

## **Relaxation Therapy on The Level of Anxiety of Post Sectio Caesarea: A Literature Review**

**Pryati Rihi\*, Muflihatul Muniroh, Dwi Susilawati**

*Faculty of Medicine, Diponegoro University, Indonesia*

\*[yati.rihi19@gmail.com](mailto:yati.rihi19@gmail.com)

### **ABSTRACT**

Childbirth with the sectio caesarean method will have an impact that tends to be more complex than normal delivery, both psychologically, medically and physiologically. Physical impacts such as pain, risk of bleeding and infection can cause psychological impacts on post-sectio caesarean mothers. Psychologically, sectio caesarea can cause anxiety phenomena which, if left untreated, can cause stress, post partum blues, post traumatic syndrome disorder. Anxiety can be overcome by non-pharmacological anxiety management, for example by relaxation therapy, which is a therapy that is often used to overcome anxiety or negative emotions using various types of relaxation. The purpose of this literature review is to examine the results of the past 10 years of research related to the effect of relaxation therapy on reducing anxiety in post-sectio caesarean mothers. The method used in the preparation of a literature review is to search for several articles by searching through nursing journals, science direct, google scholar, Pubmed, and EBSCO. The results of 8 previous research articles showed that relaxation therapy was effective in reducing maternal anxiety levels. Although there are various types of relaxation techniques autogenic relaxation has a medium-high effect size and is recommended for dealing with anxiety compared to other relaxation techniques.

**Keywords:** Relaxation Therapy, Anxiety Level, Sectio Caesarea

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## BACKGROUND

A caesarean section or commonly called a cesarean section is a surgical procedure performed by cutting the mother's abdomen and uterus so that the fetus can be removed. Data from the World Health Organization (WHO) in 2015 for approximately 30 years, deliveries with sectio caesarea have increased from 10% to 15% compared to other methods of delivery.<sup>1</sup> 2018 Basic Health Research (Riskesdas) data in Indonesia shows births at the age of 10- 54 years reaching 17.6%.<sup>2</sup>

Mothers who give birth using the sectio caesarean method will experience more complex impacts than mothers who give birth normally, namely psychological and medical impacts. Physiologically, the sectio caesarean action can cause pain arising from the scar from the sectio caesarean operation and the risk of causing infection in the wound and bleeding. Based on this physical impact, it can cause a psychological impact on post-sectio caesarean mothers.<sup>3</sup>

Psychologically, sectio caesarea action can cause the phenomenon of anxiety that is higher than normal delivery.<sup>4,5</sup> Sectio caesarea is considered a traumatic event.<sup>6</sup> Postpartum anxiety shows a high prevalence rate but is poorly recognized and handled comparatively. One study found postpartum anxiety found around 17.1% versus postpartum depression at 4.8%.<sup>7</sup>

The role of nurses is needed to intervene in patients from pre surgery to post surgery. Nurses can provide independent interventions such as non-pharmacological therapy.<sup>8</sup> Most non-pharmacological therapies are inexpensive and do not cause harmful side effects, but can increase the patient's activity level and coping abilities, reduce patient anxiety, and the length of stay in the hospital. Anxiety can be treated with relaxation therapy.<sup>8,9</sup> There are various types of relaxation that are used as relaxation that will help patients to be more relaxed so that the expected outcome is able to overcome the anxiety experienced by the mother.

## METHODS

### Search strategy

A literature review through a review of nursing articles to identify the effect of relaxation in overcoming anxiety in postpartum mothers. The article inclusion criteria used were articles with the topic of the effect of relaxation in overcoming anxiety, and using relaxation therapy keywords, anxiety level, sectio caesarea. The exclusion criteria were articles that could not be downloaded in full text (1379 articles were excluded). Search for articles accessed from the database, namely: sciencedirect, pubmed, google scholar, and EBSCO. Articles that met the inclusion criteria were collected and examined systematically. The search for literature published from 2010 to 2020. The search process for articles found 8 articles that met the inclusion and exclusion criteria requirements.

## RESULTS

Based on the search results, there were 8 articles that were deemed suitable for the purpose of the study and then screened whether the titles of the articles were the same or not. After screening, the same title was not obtained. From these 8 articles, they were screened based on eligibility according to the inclusion and exclusion criteria, the articles were obtained for further review.

The proper research consists of several studies conducted in different countries. The analysis of 8 articles shows that all articles use a quantitative design, 3 articles do not use a

control group, 2 articles use a control group, 1 article uses a systematic review design, 1 article uses an RCT design, and 1 article uses a clinical trial design. After assessing the quality of the study, the 8 articles could be categorized as good, then data extraction was carried out by analyzing the data based on the author's name, title, objectives, methods, and research results.

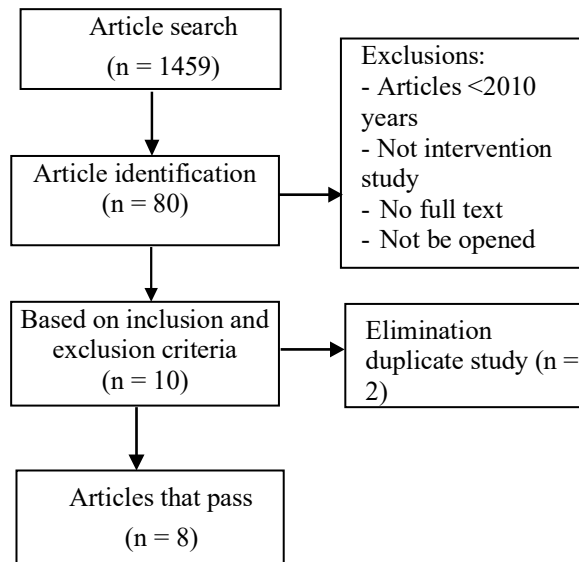


Diagram 1. Study consort diagram

Table 1. Syntetic Grid

NO	Author/Sear	Title	Purpose	Research Method	Results
1	Hyeun-sil Kim, Eun Joo Kim (2018)	<i>Effects of relaxation therapy on anxiety disorders: a systematic review And meta-analysis</i>	Explore the effects of relaxation therapy as applied to people with anxiety disorders.	Systematics review and meta analisis	The results of this study provide evidence of effective relaxation therapy for sufferers of anxiety disorders. Therefore, relaxation therapy can be chosen as a useful intervention to reduce negative emotions in people with anxiety disorders.
2	Masoumeh Nazarinasab, Azim Motamedfar, Mahin Najafian, Tabibi Hoorasa (2018)	<i>Investigating the effects of relaxation therapy on decreasing anxiety in patients with elective caesarean section in Imam Khomeini Hospital, Ahvaz, Iran during 2016</i>	Knowing the effect of relaxation therapy on reducing anxiety in patients with elective caesarean section.	Clinical trial	The results showed that explicit anxiety in the intervention group was significantly lower than in the control group. Relaxation therapy reduces total anxiety in pregnant women before cesarean section. Regarding post-caesarean section anxiety, the conditions are similar, and relaxation techniques can reduce anxiety anxiety in the mother completely.
3	Suman Dabasa, Poonam Joshib,	<i>Impact of audio assisted</i>	Assessing the effect of	Randomized controlled trial	Relaxation provides a significant reduction in

	Ramesh Agarwala, Raj Kumar Yadav, Garima Kachhawad (2019)	<i>relaxation technique on stress, anxiety and milk output among postpartum mothers of hospitalized neonates: A randomized controlled trial</i>	relaxation techniques on stress, anxiety and milk output in postpartum mothers of inpatient neonates at the NICU.		mothers who experience anxiety and increases milk production.
4	Primasari Mahardhika Rahmawati, Edi Widjajanto, Asti Melani Astari (2017)	<i>The influence of progressive muscle relaxation on anxiety level of pre-caesarean section mothers in the delivery room</i>	Knowing the effect of PMR therapy on maternal anxiety pre surgery in Maternity room	Quasy eksperimen pre-post test with control group.	PMR therapy has a significant effect on reduction anxiety in preoperative SC mothers with p value = 0.000 (<0.05). Anxiety will causes the body to react which stimulates the mind causing tension physiological one of which is characterized by muscle tension. Muscle relaxation will reduce physiological tension, which in turn will reduce anxiety. PMR therapy can be used as a therapy to reduce anxiety. There is a significant effect on reducing anxiety in cervical cancer patients before and after autogenic relaxation intervention with p = 0.011 (p <0.05).
5	Dyah Wijayanti (2016)	Autogenic relaxation reduces anxiety in cervical cancer patients.	Analyzing the effect of autogenic relaxation on anxiety in cervical cancer patients	Quasi experimental with one group pre-post design test design.	
6	Lutfi rosida, Imardiani, Joko Tri Wahyudi (2019)	<i>The effect of autogenic relaxation therapy on patient anxiety in the intensive care room at Pusri Hospital Palembang</i>	Knowing the effect of autogenic relaxation therapy on patient anxiety in intensive care rooms	Quasy eksperimen with one group pretest and posttest	Autogenic relaxation has a significant effect on reducing anxiety in patients in the ICU, namely p = 0.001. The average pretest anxiety is 43.55 and the average posttest anxiety is 36.6 with p = 0.001 (p <0.05).
7	Riris Andriati, Rita Dwsaya Pratiwi, Fenita Purnama Sari Indah (2019)	<i>The differences in the autogenic relaxation therapy influences on reducing pain levels in postoperative section caesarea patients</i>	Knowing the differences in pain in the group that was given autogenic relaxation therapy and the group that was not given the intervention	Quasy eksperimen with group control	The provision of autogenic relaxation therapy was proven to reduce pain in the postoperative cesarean section as evidenced by the mean pain in the intervention group that was 2.88 and the average pain in the control group was 3.48.
8	Jufri, Roby Aji	<i>Autogenic relaxation for</i>	To determine the effect of	Quasy eksperimen	Autogenic relaxation has been shown to reduce pain

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Permana, Ibnu Widagdo  (2019)	<i>postoperative caesarean section pain in RSAD KODAM V Brawijaya Surabaya</i>	autogenic relaxation on postoperative cesarean section pain	after cesarean delivery, where the pain can cause anxiety in the post-partum mother.
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## DISCUSSION

Based on the analysis of 8 articles, it was found that relaxation can overcome anxiety. Hyeun-sil Kim's research (2018) explains that there are various types of relaxation such as progressive muscle relaxation (PMR), autogenic relaxation (AT), mindfulness bases therapy, and meditation. Although relaxation therapy varies in technique, the goal of the various relaxation techniques is to reduce stress or anxiety.<sup>10</sup> Autogenic relaxation is a hypnosis-based autosuggestive healing technique based on hypnosis consisting of 6 mental exercises (feeling weight, warmth, regular heart rhythm, regular breathing, and cool forehead).<sup>11</sup> Autogenic relaxation has a medium-high effect size on overcoming anxiety compared to other relaxation techniques. The results of this study provide evidence that relaxation therapy is effective for people with anxiety disorders. Therefore, relaxation therapy can be chosen as a useful intervention to reduce negative emotions in sufferers of anxiety disorders.<sup>10</sup>

Masoumeh's (2018) research shows that relaxation interventions carried out for 20-25 minutes to patients can significantly reduce explicit anxiety in the intervention group than the control group, but the group does not show a significant difference in implicit anxiety. Relaxation techniques can reduce total anxiety in pregnant women before cesarean section. Regarding post-caesarean section anxiety, with similar conditions, this technique can be a therapeutic option to reduce implicit anxiety and total anxiety in women.<sup>12</sup> Masoumeh's research is supported by Donsu's research which suggests that relaxation performed with meditation and deep breathing techniques can be used to activate sympathetic nerves. so that it can be used to overcome psychological problems such as stress, anxiety, pain and depression.<sup>13</sup>

The use of relaxation techniques in Suman Dabasa's (2019) study also has an important role in reducing maternal stress and anxiety and increasing the production of breast milk (ASI). Where if anxiety occurs in postpartum mothers it will affect the amount of mother's milk production. The results of the study on 57 postpartum mothers, which included 29 respondents in the experimental group and 28 respondents in the control group, showed that anxiety scores ( $31.12 \pm 11.4$  vs  $31.08 \pm 12.0$ ,  $p = 0.99$ ) were comparable in both group but there was a significant decrease observed in anxiety scores ( $19.8 \pm 6.7$  vs  $28.18 \pm 11.7$ ,  $p \leq 0.05$ ) in the experimental group compared to the control group.<sup>14</sup>

Primasari Mahardika (2017) in his research stated that relaxation techniques can reduce anxiety in a certain period of time or in overcoming a brief anxiety event. Relaxation therapy can overcome anxiety through cognitive and physical aspects and provide a relaxing effect so that in addition to reducing anxiety, it can also improve the client's physical and psychological status. The results of his research prove that relaxation therapy can be used as a therapy to reduce anxiety.<sup>15</sup>

Dyah Wijayanti (2016) in her research suggests that autogenic relaxation which is done 2 times per day for 2 weeks can reduce anxiety. The emotional response and calming effect that results from this relaxation is able to change the physiological mechanisms that were previously dominated by the sympathetic nervous system into the parasympathetic

nervous system.<sup>16</sup> Autogenic relaxation differs from other relaxation techniques because the technique is simple, easy and does not require a difficult position or body style to implement.<sup>17</sup> The results of Wijayanti's research showed that there was a significant reduction in anxiety levels ( $p = 0.002$ ) between before and after giving autogenic relaxation interventions to cervical cancer patients.<sup>16</sup>

Lutfi Rosida (2019) in his research on autogenic relaxation in overcoming anxiety proves that autogenic relaxation is included in relaxation therapy which has a significant effect in overcoming anxiety in patients in the ICU. Evidenced by the average value of the level of anxiety of the respondents before and after the autogenic relaxation intervention experienced a significant decrease ( $43.55 \pm (SD 17,951)$  vs  $36.6 \pm (SD 17,254)$ ;  $p = 0.001$ ).<sup>18</sup>

Perioperative nursing includes preoperative, intraoperative and postoperative. The role of nurses as health workers in these three phases is to provide independent and collaborative action with the aim that patients receive recovery from the health services provided.<sup>9</sup> The mother after cesarean section will feel pain located in the surgical area. The impact of pain will make mothers feel anxious in mobilizing, disturbed Activity of Daily Living (ADL), and unfulfilled Early Initiation of Breastfeeding.<sup>11</sup> Based on the research of Riris Andriati (2019), which uses autogenic relaxation as a relaxation technique that can be done independently in dealing with post sectio caesarean pain, it is evident that this relaxation therapy can have a significant effect ( $p = 0.024$ ) in reducing the pain of cesarean section.<sup>19</sup> This research is also in line with the research of Jufri (2019) which suggests that autogenic relaxation is proven to reduce post-cesarean pain, where the pain can cause anxiety in the post-partum mother. This is evidenced by a significant difference in pain scales ( $p = 0.000$ ;  $\alpha < 0.05$ ) before and after the autogenic relaxation technique treatment.<sup>20</sup>

## CONCLUSION

The results of the review of the article show that there are various types of relaxation techniques, such as progressive muscle relaxation techniques, autogenic relaxation, and deep breathing relaxation. Relaxation technique is a therapy that can overcome anxiety levels. Caesarean section will cause pain in the surgical scar and this will be a predisposing factor for anxiety in mothers with cesarean delivery. Relaxation techniques are suitable alternatives to be implemented in post-caesarean section mothers to reduce anxiety levels caused by surgical scar pain.

## REFERENCES

1. Achadyah RK, D.A SR, Mudhawaroh. Hubungan kecemasan dengan pelaksanaan inisiasi menyusui dini (IMD) pada Ibu Post Sectio Caesarea (SC) di Ruang Edelweis RSUD Jombang. *J Bidan "Midwife J.* 2017;3(2):31–9.
2. Kementrian Kesehatan RI. RISKESDAS 2018.pdf. 2018.
3. Kuo SY, Tsai SH, Chen SL, Tzeng YL. Auricular acupressure relieves anxiety and fatigue, and reduces cortisol levels in post-caesarean section women: A single-blind, randomised controlled study. *Int J Nurs Stud* [Internet]. 2016;53:17–26. Available from: <http://dx.doi.org/10.1016/j.ijnurstu.2015.10.006>
4. Wahyu H, Febriawati H, Lina LF, Andari FN. Pengaruh terapi kompres hangat dengan aroma lavender terhadap penurunan intensitas nyeri pasien post secti caesarea di RS. Detasemen. *J keperawatan Muhammadiyah Bengkulu.* 2019;7(1):18–26.
5. Wijayanti H. Perubahan psikologis fase taking in pada ibu nifas ruang mawar di rumah sakit Islam Jemursari Surabaya. 2017.
6. Pawatte I, Pali C, Opod H. Perbedaan Tingkat Kecemasan pada Ibu Pre Seksio Caesarea



- di RSIA Kasih Ibu dan RSUP Prof. Dr. R. D. Kandou Manado. *J Kedokt Komunitas dan Trop.* 2013;1(3):107–12.
7. Zappas MP, Becker K, Walton-Moss B. Postpartum Anxiety. *J Nurse Pract* [Internet]. 2020;3(2):1–5. Available from: <https://doi.org/10.1016/j.nurpra.2020.08.017>
  8. Rokawie AON, Sulastri S, Anita A. Relaksasi Nafas Dalam Menurunkan Kecemasan Pasien Pre Operasi Bedah Abdomen. *J Kesehat.* 2017;8(2):257.
  9. Bouka S, Widani NL. Pengaruh pendidikan kesehatan pre operasi dan relaksasi autogenik terhadap perubahan tingkat ansietas pasien pre operasi di RS Karitas Weetebula NTT. *Carolus J Nurs.* 2019;1(2):167–84.
  10. Kim H sil, Kim EJ. Effects of Relaxation Therapy on Anxiety Disorders: A Systematic Review and Meta-analysis. *Arch Psychiatr Nurs* [Internet]. 2018;32(2):278–84. Available from: <https://doi.org/10.1016/j.apnu.2017.11.015>
  11. Nurhayati NA, Andriyani S, Malisa N. Relaksasi Autogenik Terhadap Penurunan Skala Nyeri Pada Ibu Post Operasi Sectio Saecarea. *J Sk Keperawatan.* 2015;1(2):52–61.
  12. Nazarinasab M, Motamedfar A, Najafian M, Tabibi H. Investigating the effects of relaxation therapy on decreasing anxiety in patients with elective caesarean section in Imam Khomeini Hospital, Ahvaz, Iran during 2016. *Med Stud.* 2018;34(2):107–11.
  13. Donsu JD., Amini R. Perbedaan Teknik Relaksasi Dan Terapi Musik Terhadap Kecemasan Pasien Operasi Sectio Caesaria. *J Vokasi Kesehat.* 2017;3(2):57.
  14. Dabas S, Joshi P, Agarwal R, Yadav RK, Kachhawa G. Impact of audio assisted relaxation technique on stress, anxiety and milk output among postpartum mothers of hospitalized neonates: A randomized controlled trial. *J Neonatal Nurs.* 2019;25(4):200–4.
  15. Rahmawati P mahardika, Widjajanto E, Astari AM. The influence of progressive muscle relaxation on anxiety level of pre caesarean section mothers in delivery room. *Nurseline J.* 2017;2(2).
  16. Wijayanti D. Relaksasi Autogenik Menurunkan Kecemasan Pasien Kanker Serviks. *J Keperawatan.* 2017;9(1):37–44.
  17. Juanita F. Relaksasi Autogenik Training Untuk Membantu Keberhasilan Masa Awal Laktasi Pada Ibu Postpartum. *J Ners.* 2013;8(2):283–294.
  18. Rosida L, Imardiani, Wahyudi JT. Pengaruh terapi relaksasi autogenik terhadap kecemasan pasien di ruang intensive care unit rumah sakit Pusri Palembang. *Indones J Heal Sci.* 2019;3(2):52–6.
  19. Andriati R, Pratiwi RD, Indah FPS. The differences in the autogenik relaxation therapy's influences on reducing pain levels in postoperative sectio caesarea patients. *MJMR.* 2019;3(4):33–7.
  20. Jufri, Permana RA, Widagdo I. Autogenik Relaxation for Postoperative Caesarean Section Pain in RSAD Kodam V Brawijaya Surabaya. *Int Conf Kerta Cendekia Nurs Acad* [Internet]. 2019;1:12–8. Available from: <http://ejournal-kertacendekia.id/index.php/ICKCNA>