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Acupuncture to intervene in nursing diagnosis: assessment of nursing experts

Acupuntura para intervenção de diagnósticos de enfermagem: avaliação de experts e especialistas de enfermagem

Acupuntura para intervención de los diagnósticos de enfermería: evaluación de expertos y especialistas en enfermería

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Abstract

Objective: To present the consensus achieved by nursing diagnoses and acupuncture experts on the use of acupuncture as an intervention for nursing diagnoses. **Methods:** Quantitative, qualitative, descriptive, and exploratory study using the Delphi method in its electronic format. The sample was composed of 30 nurse experts from different institutions and health education institutions from various Brazilian regions. **Results:** Consensus was reached in the first round with a high level of agreement in both groups, totaling a percentile greater than 75%. **Conclusion:** Finding consensus enabled verifying that acupuncture can be applied in nursing diagnoses, and can be prescribed by either nurse experts in the technique or by non-experts who recognize acupuncture is a potential intervention to be used.

Keywords: Nursing diagnosis; Acupuncture; Nursing.

Resumo

Objetivo: Apresentar consenso de expertises em diagnósticos de enfermagem e especialistas em acupuntura acerca da aplicação da técnica na intervenção de diagnósticos de enfermagem. **Métodos:** Estudo qualiquantitativo, descritivo-exploratório, desenvolvido com metodologia Delphi eletrônica. A amostra foi constituída de trinta enfermeiros expertises e especialistas da área, de diferentes instituições de saúde e educação em diversas regiões do país. **Resultados:** O consenso foi alcançado na primeira rodada, com alto nível de concordância em ambos os grupos totalizando percentil superior a 79%. **Conclusão:** O consenso formulado permitiu concluir que os diagnósticos de enfermagem podem sofrer intervenções por meio da acupuntura, podendo tanto ser aplicada por enfermeiros especialistas quanto indicada por outros não especialistas, mas que reconheçam na acupuntura uma possibilidade interventiva.

Palavras-chave: Diagnóstico de enfermagem; Acupuntura; Enfermagem.

Resumen

Objetivo: Presentar consenso de expertos en diagnósticos de enfermería y de especialistas en acupuntura, acerca de la aplicación de esta técnica en la intervención de diagnósticos de enfermería. **Métodos:** Estudio cualitativo y cuantitativo, descriptivo-exploratorio, desarrollado con metodología Delphi electrónica. La muestra estuvo constituida de treinta enfermeros expertos y especialistas del área, de diferentes instituciones de salud y educación, en diversas regiones del país. **Resultados:** El consenso fue alcanzado en el primer análisis, con alto nivel de concordancia en los dos grupos, totalizando un porcentaje superior a setenta y nueve por ciento. **Conclusión:** El consenso alcanzado permitió concluir que los diagnósticos de enfermería pueden sufrir intervenciones a través de la acupuntura, las que pueden ser aplicadas tanto por enfermeros especialistas como por otros no especialistas, pero que reconozcan en la acupuntura la posibilidad de intervenir.

Palabras clave: Diagnóstico de enfermería; Acupuntura; Enfermería.

INTRODUCTION

Current healthcare practices, as well as the paradigms of the sciences that support them, are going through a major crisis in history. In contrast to significant scientific and technological development, these practices have limitations and do not effectively respond to the complex health needs of individuals and populations. Hence, other rationales need to be considered in order to complement and integrate these actions, for which current responses and therapeutic propositions no longer present results[1].

Acupuncture (AP) within nursing care has been an object of interest and discussion among experts and specialists in recent decades. This technique originated in Chinese traditional medicine (CTM) and utilizes the insertion of needles into specific areas of the body, called acupuncture points, though other technologies such as low intensity laser can be used (laser-acupuncture)[2,3]. It is widely accepted in the West and East, with scientific recognition, for the adjuvant treatment of various health conditions[4,5].

AP was disseminated in the West because of the World Health Organization (WHO), which encouraged its use as an integrative and complementary system to current health models[5,6]. Various studies and research projects presenting varied levels of evidence have been conducted, aiming to demonstrate its efficacy and legitimate its use by healthcare professionals[5].

In Brazil, within the National Health System (SUS), AP is developed in a multidisciplinary approach, recognized by the National Policy of Integrative and Complementary Health Practices (PNPICS) and approved by decree No. 971/2006, Ministry of Health (MS)[6].

Its employment in nursing as a specialty was legitimated by resolution 326/2008, Federal Council of Nursing (COFEN), and even though it has been ensured since 1997, through resolution COFEN 197/97, it was revoked by resolution COFEN 0500/2015[7,8].

Over the course of the last decade, AP has been consolidated within the SUS. The objective of this consolidation is not to replace the current health model and create a new treatment and care system, but rather its use is intended to complement the dominant model, seeking integrated actions from the body-mind-spirit perspective, supporting it on integral care with a biopsychosocial nature[2].

AP, as well as nursing, is based on the idea of providing integral healthcare, not focusing on the disease, but rather on human responses produced in the relationships of individuals with their environments. These responses are assessed by identifying signs and symptoms so as to establish a syndromic diagnosis using associative patterns, which in the case of AP, are specified in the literature as energy diagnosis, while in the nursing field, they are denoted nursing diagnoses (NDx)[2,3].

Even though AP is not a knowledge or technique inherent to nursing, we assume that acupuncture can be integrated into its set of interventions, intervening in NDx, that is, on the affected human responses, which nurses are responsible for identifying and assisting.

It is believed that regardless of the taxonomical language adopted to define NDx, AP can be useful as an intervention technology applied together with nursing care and prescribed by non-acupuncturist nurses within the scope of their competencies, but only practiced by nurse experts in the field.

Given incipient scientific research addressing this subject and the emerging need to discuss and find definitions for its practice, this study's objective was to establish consensus between experts on nursing diagnoses and specialists in acupuncture regarding the application of this technique to intervene in NDx.

METHODS

This quantitative-qualitative, descriptive, exploratory study was conducted using the Delphi method in its electronic form.

A non-probabilistic sample composed of 30 nurses was selected by consulting their resumés on the Lattes Platform of the National Council for Scientific and Technological Development (CNPq), to confirm whether they had expertise in the study's thematic fields.

Inclusion criteria were: having a PhD or MSc degree in nursing, specialization in acupuncture (a condition for those in the field of acupuncture and optional for those in the field of nursing diagnoses), being affiliated with higher education institutions and/or research institutions, having scientific-academic publications in the field of nursing care systemization/nursing diagnoses/acupuncture and/or having more than two years of professional practice in acupuncture. In order to bring greater cultural diversity in potential consensus, participants were selected from different Brazilian cities and regions.

For this study's purposes, individuals who did not have scientific publications and/or relevant professional experience in the field were not considered experts, which was an exclusion criterion.

After verification of potential candidates' Lattes and selection, all the selected individuals were invited by email and received information regarding the study. There were no refusals and the participants signed free and informed consent forms on the study's electronic platform.

The sample was homogeneously assigned to two groups: Group A, composed of 15 ($n = 15$) experts in nursing diagnoses and Group B, composed of 15 ($n = 15$) specialists in acupuncture.

An information technology company designed an online platform to implement the survey. The participants accessed the platform that presented the propositions to be assessed using their respective logins and passwords. At the end of each round, the group's responses were summarized and sent to all the participants, while ensuring that the identity of every participant remained confidential.

The login identified the participants using the initials of the group to which they belonged (AP - Group B, Acupuncture; NDx - Group A, Nursing diagnoses) followed by their city/state and number of participation, information which was known only by the participant him/herself and the researchers, and which is used here to present the justifications for determining a consensus exists.

Confidentiality, the statistical representation of results, and feedback from the groups' responses were ensured to all study participants. A maximum of three rounds and a minimum participation of 20 experts were established, considering a potential loss of 30% of the sample (loss of segment) that is predicted in studies using this method[9,10].

The percentile that established consensus was 75% or higher (≤ 75%). In order to ensure greater consistency, in addition to descriptive analysis of the percentile achieved, we adopted the interquartile range (difference between the first and third quartiles), as well as categorizing the justifications presented and validated by the experts. Data analysis was conducted using Action Stat.

The study complied with the ethical guidelines established by the National Council of Health/Ministry of Health that regulates research addressing human subjects and was approved by the Institutional Review Board at Anna Nery Nursing School/São Francisco de Assis University Hospital, protocol Nº 087/2011.

RESULTS

The following theoretical claim was proposed: "Can acupuncture intervene in Nursing Diagnoses?"

Even though none of the invited individuals refused to participate in the study, six experts did not access the platform to provide their opinion or take part in the consensus. Sample loss remained within the expected total of 20%. Consensus was achieved with the participation of 24 experts: 10 in Group A and 14 in Group B.

A Likert scale was used to measure levels of agreement - totally agree, partially agree, totally disagree, partially disagree, indifferent - to enable a descriptive analysis regarding the percentile of agreement.

Agreement was obtained within a single round. Nineteen of the experts totally agreed with the proposition. A high level of agreement was found in both groups, 80% (*n* = 8) in Group A and 78,6%(*n* = 11) in Group B. Joint analysis (Groups A+B) achieved a percentile of 79.2% for total agreement, which without interquartile difference gave consistency to the results (Table 1).

Opinions and justifications supported the agreement achieved. Experts who totally agreed with the theoretical proposition asserted that the NDx are the structural basis for nursing interventions, which, among its set of therapies, can resort to AP as a technology to provide care, considering that the diagnosed process proposed for both (nursing and acupuncture) sees the human being as a whole and is based on human responses rather than on the disease.

> *[...] Even though Nursing and Chinese Medicine, in which acupuncture is included as one its practices, have different theoretical-philosophical approaches, and, therefore, differ in their various stages of care actions, from diagnosis to treatment, it is possible to establish links between these two fields of knowledge. Nursing diagnoses approach the human being from an integral point of view, considering the human being a physical, mental, psychological, and spiritual entity in deep connection with the surrounding environment while the diagnosis and treatment proposed by acupuncture, in a very different and peculiar way, does the same [...] (Acupuncture expert - APSP05);*

> *[...] Considering that diagnosis and treatment in Acupuncture view human beings in their totality and consider the relationship of individuals with the environment and the influence it exerts on health, we can say that practically all nursing diagnoses can be the target of an intervention that includes the use of acupuncture [...] (Expert in Nursing Diagnosis - NDxPB06);*

> *[...] They are even listed in the NIC, but one should not look for the same nomenclature used by CTM in NANDA; for instance, an individual who seeks a nurse acupuncturist because of knee pain may have acute or chronic pain and impaired physical mobility, dysfunctional family processes... In reality, when an acupuncture procedure (NIC) is performed, we are treating the individual as a whole and see these diagnoses, only we do not report them [...] (Expert in Nursing Diagnosis - NDxRJ15).*

From the perspective of these experts, NDx can be identified by both acupuncturists nurses, when practicing this specialty, and non-acupuncturist nurses who identify the potential of AP to intervene in NDx. Nonetheless, even though we acknowledge the possibility of such an intervention, we cannot affirm that all NDx can benefit from it, or even establish a single class or domain, considering that the studies in this field are still incipient.

The participants suggest the following NDx are susceptible to acupuncture: acute and chronic pain; impaired physical mobility; altered nutrition; nausea, diarrhea, constipation; anxiety, insomnia, fatigue; altered urinary elimination; impaired skin

Table 1. Joint consensus analysis

Theoretical proposition validated by consensus	Number of rounds necessary to achieve validation by consensus	%	Mean	Md	Q1	Q3	Dif
Acupuncture can intervene In nursing diagnoses	1	79.2	4.8	5	5	5	0

%: Percentile of consensus; Md: Median; Q1: 1st quartile; Q3: 3rd quartile; Dif: Interquartile difference.

integrity; activity intolerance; spiritual distress; disturbed energy field sexual dysfunction; and ineffective breastfeeding. Even though a taxonomical language was not previously indicated, these NDx refer to Taxonomy II, North American *Nursing* Diagnosis Association International (NANDA-I), some of which already indicated by the literature as susceptible to intervention, especially those related to the field of health promotion[2].

[...] Acupuncture can be an intervention chosen as treatment for diagnoses of pain. First, I'm not sure whether acupuncture is an intervention for all nursing diagnoses. And I don't believe, either, that acupuncture is an intervention for only a specific group of diagnoses, whether biological, psychological, or social diagnoses [...] (Expert in Nursing Diagnosis - NDxRJ02);

[...]NANDA's Nursing Diagnoses such as: - Anxiety; - Constipation; - Sleep pattern disturbance; - Diarrhea; - Sexual dysfunction; - Pain; - Altered urinary elimination; - Fatigue; - Impaired skin integrity; - Impaired physical mobility; - Nausea; - Altered nutrition: Intake in excess of metabolic requirements; - Ineffective Protection[...] (Expert in AP - APMG03).

A superficial analysis of NDx, considering their definitions, defining characteristics, and related factors, showed that there exists an equivalent energy diagnosis or disharmony pattern according to Taxonomy II NANDA-I, as well as specific acupuncture points able to promote a therapeutic response to the diagnoses analyzed.

Total disagreement concerning the theoretical proposition was not verified and those who did not totally agree, 20.8% (*n* = 5), partially agreed with the proposition. They justified the view that an intervention based on AP depends on the analysis and assessment the nurse employs together with the patient, considering that before using this technology, one has to establish energy diagnoses that are inherent to CTM and only then intervene in NDx, which in some cases, will be complementary and, in other cases, almost indifferent in regard to the therapy.

[...] Diagnoses, according to CTM, can support a nursing diagnosis, but not the nursing diagnosis itself [...] (Expert in AP - APGO06);

[...] Acupuncture as a nursing intervention should take place within the Nursing Process after identifying the Nursing diagnosis that justifies the intervention [...] (Expert in Nursing Diagnoses - NDxMS11);

[...] It is possible to establish relationships between diagnoses but the theoretical basis that permeates the CTM diagnoses/acupuncture has no relationship with the construction of knowledge that takes place in nursing diagnoses [...] (Expert in AP - APBA11).

FINAL CONSIDERATIONS

The results presented in light of the consensual analysis of experts who took part in this study, confirm the proposition that acupuncture can intervene in NDx, specially those related to the domains concerning health promotion, nutrition, elimination/exchange, activity and rest, coping and stress tolerance.

In this sense, we infer that although nursing and CTM/AP each present a unique way of conducing diagnoses according to the theoretical-philosophical conceptions that guide each, both express a set of signs and symptoms, comprised of inharmonious patterns, which is the focus of the treatment to be employed. Hence, even though they have distinct diagnostic languages, the focus of the professional's attention is not on the disease, but rather on human responses to health problems or vital problems that produce disharmony and that can result in disease.

Considering the development of nursing science and its contribution to the health field, including the incorporation of technologies in nursing care, it is relevant to conduct new studies be conducted to analyze the potential of employing AP as a non-pharmacological intervention technology able to safely and efficiently intervene in NDx.

REFERENCES

1. Ayres JRCM. O cuidado, os modos de ser (do) humano e as práticas de saúde. Saude Soc. 2004 set/dez;13(3):16-29.
2. Salles LF, Ferreira MZJ, Silva MJP. Enfermagem e as práticas complementares em saúde. São Paulo: Yendis, 2011.
3. Pereira RDM, Alvim NAT. Aspectos Teórico-filosóficos da Medicina Tradicional Chinesa: acupuntura, suas formas diagnósticas e relações com o cuidado de enfermagem. Rev enferm UFPE on line. 2013 jan;7(1):279-88.
4. World Health Organization - WHO. Global status report on noncommunicable diseases 2010. Geneva: World Health Organization, 2011.

5. World Health Organization - WHO. Estratégia de la OMS sobre medicina tradicional 2014-2023. Geneva: World Health Organization, 2013.

6. Ministério da Saúde (BR), Secretaria de Atenção à saúde. PNPIC: Política Nacional de Práticas Integrativas e Complementares. Brasília (DF): Ministério da Saúde, 2006.

7. Kurebayashi LFS, Oguisso T, Freitas GF. Acupuntura na Enfermagem Brasileira: uma história em construção Rev paul enferm. 2007;26(2): 127-33.

8. Conselho Federal de Enfermagem - COFEN. Resolução COFEN-326/2008. Regulamenta no Sistema Cofen/Conselhos Regionais a atividade de acupuntura e dispõe sobre o registro da especialidade [Internet]. 2008;[citado 2016 jan 30]. Disponível: http://site.portalcofen.gov.br/node/5414

9. Pereira RDM, Alvim NAT. Técnica Delphi no diálogo com enfermeiros sobre a acupuntura como proposta de intervenção de enfermagem. Esc Anna Nery. 2015 jan/mar;19(1):174-80.

10. Goluchowicz K, Blind K. Identification of future fields of standardisation: An explorative application of the Delphi methodology. Technological Forecasting & Social Change. 2011; 78(9):1526-41.