EXAMINATION OF NURSES’ THESES ON REFLEXOLOGY PRACTICE IN TURKEY.

Düden Küçükkelepçe¹ and Turkan Karaca².

1. Research assistant, midwifery department, Adıyaman University, Turkey.
2. Assistant professor, nursing department, Adıyaman University, Turkey.

Aim: In this definitive literature research, the aim is to examine the thesis examples which have made with reflexology practice; analyze the results of the thesis; planned to give tangible information for researches and health personnel.

Method: In this definitive research, between 2008-2016, National Council of Higher Education Thesis Center database were screened to assess some of the features on the thesis that reflexology is used in nursing initiative. When making research reflexology was key word.

Results: The first thesis that is made use of reflexology practice in the field of nursing was conducted in 2008. Seven of the theses were from Obstetrics and Gynecology Nursing department, five from Internal Medicine Nursing department, three from Fundamentals of Nursing department and one prepared by the Child Health and Nursing department. Seven of theses half-experimental, and nine of theses randomized controlled experimental. There are two master theses on nursing area which evaluate the reflexology application. According to both thesis results, reflexology found efficient on aches.

Conclusion: In this examination, in the majority of theses, it led to the conclusion that use of reflexology application is effective. Because of the limited researches on this area, different sampling group studies can be done and different application protocols can be developed.

Introduction:
Reflexology, which is one of the complementary and alternative medicine practices, is defined as an individual healing form and a gentle art; it helps to normalize body functions through massage of the reflex points of the eye, ear, hand and feet, which are considered a little mirror of the specific organs and regions of the body. Due to the wide area of use it has and due to the fact that warning points are close to the surface of the skin, foot area is widely preferred for the practice; an effective way to perform reflexology is foot reflexology. Reflexology is a special pressure technique and energy balancing system that is performed by applying pressure to reflex points with rubbing, caressing and squeezing movements in order to ensure healing.

The pressure and massage applied to the reflex points stimulate the peripheral and central nervous system, which breaks the energy blockage by enhancing brain information flow and ultimately helps the free balanced energy flow to be spread to the relevant organs.

Corresponding Author: Turkan Karaca.
Address: Adıyaman University, Nursing Department, Adıyaman, Turkey
Reflexology is preferred in increasing the quality of life and state of well-being in cases such as reducing the side effects of gynecological diseases, neurological diseases, musculoskeletal disorders, autoimmune diseases, digestive system diseases, and cancer pain and treatments.\textsuperscript{[2,3,4]}

The literature indicates that reflexology is mainly used for labor pain, labor pain and labor duration\textsuperscript{4}, premenstrual distress\textsuperscript{[7]}, premenstrual quality of life\textsuperscript{[6]}, dysmenorrhea\textsuperscript{[9,10]}, dysmenorrhea period school performance\textsuperscript{[11]}, menstrual period emotional state\textsuperscript{[12]}, premenopausal vasomotor complaints\textsuperscript{[13]}, multiple sclerosis\textsuperscript{[14]}, rheumatoid arthritis\textsuperscript{[15]}, fibromyalgia\textsuperscript{[16]}, constipation\textsuperscript{[17]}, hypertension\textsuperscript{[18]}, cancer pain\textsuperscript{[19]}, chemotherapy-induced nausea\textsuperscript{[5]} and vomiting as well as for reducing back pain\textsuperscript{[20]}, increasing sleep quality\textsuperscript{[21]}, reducing or eliminating stress-anxiety\textsuperscript{[2,13]}.

Technological advances and scientific knowledge in the field of health have brought changes in the roles and responsibilities of nurses. As a result, there is a need for inclusion and proper use of complementary therapies in nursing interventions. At this point, nurses need to learn about therapies with multidimensional benefits such as reflexology. Reflexology is thought to have a powerful therapeutic effect between the nurse and the patient, because touching creates a safe and unbiased environment and has strong therapeutic aspect through a sincere nurse-patient relationship.

The purpose this descriptive literature study is to examine the thesis examples about reflexology practice, analyze the results of the theses, and give tangible information for researches and health personnel.

**Method:**
In this descriptive study conducted between 2008 and 2016, National Council of Higher Education Thesis Center database was reviewed to assess some of the features of reflexology use in nursing initiative. Reflexology was used as the key word in the searching. Inclusion criteria for the theses to be examined were; existence of reflexology word in the title and thesis and being conducted in nursing and/or department of nursing. The theses which were accessed were evaluated according to the titles, and seven theses were eliminated among 23. A total number of 16 theses were included in the study. After they were separated as master’s and doctoral theses, the theses were examined in chronological order. Numerical evaluations were used in the analysis of the data, and the thesis results were summarized as graduate or doctoral dissertation, dissertation publication year, purpose of thesis, sample group, number of participants, design of thesis, and thesis results.

**Results and Discussion:**
The first thesis that used reflexology practice in the field of nursing was conducted in 2008. Seven of the theses were from Obstetrics and Gynecology Nursing department, five from Internal Medicine Nursing department, three from Fundamentals of Nursing department and one from the Child Health and Nursing department. Seven of these theses were quasi-experimental, and nine of them were randomized controlled experimental.

| Authors/ Year | Aim | Design | Sample | Results |
|---------------|-----|--------|--------|---------|
| Ozdemir and Ovayolu, 2011 | To determine reflexology positive effect on the management of fatigue, cramp and pain | Randomize trial | Intervention: 40 Control:40 | Reflexology is one of the supplementary methods to reduce the symptoms like fatigue, pain and cramp and can be used with pharmacologic methods. |
| Koc and Gozen, 2013 | The study was designed to evaluate the effect of foot reflexology applied to infants on the acute pain that might develop after the vaccine injection. | Quasi-experimental | Intervention: 30 Control:30 | The foot reflexology applied to infants was determined to be effective on relieving them before a painful intervention and making them feel less pain during and after the intervention. |
There are two master theses in nursing field which evaluated the reflexology practice (Table 1). According to the results in both theses, reflexology had effects on pain.

**Table 2:** Evaluation Of Doctoral Theses.

| Authors/Year | Aim                                                                 | Design          | Sample          | Results                                                                 |
|--------------|----------------------------------------------------------------------|-----------------|-----------------|------------------------------------------------------------------------|
| Bolsoy and Sirin, 2008 | To determine the effects of reflexology on relieving premenstrual distress | Randomize trial | Intervention: 31 Control: 31 | There was a statistically meaningful fall in the points of each of the menstrual distress sub-groups and while the highest score change (60.27) was seen in the menstrual period of the sub-control group. |
| Güven and Karatas, 2011 | To determine the effect of foot reflexology applied to individuals with hypertension on blood pressure and quality of life. | Quasi-experimental | 219 patients | Foot reflexology which was applied is effective to reduce blood pressure, LDL cholesterol, total cholesterol and triglyceride levels and to raise HDL level and to improve the quality of life. |
| Akin Korhan and Khorshid, 2011 | To examine the effect of reflexology on vital signs and sedation levels in patients receiving mechanical ventilation support | Randomize trial | Intervention: 30 Control: 30 | Reflexology applied to patients receiving mechanical ventilation support reduced the level of sedation required and positively affected the vital signs. |
| Polat and Erguney, 2013 | To determine effect of reflexology, applied to patients with COPD, on dyspnea and fatigue. | Quasi-experimental | Intervention: 30 Control: 30 | The reflexology was determined to decrease dyspnea and fatigue and increase energy in the experimental group. |
| Özdelikara and Tan, 2013 | To determine the effect of reflexology on nausea, vomiting, and fatigue as result of chemotherapy in breast cancer patients | Quasi-experimental | Intervention: 30 Control: 30 | Reflexology reduces distress and fatigue, nausea, vomiting and retching experience, formation in the experimental group. |
| Cevik and Zaybak, 2013 | To examine the effect of reflexology on constipation in the elderly | Quasi-experimental | 25 patients | Reflexology increase the number of bowel movements and amount of feces; decreased the feces consistency, straining during defecation and feeling of completely evacuating after a bowel movement. |
| Yilar and Pasinlioglu, 2014 | To determine the effect of foot reflexology on the time of labor pain of childbirth. | Quasi-experimental | Intervention: 64 Control: 64 | Foot reflexology has a positive effect to reduce the labor pain and the duration of II. |
| Alp Yilmaz and Baser, 2014 | To determine the effect of reflexology on dysmenorrhea and school performance. | Randomize trial | Intervention: 29 Control: 29 | Reflexology and foot massaging had a significant effect on dysmenorrhea, absence from school, and academic achievement. |
| Gözü Yesil and Baser, 2014 | To determine the effect of foot reflexology applied to women aged between 40 and 60 on vasomotor complaint and quality of life. | Randomize trial | 120 patients | Reflexology was effective to reduce vasomotor symptoms and to increase quality of life in menopausal women. |
| Avcı and Oskay, 2015 | To determine the effect of reflexology for decreasing | Randomize trial | Intervention: 54 Control: 46 | Reflexology are the result to be effective in reducing anxiety and |
Results of the doctoral thesis indicate that most of the theses found reflexology application an effective method. Reflexology in the field of nursing was used for the first time in 2008 and most of the studies were found to be conducted by the Department of Obstetrics and Gynecology Nursing. Review of the literature indicates that the studies using reflexology practice have increased in the last decades and most of them are in the field of birth and gynecological diseases[4,9]. The theses conducted in our country also have similar features. There are two master's theses and 14 doctorate theses in the field of nursing where the effectiveness of reflexology practice was assessed. Most of the studies were randomized-controlled experimental studies(Table 2). The effects of reflexology on blood pressure and quality of life in individuals with hypertension, on alleviating premenstrual distress, on sedation level and vital signs in patients with mechanical ventilation support, on dyspnea and fatigue in patients with copd, on chemotherapy- induced nausea, vomiting and fatigue in patients with breast cancer, on constipation in the elderly, on labor pain and duration, on dysmenorrhea and school performance. Results were examined from various aspects and positive outcomes were obtained[10-18].

The literature indicates that reflexology practice was performed in a similar way for different purposes, and their effects were investigated. It is important to note that the majority of the studies are at doctoral thesis level and that they are experimental, providing the necessary conditions for the investigation of the effect of reflexology practice.

**Conclusion:**

The present study revealed that reflexology was found to be effective in the majority of the theses. Various sampling group studies and application protocols are recommended to be performed as there is limited research on the issue in this field.
References:

1. Tabur H, Basaran EBZ. Refleksoloji’ye Giriş, 1. Baskı. İzmir, Kitapdostu Yayınları 2009:11-140.
2. Doğan HD. Ellerin İyileştirme Sanatı: Refleksoloji. Eur J Basic Med Sci 2014;4(4): 89-94
3. Kurt S, Can G. Refleksoloji ve kullanımları. Sağlık Bilimleri Dergisi 2013;3:54-5.
4. Erkek Yılar Z., Pasinlioğlu T., Doğum Ağrısında Kullanılan Tamamlayıcı Tedavi Yöntemleri Anadolu Hemsirelik ve Sağlık Bilimleri Dergisi, 2016;19:1
5. Öztürk R, Sevil Ü. Refleksolojinin kadın sağlığı üzerine etkisi. Uluslar Arası Hakemli Akademik Spor, Sağlık ve Tip Bilimleri Dergisi 2013;8:87-100.
6. Valiani M, Shiran E, Kianpour M, Hasanpour M. Reviewing the effect of reflexology on the pain and certain features and outcomes of the labor on the primiparous women. Iran J Nurs Midwifery Res. 2010;15(Suppl 1):302-310.
7. Bolsoy N. Perimenstürel Distresin Hafifletilmesinde Refleksolojinin Etkinliğini İncelemesi. Sağlık Bilimleri Enstitüsü, Kadın Sağlığı ve Hastalıkları Hemsireliği Anabilim Dalı. Doktora Tezi, İzmir: Ege Üniversitesi, 2008.
8. İşk R, Ergöl Ş, Aynioğlu Ö, Şahbaz A, Kuzu A, Uzun M. Pre-Menstrual syndrome and life quality in Turkish health science students. Turkish J Med Sci. 2016;46(3):695-701. doi:10.3906/sag-1504-140.
9. Öztürk R, Sevil Ü. Refleksolojinin kadın sağlığı üzerine etkisi. Uluslararası Hakemli Akademik Spor, Sağlık ve Tip Bilimleri Dergisi 2013;8:87-100.
10. Valiani M, Babaie E, Heshmat R, Zare Z. Comparing the effects of reflexology methods and Ibuprofen administration on dysmenorrhea in female students of Isfahan University of Medical Sciences. Iran J Nurs Midwifery Res. 2010;15(Suppl 1):371-378.
11. Alp Yılmaz F., Başer M., Dismenoren Okul Performansına Etkisi Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi GÜSBĐ 2016; 5(3): 29-33
12. Hoyer J, Burmann I, Kieseler ML, et al. Menstrual Cycle Phase Modulates Emotional Conflict Processing in Women with and without Pre-Menstrual Syndrome (PMS) - A Pilot Study. PLoS One. 2013;8(4). doi:10.1371/journal.pone.0059780.
13. Gozuyesil E., Başer M. The effect of foot reflexology applied to women aged between 40 and 60 on vasomotor complaints and quality of life. Complement Ther Clin Pract. 2016 Aug;24:78-85.
14. Nazari F, Shahreza MS, Shayannejad V, Valiani M. Comparing The Effects Of Reflexology And Relaxation On Fatigue In Women With Multiple Sclerosis. Iran J Nurs Midwifery Res. 2015;20(2):200-204.
15. Taha MN, Ali HZ. Effect Of Reflexology On Pain And Quality Of Life În A Patient With Rheumatoid Arthritis. Life Science Journal 2011;8:357-65.
16. Akin Korhan, E., Uyar, M., Eyigör, C., Hakverdioğlu G., Khorshid, L., Effects of Reflexology on Pain in Patients With Fibromyalgia Holistic Nursing Practice: November/December 2016 - Volume 30 - Issue 6 - p 351–359
17. Woodward S., Norton S.C., Gordon J., Reflexology for treatment of constipation The Cochrane Library DOI: 10.1002/14651858.CD008156
18. Güven ŞD, Karataş H. Hipertansiyonlu hastalara uygulanan ayak refleksolojisinin kan basınıcı , kolesterol düzeyleri ve yaşam kalitesine etkisi. Hemşirelikte Araştırma Geliştirme Dergisi 2013; 15(2): 56-67
19. Alan H., Terzioglu, F., 2015, Jinekolojik Kanser Hastalarında Kemoterapi Tedavisi Sürecinde Uygulanan Progresif Kas Gevşemesi Egzersizleri ve Refleksolojinin Ağrı, Yorgunluk, Anksiyete, Depresyon ve Yaşam Kalitesi Üzerine Etkisi; Randomize Kontrol Çalışması Sağlık Bilimleri Enstitüsü, Doktora Tezi, Doğum Kadın Hastalıkları Hemsireliği Anabilim Dalı, Hacettepe Üniversitesi, Ankara,
20. Quinn F, Baxter GD, Hughes CM. Reflexology in the management of low back pain: a pilot randomised controlled trial. Complement Therapy Medicine 2008;3:3-8.
21. Ünal Kevser, S., 2015, Hemodiyaliz hastalarına uygulanan refleksoloji ve sirt masajının yorgunluk ve uyku kalitesi üzerinde etkisi, Sağlık Bilimleri Enstitüsü Doktora Tezi, Hemşirelik Esasları ve Yönetim Anabilim Dalı, Atatürk Üniversitesi, Erzurum.