



PRISMA 2020 Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	1
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	2
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	2-3
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	2-3
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	4
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	4
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	4, Appendix 2
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	5
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	5
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	5
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	NR
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	5-6
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	6
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	6, Table 1
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	6
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	6
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	6
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	6
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	NR
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	5-6
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	5-6



PRISMA 2020 Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	Figure 1
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	7
Study characteristics	17	Cite each included study and present its characteristics.	7
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	Table 2, Table 3
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	12-17
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	12-17
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	12-17
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	12-17
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	12-17
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	18
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	NR
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	18
	23b	Discuss any limitations of the evidence included in the review.	20
	23c	Discuss any limitations of the review processes used.	20
	23d	Discuss implications of the results for practice, policy, and future research.	19
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	3
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	3
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	NR
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	21
Competing interests	26	Declare any competing interests of review authors.	21
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	21

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71

For more information, visit: <http://www.prisma-statement.org/>

Appendix 2. The search strategies for the included articles for each database.

Pubmed

#1 acupuncture[MeSH Terms]

#2 acupuncture points[MeSH Terms]

#3 meridians[MeSH Terms]

#4 acupuncture therapy[MeSH Terms]

#5 Acupuncture*[Title/Abstract] OR Acupuncture[Title/Abstract] OR Acupuncture Point [Title/Abstract] OR Acupoints[Title/Abstract] OR Acupoint[Title/Abstract] OR Electroacupuncture* [Title/Abstract] OR Electro-acupuncture [Title/Abstract] OR Acupoint Therapy[Title/Abstract] OR Acupuncture Treatment[Title/Abstract] OR Acupuncture Treatments[Title/Abstract] OR Needle Therapy[Title/Abstract] OR Needling[Title/Abstract] OR de qi[Title/Abstract] OR meridian [Title/Abstract] OR needling[Title/Abstract] OR Needle Warming Therapy[Title/Abstract] OR scalp acupuncture[Title/Abstract] OR auricular acupuncture[Title/Abstract] OR ear acupuncture[Title/Abstract] OR Acupoint sensitization[Title/Abstract]

#6 Moxibustion[MeSH Terms]

#7 Moxibustion[Title/Abstract] OR Moxibustion therapy[Title/Abstract]

#8 #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7

#9 temperature[MeSH Terms]

#10 skin temperature[MeSH Terms]

#11 temperature[Title/Abstract] OR skin temperature[Title/Abstract] OR Skin Temperatures [Title/Abstract] OR heat sensitization[Title/Abstract] OR heat-sensitization[Title/Abstract]

#12 #9 OR #10 OR #11

#13 dysmenorrhea [MeSH Terms]

#14 Primary dysmenorrhea [Title/Abstract] OR dysmenorrhea [Title/Abstract] OR Dysmenorrheas [Title/Abstract] OR Dysmenorrheas [Title/Abstract] OR Menstrual Pain [Title/Abstract] OR Menstrual Pains [Title/Abstract] OR Painful Menstruation

[Title/Abstract] OR Painful Menstruations [Title/Abstract]

#15 #13 OR #14

#16 #8 AND #12 AND #15

EMBASE

#1 'acupuncture'/exp

#2 'acupuncture points'/exp

#3 'meridians'/exp

#4 'acupuncture therapy'/exp

#5 'Acupuncture*':ti,ab OR 'Acupuncture':ti,ab OR 'Acupuncture Point':ti,ab OR 'Acupoints':ti,ab OR 'Acupoint':ti,ab OR 'Electroacupuncture*':ti,ab OR 'Electroacupuncture':ti,ab OR 'Acupoint Therapy':ti,ab OR 'Acupuncture Treatment':ti,ab OR 'Acupuncture Treatments':ti,ab OR 'Needle Therapy':ti,ab OR 'Needling':ti,ab OR 'de qi':ti,ab OR 'meridian':ti,ab OR 'needling':ti,ab OR 'Needle Warming Therapy':ti,ab OR 'scalp acupuncture':ti,ab OR 'auricular acupuncture':ti,ab OR 'ear acupuncture':ti,ab OR 'Acupoint sensitization':ti,ab

#6 'Moxibustion'/exp

#7 'Moxibustion':ti,ab OR 'Moxibustion therapy':ti,ab

#8 #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7

#9 'temperature'/exp

#10 'skin temperature'/exp

#11 'temperature':ti,ab OR 'skin temperature':ti,ab OR 'Skin Temperatures':ti,ab OR 'heat sensitization':ti,ab OR 'heat-sensitization':ti,ab

#12 #9 OR #10 OR #11

#13 'dysmenorrhea'/exp

#14 'Primary dysmenorrhea':ti,ab OR 'dysmenorrhea':ti,ab OR 'Dysmenorrheas':ti,ab OR 'Dysmenorrheas':ti,ab OR 'Menstrual Pain':ti,ab OR 'Menstrual Pains':ti,ab OR 'Painful Menstruation':ti,ab OR 'Painful Menstruations':ti,ab

#15 #13 OR #14

#16 #8 AND #12 AND #15

Cachrane

#1 [acupuncture] explode all trees

#2 [acupuncture points] explode all trees

#3 [meridians] explode all trees

#4 [acupuncture therapy] explode all trees

#5 'Acupuncture*':ti,ab OR 'Acupuncture':ti,ab OR 'Acupuncture Point':ti,ab OR 'Acupoints':ti,ab OR 'Acupoint':ti,ab OR 'Electroacupuncture*':ti,ab OR 'Electroacupuncture':ti,ab OR 'Acupoint Therapy':ti,ab OR 'Acupuncture Treatment':ti,ab OR 'Acupuncture Treatments':ti,ab OR 'Needle Therapy':ti,ab OR 'Needling':ti,ab OR 'de qi':ti,ab OR 'meridian':ti,ab OR 'needling':ti,ab OR 'Needle Warming Therapy':ti,ab OR 'scalp acupuncture':ti,ab OR 'auricular acupuncture':ti,ab OR 'ear acupuncture':ti,ab OR 'Acupoint sensitization':ti,ab

#6 [Moxibustion] explode all trees

#7 'Moxibustion':ti,ab OR 'Moxibustion therapy':ti,ab

#8 #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7

#9 [temperature] explode all trees

#10 [skin temperature] explode all trees

#11 'temperature':ti,ab OR 'skin temperature':ti,ab OR 'Skin Temperatures':ti,ab OR 'heat sensitization':ti,ab OR 'heat-sensitization':ti,ab

#12 #9 OR #10 OR #11

#13 [dysmenorrhea] explode all trees

#14 'Primary dysmenorrhea':ti,ab OR 'dysmenorrhea':ti,ab OR 'Dysmenorrheas':ti,ab OR 'Dysmenorrheas':ti,ab OR 'Menstrual Pain':ti,ab OR 'Menstrual Pains':ti,ab OR 'Painful Menstruation':ti,ab OR 'Painful Menstruations':ti,ab

#15 #13 OR #14

#16 #8 AND #12 AND #15

Web of Science

#1 TS=(Acupuncture* OR Acupuncture OR Acupuncture Point OR AcupointsOR
Acupoint OR Electroacupuncture* OR Electro-acupuncture OR acupuncture therapy
OR Acupoint Therapy OR Acupuncture Treatment OR Acupuncture Treatments OR
Needle Therapy OR Needling OR de qi OR meridians OR meridian OR needling OR
Needle Warming Therapy OR scalp acupuncture OR auricular acupuncture OR ear
acupuncture OR Acupoint sensitization)

#2 TI=(Acupuncture* OR Acupuncture OR Acupuncture Point OR AcupointsOR
Acupoint OR Electroacupuncture* OR Electro-acupuncture OR acupuncture therapy
OR Acupoint Therapy OR Acupuncture Treatment OR Acupuncture Treatments OR
Needle Therapy OR Needling OR de qi OR meridians OR meridian OR needling OR
Needle Warming Therapy OR scalp acupuncture OR auricular acupuncture OR ear
acupuncture OR Acupoint sensitization)

#3 AB=(Acupuncture* OR Acupuncture OR Acupuncture Point OR AcupointsOR
Acupoint OR Electroacupuncture* OR Electro-acupuncture OR acupuncture therapy
OR Acupoint Therapy OR Acupuncture Treatment OR Acupuncture Treatments OR
Needle Therapy OR Needling OR de qi OR meridians OR meridian OR needling OR
Needle Warming Therapy OR scalp acupuncture OR auricular acupuncture OR ear
acupuncture OR Acupoint sensitization)

#4 TS=(Moxibustion OR Moxibustion therapy) OR TI=(Moxibustion OR
Moxibustion therapy) OR AB=(Moxibustion OR Moxibustion therapy)

#5 #1 OR #2 OR #3 OR #4

#6 TS=(temperature OR skin temperature OR Skin Temperatures OR heat
sensitization OR heat-sensitization) OR TI=(temperature OR skin temperature OR
Skin Temperatures OR heat sensitization OR heat-sensitization) OR AB=(temperature
OR skin temperature OR Skin Temperatures OR heat sensitization OR heat-
sensitization)

#7 TS=(Primary dysmenorrhea OR dysmenorrhea OR Dysmenorrheas OR
Dysmenorrheas OR Menstrual Pain OR Menstrual Pains OR Painful Menstruation OR

Painful Menstruations) OR TI=(Primary dysmenorrhea OR dysmenorrhea OR
Dysmenorrheas OR Dysmenorrheas OR Menstrual Pain OR Menstrual Pains OR
Painful Menstruation OR Painful Menstruations) OR AI=(Primary dysmenorrhea OR
dysmenorrhea OR Dysmenorrheas OR Dysmenorrheas OR Menstrual Pain OR
Menstrual Pains OR Painful Menstruation OR Painful Menstruations)

#8 #5 AND #6 AND #7

China National Knowledge Infrastructure (CNKI)

SU=('zhenjiu'+ 'zhenci'+ 'dianzhen'+ 'aijiu'+ 'jiufa'+ 'jingluo'+ 'shuxue'+ 'xuawei') AND
SU=('wendu'+ 'xueqv wendu'+ 'remin'+ 'pifu wendu') AND SU=('tongjing'+ 'yuanfaxing
tongjing'+ 'Primary dysmenorrhea' + 'PD') AND FT='suiji'

Wanfang Data

Title or keywords:(*zhenjiu* or *zhenci* or *dianzhen* or *aijiu* or *jiufa* or *jingluo* or *shuxue* or *xuwei*) and Title or keywords:(*wendu* or *xueqvwendu* or *remin* or *pifuwendu*) and Title or keywords:(*tongjing* or *yuanfaxingtongjing* or Primary dysmenorrhea OR PD) and All:(*suiji*)

Chinese Scientific Journal Database (VIP)

M=(*zhenjiu* OR *zhenci* OR *dianzhen* OR *aijiu* OR *jiufa* OR *jingluo* OR *shuxue* OR
xuewei) AND M=(*wendu* OR *xueqvwendu* OR *renmin* OR *pifuwendu*) AND
M=(*tongjing* OR *yuanfaxingtongjing* OR Primary dysmenorrhea OR PD) AND
(U=*suiji*)

China Biology Medicine (CBM)

("zhenjiu" [Common field: Intelligence] OR "zhenjiu"[Common field: Intelligence]
OR "aijiu"[Common field: Intelligence] OR "jiufa"[Common field: Intelligence] OR
"jingluo"[Common field: Intelligence] OR "shuxue" [Common field: Intelligence]
OR "xuewei"[Common field: Intelligence]) AND ("wendu"[Common field:
Intelligence] OR "xueqvwendu"[Common field: Intelligence] OR "remin"[Common
field: Intelligence] OR "pifuwendu"[Common field: Intelligence]) AND
("tongjing"[Common field: Intelligence] OR "yuanfaxingtongjing"[Common field:
Intelligence] OR "Primary dysmenorrhea"[Common field: Intelligence] OR
"PD"[Common field: Intelligence]) AND "suiji"[Common field: Intelligence]

Appendix 3. Thermographic Imaging in Sports and Exercise Medicine (TISEM) consensus

(1) The relevant individual data of the participants must be provided.

Note: These could include, but are not limited to, age, sex, body mass, height, body mass index, ethnicity and whether they are smokers or not. An indication of physical activity profile (e.g. frequency, duration, intensity, and activity description) should be reported.

☐Yes ☐No ☐Unclear

(2) Participants should be instructed to avoid alcohol beverages, smoking, caffeine, large meals, ointments, cosmetics and showering for four hours before the assessment. Also, sunbathing (e.g. UV sessions or direct sun without protection) should be avoided before the assessment.

Note: This should be confirmed verbally before the assessment. The use of any medicinal treatments or drugs should be recorded. Any condition that could not be avoided should be reported.

☐Yes ☐No ☐Unclear

(3) Extrinsic factors affecting skin temperature (e.g. Physical activity prior to the assessment, massage, electrotherapy, ultrasound, heat or cold exposure, cryotherapy) should be clearly described.

☐Yes ☐No ☐Unclear

(4) Ambient temperature and relative humidity of the location where the assessment took place must be recorded and reported as mean±standard deviation.

☐Yes ☐No ☐Unclear

(5) The assessment should be completed away from any source of infrared radiation (e.g. Electronic devices, lightning) or airflow (e.g. Under an air conditioning unit).

Note: Any condition that could not be controlled should be reported.

☐Yes ☐No ☐Unclear

(6) The manufacturer, model and accuracy of the camera used should be provided.

Note: When available it is recommended to provide the maintenance information of the equipment (e.g. when and where it was completed the last calibration).

☐Yes ☐No ☐Unclear

(7) An acclimation period in the examination room should be completed.

Note: This item is only applicable for initial baseline measurements or basal analysis.

☐Yes ☐No ☐Unclear

(8) If necessary the camera should be turned on for some time prior to the test to allow sensor stabilization following the manufacturer's guidelines.

☐Yes ☐No ☐Unclear

(9) Conditions of image recording such as mean distance between object and camera, percentage of the region of interest within the image should be detailed.

☐Yes ☐No ☐Unclear

(10) The camera should be positioned perpendicular to the region of interest.

☐Yes ☐No ☐Unclear

(11) Emissivity settings of the camera must be reported.

Note:0.98 of emissivity is suggested for a dry clean skin surface.

☐Yes ☐No ☐Unclear

(12) The time of day at which the images were taken should be reported.

☐Yes ☐No ☐Unclear

(13) The standard body position of the subject and the regions of interest must be well described and appropriately selected. A visual example (with temperature scale presented and scale of colors properly configured)is recommended.

☐Yes ☐No ☐Unclear

(14) If the skin is dried (e.g.to remove surface water),the drying method should be clearly described.

☐Yes ☐No ☐Unclear

(15) The evaluation of thermograms and collection of temperature from the software should be clearly described.

☐Yes ☐No ☐Unclear

Appendix 4. The excluded literature.

Records excluded,with reasons(n=52)

Research subjects were not human(n =16)

- [1] YANG Jiamin, SHEN Xiaoyu, LUO Li, REN Xiaoxuan, GUO Mengwei, ZHAO Yafang, et al. Effects of needling different acupoints on skin temperature in SP6, SP10 and CV4 in the rat model of cold congealing and dysmenorrhea. *Journal of Medical Postgraduates*. (2014);27.
- [2] ZHANG Mei, LIU Zhenzhen, QI Dandan, ZHANG Qingqing, YANG Jiamin, ZHOU Jin, et al. Experimental Research on Variation of Uterine Tension and Temperature of the Surface Area of Dysmenorrhea Rats with Cold Stagnation Syndrome and the Effect of Moxibustion Intervention. *Acta Chinese Medicine and Pharmacology*. (2015);43.
- [3] LUO Li, ZHU Shipeng, YANG Jiamin, SHEN Xiaoyu, ZHANG Ling, SHEN Songxi, et al. Study on the effects of acupuncture different points on the temperature changes in left and right Sanyinjiao (SP 6) of dysmenorrhea rat with cold stagnation. *China Journal of Traditional Chinese Medicine and Pharmacy*. (2015);30.
- [4] Yang JM, Shen XY, Zhang L, Shen SX, Qi DD, Zhu SP, et al. The effect of acupuncture to sp6 on skin temperature changes of SP6 and SP10: An observation of "deqi". *Evidence-based Complementary and Alternative Medicine*. (2014);2014.
- [5] LUO Li. Effect of acupuncture on the temperature and vasodilator substances in the left and right Sanyinjiao acupoints of rats with dysmenorrhea caused by cold condensation [Master's thesis]: Beijing University of Chinese Medicine; 2014.
- [6] Luo Li, Ren Xiaoxuan, Guo Mengwei, Zhao Yafang, Li Xiaohong, Ji Bo, et al. Effect of acupuncture at guānyuán(CV4) on skin temperature at bilateral sānyīnjīao(SP6) and on TXB2/6-keto-PGF1a of dysmenorrhea rats with coagulation cold pattern. *Journal of Beijing University of Traditional Chinese Medicine*. (2017);40:48-51.
- [7] Luo Li, Yang Jiamin, Zhu Shipeng, Zhang Ling, Shen Songxi, Shen Xiaoyu, et al. Temperature changes in the left and right Sanyinjiao of rats with dysmenorrhea in the cold condensation category and the effect of acupuncture intervention. *2013 Annual Meeting of China Association for Acupuncture and Moxibustion*; 2013; Chengdu Sichuan China.
- [8] LUO Li, ZHU Shipeng, YANG Jiamin, SHEN Xiaoyu, ZHANG Ling, SHEN Songxi, et al. Study on the effects of acupuncture different points on the temperature changes in left and right Sanyinjiao (SP 6) of dysmenorrhea rat with cold stagnation. *China Journal of Traditional Chinese Medicine and Pharmacy*. (2015);30:824-827.
- [9] YANG Jiamin. The effect of acupuncture SP6 and CV4 on skin temperature changes and pain related mechanism on cold congealing and dysmenorrhea rats [Master's thesis]: Beijing University of Chinese Medicine; 2014.
- [10] Yang Jiamin, Shen Xiaoyu, Luo Li, Ren Xiaoxuan, Guo Mengwei, Zhao Yafang, et al. Effects of needling different acupoints on skin temperature in SP6, SP10 and CV4 in the rat model of cold congealing and dysmenorrhea. *Journal of Medical Postgraduates*. (2014);27.
- [11] Zhang Ling. Study on the effect of different stimulation amounts on the temperature of acupoint area and related pain factors in rats with dysmenorrhea of cold condensation evidence [Doctor's thesis]: Beijing University of Chinese Medicine; 2014.

- [12] ZHANG Mei, LIU Zhenzhen, QI Dandan, ZHANG Qingqing, YANG Jiamin, ZHOU Jin, et al. Experimental Research on Variation of Uterine Tension and Temperature of the Surface Area of Dysmenorrhea Rats with Cold Stagnation Syndrome and the Effect of Moxibustion Intervention. *Acta Chinese Medicine and Pharmacology*. (2015);43:35-39.
- [13] ZHANG Wei. Effect of moxibustion on the infrared temperature of the uterus and other body surfaces of rats with dysmenorrhea caused by cold condensation [Master's thesis]: Beijing University of Chinese Medicine; 2016.
- [14] ZHANG Wei, YANG Jiamin, QI Dandan, ZHANG Mei, LIU Zhenzhen, ZHANG Qingqing, et al. Research on Uterine Body Surface Temperature of Cold Stagnation Syndrome of Dysmenorrhea Rats and the Effect of Moxibustion. *Chinese Archives of Traditional Chinese Medicine* (2016);34:626-629.
- [15] ZHANG Wei, YANG Jiamin, ZHANG Mei, LIU Zhenzhen, QI Dandan, ZHANG Qingqing, et al. Study on the infrared temperature and moxibustion effect of the left and right meridian points in rats with dysmenorrhea. *Chinese Journal of Information on Traditional Chinese Medicine*. (2016);23:68-71.
- [16] ZHU Shipeng. Study on the analgesic effect of different acupuncture stimulation amounts on dysmenorrhea in rats with cold condensation and the correlation with uterine microcirculation and acupoint temperature [Doctor's thesis]: Beijing University of Chinese Medicine; 2014.

Non-primary dysmenorrhea(n=3)

- [1] JIAO Lin. The credibility study of infrared thermal fault method combined with temperature threshold method for detecting thermal sensitivity of acupoints [Doctor's thesis]: Jiangxi University of Chinese Medicine; 2019.
- [2] SONG Tingling. Research on the Application Development of Qiai based on the Mechanism of Moxibustion [Master's thesis]: South-Central Minzu University; 2019.
- [3] XIE Yiding. Scale Design of Moxibustion Deqiand Study on its Dose-effect Relationship [Doctor's thesis]: Jiangxi University of Chinese Medicine; 2020.

Control group not healthy subjects(n=10)

- [1] Jun EM, Chang S, Kang DH, Kim S. Effects of acupressure on dysmenorrhea and skin temperature changes in college students: a non-randomized controlled trial. *International journal of nursing studies*. (2007);44:973-981.
- [2] Mohammadi A. Comparison of the Immediate Analgesic Effect of Perpendicular Needling and Transverse Needling at SP6 in Primary Dysmenorrhea Patients [Master's thesis]: Beijing University of Chinese Medicine; 2018.
- [3] CHEN Weiwei. Different parts of compatibility acupoints acupuncture treatment of primary dysmenorrhea (cold coagulation and blood stasis type)therapeutic effect difference [Master's thesis]: Changchun University of Chinese Medicine; 2021.
- [4] FENG Zhimin. Clinical Study in Treating Delayed Menstruation with Cold Deficiency Type by Decoction for Warming Meridian with Acupoint Application and its effect of Acupoint temperature [Master's thesis]: Shandong University of Traditional Chinese Medicine; 2019.
- [5] LI Jun. Study on temperature sensation characteristics heat-sensitive acupoints in patients with deficiency of qi and blood of Primary [Master's thesis]: Jiangxi University of Chinese Medicine; 2020.
- [6] LIN Chi, SA Zheyang, ZHONG Xiaoling, XU Shali, ZHU Jiamin, HUANG Shunyan, et al. Effect of Deqi Induced by Needling Sanyinjiao(SP6)on Energy Metabolism Indicators in Patients with Primary Dysmenorrhea in Cold and Dampness Stagnation Pattern. *Fujian Journal of Traditional Chinese Medicine*. (2021);52:10-14.

- [7] LIU Yuqi. Correlation study between response/effect specificity of meridian points and the type of symptoms [Doctor's thesis]: Beijing University of Chinese Medicine; 2012.
- [8] Zhang Weichen. Clinical study on the treatment of primary dysmenorrhea by combination of preponderant techniques [Master's thesis]: Shanxi University of Chinese medicine; 2019.
- [9] ZHANG wei. The correlated study between moxibustion sense and moxibustion effect through heat-sensitive moxibustion treating primary dysmenorrhea [Doctor's thesis]: Hunan University of Chinese Medicine; 2012.
- [10] Zhao Minyi. Effect of acupuncture Deqi on the body surface temperature of meridian points [Doctor's thesis]: Beijing University of Chinese Medicine; 2017.

Case reports or research protocols(n =5)

- [1] Guan Z. Clinical application of heat-acupuncture therapy. *Journal of Traditional Chinese Medicine*. (2006);26:243-246.
- [2] Huang T, Han B, Wang L, Gaischek I, Litscher G. Warming needle eases severe pain during menses: A case and thermographic measurement. *Medical Acupuncture*. (2013);25:227-231.
- [3] Liu YQ, Zhang P, Xie JP, Ma LX, Yuan HW, Li J, et al. Influences of Deqi on immediate analgesia effect of needling sp6 (Sanyinjiao) in patients with primary dysmenorrhea in cold and dampness stagnation pattern: study protocol for a randomized controlled trial. *Evidence-based complementary and alternative medicine*. (2015);2015.
- [4] Zhai SJ, Ruan Y, Liu Y, Lin Z, Xia C, Fang FF, et al. Time-effective analgesic effect of acupressure ankle strip pressing wrist and ankle acupuncture point on primary dysmenorrhea Study protocol clinical trial (SPIRIT compliant). *Medicine*. (2020);99.
- [5] WU Guiwen, ZHANG Peng, LI Jing, WANG Pei, LIN Chi, HU Nijuan, et al. Effect of Deqi Induced by Needling Sanyingjiao (SP6) on Skin Temperature of Acupoints in Patients with Primary Dysmenorrhea in Cold and Dampness Stagnation Pattern: A Study Protocol. *Journal of Clinical Acupuncture and Moxibustion*. (2016);32:1-5.

No related indicators reported(n=9)

- [1] CHEN Zhongxin. 76 cases of primary dysmenorrhea treated by shaoshanhuo technique. *Shaanxi Journal of Traditional Chinese Medicine*. (2008);29:874-875.
- [2] He Yihan. Clinical Research on Heat-sensitive Acupoints Moxibustion for Dysmenorrhea Patients with Cold Syndrome [Master's thesis]: Guangzhou University of Chinese Medicine; 2015.
- [3] Huang Shunyan. Effect of Moxibustion at Sanyinjiao Point on Spleen and kidney Meridians of Patients with Cold Dysmenorrhea in Yang Deficiency [Master's thesis]: Fujian University of Traditional Chinese Medicine; 2022.
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