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Research Article

Using of Cupping Therapy among Palestinian Women in Reproductive Age using a Cross-Sectional Survey

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Abstract

Introduction: Cupping therapy or Hijamah is a traditional practice after spiritual healings and herbal medicine in Islamic Arabic culture. Wet cupping is by far the most common type of cupping therapy. No previous study in Palestine about this topic and nurses are not in isolation of this topic. So, the purpose of the study is to investigate the use of cupping therapy among women in reproductive age.

Methods: A cross-sectional study from September 2018 through December 2018, to evaluate the use of cupping therapy among women in reproductive age in three centers at 48 lands/ Palestine. The sample size was included 100 Palestinian women from 48 lands were selected from three centers taken from their files. Developed questionnaires were used based on previous study and researchers' experience. SPSS version 20 was used for analysis.

Results: Show there is a significant relationship between using cupping therapy and improvement in the Menstrual cycle with a significant P-value (0.0377). The study showed that (34%, n=34) of women answered that they have used therapy to treat back pain; (67%, n=23) of them reported improvement and pain decreased. The study (24%, n=24) of women answered that they have used therapy to treat infertility; (75%, n=18) of them become pregnant after 2-3 sessions of cupping therapy. The study showed that (13%, n=13) of women answered that they have used therapy to treat migraines; (46%, n=6) of them reported relieved headache after Hijama. While, (11%, n=11) of women answered that they have used therapy to treat menopausal signs and symptoms; (18%, n=2) of them reported improvement. About (8%, n=8) of women have used therapy for irregular menses; (62%, n=5) of them reported improvement. Finally, (7%, n=7) of women have used in just because of "Sunnah" or religious issues, and (3%, n=3) have used for dysmenorrhea with good outcomes. Lab tests for these patients were the same before and after Hijama except for the infertility group. For this group the mean of test for 24 participants was: FSH before cupping was 7 IU/L and after 9 IU/L, TSH was 0.6 IU/L and after 1.2 IU/L, LH was 5 IU/L and after 7.5 IU/L, progesterone was 6 IU/L after cupping becomes 7.5 IU/L, with high satisfaction level (77%, n=77) of participants.

Discussion and Conclusion: In general these results support and reinforce our hypothesis that cupping therapy has a positive effect on women in reproductive age in treating menstrual disorders, migraine, infertility, back pain and findings recommended several conditions. The nurses should have knowledge regards to this complementary treatment to provide culturally competent care.

Keywords: Complementary therapy; Nursing; Cupping; Menorrhagia; Infertility; Competent care

Introduction

Hijama or Cupping therapy is an alternative method of treatment and one of the traditional medicines used by several cultures through history, as Unani, Indian, Chinese, Islamic, and Arabic culture. The procedure is done by making superficial incisions at special parts of the body and then removing subcutaneous blood through suction cups [1]. It is one of the most effective and oldest ways of alleviating and relieving pain in several conditions [2]. It is safe, non-invasive, available, and well-tolerated by patients [3]. It has two types: dry cupping and wet cupping. Hijamah is used in Saudi Arabia and other Muslim countries as a model of religious influences [4]. Traditional medicine is defined as "a total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health, prevention, diagnosis, improvement or treatment of physical and mental illnesses". Complementary/alternative/non-conventional medicine is used interchangeably with traditional medicine [5]. Arabs believed it would be used to treat 72 diseases such as Gout, pneumonia, leprosy, toothaches, and boils [6]. Islamic culture, as Prophet Mohamad himself, used cupping, and he said; "It is the best of your treatments" [7].

Several studies have assessed it is efficacy in treating conditions affecting a large number of people such as headache, back pain, arthritis, Menstrual-cycle related problems as Dysmenorrhea, menorrhagia, Irregular cycles, and infertility. Menstrual disorders are common among females [8], and it is the leading cause of physician visits among late adolescent females [9]. This study aimed to investigate the use of cupping therapy among women in reproductive age. This study will help also the nurses and health professionals to understand the scope of this practice among women, which will help later to integrate it into the nursing process and build an appropriate teaching process to improve the health status of women throughout her life.

Methods

This is a cross-sectional survey study, which was carried out

in three cupping centers in Palestine, in a period of 3 months, from September 2018 till December 2018 including all females in reproductive age, who are or have been using cupping as a treatment for their conditions. Exclusion criteria were any woman who is not in her reproductive age, a woman who had not cupped before, or a woman who refused to share her experience. Data collection technique involved the use of the researcher self –designed questionnaire using visiting centers daily to fill questionnaires, using social media and phone calls**.** The questionnaire included demographic and obstetric data, reasons for using this practice, lab test, and satisfaction questions. The 28 item questionnaire was developed through literature review and researchers' experience. Informed consent was obtained from all participants before the study. A pilot study was conducted to identify the barriers that may counter during the data collection process, to estimate the time required for the data collection, to determine the reliability and obtain the clarity and the content adequacy of the questionnaire. The study was approved by the Institutional Review Board (IRB) at An-Najah National University before conducting the study and permission was taken from centers of Hijama to use patients' files to recruit them to participate in the study.SPSS version 20 was used for analysis. Chi-square and independent t-tests were used to compare mean differences. A p-value of <0.05 was considered statistically significant.

Validity and reliability of the study

The Validity of an instrument refers to the degree to which it measures what it is intended and supposed to measure [10]. The instrument used in this study was constructed by the researcher. Content validity is concerned with obtaining the opinion of other experts who can assist in determining whether there is adequate sampling of the content for the construct being measured [10]. The reliability of the questionnaire was measured by using Coefficient alpha (or Cronbach's alpha) the normal range of values between 0.00 and 1.00, where the higher values reflect a higher internal consistency[10]. The Cronbach's Alpha obtained from this study equal to 0.8 for items of the questionnaire; this means the instrument has a high degree of reliability and high internal consistency.

Results

The response rate was not calculating, because researchers used multi-methods to recruit the participants. It was not easy to recruit the participants.By the end of the third month of study, one hundred women were enrolled in the study, recruited from three cupping centers. 53 of women were above 35 years old of age (53%) while, 32 women were between 25 and 35 years old (32%) and 15 were between 18 and 25 years. The mean weight was 66.6 +- 13. While, the mean height was 161+-9. Regarding marital status, 62 of them were married (62%), 31 were singles (31%), thirty – two percent hadreached a primary level of education, and 56% were housewives while 32% were workers. Almost two-thirds of participants were living in cities. Cupping was not significantly correlated with age or marital status (p=0.103, 0.211 respectively). Meanwhile, ithas a significant relationship with the level of education (p=0.01) (Table 1).

Reasons for using cupping, the highest proportion used cupping for back pain (34%), while 24% of participants used cupping for infertility treatment, of whom, 75% became pregnant after 2-3 sessions of cupping therapy. About 13 women used it to treat headaches, of whom, 46% reported relieved headache after the session, and 7 % used it for religious reasons. The results show there is a significant relationship between using cupping therapy and improvement in Menstrual-cycle with a significant P-value (0.0377). 11% of women answered that they have used therapy to treat menopausal signs and symptoms (n=11),of whom, 18% reported improvement (n=2). 8 women have used therapy for irregular menses, 62% of them reported improvement (n=5), and 3% have used for dysmenorrhea with good outcome (n=3).

Table 1: Socio-demographic characteristics.

Variable	Frequency	Percentage %
Age(years)		
18 -25	15	15%
25- 35	32	32%
Above 35	53	53%
Marital Status		
Single	31	31%
Married	62	62%
Divorced	7	7%
Widow	0	0%
Education Level		
Primary	32	32%
Preparatory	24	24%
Secondary	18	18%
University	11	11%
Uneducated	15	15%
Residency		
City	68	68%
Village	32	32%
Refugee Camp	0	0%
Employment		
Housewife	56	56%
Worker	32	32%
Retired	5	5%
Student	7	7%

Around 72% of women reported improvement in their general health after cupping (n=72). There is a significant reductionin pain after cupping therapy (p=0.01). 69% of participants confirmed that pain reduced after the session, and 77% were satisfied and three quarters reported that they would advise other women to try cupping (Table 2).

Only 50% of participants have done laboratory tests before and after cupping sessions. Laboratory tests were compared for these participants, and they were the same before and after Hijama except for the infertility group. For this group the means ofvalue for 24 participants were: FSH before cupping was 7 IU/L and after 9 IU/L, TSH was 0.6 IU/L and after 1.2 IU/L, LH was 5 IU/L and after 7.5 IU/L, progesterone was 6 IU/L after cupping becomes 7.5 IU/L.

Discussion

There were four main findings of this study. Firstly, using cupping therapy showed significant improvements in menstrual cycle-related symptoms (p=0.03). Secondly, a significant reduction of pain and migraine after cupping therapy (p=0.01).

Table 2: Reasons of for using Cupping.

Variable	Frequency	Percentage
Back pain	34	34%
Infertility	24	24%
Headache	13	13%
Menopause	11	11%
Irregular Menses	8	8%
Religious Reasons	7	7%
Pain During Menses	3	3%

Thirdly, a significant satisfaction of patients was demonstrated after cupping therapy. Lastly, Laboratory tests for these patients were the same before and after Hijama except for the infertility group.

A previous study by Arshiya Sultana &Rahman [11] reported a significant decrease in menstrual blood flow in 15 women in their reproductive age and suggested dry cupping therapy as a treatment for menorrhagia.Another study by Sultana, et al. [12] on dysmenorrhea had assessed the efficacy of dry cupping on the intensity of pain during menses. VAS score before and after treatment was calculated.A significant reduction in pain intensity was observed. Another study demonstrated that the effect of dry cupping was statistically significant in reducing dysmenorrhea in 40 eligible women [13].

In a randomized control trial on 150 single female students with Primary dysmenorrhea aimed to investigate the efficacy of dry cupping on PD. The study reported a significant reduction of severity and systemic symptoms of PD [14]. The researchers ofTaherpour et al study reported that the mechanism of pain relief would be the same as acupuncture, as it affects the release of endorphins, encephalin, and serotonin, so blocking pain transmission [15,16]. In our study, 3% have used cupping for dysmenorrhea and reported good outcomes. Also, 18% of women who used cupping for treating menopausal signs and symptoms and 11% of women who used it for irregular menses reported improvement, furthermore, using cupping therapy showed significantimprovements in the menstrual cycle (p=0.03).

A study on the assessment of wet cupping as a treatment of female infertility reported it may be useful in infertile women to achieve a pregnancy as 12 patients (20.3%) became pregnant after cupping therapy [17]. Evidence is presented in a case report for infertile women who got pregnant after multiple sessions of treatment with a combination of acupuncture and cupping [18]. In our study, interestingly that 75% of women who used cupping to treat infertility, became pregnant after 2-3 sessions of therapy.

In a study of using cupping treat headache. It reported the severity of headache decreased by 66% after wet cupping therapy [19]. In the current study, 46% of our participants who used cupping for treating migraines reported improvement. Another study on Back pain by Bilal & Khan [1] reported relief in pain experienced by patients after cupping therapy showing a highly significant decrease in pain (4. 89 ± 0.98 as compared to before Hijama. 10 ± 0.0, on the pain scale. A randomized control trial designed to assess the efficacy of wet cupping in treating persistent non-specific low back pain, researchers reported that cupping was significantly more effective in reducing pain than usual care at 3 months of follow up [20], Previous research has tried to investigate the possible effects and mechanisms of cupping in pain reduction, six hypotheses were suggested trying to explain the effects produced by cupping therapy. Pain reduction and biomechanical changes of the skin could be explained by "Pain-Gate Theory", "Diffuse Noxious Inhibitory Controls" and "Reflex zone theory" [21].

In a knowledge, attitude, and practice study on cupping therapy among Saudi women, it reported a significant correlation with the level of education among participants as 45.5% of them were university educated [22]. Our study showed the highest percentage among women who were primary school educated. In Ghazi's study, he did not find any correlation with age or marital status and this result is consistent with our study. One of the previous studies, reported a significant decrease in Luteinizing Hormone (LH) after cupping therapy [17], while LH stayed in the normal range for the participants except for the infertility group, whom their LH level increased by 2.5IU/L. Previous research proposed "immunomodulation theory" trying to explain the hormonal and immunological effects, as our study reports hormonal change. Cupping is aprocedure involving surface stimulation, specifically by the negative pressure produced by the applied cups, which stimulate the release of neuropeptides from Langerhans cells in the epidermis, which in turn producingsignaling transduction, which a part of it, isbeing transmitted to the spinal cord andthe other part to CNS through the contralateral spinothalamic tract. There by initiating the neuroendocrine immunomodulation process, and thus creating the therapeutic effect [23].

Other effects of cupping are proposed also as blood detoxification theory Releasing of toxins and removal of wastes and heavy metals. These theories may overlap or work interchangeably to produce various therapeutic effects in specific ailments and diseases. No single theory exists to explain the whole effects of cupping as this systemic review stated [21].

To our knowledge, this is the first study in Palestine discussing cupping therapy. In general, these results support and reinforce our hypothesis that cupping therapy has a positive effect on women in reproductive age in treating menstrual disorders, migraine, infertility, back pain and findings recommended several other conditions.

Strength and Limitation of the study

This the first study in its kind that investigates and provide good evidence of using (complementary therapy) or Hijama for women during reproductive age. This study is good evidence of important to integrate the complementary therapy into the nursing process and practice.

The limitation of the study was the limited sample size; it was not easy to recruit the participants. The researchers tried to use multi-method to increase the response rate using social media and visiting Hijama centers daily. The researchers wish to have a baseline lab test for all participates only 50% of participants did the lab tests. A limited number of tests were available before Hijama as CBC, liver function test, renal function test, and hormonal test. The researchers wish to do an immunological test before and after

Hijama, but it was not applicable. This is recommended for future studies.

Another limitation of the study is a cross-sectional survey study, so we can not generalize our results .Hence, we recommend further longitudinal studies on this topic.

Implications and Recommendations and Conclusion

This study provides us with evidence of why and for what the women using cupping therapy. The study showed that (69%) of women answered the pain has been reduced after cupping therapy. The Effect of cupping was positive on pain during menses, on migraine, as well as decreasing the amount of menstrual blood flow in menorrhagia. The Mean value of the hormonal level for 24 participants who used Hijama to treat the infertility group was highly significant after Hijama compared to tests done before. All of this evidence should help us as health care providers and nurses to be open-minded, always be culturally sensitive, and have cultural competence. The achievement of cultural competence is continuous process that requires self-awareness in a provider. Transcultural skills and multicultural backgrounds should be provided to our students during their training to help them to provide patients with comprehensive and competent care.

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