



## Appendix I Search strategy

### Retrieval table

Search	Search parameters	Results
	CAM PubMed	
1	("aromatherapy"[MeSH Terms] OR "aromatherapy"[All Fields]) OR (mixed[All Fields] AND ("oils"[MeSH Terms] OR "oils"[All Fields])) OR (("oils, volatile"[MeSH Terms] OR ("oils"[All Fields] AND "volatile"[All Fields]) OR "volatile oils"[All Fields] OR ("essential"[All Fields] AND "oil"[All Fields]) OR "essential oil"[All Fields]) AND reduction[All Fields] AND discomfort[All Fields] AND ("perineum"[MeSH Terms] OR "perineum"[All Fields] OR "perineal"[All Fields])) AND cam[sb]	4
2	(aromatherapy[Title/Abstract]) OR diluted oils) OR sitz bath) OR smell herbs essence) OR essential oil) AND reduction of discomfort perineal) AND reduction pain perineal) AND vaginal delivery) AND early postpartum) AND perineal trauma) AND primiparous women",0,17:43:27 #8,"Search aromatherapy OR mixed oils OR essential oil and reduction of discomfort perineal AND (cam[sb])",1967,17:39:54 #7,"Select 1 document(s)",1,17:39:27 #5,"Similar articles for PubMed (Select 29043282)",87,17:27:35 #4,"Search aromatherapy or mixed oils or essential oil and reduction of discomfort perineal Filters: Complementary Medicine",1967,17:11:27 #3,"Search oils, volatile[MeSH Terms] AND ("humans"[MeSH Terms] AND (Meta-Analysis[ptyp] OR Review[ptyp]) OR systematic[sb] AND English[lang] AND ""2012/10/19""[PDAT] : ""2017/10/19""[PDAT])",107,16:57:42	5
	Evidence based CAM	
1	Aromatherapy and discomfort and pain and postpartum	1
	BMC Complementary and alternative medicine	
1	Aromatherapy and postpartum	1
	USF University of South Florida Libraries	
1	Aromatherapy and postpartum	4
2	Aromatherapy and postpartum and primiparous women	1
3	Aromatherapy and perineal discomfort and perineal pain and postpartum	1
	Proquest Nursing and Allied Health Source	
1	Aromatherapy and perineal pain	0
	PubMed	
1	"aromatherapy"[All Fields]) AND ("perineum"[MeSH Terms] OR "perineum"[All Fields] OR "perineal"[All Fields]) AND ("pain"[MeSH Terms] OR "pain"[All Fields])	4
2	("aromatherapy"[MeSH Terms] OR "aromatherapy"[All Fields]) AND ("perineum"[MeSH Terms] OR "perineum"[All Fields] OR "perineal"[All Fields]) AND ("pain"[MeSH Terms] OR "pain"[All Fields]) AND ("perineum"[MeSH Terms] OR "perineum"[All Fields] OR "perineal"[All Fields]) AND discomfort[All Fields]	1
3	((("aromatherapy"[MeSH Terms] OR "aromatherapy"[All Fields]) AND ("perineum"[MeSH Terms] OR "perineum"[All Fields] OR "perineal"[All Fields]) AND ("pain"[MeSH Terms] OR "pain"[All Fields])) OR (("perineum"[MeSH Terms] OR "perineum"[All Fields] OR "perineal"[All Fields]) AND discomfort[All Fields] AND ("parity"[MeSH Terms] OR "parity"[All Fields] OR "primiparous"[All Fields]) AND ("women"[MeSH Terms] OR	4

	"women"[All Fields]])	
	Cochrane Library	
1	Aromatherapy and postpartum	6
2	Aromatherapy and postpartum and perineal discomfort	0
3	Aromatherapy and postpartum and perineal pain	1
4	Aromatherapy and postpartum and primiparous women	3
	MEDline	
1	Aromatherapy or essential oils and postpartum and perineal pain	1
2	Aromatherapy or essential oils and postpartum and perineal discomfort	0
	EMBASE	
1	'aromatherapy':ab,ti AND 'puerperium':ab,ti AND 'perineal pain':ab,ti OR 'perineal discomfort':ab,ti	2
	CINAHL	
1	Aromatherapy and postpartum and perineal discomfort or perineal pain	0
	Open Grey	
1	Aromatherapy and essential oils	0

## Appendix II: Excluded studies and reasons for their exclusion

Exclusion study		Reason for exclusion
1	Alireza Olapour KB. The effect of inhalation of aromatherapy blends containing lavender essential oil on cesarean postoperative pain. Anesthesiology and Pain Medicine. 2013	It focuses only on postoperative pain.
2	Amaya DM NJ. Curso de preparación para la maternidad y paternidad "un proyecto de vida" El milagro de la vida y la aroma terapia. Facultad de Enfermería: Universidad Nacional de Colombia; 2014.	Because is a thesis, descriptive, and by theme not answer to the review.
3	Andrews VT. Evaluation of postpartum perineal pain and dyspareunia-A prospective study. European Journal of Obstetrics Gynecology and Reproductive Biology. 2008;137 (2):152-6.	It is a prospective study that focuses on the measurement of perineal pain valued by visual analog scale and does not make any relationship with aromatherapy.
4	Beckmann MMS. Antenatal perineal massage for reducing perineal trauma. 2013; (4):CD005123.	It is a systematic review that deals with the massage that is made to the perineal area to reduce the trauma. It has no relation with aromatherapy.
5	Blum JWB. Physical activity patterns and maternal well-being in postpartum women. Maternal and Child health journal. 2004;8(3):163-9.	It is a descriptive study that focuses on well-being throughout the prenatal process until postpartum and the variables are not related to the research object of our study, although its main variable is maternal well-being.
6	Buckle J RK. Clinical Aromatherapy for Pregnancy, Labor and Postpartum. International Journal of Childbirth Education. 2014;29(4):21.	It is an unpublished dissertation, the full document is not found.
7	Catriona Jones. The efficacy of lavender oil on perineal trauma: A review of the evidence. Complementary Therapies in Clinical Practice. 2011;17:215e220.	It is a review with only 6 documents where you do not find enough evidence. It is duplicated.
8	Erbaba H PG. Current approaches to the prevention and management of postpartum perineal trauma/ Postpartum	We wrote to the authors requesting a document in English, without response.

	perineal travmanin onlenmesi ve yonetimine iliskin guncel yaklasimlar. Journal of Education and Research in Nursing. 2016;(3):272.	
9	Field T. Pregnancy and labor alternative therapy research. Alternative Therapies in Health and Medicine. 2008;14(5):28.	This article is a review that focuses on prenatal and labor. Therefore, it is not related to the postpartum.
10	Gould D. Perineal tears and episiotomy. Nursing Standard. 2007;21(52):41.	The objective of this research is in perineal repair and indication for episiotomy and classification of tears.
11	Helen G.HallaLisa G.McKennabDebra L.Griffithsa. Midwives' support for Complementary and Alternative Medicine: A literature review. WOMEN AND BIRTH. 2012; 25(1).	It's a review that speaks very generally about CAM.
12	Hur Myung Haeng HSH. Clinical trial of aromatherapy on postpartum mother's perineal healing. Taehan Kanho Hakhoe chi. 2004; 34(1):53-62.	The authors were requested to request a document in English, without an answer.
13	Katayon Vakilian MA. Healing advantages of lavender essential oil during episiotomy recovery: a clinical trial. Complementary Therapies in Clinical Practice. 2011; 17:50-3.	Despite being a study that includes the use of essential oils (lavender), it does not refer to the variable pain or discomfort, but rather to a healing aspect of the incision of the episiotomy.
14	Kianpour MM. Effect of lavender scent inhalation on prevention of stress, anxiety and depression in the postpartum period. Iranian Journal of Nursing and Midwifery Research. 2016 ;(2).	It is a clinical trial that applies aromatherapy to evaluate postpartum anxiety and depression. Therefore, it does not fit our variables under study.
15	Lakhan S SH. The effectiveness of aromatherapy in reducing pain: a systematic review and meta-analysis. Pain Research and Treatment. 2016; 2016(ID 8158693):13.	It is a systematic review that collects studies on pain in general in different areas, in obstetrics refers to pain by episiotomy and is related to the study of Sheikhan that we have included in this study.
16	Makvandi S MM. A review of randomized clinical trials on the effect of aromatherapy with lavender on labor pain relief. Nursing & Care. 2016; 1(3):1-6.	It is an RCT that takes pain in labor into consideration only.
17	Marzouk TB. Lavender-thymol as a new topical aromatherapy preparation for episiotomy: A randomised clinical trial. Journal of Obstetrics and Gynaecology. 2015;	It is an RCT focused on the healing of episiotomy. It does not have variables of interest for our study.
18	Monika KB. Effectiveness of lavender oil vs hospital routine care on healing of episiotomy wound among postnatal mothers of selected hospital, faridkot, Punjab. BFUNJ. 2015; 8(1).	It is a quasi-experiment with 30 subjects whose objective is to evaluate the healing and coping of the episiotomy. Does not relate to pain or discomfort in the postpartum.
19	Sahar Mansour Lamadah IN. The effect of aromatherapy massages using lavender oil on the level of pain and anxiety during labour among primigravida women. American Journal of Nursing Science. 2016; 5(2):37-44.	It is a study that assesses variables in labor. There is no variable that is related to our study.
20	Sampselle CMS. Physical activity and postpartum well-being. Journal of obstetric, gynecologic & neonatal nursing. 1999;28(1):41-9.	It is a longitudinal secondary analysis study whose variable of interest is physical exercise at different times such as prenatal and posts it. Does not mention aromatherapy.
21	Stoks SM. The role of suggestion of hedonic quality in the olfactory remediation of pain. Mississippi: The University of Southern Mississippi; 2000.	Excluded by title
22	Tejirian TA. Sitz bath: Where is the evidence? Scientific basis of	Study designed to determine if there is

	a common practice. Diseases of the Colon and Rectum. 2005;48(12):2336–40.	evidence to support sitz baths for anorectal problems.
23	Vakilian KA. Healing advantages of lavender essential oil during episiotomy recovery: A clinical trial. Complementary Therapies in Clinical Practice. 2011.	It is an RCT where lavender is used in oil to evaluate the healing and coping of the episiotomy. It has some varied taken into account as primiparous women, with normal spontaneous delivery included in our study but they are not associated with pain or discomfort only to the healing of episiotomy.
24	Woollard AC TK. The influence of essential oils on the process of wound healing: a review of the current evidence. Journal of wound care. 2007;16(6):255–7.	It is a review that focuses on the influence of essential oils on healing in different areas.
25	Yazdkhasti M PA. The effect of aromatherapy with lavender essence on severity of labor lavender essence on severity of labor pain and duration of labor in primiparous women. Complement There Clin Pract. 2016;(25):81–6.	Presents the results of the effect of aromatherapy specifically lavender oil to reduce pain in the work, make a measurement before and after the intervention. However, they do not present results of variables included in our review.
26	Zumsteg IS WC. Bakera, a herbal steam bath for postnatal care in Minahasa (Indonesia): documentation of the plants used and assessment of the method. J Ethnopharmacol. 2007;111(3):641–50.	Set of materials that are mixed for different treatments, focused more on the effectiveness of the components of the Bakera. It is a qualitative study.
27	Ogawa Chiaki Shiroishi. A systematic review of the effects of foot baths with essential oils added during the puerperium. Nursing science research.2016; 14(3):58–65.	Duplicated. It is not in English.