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Repercussions of yamamoto new scalp acupuncture on pain and quality of life of healthcare professionals

Repercusiones de nueva craneopuntura de yamamoto sobre dolor y calidad de vida de profesionales de la salud

Repercussões da nova craniopuntura de yamamoto na dor e qualidade de vida de profissionais de saúde

ABSTRACT

Objective: To describe the repercussions of Yamamoto New Scalp Acupuncture (YNSA) on pain and quality of life of health professionals. **Methods:** Study before and after, with health professionals of a Family Health Strategy, who had chronic pain. WHOQOL-BREF instrument was used to evaluate quality of life before initiation and after the treatment with the YNSA, performed over a 4-week period. **Results:** Statistical improvements were obtained in the psychological, environmental, pain domains, questions 1 and 2, and the final quality of life results, especially the physical domain ($p = 0.009$). **Conclusion:** After the treatment of YNSA it was possible to observe a significant decrease in pain. Due to the improvement of pain, it was also possible to observe and verify the improvements in the domains that make up the quality of life.

DESCRIPTORS: Quality of Life; Pain; Health Professionals; Acupuncture.

RESUMEN

Objetivo: Describir las repercusiones de la Nueva Craneopuntura de Yamamoto (YNSA) sobre el dolor y la calidad de vida de los profesionales de la salud. **Métodos:** Estudio antes y después, con los profesionales de la salud de una Estrategia de salud familiar, que tenían dolor crónico. El instrumento WHOQOL-BREF fue utilizado para evaluar la calidad de vida antes y después del tratamiento con Nueva Craneopuntura de Yamamoto, que se realizó durante un período de 4 semanas. **Resultados:** Hubo una mejora estadística en los dominios psicológicos, ambientales, de dolor, preguntas 1 y 2 y el resultado final de la calidad de vida, especialmente el dominio físico ($p = 0.009$). **Conclusión:** Después del tratamiento de la YNSA fue posible observar una reducción significativa del dolor. Debido a la mejora del dolor, también fue posible observar y demostrar la mejora de los dominios que componen la calidad de vida.

DESCRIPTORES: Docentes de Enfermería, Educación en Enfermería, Graduación en Auxiliar de Enfermería, Enfermería, Docentes.

RESUMO

Objetivo: Descrever as repercussões da Nova Craniopuntura de Yamamoto (YNSA) na dor e qualidade de vida de profissionais de saúde. **Métodos:** Estudo do tipo antes e depois, com profissionais de saúde de uma Estratégia de Saúde da Família, que possuíam dores crônicas. Utilizou-se o instrumento WHOQOL-BREF para avaliar a qualidade de vida antes do início e após o término do tratamento com a YNSA, realizado em um período de 4 semanas. **Resultados:** Obteve-se melhora estatística dos domínios psicológico, ambientais, de dor, das questões 1 e 2 e do resultado final da qualidade de vida, com destaque para o domínio físico ($p=0.009$). **Conclusão:** Após o tratamento de YNSA foi possível observar diminuição significativa da dor. Em virtude da melhora da dor também foi possível observar e comprovar a melhora dos domínios que compõem a qualidade de vida.

DESCRIPTORIOS: Qualidade de Vida; Dor; Profissionais de Saúde; Acupuntura.

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INTRODUCTION

Quality of life (QoL) is a topic that is currently discussed and evaluated in several population groups, but there are still factors that need to be studied, so that we can think about new health strategies, targeted interventions, changes in lifestyle and, consequently, its improvement⁽¹⁾. Quality of life is understood as the individual's perception of his position in life, in the context of the culture and value system in which he lives and in relation to his goals, expectations, standards and concerns⁽²⁾. It covers several factors, such as those mentioned above, in addition to the perception of the health situation.

However, it is known that one third of the day is devoted to work, the environment and the activities developed become risk or protective factors for the development of health problems. Work can be perceived as a source of happiness, recognition, accomplishment and pleasure, evidenced by personal and economic progress and also as a cause of physical and / or psychological wear and tear⁽³⁾.

Chronic non-communicable diseases are the main health problem in Brazil, which mainly affects the poor population and the most vulnerable groups. Chronic diseases have several causes, which vary with time, heredity, lifestyle, exposure to

environmental and physiological factors, start and evolve slowly. They have a duration of more than three months and, in some cases, tend to present themselves permanently and permanently⁽¹⁾.

The professional affected by any type of pain may find it difficult to perform his role efficiently and effectively, with the consequent reflection in his personal life, which significantly reduces the quality of life. In this sense, it is essential to coordinate actions to promote the health of workers as a mechanism to improve health care in general⁽³⁾.

Studies state that when physical deficit occurs, functional disability can impair the independence and autonomy of these people, conditions that compromise beyond health, QoL⁽⁴⁾.

There are several factors that interfere in the quality of life of workers, more specifically in health professionals, among them: the weekly workload, age, sex, the dedication regime (full-time, part-time and hourly dedication), degree, quality of the services offered, satisfaction with the team, relationship in the service, working conditions, work shift, among others, which affect the psychological domains, social relationships, spiritual aspects / religiosity / personal beliefs, environment and physical^(4,5).

In view of this, it is believed that the development of strategies that promo-

te the well-being of health professionals is important so that they can offer excellence in patient care. Due to this problem, interventions aimed at professionals, more specifically the nursing team, are sought to reduce the risk of problems due to occupational health⁽⁶⁾.

It becomes opportune, after the previous discussion, to delimit the objective: to describe the repercussions of Yamamoto's New Craniopuncture on the pain and quality of life of health professionals.

METHODOLOGY

It is a study of the type before and after, which implies the performance of an intervention, however, unlike experimental studies, it does not require the randomization of research subjects, with no control group⁽⁷⁾.

The subjects were 07 professionals who worked in a Family Health Strategy (FHS), from a municipality located in the Coastal Lowland Region, in the State of Rio de Janeiro, from a universe of 17 who worked in the referred unit, among different professional categories (health agents, nurses, nursing technicians, doctor, secretary, general services, intern - archive), those who met the inclusion criteria and accepted to participate in the study, after signing the

Free and Informed Consent Term (IC). This fact corroborates the precepts of Resolution No. 466/2012 of Guidelines and Regulatory Norms for Research Involving Human Beings of the National Health Council - CNS⁽⁸⁾.

It is worth mentioning that this research was registered at Plataforma Brasil, where it appears to be duly assessed and approved on June 21, 2016 by the Research Ethics Committee of Universidade Federal Fluminense through CAAE n°: 56278016.0.0000.5243. The intervention started on June 22, 2016, shortly after approval by the Ethics and Research Committee, and ended on July 22, 2016.

Inclusion criteria were established: being an ESF professional and having some pain complaint.

For a better assessment of the Quality of Life and applicability of the WHO-QOL-BREF instrument, the data collection process occurred before starting and after the end of a Yamamoto's New Craniopuncture (YNSA) treatment performed over a period of 4 weeks being

applied 2 craniopuncture sessions per week, these on different days, totaling 8 sessions. This strategy is in line with that demonstrated in a study entitled "Evaluation of chronic myofascial pain control in the head and neck using the Yamamoto Nova Cranium Acupuncture technique in follow-up for 8 weeks", where good results were obtained⁽⁹⁾.

After obtaining the data, they were compiled and analyzed with the aid of the Bioestat 5.3 program, with a free license available online. The results were presented descriptively, using measures of central tendency, simple frequency, and the hypothesis test, where the Wilcoxon test (nonparametric) was performed because of the sample ($n = 7$).

RESULTS

Of the 17 professionals allocated in the study scenario, 09 were unable to participate in the study, either because they did not meet the inclusion criteria, or due to unavailability. However, it is worth noting that 01 of the 08 par-

ticipants was disconnected from the research, when he was in the 4th YNSA session, for having received work leave due to a health problem, however, the data presented from that moment on were 07 individuals.

Of the subjects who agreed to participate in the research, only 01 subject belongs to the male gender, which represents 14%, while the female gender is represented by 86%, corresponding to 06 individuals. However, it can be said that approximately 58.9% of the team reported feeling some type of pain.

The YNSA sessions took place for 4 weeks, in the FHS after the end of the day, 2 sessions per week were applied, for 4 weeks, totaling 8 sessions, as described in the method.

To contemplate the objective of the present study, the results of the intervention, between the variables of QoL and pain, will be presented in Chart 1, as can be seen below.

Chart 1 expresses a significant statistical difference in almost all the variables analyzed, except for only one that covers the social domain covered in the WHOQOL-BREF.

To better detail the assessment of the quality of life classification, the domains and their QoL classifications will be presented in detail, before and after treatment, according to Chart 2.

The WHOQOL-BREF was applied at 2 different times, and after the 8 craniopuncture sessions, there was an increase in the means of each domain, even though the overall classification has not been changed. The only significant increase, to the point of modifying the general classification, was the physical domain which from 2.8 (needs to improve) went to 4.3 (good).

Chart 3 shows the results and the classifications obtained after the evaluation of the answers marked in questions 1 and 2 of the quality of life questionnaire, namely: "How would you rate your quality of life?", "How satisfied are you with your health?". This is due to the failure to account for these two items for the final

Chart 1. Wilcoxon hypothesis test. Rio de Janeiro, RJ, Brazil, 2016

WILCOXON	P
Dor antes	0.009*
Dor depois	
QV antes	0.009*
QV depois	
Pergunta 1 antes	0.02*
Pergunta 1 depois	
Pergunta 2 antes	0.009*
Pergunta 2 depois	
Físico antes	0.009*
Físico depois	
Psicológico antes	0.009*
Psicológico depois	
Social antes	0,17
Social depois	
Ambiente antes	0.02*
Ambiente depois	

Note: * The p value, to be considerable, must be ≤ 0.05 .

mean and the consequent stratification of the QoL classification⁽²⁾.

According to the data evaluation, it can be said that there was a significant increase in the means of both questions, mainly in question 2, where the mean practically doubled (from 2.40 to 4.5). Another possible data to observe in the table is the mode of each question, in the last question there was a surprising increase, from 2, which means dissatisfied, to 5, the maximum score of the WHO-QOL-BREF, which means very satisfied.

As previously seen, it was not possible to observe a significant improvement in the general classification of the domains, discussed in Chart 3, but an increase in the averages of all domains was observed.

DISCUSSION

The significant percentage of professionals who feel pain is in line with

other research, as it states that the work implies the exposure of factors that can lead to illness or suffering, a fact resulting from the nature of the profession and its organization. The QoL of workers is directly linked to factors such as: weekly hours of work, dedication regime, quality of services offered, satisfaction with the team and working conditions^(4,5).

When focusing on the professional who performs activities in the field of health, some factors are added, by the work object itself, such as pain, suffering and the way their professional practice is organized can be harmful to the worker. Therefore, the importance of developing corrective and preventive measures to improve work capacity, with repercussions on quality of life^(10,11).

Gender-related data are like other studies, where the female gender was the most prevalent in health institutions. It is worth mentioning that most

women also perform domestic work, thus denoting a possible double shift, which results in an overload of work, evidenced by physical and mental exhaustion^(10,12-14).

When we turn the discussion over to the pains reported by the professionals, it is possible to state that other studies show similar results. The prevalence of musculoskeletal symptoms evidenced, by its study in nursing workers, was 91.81%, such musculoskeletal symptoms are responsible for work leaves⁽¹⁵⁾.

Among the ones that most affect the nursing team are the body regions: neck, shoulder, lumbar, dorsal, ankles / feet, hips / thighs. Headache is also expressed in another study, where it is possible to observe the relationship of stress, decreased quality of life and reduced work capacity, due to headache⁽⁶⁾.

Therefore, it is possible to say that after the treatment of craniopuncture, the decrease in pain was considerably positive, which certainly influenced the improvement of the variables mentioned above, considering that several studies correlate the pain of health professionals with the decrease in quality of life⁽¹¹⁻¹⁶⁾.

Therefore, we can say that with the reduction of pain it is possible to directly improve the physical domain, at the same time, the results presented also suggest that the reduction of pain favors an improvement in the perception of quality of life in the psychological and environmental domains.

Another relevant research observed that the greater the number of chronic conditions, the lower the values of the domains of the quality of life scale, where the most affected domains were the physical and emotional aspects⁽¹⁾. Regarding emotional and mental aspects, a study brought us different considerations, when compared to the authors discussed so far and the data found in our research, as it states that the scores of the domains related to mental health and emotional aspects found in their study, demonstrate that health profes-

Chart 2. Classification of WHOQOL-BREF domains, before and after treatment. Rio de Janeiro, RJ, Brazil, 2016

	DOMÍNIOS	MÉDIA	DESVIO PADRÃO	CLASSIFICAÇÃO
Antes	Físico	2,8	0,7	Necessita melhorar
	Psicológico	3,4	0,4	Regular
	Relações Sociais	3,1	0,7	Regular
	Meio ambiente	2,5	0,5	Necessita melhorar
	Total	3	0,4	Regular
Depois	Físico	4,3	0,4	Boa
	Psicológico	3,9	0,5	Regular
	Relações Sociais	3,3	0,5	Regular
	Meio ambiente	2,8	0,3	Necessita melhorar
	Total	3,6	0,9	Regular

Chart 3. Analysis of Questions 1 and 2 of the WHOQOL-BREF, before and after treatment. Rio de Janeiro, RJ, Brazil, 2016

	QUESTÕES	MÉDIA	MODA	DESVIO PADRÃO	CLASSIFICAÇÃO
Antes	Questão 1	2,80	3,00	1	Necessita melhorar
	Questão 2	2,40	2,00	0,9	Necessita melhorar
Depois	Questão 1	3,8	4	0,3	Regular
	Questão 2	4,5	5	0,7	Boa

sionals had enough QoL indicators to work in the care routine⁽¹⁴⁾.

Therefore, there are negative aspects regarding stress at work and social support, it was found that 85% of professionals consider the social support received to be very unsatisfactory, with difficulties in interpersonal relationships⁽¹⁷⁾. These data are like those found in the FHS.

CONCLUSION

Finally, it can be said that after the tre-

atment of craniopuncture, considered a low-cost technique, it was possible to observe a significant decrease in pain, statistically proven. Due to the improvement in pain, it was also possible to observe and prove the improvement of several facets that make up the quality of life.

It can be said that some difficulties / limitations were encountered, such as the reduced number of professionals participating in the research, the difficulty of having a reserved environment to apply the questionnaires and carry out the treatment, in addition to not

having studies on quality assessment in Family Health Strategy professionals.

After conducting this study, the need for interventions for primary care health professionals is evident. These interventions are aimed at knowing, preventing, and intervening in the most affected areas, as well as reducing complaints of pain, whether caused by work activity or not. With the purpose of improving the professional's QoL inside and outside the work environment, consequently increasing the users' satisfaction with the services provided. ■

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