



**NEAR EAST UNIVERSITY**

**INSTITUTE OF GRADUATE STUDIES**

**DEPARTMENT OF CHILD HEALTH AND DISEASES NURSING**

**THE EFFECT OF PRANIC HEALING BASED ON ROGERS' THERAPEUTIC  
TOUCH NURSING THEORY ON CARDIORESPIRATORY INDICES AND PAIN  
RELATED TO VENIPUNCTURE OF CHILDREN**

**PhD THESIS**

**Pouran VARVANI FARAHANI**

**NICOSIA**

**APRIL 2025**

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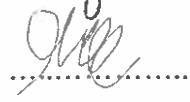



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## Approval

We certify that we have read the thesis submitted by Pouran Varvani FARAHANI titled “**The Effect of Pranic Healing Based on Rogers' Therapeutic Touch Nursing Theory on Cardiorespiratory Indices and Pain Related to Venipuncture of Children**” and that in our combined opinion it is fully adequate, in scope and in quality, as a thesis for the degree of PhD in Child Health and Diseases Nursing.

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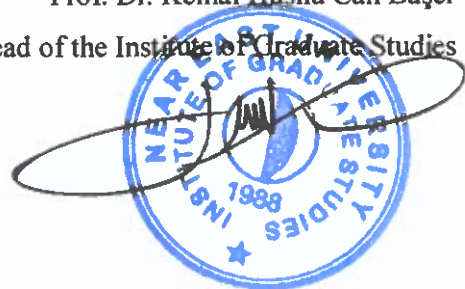
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## **Declaration**

I hereby declare that this thesis follows the academic and moral guidelines established by the Institute of Graduate Studies at Near East University. It includes data collection, analysis, and presentation as well as conclusions. After careful consideration, I certify that, while closely adhering to all academic standards and mandated regulations, I have dutifully acknowledged and attributed all external information and data used in this endeavor.

**Pouran Varvani Farahani**

**April 2025**

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**Pouran Varvani Farahani**

**April 2025**

## **Abstract**

# **The Effect of Pranic Healing Based on Rogers' Therapeutic Touch Nursing Theory on Cardiorespiratory Indices and Pain Related to Venipuncture of Children**

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**Introduction:** Venipuncture is a commonly performed but distressing procedure for children, often leading to significant pain and anxiety. Managing this pain is critical to preventing both immediate and long-term physical and psychological harm. This study aimed to evaluate the effect of Pranic Healing, based on Rogers' Therapeutic Touch Nursing Theory, on the cardiorespiratory indices and pain associated with venipuncture in children aged 6 to 12 years.

**Methods:** This double-blind, randomized clinical trial was conducted on a cohort of 46 school-aged children, selected via convenience sampling, at a hospital in Northern Cyprus. Participants were randomly allocated into either the experimental group (n=23) or the control group (n=23). The experimental group received Pranic Healing, an energy-based therapeutic intervention grounded in Rogers' Therapeutic Touch Nursing Theory. According to Martha Rogers' Science of Unitary Human Beings, nursing is conceptualized as the facilitation of healing, where practitioners assist individuals in achieving optimal health by aligning their inherent energy flow. The purpose of this intervention was to restore balance within the patient's energy field, thereby enhancing physiological and psychological well-being.

The Pranic Healing protocol was administered for 5 minutes before, during, and after venipuncture, while the control group received standard care without additional therapeutic interventions. Pain levels were assessed using the Wong-Baker Facial Pain Scale, and physiological parameters including heart rate, respiratory rate, and oxygen saturation were measured at three specific time points: Time 1 (immediately after

needle insertion), Time 2 (two minutes after needle removal), and Time 3 (five minutes after needle removal).

Data analysis was performed using SPSS version 25.0, employing independent t-tests, chi-square tests, and repeated measures ANOVA to assess differences between groups, with a significance level set at  $P < 0.05$ .

**Results:** The study showed that pain scores had decreased ( $P < 0.001$ ) and improved cardiorespiratory indices, including heart rate ( $P = 0.004$ ), respiratory rate ( $P = 0.001$ ), and oxygen saturation ( $P = 0.005$ ) in the intervention group compared to the control group. These findings suggest that Pranic Healing is effective in reducing pain and stabilizing physiological responses during venipuncture in children.

**Conclusion:** Pranic Healing, based on Rogers' Therapeutic Touch Nursing Theory, may serve as an effective, non-invasive method for managing pain and promoting physiological stability during painful medical procedures like venipuncture in children.

**Key words:** Therapeutic Touch, Nursing Theory, Pain Management, Children

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## **CHAPTER I: Introduction**

### **1.1 Statement of the Problem**

In hospitals, children frequently experience unforeseen pain connected to procedures, which can have detrimental emotional and psychological effects. Painful procedures, such as venipuncture, are typically seen in emergency rooms, during hospital admissions, follow-up visits, or during admissions. One of the most painful medical procedures for kids is the simple act of inserting needles, which causes anxiety and misery for children and even parents when they are in the hospital (Phyu et al., 2020). Venipuncture is one of the most invasive and distressing therapeutic procedures performed on children. It has been reported to be one of the main sources of pain for hospitalized children, and if appropriate pain management strategies are not used, there is a risk of negative physical outcomes (Yilmaz Kurt et al., 2020). The short-term effects include increased intracranial pressure, hemodynamic instability, and decreased oxygenation. Long-term effects include anxiety, hypersensitivity to pain, impatience, sleep disturbance, poor nutrition, immune system delay, disruption of emotional connections, hyperactivity, and lack of attention (Bahrami et al., 2023).

Even though these problems are acknowledged, a sizable portion of children (66.7%) say that venipuncture causes them great discomfort (Satchi & Sankar, 2017). In addition to providing immediate relief, pain management in pediatric care is essential for addressing the moral and basic human rights issues surrounding the best possible pain management (Jukić & Puljak, 2018). A holistic approach to nursing care emphasizes the value of atraumatic treatment by attempting to lessen the psychological and physical effects of unpleasant operations (Gates et al., 2020). This approach focuses on preventing and

minimizing injury, aiming to reduce or eliminate the discomfort experienced by children and their families within healthcare settings (Hockenberry, 2019a).

The potential advantages of complementary and alternative medicine (CAM) treatments for pain management have been highlighted by recent studies. Compared to traditional techniques, complementary and alternative medicine (CAM) is frequently more accessible, less invasive, and has fewer adverse effects (Mofid et al., 2023). Based on the National Center of Complementary and Alternative Medicine one of the five major "domains" of complementary and alternative therapies is energy healing. There are three types of energy healing: Therapeutic touch, Reiki, and Healing. These three ancient therapies are used by people of all ages to support health and well-being (Taheri et al., 2024) (Tobbia et al., 2019). Touch therapy (TT) is a non-invasive nursing intervention which takes place by the hands and in the form of energy transfer (Vanaki et al., 2015). Based on the idea that the physical body is encircled by an energy field and sustained by a universal energy known as prana, touch therapy (TT) functions. Through chakras or non-physical vortexes, this energy travels through the body and is changed (Johnson et al., 2022).

The nursing philosophy of Martha Rogers (1970, 1990), which is wholly grounded in a field world view, can support this point of view. In his book "Nursing: Knowledge of Human Unity," Rogers views humans as continuous, multifaceted energy fields that interact with their surroundings. According to Rogers' viewpoint, TT serves as an illustration of how experts strive to uphold the perfection and integrity of people and their surroundings in order to help patients achieve their best possible health. Dr. Dolores Krieger, a nursing professor at New York University, created TT in the 1970s (Alp & Yucel, 2020). The flow of energy waves that order and re-order the human field is

facilitated by nursing treatments that incorporate TT. Blockages, congestion, dysrhythmias, or areas of imbalance in the field are all signs of an energy obstruction (V. Malinski, 2018).

According to this theory, nurse has the role Facilitation of Healing: Instead of viewing nursing as primarily a treatment for specific symptoms or diseases, Rogers sees the nurse's role in the role of a healing process facilitator. Healing, in this context, goes beyond the physical recovery from illness; it encompasses the restoration of balance, harmony, and well-being within the individual's energy field. The goal of nursing, according to Rogers, is to assist individuals in reaching their maximum health potential. Nursing interventions, according to Rogers' theory, are aimed to encourage balance in the patient's energy field. This may involve various approaches, such as creating a therapeutic environment, fostering positive interpersonal relationships, and incorporating complementary therapies that resonate with the individual's energy patterns (Smith, 2019). It is suggested that the healer, or nurse, adds restorative energy to the environmental field that they share with the client in order to define the link between the two fields. A re-patterning takes place in the client's energy field throughout this process, allowing a power transfer that helps the client attain the necessary energy balance to support a healing condition (V. Malinski, 2018). All non-invasive techniques used to enhance human potential, such as humor, therapeutic touch, music, and guided imagination, are included in nursing action (Larkin, 2021).

A traditional type of Touch therapy called Prana healing (PH) focuses on the energy fields that surround and exist inside the human body. This healing method was retrieved and investigated by Master Choa Kok Sui, the founder of Modern PH . Pranic healing has a specific treatment protocol for each disease and its symptoms (Sui CK, 2004). It is a supplementary therapy that does not involve touch and relies heavily on the healing power

of Prana, or vital energy. Prana is applied by the healer to the person's energy body. It uses the life energy found in the sun, air, and earth to promote healing. The energy body has major, minor, and tiny chakras, much like the physical body contains vital and minor organs (Sui choa kok, 2018). The primary chakras, or centers, regulate and energize the internal organs as well as the mental and emotional states of an individual.

The foundation of Pranic Healing (PH) is the laws of self-healing and life energy. PH entails scanning, purifying, and energizing the human aura in order to identify energy imbalances. Then, cleansing and energizing techniques are used to strengthen the aura and chakras in order to increase energy flow (Sui choa kok, 2018). However, few studies have examined PH improves people's well-being (Jois et al., 2018) (Lama, 2020), modifies their energy fields, and lessens chronic musculoskeletal pain (Gangmei & Upendra, 2020). To our knowledge, no studies have been published on the impact of Pranic healing on children's pain management. Furthermore, Pranic Healing has been characterized as a straightforward yet incredibly effective method that can be used to provide the patient with instant advantages. Pranic healing involves treating the energy body that influences the physical body and adjusting a person's energy field. Pranic Healing which is a novel and inexpensive technique may be applied in hospital departments and medical facilities. The current study is aimed at investigating the effects of Pranic Healing, which is based on Rogers' Therapeutic Touch Nursing Theory, on children's venipuncture-related pain and cardiorespiratory indices.

## **1.2 Purpose of the Study**

The primary objective of this research is to find out how Pranic Healing, which is based on Rogers' Therapeutic Touch Nursing Theory, affects children's venipuncture discomfort and cardiorespiratory indices. The study specifically aims to:

- Determine the effectiveness of Pranic Healing in reducing pain during venipuncture procedures in pediatric patients.
- Assess the impact of Pranic Healing on the cardiorespiratory stability of children undergoing venipuncture.
- Explore the potential of Pranic Healing as a complementary therapy to conventional pain management strategies in pediatric care.
- Contribute to the body of knowledge on the application of energy-based healing modalities in nursing, particularly in the context of pediatric pain management.

### **1.3 Research Questions**

This study seeks to answer the following research questions:

- How effective is Pranic Healing, based on Rogers' Therapeutic Touch Nursing Theory, in reducing pain during venipuncture in pediatric patients?
- What impact does Pranic Healing have on the cardiorespiratory indices (heart rate, respiratory rate, oxygen saturation) of children undergoing venipuncture?
- What are the potential benefits and limitations of incorporating Pranic Healing into standard pediatric pain management practices?

### **1.4 Significance of the Study**

- This study is significant because it addresses a critical gap in pediatric pain management, specifically concerning non-invasive and complementary therapies like Pranic Healing. By exploring the effects of Pranic Healing on pain and anxiety during venipuncture in children, the research could offer an alternative approach to conventional pain management strategies, which often involve pharmacological interventions that may have side effects.



- The study's findings could contribute to a deeper understanding of how energy-based therapies can be integrated into pediatric care to enhance the overall well-being of young patients. This is particularly important in settings where reducing pain without the use of medications is prioritized, such as in vulnerable pediatric populations. Additionally, this research could influence healthcare policies and practices by providing evidence to support the inclusion of complementary therapies like Pranic Healing in routine pediatric care, ultimately improving patient outcomes and satisfaction.
- Moreover, the study could have broader implications for nursing practice by highlighting the role of nurses as facilitators of holistic healing. It underscores the importance of considering the emotional, psychological, and energetic aspects of patient care, aligning with a more comprehensive and integrative approach to health and wellness.

### **1.5 Limitations**

This study has several limitations that should be acknowledged:

- **Cultural and Individual Differences:** Cultural beliefs and individual differences in attitudes toward complementary and alternative medicine may affect the participants' responses to Pranic Healing. This could impact the study's findings, particularly if the participants hold strong beliefs about the efficacy or ineffectiveness of such therapies.
- **Short-Term Follow-Up:** The study might focus on the immediate effects of Pranic Healing during and shortly after venipuncture. Long-term effects, such as changes in pain sensitivity over time, may not be captured, limiting the understanding of the therapy's sustained impact.

- **Limited Scope of Measurement:** While the study focuses on cardiorespiratory indices and pain, other potential benefits or adverse effects of Pranic Healing, such as emotional well-being, immune function, or behavioral changes, may not be explored, limiting the comprehensiveness of the findings.

These limitations highlight the need for cautious interpretation of the study's results and suggest areas for further research to validate and expand upon the findings.

### 1.6- Definition of Key Terms

- **Pranic Healing (PH):** A form of energy healing developed by Master Choa Kok Sui, focusing on the manipulation of energy fields inside and outside the body to promote healing and balance. It involves techniques such as scanning, cleansing, and energizing the aura and chakras (Sui choa kok, 2018).
- **Therapeutic Touch (TT):** An energy-based nursing intervention grounded in Martha Rogers' theory, which involves using the practitioner's hands to sense and manipulate the patient's energy field to promote healing (Alp & Yucel, 2020).
- **Venipuncture:** A medical procedure involving the insertion of a needle into a vein for purposes such as blood sampling or medication administration, often associated with pain and distress in pediatric patients (Padoan et al., 2020).
- **Cardiorespiratory Indices:** Physiological measures related to heart and respiratory functions, such as heart rate, blood pressure, and respiratory rate (Mencía et al., 2022).
- **Pain Perception:** The subjective experience of pain, which can vary widely among individuals based on factors such as age, psychological state, and cultural background (Hockenberry, 2019b).

- **Martha Rogers' Science of Unitary Human Beings:** A nursing theory that conceptualizes humans as dynamic, interconnected energy fields that interact continuously with the environment. Health is seen as a reflection of harmony and balance within these energy fields. Rogers' theory provides the theoretical foundation for therapeutic touch and other energy-based healing practices (Smith, 2019).

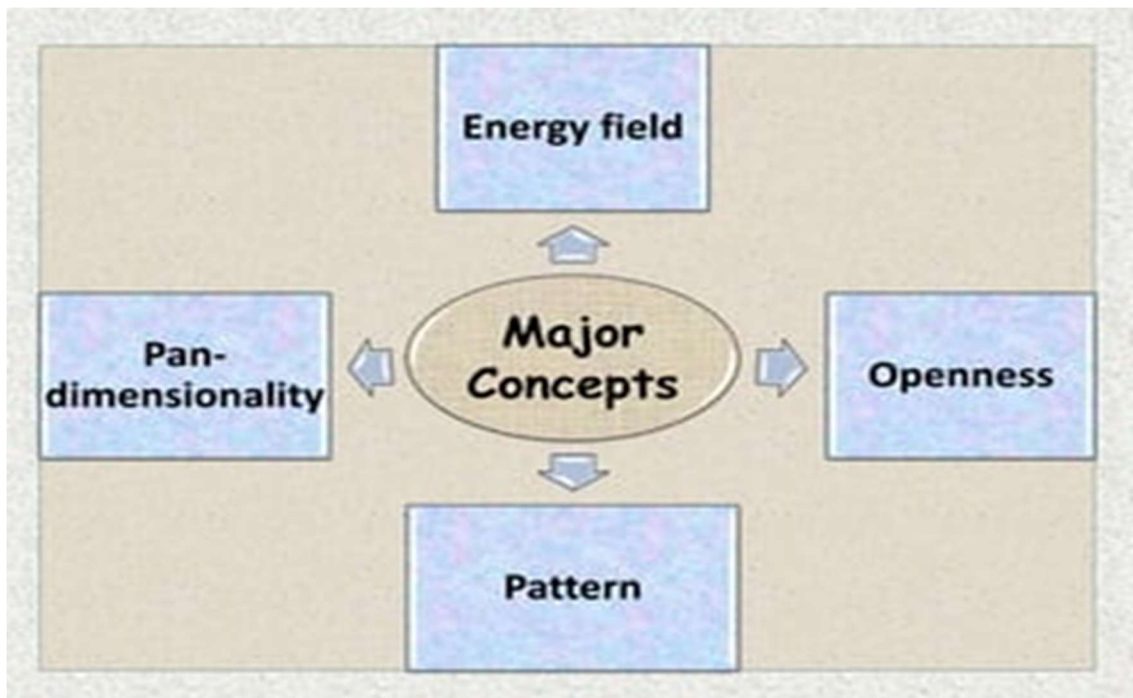
## CHAPTER II: Literature Review

### 2.1 Theoretical Framework

The theoretical framework for this study is grounded in Martha Rogers' Science of Unitary Human Beings (1970, 1990), a nursing theory that provides a comprehensive understanding of energy-based therapies. Rogers' theory presents a unique perspective on health and nursing by conceptualizing humans as dynamic, interconnected energy fields that continuously interact with their environment (Kirshbaum, 2021).

#### 2.1.1 Martha Rogers' Science of Unitary Human Beings

Emphasizes four key concepts:



*Figure 2-1- The major concepts of Rogers's theory*

1. **Energy Fields:** Rogers (1970) posits that humans are surrounded by and composed of energy fields, which interact with the environment. These fields are essential for maintaining health and well-being. Rogers conceptualizes

humans as more than just physical entities; they are composed of complex, dynamic energy fields. These energy fields are not confined to the physical body but extend beyond it, interacting constantly with the surrounding environment. This perspective shifts the focus of healthcare from merely addressing physical symptoms to considering the energetic aspects of a person's health. **Dynamic Interaction:** Energy fields are dynamic and constantly changing due to the effect of both external (such social interactions and environmental conditions) and interior (like ideas, emotions, and physiological processes) components. This dynamic nature means that health is not a fixed state but a continuously evolving process. **Health Implications:** Imbalances or disruptions in these energy fields can lead to physical, emotional, or mental health issues. For example, prolonged stress or negative emotions can create blockages or distortions in the energy field, which might manifest as physical illness or psychological distress. Nursing interventions, therefore, need to focus on restoring balance and harmony within these fields to promote health and well-being. According to Rogers, energy fields are not static but are continuously changing and interacting with both internal and external forces. This interaction is crucial for achieving and maintaining health, as imbalances or disruptions in these energy fields can lead to disease or discomfort (Hedlund, 2023).

2. **Patterns and Openness:** Rogers (1990) highlights that health is the outcome of the harmonious flow and balance of energy patterns within the human field. Patterns represent the unique organization and flow of energy within an individual, while openness refers to the capacity of the energy field to interact

with the environment. When these patterns are disrupted or blocked, it can result in health issues. Patterns and openness are central to Rogers' understanding of health. **Patterns:** In Rogers' theory, patterns are the unique characteristics of an individual's energy field. They represent the specific way energy is organized and flows within a person. Each individual has a distinctive pattern that reflects their physical, emotional, and spiritual state. Health is seen as the harmonious flow and balance of these patterns. When the energy patterns are coherent and well-organized, the person experiences a sense of well-being. Conversely, when these patterns are disorganized or blocked, it can lead to health problems. **Openness:** Openness refers to the degree to which an individual's energy field can interact with the environment. A healthy person is characterized by an open and fluid energy field, allowing for free exchange of energy with the environment. This openness is essential for maintaining health, as it enables the person to adapt to changes and respond to external stimuli in a balanced manner. In contrast, a closed or rigid energy field can limit this interaction, leading to stagnation and health issues. Nursing interventions, therefore, should aim to restore and maintain these patterns to support overall health (TK & Chandran, 2017).

3. **Human-Environment Interaction:** According to Rogers (1970), health involves a continuous interaction between the individual and their environment. Effective nursing care focuses on enhancing this interaction to support the patient's healing process. Rogers emphasizes that humans are not isolated entities but are in constant interaction with their environment. This interaction is vital for health and well-being. **Continuous Interaction:** The

environment, in Rogers' theory, is not just the physical surroundings but also includes the social, cultural, and energetic contexts in which a person exists. Health is viewed as a reflection of the quality of this interaction. A harmonious interaction between the individual and their environment supports health, while discord or disharmony can lead to illness or discomfort. **Role of Nursing:** Effective nursing care, from Rogers' perspective, involves facilitating a positive interaction between the patient and their environment. This could involve creating a healing environment, both physically (e.g., a calm, supportive setting) and energetically (e.g., using therapeutic techniques to balance the patient's energy field). By doing so, nurses can help patients achieve a higher level of well-being. Rogers' theory suggests that nursing interventions should aim to facilitate this interaction by promoting balance and harmony within the energy fields, thereby enhancing the individual's overall well-being (V. M. Malinski, 2022).

4. **Pan dimensionality:** this is a core concept in Martha Rogers' Science of Unitary Human Beings, representing one of the fundamental ideas that underpin her theoretical framework. Pan dimensionality is the idea that human beings and their environments exist in a non-linear, non-local, and infinite universe that transcends traditional notions of time and space (V. M. Malinski, 2022). It suggests that humans are not limited to the three-dimensional physical world but rather exist in multiple dimensions simultaneously. **Beyond the Physical Realm:** pan dimensionality implies that reality is not confined to the physical world that we perceive with our senses. Instead, it encompasses multiple dimensions, including the spiritual, emotional, and energetic planes.

This aligns with the idea that humans are more than just physical bodies; they are complex, dynamic beings interacting with an infinite environment.

**Nonlinear and Non-Local Interactions:** In a pan dimensional universe, interactions and events are not restricted by the conventional boundaries of time and space. This means that cause and effect may not follow the linear patterns we expect, and connections can occur across vast distances or even instantaneously. This concept supports the idea of energy healing practices, where changes in a person's energy field can have immediate effects on their physical or emotional state, regardless of physical proximity. **Infinite Possibilities:** Pan Dimensionality introduces the notion of infinite possibilities for human experience and existence. It acknowledges that humans are capable of transcending physical limitations, engaging in experiences and connections that go beyond what is typically considered possible in a three-dimensional world. This idea is closely related to Rogers' emphasis on the human potential for growth, transformation, and healing. **Holistic Health Care:** The concept of pan dimensionality reinforces the importance of holistic approaches to health care, where the focus is not only on treating physical symptoms but also on addressing the emotional, spiritual, and energetic dimensions of a person's being. By recognizing the pan dimensional nature of humans, nurses and health practitioners are encouraged to adopt a broader perspective that considers the full spectrum of human experience. Pan dimensionality in Rogers' Science of Unitary Human Beings challenges traditional, linear ways of thinking about health and human existence. It broadens the scope of nursing practice to include an understanding of humans as multi-dimensional beings who interact



with an infinite, non-linear universe, thus advocating for more holistic, patient-centered approaches to care (Phillips, 2016).

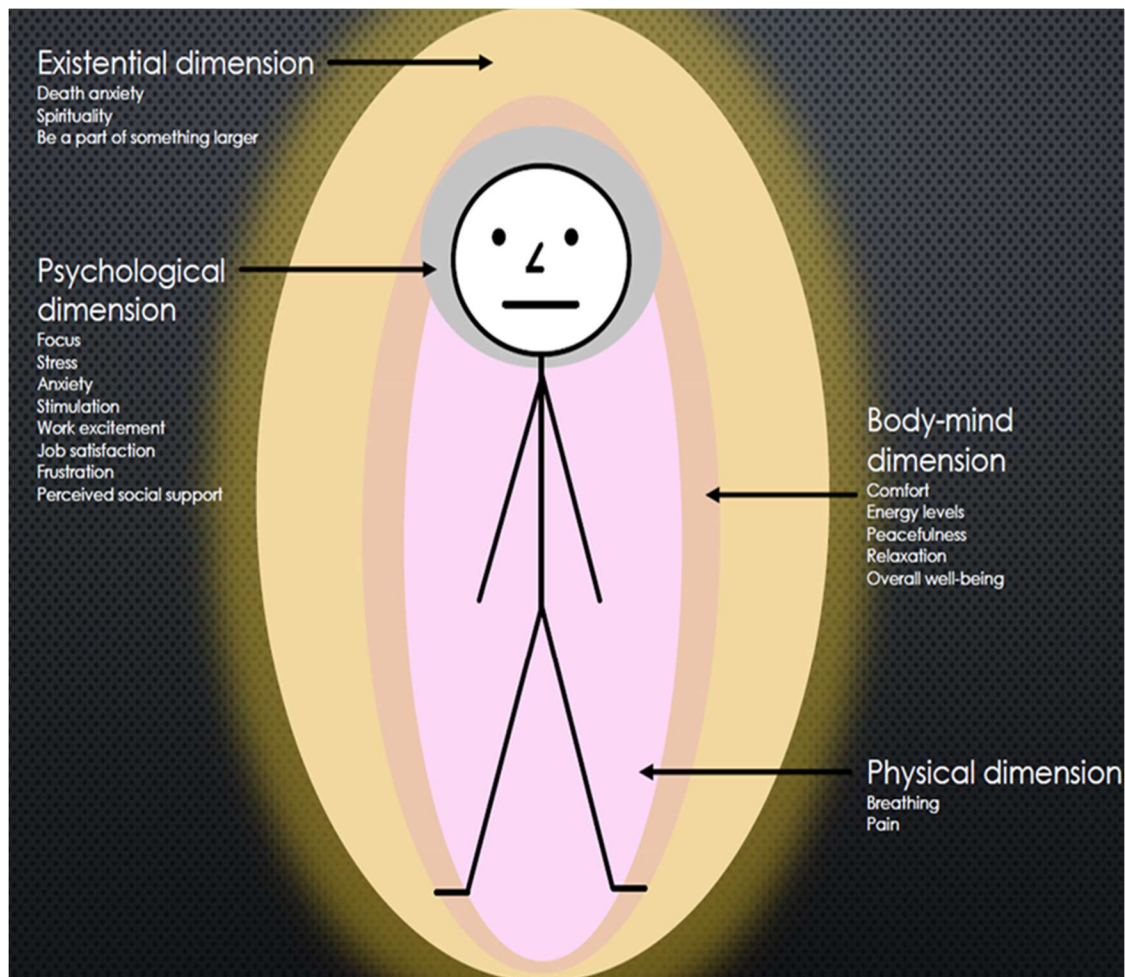


Figure 2-2- Dimensions of well-being (Hedlund, 2023)

### 2.1.2 Practical Implications for Nursing:

Rogers' theory has profound implications for nursing practice. It suggests that nurses should not only focus on the physical aspects of care but also consider the energetic and environmental dimensions of health. Nursing interventions might include: **Energy-Based Therapies:** Techniques such as Therapeutic Touch, Pranic Healing, or Reiki, which directly manipulate the patient's energy field to restore balance and promote healing.

**Holistic Assessment:** Assessing patients not only for physical symptoms but also for emotional, mental, and spiritual well-being, as these are all reflected in the energy patterns.

**Creating Healing Environments:** Designing care environments that support the free flow of energy, such as using calming colors, soothing sounds, and ensuring a peaceful atmosphere.

By adopting Rogers' framework, nursing can evolve into a more holistic and integrated practice, addressing the full spectrum of human health and well-being. This approach aligns with the growing emphasis on holistic care in modern healthcare, where the goal is not just to treat disease but to enhance the overall quality of life (Reed, 2023).

## **2.2 Related Research**

### **2.2.1 Search Strategy**

A comprehensive literature search was undertaken in January 2024. The search included studies published from 2000 to January 2024 . A search of literature was conducted on the Web of Science, Scopus, PubMed and Science Direct. The keywords used in English were as TS = (("Touch therapy" OR "Therapeutic Touch" OR "Pranic Healing" OR " Healing Touch" OR "Reiki" OR "Energy therapy" OR "Qi gong") AND ("Pediatric" OR "Child ")). After 603 of the 665 articles from the first search were excluded because they did not match the inclusion criteria, 30 papers remained for analysis. The "Full Record and Cited References" for these papers were downloaded so that we may utilize them as input data for our science mapping and VOS viewer-based bibliometric analysis.

The keywords assistance in finding the most significant information associated with the study topics. Co-occurrence analysis of keywords can be used to determine the topics that appear most frequently in publications within a given field (Kim & So, 2022). We conducted a keyword co-occurrence analysis using the VOSviewer. 210 keywords in all

were looked up in the Web of Science, Scopus, PubMed and Science Direct papers. In the four databases, seventeen terms on this subject were displayed more than three times, as shown in Figure 2. Female and male are the most used keyword with 9 repetitions. After that Reiki is used keyword with 7 repetitions. In the touch therapy research, the terms "child," "pain," "alternative medicine," "therapeutic touch," were each used more than 4–6 times. Furthermore, stress was important while considering touch therapy in pediatrics, as shown by the observation that it was used as a keyword three times. Figure 2-3 shows the chronological order of the appearance of words from 2012 to 2020. that these words: infant, male and female, therapeutic touch, Reiki, pain, pediatric, feasibility and alternative medicine appeared in the articles in order.

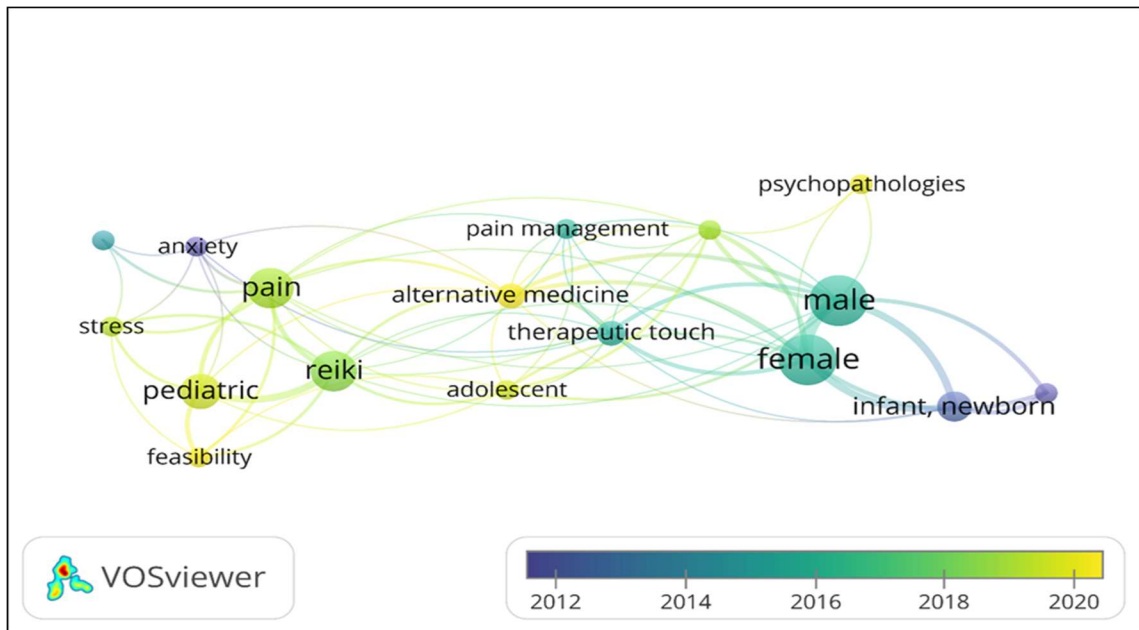
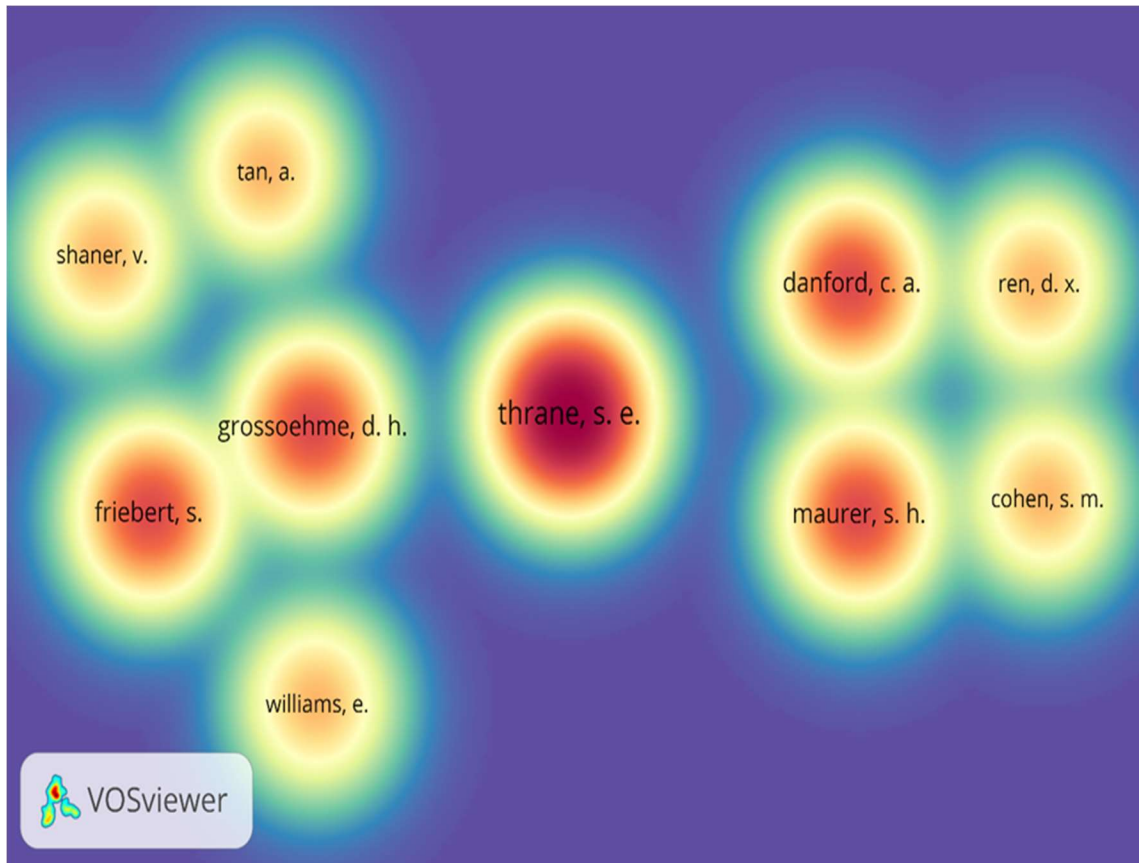


Figure 2-3- The most frequent keywords for research on touch therapy in pediatrics based on the chronological order.

In total, 109 authors, produced study on touch therapy in pediatrics according to the Web of Science, Scopus, PubMed and Science Direct databases. The most productive author is by Thrane with four documents and a 13 total link strength, which it emphasizes Reiki

Therapy for Very Young Hospitalized Children Receiving Palliative Care. After that, Friebert, Grossoehme and Kundu. have made two publications and 7 total link strength according to the database (Figure 2-4) (Figure 2-5).



*Figure 2-4- The density visualization of authors related to touch therapy in pediatrics*

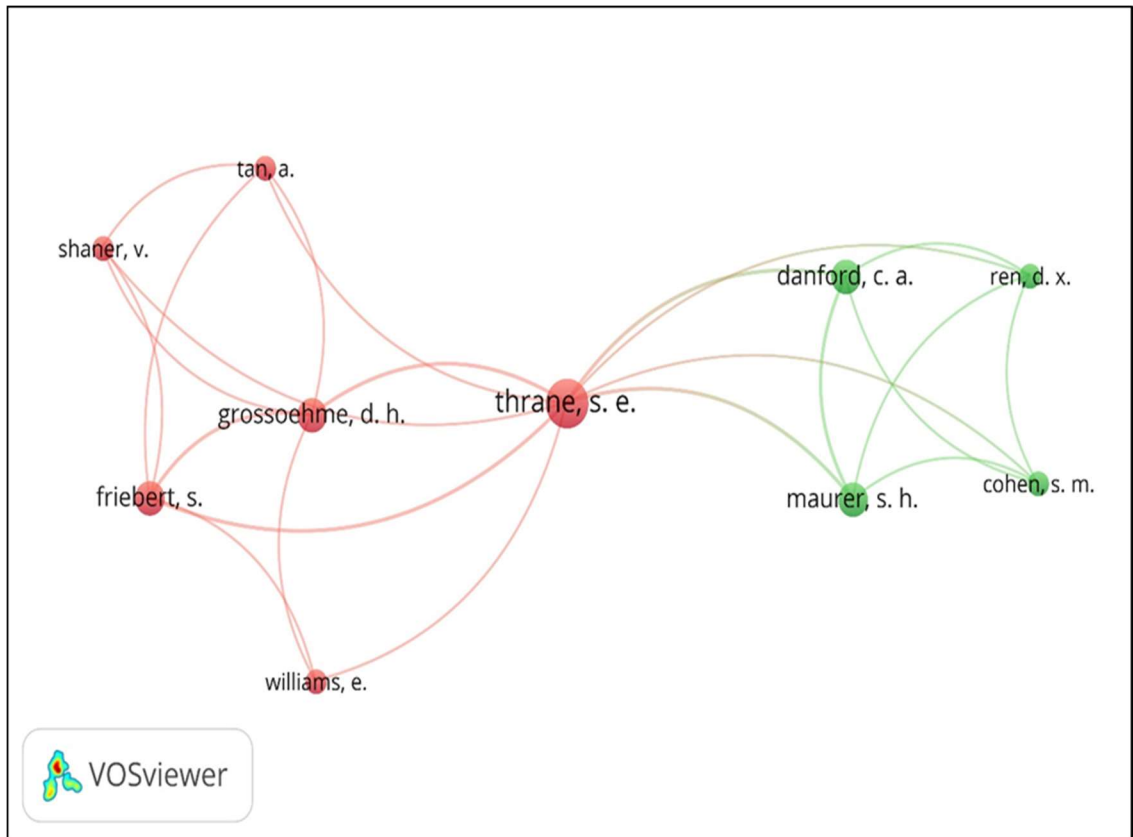


Figure 2-5- The most productive authors on touch therapy in pediatrics

### 2.3 Literature review

Research has shown that Touch therapy has emerged as a promising complementary approach in pediatric healthcare in many countries. The findings underscore the global relevance of touch therapy in pediatrics, with the United States emerging as a major contributor, representing 47% of the research landscape. The prominence of Elsevier, contributing to 57% of the publications, indicates its pivotal role in shaping and disseminating touch therapy research. Moreover, the journal "Complementary Therapies in Clinical Practice" emerges as a cornerstone in this field, underlining its significant role in advancing touch therapy knowledge. According to the study's findings, touch therapy had a considerable influence on pediatric healthcare internationally, aiming to address

various aspects of well-being such as pain relief, sleep improvement, psychological well-being, and physiological parameters. The studies presented encompass different touch therapy modalities, including Reiki, therapeutic, touch, Healing Touch and Qi Gong.

### **2.3.1 Literature review on Pain Management**

- ❖ Based on the study of Bahrami et al. in 2023, this study looked at how gentle touch affected preterm infants' cardiorespiratory indices and pain responses associated to venipuncture and blood sampling. Supplies and Procedures: Three phases of a quasi-experimental investigation including control and mild touch groups was conducted. Premature infants at the NICU of Al-Zahra Hospital in Isfahan, Iran, were included in the population. 52 newborns were randomly chosen and divided into two groups ( $n = 26$ ) using convenience sampling. The control group received standard treatment in addition to the five-minute pre-, during-, and post-procedure gentle touch approach and cardiorespiratory index measurements. The Neonatal Infant Pain Scale (NIPS) and an intensive care monitor were used to measure the cardiorespiratory and newborn pain indices. The findings imply that the babies' suffering during the venipuncture and blood sample was lessened by gentle touch. Therefore, it is advised that this technique be used to lessen premature infants' suffering (Bahrami et al., 2023).
- ❖ Based on the study by Pope et al. (2023), the objective was to decrease Anxiety and pain in children with cancer having outpatient treatments by implementing integrative modalities. This quality improvement project focused on pediatric patients undergoing various outpatient procedures and aimed to assess the

effectiveness of guided imagery, music therapy, reiki, and art therapy in reducing pain and anxiety. The findings revealed a decrease in the use of over-the-counter (OTC) pain medications, a reduction in anxiety levels, and that 100% of need-stratified patients received integrative treatments. These results suggest that integrative modalities can be an effective approach to reducing pain and anxiety in pediatric oncology patients (Pope et al., 2023).

- ❖ Based on the study by Love et al. (2022), the research aimed to examine the effects of Reiki treatment on painful symptoms in children with cerebral palsy (CP). This quasi-experimental study involved 13 pediatric participants aged 5 to 16 years. Reiki Therapy was administered by a Level 3 Reiki Therapist in the home setting for eight consecutive weeks. The study explored the potential benefits of this intervention over the specified period. The findings suggested that Reiki Therapy might be effective in alleviating symptoms of anger in children with cerebral palsy. These preliminary results indicate that Reiki, as a therapeutic modality, holds promise and warrants further research within the pediatric CP population (Love et al., 2022).
- ❖ Based on the study of Vinushree in 2021 a 37-year-old female patient with fibromyalgia is described; her main symptoms are pain, stiffness, and disturbed sleep. The score from the Numerical Rating Scale (NRS) was used to quantify these symptoms. As a supplemental therapy to address the symptoms of weariness and persistent pain, she got distant phototherapy. After eight Pranic healing sessions, there was a considerable improvement in the quality of sleep, with pain and stiffness from fibromyalgia symptoms reduced by 40% and 60%, respectively.

As such, Pranic Healing may be utilized in addition to traditional pharmacological methods to treat fibromyalgia as a non-pharmacological therapy (Vinushree, 2021).

- ❖ Based on the study of Gangmei et al. in 2020 with aimed to evaluate the impact of Pranic healing therapy on adult back pain during quasi-experimental and intervention research was conducted on 40 adult age group who are having back pain using a pretest-posttest design. The result showed that The therapist's use of Pranic Healing Therapy was effective in reducing back pain among adults undergoing the treatment (Gangmei & Upendra, 2020).
- ❖ Based on the study of Gantt & Orina in 2020, The aims of this study were to: (1) explain the concept of Reiki to participants; (2) let them take part in six sessions of Reiki therapy and assess the impact on chronic pain; and (3) find out how participants felt about Reiki therapy and whether they would continue to use and recommend it as a supplement to treat chronic pain. Using a prospective repeated measures pre- and post-intervention design, a convenience sample of 30 military health care beneficiaries with chronic pain had six 30-minute Reiki treatments spaced out over two to three weeks after learning about the practice. It is possible to conduct a 30-minute Reiki session in an outpatient setting with a skilled Reiki practitioner. Participants who are prepared to try at least four consecutive sessions may see positive results. Reiki can help with many different kinds of pain and also has a good effect on living activities that pain frequently interferes with (Gantt & Orina, 2020).



- ❖ Based on the study by Dur et al. (2020), the objective was to determine the impact of Yakson and Gentle Human Touch (GHT) techniques on physiological parameters and pain during heel lancing in preterm infants. This randomized controlled trial involved 90 preterm infants admitted to neonatal intensive care units (NICU). The study aimed to assess how the Yakson and GHT methods could influence the infants' discomfort and physiological responses during heel lancing procedures. Both techniques were applied during the procedure, and the findings revealed that the application of Yakson and GHT significantly reduced heart rates and pain scores compared to the control group. These results indicate that Yakson and GHT have beneficial effects on both physiological parameters and pain reduction during heel lancing in preterm infants (Dur et al., 2020).

### **2.3.2 Literature review on Sleep Disorders**

- ❖ Based on the study by Yildirim and Yayan (2023), the objective was to assess the impact of Therapeutic Touch on sleep-related parameters in pediatric liver transplant patients. This randomized, prospective study involved 50 children who had undergone liver transplantation. The study aimed to evaluate how Therapeutic Touch, in combination with music, could influence the sleep patterns of these patients. Over the course of three consecutive days, Therapeutic Touch and music sessions were applied once daily, each lasting for twenty minutes. The findings revealed that both Therapeutic Touch and music significantly improved sleep efficiency, increased time spent in bed, and enhanced total sleep time, while also reducing sleep onset latency. These results suggest that Therapeutic Touch,

alongside music therapy, can be an effective intervention for improving sleep quality in pediatric liver transplant patients (Yildirim & Yayan, 2023) .

- ❖ Based on the study of Amritha & Shalini in 2020, the goal of this study was to provide empirical evidence supporting the effectiveness of "Pranic Healing" in treating common sleep disorders such as insomnia and related issues such habitual sleep efficiency and latency. A purposive sample strategy is used in conjunction with a pre-test/post-test randomized experimental-control design. Thirty-two out of the seventy-three participants were found to have inadequate or relatively poor quality sleep. The Pittsburgh Sleep Quality Index was used to evaluate the sleep variable (1988). The chosen sample was split into 16-person experimental and control groups, and each group received four sessions of pranic healing. The results indicate a significant variation in the experimental group's mean scores, which were 3.87 in the post-test and 14.31 in the pre-test. The success of the intervention on the experimental group in the post-test is implied by the presence of such a high mean difference. pranic healing increases the body's general stamina and resilience against illnesses in the near future. In comparison to most treatment methods, this no-touch method is also more affordable and healthful (Amritha & Shalini, 2020).

### **2.3. 3 Literature review on Mental Health**

- ❖ Based on the study by Thrane et al. (2021), the goal was to investigate the efficacy and popularity of Reiki therapy as a palliative care treatment for children between the ages of 7 and 16. Twenty-one parent-child pairs participated in this quasi-experimental pilot study. The youngsters received Reiki therapy in two sessions

lasting twenty-four minutes each. With the majority of participants experiencing sensations of relaxation and finding the therapy beneficial, the results showed that Reiki therapy was practical, agreeable, and well-tolerated (Thrane et al., 2021).

- ❖ Based on the study by Sutarmi et al. (2020), assessing the impact of Loving Touch Therapy (LTT), Smart Brain Exercise (SBE), and their combination on behavioral improvements in kids with Attention Deficit Hyperactivity Disorder (ADHD) was the goal. In this pretest-posttest true experimental investigation, 35 school-age ADHD children were split up into four groups, one of which was a control group. A control group was used to compare the effects of SBE, LTT, and their combination. The findings revealed that both SBE and LTT interventions significantly improved ADHD-related behaviors in children, with the combination of SBE and LTT proving particularly effective in enhancing attentiveness (Sutarmi et al., 2020).
- ❖ Based on the study by James et al. (2019), the objective was to assess how Healing Touch (HT) affects pediatric patients undergoing elective surgery in terms of pain, sleep, anxiety, and anesthetic emergence. In this randomized clinical trial, 39 patients between the ages of 5 and 21 participated. Evaluating the effects of HT treatment during the perioperative phase was the goal of the study. Based on patient age, sex, or ethnicity, the results showed no discernible variations in treatment outcomes. However, the group that did not receive preoperative support, including HT, exhibited higher levels of cortisol, hyperglycemia, and C-reactive protein (CRP), suggesting that preoperative support, possibly through HT, may be beneficial in managing stress and inflammatory markers (James et al., 2019).

- ❖ Based on the study of Rajagopal et al. in 2018 in India, this study aimed to determine whether Pranic Healing (PH) is a beneficial alternative treatment for depression. We assessed fifty-two people with mild to moderate depression using the Hamilton Depression Rating (HAM-D) scale. In addition to pranayama and mock healing sessions, the Medication + PH (MedPH) and Medication + Mock PH (MedMockPH) groups received an antidepressant medication. PH sessions, lasting up to twenty minutes each, were given to participants in the Medication + PH group (MedPH) once a week for four weeks. The Pranic psychotherapy protocol was implemented according to Master Choa Kok Sui's conceptualization. The HAM-D scores in the MedPH group significantly decreased, as evidenced by improvements observed in 69.2% of MedMockPH participants and 100% of the MedPH group (Rajagopal et al., 2018).

### **2.3.4 Literature review on Quality of Life**

- ❖ Based on the study of Jois et al. in 2018 in India the current study looks into how PH affects the quality of life for female workers in clothing factories. In this work, an experimental design was adopted. Two groups of 65 employees, 29 in the control group and 36 in the Pranic group, were created with a mean age of 30.1 years. For all groups, the quality of life scale was measured before and after the test. For the pranic group, mass PH was applied twice a week for 20 minutes. Following the last healing session, the responses of the Pranic group participants were also audio recorded in order to document their experiences. For both the control and pranic groups, the overall quality of life increased from the pre- to the post-test. On the other hand, the pranic group experienced a considerably greater

degree of change ( $p < .003$ ) in comparison to the control group. During the pranic healing session, the majority of the pranic group employees reported experiencing tingling feelings (77.8%), and their experience was deemed significant ( $p < .001$ ). The results of the study showed that PH was useful in raising the standard of living for working women employees (Jois et al., 2018).

- ❖ Based on the study of Nittur et al., in 2023 the goal of this study was to assess the effectiveness of pranic healing as an adjunctive treatment for diabetic foot ulcers (DFUs). The trial and control groups were split 1:1 among thirty diabetic participants who were already receiving standard therapy for their diabetes, co-morbidities, and wound care related to diabetic foot ulcers. The trial group also received Pranic Healing therapy in addition to the usual therapy that both groups were receiving. Patients, assessors, nurses, and the clinician were all blindfolded. Every day for fifty to sixty minutes, Pranic Healers performed remote healing on the trial group for conditions like stress, diabetes, local wound healing, blood purification, and single nerve regeneration. The mean change from baseline in wound parameters and grade of DFU, overall well-being, and HbA1c were the effectiveness factors. Both the wound area and the HbA1c levels were significantly reduced, according to the trial group. In comparison to 22.22% of participants in the control group, almost 76.9% of trial group members reported lower levels of stress. The use of Pranic Healing intervention can help manage diabetic foot ulcers in a safe and efficient manner (Nittur et al., 2023).

## **CHAPTER III: Methodology**

### **3.1 Research Design**

This study was conducted as a double-blind, randomized clinical trial. The objective was to determine the effect of Pranic healing, based on Rogers' therapeutic touch nursing theory, on cardiorespiratory indices and pain related to venipuncture in children aged 6 to 12 years. The study took place in the pediatric ward of Near East University Hospital in Northern Cyprus. Participants were randomly assigned to either the experimental group, which received Pranic healing, or the control group, which received standard care without any intervention.

### **3.2 Participants/Population and Sample**

The participants in this study were school-aged children (6–12 years) who experienced pain during venipuncture. Using convenience sampling, 46 children were selected, with 23 children assigned to each of the experimental and control groups.

#### **3.2.1 Inclusion and exclusion criteria:**

##### **3.2.1.1 Inclusion criteria:**

1. School-aged children aged 6 to 12 who experience pain during venipuncture.
2. The family's and child's willingness to participate in the study and cooperate
3. The parents claim that no particular mental illness exists.
4. The night before, avoid using acetaminophen or any other painkillers.

##### **3.2.1.2 Exclusion criteria:**

1. The toddler is quite restless.
2. The mother did not give her permission to continue taking part in the study.

### **3.2.2 Sample size determination:**

In this study, school-aged children admitted to a hospital in Northern Cyprus were the statistical population. The children were split into the experimental and control groups at random after their consent was obtained. Then, a control and experimental group of 23 people were formed by the random block sampling method. In this method, blocks were formed based on the variables in question, and half of the intervention people and half of the control people were included in each block. The main goal of this method was to balance the number of participants in each of the groups. The four-block randomization method was used, and the patients were placed in experimental group (A) and control group (B). The first 12 blocks of four and one block of two were prepared as follows: AABB, ABAB, ABBA, BBAA, BABA, BAAB, ABAB, AABB, BBAA, BAAB, BABA, ABBA, AB. Then, using the list that had been created in terms of A and B, participants were divided into two groups; this process was repeated repeatedly until the sample size was completed. The samples of this research, according to the sample size formula considering the 20% dropout, were 23 school-aged children in each group who met the criteria for entering the research. The samples were divided into control and intervention groups using the convenience sampling method. To minimize the risk of bias, a double-blind approach was implemented in this study. The nurse responsible for assessing and recording pain scores and vital signs (including respiratory rate, pulse rate, and oxygen saturation) was blinded to group allocation and had no knowledge of whether each child was in the experimental or control group. Similarly, the researcher who performed the Pranic Healing intervention was not involved in outcome measurement or data analysis, ensuring separation between intervention delivery and data collection. Additionally, while the primary researcher was involved in organizing and collecting data, the data were coded

anonymously as  $x_1$  (experimental) and  $x_2$  (control) before being submitted for statistical analysis. The statistician who conducted the analysis was blinded to group identity and worked exclusively with the coded data.

Based on the study (Dehghani et al., 2019) and the mean comparison formula, the first type error level is 0.05, the power of the test is 80%, the sample size in each group is 19 people, which is 23 people in each group considering 20% dropout (Figure 3-1).

$$n = \frac{(z_{1-\frac{\alpha}{2}} + z_{1-\beta})^2 (s_1^2 + s_2^2)}{d^2}$$

$$\alpha = 0.05$$

$$\beta = 0.2$$

$$s_1 = 0.82$$

$$s_2 = 0.65$$

$$\mu_1 = 3.61$$

$$\mu_2 = 2.94$$

$$N_1 = N_2 = 19$$



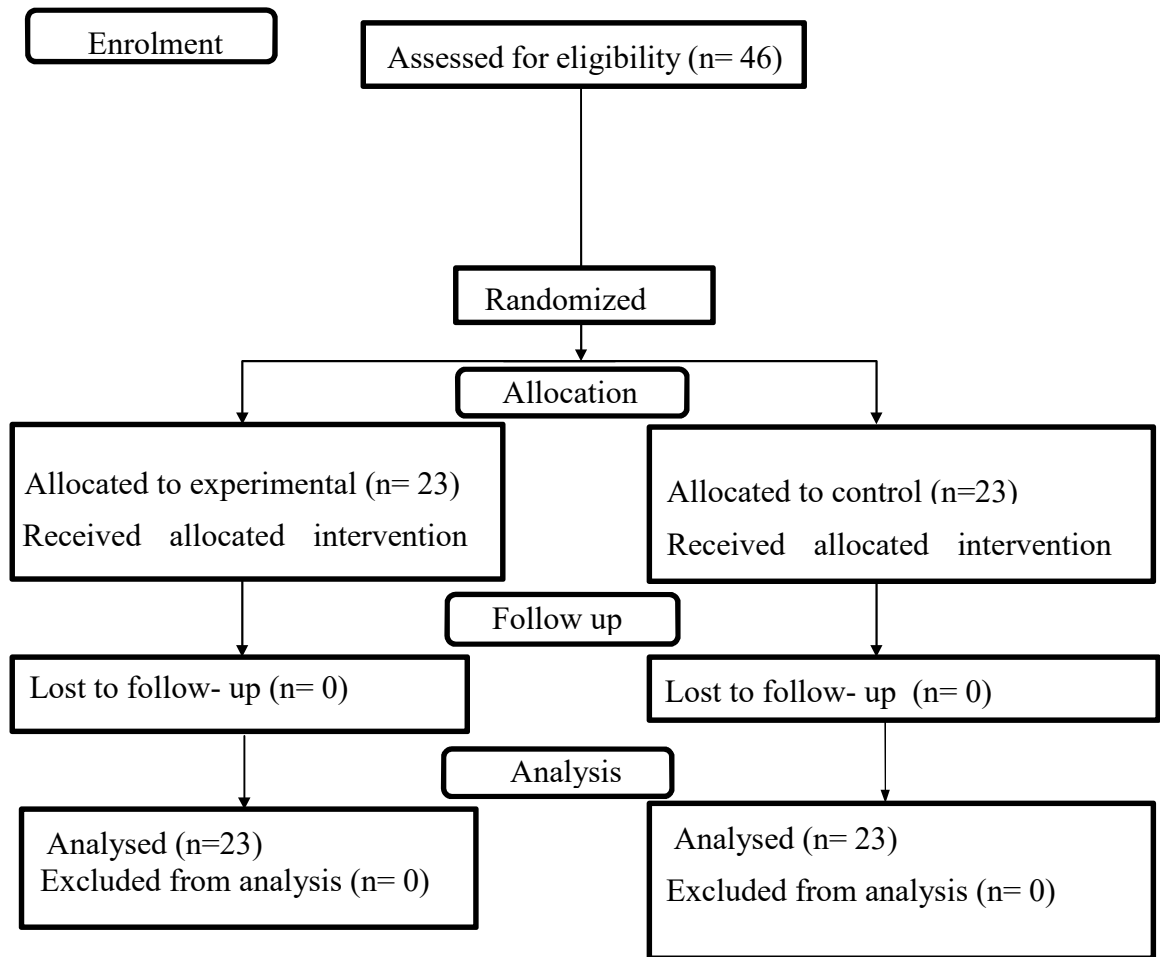


Figure 3-1- CONSORT flow diagram of the study participants

### 3.3 Data Collection Tools/Materials

Questionnaires for demographic information, the Pain Intensity Scale, a flow sheet for assessing children's pain and measuring cardiorespiratory indices, and a pulse oximeter were used to gather data in order to meet the objectives of the study.

**A) The questionnaire for collecting demographic** data on children and parents was one of the tools utilized (Appendix A).

**B) The instrument used to measure pain** was the Wong and Baker Facial Pain Scale. This scale was used in children aged 3 and older to rate pain severity (Yıldırım & Gerçek, 2023). The child was asked to select the expression that best reflected their pain. It was shown by Wong and Baker in 1988 and 1996 and featured six cartoon characters that ranged from crying (0 to 5 or 0 to 10) to experiencing no discomfort at all (Hockenberry, 2019b). In this research, the Wong and Baker Facial Pain Scale was used in Turkish (Appendix B). The validity and reliability of the Wong and Baker Facial Pain Scale have been established in acute pain, and it has been used extensively (Kamki et al., 2022). Seval conducted a project to validate the Turkish version of this tool in 2020, obtaining an internal consistency coefficient of 0.851 and a correlation of  $r = 0.79$  (Seval, 2020).

**C) The children's pain assessment and measurement of cardiorespiratory indices** were recorded using a flow sheet consisting of seven items. The researcher observed both groups as they filled out these questionnaires (Appendix C).

**D) The respiration rate of the child, pulse rate, and arterial oxygen saturation** were measured using a pulse oximeter and intensive care monitor. Pulse oximetry was valid, and each participant only used a single pediatric pulse oximeter to guarantee the validity of the research instrument. The monitor's accuracy was compared with another device each time prior to the intervention in order to assess its dependability using the analogous reliability approach.

### **3.4 Intervention**

The present study was a clinical trial study. All children between the ages of 6 and 12 who were diagnosed and admitted to the children's department at Near East Hospital in Northern Cyprus were included in the research population. The study included 46 samples

of eligible children with mothers that consented to take part. The samples were divided into two equal groups by random and convenience sampling method. After explaining the purpose and how to do the work, written informed consent was obtained from the mothers. The samples were divided into Pranik healing therapy and control groups.

A demographic information questionnaire was completed for each child. In order to carry out the intervention, the experimental group underwent Pranik healing five minutes prior to, during, and five minutes following the venipuncture. A Pranik therapist instructed the researcher who used Pranik therapy. The World Pranik Healing Foundation awarded her a certificate (Appendix D). Interventions in this study were carried out in the participant's private room. Participants received guidance. During the procedure, they lie on their backs in their hospital beds. They were told to unwind as much as possible before the therapy began, and an educational pamphlet provided a quick rundown of Pranik healing techniques (Appendix E). The idea of "Nursing as Facilitation of Healing" was essential to comprehending the function of nurses in advancing health and wellbeing, according to Martha Rogers' Science of Unitary Human Beings. In order to facilitate the healing process, we employed Roger's idea of "nursing as a facilitator of healing" from the Pranik Healing technique in this study. The Pranik advanced protocol was implemented as Master Choa Kok Sui had envisioned (Sui CK, 2004). The following seven methods formed the basis of the Pranik healing protocol used in this study: 1. Aura scanning, 2. Hand sensitization, 3. Aura cleansing, 4. Receptivity enhancement, 5. Prana energizing, 6. Projected Prana stabilization, and 7. Release (Sui choa kok, 2018) (Jois et al., 2018).

The nurse performed venipuncture after making sure the children were prepared for sampling, and the intervention was carried out in three stages: five minutes before to, during, and five minutes following the venipuncture. Children in the control group merely

got standard care; no intervention was carried out. Research assistants measured and documented the children's pulse rate, number of breaths, arterial oxygen saturation, and pain. A trained nurse performed the venipuncture. The intervention was planned during times when the nurse was on duty in the ward to guarantee the consistency of the conditions.

### **3.5 Ethic committee**

The Near East University Ethics Review Board gave the study ethical permission, with approval number NUE/2023/119-1788 (Appendix F). The project was carried out in complete accordance with the Declaration of Helsinki's principles (1964) and closely followed the ethical rules established by the Council of Ethics. Additionally, the study was registered with ClinicalTrials.gov under the ID NCT06571357 (Appendix G).

Near East University Hospital in Northern Cyprus approved permission to conduct the study in its pediatric ward, and patient selection was done in compliance with the study's qualifying requirements as well as hospital policies (Appendix H).

The participants were briefed on the purpose and methodology of the study. The participants were assured that they would not be charged if they left the study at any time. Lastly, formal informed consent was given by the parent and children who willingly indicated their interest in the study. The study was conducted in compliance with the principles outlined in the Declaration of Helsinki (Declaration H, 1964). Additionally, 1. Following the acquisition of consent (signed written consent from both the experimental and control groups), the participants were notified of the purpose of the study and assigned to groups as project samples. 2. The project units were assured that the information was confidential and would not have any negative consequences. 3. The project units received assurances that doing this yoga would not have any adverse effects. 4. The initiative's

objectives and advantages were explained to the authorities, who will also be able to view the outcomes upon request. Each volunteer signed a written consent form acknowledging their right to withdraw from the study at any time. We acquired the written consents to take part in the project.

### **3.6 Data Analysis Procedures**

Each group's results were examined by an individual who was blind to the intervention technique. The Statistical Package for the Social Sciences (SPSS) software, version 25.0, was used to analyze the survey data. The Kolmogorov-Smirnov test was used to evaluate the data's normality. Following the confirmation of a normal distribution, data analysis was conducted using descriptive statistics, the Chi-square test, paired and independent t-tests, and repeated measures analysis of variance (ANOVA).  $P < 0.05$  was used as the significance criterion to assess statistical significance.

### 3.6 Scheduling of research

Activities	1-30 October	1-30 November	1-15 December	15-30 December	from January to April	from May to September	from October to November	from December to January
Topic selection								
Approval of the research title								
Research proposal and instruments								
Ethical permission documents								
Data collection								
Data analysis and results								
conclusion and recommendations								
Submission of the graduation Thesis								

## **CHAPTER IV: Findings and Discussion**

This chapter reports on the statistical studies that were done to evaluate the impact of Pranic healing, which is based on Rogers' therapeutic touch nursing theory, on the cardiorespiratory indices and venipuncture pain in children between the ages of 6 and 12.  $P < 0.05$  was chosen as the significance level, and SPSS version 25.0 was used to analyze the data.

### **4.1 Patients' characteristics**

The final analysis includes all 46 children that took part in the trial. The average age of the experimental group was  $7.56 \pm 1.97$  years, whereas the control group's average age was  $8.13 \pm 1.81$  years. There was no discernible age difference between the two groups, according to the independent t-test ( $P = 0.318$ ). In regards to gender distribution, there was no significant difference between the experimental and control groups ( $P = 0.654$ ), with 52.2% of the children in the former group being boys and 47.8% being girls, while the latter group had 56.5% boys and 43.5% girls.

The mean weight of the children in the experimental group was  $32.45 \pm 5.8$  kg, while it was  $33.12 \pm 6.1$  kg in the control group, with no statistically significant difference ( $P = 0.681$ ). The height of the children in the experimental group averaged  $128.4 \pm 10.5$  cm, while it was  $129.2 \pm 9.8$  cm in the control group, and no significant difference was found ( $P = 0.734$ ). Most families in both groups had 1–2 children (60.9% in the experimental group, 56.5% in the control group), with no significant difference in the number of children between the groups ( $P = 0.598$ ). Similarly, there was no significant difference in hospitalization history,

with 30.4% of the experimental group and 26.1% of the control group having a history of hospitalization ( $P=0.782$ ).

The mother's education level was similar across the groups, with no significant differences ( $P=0.732$ ). The mean age of the mothers in the experimental group was  $36.8\pm4.9$  years, compared to  $37.2\pm5.3$  years in the control group ( $P=0.806$ ). Additionally, 69.6% of the mothers in the experimental group were housewives, compared to 73.9% in the control group, with no significant difference ( $P=0.689$ ).

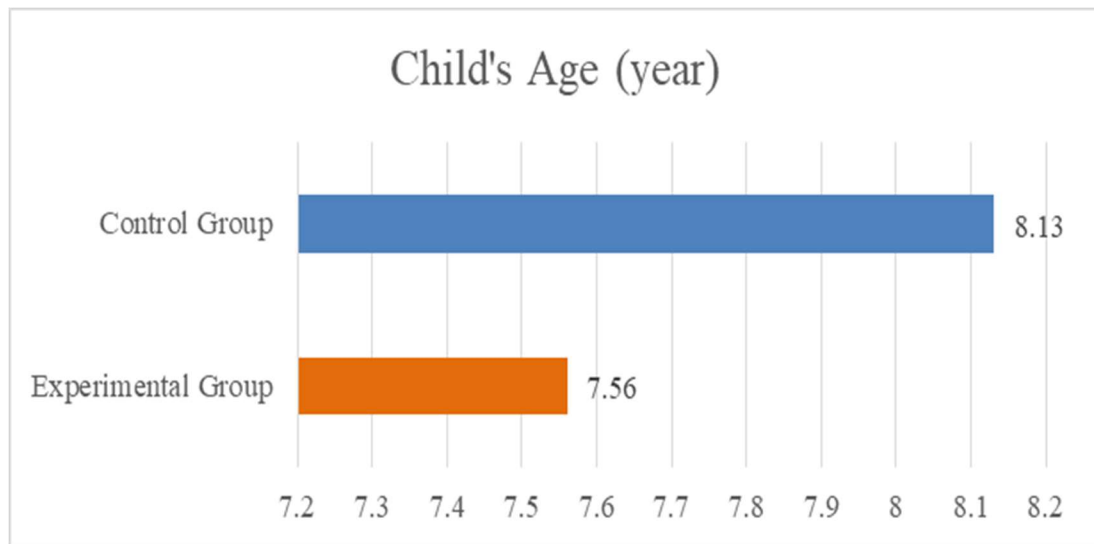
The mean age of the fathers was  $40.5\pm5.2$  years in the experimental group and  $41.1\pm5.6$  years in the control group, with no statistically significant difference ( $P=0.712$ ). The father's education level and occupation were also comparable between the groups, with no significant differences found in either variable ( $P>0.05$ ) (Table 1).



Table 4-1- Comparison of sociodemographic characteristics between experimental and control groups

Variable	Experimental group (n = 23) N (%)	Control group (n = 23) N (%)	P value	t	df
Age (year) (Mean± SD)	7.56 ± 1.97	8.13 ± 1.81	0.318**	-1.01	44
Gender					
Boys	12 (52.2)	10 (43.5)	0.555*		
Girls	11 (47.8)	13 (56.5)			
Weight (Mean ± SD) (kg)	26.08 ± 9.28	24.15 ± 4.49	0.441**	0.777	44
Height (Mean ± SD) (cm)	106.2 ± 13.37	108.2 ± 15.78	0.631**	-0.484	44
Number of Children					
1–2 Children	10 (43.5)	11 (47.8)	0.767*		
3 or More Children	13 (56.5)	12 (52.2)			
Hospitalization History					
Yes	23 (100)	23 (100)			
Mother's Education Level					
High School	3 (13.0)	1 (4.3)	0.295*		
University	20 (87.0)	22 (95.7)			
Mother's Occupation					
Housewife	3 (13.0)	2 (8.7)	0.636*		
Employed	20 (87.0)	21 (91.3)			
Mother's Age (Mean ± SD)	32.39 ± 5.11	32.43 ± 3.99	0.975**	-0.032	44
Father's Education Level					
High School	4 (17.4)	1 (4.3)	0.346*		
University	19 (82.6)	22 (95.7)			
Father's Occupation					
Laborer	4 (17.4)	19 (82.6)	0.346*		
Employed	1 (4.3)	22 (95.7)			
Father's Age (Mean ± SD)	34.69 ± 5.77	36.30 ± 4.30	0.290**	-1.072	44

\*Chi square; \*\* Independent t-test



*Figure 4-1- Comparing the Ages of Participants in the Experimental and Control Groups*

The Figure 4- 1 above compares the mean age of participants between the experimental and control groups:

- **Experimental Group** (n = 23): The mean age was 7.56 years.
- **Control Group** (n = 23): The mean age was 8.13 years.

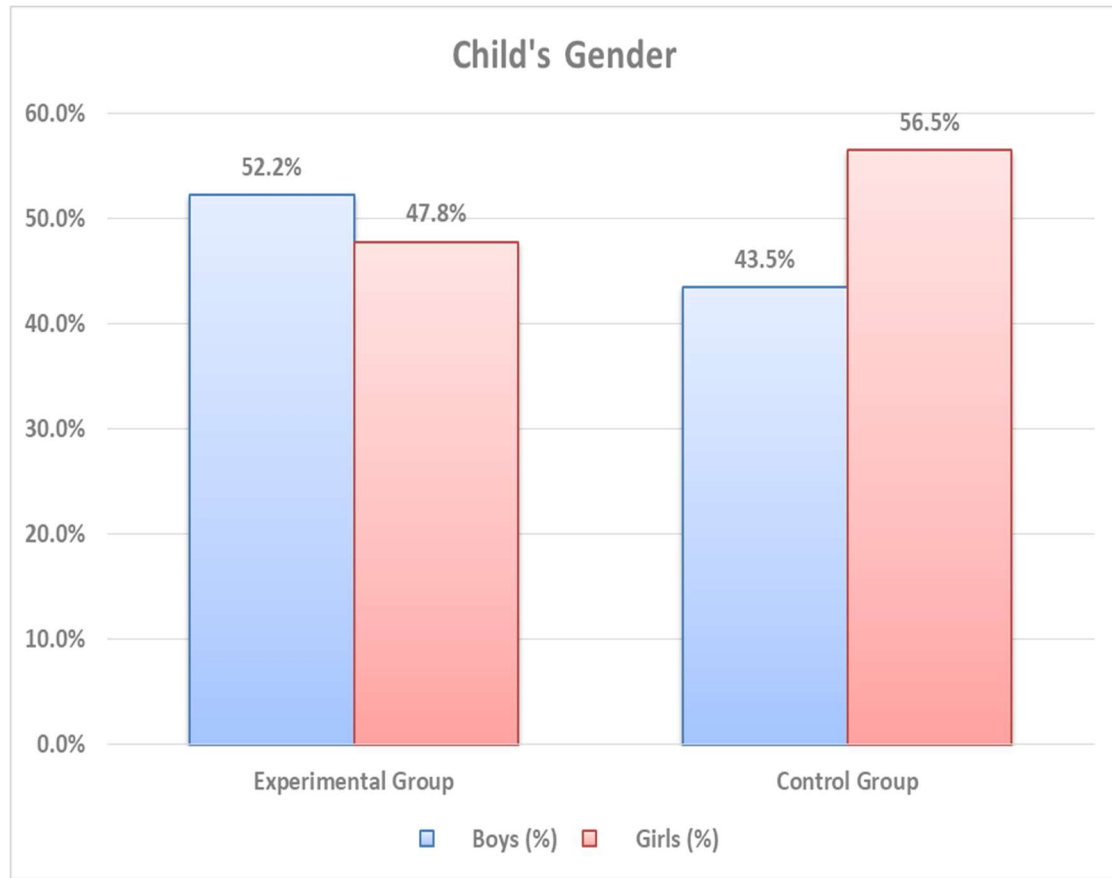


Figure 4-2- Gender Distribution of Participants in the Experimental and Control Groups

The Figure 4- 2 above presents the gender distribution of participants in both the experimental and control groups:

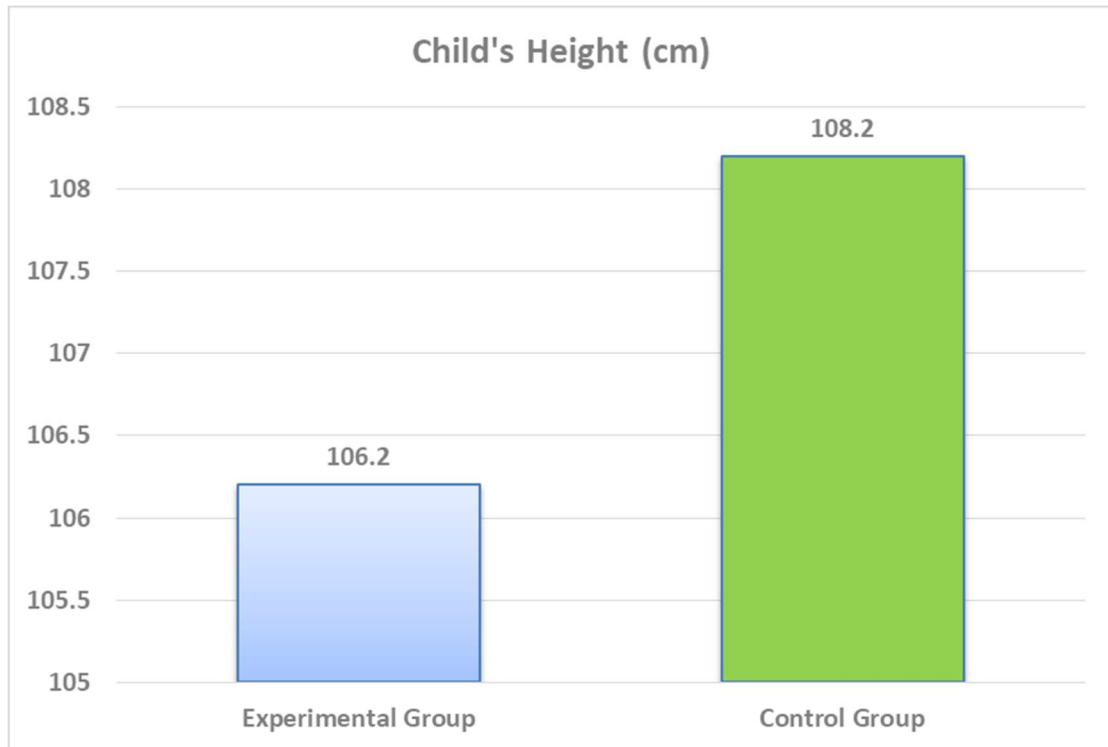
- In the **experimental group** ( $n = 23$ ), 12 participants (52.2%) were boys and 11 participants (47.8%) were girls. This shows that the experimental group had a fairly even gender distribution, with a slightly higher proportion of boys.
- In the **control group** ( $n = 23$ ), 10 participants (43.5%) were boys and 13 participants (56.5%) were girls, indicating a slightly higher proportion of girls compared to boys in this group. The gender distribution across both groups is relatively balanced



*Figure 4-3- Weight of Participants in the Experimental and Control Groups (n = 46)*

The Figure 4- 3 above compares the mean weight of participants between the experimental and control groups:

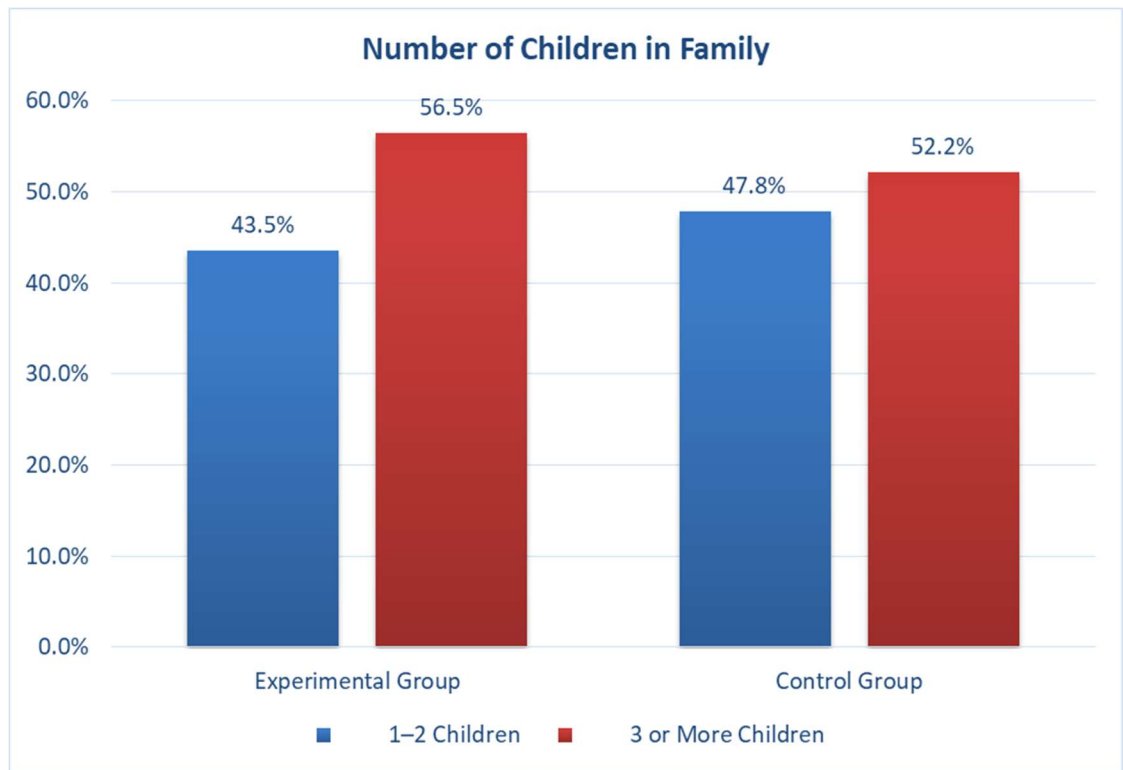
- **Experimental Group (n = 23):** The mean weight was 26.08 kg.
- **Control Group (n = 23):** The mean weight was 24.15 kg.



*Figure 4-4- Height of Participants in the Experimental and Control Groups (n = 46)*

The Figure 4- 4 above compares the mean height of participants between the experimental and control groups:

- **Experimental Group** (n = 23): The mean height was 106.2 cm.
- **Control Group** (n = 23): The mean height was 108.2 cm.

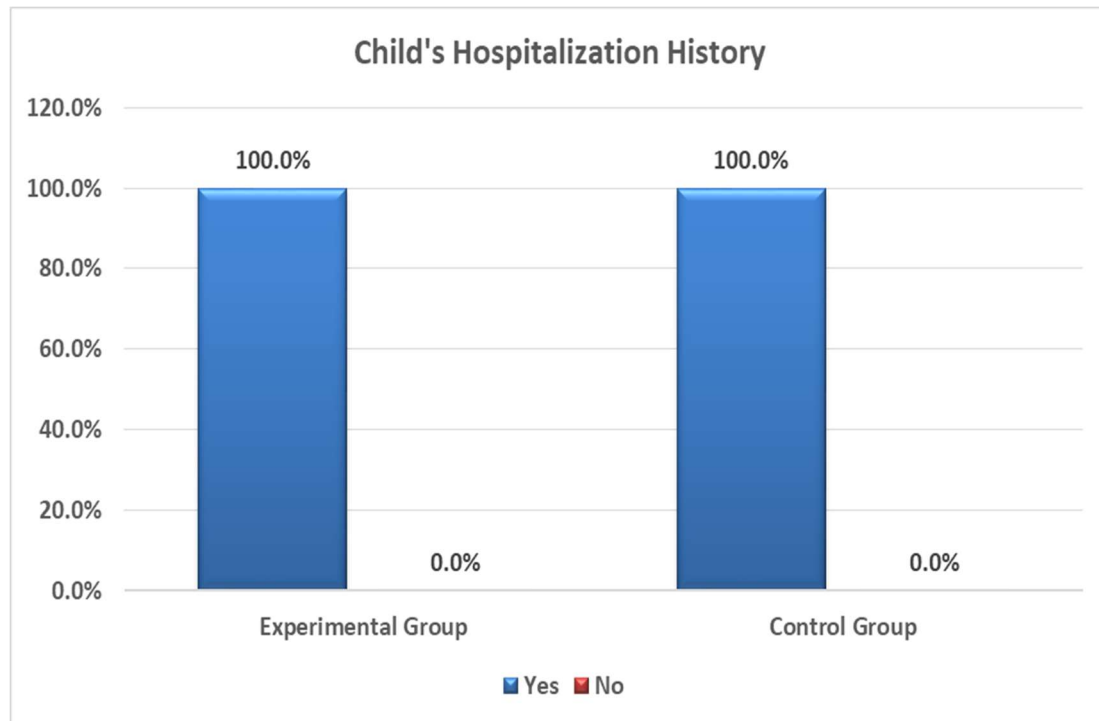


*Figure 4-5- Number of Children Distribution in Experimental and Control Groups*

The Figure 4- 5 above presents the distribution of participants based on the number of children they have in both the experimental and control groups:

- **Experimental Group** (n = 23): 1-2 Children: 10 participants (43.5%) and 3 or More Children: 13 participants (56.5%). In the experimental group, there is a higher proportion of participants with 3 or more children compared to those with 1-2 children. This distribution indicates that a majority of the participants in this group have 3 or more children.
- **Control Group** (n = 23): 1-2 Children: 11 participants (47.8%) and 3 or More Children: 12 participants (52.2%). In the control group, the distribution is fairly balanced but shows a slightly higher proportion of participants with 3 or more

children compared to those with 1–2 children. This suggests a relatively similar distribution of number of children between the two groups.



*Figure 4-6- Hospitalization History of Participants in Experimental and Control Groups*

The Figure 4- 6 above presents the hospitalization history of participants in both the experimental and control groups:

- **Experimental Group** (n=23): All participants (100%) reported a history of hospitalization.
- **Control Group** (n = 23): All participants (100%) reported a history of hospitalization. In both the experimental and control groups, every participant has a history of hospitalization, with no participants reporting otherwise.

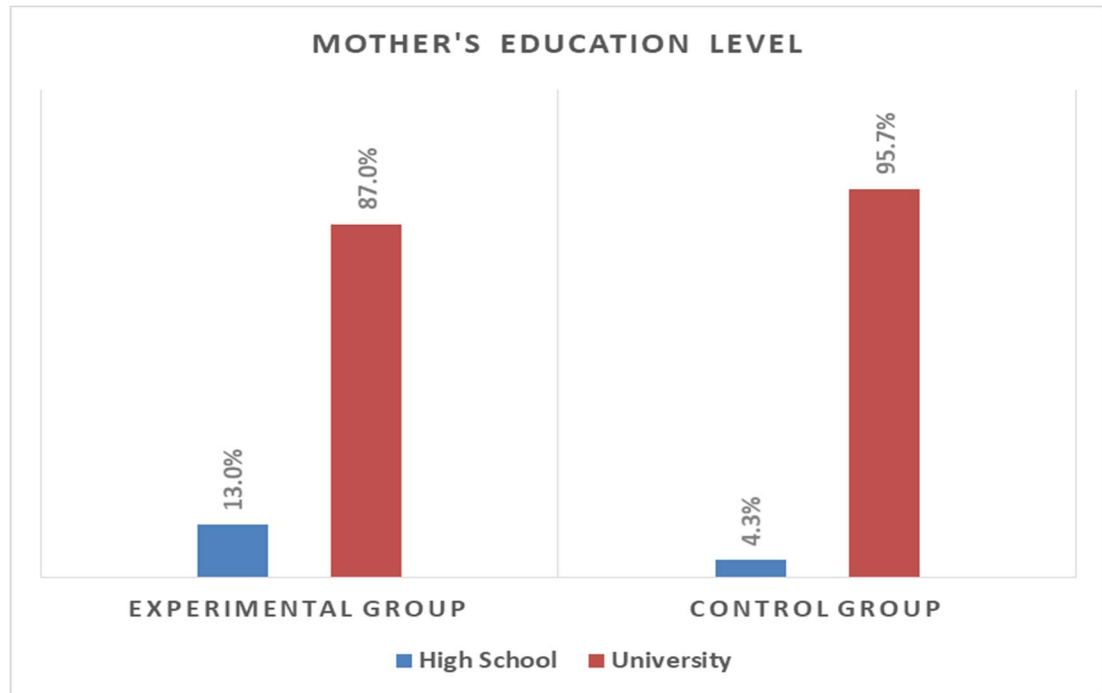


Figure 4-7- Mother's Education Level in Experimental and Control Groups

The Figure 4- 7 above presents the distribution of participants based on their mother's education level in both the experimental and control groups:

- **Experimental Group** (n = 23): High School: 3 participants (13.0%) and University: 20 participants (87.0%). In the experimental group, the majority of participants (87.0%) have mothers with a university education, while a smaller proportion (13.0%) have mothers with a high school education.
- **Control Group** (n = 23): High School: 1 participant (4.3%) and University: 22 participants (95.7%). In the control group, a larger proportion of participants (95.7%) have mothers with a university education, and a smaller proportion (4.3%) have mothers with a high school education. Both groups show a high percentage of participants with mothers who have a university education, though the control



group has a slightly higher proportion of this educational level compared to the experimental group. The differences in education levels of mothers between the two groups are minimal.

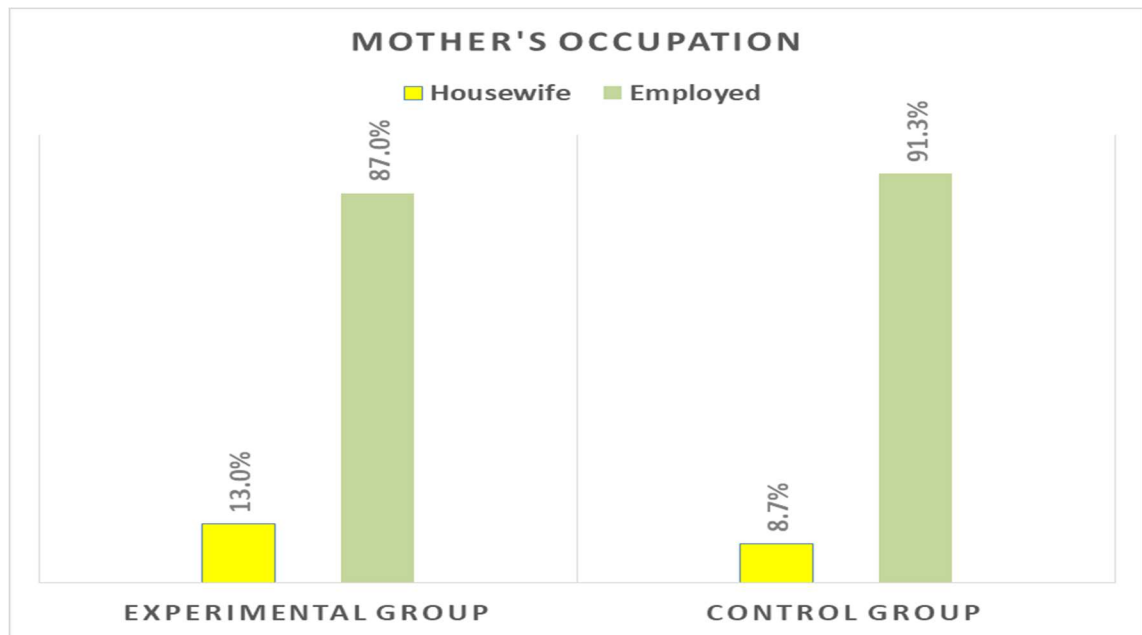
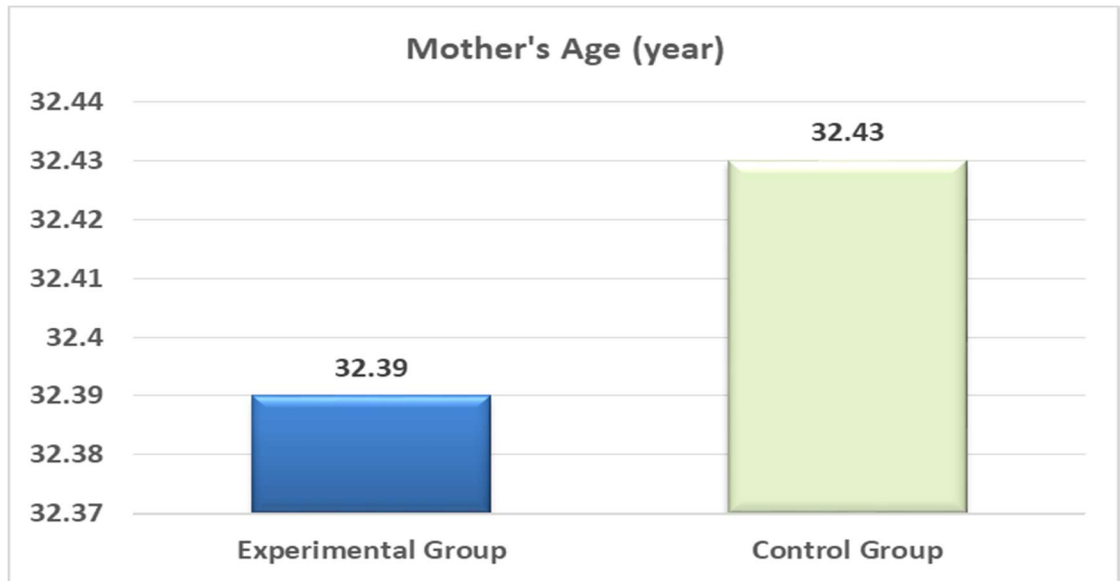


Figure 4-8- Mother's Occupation in Experimental and Control Groups

The Figure 4- 8 above shows the distribution of participants based on their mother's occupation in both the experimental and control groups:

- **Experimental Group** (n = 23): Housewife: 3 participants (13.0%) and Employed: 20 participants (87.0%). In the experimental group, the majority of participants (87.0%) have mothers who are employed, while a smaller proportion (13.0%) have mothers who are housewives.
- **Control Group** (n = 23): Housewife: 2 participants (8.7%) and Employed: 21 participants (91.3%). Similarly, in the control group, the majority of participants

(91.3%) have employed mothers, with only 8.7% having mothers who are housewives. Both groups show a high proportion of participants with employed mothers, with a slightly higher percentage in the control group. The difference in the occupation distribution between the groups is small.



*Figure 4-9- Mother's Age in Experimental and Control Groups*

The Figure 4- 9 above compares the mean age of mothers of participants in the experimental and control groups:

- **Experimental Group** (n = 23): The mean age of mothers was 32.39 years.
- **Control Group** (n = 23): The mean age of mothers was 32.43 years. The mean age of mothers in both the experimental and control groups is almost identical, with minimal differences in variability.

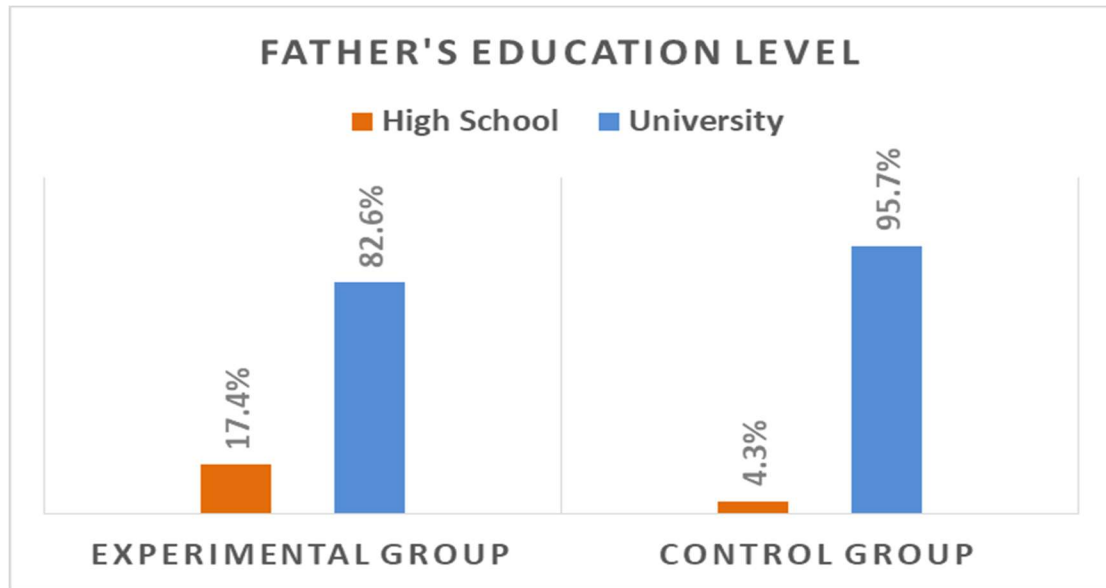
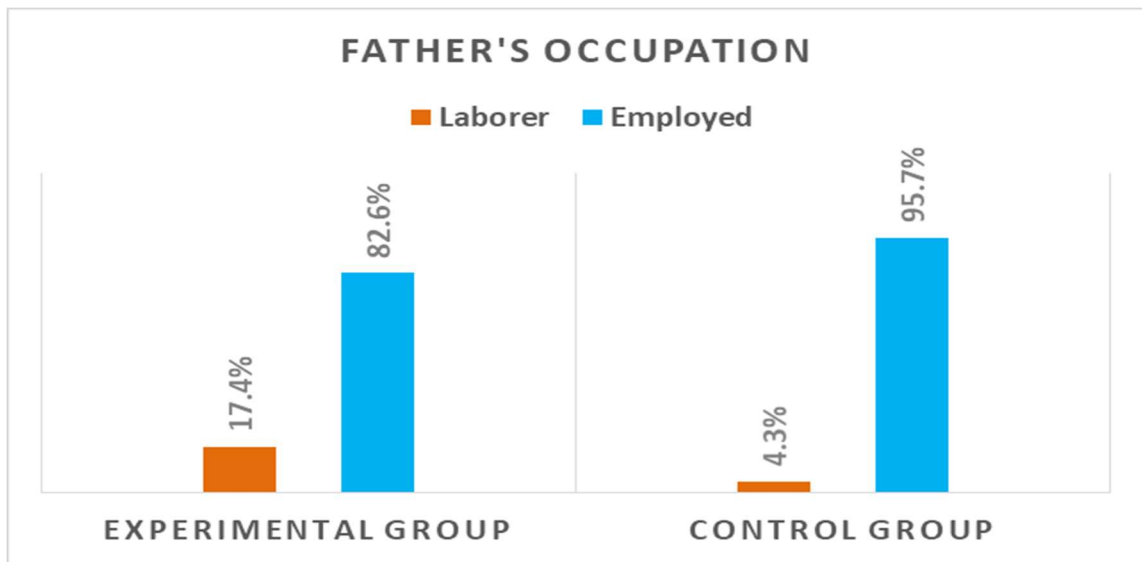


Figure 4-10- Father's Education Level in Experimental and Control Groups

The Figure 4- 10 above presents the distribution of participants based on their father's education level in both the experimental and control groups:

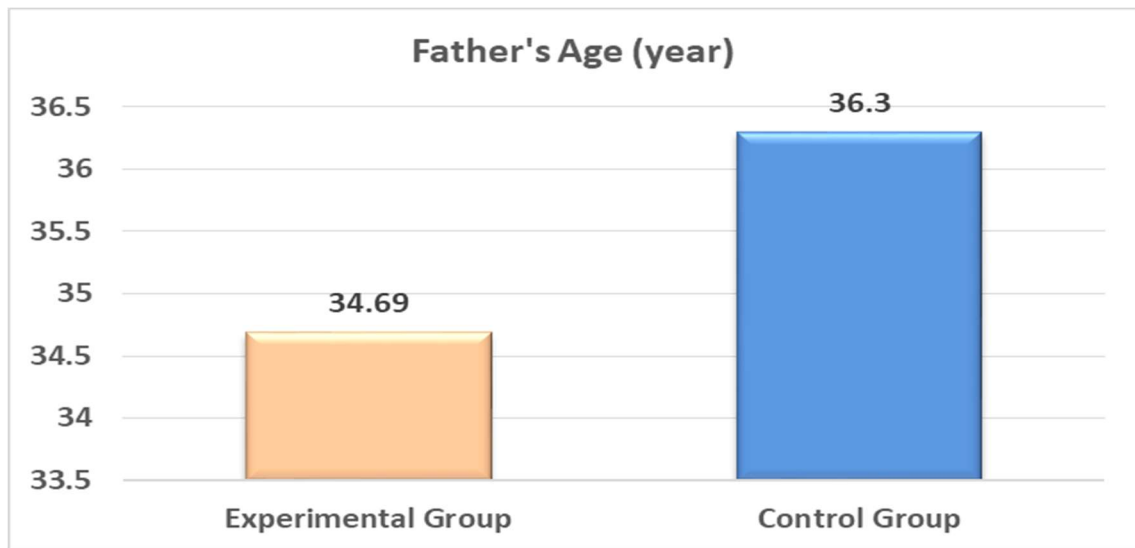
- **Experimental Group** (n = 23): High School: 4 participants (17.4%) and University: 19 participants (82.6%). In the experimental group, the majority of participants (82.6%) have fathers with a university education, while 17.4% have fathers with a high school education.
- **Control Group** (n = 23): High School: 1 participant (4.3%) and University: 22 participants (95.7%). In the control group, the majority of participants (95.7%) have fathers with a university education, with only 4.3% having fathers with a high school education. Overall, both groups show a high proportion of participants whose fathers have a university education. The control group has a slightly higher proportion of fathers with a university education compared to the experimental group. However, the difference is relatively small.



*Figure 4-11- Father's Occupation in Experimental and Control Groups*

The Figure 4- 11 above presents the distribution of participants based on their father's occupation in both the experimental and control groups:

- **Experimental Group** (n = 23): Laborer: 4 participants (17.4%) and Employed: 19 participants (82.6%). In the experimental group, the majority of participants (82.6%) have fathers who are employed, while 17.4% have fathers who are laborers.
- **Control Group** (n = 23): Laborer: 1 participant (4.3%) and Employed: 22 participants (95.7%). In the control group, the vast majority of participants (95.7%) have fathers who are employed, with only 4.3% having fathers who are laborers. Overall, both groups show a high percentage of participants whose fathers are employed.



*Figure 4-12- Father's Age in Experimental and Control Groups*

The Figure 4- 12 above compares the mean age of fathers of participants in the experimental and control groups:

- **Experimental Group** (n = 23): The mean age of fathers was 34.69 years.
- **Control Group** (n = 23): The mean age of fathers was 36.30 years. While the control group has a slightly higher mean age for fathers compared to the experimental group, the difference is small, and the variability in ages is relatively similar between the two groups.

#### **4.2 Pain Score Analysis across Time Points**

There was a statistically significant difference in the mean pain scores across different time points in both the experimental and control groups ( $P < 0.001$ ). The ANOVA results for the experimental group showed a significant reduction in pain over time, with a P value  $< 0.001$  and an F value of 54.61, indicating a substantial effect of the intervention. The

partial eta squared value of 0.554 suggests that 55.4% of the variance in pain scores can be attributed to the intervention.

In the experimental group, the pain scores decreased from  $0.61 \pm 0.49$  at Time 1 (immediately after needle insertion) to  $0.78 \pm 0.52$  at Time 2 (two minutes after needle removal), and further to  $0.17 \pm 0.38$  at Time 3 (five minutes after needle removal). The reduction in pain between Time 1 and the later time points was significant ( $P < 0.001$ ), indicating that the intervention led to a substantial decrease in pain over time.

In contrast, the control group showed higher pain scores across all time points, with  $2.22 \pm 0.59$  at Time 1,  $2.26 \pm 0.62$  at Time 2, and  $1.26 \pm 0.75$  at Time 3. The P-values for the comparison between the experimental and control groups at each time point were all statistically significant ( $P < 0.001$ ), suggesting that the experimental group experienced significantly lower pain than the control group.

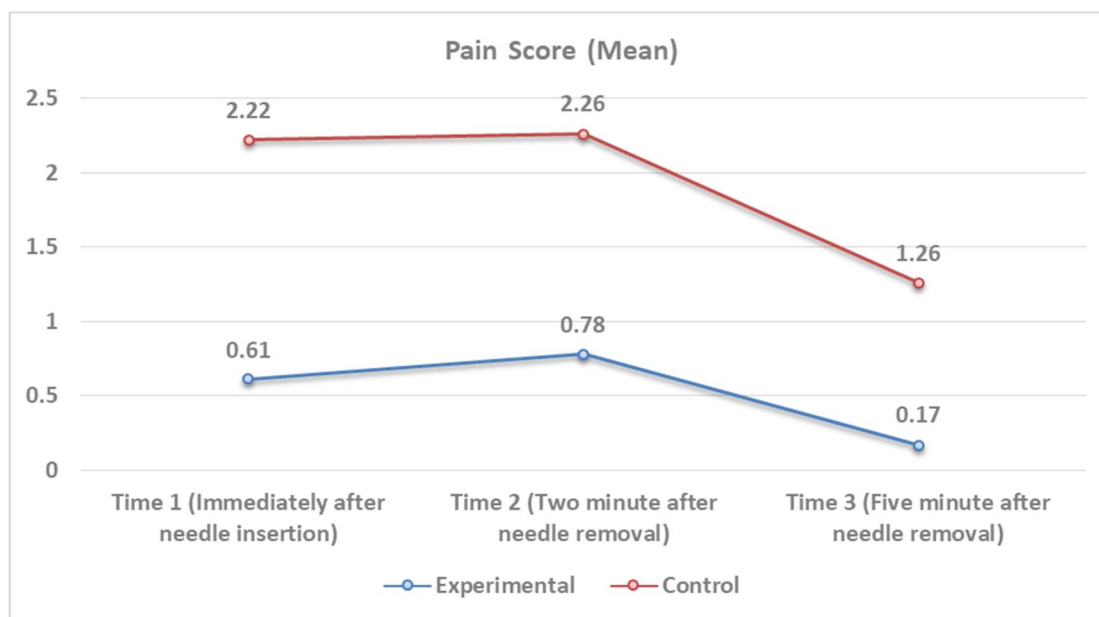
The independent t-test confirmed these differences, with t-values of -9.889 at Time 1, -8.779 at Time 2, and -6.163 at Time 3, all of which indicate a significant difference in pain scores between the two groups at each time point.

This data suggests that the intervention had a lasting effect in reducing pain, even several minutes after the procedure, whereas the control group experienced little to no reduction in pain levels over time (Table 2).

Table 4-2- Comparison of Pain Scores Between Experimental and Control Groups at Different Time Points

Variables	Group	Mean $\pm$ SD			P value*	F*	Partial eta squared
		*** Time 1	**** Time 2	***** Time 3			
Pain Score	Experimental	0.61 $\pm$ 0.49	0.78 $\pm$ 0.52	0.17 $\pm$ 0.38	<0.001	F(2,88) = 54.61	0.554
	Control	2.22 $\pm$ 0.59	2.26 $\pm$ 0.62	1.26 $\pm$ 0.75			
	P value**	<0.001	<0.001	<0.001			
	t**	-9.889	-8.779	-6.163			
*	Repeated Measures ANOVA						
**	Independent t-test						
***	Time 1: Immediately after needle insertion						
****	Time 2: Two minute after needle removal						
*****	Time 3: Five minute after needle removal						

A Repeated Measures ANOVA was conducted to assess within-group differences across the three time points, revealing a statistically significant time  $\times$  group interaction ( $F(2, 88) = 54.61$ ,  $p < 0.001$ ), with a partial eta squared of 0.554, indicating a large effect size. This suggests that 55.4% of the variance in pain scores can be attributed to the interaction between time and the intervention.



*Figure 4-13- Pain Score Comparison at Different Time Points Between Experimental and Control Groups*

The Figure 4-13 above presents the mean pain scores of participants in both experimental and control groups at three different time points (Time 1, Time 2, and Time 3):

- **Time 1 (immediately after needle insertion):** Experimental Group: The mean pain score was 0.61, indicating a low level of pain with some variability in the scores. Control Group: The mean pain score was 2.22, reflecting a much higher level of pain compared to the experimental group.
- **Time 2 (two minutes after needle removal):** Experimental Group: The mean pain score increased slightly to 0.78, showing a small rise in pain, but it remained relatively low. Control Group: The mean pain score was 2.26, showing a slight increase compared to Time 1, but the pain level stayed significantly higher than in the experimental group.



- **Time 3 (five minutes after needle removal):** Experimental Group: The mean pain score dropped to 0.17, indicating a substantial reduction in pain after the intervention. Control Group: The mean pain score decreased to 1.26, showing some reduction in pain, but it remained considerably higher than in the experimental group. Overall, the experimental group experienced a significant reduction in pain over time, particularly after the intervention (Time 3), while the control group experienced consistently higher pain levels across all three time points. This suggests that the intervention in the experimental group was effective in reducing pain compared to the control group.

### **4.3 Cardiorespiratory Indices across Time Points**

There was a statistically significant difference in RR, PR, and O2Sat between the experimental and control groups over time.

#### **4.3.1 Respiratory Rate (RR)**

The ANOVA results showed a significant reduction in RR in the experimental group over the three time points ( $P < 0.001$ ,  $F(2, 88) = 18.035$ ). There was a statistically significant difference in the respiratory rate across the three time points for the experimental group, with a partial eta squared value of 0.291, indicating that 29.1% of the variance in respiratory rate can be attributed to the intervention. The mean respiratory rate in the experimental group decreased from  $21.5 \pm 1.6$  breaths/min at Time 1 (immediately after needle insertion) to  $20.9 \pm 1.8$  breaths/min at Time 2 (two minutes after needle removal), and further to  $19.8 \pm 1.1$  breaths/min at Time 3 (five minutes after needle removal). This significant decrease indicates that the intervention had a calming effect on the respiratory rate over time.

In the control group, however, the respiratory rate remained relatively high, with values of  $22.7 \pm 1.4$  breaths/min at Time 1, increasing slightly to  $23.6 \pm 1.8$  breaths/min at Time 2, before decreasing to  $21.8 \pm 2.1$  breaths/min at Time 3. The independent t-test showed significant differences between the experimental and control groups at all three time points, with t-values of -2.658 at Time 1, -5.168 at Time 2, and -4.097 at Time 3 ( $P < 0.05$ ), suggesting that the intervention group had significantly lower respiratory rates compared to the control group (Table 3).

#### **4.3.2 Pulse Rate (PR)**

The pulse rate also showed a significant reduction over time in the experimental group ( $P < 0.001$ ,  $F(2, 88) = 13.924$ ), with a partial eta squared value of 0.240, meaning 24% of the variation in pulse rate was due to the intervention. The experimental group's pulse rate decreased from  $98.9 \pm 6.5$  beats/min at Time 1 to  $98.3 \pm 5.9$  beats/min at Time 2, and further to  $94.6 \pm 7.07$  beats/min at Time 3. This consistent decrease reflects the calming effect of the intervention.

Conversely, the control group's pulse rate remained higher throughout, with mean values of  $103.3 \pm 4.9$  beats/min at Time 1, rising to  $105.5 \pm 12.0$  beats/min at Time 2, and decreasing to  $100.7 \pm 10.7$  beats/min at Time 3. The independent t-test results showed significant differences between the experimental and control groups at all three time points ( $P < 0.05$ ), with t-values of -2.592 at Time 1, -2.567 at Time 2, and -2.285 at Time 3, indicating that the experimental group had a significantly lower pulse rate compared to the control group at each time point (Table 3).

### **4.3.3 Oxygen Saturation (O2sat)**

Oxygen saturation (O2 sat) levels also showed significant differences between the two groups. In the experimental group, the oxygen saturation increased slightly over time, from  $98.6 \pm 0.6\%$  at Time 1 to  $98.7 \pm 0.7\%$  at Time 2 and  $99.0 \pm 0.4\%$  at Time 3. This improvement was statistically significant ( $P < 0.001$ ,  $F(2, 88) = 8.243$ ), with a partial eta squared value of 0.158, indicating that 15.8% of the variation in oxygen saturation was due to the intervention.

In contrast, the control group had lower oxygen saturation levels, starting at  $97.04 \pm 1.6\%$  at Time 1, decreasing further to  $96.3 \pm 2.4\%$  at Time 2, before slightly recovering to  $97.6 \pm 2.3\%$  at Time 3. The independent t-test showed significant differences between the groups at all three time points ( $P < 0.05$ ), with t-values of 4.448 at Time 1, 4.575 at Time 2, and 2.870 at Time 3, demonstrating that the experimental group had significantly higher oxygen saturation levels compared to the control group.

Table 4-3- Comparison of Cardiorespiratory Indices between Experimental and Control Groups at Different Time Points

Variables	Group	Mean $\pm$ SD			P value*	F*	Partial eta squared
		*** Time 1	**** Time 2	***** Time 3			
RR (b/min)	Experimental	21.5 $\pm$ 1.6	20.9 $\pm$ 1.8	19.8 $\pm$ 1.1	<0.001	F(2,88)= 18.035	0.291
	Control	22.7 $\pm$ 1.4	23.6 $\pm$ 1.8	21.8 $\pm$ 2.1			
	P value**	0.011	<0.001	<0.001			
	t**	-2.658	-5.168	-4.097			
PR (beats/min)	Experimental	98.9 $\pm$ 6.5	98.3 $\pm$ 5.9	94.6 $\pm$ 7.07	<0.001	F(2,88)= 13.924	0.240
	Control	103.3 $\pm$ 4.9	105.5 $\pm$ 12.0	100.7 $\pm$ 10.7			
	P value**	0.013	0.014	0.027			
	t**	-2.592	-2.567	-2.285			
O <sub>2</sub> sat (%)	Experimental	98.6 $\pm$ 0.6	98.7 $\pm$ 0.7	99.0 $\pm$ 0.4	<0.001	F(2,88)= 8.243	0.158
	Control	97.04 $\pm$ 1.6	96.3 $\pm$ 2.4	97.6 $\pm$ 2.3			
	P value**	<0.001	<0.001	0.006			
	t**	4.448	4.575	2.870			

Repeated Measures ANOVA

Independent t-test

Time 1: Immediately after needle insertion

Time 2: Two minute after needle removal

Time 3: Five minute after needle removal

**Respiratory Rate (RR):** A Repeated Measures ANOVA was conducted to assess within-group differences across the three time points, revealing a statistically significant time  $\times$  group interaction ( $F(2, 88) = 18.035$ ,  $p < 0.001$ ), with a partial eta squared of 0.291, indicating a moderate to large effect size. This suggests that 29.1% of the variance in respiratory rate is explained by the interaction between time and the intervention.

**Pulse Rate (PR):** A Repeated Measures ANOVA showed a statistically significant time  $\times$  group interaction ( $F(2, 88) = 13.924$ ,  $p < 0.001$ ), with a partial eta squared of 0.240, indicating a moderate effect size. This means 24.0% of the variance in pulse rate can be attributed to the effect of the intervention over time.

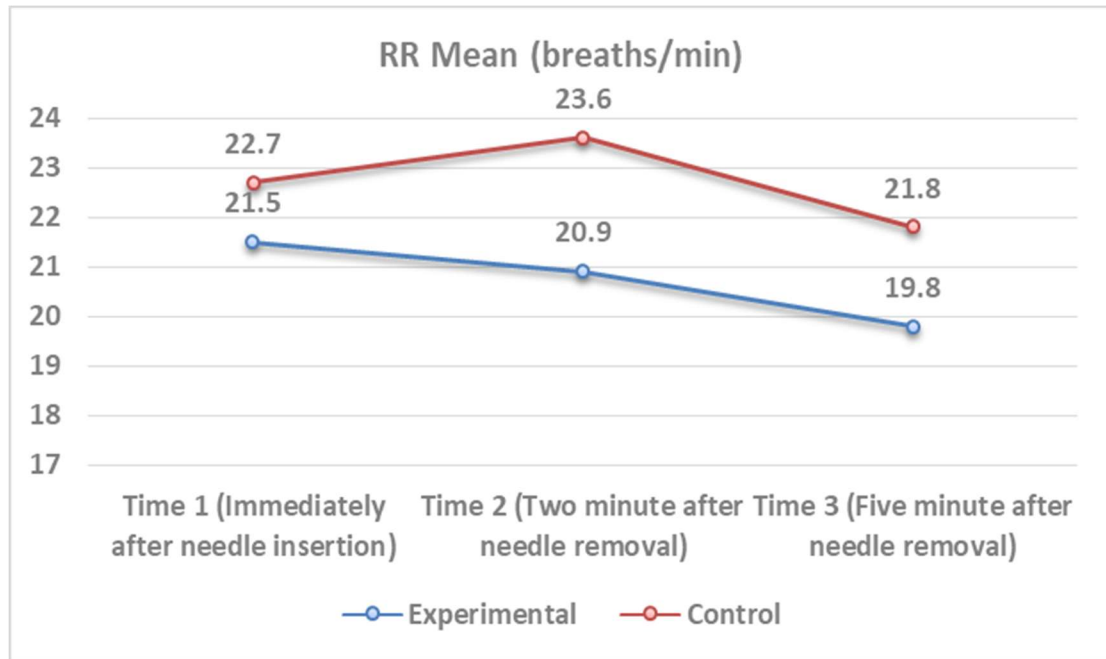


Figure 4-14- Respiratory Rate (RR) Comparison at Different Time Points Between Experimental and Control Groups

The Figure 4- 14 above shows the mean respiratory rate (breaths per minute) of participants in both the experimental and control groups at three specific time points:

- Time 1 (Immediately after needle insertion):** Experimental Group: The mean RR was 21.5 breaths per minute, indicating a normal respiratory rate with slight variability among participants. Control Group: The mean RR was 22.7 breaths per minute, showing a slightly higher rate compared to the experimental group.
- Time 2 (Two minutes after needle removal):** Experimental Group: The mean RR decreased slightly to 20.9 breaths per minute, indicating a mild reduction in respiratory rate during this time. Control Group: The mean RR increased to 23.6 breaths per minute, showing an increase in respiratory rate compared to Time 1, and remaining higher than in the experimental group.
- Time 3 (Five minutes after needle removal):** Experimental Group: The mean RR further decreased to 19.8 breaths per minute, reflecting a significant reduction in

respiratory rate after the intervention. Control Group: The mean RR decreased slightly to 21.8 breaths per minute but remained elevated compared to the experimental group. Overall, the experimental group experienced a steady decrease in respiratory rate over time, particularly five minutes after the needle removal (Time 3), indicating a calming effect. In contrast, the control group had a slight increase in RR after the needle insertion, with only a moderate decrease by Time 3. This suggests that the intervention in the experimental group was effective in reducing the respiratory rate compared to the control group.

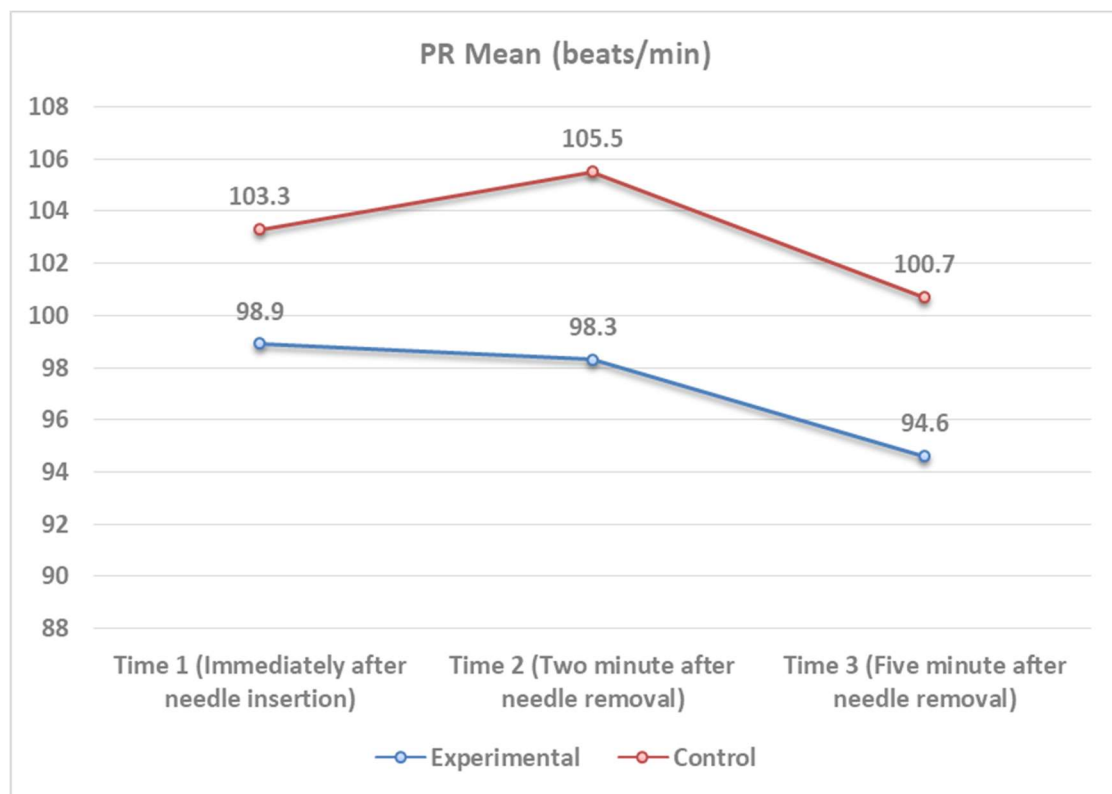


Figure 4-15- Pulse Rate (PR) Comparison at Different Time Points Between Experimental and Control Groups

The Figure 4- 15 above shows the mean pulse rate (beats per minute) of participants in both the experimental and control groups at three specific time points:

- **Time 1 (Immediately after needle insertion):** Experimental Group: The mean PR was 98.9 beats per minute, indicating a normal pulse rate with moderate variability. Control Group: The mean PR was 103.3 beats per minute, reflecting a higher pulse rate compared to the experimental group.
- **Time 2 (Two minutes after needle removal):** Experimental Group: The mean PR slightly decreased to 98.3 beats per minute, showing a minor reduction in pulse rate during this time. Control Group: The mean PR increased to 105.5 beats per minute, indicating a further rise in pulse rate compared to Time 1 and remaining higher than in the experimental group.
- **Time 3 (Five minutes after needle removal):** Experimental Group: The mean PR further decreased to 94.6 beats per minute, reflecting a significant reduction in pulse rate after the intervention. Control Group: The mean PR decreased slightly to 100.7 beats per minute but remained elevated compared to the experimental group. Overall, the experimental group experienced a consistent decrease in pulse rate over time, particularly five minutes after needle removal (Time 3), indicating a calming effect. In contrast, the control group showed a rise in pulse rate after needle insertion, with only a moderate decrease by Time 3. This suggests that the intervention in the experimental group was effective in lowering the pulse rate compared to the control group.

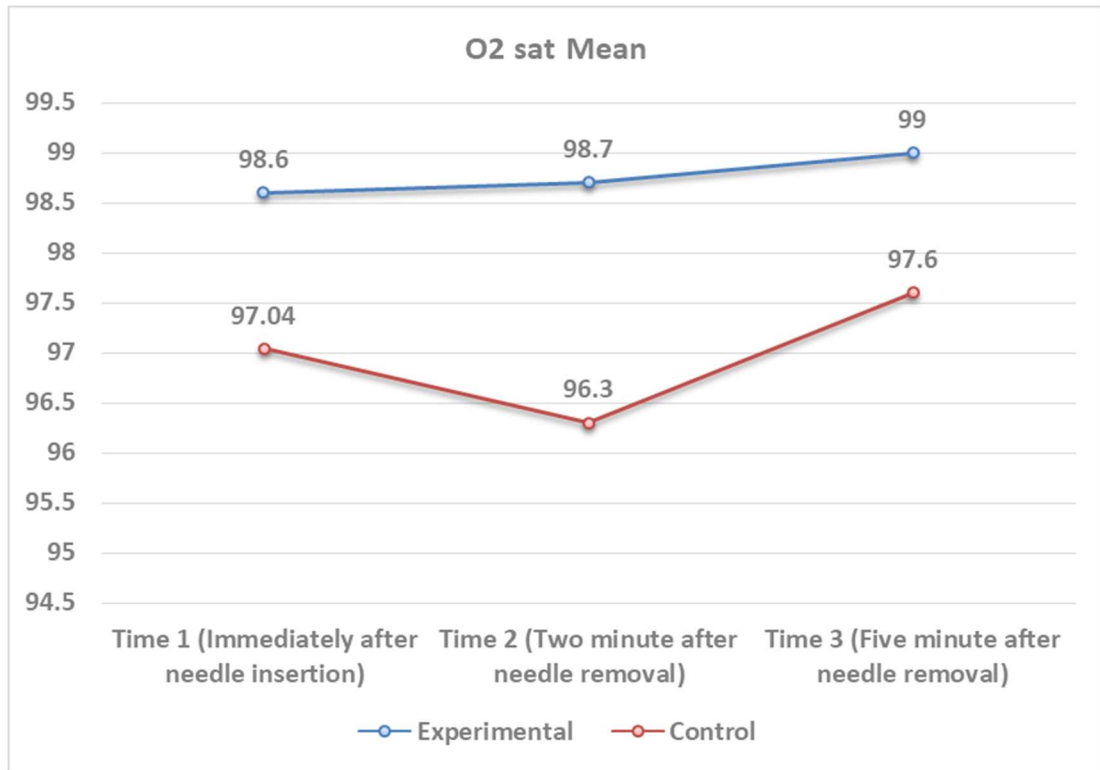


Figure 4-16- Oxygen Saturation (O2 Sat) Comparison at Different Time Points Between Experimental and Control Groups

The Figure 4- 16 above presents the mean oxygen saturation levels (in percentage) of participants in both the experimental and control groups at three specific time points:

- Time 1 (Immediately after needle insertion):** Experimental Group: The mean O2 sat was 98.6, indicating high and stable oxygen saturation levels with minimal variability. Control Group: The mean O2 sat was 97.04, showing slightly lower oxygen saturation compared to the experimental group, with more variability.
- Time 2 (Two minutes after needle removal):** Experimental Group: The mean O2 sat increased slightly to 98.7, reflecting a stable and slightly improved oxygen saturation level. Control Group: The mean O2 sat decreased to 96.3, indicating a further drop in oxygen saturation compared to Time 1 and remaining lower than in the experimental group.



- **Time 3 (Five minutes after needle removal):** Experimental Group: The mean O<sub>2</sub> sat further increased to 99.0, showing a significant improvement in oxygen saturation and maintaining high levels. Control Group: The mean O<sub>2</sub> sat increased to 97.6, but it remained lower compared to the experimental group, with some variability. Overall, the experimental group exhibited consistently high and improving oxygen saturation levels over time, particularly five minutes after needle removal (Time 3). In contrast, the control group had lower oxygen saturation levels throughout, with only a modest improvement by Time 3. This suggests that the intervention in the experimental group was effective in maintaining and improving oxygen saturation compared to the control group.

## **CHAPTER V: Discussion**

This study determined to assess how Pranic Healing, which is based in Rogers' Therapeutic Touch Nursing Theory, affected children's venipuncture-related discomfort and cardiorespiratory indices. Particularly for children undergoing traumatic procedures, the results of this study highlight the possible advantages of incorporating Pranic Healing into therapeutic care.

According to the study's findings, children who received Pranic Healing during venipuncture experienced significantly less pain than those in the control group. Five minutes prior to, during, and five minutes following the surgery, this impact was consistently seen. These findings are in line with earlier studies that looked at complementary, non-invasive pain treatment techniques for kids. For example, a research showed that soft touch significantly reduced pain and cardiorespiratory stress during blood sample and venipuncture in premature newborns (Bahrami et al., 2023). Similarly, the results of the other study showed that preterm infants' heel lancing pain was much decreased by the Yaksan and Gentle Human Touch procedures (Dur et al., 2020).

Our study provides to the increasing amount of evidence showing the efficacy of energy-based pain management techniques like Reiki and Pranic Healing. Similar results were found in a study that showed how integrative techniques including guided imagery, music therapy, and Reiki successfully decreased pain and anxiety in pediatric cancer patients undergoing outpatient operations (Pope et al., 2023). These findings are consistent with our own, indicating that by reducing the discomfort and anxiety related to medical treatments, non-pharmacological therapies might be extremely important in pediatric care.

Additionally, particular research on Pranic Healing has shown that it is successful in lowering pain in a range of patient demographics. For instance, a study indicated that adult patients' back pain was much lessened by Pranic Healing (Gangmei & Upendra, 2020). Similarly a different study found that after several Pranic Healing sessions, fibromyalgia patients' pain and stiffness significantly decreased (Vinushree, 2021). These findings illustrate the promise of Pranic Healing as a therapeutic approach for managing pain in a variety of age groups and medical conditions, not only in children.

In the current study, the experimental group experienced prolonged pain reduction even five minutes after the venipuncture, with the greatest reduction in pain occurring immediately following the procedure. According to Rogers' Science of Unitary Human Beings theory, the calming impact of Pranic Healing on the patients' energy fields is responsible for this long-lasting effect. The therapy's ability to reduce both physical and mental discomfort during the treatment was probably facilitated by its non-invasive character, which excludes physical contact. According to a study that showed the effectiveness of Reiki for chronic pain, non-contact energy therapies can significantly improve pain management and improve patients' general health (Gantt & Orina, 2020).

The findings of this study demonstrated significant improvements in the cardiorespiratory indices of children in the experimental group who received Pranic Healing during venipuncture. These results were evident across three key parameters: respiratory rate (RR), pulse rate (PR), and oxygen saturation (O2Sat), and were measured at three specific time points (immediately after needle insertion, two minutes after needle removal, and five minutes after needle removal). These improvements suggest that Pranic Healing had a calming and stabilizing effect on the participants' physiological responses to the stressful medical procedure.

Our study demonstrated a notable reduction in RR among the children receiving Pranic Healing compared to those in the control group. Specifically, the RR in the experimental group decreased from 21.5 breaths/min five minutes before the procedure to 20.9 breaths/min during the procedure, and further to 19.8 breaths/min five minutes after the procedure. This progressive decrease suggests a calming and stress-relieving effect of Pranic Healing. In contrast, the control group's RR remained relatively high, starting at 22.7 breaths/min five minutes before, increasing to 23.6 breaths/min during the procedure, and decreasing slightly to 21.8 breaths/min five minutes after. This pattern indicates a less pronounced effect on relaxation compared to the experimental group.

Our results are in line with a study that showed that other energy therapies, including as Reiki and Healing Touch, significantly decreased RR and encouraged relaxation in people who were under stress. The effectiveness of energy therapies in enhancing physiological parameters is further supported by a study that revealed Spiritist "passe" (SP) therapy significantly reduced respiratory frequency (RF) and kept cortisol levels from rising in premature neonates (Carneiro et al., 2018). Additionally, a different study found that music and therapeutic touch enhanced sleep-related metrics in children undergoing liver transplants, showing comparable relaxing advantages to our findings of lower RR after Pranic Healing (Yildirim & Yayan, 2023) . However, according to one study the results are different. A study that looked at how Healing Touch affected different perioperative outcomes, including RR, found no discernible changes in RR after the intervention. They proposed that the specifics of the surgical methods and the wider range of factors affecting patient responses could be connected to the lack of efficacy (James et al., 2019).

Our study revealed a significant decrease in PR among children receiving Pranic Healing compared to those in the control group. Specifically, the PR in the experimental group fell

from 98.9 beats/min five minutes before the procedure to 98.3 beats/min during the procedure, and further to 94.6 beats/min five minutes after the procedure. This progressive decline highlights the calming effect of Pranic Healing. Conversely, the control group exhibited higher PR values, starting at 103.3 beats/min five minutes before the procedure, rising to 105.5 beats/min during the procedure, and decreasing slightly to 100.7 beats/min five minutes after. Our results are in accordance with research showing that Reiki enhanced quality of life and decreased stress in young children undergoing palliative care, with discernible changes in breathing rate, relaxation, and other physiological parameters after the intervention (Thrane et al., 2022). Furthermore, our results were consistent with the previous studies, which showed that reassuring interventions like music and touch dramatically reduced PR in critically ill children (Rennick et al., 2018).

Our study's findings also revealed that Oxygen saturation levels improved significantly in the experimental group over time. O2Sat increased from 98.6% five minutes before the procedure to 98.7% during the procedure, and further to 99.0% five minutes after the procedure. This progressive improvement suggests that Pranic Healing enhances respiratory efficiency and physiological stability. In contrast, the control group's O2Sat decreased slightly, starting at 97.04% five minutes before, decreasing to 96.3% during the procedure, and slightly recovering to 97.6% five minutes after. This trend indicates that Pranic Healing had a beneficial impact on maintaining higher O2Sat levels. A study demonstrated that Reiki therapy led to significant improvements in oxygen saturation among patients undergoing open abdominal surgery. The study discovered that Reiki had a statistically significant influence on these parameters and was useful in raising oxygen saturation levels as well as lowering anxiety, fear, and pain. This validates our findings

and emphasizes how energy therapy might improve physiological characteristics (Morbeck et al., 2021) .

### **Integration and Clinical Implications**

The significant improvements observed in cardiorespiratory indices among the experimental group underscore the potential of Pranic Healing as a complementary therapy for managing physiological responses to stress. The reduction in RR and PR, combined with the increase in O2Sat, suggests that Pranic Healing not only mitigates pain but also fosters a more balanced and stable physiological state during medical procedures. These findings have important clinical implications, suggesting that Pranic Healing could be a valuable addition to pediatric care protocols, particularly for procedures that induce stress and discomfort. By incorporating Pranic Healing into clinical practice, healthcare providers can enhance patient comfort, improve physiological stability, and potentially reduce the need for pharmacological interventions.

### **Study Strengths and limitations**

**Study Strengths:** The novelty of this study lies in its application of Pranic Healing, grounded in Rogers' Science of Unitary Human Beings theory, to a pediatric population undergoing venipuncture. While previous research has explored various non-invasive therapies for pain management, our study uniquely combines Pranic Healing with Rogers' theoretical framework to address both pain and cardiorespiratory indices in children. The integration of these concepts provides a novel approach to managing procedural pain and stress, offering a valuable addition to the existing body of literature. Furthermore, the double-blind, randomized clinical trial design enhances the reliability of our findings, providing robust evidence for the effectiveness of Pranic Healing. This study not only

contributes to the understanding of energy-based therapies but also paves the way for future research in integrating complementary modalities into pediatric care.

**Study limitations:** The limitations of this study include its focus on short-term outcomes immediately after the venipuncture procedure, leaving the long-term effects of Pranic Healing on pain and physiological indices unexplored. Future research with an evaluating long-term outcomes, could address these limitations and provide a more comprehensive understanding of the intervention's impact.

## **CHAPTER VI: Conclusion and Recommendations**

### **6.1 Conclusions**

This study investigated the effects of Pranic Healing, based on Rogers' Therapeutic Touch Nursing Theory, on cardiorespiratory indices and pain associated with venipuncture in children aged 6 to 12 years. The findings revealed that Pranic Healing significantly reduced pain and positively impacted cardiorespiratory indices during and after venipuncture. Specifically, children in the experimental group experienced lower pain scores, reduced respiratory and pulse rates, and improved oxygen saturation compared to those in the control group. These results suggest that Pranic Healing can effectively mitigate pain and enhance physiological stability during medical procedures.

The study supports the integration of energy-based therapies, such as Pranic Healing, into clinical practice as a non-pharmacological approach to pain management in pediatric care. By leveraging Rogers' Therapeutic Touch Nursing Theory, which emphasizes the role of nursing in facilitating healing, this research highlights the potential of energy therapies to address both physical and emotional stress in children undergoing invasive procedures.

### **6.2 Recommendations**

Based on the findings of this study, the following recommendations are proposed:

**1. Clinical Practice:** Healthcare providers should consider incorporating Pranic Healing into pain management protocols for pediatric patients undergoing venipuncture and similar procedures. This non-invasive intervention could be a valuable addition to existing pain management strategies, potentially improving patient comfort and overall experience.



**2. Further Research:** Future studies should aim to replicate these findings with a larger sample size and across multiple healthcare settings to enhance the generalizability of the results. Additionally, research should explore the long-term effects of Pranic Healing on pain and physiological indices to assess its sustained impact and potential benefits over extended periods.

**3. Training and Education:** Training programs for healthcare professionals should include education on energy-based therapies and their application in clinical settings. Providing clinicians with the knowledge and skills to implement Pranic Healing can facilitate its integration into patient care practices and enhance therapeutic outcomes.

**4. Patient and Family Engagement:** Educate patients and their families about the potential benefits of Pranic Healing and other complementary therapies. Informed consent and patient education can help ensure that families are aware of and comfortable with incorporating these therapies into their child's care.

**5. Policy Development:** Healthcare institutions should consider developing policies that support the use of complementary therapies, including Pranic Healing, as part of comprehensive pain management and patient care strategies. Establishing guidelines and protocols for the safe and effective implementation of these therapies can improve patient outcomes and standardize practice.

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## Appendices

### Appendix A: Demographic information questionnaire

Greetings and Regards;

Thank you for your time, this questionnaire is designed the effect of Pranic Healing based on Rogers' therapeutic touch nursing theory on the amount of pain during venipuncture of school-aged children.

The information of this questionnaire is completely confidential. So there is no need to write your name. Please answer the questions carefully and let us know your valuable comments. We hope that the results of this questionnaire can be effective in improving the health of children.

You are free to participate or not to participate in this research.

POURAN VARVANIFARAHANI

#### Demographic information questionnaire

1. Questionnaire number (code):		
2. Completion date:		
3. Age..... (Years):		
4. Sex:	<input type="checkbox"/> boy	<input type="checkbox"/> girl
5. Weight	6. Height	
7. Number of children in the family	8. Hospitalization history	
9. Mother's education	10. Mother's age	
11. Mother's occupation	12. Father's age	
13. Father's education	14. Father's occupation	

## Appendix B: Pain Rating Scale



## Appendix C: Pain assessment flow sheet

Pain assessment flow sheet

Venipuncture	Rate of pain	Arterial oxygen saturation	Pulse rate	Respiratory rate	Date	Time
Before						
During						
After						

**Appendix D: Researcher certificates**





**World Pranic Healing Foundation, Inc.**

Manila, Philippines

03/13 072

IRN/SR-C13/072

Awards this

# Certificate of Attendance

to

POORAN VARVANI FARAHANI

after having enthusiastically participated in

**MASTER CHOA KOK SUI  
PRANIC CRYSTAL HEALING COURSE®**

Given this 22<sup>th</sup> day of February, 2013, at Tehran, Iran



*Rajagopal*

Instructor



**GRAND MASTER CHOA KOK SUI**  
President / Founder



## Appendix E: Pranic Healing Procedures Explained via Brochure



**YAKIN DOĞU ÜNİVERSİTESİ**  
UZAKTAN EĞİTİM VE BİLİŞİM TEKNOLOJİLERİ MERKEZİ  
NEAR EAST UNIVERSITY DISTANCE LEARNING AND INFORMATION TECHNOLOGY CENTER

**Pouran Varvani Farahani**  
20222948@std.neu.edu.tr



### Sağlıklı Yaşamın Kilidini Açmak: Pranic Healing Gücü



#### Pranic Healing Nedir?

Pranic Healing, bedenin enerjisini temizlemek, enerji vermek ve dengelemek için prana olarak bilinen yaşam gücü enerjisini kullanan bütünsel bir yaklaşımdır. Bu yöntem Usta Choa Kok Sui tarafından kurulmuştur. Bu uygulama fiziksel, duygusal ve ruhsal dengesizlikleri gidererek genel refahı artırır (Sui choa kok, 2018).

#### Pranic Healing Faydaları

- Pranic Healing fiziksel, duygusal ve ruhsal refahı destekler. İyileşmeyi hızlandırır, ağrıyı hafifletir ve stresi azaltır. Çakra dengeleme gibi uygulamalarla canlılığı ve duygusal dayanıklılığı artırır. Tamamlayıcı bir yaklaşım olarak bireylerin bütünsel sağlıklarına ve ruhsal gelişimlerine aktif olarak katkıda bulunmalarını sağlayarak dengeli ve uyumlu bir yaşamı teşvik eder.

#### Pranic Healing Teknikleri nasıl yapılır?

- Tarama: Enerji dengesizliklerinin belirlenmesi.
- Temizleme: Hastalıklı veya tıkanmış enerjinin uzaklaştırılması.
- Enerji Verici: Şifa için taze prana aşılama.
- Stabilizasyon: Dengeli bir enerji alanının sağlanması.



Sui choa kok. (2018). Advanced Pranic Healing: The most advance energy healing system using color pranas (Institute For Inner Studies (ed.); 21st ed). Publishing foundation India Private Limited.

## Appendix F: Ethical approval letter of Ministry of Health and Human Services



### NEAR EAST UNIVERSITY SCIENTIFIC RESEARCH ETHICS COMMITTEE

#### RESEARCH PROJECT EVALUATION REPORT

Meeting date :21.12.2023  
Meeting Number :2023/119  
Project number :1788

The project entitled "The effect of Pranic healing based on Rogers' therapeutic touch nursing theory on cardiorespiratory indices and pain related to venipuncture of children" (Project no: NEU/2023/119-1788), which will be conducted by Prof. Dr. Candan Öztürk has been reviewed and approved by the Near East University Scientific Research Ethical Committee.

Prof. Dr. Şanda Çalı  
Near East University  
Head of Scientific Research Ethics Committee

Committee Member	Decision	Meeting Attendance
	Approved (✓) / Rejected (X)	Attended (✓) / Not attended(X)
Prof. Dr. Tamer Yılmaz	✓	✓
Prof. Dr. Şahan Saygı	✓	✓
Prof. Dr. İlker Etikan	✓	✓
Doç. Dr. Mehtap Tınazlı	✓	✓
Doç. Dr. Nilüfer Galip Çelik	X	X
Doç. Dr. Dilek Sarpkaya Güder	✓	✓
Doç. Dr. Gulifeiya Abuduxike	✓	✓
Doç. Dr. Burçin Şanlıdağ	✓	✓

<https://etikkurul.neu.edu.tr/>

## Appendix G: ClinicalTrials.gov Protocol Registration and Results System (PRS)

### Receipt

**ClinicalTrials.gov PRS**  
*Protocol Registration and Results System*

ClinicalTrials.gov Protocol Registration and Results System (PRS) Receipt  
Release Date: August 24, 2024

ClinicalTrials.gov ID: NCT06571357

#### Study Identification

Unique Protocol ID: PVF2024CAM001

Brief Title: Effect of Pranic Healing on Cardiorespiratory Indices and Pain During Venipuncture in Children

Official Title: The Effect of Pranic Healing Based on Rogers' Therapeutic Touch Nursing Theory on Cardiorespiratory Indices and Pain Related to Venipuncture in Children

Secondary IDs:

#### Study Status

Record Verification: August 2024

Overall Status: Not yet recruiting

Study Start: October 1, 2024 [Anticipated]

Primary Completion: December 1, 2024 [Anticipated]

Study Completion: December 1, 2024 [Anticipated]

#### Sponsor/Collaborators

Sponsor: Near East University, Turkey

Responsible Party: Principal Investigator

Investigator: Pouran Varvani Farahani [pfarahani]

Official Title: PhD student in Pediatric Nursing, Near East University, Faculty of Nursing

Affiliation: Near East University, Turkey

Collaborators: Near East University, Turkey

#### Oversight

U.S. FDA-regulated Drug: No

U.S. FDA-regulated Device: No

U.S. FDA IND/IDE: No

Human Subjects Review: Board Status: Approved

Approval Number: NUE/2023/119-1788

Board Name: Near East University Scientific Research Ethics Committee

Board Affiliation: Near East University, Prof. Dr. Şanda Çali

Phone: 0392 675 1000

Email: baek@neu.edu.tr



Appendix H: Ministry of Education and high education Research clearance permit letter

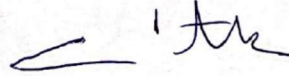
CSHH/11.12.2023/8/2

12.12.2023

**YAKIN DOĞU ÜNİVERSİTESİ HASTANESİ**  
**ÇOCUK SAĞLIĞI VE HASTALIKLARI ANABİLİM DALI BAŞKANLIĞINA**

Danışmanlığını yürüttüğüm Doktora programı öğrencim Poursan Varvani Farahani'nin tez konusu; "The effect of Pranic healing based on Rogers' therapeutic touch nursing theory on cardiorespiratory indices and pain related to venipuncture of children" dir.

Çalışmamızı Yakın Doğu Ü. Hastanesi Çocuk kliniğinde yaran çocuklar ile yürütebilmemiz için gerekli iznin verilmesini, saygılarımla arz ederim.

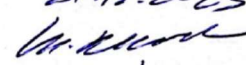


Prof. Dr. Candan Öztürk

YDÜ Hemşirelik Fakültesi

Çocuk Sağlığı ve Hastalıkları AD Başkanı

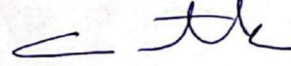


21.12.2023  
  
Yakın Doğu Üniversitesi Hastanesi  
Prof. Dr. Salih Müjdat Balkan  
Başhekim

## YAKIN DOĞU ÜNİVERSİTESİ HASTANESİ BAŞHEKİMLİĞİNE

Danışmanlığını yürüttüğüm Doktora programı öğrencim Poursan Varvani Farahani'nin tez konusu; "The effect of Pranic healing based on Rogers' therapeutic touch nursing theory on cardiorespiratory indices and pain related to venipuncture of children" dır.

Çalışmamızı Yakın Doğu Ü. Hastanesi Çocuk kliniğinde ~~ya~~ çocuklar ile yürütebilmemiz için gerekli iznin verilmesini, saygılarımla arz ederim.



Prof. Dr. Candan Öztürk

YDÜ Hemşirelik Fakültesi

Çocuk Sağlığı ve Hastalıkları AD Başkanı

+90548 865 25 23

Çocuk AD. Başkanlığına,  
Uygunluğu konusunda  
mshk

Çalışma uygun görülmüştür.

18.12.2023

Yakın Doğu Üniversitesi  
Hastanesi,  
Prof. Dr. Eray Yıldırım  
Çocuk Sağlığı ve Hastalıkları  
Çocuk Nefrolojisi Uzm.  
Diploma No: 4108



## CV

1. **Name Surname** : Pouran Varvani Farahani
2. **Date of Birth** : 02.20.1978
3. **Title** : PhD student
4. **State of Education** : RN, PhD©
5. **Current Institution** : Cyprus International University
6. **Email** : pfarahani@ciu.edu.tr, 20222948@std.neu.edu.tr
7. **Phone** : Tel: +90 392 671 1111 EXT.2295



Degree	Department	University	GPA	Date
Bachelor's Degree	School of Nursing	Azad University of Arak	3.46 on the 4.0	2002
Master's Degree	Pediatric Nursing	Tarbiat Modarres University of Tehran	3.47 on the 4.0	2008
PhD	Pediatric Nursing	Near East University		2022

8.

### Academic Appointments

1. Nursing, **Instructor**, Department of Nursing, Faculty of Health Science, Cyprus International University, Nicosia, TRNC-2023- now
2. Nursing **Faculty member** (Instructor) Department of Nursing , Arak university of medical science, Iran : 2009-2022
3. Azad University of Arak (**Instructor**) 2008-2014
4. Vali-Asr Hospital-Arak, **Nurse** (Surgery, Emergency, ICU) 2002-2004
5. **Family health nurse** of oil industry of central province 2008 - 2009
6. **Nurse** of oil industry of central province ( Emergency) 2005 - 2008

### 9. Thesis Advised

1. Postgraduate Thesis: **5**
2. Thesis referee: **10**
3. Research project referee: **15**

4. Journal reviewer: **SCI:** Health Science Reports, Integrative Cancer Therapies, Complementary Therapies in Clinical Practice, Burns, Journal of Diabetes & Metabolic Disorders

## 10. Publications

- [https://scholar.google.com/citations?user=\\_sBc388AAAAJ&hl=en](https://scholar.google.com/citations?user=_sBc388AAAAJ&hl=en)
- <https://www.webofscience.com/wos/author/record/V-4279-2018>

### A. Articles published in internationally refereed journals (SCI, SSCI, Arts and Humanities)

1. **Varvani Farahani P, ÖZTÜRK C.** (2025). The Effect of Pranic Healing Based on Rogers' Therapeutic Touch on Cardiorespiratory Indices and Pain during Venipuncture in Pediatrics: A Randomized Clinical Trial. *Journal of Pediatric Nursing*, 80:120-126. (SCI).
2. **Varvani Farahani P, ÖZTÜRK C.** (2024). The Effect of Super Brain Yoga on Concentration, Memory, and Academic Progress in Nursing Students: A Quasi-Experimental Study. *International Journal of Community Based Nursing and Midwifery*, 12 (4):219-227. (SSCI).
3. **Varvani Farahani P, ÖZTÜRK C.** (2024). Insights into Pediatric Nursing; an In-depth Examination of Problems and Challenges: A Systematic Review. *Journal of Pediatrics Review*, 12(3):213-222. (SCI – Expanded).
4. **Varvani Farahani P, ÖZTÜRK C.** (2024). Complementary and Alternative Medicine in Treating Children's Diseases in Iran: A Systematic Review *Journal of Pediatrics Review*, 12(4):329-342. (SCI – Expanded).
5. **Varvani Farahani P, ÖZTÜRK C.** (2024). Investigating the Effects of COVID-19 on the World Trend of Childhood Vaccination: A Systematic Review. *Journal of Pediatrics Review*, 12(1):27-40. (SCI – Expanded).
6. Aburayyan L., ÖZTÜRK C., **Varvani Farahani P.** (2024). Application Orem's self-care nursing theory for spinal muscular atrophy: A case study. *Journal of Pediatrics Review*, 12(1): 65-72. (SCI – Expanded).
7. Mofid B, **Varvani Farahani P.**, Khonsari AH, Nazmi R, Taherkhaniha H. Azghandi S. (2023). Improving quality of life for the patients with Breast cancer by twin hearts meditation: A randomized clinical trial. *Arch Breast Cancer*, 10(3):262-9. (SSCI).
8. **Varvani Farahani P**, Hekmatpou D., Khonsari, A. H., & Gholami, M. (2019). Effectiveness of super brain yoga for children with hyperactivity disorder. *Perspectives in psychiatric care*, 55(2): 1-7. (SCI, SSCI).
9. **Varvani Farahani P.**, Hekmat Pou D., Alhani F., Ashori M., Azadnia, M. (2018). Investigating the Effect of Family-Centered Empowerment Model

- on the Lifestyle of Children Suffering From Leukemia. *J Holist Nurs Midwifery*, 28(3), 198-204. (SSCI).
10. Hekmatpou D., Pourandish Y., **Varvani Farahani P.**, Parvizrad R. (2017). The Effect of Aromatherapy with the Essential Oil of Orange on Pain and Vital Signs of Patients with Fractured Limbs Admitted to the Emergency Ward: A Randomized Clinical Trial. *Indian journal of palliative care*, 23(4), 431–436. (ESCI, SSCI).
  11. **Varvani Farahani P.**, Hekmat pou D, Rezvanfar M R, Talaei A. (2016). Comparing the Effect of Multimedia Education with Live Successful Experiments on Quality Of Life in Type 2 Diabetic Patients. *İjdd*, 15 (5):320-329. (SSCI).
  12. **Varvani Farahani P.**, M Haroorani. (2015). Complementary medicine for children in the legal perspective. *Avicenna Journal of Phytomedicine*. 5:148-148. (ESCI, SSCI).
  13. **Varvani Farahani P.**, Alhani, F., & Mohammadi, E. (2014). Effect of establishing pain committee on the pain assessment skills of paediatric nurses. *International journal of nursing practice*, 20(5), 499-509. (SCI, SSCI).
  14. Saeedi, M., Shamsikhani, S., **Varvani Farahani P.**, Haghverdi, F. (2014). Sleep Hygiene Training Program for Patients on Hemodialysis. *Iranian Journal of Kidney Diseases*, 8(1). (SCI, SSCI).

#### **B. Articles published in other internationally refereed journals**

1. Azghandi S, **Varvani Farahani P.**, Khonsari AH, Nazmi R, Taherkhaniha H, Mofid B. (2022). Meditation practice can be effective on fatigue in breast cancer patients undergoing chemotherapy. *Journal of Disease and Global Health*. Jan 10:1-8.
2. **Varvani Farahani P.**, Hekmatpour, D., Khonsari, A. H., Harorani, M., & Lotfi, A. (2017). Effect of inhalation aromatherapy with Lavender and Rosa damascena essential oil on the fatigue of emergency nurses. *Der Pharmacia Lettre*, 9(5), 94-102.
3. P. Matory-Por and A.S. Khoshniyat H. Jafarimanesh, S. Zand, M. Ranjbaran, **Varvani Farahani P.**, Sadrkia G.R., M. Seif Hashemi. (2015). Effects of A Mobile Phone Short Message Service on Nurses' Knowledge about Diabetic Ketoacidosis. *Middle-East Journal of Scientific Research*. 9(23).

#### **C. Assertions presented in international scientific congresses and published in the proceedings**

1. **Varvani Farahani P.**, ÖZTÜRK C. (2024). Pranic Healing Based on Rogers' Theory: Pain Reduction in Pediatric Venipuncture. *ICHEAS 8th*

International Conference on Health, Engineering and Applied Sciences.  
November 15 - 17, 2024, Roma, Italy.

2. **Varvani Farahani P, ÖZTÜRK C.** (2024). The Impact of Touch therapy in Pediatric Care: A Systematic Review. The World Children's Conference 2024. June 7-9 2024, Hakkari, Türkiye.
3. **Varvani Farahani P, ÖZTÜRK C.** (2024). How Has the COVID-19 Pandemic Affected the Global Childhood Vaccination Trend? 12. International Gevher Nesibe Health Sciences Conference. February 19-20 2024, Ankara, Türkiye.
4. **Varvani Farahani P, ÖZTÜRK C., CAREW A.** (2024). Investigating the Impact of Super Brain Yoga on Concentration, Memory, and Academic Achievement in Nursing Students. 12. International Gevher Nesibe Health Sciences Conference. February 19-20, 2024, Ankara, Türkiye.
5. **ÖZTÜRK C., Varvani Farahani P.** (2023). Utilization of Complementary and Alternative Therapies in Iranian Children: A Systematic Review. 4th International Mediterranean Pediatric Nursing and the 3rd International 8th National Pediatric Nursing Congress, 'Poster Presentation', June 1-3 2023, Turkey/ Atatürk University.
6. **ÖZTÜRK C., Varvani Farahani P., Azimizadeh M.** (2023). Self-management education for patients with type 1 diabetes using Orem's nursing theory of self-care: a case study. 2nd International Conference on New Horizons in Sciences, 'oral Presentation', June 28 - 30, 2023, Cairo/ Egypt.
7. **Aburayyan L., ÖZTÜRK C., Varvani Farahani P.** (2023). Application Orem's self-care nursing theory for spinal muscular atrophy: A case study. 2nd International Conference on New Horizons in Sciences, 'oral Presentation', June 28 - 30, 2023, Cairo/ Egypt.
8. **ÖZTÜRK C., Varvani Farahani P.** (2023). Challenges and Problems Faced by Pediatric Nurses in Iran: A Systematic Review. World Children Conference-IV, 'oral Presentation', June 15-16, 2023, Nicosia / Turkish Republic of Northern Cyprus.
9. **Varvani Farahani P., Hekmatpou D., Khosravi Sh., Khonsari A.** (2022). Meditation Practice can be effective on Nausea and Vomiting of patients with breast cancer under chemotherapy .15th. International Breast cancer congress. 'Oral Presentation', February 23-25, 2022, Tehran/ Iran.
10. **Varvani Farahani P., Khosravi Sh., Latifi AH, Javaheri j.** (2021). The effect of self-care method temperaments modification on Quality of Life in Type 2 Diabetic Patients. 13th. international endocrine disorder congress, 'oral Presentation', November 10-12, 2021, Tehran/ Iran.
11. **Varvani Farahani P., Azghandi S, Khonsari AH, Nazmi R, Taherkhaniha H, Mofid B.** (2017). The role of twin hearts meditation practice on fatigue in breast cancer patients. First International Congress

of Iranian personalized medicine, 'oral Presentation', February 2017, Tehran/ Iran.

12. **Varvani Farahani P.**, Hekmat Pou D, Rezvanfar M, Talai A (2017). Comparing the effect of multimedia education with live successful experiments on quality of life in type 2 diabetic patients. 11th. international congress of Endocrine Disorders, November 2-4, 2016, 'oral Presentation', Tehran/ Iran.
13. **Varvani Farahani P.**, Khonsari Sh, Sajadi M, pain reduction in new born. 28th International Congress on Pediatrics & 14th Congress on Pediatrics Nursing, 2016, 'oral Presentation', Tehran/ Iran.
14. **varvani Farahani P**, Hekmat Pou D, Khonsari A H, Shamsikhani S, Matouri Pour P, Gholami M. The Effect of super brain yoga on children with autism disorder. 28th International Congress on Pediatrics & 14th Congress on Pediatrics Nursing. 2016, 'oral Presentation', Tehran/ Iran.
15. **Varvani farahani P.**, Hekmatpou D., Khonsari A., Gholami M. Effectiveness super brain yoga on children with hyperactivity disorder. 27th International Congress on Pediatrics & 13th Congress on Pediatrics Nursing. Oct 8- 11, 2015, 'Oral Presentation', Tehran/ Iran.
16. **Varvani Farahani P.**, Hekmatpou D., Shamsikhani S. The effectiveness of Benson techniques on pruritus and vital signs of patients with burns. The second international Tehran burn symposium, 2011, 'Oral Presentation', Tehran/ Iran.
17. **Varvani Farahani P.**, Alhani F. Pain assessment tools in children, who can't self-report their pain. The 22nd International Conference on Children's Diseases and the 8th National Conference on Pediatric Nursing, 2010, 'Oral Presentation', Tehran/ Iran.
18. **Varvani Farahani P.**, Alhani F. Comparative evaluation about appropriate pain assessment tools: nurse's and children's viewpoint. The 21st International Conference on Children's Diseases and the 7th National Conference on Pediatric Nursing, 2009, 'Oral Presentation', Tehran/ Iran.
19. **Varvani Farahani P.**, Alhani F. Investigating the effect of the formation of a pain nursing committee on the skill of recording the physiological symptoms of pain measurement in nurses. The 20th International Conference on Children's Diseases and the 6th National Conference on Pediatric Nursing, 2008, 'Oral Presentation', Tehran/ Iran.
20. **Varvani Farahani P.**, Alhani F. examining the views of nurses in relation to the appropriate tool for pain measurement in school-age children. The 19th International Conference on Children's Diseases and the 5th National Conference on Pediatric Nursing, 2007, 'Oral Presentation', Tehran/ Iran.
21. **Varvani Farahani P.**, Alhani F. The necessity of teaching the importance and how to measure children's pain The 19th International Conference on

Children's Diseases and the 5th National Conference on Pediatric Nursing, 2007, 'Poster Presentation', Tehran/ Iran.

#### **D. National books published, or chapters from a book**

1. **Varvani Farahani P.**, et all. Complementary and alternative medicine. (2024). the first edition, ISBN 13. Under publish.
2. **Varvani Farahani P.**, Matouri pour P, Khonsari Sh, Sajadi M. (2016). Comprehensive book for the assessment and management of pain in pediatric. The second edition, Tehran: Heydari Publications, ISBN 978-600-7815-92-2.
3. Saidi M., Shamsikhani S., Muturipour P., **Varvani Farahani P.** (2015). Complementary medicine, and its role in nursing. The first edition, Tehran: Heydari Publications.

#### **E. Articles published in national refereed journals**

1. Farhadi F, Farmahini Farahani M, **P Varvani Farahani**, Abedi A. (2022). Effect of Benson's Relaxation Technique on the Anxiety of Patients with COVID-19. *cmja*, 12(3): 234-245. (ISC).
2. **Varvani Farahani P**, Khosravi S, Sajadi, SA Latifi S, Javaheri J. (2022). Effect of a Self-care Training Program Based on Temperament Modification on the Quality of Life of Patients with Type 2 Diabetes. *Journal Medicine Complementary*. 2(12): 135-126. (ISC).
3. **Varvani Farahani P**, Hekmatpou D, Jafarimanesh H, Matoripour P, Harorani M, Ranjbaran M. (2022). Comparing the Effect of Tea Tree Oil and Lavender on Bacterial Samples of Nurses' Hands. *Cmja*. 11 (4):292-303. (ISC).
4. **Varvani Farahani, P.**, Hekmatpou, D., Ghafarzadeghan, R., Khansari, A. H., & Pakbaz, H. (2019). Comparing the Effect of Vibration Therapy and that of Muscle Relaxation on Nurses with Low Back Pain. *Complementary Medicine Journal*, 9(1), 3607-3616. (ISC).
5. Harorani M., Pakniat A, Jadidi A., Sadeghi H., **Varvanifarahani P.**, Golitaleb M.( 2017). The Extent of Maintaining the Privacy of Patients Hospitalized in Emergency Departments of Hospitals Affiliated with Arak University of Medical Sciences; a Cross-sectional Study. *Iranian Journal of Emergency Medicine*, 4 (4): 158-163.
6. Harorani M, **Varvanifarahani P**, Yazdanbakhsh SA, Pakniyat AG, Sadeghi H, Norozi M, Golitaleb M. (2017). Evaluation of the vulnerable factors of occupational violence against practitioner medical personnel in the emergency units of training hospitals of Arak city. *Med Ethics J* . 11(39): 55-61.



7. Harorani M., Zand S., **Varvanifarahani P.**, Norozi M., Safarabadi M. Investigation on the effectiveness inhalation aromatherapy with Lavender essential oil on the anxiety of patients with burns. (2016). *Complementary Medicine Journal*, 6 (3):1583-1591. (ISC).
8. **Varvani Farahani P.**, Hekmat Pou D, Khonsari A H, Shamsikhani S, Matouri Pour P, Gholami M. (2016) The Effect of super brain yoga on children with autism disorder. *Cmja*. 6 (3):1549-1559. (ISC).
9. Jafarimanesh H, Zand S, Ranjbaran M, **Varvani Farahani P.**, Sadrkia G R. (2015). Comparing the effectiveness of SMS and lectures on the job training for nurses. *Iranian Journal of Medical Education*, 15:579-588. (ISC).
10. **Varvani Farahani P.**, Hekmat pou D, Amini H. (2013). Determination of the numerical scores of occupational hazards and their predisposing factors among nurses working in educational hospitals in Arak city. *JNE*, 1 (2):53-61. (ISC).
11. **Varvani Farahani, P.**, & Saeedi, M. (2013). Investigation on the effects of pain assessment workshop on knowledge, attitude, and practice of nurses in Valie-Asr Hospital in Arak. *Modern Care Journal*, 10(3). (ISC).
12. **Farahani, P. V.**, Hekmatpou, D., & Khani, S. S. (2013). Effectiveness of Muscle Relaxation on Pain, Pruritus and Vital Signs of Patients with Burns. *Iran J Crit Care Nurs*, 6(2), 87-94. (ISC).
13. **Varvani farahani P.**, alhani F, Mohammadi E. (2009). Assessing the effects of establishing a nursing commission of pain management on empowering nurses within pain assessment process. *Iranian Journal of Nursing Research*, 4(14), 49-58. (ISC).
14. **Varvani Farahani, P.**, & Alhani, F. (2008). Barriers to apply pain assessment tools in children by nurses. *J Nurs Midwifery Shahid Beheshti Univ*, 18(62): 40-6 (ISC).

#### **F. Assertions presented in national scientific congresses and published in the proceedings.**

1. **Varvani farahani P.**, Mofid B. , Khonsari AH, Nazmi R, Taherkhaniha H. Azghandi S. Improving the quality of life of cancer patients with two hearts meditation. National Congress of Traditional Medicine and Pharmacy and Complementary Medicine, 2015, 'Poster Presentation', Tehran/ Iran.
2. **Varvani Farahani, P.**, Hekmat Pou D., Alhani, F., Ashori M., & Azadnia M. Investigating the Effect of Family-Centered Empowerment Model on the Lifestyle of Children Suffering From Leukemia. The 11th national conference family oriented, 2014, 'Poster Presentation', Shiraz/ Iran.

3. **Varvani farahani P.**, Harroani M. Complementary medicine in children: legal perspective. The first congress of complementary and alternative medicine, 2014, 'Poster Presentation', Mashhad/ Iran.
4. Matori por P., **Varvani farahani P.** Investigating the types and amount of use of complementary therapeutic sports in students of Tarbiat Modares University of Tehran. Complementary Medicine Congress, 2013, 'Poster Presentation', Esfahan/ Iran.
5. Matori por P., **Varvani farahani P.** investigating the effect of progressive muscle relaxation on nurses' occupational stress in special departments. Complementary Medicine Congress, 2013, 'Poster Presentation', Esfahan/ Iran.
6. Shamsikhani S., **Varvani farahani P.** Decrease symptoms of ADHD with Aromatherapy. National congress of pediatric nursing, 2014, 'Poster Presentation', Tehran/ Iran.
7. Shamsikhani S., **Varvani farahani P.** every nurse needs to know about the clinical aspects of child abuse. National congress of pediatric nursing, 2014, 'Poster Presentation', Tehran/ Iran.
8. Varvani farahani P., Shamsikhani S. Application of prana therapy in nursing care of patients' pain. Complementary Medicine Congress, 2013, 'Poster Presentation', Esfahan/ Iran.
9. Shamsikhani S., Varvani farahani P. Controlling depression and cognitive errors of students by sending SMS. The 7th Educational Festival of Martyr Motahari, 2012, 'Poster Presentation', Arak/ Iran.
10. Varvani Farahani, P., Hekmat Pou D. Management of burn pain in children who are unable to express their pain. The third national conference on burns, 2012, 'Oral Presentation', Tehran/ Iran.
11. Shamsikhani S., Varvani farahani P. Application of aromatherapy on Alzheimer's. National Congress of Health Research Updates, 2013, 'Oral Presentation', Arak/ Iran.
12. Varvani farahani P., Shamsikhani S. Application of aromatherapy on Alzheimer's. National Congress of Health Research Updates, 2013, 'Oral Presentation', Arak/ Iran.
13. Varvani farahani P., Alhani F. Investigating the effect of forming the first children's pain committee on nurses' pain assessment skills regarding questions from children and parents. The 10th Research Congress of Medical Sciences Students of Iran. 2009, 'Oral Presentation', Tehran/ Iran.
14. Varvani farahani P., Alhani F. Investigating the effect of forming a pain nursing committee on the use of pain measurement tools in children. The second national pain conference, 2008, 'Oral Presentation', Tehran/ Iran.

## 11. Projects

1. **Varvani Farahani P.**, Onyinye Christopher G., Sutcu H. Comparing the effect of multimedia education with peer education model on nursing students' knowledge, attitudes and influences use of complementary and alternative medicine. Cyprus International University, 2024. (Researcher).
2. **Varvani Farahani P.**, Esmailzadeh S., Chisom Uzoeghelu P., Sutcu H. Comparison of Twin Hearts meditation and Mandala coloring on practical exam anxiety in nursing students. Cyprus International University, 2024. (Researcher).
3. Esmailzadeh S., **Varvani Farahani P.** The effect of Mandala coloring on practical exam anxiety in nursing students. Near East University, 2024. (Researcher).
4. ÖZTÜRK C., **Varvani Farahani P.** The effect of super brain yoga on concentration and memory and academic achievement of nursing students. Cyprus. Near East University, 2023. (Researcher).
5. ÖZTÜRK C., **Varvani Farahani P.** The Effect of Meditation on Exam Anxiety of Nursing Students. Cyprus. Near East University, 2023. (Researcher).
6. ÖZTÜRK C., **Varvani Farahani P.**, Eghbali A., Salehi M. The impact of child-centered empowerment on lifestyle of leukemia patients. Cyprus. Near East University, 2023. (Researcher).
7. **Varvani Farahani P.**, Khosravi S, Sajadi, SA Latifi S, Javaheri J. The effect of self-care method temperaments modification on Quality of Life in Type 2 Diabetic Patients., Iran, Arak University of Medical Science, 2016. (Researcher).
8. Hekmatpou, D., Pourandish, Y., **Varvani Farahani P.**, Parvizrad, R. The Effect of Aromatherapy with the Essential Oil of Orange on Pain and Vital Signs of Patients with Fractured Limbs Admitted to the Emergency Ward. Iran, Arak University of Medical Science, 2017. (Researcher).
9. Shamsikani S. **Varvani Farahani P.** Investigating the effect of Fordyce happiness training on blood pressure and self-efficacy of heart attack patients. Iran, Arak University of Medical Science, 2017. (Researcher).
10. Harorani M, **Varvani farahani P.**, Yazdanbakhsh SA, Pakniyat AG, Sadeghi H, Norozi M, Golitaleb M. Evaluation of the vulnerable factors of occupational violence against practitioner medical personnel in the emergency units of training hospitals of Arak city. Iran, Arak University of Medical Science, 2017. (Researcher).
11. Mofid B, **Varvani farahani P.**, Khonsari AH, Nazmi R, Taherkhaniha H. Azghandi S. Investigating the effectiveness of two hearts meditation on the treatment and quality of life of breast cancer patients. Iran, Tehran-

- Shahid Beheshti University of Medical Sciences, Shahada Tajrish Hospital, 2017. (Researcher).
12. Motouripur P., Shamsi Khani S., **Varvani farahani P.** Investigating the quality of life and burden of care in the main caregiver of patients with breast cancer. Iran, Arak University of Medical Science, 2016. (Researcher).
  13. **Varvani Farahani P.**, Hekmat Pou D, Khonsari A H, Shamsikhani S, Matouri Pour P, Gholami M. The Effect of super brain yoga on children with autism disorder. Iran, Arak University of Medical Science, 2016. (Researcher).
  14. Harorani M., Zand S., **Varvani farahani P.**, Norozi M., Safarabadi M. Investigation on the effectiveness inhalation aromatherapy with Lavender essential oil on the anxiety of patients with burns. Iran, Arak University of Medical Science, 2016. (Researcher).
  15. Shamsi Khani S., **Varvani farahani P.** Investigating the effect of the family empowerment model on the quality of life of bipolar patients. Iran, Arak University of Medical Science, 2015. (Researcher).
  16. Motouripur P., Shamsi Khani S., **Varvani farahani P.** Investigating the relationship between the burden of maternal care and the quality of life of parents and children with thalassemia major in Amirkabir Hospital in Arak city in 2013. Iran, Arak University of Medical Science, 2013. (Researcher).
  17. Motouripur P., **Varvani farahani P.**, Hekmatpou D., Khonsari, A., Gholami M. Investigating the effect of aerobic exercise (by yoga method) on children with attention deficit hyperactivity disorder. Iran, Arak University of Medical Science, 2013. (Researcher).
  18. **Varvani Farahani P.** , Hekmatpou D., Jafarimanesh H., Matoripour P., Harorani M., Ranjbaran M. Comparing the Effect of Tea Tree Oil and Lavender on Bacterial Samples of Nurses' Hands. Iran, Arak University of Medical Science, 2013. (Researcher).
  19. Pakbaz H., **Varvani Farahani P.**, Hekmatpou D., Ghafarzadeghan R., Khansari A., Comparing the Effect of Vibration Therapy and that of Muscle Relaxation on Nurses with Low Back Pain. Iran, Arak University of Medical Science, 2011. (Researcher).
  20. Jafarimanesh H, Zand S, Ranjbaran M, **Varvani Farahani P**, Sadrkia G R. . Comparing the effectiveness of SMS and lectures on the job training for nurses. Iran, Arak University of Medical Science, 2011. (Researcher).
  21. Lotfi A. **Varvani Farahani P.**, Hekmatpour D., Khonsari A., Harorani M. Effect of inhalation aromatherapy with Lavender and Rosa damascena essential oil on the fatigue of emergency nurses. Iran, Arak University of Medical Science, 2011. (Researcher).

22. Saeedi, M., Shamsikhani, S., **Varvani Farahani P.**, Haghverdi F. Sleep Hygiene Training Program for Patients on Hemodialysis. Iran, Arak University of Medical Science, 2010. (Researcher).
23. **Varvani Farahani, P.**, Hekmat Pou D., Alhani, F., Ashori M., & Azadnia M. Investigating the Effect of Family-Centered Empowerment Model on the Lifestyle of Children Suffering From Leukemia. Iran, Arak University of Medical Science, 2010. (Researcher).
24. **Varvani Farahani P.**, Hekmat Pou D, Rezvanfar M, Talai A . Comparing the effect of multimedia education with live successful experiments on quality of life in type 2 diabetic patients. Iran, Arak University of Medical Science, 2010. (Researcher).
25. **Varvani Farahani P.**, Saeedi M. Investigation on the effects of pain assessment workshop on knowledge, attitude, and practice of nurses in Valie-Asr Hospital in Arak. Iran, Arak University of Medical Science, 2010. (Researcher).
26. **Varvani Farahani P.**, Hekmatpou D., ShamsiKhani S. Effectiveness of Muscle Relaxation on Pain, Pruritus and Vital Signs of Patients with Burns. Iran, Arak University of Medical Science, 2010. (Researcher).
27. **Varvani Farahani P**, Hekmat pou D, Amini H. Determination of the numerical scores of occupational hazards and their predisposing factors among nurses working in educational hospitals in Arak city. Iran, Arak University of Medical Science, 2010. (Researcher).
28. **Varvani farahani P**, alhani F, Mohammadi E. Assessing the effects of establishing a nursing commission of pain management on empowering nurses within pain assessment process. Iran, Tarbiat Modarres University of Tehran, 2008. (Researcher).
29. **Varvani Farahani P.**, Alhani F. Barriers to apply pain assessment tools in children by nurses. Iran, Tarbiat Modarres University of Tehran, 2008. (Researcher).

## **12. Administrative Services**

1. Advisor teacher of nursing faculty in Cyprus International University ( 2024-now)
2. Advisor teacher of nursing faculty in Arak university of medical science ( 2009-2022)
3. Head of Advisor teachers of nursing faculty (2018-2020)
4. Member of Educational and Development Council ( 2017-2022)
5. Member of Complementary Medicine Research Center (2017-2022)
6. Manager of Educational and Assessment committee in Bureau of educational development in nursing faculty ( 2019-2022)

## **13. Professional Affiliations**

1. Membership in the country's nursing system organization (INO), (2005 to now)

2. Membership in the International Organization of the Nursing System of the Country (**INC**) (2012 to now)
3. Member of the **educational council**, health and treatment of oil industry of central province (2008 to 2009)
4. **Advisor teacher**, Arak University of Medical Sciences (from 2010 to 2022)
5. Head of Advisor teachers of Arak University of Medical Sciences (2015 to 2018)
6. Member of **Educational Council**, Arak University of Medical Sciences (2015 to 2022)
7. Member of **Complementary** Medicine Research Center, Arak University of Medical Sciences (2017 to 2022)
8. Manager of Educational and **Assessment committee** in Bureau of educational development in nursing faculty , Arak University of Medical Sciences (2016 to 2022)

**14. Fellowships and Awards**

1. Rank 1 student in Azad University of Arak (Bachelor's Degree)
2. Rewarded Nurse in Petroleum Industry Health Organization of Markazi Province
3. Rewarded Instructor, Nursing Faculty of Arak University of Medical Science
4. Rank 2 essay in 2nd. Burning Congress in Tehran University of Medical Science

**15. Undergraduate and graduate courses have given in the last 2 years.**

Academic Year	Sem.	Course	Weekly Course Hours		Number of Students
			Theoretical	Practical	
2020-2021	<b>Fall</b> (Bachelor's Degree)	Pediatric Nursing 1	2	-	40
		Pediatric Nursing 2	3	18	45
		Survey of health status	2	4	30
	<b>Spring</b>	Fundamental Nursing	3	5	40
		Pediatric Nursing 1	2	18	40
		Survey of children health status (Master's Degree)	2	2	5
2023-2024	<b>Spring</b> (Bachelor's Degree)	Graduation Project (NURS409)	3	-	14
		Nursing For Children's Health And Diseases-2 (NURS304)	5	-	129
		Nursing For Infectious Diseases (NURS208)	2	2	112
		Nursing For Infectious	2	2	96

		Diseases (NURS208)			
		Pediatric Nursing (NURS303)	-	6	129
	<b>Summer (Bachelor's Degree)</b>	Critical Care Nursing(NURS411)	4	-	24
		Summer Internship-V: Nursing For Children's Health (NURS450)	-	24	31

#### 16. Skills:

A. **Language Skills:** English (IELTS band score: B2) / French: Elementary/  
Farsi: Native

#### B. Other skills:

- ***Proficient in complementary medicine*** (Traditional Iranian Medicine, Pranic healing, Relaxation, Aromatherapy, Meditation, and Breathing techniques)
- **Microsoft Office** (Word, Excel, PowerPoint, ...), Engineering Software (SPSS)

#### 17. Interests:

- Complementary and Alternative Medicine, Pediatric Nursing, Pain Management

#### 18. Professional Certificates:

- 2016: Refah University: Iranian traditional medicine (336 h)
- 2016: World Pranic healing foundation: Pranic healing (112 h)
- 2014: Arak University of Medical Science: Reporting (10 h)
- 2014: Arak University of Medical Science: Communication Skills (8 h)
- 2014: Arak University of Medical Science: pediatric Ailments (4 h)
- 2012: Arak University of Medical Science: burnt (9 h)
- 2012: Arak University of Medical Science: Reflexology (8 h)
- 2012: Arak University of Medical Science: Medical Ethics (10 h)
- 2011: Arak University of Medical Science: Research Methods (32 h)
- 2011: Arak University of Medical Science: Pain Control and Assessment (8 h)

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