Using acupressure to minimize discomforts during pregnancy

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ABSTRACT
Objective: To describe responses issued by pregnant women, and the improvement of the gravidic discomforts after the use of the acupressure technique.
Method: Qualitative and descriptive study conducted with 15 pregnant women between November 2013 and February 2014 in a Basic Health Unit in Natal, RN, Brazil. The data were collected through unstructured interviews and depositions that were then transcribed and treated according to Minayo's operative proposal, carefully read, compared and organized into two groups.
Results: The categories that resulted were: Positive effects of acupressure, and the recommended use of acupressure. According to pregnant women, the discomforts of pregnancy cramps, fatigue in the legs, lower back pain and headaches decreased with the use of acupressure.
Conclusions: Based on the results, acupressure should be introduced by the nurse in pre-natal care as a therapeutic resource for the pregnant woman's well-being.
Keywords: Midwifery. Pre-natal care. Acupressure. Assistance humanization.

RESUMO
Objetivo: Descrever respostas emitidas por gestantes, quanto à melhora dos desconfortos gravídicos após aplicação da técnica da acupressão.
Método: Estudo qualitativo e descritivo desenvolvido com 15 gestantes entre novembro de 2013 e fevereiro de 2014 em uma Unidade Básica de Saúde de Natal-RN, Brasil. A coleta de dados ocorreu por meio de entrevista não estruturada, e os depoimentos, depois de transcritos e tratados de acordo com a proposta operativa de Minayo, foram lidos criteriosamente, comparados entre si e organizados em dois grupos.
Resultados: As categorias suscitadas foram: Repercussões positivas da acupressão e Recomendações do uso da acupressão. Segundo as gestantes, os desconfortos da gravidez como câimbras, cansaço nos membros inferiores, lombalgia e cefaleia diminuíram com o uso da acupressão.
Conclusões: Baseado nos resultados obtidos, a acupressão deve ser introduzida pela(o) enfermeira(o) em consultas pré-natais como recurso terapêutico em prol da obtenção do bem-estar da gestante.

RESUMEN
Objetivo: Describir las respuestas de las mujeres embarazadas correspondiente a la mejora de las molestias gravídicas después de la aplicación de la acupresión.
Método: Estudio cualitativo, descriptivo desarrollado con 15 mujeres embarazadas entre noviembre de 2013 y febrero 2014 en una Unidad Básica de Salud de Natal-RN, Brasil. Los datos fueron recolectados a través de entrevistas no estructuradas y las declaraciones, después de transcritas y tratadas según propuesta operativa de Minayo, fueron leídas con atención, comparadas y organizadas en dos grupos.
Resultados: Se plantearon las siguientes categorías: Repercusiones positivas de la acupresión y Recomendaciones de uso de la acupresión. Mediante el uso de acupresión en las mujeres embarazadas se obtuvo disminución de calambres, fatiga en las piernas, dolor de espalda y dolor de cabeza.
Conclusiones: Basándose en los resultados, la acupresión debe ser introducida por la enfermera en las reuniones prenatales como recurso terapéutico para obtener bienestar de la mujer embarazada.
INTRODUCTION

During the pregnancy period, women experience many physical and emotional changes. Regarding the physical and physiological aspects, such changes occur in order to maintain the stability of the mother-child dyad, and fetal vitality. In this phase, discomforts that are characteristic of pregnancy arise, permeating the common complaints related to structural and/or functional changes of the maternal organism.

From the perspective of promoting a consistent approach to the needs presented by the woman, prenatal care constitutes an effective remedy in order to maintain the stability of the pregnancy, prevent injuries, and monitor maternal and fetal health. In this process, attention is brought to the discomforts experienced by most pregnant women, like cramps, headache, backache and fatigue[1]. When such symptoms are present, the use of non-interventionist practices, such as light technology, are recommended in order to minimize the sensations reported by women. In accordance with this design, alternative and non-pharmacological therapies are placed in the Unified Health System (SUS) as a way to provide assistance that is focused on behaviors that encourage the pursuit of physiological and emotional balance of the human being.

Thus, the National Policy on Integrative and Complementary Practices in Health (PNPIC), implemented in 2006, appears as a resource to regulate the practices used throughout society’s experiences. It is noteworthy that the therapeutics contained in PNPIC are based on the National Policy of Health Promotion, established in Brazil since 2004, and based on the premises of the World Health Organization (WHO)[2].

In the context of PNPIC, experiences with the use of Integrative and Complementary Practices (PICs) such as aromatherapy and foot baths for women with medical complications of pregnancy, the result was relief of their physical and psychological symptoms[3]. Thus, the use of PICs is seen as a form of support in midwifery assistance that focuses on humanization.

The aforementioned PICs are included in the PNPIC, however, it emphasizes the existence of acupressure as a therapy contained in that policy, whose principles are based on the balance of energy channels called meridians, according to Traditional Chinese Medicine (TCM). In these ways, the Qi flow of energy (chi) is conducted under the influence of equal and opposite forces Yin and Yang. From the imbalance of these energies arise the physical and/or emotional discomforts in the body of individuals[4-5].

This therapy applies precise stimuli in anatomical locations, through pressure with one or two fingers, mild or medium intensity, associated with circular massage to the skin, keeping firm and constant contact on specific meridian points that are, in their majority, bilateral[6]. It is noteworthy that the application of acupressure does not demand technology resources and/or adverse inputs from those in the Basic Health Units (BHU).

In the context of non-pharmacological therapy use, studies on acupressure as a strategy to reduce discomforts of pregnancy have been developed essentially for nausea and vomiting[7-8]. However, there is evidence that acupressure can be performed on individuals affected by more than one clinical symptom[9]. This leads to the need to consider investigating the applicability of the acupressure technique in improving other discomforts inherent to the pregnancy period.

In the case of pregnant women, it is assumed that the discomforts occur due to the very energetic inharmonies of the pregnancy status. Therefore, it is assumed that the use of acupressure in pregnant women contributes to maintaining the balance between forces and, consequently, relieves feelings that are unfavorable to the woman’s well-being during the course of pregnancy. Upon this assumption, the study had the following question: how do women feel with respect to the discomfort of pregnancy after undergoing acupressure? The objective was to describe the responses given by women about the discomforts after undergoing the acupressure technique.

METHOD

A qualitative descriptive study, originated from the Research Group Nursing Care in Different Stages of Life, which used the operative proposal advocated by Minayo as its benchmark. The field of study was a BHU, located in western health district of Natal, Rio Grande do Norte, Brazil. This institution adopts the Family Health Strategy (FHS), and among its actions is the development of guidelines for activities related to the assistance offered to pregnant women groups.

Fifteen pregnant women enrolled in the prenatal program at the BHU above and participated in the investigation. The following were used as inclusion criteria: being over 18 years of age, being a woman with usual risk pregnancy (classified as such according to the Ministry of Health - MH) and that presents discomforts related to pregnancy. The following were set as exclusion criteria: pregnant women who were using a drug to minimize the discomforts presented. Data collection took place between
the months of November 2013 and February 2014, and proceeded as follows: pregnant women were contacted at the beginning of prenatal care and questioned about the presence of any gravidic discomfort. Upon positive response, they were asked about the possibility of participating in the investigation.

Thus, five women were invited to undergo the technique. To this end, five properly trained undergraduate Nursing students participated, each attending the same pregnant woman during the four scheduled meetings. These meetings occurred weekly, at the same time as the pregnant group meetings. Once the four-meeting series was over, another group of five pregnant women was formed, following the process described above. Thus, three groups of pregnant women constituted the study participants.

Women who agreed to participate in the research were asked to withdraw from the technique application group. Participants were accommodated in chairs in a circle in a heated room scented with lavender and where music was played, in order to promote an environment that was conducive to relaxation. In the first meeting, there were questions made about the discomforts present, which were followed by the application of acupressure in specific points related to these complaints.

The most cited discomforts during the consultations referred to cramps, fatigue in the lower limbs, headache and lower back pain, which were present at the time the technique was applied. Considering the answers, the points following the caudal-cranial anatomy were used, namely: Yongquan (R1), which is part of the kidney meridian, and is located in the middle of the sole, the height corresponding to the metatarsophalangeal articulation of fingers 2 and 3; Taichong (F3), part of the liver meridian, located in the instep, specifically in the interosseous space between the 1st and 2nd metatarsals; Chengshan (B57), bladder meridian constituent, is in the middle third of the calf and Ciliao (B32), also a bladder meridian element located on the second sacral foramen.

In subsequent meetings, the women were asked about the result of the technique applied previously and if they had any new discomfort(s). Thus, subsequent meetings occurred. The sessions were developed with five women simultaneously, according to the number of nursing students, with each student becoming responsible for the care of one pregnant woman, and weekly meetings that took place over the period of one month. The fact that the pregnant woman was seen by a single person is justified by the possibility of creating a link between the therapist and the person receiving the care, considered a basic principle in the care process.

The application of the technique followed a treatment protocol established in the study. In it, it was determined that the feet be sanitized with a damp handkerchief, then massaged with a lavender base cream, alternating with the application of the acupressure technique. On average, five deep acupressure cycles were applied, with a three-time repetition on each specific point. After finishing the application of the lower limbs, attention was directed to the lumbosacral region, the upper limbs, trapezius and face. These regions are energy points related to the discomforts usually mentioned by pregnant women. The average service time for each woman was one hour per meeting.

Once the fourth week after the first session had elapsed, unstructured interviews were held with the participants, using the following guiding question: “How do you feel after the application of acupressure for pregnancy discomforts cited by you in your first session?”

The interviews were transcribed and processed in accordance with the operative proposal, which is the study of the mapping in the exploratory phase of research and interpretation, representing the encounter with empirical facts. The interpretative phase is divided into sorting and classification of data, whose operational dynamics include horizontal and exhaustive reading of texts. Followed by cross-reading, final analysis and construction of the report presenting the results.

According to these principles, after the acupressure technique was applied, the women were questioned on the improvement or not of the discomforts. The answers were read carefully, setting a comparison between them, and then organized into two groups according to similarities presented: positive effects of acupressure, and its recommended use.

It is noted that the research followed the ethical principles of Resolution 466/2012 and the signature of the Free and Informed Consent Form (FICF) by the interviewees. The project obtained a favorable opinion No. 461388/2013 and CAAE 01224913.1.0000.5537 from the Research Ethics Committee (CEP) of the Federal University of Rio Grande do Norte (UFRN), on 12/08/2014. The Municipal Health Department of Natal (SMS) and the heads of the BHU also issued approval to use the unit as a research field.

RESULTS AND DISCUSSION

Socio-demographic data of the participants

The socio-demographic data revealed that the ages of the respondents ranged from 18 to 38 years of age, where eight (53.3%) were in the age group of 28-38 years of age.
As for family income, 10 (66.7%) reported having income between 1 and 2 times the minimum wage (BRL 724.00) and 14 (93.3%) declared having completed high school. With regard to the pregnancy period, nine (60.0%) of the women were in the 2nd trimester of pregnancy. With regard to marital status, eight (53.3%) reported living with their partner in a common law marriage. In addition, 11 (73.3%) of the pregnant women were experiencing their first pregnancy.

**Positive impact of acupressure**

The women reported cramps, fatigue in the lower limbs, back pain and headaches. Furthermore, they reported the result of acupressure on those claims. Participants reported the use of acupressure as co-responsible for obtaining feelings of comfort, stress relief and relaxation.

[...] So it was very nice and acupressure helped the backaches, headaches and cramps a lot [...]. (Pregnant woman 02)

[...] Before the massage I felt cramps, back pain and leg pain and when I got the massage I improved and relaxed [...]. (Pregnant woman 03)

Discomforts cited by these pregnant women are consistent with the pregnancy trimester in which they were. The pregnancy period develops within 40 weeks, which comprises 280 days, divided into three trimesters. The 2nd quarter is highlighted as period that is most permeated with structural changes in the woman’s body. For this reason, the main gravidic discomforts are shown in this phase(10).

In order to minimize the complaints arising from the pregnancy process and monitor the pregnancy, prenatal care service has ensured the monitoring of physical, physiological and emotional changes. In this scenario, it is understood to be necessary for the professional to use non-invasive strategies to promote and recover the pregnant woman’s well-being. In this sense, acupressure has been used by nurses on pregnant women, providing physical and emotional well-being during the birth process(11).

The positive effects of the use of acupressure in the active phase of labor intensify the need to enter this technique as a clinical strategy to discomforts that arise in women during the pregnancy period. As the statements described above, cramps and lumbago played down considerably after the application of the therapy used. This is supported with innovative and successful experiences of obstetrical nurses with usual risk pregnant women related to the relief of discomfort mentioned by the use of complementary health techniques according to the individual needs of women(12-18).

It is understood that during the assistance to women in the pregnancy period, burses need to consider their physiological discomforts, using light technology and alternative coping strategies. Therefore, to encourage pregnant women to the use of non-pharmacological techniques during pregnancy, the pregnant woman can experience the benefits from the holistic approach in this period. By using holism, one stimulates the acceptability of the pregnant woman, and this changes the perspective of overcoming the difficulties arising from the discomforts. To the extent that this culture of care is developed in the prenatal care, it is believed it promotes effects on other phases of pregnancy and childbirth, because women have been prepared to smoothly deal with the feelings implied.

In fact, in this study, the non-pharmacological method of acupressure decreased unwanted sensations arising from gravidic discomforts as can be read in the following report:

Look, I felt very well indeed. [...] no one had taken care of me like that, with a massage, worrying about my pain [...]. (Pregnant woman 05)

In addition to the cramps and the headaches having decreased after this massage, I can calm down [...]. (Pregnant woman 11)

These women make positive reference to the technique and refer feel to the well-being resulting from the use of acupressure by graduate nursing students. Thus, manual contact is considered an important feature in the humanization of assistance and the bond established. In this regard, the National Humanization Programme of Care and SUS Management, established in 2003, advocates the need to evaluate all aspects of the individual and his or her family. For this to happen, it is essential to raise awareness among health professionals in order to welcome and accompany women during pregnancy(14). In this context, the way in which the nurse conducts prenatal care, with dialogue about and active listening of the pregnant woman’s particularities, they develop the patient’s confidence in the process of care(15).

The fact that the study participants were welcomed with the use of a technique in which you use hand contact that supplies touch, attention and comfort refer to the concept of humanization recommended by the MH.
Thus, the strengthening of the bond between the mother and the professional applying the acupressure technique allows women to experience the pregnancy period within the standards of a low-risk pregnancy. Given the reduction or disappearance of discomforts, some interviewees said they would recommend the use of the technique to other pregnant women.

**Recommendations of the use of acupressure**

With the results of the use of acupressure to relieve gravidic discomforts came the desire of participants to receive the massage more often. This was motivated by feeling of well-being during and after the application of the technique.

[... ] When I’m here I trust what you do. [...] I’ve never experienced this before [...]. (Pregnant woman 08)

[... ] Too bad no one at the health care unit does massages on other days [...]. It makes me feel good and confident. [...]. (Pregnant woman 10)

These mothers make their satisfaction in having been submitted to acupressure evident, but also recognize that this is not part of the list of activities in the prenatal care process. In this context, to the extent that the individual is received and conducted in a way that is specific to their needs, a relationship of trust is established, and with it, the sense of security, physical and emotional well-being is built. So when care is recognized as beneficial, it results in the desire to have routine access to it[16].

It is possible to observe the recognition of these women regarding the care offered to them through acupressure. Care is found in the core of the human being, it comes before birth. So it is recognized as essential and always present in the reality of individuals[17]. From the perspective of care, as a profession, nursing has knowledge, skills and practices based on theoretical frameworks. These represent the extensive ideas of the care process and guide the systematization of actions employed in its praxis. In this understanding, the nursing care is anchored in theories or theoretical models consistent with the transformations in contemporary health care models.

It is conceived that health care models that underlie the approaches used in prenatal care, from the influence of Flexner to social determination, compete today for the use of systemic thinking. This refers to the thinking process in which the form is associated with the process, the interrelationship and interaction. So, when considering a systemic view of life, it is necessary to have intuitive knowledge arising from the direct, holistic and non-linear experience of reality between people[18].

During the prenatal visit, considering systemic thinking, the nurse is able to acquire information about the discomforts of pregnancy and use the therapeutic care consistent with the needs of women during pregnancy. At this stage, dialogue between the nurse and the mother becomes essential, where the sensitive and affective attitude demonstrated by this professional favors the explanation of the pregnant woman’s complaints.

In the context of this discussion, it is recognized that the practice of care is inherent to the Nursing profession. However, once the theme of complementary therapies is approached, specifically acupressure, its use as a therapeutic resource has not often been explored. It should be noted that the Federal Nursing Council, in Resolution COFEN-197 of 19 March 1997, establishes and recognizes alternative therapies as a specialty and/or qualification of nursing professionals[19].

In addition to the speeches of the women, it was possible to observe the involvement of each participant as to whether they allowed themselves to be cared for by acupressure. For every touch and application of the technique, their facial and body expressions stated their well-being, relief of discomfort and tensions in bundles of muscles, especially in the lower back, shoulders and neck. However,
the practice of touch as a therapeutic resource used in face of the experiences of pregnant women is almost nonexistent. On this subject, studies carried out with this technique confirmed improvement in the severity of pain and anxiety, with increased relaxation and subsequent improvement in the quality of sleep[^20].

According to the result obtained from the relief of discomforts and relaxation of the study participants after application of acupressure, there was unanimity among the pregnant women on the desire to add acupressure to routine services from the prenatal BHU where the research program was held. In addition, the individual experience of the interviewees made some of them indicate massage to other pregnant women:

> [...] I have had other pregnancies and the massage wasn't offered here at the time. After the massage, I improved a lot, so I recommend acupressure to all pregnant women. (Pregnant woman 04)

> [...] I felt very good right from the first day of massage. [...] in other pregnancies I didn't have this experience. It's so good that I recommend it to other pregnant women [...]. (Pregnant woman 06)

These statements portray the sense of well-being and relief of discomforts experienced by participants due to the use of acupressure, awakening the desire for this type of care to be extended to other pregnant women. Thus, one can say that the acupressure technique in the study population was recognized as a means to minimize or abolish the discomforts of pregnancy. The feeling of well-being and relaxation associated with the relief of discomforts is also considered, as well as the care provided during the therapy sessions.

**CONCLUSIONS**

The answers given by pregnant women concerning discomforts presented by them after using the acupressure technique indicate improvement of cramps, fatigue in the legs, lower back pain and headaches. Given the positive results obtained in this study, it is understood that the inclusion of the acupressure technique is necessary as an adjunct strategy in health promotion and disease prevention for pregnant women.

On the understanding that Nursing is based on the process of care and seeks the human being holistically, acupressure is presented as a procedure within the reach of nurses. In the context of prenatal care, this care has historically been driven by this professional, whose tender care is guided on the needs of each woman. Thus, as a non-pharmacological technique, acupressure, to minimize different gravidic discomforts should be introduced by the nurse in prenatal consults as a therapeutic resource for the sake of obtaining the pregnant woman’s well-being.

The limitations of the study are recognized, since it was only developed in one BHU. This recognition leads to suggesting that such research is designed to cover a larger contingent of pregnant women.

**REFERENCES**

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