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Effect of nursing intervention on anxiety during labour among primigravida mothers in JIPMER, Puducherry: Randomized control trial

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Abstract

Background: Childbirth is universally celebrated and significant moment in women's life. More than 90% of prenatal anxiety and stress is related to the process of labour. Understanding the suffering of mother and providing safe labour with less pain and anxiety is one of the fundamental principles of modern obstetrics. This study aimed to assess the effectiveness of nursing intervention to reduce the anxiety during labour among primigravida mothers.

Methods: A Randomized control trial was carried out among 66 primigravida mothers in Antenatal outpatient department, Labour room in tertiary care hospital, Puducherry by simple random sampling with computerised random numbers and divided into experimental and control group, 33 in each. Pre-test anxiety level was assessed by using modified anxiety scale to both the groups and nursing intervention was given to experimental group and control group were received routine care.

Results: The result showed that in terms of comparing the pre-test and post-test level of anxiety during labour after giving nursing intervention shows statistically highly significant ($p < 0.001$) in experimental group and no significant difference in control group p value (0.052).

Conclusions: Mothers especially primigravida mothers experience anxiety during labour ($p < 0.001$). Thus, the study concluded that nursing interventions were effective in reducing the anxiety level of primigravida during labour.

Keywords: Antenatal, anxiety, counselling, education, labour, nursing intervention, primigravida

Introduction

Childbirth is a universally celebrated and significant moment in women's life. The health of the nation is often judged by mother and infant health. Thus, the health of the mother plays an important role in the development of the nation^[1]. Birth is a sensational event that is typified by painful contractions of the uterus, progressive dilatation of the cervix, and descent of presenting part of a baby through the birth canal of the mother. One fifth pregnant women feel the fear of childbirth and 6%-13% of women feel acute and incapacitate fear of childbirth. It is the most cheerful moment for the mother but at the same time, she experiences pain, anxiety, fear, stress due to unknown experience^[2].

Pregnant women are "like a ship on the stormy sea", out of balance seeking equilibrium in the physiological changes^[3]. Hormonal changes during pregnancy make pregnant women more prone to anxiety and panic attacks, simply because they allow some parts of the brain to become more activated during labour^[4]. Some previous studies have suggested that an increased level of anxiety was related to many adverse effects in pregnancy and labour such as the increased risk of preterm birth, low term birth of babies, prolonged labour, preeclampsia, and forceps delivery. Complicated instruments, lights, and alarm systems may extremely increase anxiety. A smiling, greeting, and cooperation of the nurse and other members of the health team contribute to minimizing the trauma of hospitalization. Nearly all women feel anxious during labour, and as many as 10% of women have more intense fear. The third trimester of pregnancy is the time of expectation. Primigravida mothers usually have increased anxiety and concern about all. As the fear and anxiety increase the muscle tension reducing the effectiveness of contractions increasing discomfort and further leads to fear and anxiety^[5].

Pregnancy and anxiety go often hand in hand. Aside from labour process and the unborn baby, they are also worried about their financial status. Some amount of anxiety and fear is expected

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but the high level may cause serious illness which leads to preterm labour, low birth weight babies, and mostly miscarriages may happen [6]. Finding ways to reduce anxiety is an essential need for the unborn baby.

Many interventional studies have focused on improving vaginal birth rates but not many studies were on the effectiveness of an antenatal intervention like giving education to the mother regarding the labour process to reduce anxiety level before and during labour process. And also, there is a lack of resources that depict the role of health professionals especially nurses in reducing anxiety during the labour process. So, giving information regarding labour process can answer their question and decrease their anxiety level, and will give new hope to the mother and improve confidence level [7].

During clinical experience, the investigator witnessed the antenatal mothers who are coming for the antenatal visit in OPDs were anxious and also noted that the mothers were less knowledgeable about childbirth preparation especially primigravida mothers. Many of them in the third trimester were unprepared for labour. And also, many post-natal mothers verbalized that their childbirth experience was terrible, and not aware of any of the process makes them more anxious. Hence the investigator felt that these mothers must be educated on labour process so it will enable them to have a less anxious, peaceful, and healthy childbirth experience.

Anderson Nafese *et al.* conducted a study to determine the effect of an individual counselling program by a midwife on fear of childbirth in primiparous women. A randomized control trial was conducted on ninety primiparous women with gestational ages of 28–30 weeks and divided into two groups namely intervention and control. The intervention group received the counselling program individually in 3 sessions during 34–36 weeks of pregnancy, and routine care was given to the control group. During weeks 34–36 of pregnancy, and there was a significant difference between the two groups ($p < 0.001$). The study concluded individual counselling programs provided by the midwife to the primiparous women during pregnancy resulted in reduced fear of childbirth [8].

Seyhan *et al.* (2020) investigated the effects of antenatal education on anxiety, depression, and mode of delivery in primiparous pregnant women. 120 primiparous pregnant women were randomized to the antenatal education group ($n = 60$) and the control group ($n = 60$) by block randomization. Antenatal education was given to the experimental group by two 2-hr sessions (240 min) for 4 weeks. They found that the experimental group had less birth fear, depression, anxiety, and stress symptoms and increased childbirth self-efficacy compared to the control group ($p < 0.05$). So, the study concludes antenatal education has great impact and clinical benefits for women both during pregnancy and in the postpartum period [9].

Materials and Methods

A randomized control design was adopted for this study to identify the effectiveness of nursing intervention on reducing the anxiety during labour of primigravida mothers. This study was conducted in antenatal outpatient department and labour room of tertiary care hospital during December 2020 to April 2021. Based on 5% absolute precision and 95% 95% confidence interval, 66 participants were enrolled in this study. Primigravida mothers who booked and undergone normal vaginal delivery in the hospital were included in this study. Primigravida who were having any previous or present history of any medical and obstetrical co morbidities and also who developed complications during delivery and underwent C-

section or instrumental delivery were excluded from the study. Primigravida mothers who met inclusion criteria were selected by simple random sampling by using system generated random numbers.

Data collection instrument had two sections. The first section includes socio-demographic variables (age, educational status, occupation, family type, duration of married life, economic support, type of marriage). Second section include modified anxiety scale which was developed by investigator, reliability was checked by Cronbach's alpha (Alpha-0.9) and content validity was obtained from medical and nursing experts. The data was collected from the participants and scoring was given. The modified anxiety scale had 40 statements which concentrated on physical, social and psychological aspects.

Scoring interpretation

Level of anxiety	Total score
Very low anxiety	0-40
Moderate anxiety	41-80
Severe anxiety	81-120

The study was approved by institute scientific advisory committee (JIP/CON/NRMC/M.SC/2019/OBG/4) and ethics committee (JIP/CON/IEC/M.SC/2019/OBG/4). Informed written consent was obtained from participants. Data confidentiality and withdrawal right from study were explained priorly. The primigravida mothers were selected through a simple random method by system generated random numbers and allotted to the experimental and the control group. A pre-test was conducted to both the groups and socio-demographic variables were collected through a questionnaire and anxiety level was assessed by a modified anxiety scale. Mothers in the experimental group receive nursing intervention for 20 minutes by explaining about labour process, signs indicating onset of labour, preparation and things to be done when the labour has started, orienting to labour room, explaining about the pain location, intensity and frequency during different stages of labour, taught about the pushing and breathing exercise. And also, about the episiotomy and its care to be taken, handling of new-born and breastfeeding. The mothers in the control group were received routine care. Post-test was conducted on both the experimental and the control group during the first stage of labour by using the same modified anxiety scale. Then the data were recorded and analysed using the statistical package for social science (SPSS) version 23. Both descriptive and inferential statistics were used for analysis.

Results

Table 1: Mean and standard deviation of Pre-test and post-test of the level of anxiety (domains) during labour among primigravida mothers in the experimental and control group

Level of anxiety (Domains)	Experimental group				Control group			
	Pre-test		Post-test		Pre-test		Post-test	
	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
Social & family aspect	17.72	3.634	4.469	1.446	18.72	3.145	15.21	3.295
Physical aspect	34.57	6.548	8.875	3.108	34.66	3.256	30.72	4.453
Psychological aspect	42.87	5.134	11.60	4.220	43.78	4.052	38.51	5.927

Table 1 shows, based on domains, the majority of the mothers in both experimental and control group had anxiety on psychological aspect.

Table 2: Comparison of the Pre-test and post-test level of anxiety during labour among primigravida mothers in the experimental and control groups

Level of anxiety during labour	Test	Mean	Standard deviation	Mean difference	't' Value Paired t-test	DF	'p' Value
Experimental group	Pre-test	95.18	12.88	68.51	22.96	32	0.001** HS
	Post-test	26.66	10.73				
Control Group	Pre-test	96.24	9.575	14.03	4.685	32	0.052
	Post-test	82.21	11.12				

**- $p < 0.001$ highly significant

Table 2 shows that the mean score of the effectiveness of nursing interventions on anxiety in the experimental group in the pre-test was 95.18 ± 12.88 and the mean score in the post-test was 26.66 ± 10.73 . The calculated paired t test value of $t = 22.96$

shows a statistically highly significant difference between the pre-test and post-test. The calculated paired t test value of $t = 4.685$ in the control group shows a statistically not significant difference between pre-test and post-test levels of anxiety.

Table 3: Comparison of the effectiveness of nursing interventions on anxiety during labour among primigravida mothers with the experimental and control group

Level on anxiety during labour	Group	Mean	Standard deviation	Mean difference	"t" Value student t-test	DF	'p' Value
Pre-test	Experimental group	95.18	12.88	-1.0606	-0.380	64	0.706
	Control group	96.24	9.575				
Post-test	Experimental group	26.66	10.73	-55.54	-20.64	64	0.001**
	Control group	82.21	11.12				

Table 3 shows that the mean score of the effectiveness of nursing interventions on anxiety pre-test in the experimental group was 95.18 ± 12.88 and in the control, the group was 96.24 ± 9.575 . The calculated independent t test value of $t = -0.380$ shows a statistically not significant difference in the pre-test of experimental and control group respectively. The mean score of the effectiveness of nursing interventions on anxiety post-test in the experimental and control group was 26.66 ± 10.73 and 82.21 ± 11.12 respectively. The calculated independent t test value of $t = -20.64$ shows a statistically highly significant difference in post-test of experimental and control group respectively.

Discussion

The first objective of the study was to assess the level of anxiety and it was supported by the study Lal 2018, majority 46% of respondents are in the age group of 18–20 years and 64.3% of mothers had anxiety related to physical aspects. Overall findings showed that the higher the age of the mothers, anxiety level was high.

The second objective is to assess the effectiveness of nursing interventions in reducing anxiety during labour among primigravida mothers. This study was supported by Firouz bakt *et al.* 2018, this study showed that the anxiety level was 14.47 (4.69) and 16 (4.86), the pain intensity was 85.68 (1.85) and 90.99 (14.72) in case and control group respectively with the P value 0.003. So, the study concludes that prenatal education and psychological support are beneficial for mothers during pregnancy and labour

The third objective of the study to find out the association of socio-demographic and obstetric variables with anxiety among primigravida admitted for labour. It was supported by study Binita 2019, showed that less than 50 (40.9%) of respondents had minimal anxiety, 42.1% had mild to moderate level anxiety and least (16.9%) of the respondents had severe anxiety and also showed that there was an association between anxiety and gravida.

Conclusion

This study concluded that nursing interventions are very effective in reducing the anxiety level among primigravida mothers mean scores of pre-tests were 95.18 ± 12.88 and the post-test was 26.66 ± 10.73 . Guidance and counselling are

essential for antenatal women especially in the first pregnancy and the provision of psychological support is the most important need during labour. It will help the mothers to reframe their views and perceptions about labour. One of the extended roles for the nurses includes nurse counselor, hence she can give counseling services to the mothers as well as family members to reduce the anxiety and make the primigravida mothers to feel positive by get them to receive proper nursing interventions at the time. This study emphasizes the need for nursing intervention and provision of psychological support during labour in routine daily practice for the improvement of maternal and perinatal outcomes.

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Conflict of interest

The authors declare no conflict of interest.

Funding resources

The authors have declared that there was no funding

Data accessibility

The datasets are available from the corresponding author on reasonable request.

Ethical issues

The current study is a part of MSC thesis approved by the ethics committee of JIPMER. The objectives of the study were explained to the participants and all of them signed written consents forms. They were also assured about the confidentiality of the data.

References

1. Meena BL. A Study to assess the Anxiety related to the Onset of Labour and Delivery among Primigravida Mothers admitted for Delivery at the Selected Hospital, Jaipur, Rajasthan. 2018;3(4):5.
2. Alipour Z, Lamyian M, Hajizadeh E, Vafaei MA. The association between antenatal anxiety and fear of childbirth in nulliparous women: A prospective study. Iran J Nurs Midwifery Res. 2011;16(2):169-73.

3. Balasubramaniam K. Dying while giving life. *Health Action*. 2000;35(5):21-241.
4. Størksen HT, Garthus-Niegel S, Adams SS, Vangen S, Eberhard-Gran M. Fear of childbirth and elective caesarean section: A population-based study. *BMC Pregnancy Childbirth* [Internet]. 2015 Sep 17 [cited 2021 Mar 26];15. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4573308/>
5. Biaggi A, Conroy S, Pawlby S, Pariante CM. Identifying the women at risk of antenatal anxiety and depression: A systematic review. *J Affect Disorder*. 2016 Feb;191:62-77.
6. Shahhosseini Z, Pourasghar M, Khalilian A, Salehi F. A Review of the Effects of Anxiety during Pregnancy on Children's Health. *Mater Sociomed*. 2015 Jun;27(3):200-2.
7. Smith V, Gallagher L, Carroll M, Hannon K, Begley C. Antenatal and intrapartum interventions for reducing caesarean section, promoting vaginal birth, and reducing fear of childbirth: An overview of systematic reviews. *PLOS ONE*. 2019 Oct 24;14(10):0224313.
8. Nafese, *et al*. The effect of individual counseling program by a midwife on fear of childbirth in primiparous women [Internet]. [cited 2021 Mar 26]. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5747210/>
9. Cheung W, Ip W-Y, Chan D. Maternal anxiety and feelings of control during labour: A study of Chinese first-time pregnant women. *Midwifery*. 2007 Jun;23(2):123-30.
10. Deepthi H, *et al*. Effect of antenatal education in improving maternal confidence and reducing anxiety about labour in Primigravida women attending Saveetha medical College and hospital, Chennai, Tamilnadu, India. *International Journal of Pharma and Bio Sciences* [Internet]. 2017 Mar [cited 2021 Apr 4]; Volume 8 Issue 1. Available from: <http://ijpbs.net/abstract.php?article=5626>
11. O'Connell MA, Leahy-Warren P, Khashan AS, Kenny LC, O'Neill SM. Worldwide prevalence of tocophobia in pregnant women: systematic review and meta-analysis. *Acta ObstetGynecol Scand*. 2017 Aug;96(8):907-20.
12. Tosson MM, Atwa AME, Mahmoud TM. Anxiety and Fear Level toward Childbirth among Primigravida versus Multigravida: 9.
13. Lilliecreutz C, Larén J, Sydsjö G, Josefsson A. Effect of maternal stress during pregnancy on the risk for preterm birth. *BMC Pregnancy and Childbirth*. 2016 Jan 15;16(1):5.
14. Alipour Z, Lamyian M, Hajizadeh E, Vafaei MA. The association between antenatal anxiety and fear of childbirth in nulliparous women: a prospective study. *Iran J Nurs Midwifery Res*. 2011;16(2):169-73.
15. Firouzbakht M, *et al*. The Effectiveness of Prenatal Intervention on Pain and Anxiety during the Process of Childbirth-Northern Iran: Clinical Trial Study [Internet]. [cited 2021 Mar26]. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4594348/>
16. Madhavanprabhakaran GK, D'Souza MS, Nairy KS. Prevalence of pregnancy anxiety and associated factors. *International Journal of Africa Nursing Sciences*. 2015 Jan 1;3:1-7.
17. Jayasankari, Samson Rebecca. Effectiveness of child birth education on labour outcomes among antenatal mothers. *IJHRS*. 2019;9(8):316-25.
18. WHO Essential antenatal, perinatal and postpartum care: training modules. 392.
19. Childbirth: labour, delivery and immediate postpartum care [Internet]. *Pregnancy, Childbirth, Postpartum and Newborn Care: A Guide for Essential Practice*. 3rd edition. World Health Organization; c2015 [cited 2021 Mar 26]. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK326674/>
20. Suinjing M, Nikpour M, Salmalian H, Ledari FM, Khafri S. The Effect of Perinatal Education on Iranian Mothers' Stress and Labour Pain. *Glob J Health Sci*. 2014 Jan;6(1):61-8.
21. Sapkota B, Mali NS, Singh RD, Yogi I, Maharjan D, Maharjan M. Prenatal Anxiety among Pregnant Women Visiting in Antenatal Care Outpatient Department at Paropakar Maternity and Women's Hospital. *International Journal of Health Sciences*. 2019;3:9.
22. Koelewijn JM, Sluijs AM, Vrijkotte TGM. Possible relationship between general and pregnancy-related anxiety during the first half of pregnancy and the birth process: a prospective cohort study. *BMJ Open*. 2017 May 9;7(5):e013413.
23. Lucia *et al*. Association between anxiety and pain in the latent phase of labour upon admission to the maternity hospital: a prospective, descriptive study - PubMed [Internet]. [Cited 2021 Mar 26]. Available from: <https://pubmed.ncbi.nlm.nih.gov/24155186/>
24. Liang H-M, Gau M-L, Chen C-P, Liu C-Y. [Effectiveness of a Labour-Admission Education Program on Anxiety, Uncertainty, Locus of Labour Control, and Labour Outcomes in Pregnant Women]. *Hu Li Za Zhi*. 2019 Apr;66(2):36-47.
25. Serçekeş P, Başkale H. Effects of antenatal education on fear of childbirth, maternal self-efficacy and parental attachment. *Midwifery*. 2016 Mar; 34:166-72.
26. Ayunur *et al*. The effect of education given to primigravida women on fear of childbirth - PubMed [Internet]. [cited 2021 Mar 26]. Available from: <https://pubmed.ncbi.nlm.nih.gov/26856483/>
27. Firouzbakht M, Nikpour M, Salmalian H, Ledari FM, Khafri S. The Effect of Perinatal Education on Iranian Mothers' Stress and Labour Pain. *Glob J Health Sci*. 2014 Jan;6(1):61-8.
28. Toohill J, Fenwick J, Gamble J, Creedy DK, Buist A, Turkstra E, *et al*. A randomized controlled trial of a psycho-education intervention by midwives in reducing childbirth fear in pregnant women. *Birth*. 2014 Dec;41(4):384-94.
29. Rajeswari S, Sanjeeva Reddy N. Efficacy of progressive muscle relaxation on pregnancy outcome among anxious indianprimi mothers. *Iranian Journal of Nursing and Midwifery Research*. 2020 Jan 1;25(1):23.
30. Levy I, Attias S, Stern Lavee T, Avneri O, Cohen G, *et al., et al*. The effectiveness of foot reflexology in reducing anxiety and duration of labour in primiparas: An open-label randomized controlled trial. *Complement Ther Clin Pract*. 2020 Feb;38:101085.
31. Hamdamian S, Nazarpour S, Simbar M, Hajian S, Mojab F, Talebi A. Effects of aromatherapy with *Rosa damascena* on nulliparous women's pain and anxiety of labour during first stage of labour. *J Integr Med*. 2018 Mar;16(2):120-5.
32. Hepp P, Hagenbeck C, Gilles J, Wolf OT, Goertz W, Janni W, *et al*. Effects of music intervention during caesarean delivery on anxiety and stress of the mother a controlled, randomized study. *BMC Pregnancy Childbirth*. 2018 Nov 3;18(1):435.
33. AkközÇevik S, Karaduman S. The effect of sacral massage on labour pain and anxiety: A randomized controlled trial. *Jpn J Nurs Sci*. 2020 Jan;17(1):e12272.
34. Boaviagem A, Melo Junior E, Lubambo L, Sousa P, Aragão C, Albuquerque S, *et al*. The effectiveness of breathing

- patterns to control maternal anxiety during the first period of labour: A randomized controlled clinical trial. *Complement Ther Clin Pract*. 2017 Feb; 26:30-5.
35. Jesleen, *et al.* A pre-experimental study to assess the effectiveness of massage therapy on severity of labour pains and anxiety among parturient mothers admitted in labour room during active phase of labour in selected Hospital, Jalandhar, Punjab, 2017 *International Journal of Development Research (IJDR)* [Internet]. [cited 2021 Mar 26]. Available from: <https://www.journalijdr.com/pre-experimental-study-assess-effectiveness-massage-therapy-severity-labour-pains-and-anxiety-among>
 36. Jhala AAG. A study to assess the effectiveness of Lamaze breathing on labour pain and anxiety towards labour outcome among primigravida mothers during labour in Community health center, Kolar road, Bhopal. *Indian Journal of Obstetrics & Gynecology*. 2017 Mar 1;5:9-11.
 37. Effect of prenatal yoga on anxiety, blood pressure, and fetal heart rate in primigravida mothers | Hamdiah | Belitung Nursing Journal [Internet]. [cited 2021 Mar 26]. Available from: <https://belitungraya.org/BRP/index.php/bnj/article/view/99>
 38. Fenwick J, Gamble J, Creedy DK, Buist A, Turkstra E, Sneddon A, *et al.*, Study protocol for reducing childbirth fear: a midwife-led psychoeducation intervention. *BMC Pregnancy Childbirth*; c2013. doi: 10.1186/ 1471-2393-13-190.
 39. Rouhe H, Salmela Aro K, Toivanen R, Tokola M, Halmesmaki E, Saisto T. Obstetric outcome after intervention for severe fear of childbirth in nulliparous women – randomized trial. *BJOG*. 2013;120:75-84.
 40. Salmela-Aro K, Read S, Rouhe H, Hamesmaki E, Toivanen R, Tokola M, *et al.*, Promoting positive motherhood among nulliparous pregnant women with an intense fear of childbirth: RCT intervention. *J Health Psychol*. 2012;17(4):52034.
 41. Kizilirwak, Baser. The effect of education given to primigravida women on fear of childbirth. *ANR*. 2016;29:19-24.
 42. Beck AT, Epstein N, Brown G, Steer RA. An inventory for measuring clinical anxiety, Psychometric properties. *Journal of counselling and clinical psychology*, 56, 893-97.
 43. Sahar Mansour Lamadah, Ibtisam Nomani. The effect of aromatherapy massage using lavender oil on the level of pain and anxiety during labour among primigravida mothers. *American journal of nursing science*. 2016;2:37-44.
 44. Bastani F, Hidernia A, Kazemnejad A. A randomized controlled trial of the effects of applied relaxation training on reducing anxiety and perceived stress in pregnant women. *Journal of midwifery and women's health*. 2005;50:38-40.
 45. Hanan EL, Sayed M, Hanan Awad M. Benson's relaxation therapy. Its effect on stress and coping strategies among mothers with high-risk pregnancy. *Inter J Nursing Didactics*. 2017;7:345.
 46. Reece SM. Stress and maternal adaptation in first time mothers more than 35 years old. *Journal of midwifery*. 2000 May;8(2):61-6
 47. Polit, Devise F, Hungler Pb. *Nursing research*. 2nd edition. Philadelphia: Lippincott Publishers; c1999. p. 172-176.
 48. Silwal M. A descriptive study to assess the level of anxiety and depression among antenatal mothers in a selected hospital, Mangalore, with a view to develop an information booklet. 2015;6:5.
 49. IP Tang CS, Goggins WB. An educational intervention to improve women's ability to cope with childbirth. *J Clin Nurs*. 2009 Aug;18(15):2125-35.
 50. Andaroon N, Kordi M, Kimiaei SA, Esmaeily H. The effect of individual counseling program by a midwife on fear of childbirth in primiparous women. *J Educ Health Promot* [Internet]. 2017 Dec 4 [cited 2020 Jul 20];6. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5747210/>
 51. Lowdermilk D, Pery S *Maternity and Women's health care*. 10th ed, USA, Mosby. 2009:10:481.
 52. *Myles textbook for midwives*. Sixteenth edition, Edinburgh: Churchill Livingstone Elsevier; 2014. p. 532-34.
 53. *Williams Obstetrics*. Twenty third edition: The McGraw-Hill Companies, Inc; 2010. p. 393-406.

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