. 2006;32 (9):497–505.
11. Geller SE, Rosenberg D, Cox SM, Kilpatrick S. Defining a conceptual framework for near-miss maternal morbidity. J Am Med Womens Assoc. 2002;57 (3):135–139.
12. Callaghan WM, MacKay AP, Berg CJ. Identification of severe maternal morbidity during delivery hospitalizations, United States, 1991-2003. Am J Obstet Gynecol. 2008;199 (2): 133.e1–8.
13. Brace V, Penney G, Hall M. Quantifying severe maternal morbidity: a Scottish population study. BJOG. 2004;111 (5):481–484.
14. Srinivas SK, Epstein AJ, Nicholson S, Herrin J, Asch DA. Improvements in US maternal obstetrical outcomes from 1992-2006. Med Care. 2010;48 (5):487–493.
15. Wen SW, Huang L, Liston R et al. Maternal Health Study Group, Canadian Perinatal Surveillance System. Severe maternal morbidity in Canada, 1991-2001. CMAJ. 2005;173 (7):759–764.
16. Goffman D, Madden RC, Harrison EA, Merkatz IR, Chazotte C. Predictors of maternal mortality and near-miss maternal morbidity. J Perinatol. 2007;27 (10):597–601.
17. Berg CJ, Harper MA, Atkinson SM et al. Preventability of pregnancy-related deaths: results of a state-wide review. Obstet Gynecol. 2005;106 (6):1228–1234.
18. Getahun D, Nath C, Ananth CV, Chavez MR, Smulian JC. Gestational diabetes in the United States: temporal trends 1989 through 2004. Am J Obstet Gynecol. 2008;198 (5):525.e1–5.
19. Wallis AB, Saftlas AF, Hsia J, Atrash HK. Secular trends in the rates of preeclampsia, eclampsia, and gestational hypertension, United States, 1987-2004. Am J Hypertens. 2008;21 (5):521–526.
20. Baraban E, McCoy L, Simon P. Increasing prevalence of gestational diabetes and gestational hypertension in Los Angeles County, California, 1991-2003. Prev Chronic Dis. 2008;5 (3):A77.
21. National Center for Health Statistics. Vital Statistics of the United States 1993. Vol 1: Natality.Hyattsville, MD: National Center for Health Statistics; 1999.
22. Martin JA, Hamilton BE, Sutton PD et al. Births: final data for 2005. Natl Vital Stat Rep. 2007;56 (6):1–103.
23. Chu SY, Bachman DJ, Callaghan WM et al. Association between obesity during pregnancy and increased use of health care. N Engl J Med. 2008;358 (14):1444–1453.
24. Pan IJ, Yi HY. Prevalence of hospitalized live births affected by alcohol and drugs and parturient women diagnosed with substance abuse at liveborn delivery: United States, 1999-2008. Matern Child Health J. 2013;17 (4):667–676.
25. Bansil P, Kuklina E, Jamieson D et al. Maternal and fetal outcomes among women with depression. J Womens Health (Larchmt) 2010;19 (2):329–334.
26. Grote NK, Bridge JA, Gavin AR, Melville JL, Iyengar S, Katon WJ. A meta-analysis of depression during pregnancy and the risk of preterm birth, low birth weight, and intrauterine growth restriction. Arch Gen Psychiatry. 2010;67 (10):1012–1024.
27. Gilbert WM, Nesbitt TS, Danielsen B. The cost of prematurity: quantification by gestational age and birthweight. Obstet Gynecol. 2003;102 (3):488–492.
28. International Classification of Diseases, Ninth Revision, Clinical Modification. Hyattsville, MD: National Center for Health Statistics; DHHS publication PHS; 1980. pp. 80–1260.
29. Lain SJ, Hadfield RM, Raynes-Greenow CH et al. Quality of data in perinatal population health databases: a systematic review. Med Care. 2012;50 (4):e7–e20.
30. Chatmers, et al,, (2015).Effective care of pregnancy and child birth, third edition, new York, oxford university press limited.
31. Bryar and Rosamund, (2014).Teory for midwifery practise, first edition, londan, macmillan press limited.
32. Bonnar John, (2015).Obstetrics and gynaecology, first edition, new York, Churchill living stone.
33. Bobak.Irene. (2005). maternity and gynaecology care, fifth edition, Philadelphia.
34. Bennet Ruth and Linde brown (2000). myles text book for midwives , sixteenth edition, new York, Churchill living stone.

35. Adele pillitleri., (2010), Maternity and child health nursing, second edition, Philadelphia, j.b.lippincott company.
36. Dickason and Elizabeth Jean et..al.,, (2009)Maternity and infant nursing care, second edition, Philadelphia, mosby publication.
37. Donna.l and Sharon (2011).Maternity and child nursing care, fifth edition, Calcutta, new central book agency.

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