

# دفترچه مقالات برگزیده (۲۰۲۲)

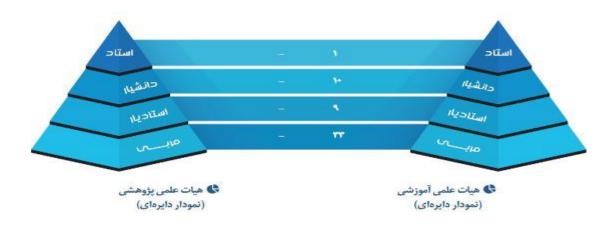
# دانشکده پرستاری و مامایی اهواز



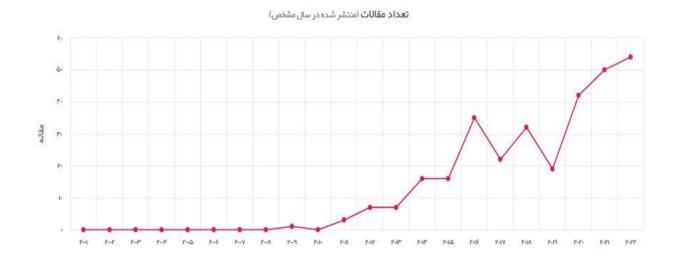
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# **ORIGINAL ARTICLE**

# The Effect of Citrus Aurantium Aroma on the Sleep Quality in Postmenopausal Women: A Randomized Controlled Trial

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# ABSTRACT

Background: One of the most common problems in menopausal women is sleep disturbance. Citrus aurantium has sedative, hypnotic, and anti-anxiety effects. The aim of this study was to investigate the effect of Citrus aurantium aroma on the sleep quality of postmenopausal women.

Methods: This was a double-blind randomized controlled trial that was conducted from Feb to Dec 2019 on 80 postmenopausal women who suffered from sleep disturbances. The participants were assigned into two groups randomly. Women in the intervention group were requested to use 2 drops of essential oil of Citrus aurantium, twice a day, for 4 consecutive days in a week, for 4 weeks as inhalation. The control group received almond oil in the same way. The quality of sleep was evaluated using the Pittsburgh Sleep Quality Index (PSQI) before the intervention and 4 weeks after the intervention started. The data were analyzed using the SPSS statistical software, version 21, and P<0.05 was considered statistically significant.

Results: After 4-weeks of intervention, the mean score of sleep quality was significantly lower in the Citrus aurantium group compared to the control group (5.75±1.33 vs 13±1.59, P<0.001). In the intervention group, all dimensions of PSQI were improved significantly (P<0.001).

Conclusion: The results of this study showed that the aroma of Citrus aurantium essence could significantly improve the sleep quality of postmenopausal women. Therefore, it is recommended that health care providers should inform the postmenopausal women and advise them to use this intervention for reduction of sleep disorders.

Trial Registration Number: IRCT20160427027633N7

Keywords: Aromatherapy, Citrus aurantium, Postmenopausal women, Sleep quality

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# Experiences of Urinary Incontinence Management in Older Women: A Qualitative Study

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Introduction: Older women have various experiences regarding the management of urinary incontinence depending on the societies they live in and their cultural backgrounds. The present study aimed to determine older women's experiences in urinary incontinence management.

Methods: The present qualitative study employed a conventional content analysis approach and was conducted in Iran from 2019 to 2020. In this research, the data were collected through face-to-face unstructured in-depth interviews with 22 older women suffering from urinary incontinence selected via purposeful sampling. The interviews were continued until reaching the data saturation point. Data analysis was performed simultaneously with data collection. The interviews were recorded, transcribed, and analyzed through Graneheim and Lundman style content analysis, and data management was done using the MAXQDA software. In order to achieve the accuracy and validity of the study, the Four-Dimensions Criteria (FDC) by Lincoln and Guba, namely credibility, dependability, conformability, and transformability, were

Results: This study was conducted on 22 older women suffering from urinary incontinence with the mean age of  $66.54 \pm 5.76$  years. The acquired data were put in four main categories of "resilience" with three subcategories, "change in lifestyle" with six subcategories, "attempt for treatment of the condition" with three subcategories, and "receiving support" with two subcategories.

Conclusion: The study results indicated that the older women suffering from urinary incontinence were resilient against the condition, had changed their lifestyles to manage the condition, and sought treatment. In addition, receiving support from the family and the society played a significant role in the follow-up and management of the condition. The present study findings can help healthcare team members focus on urinary incontinence. design care programs for older women with this condition, and improve their quality of life. Furthermore, focusing on young and middle-aged women's health, providing them with the necessary training for taking care of the genitourinary system, and raising

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# Impact of a sensory stimulation program conducted by family members on the consciousness and pain levels of ICU patients: A mixed method study

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Background: The results of several studies show the different effects of a balanced sensory stimulation program (SSP) on patients with brain injury admitted to the intensive care unit (ICU), but these effects have been less studied based on mixed and comprehensive methods.

Method: This mixed-method study involved 66 patients with brain injury admitted to the ICU who were allocated into intervention (n = 33) and control (n = 33) groups using random stratified sampling. Patients in the intervention group received a sensory stimulation program from family members for 1 h daily during ICU hospitalization, while the control group received only routine care. Patients' level of consciousness and pain intensity were measured immediately before and after the intervention using Glasgow Coma Scale (GCS) and Behavioral Pain Scale (BPS), respectively. In-depth unstructured interviews were conducted with the patients in the intervention group 3 months after discharge from the ICU. These interviews were analyzed following Graneheim and Lundman (2004) conventional content analysis method.

Results: A significant difference was found between the study groups in terms of the mean difference of GCS (P = 0.001) and BPS score (P = 0.001) before and after intervention. Patients in the intervention group had a higher mean GCS and a lower mean BPS than did patients in the control group. The main themes extracted from the qualitative analysis confirmed the results obtained from the quantitative phase of the study.

Conclusion: The combination of the quantitative and qualitative findings suggested that amidst the many hardships and sufferings brain injury patients go through in the ICU, a sensory stimulation program offered by family

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# RESEARCH Open Access



# Recurrent implantation failure and sexual function in infertile Iranian women: a comparative cross sectional study

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# **Abstract**

**Background:** Recurrent implantation failure (RIF) which means failing to implant after two or more high-quality embryo transfer cycles, affects 3% to 5% of women worldwide. The aim of this study was to assess the relationship between recurrent implantation failure and sexual function in infertile Iranian women.

**Methods:** This was a comparative cross-sectional study on 180 infertile Iranian women (90 infertile women with recurrent implantation failure and 90 infertile women who did not start infertility treatment). A demographic questionnaire and the Female Sexual Function Index were used for data collection. Data were analyzed using Chi-square, independent t-test, and multiple linear regression.

**Results:** The mean scores of different domains of sexual function (desire, lubrication, arousal, orgasm, pain, and satisfaction) were significantly lower in the group with RIF compared to the group without RIF. The total score of sexual function was significantly lower in the RIF group compared with the group without RIF (23.11  $\pm$  2.24, vs. 25.99  $\pm$  2.35, p < 0.001). The overall sexual function scores in women with RIF were 2.65 units lower than women without RIF (p < 0.001).

**Conclusion:** The results of this study showed that women with RIF had significantly lower sexual function than that in women without RIF. Therefore, sexual function issues should be treated as an important component of comprehensive care. This study did not measure the impact of economic factors on sexual function, however, the majority of the sample were classified as having weak or moderate economic status and this, along with the high cost of infertility treatments, could potentially have played a role in the participants' experience. This relationship will need to be investigated in future research.

Keywords: Recurrent implantation failure, Sexual function, Infertility

# Plain Language summary

Recurrent implantation failure (RIF) means inability to implant after two or more high-quality embryo transfer cycles. The aim of this study was to assess the relationship between recurrent implantation failure and sexual function in infertile Iranian women. In this study, 180 infertile Iranian women (including 90 infertile women with recurrent implantation failure and 90 infertile women with no implantation failure) were recruited. A demographic questionnaire and

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# Prediction of risk of coronary artery disease based on the Framingham risk score in association with shift work among nurses

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## ABSTRACT

Objectives. This study aimed to determine the prediction of risk of coronary artery disease (CAD) based on the Framingham risk score (FRS) in association with shift work among nurses. Methods. This cross-sectional and descriptive-analytic study was conducted with nurses working in three hospitals located in Abadan, southwest Iran. The sample size was 120 participants, divided into 60 shift workers and 60 day workers (non-shift workers). Demographic data and medical and occupational history were collected through a checklist and interviews. CAD risk assessment tools used to estimate the 10-year cardiovascular disease (CVD) risk included the FRS. Data were analysed by Mann–Whitney U test,  $\chi^2$  test and one-way analysis of variance (ANOVA) using SPSS version 22.0. Results. There were statistically significant differences between blood pressure (BP), total cholesterol (TC), body mass index (BMI) and shift work  $(U) \leq 0.001$ ). There was a statistically significant difference between prevalence of CAD risk and shift work based on the FRS (D = 0.04). Conclusion. The study findings showed that shift work is a risk factor for CAD disturbances. Therefore, particular follow-up of shift workers should be recommended for screening and preventing CAD.

# KEYWORDS

coronary artery disease; cardiovascular disease; nurse; shift work; Framingham risk

# 1. Introduction

Coronary artery disease (CAD) is the most common cardiovascular disease (CVD) and the leading cause of death worldwide [1]. CAD accounts for nearly 50% of CVD [2]. According to data from the World Health Organization (WHO), about 17.7 million individuals died of CAD in 2015, contributing to 31% of all mortality [3].

Some occupational factors are associated with CVD. Among the factors affecting CVD, shift work can be cited [4]. Approximately one-fifth of the total world workforce works in shift schedules. Shift work causes circadian rhythm misalignment and lifestyle changes, which is probably carcinogenic to workers [5]. Shift work is defined as work outside typical daytime hours, including unfixed shifts or rotating schedules, and night work [6].

Nurses are the largest group of healthcare personnel in the world, and the quality of their provided services directly influences the healthcare system [7]. Shift work among nurses is common, and they must provide 24-h continuous care and services [8]. Nurses, due to the nature of their work, tend to present occupational complications such as stress, poor sleep quality and eating impairment. This leads to various health hazards, particularly CVD, immune and neurological disorders [9].

Previous reports have shown that shift workers have a higher prevalence of CAD risk factors including increased blood pressure (BP), cholesterol, smoking [10] and poor diet [11]. The risk of hospital admission due to work-related CAD is highest among shift workers [12]. Accordingly, a higher prevalence of coronary heart disease (CHD) and

metabolic syndrome has been described among rotating shift workers [13].

Some studies suggest that CVD risk among shift workers is higher than in day workers. A recent meta-analysis of the relationship between shift work and CVD risk was published in 2018; it reported that shift workers were at 17% higher risk of CVD events than non-shift workers [14]. A cross-sectional study was performed with 110 Korean chemical plant workers, and the results showed that shift work is associated with an increased risk of CAD [15]. Another cross-sectional study was conducted with 400 textile mill workers of the Pali area, and the results showed that shift work can lead to a rise in CVD risk [16]. In a previous cohort study, shift work was found to be associated with a higher chance of developing CVD [17].

However, it is important to mention that several surveys have reported the reverse, e.g., a 22-year follow-up study failed to demonstrate any significant correlation between shift work and CVD [11]. A systematic review, with 7839 participants, did not show any difference in CVD between shift and day workers [18].

Given that nurses have an important responsibility in developing health, their physical problems cause a decrease in their beneficial nursing service and deterioration of the quality of work [19]. Thus far, no study has been conducted on nurses regarding relationships between risk of CAD and shift work based on a common tool in Iran. Therefore, the aim of this study was to assess and predict the risk of CAD based on the Framingham risk score (FRS) in association with shift work among nurses.

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# Does Infertility Stress Impair Sexual Function in Infertile Women and Men? A Cross-Sectional Study in Iran

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**Background:** The issue of infertility is a worldwide challenge, estimated to affect around 50 million couples. This study aimed to evaluate the relationship between infertility stress and sexual function in men and women with infertility.

**Methods:** In this cross-sectional study, 300 men and women with infertility were recruited. A demographic questionnaire, the Fertility Problem Inventory, the Female Sexual Function Scale (FSFI), and the International Index of Erectile Function (IIEF) were used to collect data. Independent *t*-test, Chi-square, and linear and logistic regressions were used to assess the data.

**Results:** The total score of sexual function in women and men was  $22.18 \pm 7.86$  and  $57.7 \pm 17.8$ , respectively. Infertility duration and the ability to pay for the costs of infertility treatment had a significant relationship with sexual function in women. A significant association was found between communication concerns and sexual function scores in men with infertility. Infertile women had more sexual concerns, while infertile men had more communication concerns.

**Conclusion:** This study showed that women with infertility had more infertility stress than men with infertility. Women with higher infertility duration and the inability to pay for the infertility treatment costs impaired sexual function. Women with infertility had more sexual concerns, while Men with infertility had more communication concerns. Policymakers need to consider strategies such as counseling for men and women with infertility to help them cope with their problems, especially their psychological problems. The lack of random enrollment of participants and lack of control group were the limitations of this study.

Keywords: infertility stress, female sexual function, male sexual function, infertile men, infertile women

# BACKGROUND

Infertility is a challenging worldwide issue which is estimated to affect around 50 million couples (1). In other words, every sixth couple is affected by infertility (2). The prevalence of primary clinical infertility in Iran was estimated to be 20.2% in 2019 (3). The causes of infertility can be listed as follows: non-ovulation or irregular ovulation (20%), tubal factor (30%), semen migration factor (10%), and male factor (30%) (2).

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# RESEARCH Open Access

# Scope of Iranian community health nurses 'services from the viewpoint of the managers and nurses: a content analysis study



Aazam Hosseinnejad<sup>1</sup>, Maryam Rassouli<sup>2</sup>, <mark>Simin Jahani<sup>3\*</sup>, Nasrin Elahi<sup>3</sup> and Shahram Molavynejad<sup>3</sup></mark>

# Abstract

**Background:** Considering the need for nurses specializing in community health and in order to define professional duties for future planning towards creating the position of community health nurses in the primary health care system of Iran, this study aims to explain the range of services which can be provided by community health nurses from the perspective of the mangers and nurses.

**Methods:** The present qualitative study was conducted with the approach of contract content analysis in Iran in 2020. This study was conducted through in-depth and semi-structured interviews with 22 participants, including community health nursing faculty members, health deputies and managers, community health nurses working in health centers, and the care seekers visiting comprehensive health centers. The samples were selected through purposeful sampling. The interviews continued until data saturation. Data analysis was performed simultaneously with data collection. The interviews were recorded, transcribed, and analyzed through Graneheim & Lundman's content analysis method, and data management was done using MAXQDA software. To achieve data trustworthiness, the criteria presented by Lincoln and Guba were used.

**Results:** The obtained data were classified into the two main categories of service provision settings and service provision domains. The category service provision settings covered 7 subcategories including participation in the family physician plan, activities at the centers for vulnerable groups of the community, establishing private community health clinics, leading health promotion programs in the 3rd generation hospitals, activities in comprehensive health centers, follow-ups and home visits, and activities in schools' health units. Service provision domains consisted of 6 subcategories including participation in health planning, decision-making, and policymaking, research on the health system, health promotion, monitoring and coordination, providing care for the patients with non-communicable diseases and high-risk groups, and eldercare.

**Conclusions:** From the participants' perspective, important services that can be provided by the community health nurse are health promotion, the management of chronic patients and the elderly, follow-ups, and home visits. Therefore, it is recommended that health policy makers pay attention to the service provision areas and the services providable by the community health nurse in their macro-planning, and to provide primary health care in comprehensive health centers using inter-professional care models, integrating the community health nurse into the care team.

Keywords: Community health nursing, Task performance and analysis, Iran

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# RESEARCH Open Access

# Development of accreditation standards for midwifery clinical education in Iran



Sara Abedian<sup>1</sup>, Mojgan Javadnoori<sup>2</sup>, <mark>Simin Montazeri<sup>2</sup></mark>, Shahla Khosravi<sup>3</sup>, Abbas Ebadi<sup>4,5</sup> and Roshan Nikbakht<sup>6</sup>

# Abstract

**Background:** Accreditation is one of the most important methods of quality assurance and improvement in medical education. In Iran, there are no specific midwifery education accreditation standards. This study was designed to develop accreditation standards for midwifery clinical education in Iran.

**Methods:** This study was performed in Iran in 2021. It consisted of two phases. In the first phase, accreditation standards for midwifery education in the United Kingdom, the United States, Australia and the International Confederation of Midwives were thoroughly examined through a narrative review. The domains obtained from this phase were used as a framework for coding in the second phase. In the second phase, a qualitative study was conducted with a directed content analysis approach to determine standards and criteria for clinical midwifery education accreditation in Iran. Participants were policymakers and senior managers of midwifery education, faculty members of midwifery departments with clinical teaching experience, and final year undergraduate midwifery students. The participants were selected by purposive sampling method, and data collection continued until data saturation.

**Results:** The standards and accreditation criteria of midwifery education from the review study were formed 6 domains: Mission and goals; Curricula; Clinical instructors; Students, Clinical setting; and Assessment. In the second phase, data analysis led to the extraction of 131 codes, which were divided into 35 sub-subcategories, 15 sub-categories, and 6 main categories.

**Conclusion:** Implementing the specific and localized standards of clinical midwifery education in Iran can lead to improved quality of clinical education programs.

Keywords: Accreditation standards, Accreditation program, Clinical education, Midwifery

# Introduction

Clinical education is a dynamic process in which students gradually gain experience by attending the patient's bedside and putting into practice the concepts they have already learned in interaction with the instructor and the clinical setting [1]. The quality of community health care depends on the quality of education in the clinical environment, and quality clinical education leads to the

graduation of more successful and competent students [2].

Understanding the problems of clinical education is the first step to improving its quality [3]. Various studies have been conducted to evaluate the quality of clinical education, and in most of these studies, the quality of clinical education has not been at a desirable level [4, 5]. Given the paramount importance of midwifery clinical education in the health of the community, low-quality midwifery education leads to low-quality maternal and newborn health. Delivering high-quality midwifery care requires a professional, qualified and competent workforce. Improving the quality of clinical services plays an important role in the health system, and the government's

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# ARTICLE



# Effect of Omega-3 fatty acid supplementation on sexual function of pregnant women: a double blind randomized controlled trial

Zeinab Khanjari<sup>1</sup>, Mina Iravani (□<sup>2™</sup>, Parvin Abedi (□)<sup>3</sup> and Saeed Ghanbari<sup>4</sup>

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The aim of this study was to evaluate the effect of omega-3 fatty acid supplementation on female sexual function during pregnancy. The present study was a double-blind randomized controlled clinical trial performed on 124 pregnant women (62 people in each group) at 16–22 weeks of gestation who referred to health centers in llam in 2020 to receive prenatal care. The intervention group received 300 mg of omega-3 supplements and the control group received placebo once a day for 8 weeks. Data collection tools in this study included a demographic questionnaire, three 24-h dietary recall (24HR), female sexual function index (FSFI), and Van den Bergh Pregnancy-Related Anxiety Questionnaire (PRAQ). Before intervention, the total score of sexual function in the intervention group and control groups, showed no statistically significant difference (P = 0.123). However, 4 and 8 weeks after intervention, the mean total score of sexual function in the intervention group was significantly higher than that of the control group after intervention (P < 0.0001). Before intervention, the total score of gestational anxiety in the intervention and control groups, showed no statistically significant difference (P = 0.149). However, 4 and 8 weeks after intervention, the mean total score of gestational anxiety in the intervention group was significantly lower than that of the control group (P < 0.0001). Based on three 24-h dietary recall, regardless of daily intake of 300 mg of omega-3 supplement, the percentage of polyunsaturated fatty acid (PUFA) intake from daily energy intake was not statistically significant between the intervention and control groups from baseline to follow-up (P > 0.01). Based on the results of this study, omega-3 supplementation could improve sexual function in pregnant women by preventing increased pregnancy anxiety. However, more studies are needed to prove the effectiveness of omega-3s on female sexual function during pregnancy. This study was approved by the Ethics Committee of Ahvaz Jundishapur University of Medical Sciences (Ref. ID: IR.AJUMS.REC. 1398.935) and registered in Iranian Registry of Clinical Trials (Ref. ID: IRCT20200415047078N1).

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Sexual dimension is one of the most inherent human emotions. which manifests in the deepest human relationships [1] and plays an important role in a person's quality of life and well-being [2, 3]. Different periods of a woman's life and the changes that occur therein can affect a woman's sexual life [4]. Pregnancy is one of the most critical periods in women's life characterized with profound changes that expose them to mental and physical changes and thus effecting the physical and operational proofs of changes and thus affecting the physical and emotional needs of the couple [5, 6].

the couple [5, 6]. In a systematic review conducted by Serati et al. The results showed that in most studies, sexual function was reduced during pregnancy [7]. Nearly half of women of the population experience sexual dysfunction during pregnancy, with the prevalence of this disorder varying according to gestational age [8]. In a study on pregnant women in Turkey, the prevalence of this disorder was 54.7% [9] while the rate reported for Egypt was 68.8% [10] and in Iran, results of different studies range from 33.3% [11] to 79% [12].

Numerous factors during pregnancy can be associated with changes in sexual function, including hormonal [13], psychological, relational and social factors [1, 14]. In this regard, the results of previous studies indicate that mental disorders such as anxiety

previous studies indicate that mental disorders such as anxiety play a prominent role in changing sexual function in women during pregnancy [15, 16].

Anxiety is a common symptom during pregnancy [17] for which no definitive treatment is often offered [18]. Numerous studies have examined the relationship between mental disorders and sexual function. Anxiety can be associated with inhibition of orgasm, sexual arousal, and increased risk of dyspareunia [19–23].

Because some sexual dysfunctions are caused by psychological contents.

Because some sexual dysfunctions are caused by psychological factors, treatments aimed improving the mental health problems of pregnant women seem to be effective in promoting sexual function [24]. Currently, while no approved drug treatment for sexual dysfunction in pregnant women has been proposed [25].

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Original Article



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# Determining massage dose-response to improve cancer-related symptom cluster of pain, fatigue, and sleep disturbance: A 7-arm randomized trial in palliative cancer care

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# Abstract

Background: The efficacy of various massage doses in palliative cancer care settings is still debated, and no specific protocol is

Aim: Evaluating response to various massage doses for symptom cluster of pain-fatigue-sleep.

Design: A 7-arm randomized-controlled trial with weekly massage for 4 weeks depending on the prescribed dose (15-, 30-, or 60-min; 2× or 3×/week) and a 4-week follow-up. The intensities of pain, fatigue, and sleep disturbance were measured using a 0–10 scale at nine-timepoint; baseline, weekly during the intervention, and the follow-up period. Then, the mean scores of the three symptoms were calculated as the symptom cluster intensity at each timepoint. IRCT.ir IRCT20150302021307N5.

Setting/participants: Adults with cancer (n = 273) who reported all three symptoms at three oncology centers in Iran.

Results: The odds of clinical improvement (at least 30% reduction in symptom cluster intensity from baseline) increased with doseescalation significantly [(OR = 17.37; 95% CI = 3.87-77.90 for 60-min doses); (OR = 11.71; 95% CI = 2.60-52.69, for 30-min doses); (OR = 4.36; 95% CI = 0.94-20.32, for 15-min doses)]. The effect durability was significantly shorter at 15-min doses compared to 30- and 60-min doses. The odds of improvement for doses  $3\times$ /week was not significant compared to doses  $2\times$ /week (OR = 12.27 vs OR = 8.34); however, the effect durability for doses  $3 \times$ /week was significantly higher.

 $\textbf{Conclusions:} \ \text{The findings indicated that dose-escalation increases the efficacy of massage for the pain-fatigue-sleep symptom cluster.}$ Although the 60-min doses were found to be more effective, the 30-min doses can be considered more practical because they are less costly and time-consuming. Our findings can be helpful to develop massage guidelines in palliative care settings. Trial registration: Iranian Registry of Clinical Trials, IRCT20150302021307N5.

# Keywords

Palliative care, oncology, comfort care, complementary therapies, holistic medicine, integrative medicine, supportive care, clinical

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# ORIGINAL ARTICLE

# The Effect of Malva Sylvestris Cream on Episiotomy Pain and Healing: A Randomized Controlled Clinical Trial

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# ABSTRACT

Background: Episiotomy is one of the common procedures during childbirth in Iran, which causes pain, discomfort, and scar in the perineum. This study aimed to pursue the effect of Malva Sylvestris cream on episiotomy pain and healing.

Methods: This study was a double-blinded randomized-controlled clinical trial that was conducted from April to December 2021 at the Sina hospital in Ahvaz, Iran. Sixty women were selected and randomly assigned to control and intervention groups using block randomization. The main outcomes included pain assessment and episiotomy wound healing that are assessed by the Visual analog scale (VAS), and perineal healing scale included redness, edema, ecchymosis/bruising, discharge, approximation (REEDA). The cream was used twice a day for up to 14 days. The participants were followed on the first, seventh, and fourteenth days postpartum. Independent T-test, Mann-Whitney, and Chi-square, and Generalized Estimating Equations (GEE) model were used by SPSS software version 22 for data analysis. Statistically significant level was considered less than 0.05.

Results: There were no significant statistical differences between the two groups in demographic characteristics (P>0.05). No significant statistical differences were found in both groups in terms of perineal healing (B=-0.05; P=0.89) and pain scores (B=0.15; P=0.56). However, the chance of external dysuria in the intervention group decreased by 77% (P=0.01).

Conclusion: Despite showing the positive effect of Malva Sylvestris extract on wound healing in animal and in-vitro studies, this clinical study failed to show the positive effect of this extract on wound healing and pain relief of episiotomy. However, future clinical trials are needed to substantiate the above findings. Trial Registration Number: IRCT20190826044621N1.

Keywords: Episiotomy, Malva, Pain, Wound healing

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# RESEARCH Open Access



# A comparison of the effect of Swedish massage with and without chamomile oil on labor outcomes and maternal satisfaction of the childbirth process: a randomized controlled trial

Fatemeh Eskandari¹®, <mark>Parvaneh Mousavi²®</mark>, Mahboubeh Valiani³®, Saeed Ghanbari⁴® and <mark>Mina Iravani⁵</mark>\*®

# **Abstract**

**Purpose of study:** Massage is widely used as a traditional technique during labor and delivery. The aim of this study was to evaluate the effect of Swedish massage with and without chamomile oil on delivery outcomes.

**Methods:** The present study was a randomized clinical trial on 154 primiparous pregnant women who were selected by random sampling method and divided into 3 groups: massage with chamomile oil (n=51), massage without chamomile oil (n=51), and control group (n=50). Data collection tools included demographic and delivery information questionnaire, Visual Analogue Scale (VAS), maternal satisfaction with delivery scale, and Partograph form. In the two intervention groups, Swedish massage techniques (i.e., Effleurage, Petrissage, Vibration, and Superficial stroke) were performed with and without the use of chamomile oil since the active phase of labor (5 cm dilatation), while the control group received only routine labor care during labor.

**Results:** Swedish massage with chamomile oil significantly reduced the labor pain score, reduced the length of active phase and the second stage of labor, and increased the score of maternal satisfaction with the labor process (P < 0.001). In addition, there was a significant relationship between the type of study groups and the type of delivery (P < 0.043).

**Conclusion:** The results of the study showed that using Swedish massage techniques with or without chamomile oil can improve labor outcomes. Swedish massage using chamomile oil was associated with better results compared to the same massage without using chamomile oil.

Clinical trial code IRCT20200513047430N1.

Keywords: Swedish massage, Chamomile oil, Delivery outcomes, Labor

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# Introduction

The mechanism and physiology of delivery entail a natural, spontaneous and non-interventional process that has been performed physiologically for many years [1]. As a critical and important experience in the life of every woman, delivery has several physical, emotional, social, physiological, cultural and psychological



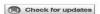
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# Comparison of pre- and intra-COVID-19 postpartum depression among reproductive aged women: A comparative cross-sectional study in Ahvaz, Iran

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**Background:** The association between PPD and COVID-19 pandemic has been studied in some countries. This study aimed to compare postpartum depression before and during the COVID-19 pandemic among reproductive-aged women in Ahvaz, Iran.

Methods: This comparative cross-sectional study involved 600 women of reproductive age in Ahvaz, Iran during the COVID-19 pandemic who were compared with 504 of their counterparts before the pandemic. Literate women who had given birth 1-6 months prior to the study, were aged 18-35, and were willing to participate in this study were recruited. A demographic questionnaire and Edinburgh Postnatal Depression Scale were used to collect the data. Independent t-test, Chi-square, and Logistic regression were used to analyze

Results: Before the pandemic, only 123 (24.9%) of the women had PPD, while during the pandemic, this number rose to 409 (68.2%). During the COVID-19 pandemic, the women were 8.727 times more likely to have PPD (95% CI: 5.919-12.868). During the pandemic, women with high school education and those having a high school diploma were 2.454 and 2.054 times more likely to have PPD compared to women with a university degree (95% CI: 1.508-3.996 and 1.302-3.241, respectively).

Conclusion: The prevalence of PPD among Iranian reproductive-aged women increased during the COVID-19 pandemic. Policymakers should seek some strategies to support women during pregnancy and postpartum in times of crises such as the COVID-19 pandemic.

postpartum depression, COVID-19 pandemic, reproductive aged women, cross-sectional study, postnatal depression

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Abstract

The Persian validation of the Coronary Artery Disease Education Questionnaire Short Version for education of patients undergoing cardiac rehabilitation

Zahra Omovvat MSc<sup>(1)</sup>, Nasrin Elahi PhD<sup>(2)</sup>, Neda Sayadi PhD<sup>(3)</sup>, Saeed Ghanbari PhD<sup>(4)</sup>

# **Original Article**

BACKGROUND: Coronary artery disease (CAD) is a leading cause of cardiovascular death worldwide. Therefore, assessing knowledge in patients with CAD needs a specific tool. This study aims to carry out the Persian validation of the Coronary Artery Disease Education Questionnaire Short Version (CADE-Q SV) for education of patients undergoing cardiac rehabilitation (CR).

METHODS: This study was a cross-sectional study. First, the original version of the CADE-Q SV was translated from English into Farsi using the standard approach. The face validity and content validity were measured using quantitative and qualitative approaches. The confirmatory factor analysis (CFA) was done to examine the construct validity. The reliability of the questionnaire was investigated through test-retest reliability and by calculating Cronbach's alpha coefficient. SPSS software was used to analyze the data, and the R package lavaan, to approve the CFA.

RESULTS: The result of quantitative face validity showed that the minimum score was 4.42. The minimum scores for quantitative content validity were 0.83 for content validity index (CVI) and 0.66 for content validity ratio (CVR); therefore, all the items were approved. According to the results of the CFA, the comparative fit index (CFI) was reported to be 0.969, indicating a good fit for the items. The Cronbach's alpha coefficient for the whole instrument was 0.679, and the test-retest correlation was measured to be > 0.4, after a 2-week interval.

CONCLUSION: In total, it can be concluded that the CADE-Q SV has good psychometric properties and proper reliability. It can be utilized in medical and CR centers.

Keywords: Validation; Coronary Artery Disease; Cardiovascular Disease; Rehabilitation

Date of submission: 13 June 2020, Date of acceptance: 15 June 2021

# Introduction

Coronary artery disease (CAD), as the most common cardiovascular disease (CVD) in the developed countries, is still the leading cause of death and the most common debilitating disease across the world, and seemingly the leading cause of death globally by the year 2030.1-5

Mortality rates in developed countries have declined due to preventive measures. But it is still on the rise in developing countries and increasing in Iran due to improper lifestyle.6 Evidence shows that CVD is the leading cause of death in Iran.7

Rehabilitation is part of cardiovascular treatment

and is considered as an evidence-based intervention to change health behaviors.8,9 A cost-effective program is one which results in reduced complications, reduced re-hospitalizations and the recurrence of disease, increased quality of life, reduced mortality, improved physical and mental function, and reduced depression and anxiety.6,7,10

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# Investigation of Risk Factors of Congenital Hypothyroidism in Children in Southwestern Iran

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# Ashrafalsadat Hakim<sup>1</sup>

## Abstract

Due to the fact that congenital hypothyroidism is one of the preventable causes of mental retardation, so this study was conducted to determine the risk factors in children with congenital hypothyroidism. In this descriptive-analytical cross-sectional study, the study population included all children with congenital hypothyroidism referred to outpatient clinics of teaching hospitals whose congenital hypothyroidism was diagnosed by a physician specializing in this field from the first months after birth. The data collection tool is a researcher-made checklist that includes individual and clinical variables (age, sex, height, weight, several children in the family, etc.). In order to analyze the data, SPSS<sub>19</sub> software and descriptive statistics such as mean, standard deviation and frequency percentage were used to describe the demographic information. The significance level used in statistical tests was considered equal to 0.05. The results of this study showed that out of 350 affected children, 163 (46.6) were girls and 187 (53.4) were boys. Also, the majority of children are over 6 years old (35.14%). Most children live in the city (88.57%). Also 55.71% of mothers of affected children had a normal delivery. 57.42% of the parents of children have a family relationship. According to the results of this study, many risk factors for congenital hypothyroidism are identified. Therefore, based on these findings, Health planners should consider the necessary strategies to prevent and control this congenital disease in a timely manner.

# Keywords

Congenital hypothyroidism, Risk factors, Children

# Introduction

Congenital hypothyroidism is defined as a deficiency of thyroid hormone at birth and is one of the most common endocrine disorders in newborns.<sup>1,2</sup>

Congenital hypothyroidism, with a prevalence of 1 in 3000-4000 live births, is the most common preventable cause of mental retardation in children.<sup>3,4</sup>

The rate of this disorder is lower in whites and blacks and higher in Hispanics and Asian countries. Congenital hypothyroidism in Iranian provinces also has a variable prevalence. Dalili et al. In their study state that the incidence of 1 case of congenital hypothyroidism per 781 live births is comparable to other studies in Iran and it has a significant incidence compared to most reports from other countries. Due to the higher incidence in several Iranian studies, the genetic predisposition of the Iranian population is a possible cause but a significant variation in the incidence of hypothyroidism in different parts of Iran is a significant effect of environmental factors. Newborns with hypothyroidism have a normal

appearance and clinical signs at birth are low and non-specific. Therefore, if the diagnosis is based on clinical symptoms, the diagnosis and treatment is delayed and the newborn will suffer irreversible complications such as deafness and mental retardation. Congenital hypothyroidism is generally classified into 2 types, transient and permanent. The transient type improves on its own while in the permanent type, a person must take medicine for the rest of one's life. The transient type is mainly due to iodine disorders in the mother during pregnancy or exposure of the newborn to high levels of iodine during or after birth.

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# ORIGINAL ARTICLE



# Sense of coherence or self-efficacy as predictors of health-related quality of life in sickle cell disease patients

Mehrnaz Ahmadi¹ □ · Samira Beiranvand¹ □ · Saeed Poormansouri² □ · Mahsa Matbouei³.⁴ □ · Camelia Rohani⁵ □

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# **Abstract**

Patients with sickle cell disease (SCD) suffer from impaired health-related quality of life (HRQoL). This study aimed to determine the level of HRQoL, sense of coherence (SOC), and self-efficacy (SE) in a sample of SCD patients, and to explore predictors of their physical and mental HRQoL. A cross-sectional descriptive study was conducted on 83 SCD patients of one university hospital. The data of the study was collected through Persian versions of the Short-Form Health Survey SF-36 (RAND 36-item), the Sense of Coherence Scale (SOC-13), and the Sickle Cell Self-Efficacy Scale (SCSES). The mean age of the patients was  $26.34\pm8.19$  years old. Patients' mean scores for the Physical Component Summary (PCS), Mental Component Summary (MCS), SOC, and SCSES were  $40.57\pm17.18$  (range: 0-100),  $50.44\pm17.95$  (range: 0-100),  $52.40\pm15.35$  (range: 13-91),  $26.40\pm6.96$  (range: 9-45), respectively. Regression models showed that the level of the patients' SOC, was the main predictor of the MCS ( $\beta=0.37, p<0.001$ ). However, the level of the patients' SE was the main predictor of the PCS ( $\beta=0.30, p=0.004$ ). Also, "blood transfusion history" in patients was a common predictor for both the PCS ( $\beta=0.20, p=0.008$ ) and the MCS ( $\beta=-0.29, p=0.003$ ). These results can assist nurses and clinicians to plan clinical interventions for SCD patients by focusing on increasing the level of the SOC and SE and improving SCD patients with a greater risk of impaired HRQoL.

Keywords Sickle cell disease · Health-related quality of life · Sense of coherence · Self-efficacy

This article is part of the Topical Collection on Vascular Neurosurgery—Ischemia.

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# Introduction

Sickle cell disease (SCD) is an inherited hemoglobin disorder that has affected on the health of millions of individuals throughout the world [1]. It has been estimated that about 300 million people worldwide carry the sickle cell

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# The Lived Experiences of Iranian Patients with Rheumatoid Arthritis: A Qualitative Research

# Abstract

Background: Rheumatoid Arthritis (RA) is a chronic inflammatory disease that affects various systems of the body. The present study was conducted with the aim to explain the lived experiences of Iranian patients with RA. Materials and Methods: According to the research question, the phenomenological research approach was used. The participants were selected through purposive sampling, and sampling was continued until data saturation was achieved. The data was collected by conducting unstructured interviews and using an audio recorder. To interpret the data, an interpretive/ hermeneutic approach was implemented using Van Manen's method. In addition, Lincoln and Guba's criteria were used to evaluate data robustness. **Results:** A total of 24 participants participated in the study. Overall, 145 basic concept codes were extracted which were classified into the four main themes of self-management with the participation of the family, spiritual resilience in the face of existing problems, the tendency to hide the disease, and the fear of an uncertain future. Conclusions: It is recommended that care providers use the findings of this study to develop care plans in the various aspects of the physical, mental, social, and spiritual needs of patients with RA based on their concerns and deep experiences. It is also suggested that other qualitative research approach methodologies such as grounded theory for explaining the process of patient care and providing an appropriate model, or action research for solving the problems of hospitalized patients through suitable care at home be implemented.

Keywords: Arthritis, lifestyle, Qualitative Research, rheumatoid

# Introduction

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Rheumatoid Arthritis (RA) is a prototypical, chronic, inflammatory rheumatic condition that affects 5-10 adults per 1000 in industrialized countries. Delayed care leads to severe RA, along with physical disability, poor Quality of Life (QOL), and early death. [1] It should be noted that from 1990 to 2017, RA was responsible for 3.4 million years of disability living worldwide.[2] In addition, the mortality rate in RA patients is recorded to be 50% more than that in the general population.[3-5] In Iran, the incidence rate of this disease is reported to be 0.37% of the total population. [6] RA is a chronic inflammatory disease that causes cartilage and bone damage in multiple joints,<sup>[7]</sup> pain, joint stiffness, and functional defects.<sup>[8]</sup> RA has periods of improvement and exacerbation that cause a decline in QOL of patients and makes it a severely debilitating disease.[9-11] The challenging study by Chaleshgar Kordasiabi et al.[12] in Iran showed that the patients with

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RA have a poorer physical OOL compared to other aspects. In the study by Bala et al[13] and Pedraz-Marcos et al, pain intensity and depression were reported that had a great impact on the QOL.[14]

In a study by Bai et al.,[9] age, gender, pain, income, education level, employment status, social status, and Body Mass Index (BMI) were found to impact the QOL of RA patients. In the study of Poh et al.,[15] the complications affecting the OOL had negative impacts on the physical, mental, and social aspects of health, and patients adapted to these effects through different approaches.

In the study by Edwards et al.,[16] findings showed that patients' experiences during hospitalization played an important role in the promotion of rheumatic care by nurses. In the study conducted by Hwang et al.[17] on the experiences of Korean women with RA, although RA was recognized as a very painful and stressful disease, the real life of patients with the disease was not well

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# The effectiveness of cognitive-behavioural consultation on sexual function and sexual self-efficacy of women after childbirth

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ARTICLE INFO

Keywords:
Cognitive-behavioral therapy
Sexual self-efficacy
Postpartum
Sexual dysfunction
Counseling

# ABSTRACT

Objective: The purpose of this study was to investigate the effect of the cognitive-behavioral therapy program (CBT) on the sexual function and sexual self-efficacy of 100 women after childbearing.

Methods: In this experimental pretest-posttest and control group design study, women who passed eight weeks of

Methods: In this experimental pretest-posttest and control group design study, women who passed eight weeks of their delivery and were referred to three health centers, in Shadegan, Iran, from January to April 2019 registered using the simple sampling method and randomly allocated into two groups of case and control. For the CBT group eight weeks of counseling (one session/week), and for the control group, routine educations were provided by health care providers. Both groups filled out the female sexual function index and sexual self-efficacy questionnaires before intervention and eight weeks after the last session.

Results: There was no significant difference between the CBT and control groups before the intervention in terms of sexual function and sexual self-efficacy, but eight weeks after the intervention, there was a statistically significant difference between the two groups (P=0.001).

Conclusion: Proper implementation of counseling based on the CBT model improved sexual function and self-

Conclusion: Proper implementation of counseling based on the CBT model improved sexual function and selfefficacy of nulliparous women after childbirth.

# Introduction

Sexual health has an essential role at any stage of a women's life [1, 2] and sexual dysfunction could adversely affect the women's quality of life of the postpartum women [3,4]. Childbearing is a critical life transition that affects postpartum sexual function [5]. Following childbirth, a woman's sexual functioning may negatively have affected by Psychological distress and decreasing interest in resuming Sexual intercourse [5,6]. Sexual dysfunction due to some factors such as personality, social, cultural, and family status may remain unknown or appear in the form of depression, low self-esteem, marital dissatisfaction, and separation [7, 9]

This disorder refers to trouble with sexual desire and psychosocial changes which disturb the sexual response cycle and lead to some conflicts in the couple's relationship [9]. According to Rosen's theory, sexual function includes six components of sexual desire, sexual arousal, lubrication, orgasm, sexual satisfaction, and vaginal pain during and

after intercourse[2].

The results of a meta-analysis of 59 studies have shown that if couples have sexual activity during pregnancy and enjoy it, their communication, gratitude, and behavior become more stable four months after childbirth and three years afterward [10]. Postpartum sexual dysfunction has been estimated to range from 25 % to 63 % [11]. Khajehei et al. also studied 325 women who had given birth a year earlier and reported sexual dysfunction in 3.64% and sexual dissatisfaction in 5.70%. Also, the most common sexual dysfunction was related to sexual desire (2.81 %), orgasm (3.53 %), and sexual arousal (3.52 %) [9]. In a study, 35 % of women reported a moderate level and 13 % of women reported a severe level of sexual dysfunction during 3 months after birth that improved over the time [12]. Studies show that inadequate sex education and information about sexual activity have a role in sexual dysfunction, incidence, and persistence of sexual disorders [13].

For the treatment of sexual disorders, several methods, including cognitive-behavioral therapy, yoga, medications, change in lifestyle,

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# **Original Article**



Mansooreh Rooeintan, Niloofar Hajiaraghi¹, Seyed Maryam Mousavi², Behnaz Asadizaker³, Zahra Gorjian⁴

A cross-sectional study

The survey of nursing students'

during the Covid-19 epidemic:

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Abstract:

**BACKGROUND:** Coronavirus disease 2019 (Covid-19) pandemic has increased virtual education use. This study aimed to determine the attitude of nursing students of Ahvaz Jundishapur University of Medical Sciences towards virtual education and its relationship with their satisfaction during the Covid-19 pandemic.

attitude towards virtual education and its relationship with their satisfaction

MATERIALS AND METHODS: This descriptive-analytical study was conducted during 2020–2021 with the participation of 229 nursing students (undergraduate, graduate, and doctoral) who had spent at least one semester virtually at Ahvaz Jundishapur University of Medical Sciences. The sampling method was convenience. The data collection tool was a questionnaire consisting of three parts. The first part included students' demographic information and the second and third parts included the standard questionnaire of individual development and educational assessment to determine students' attitudes toward virtual education and their satisfaction with this type of education. IBM SPSS statistics 22 software and descriptive and analytical statistical tests were used for data analysis.

**RESULTS:** According to the study results, the mean score of students' attitudes toward virtual education was  $35.1 \pm 11.3$  and the mean score of students' satisfaction with this educational method was  $88.3 \pm 30.6$ , both of which are at the desired level. Also, a direct relationship was found between students' attitudes and satisfaction scores (P < 0.001).

**CONCLUSION:** In this study, the attitude of nursing students to virtual education and their satisfaction with this educational method had been at the desired level. Therefore, the relevant authorities should also consider the necessary planning in the field of using this educational method and improving students' attitudes towards it under normal conditions.

Keywords

Attitude, Covid19, education, nursing, satisfaction

# Introduction

In December 2019, coronavirus disease 2019 (Covid-19) appeared in Wuhan, China, and is spreading rapidly around the world. In the virus has infected Iran as well as other countries around the world, and the first cases of Covid-19 in

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Iran were identified with the death of two patients in Qom. [2,3] Covid-19 is a large family of viruses that cause diseases, from the common cold to severe respiratory diseases. Common symptoms of Covid-19 include fever, fatigue, cough, shortness of breath, and difficulty in breathing. Most patients have mild symptoms and a good

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# CASE REPORT

# The Study of COVID-19 in an Iranian Family with Sickle Cell Disease

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# ABSTRACT

Coronavirus Disease 2019 (COVID-19) is a significant medical and public health problem in the world. It is believed that it can worsen in extreme conditions. Also, it is suggested that blood disorders such as sickle cell disease (SCD) may increase the risk of COVID-19 symptoms. The present study reports a family facing COVID-19, in which one of two members with SCD presented with fever, repeated cough and dizziness followed by acute chest syndrome leading to death. The remained members that had sickle cell trait manifested mild symptoms based on our findings. Although COVID-19 in individuals with SCD showed an increased risk for COVID19 compared with individuals with sickle cell trait, it seems that SCD cannot lead to worse condition in our patients.

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# Introduction

The emergence of Coronavirus Disease 2019 (COVID-19) in China on December 2019 caused a pandemic around the world.1 More than five million cases have been reported worldwide with 355,942 deaths by May 2020.2 In Iran, the first confirmed positive case for COVID-19 was reported in Masih Daneshvari Hospital in Tehran on February 2020.3 This novel virus can cause severe inflammation. respiratory tract infections and subsequent injury to the lungs.4 The severity of COVID-19 cases varies from mild to severe pneumonia and thromboembolism events with high morbidity and mortality

There are various potential risk factors which predispose affected patients to the severe forms of the disease. Among different underlying disorders, patients with sickle cell disease (SCD) are thought to be at higher risk of complications such as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

SCD is one of the most common inherited hematological disorders. Sickle hemoglobin results from a point mutation replacing a T at codon 6 of beta globin chain (HBB: c.20A>T, p. Glu6Val).5 This inherited disorder affects African Americans in the United States as well as those in sub-Saharan Africa, the western hemisphere including South America, the Caribbean, and Central America, and some Mediterranean countries.6 In Iran, SCD is one of the most common hemoglobinopathies reported in Khuzestan province.7-5

The main clinical manifestations of patients with SCD are hemolysis and episodes of vaso-occlusive crisis. In this condition, the lifespan of RBCs is decreased from 120 days to 10-12 days leading to jaundice and gall stones. Similarly, obstruction of normal blood flow by sickled red blood cells can result in ischemic injuries in various

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# Performance checklist and its influence on knowledge and satisfaction of intensive care nurses: A quasi-experimental study

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# Abstract

Aim: The purpose of this study was to evaluate the impact of using a performance checklist on knowledge and satisfaction of intensive care nurses.

Method: This study was a quasi-experimental study and performed on 70 intensive care nurses in two groups. Performance checklists had to be filled by the nurses in experiment group during central venous pressure (CVP) measurement procedure. Knowledge and the nurses about standards of CVP measurement and their satisfaction were evaluated in both groups by a researcher-made questionnaire. The data were analysed using the SPSS software.

Results: In the experiment group, the level of knowledge significantly increased after the intervention (p = .001) and the majority of nurses (85.7%) had a high level of satisfaction. Also, there was a significant difference between mean knowledge scores of the two groups after the intervention (p = .006).

Conclusion: This showed that applying performance checklists can influence nurses' knowledge and should consider a simple indirect educational method.

KEYWORDS

intensive care, knowledge, nurse, performance checklist

# 1 | INTRODUCTION

Nowadays, one of the most important goals in all healthcare organizations is to provide high quality and desirable care parallel to the advances of science and technology around the world (Kruk et al., 2018). In order to provide high-quality care, nurses should constantly improve their knowledge in their professional life (McCullough et al., 2020). An approach that is known as "Best Practice" is a crucial way that can help nurses provide high-quality care to their patients. Best practice refers to clinical care, treatments

and interventions that will lead to the best possible outcomes for patients (Byumbwe & Mtshali, 2018). Since nurses are a group of healthcare providers that have direct contact with patients, they can provide better care and support for the patients only if they possess an adequate level of knowledge (Said & Chiang, 2020). The ultimate goal in professional nursing is to give quality care to patients on all issues (biological, psychological and social), which requires a high level of knowledge (Araki, 2019). However, unfortunately, the quality of nursing care is not optimal for many reasons, such as high workload, shortage of nursing staff and increased

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# An Evaluation of Psychometric Properties of Needs Assessment Instruments in Patients with **Coronary Artery Disease Undergoing Cardiac** Rehabilitation Programs: A Systematic Review



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# Abstract

Background: Coronary Artery Disease (CAD) is the foremost reason of illnesses and death in the world. Assessment of the needs is a priority in these patients. However, there is a paucity of tools for the evaluation of needs, with the controversy surrounding their validity.

Purpose: This review aimed to evaluate the psychometric properties of tools used to assess needs of patients with CAD undergoing cardiac rehabilitation (CR) plans. Methods: An online literature search combined with manual search was carried out on 11 databases to identify relevant articles. The terms used in the search were: cardiac rehabilitation AND coronary artery disease, cardiac rehabilitation AND acute coronary syndrome, and questionnaires OR need assessment OR tool OR scale. Articles from 1989 to 2021 were selected using some inclusion criteria and no validation studies were excluded. The quality of the questionnaires was evaluated by researchers using consensus-based standards for the selection of health status measurement instruments (COSMIN) list. Data analysis had been done by calculating overall methodological quality scores per study on a measurement property using COSMIN checklist. A methodological quality score per box was obtained by taking the lowest rating of any item in a box ('worse score counts').

Results: Of 653 articles, 15 papers were involved in the study. Six studies reported measurement error, hypothesis testing, and responsiveness. There is no vigorous and valid single scale for the measurement of needs in CAD patients. Overall, the CADE-Q questionnaire was good and a patient self-assessment tool for cardiac rehabilitation was poor based on psychometric properties.

Conclusions: The findings of this study disclosed that even though it has been more than 32 years, from 1989 to 2021, of the development in need assessment instruments, each instrument has as a minimum of one "poor" psychometric property according to the COSMIN checklist. So, it is recommended for the next studies to design and develop instruments wit

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Cardiovascular illness is the principal reason for death in the world (Vasan et al., 2016). Patients with Coronary Artery Disease (CAD) are at high risk of recurring cardiovascular events. In spite of the progress in pharmacological and invasive cure approaches, risk factors remain independent forecasters of cardiac death in patients with CAD (De Bacquer et al., 2013).

Consequently, secondary prevention constitutes a crucial part of the current care of patients by cardiovascular illness. The expression "Cardiac Rehabilitation" (CR) refers to coordinated complex interventions planned to enhance a cardiac patient's physical, mental, and social performance, as well as steadying, reducing, or even reversing the development of the causal atherosclerotic progressions, thus decreasing morbidity and mortality (Anderson et al., 2016). As such, CR or secondary prevention plans deliver a critical and cost-effective situation to bring applicable preventive care (Balady et al., 2007). Because of the low quality of life in patients with

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# REVIEW





# Increased nurses' anxiety disorder during the COVID-19 outbreak

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# Abstract

Background: The rapid outbreak of COVID-19 at the beginning of 2020 in the world has put severe physical and psychological pressure on the medical staff of hospitals involved in the care of patients with COVID-19 to the point of risk of PTSD. There was. The aim of this study was to investigate the relationship between the prevalence of COVID-19 and nurses' anxiety disorder.

Methods: This review study was conducted by library method.

Results: As is well known and mentioned everywhere in cyberspace, nurses have lost their mental health and become very anxious during the COVID-19. Serious spread of traumatic psychiatric symptoms in the current situation can lead to damage to the

Conclusions: The need to care for nurses to relieve fatigue for several months and inject hope and motivation into this group should be understood. But due to the economic situation of the country, unfortunately, the fulfillment of the promises has been delayed, which we hope will be fulfilled soon; Although the delay will certainly not prevent nurses from properly caring for patients, but resolving nurses 'livelihood problems should also be a priority on the authorities' agenda.

# KEYWORDS

anxiety disorder, COVID-19, nurses

At the end of December 2019, an outbreak of a new viral disease was reported in Wuhan, China, caused by a novel coronavirus that was officially named COVID-19 by the World Health Organization (WHO) (Kamran & Naeim, 2021a: Kamran et al., 2021a: Naeim & Rezaeisharif, 2021a, 2021b; Naeim et al., 2021a). The COVID-19 outbreak was unique because of its speed of transmission, which created a global health emergency in less than a few months around the world. Not only does it cause public health concerns but it also causes several psychological conditions, including anxiety, fear, depression, labeling, avoidant behaviors, irritability, sleep disturbance, and posttraumatic stress disorder (PTSD). In these circumstances, maintaining mental health is essential because people in different parts of society may experience stressful stimuli during the release of COVID-19. Individuals in different parts of a community may experience psychological symptoms of COVID-19 during the increased phase of the disease, including patients with COVID-19, quarantined individuals, health care

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# Comparative Study of the Incidence of Port Site Infection in Disposable Ports and Reprocessed Disposable Ports in Laparoscopic Cholecystectomy

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# Abstract

Introduction: Port site infection (PSI) is a rare complication of laparoscopic surgery that can reduce the benefits of this minimally invasive surgery and increase postoperative complications. As a variety of disposable ports (single-use ports) and reprocessed ports are used in laparoscopic surgeries, this study was conducted to compare the incidence of PSI in disposable ports and reprocessed disposable ports in laparoscopic cholecystectomy (LC).

Materials and methods: In this prospective cohort study, 473 patients were studied. Two hundred fifteen and two hundred fifty eight were in the disposable port group and reprocessed disposable port group, respectively. The demographic characteristics and incidence of superficial and deep infection were evaluated using the researcher-made checklist of infection assessment standards at intervals of 3 to 5 and 5 to 14 days following LC using call and physical examination on day 14. Data analysis was performed using descriptive statistics and statistical tests in SPSS software.

Results: The incidence of PSI, 3 to 5 and 5 to 14 days after surgery in the reprocessed disposable port group was significantly higher than that in the disposable ports group. In both groups, all PSI accrued in the epigastric port area (where the gallbladder was removed) ( P < 0.05).

Conclusion: On the basis of the results, our study suggests using disposable ports instead, and in the case of using reprocessed disposable ports in LC, upgrading of disinfection and sterilization techniques is necessary.

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Relationships Between Job Satisfaction of Operating Room Nurses and Hospital's Compliance With Protective Guidelines During the Covid-19 Pandemic: A Cross-Sectional Study, Iran

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# ABSTRACT

Keywords: job satisfaction operating room nursing Covid-19 pandemic protective guidelines hospital's compliance

A B S T R A C T

Purpose: The Covid-19 pandemic is considered the biggest threat to human health in the recent century. During emergency surgeries, the possibility of infection of members of the surgical team with Covid-19 increases due to the direct contact with patients. The present study has been conducted aimed to investigate the relationships between job satisfaction of operating room nurses and the hospital's compliance with protective guidelines (guidance) during Covid-19 pandemic from the perspective of operating room nurses.

Design: This was a descriptive and cross-sectional study conducted from September 22, 2020 to April 21, 2021.

Methods: This study was conducted on 926 nurses working in operating rooms in 15 metropolises of Iran. The sampling method in this study was multistage clustering. The questionnaire was sent to the target group through social apps (WhatsApp and Telegram). The collected data were analyzed by SPSS software version 26 using descriptive and analytical statistics.

Findings: The mean age and job satisfaction of the participants were 28.81 ± 5.64 years and 51.15 ± 11.45, respectively. Participants (n = 259; 27.97%) reported very good job satisfaction. Also, the mean hospital's compliance with protective guidelines during Covid-19 pandemic from the perspective of operating room nurses was 42.29 ± 7.11. The results of the present study showed a significant relationship between job satisfaction and hospital's compliance with protective guidelines during Covid-19 pandemic (P-value ≤ .001).

Conclusions: Optimization of infrastructure, improvement of management decisions and increasing human resources in a crisis can affect the quality of performance and job satisfaction of operating room nurses. The researchers suggest that health system managers can contribute to the safety and efficiency of the existing human resources by taking measures to increase job satisfaction.

Conflict of interest; None to report.
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The Covid-19 pandemic is the biggest threat to human health in the recent century. At the frontline of this global crisis, health care professionals are responsible for diagnosing, treating, and implementing patient care decisions. The possibility of infection of health care professionals with Covid-19 due to direct contact with patients is higher than others. According to the Secretary-General of the World Health Organization, 10% of patients with Covid-19 around the world are health care professionals.

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