

SYSTEMATIC REVIEW ON THE SEARCH AND EFFECTIVENESS OF INTEGRATIVE AND COMPLEMENTARY MEDICINE PRACTICES IN DIFFERENT AREAS OF CONVENTIONAL MEDICINE

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Abstract: The bibliographic research carried out on Integrative Medicine aimed to understand which are the integrative and complementary practices (PICs) most used today, to identify the areas of medical specialty that most make use of this therapeutic modality and to understand the efficiency of the application of such techniques. in patients who are undergoing medical treatment using the conventional way. The systematic survey indicated that acupuncture, meditation and the practice of yoga are the most used complementary therapies today, and the patients who most seek integrative medicine are undergoing oncological, rheumatological and psychiatric treatment. The data collected indicate that these and other practices, such as the use of herbal and homeopathic medicines, are mostly efficient for the treatment of patients in all areas where research has been carried out. These and other data explain the reason for the current growth of such ancient practices, which have been replaced by conventional medicine, leaving that these are returning to occupy space in health treatments in conjunction with the biomedical model, aiming at the integral and holistic treatment of the patient.

Keywords: PICs, Complementary Integrative Practices, Medical Specialty, Holistic Treatment, Complementary Medicine.

INTRODUCTION

Integrative medicine (IM) is based on the combination of Conventional Medicine with Integrative and Complementary Practices (PICs), which are defined by the Ministry of Health as treatments based on traditional knowledge. Different studies show that there is no consensus on the concept of Integrative Medicine, however, the idea that stands out is that this model is creating new expressions of health treatment (OTANI & BARROS,

2021).

Currently, Brazil is a reference in the area of PICs in primary care, and, through the National Policy on Integrative and Complementary Practices (PNPIC), provides more than 25 procedures free of charge through the Unified Health System (SUS). based on this holistic therapy. This policy was created in 2006, however, since 1980 there has been a growing appreciation and number of professionals within this branch of medicine, as well as an increase in patients' demand for these therapeutic modalities (BRASIL. Ministério da Saúde, 2013, s/p.) (OTANI & BARROS, 2021).

This way, the objective of this work is to expose the main information collected through a systematic review research on the practices of Integrative and Complementary Medicine, since PICs already have scientifically proven benefits, but are still in the process of expansion, we sought to understand which integrative practices are most used by patients undergoing medical treatment, to identify the areas of conventional medical treatment in which patients most seek Integrative and Complementary Medicine, and to verify the effectiveness of its use. It is also justified that PICs are constantly growing worldwide, and, therefore, it is important to clarify their effectiveness.

THEORETICAL FOUNDATION

Integrative medicine has been practiced for some decades, however, the production of a unique meaning for this practice is still in process. in the area of health (LEVETT, Kate, 2016, s/p). This integrated application of different means of care aims, above all, at the best care for the patient, in order to offer the opportunity to choose the best treatment according to each case within its individuality (OTANI & BARROS, 2021).

The search for integrative practices began to gain momentum mainly from the 1960s onwards, when there was a great change in the health-disease profile, such as, for example, a reduction in the number of infectious diseases, an increase in the number of cases of chronic diseases, an increase in life expectancy and changes in the doctor-patient relationship (OTANI & BARROS, 2021). It can also be seen that there is a limitation of several treatment methods based on conventional medicine, opposition to the use of medicines due to side effects, population dissatisfaction with the functioning of the current health system, and the lack of therapies that treat the patient as an integrated being, looking not only at the disease, but at the human being who harbors the pathology (OTANI & BARROS, 2021); (IMANISHI, Aya, et al., 2020, s/p); (JESPERSEN, OTTO, KRINGELBACK, SOMEREN, & VUUST, 2019).

Based on this change in patterns, there was the development and dissemination of alternative ideas, which are based on the combination of ancient healing systems with modern biomedicine. This new model brings with it the valorization of communication and the doctor's relationship with the patient, and the judgment of the person in an integral way, with a focus on health, cure and prevention of diseases based on evidence (OTANI & BARROS, 2021). Therefore, despite dealing with non-pharmacological treatments, Integrative Medicine is based on scientific evidence, and is able to play significant roles in health, especially under chronic conditions (GARDINER, et al., 2021).

However, even though complementary practices address extremely important factors, such as physical activity, social connection, nutrition, lifestyle modification and stress (GARDINER, et al., 2021), research indicates that most doctors do not even expose

themselves to sick ideas about practices of Alternative and Complementary Medicine. Opposing this data, the same research shows that doctors who used some type of PIC are more likely to recommend it to their patients (A, Patrícia, 2016, s/p). Among the methods of PICs most used today, there are different techniques of Acupuncture, Yoga and Meditation, also called Mindfulness, which will be addressed below.

Acupuncture stands out for being an ancient Chinese traditional technique and an important part of complementary and alternative medicine, and it is possible to observe, today, more than one type of treatment based on its principles. This practice aims at pressure on traditional acupuncture body points, mainly through the traditional practice, Auricular Acupuncture and Electroacupuncture, proving to be well tolerated and without significant side effects. Such clinical management was even recommended by the National Institute of Health for the treatment of various diseases (MOOVENTHAN, A; SHETTY, Balakrishna; SHETTY, Gheetha, 2018); (A, Laura, et al, 2016, s/p); (SUN, MAO, LIU, YANG, & HE, 2020); (GRUNDMANN, Oliver, et al, 2019, s/p).

Another pillar of Integrative Medicine is Meditation, also known as Mindfulness, which is one of its main aspects. This is an ancient practice that encompasses mind and body, with techniques that use visualization, sound, movement and/or breathing, and which, according to the National Center for Complementary and Integrative Health, has a high safety profile (BRUERA, Eduardo; et al, 2018, s/p). Mindfulness developed through meditation awakens, through attention to the present moment, awareness and the unfolding of the experience of living in each moment, which can lead to the use of several improvements in the patient's health and

quality of life (BLACK, PENG, & SLEIGHT, 2017).

The third most used integrative activity today is the practice of Yoga, which originated more than 5000 years ago with the aim of harmonizing the body, mind and spirit. Its execution involves body postures, breathing, meditative practices, sensory retraction, and other components described by one of the founding Hindus (COCHRAN, Ashly; et al, 2017, s/p). Yoga can help improve physical and psychological health, and also contribute to the improvement of cognitive skills and psychomotor performance, making it possible to verify that the practice can be used for the purpose of health promotion (ANHEYER, D; et al, 2016), s/p); (DAUKANTAITE, Daiva; et al, 2018, s/p); (ANUSUYA, Us; MOHANTY, Sriloy; SAOJI, Apar, 2021, s/p).

In addition to these three most used techniques, there is a diversity of complementary therapies, such as the use of herbal and homeopathic medicines, the practice of Tai Chi, the use of music therapy, and others, which can be applied individually or together, always aiming at the well-being of patients. being and the quality of life of the patient as a whole, focusing on the holistic view of the patient (LEVETT, Kate, 2016, s/p; BARROS, Nelson; OTANI, Márcia, 2011, s/p; D'AMICO, Salvatore, et al., 2019, s/p).

However, it is important to point out that Integrative Medicine does not only aim at carrying out complementary alternative practices, such as, for example, those mentioned above. This health promotion model recommends the continuity of conventional treatments based on the current biomedical model, however, with the help and complementarity of practices based on other models and systems, but which also aim at physical, psychological and social improvement (OTANI & BARROS, 2021).

METHODOLOGY

A systematic literature review synthesizes the information on a given subject that is available in an established period. The research materials are methodically selected, and the inclusion and exclusion criteria must be specified in the body of the text, which differs from the literature review and other models of scientific research (OTANI & BARROS, 2021).

For the present article, an electronic search was carried out in the PubMed database, using “Integrative Medicine” as a keyword for the period between January 1, 2016 and August 31, 2021. According to the inclusion criteria available on the platform, articles that fit into “clinical trial” and “full and free texts” were selected, resulting in the identification of 632 works, which were accessed via the Internet.

The first reading of the articles generated a new investigation, since 571 articles only cited Integrative Medicine in a generic way, without applying the subject, or only described a research project that had not yet been carried out. Therefore, 61 studies were selected that made up this study.

From the second reading onwards, the surveys carried out to verify the effectiveness of complementary practices were divided into areas of activity, according to the medical specialty, and subdivided between the practices and methods used. Another return to the material was carried out, and from it came the results presented below.

ANALYSIS AND DISCUSSION

The results of the present research demonstrate that, although PICs are being increasingly disseminated, they are still timidly used, since, of the 632 works selected on the PubMed platform, only 9.65% effectively applied a complementary medicine technique.

Despite this small number, the results point to a great diversity in the use of these methodologies, given that this systematic review revealed more than 10 different complementary therapies (Table 1), which are used in 12 different areas of medical specialty (Table 2).

Even in this wide diversity of areas used, it is observed, based on the data, that it is possible to verify an expressive effectiveness based on the use of Integrative Medicine, given that even with wide variability between the types of research, 84% of the studies carried out show an evolution positive in the health of patients when applying some technique of PICs. The results of this research confirm what has been exposed in several studies mentioned above, such as that of D'AMICO (2019), which highlighted the importance of complementary techniques, since they are based on the performance of significant roles in health, aiming at broad well-being. patient's physical and mental.

Among the numerous health specialties, we observed that oncology is the medical area in which patients most use Integrative Medicine, with 23% of the use of complementary activities, with 100% of all practices present in the research. The area of oncology is followed by rheumatology, with 16%, psychiatry, with 13%, neurology, with 11%, and gynecology and obstetrics, with 8% of use, as can be seen in Table 2. In view of this, these are the five areas of medical specialty in that patients most seek alternative therapies as a complement to health care. Oncology has already been observed in other studies as a specialty in which most patients and survivors use integrative health modalities alongside conventional treatments, and this use has been shown to be effective in improving patients (BLACK, PENG, & SLEIGHT, 2017).). As well as complementary therapies, they have also been shown to be

effective for rheumatology, which is the second most used area (GARDINER, et al., 2021).

In the field of oncology, the most applied techniques were Acupuncture and Meditation, with 36% and 29% of coverage, consecutively (graph 1). Patients undergoing rheumatologic treatment use, in addition to acupuncture and meditation, yoga, with each technique achieving 20% use (Graph 2). Acupuncture and yoga techniques were also observed with predominance in psychiatric treatments (graph 3), however, in the areas of neurology (graph 4) and gynecology and obstetrics (graph 5), there was only a predominance of acupuncture among complementary treatments. These data are consistent with the observation made by SUN, et al. (2020), that acupuncture is one of the main pillars of integrative medicine today.

The other areas - that is, geriatrics, cardiology, infectious diseases, pulmonology and the treatment of obese patients and patients with reports of acute pain - represent, in total, 28% of patients seeking integrative practices, as observed in Table 1. These medical specialties make greater use of meditation and yoga techniques, as well as Tai Chi and homeopathy or herbal medicine (graph 6). Differing from the five main areas of use, the rest of the specialties make little use of acupuncture. However, meditation and yoga are also major pillars of integrative and complementary therapies, proving to be, like the others, safe and effective for various treatments (BLACK, PENG, & SLEIGHT, 2017), (ANUSUYA, Us; MOHANTY, Sriloy; SAOJI, Apar, 2021, s/p).

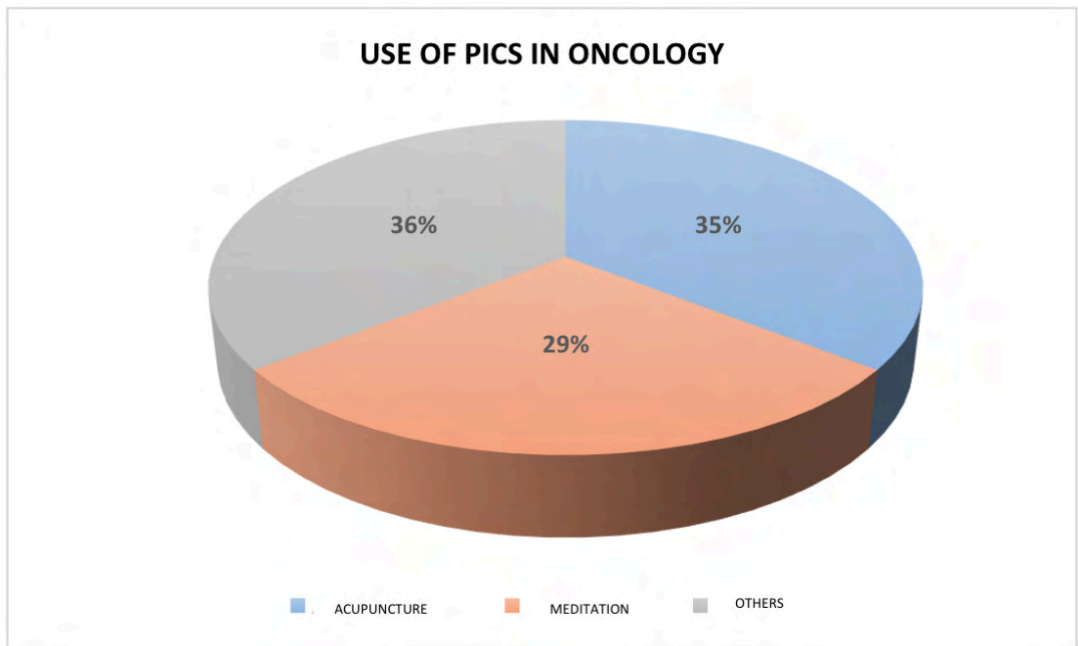
With regard to other medical specialties that make use of integrative medicine, a great search for complementary techniques occurs on the part of obese patients. These data corroborate other studies, which report findings on the limitations of conventional

COMPLEMENTARY THERAPIES USED PERCENTAGE OF USE PERCENTAGE OF EFFECTIVENESS		
ACUPUNCTURE	31%	74%
MEDITATION AND/OR MINDFULNESS	24%	73%
YOGA	15%	100%
HOMEOPATHY AND/OR PHYTOTHERAPY	8%	100%
TAI CHI	7%	100%
MUSIC THERAPY	3%	100%
MOXIBUSTION	2%	100%
IQ GONG	2%	100%
AURICULOTHERAPY	2%	100%
AYURVEDA	2%	100%
AROMATHERAPY	2%	100%
SUPPLY THERAPY	2%	0%
THERAPIES NOT SPECIFIED	3%	100%

Table 1 -Use and effectiveness of complementary therapies used.

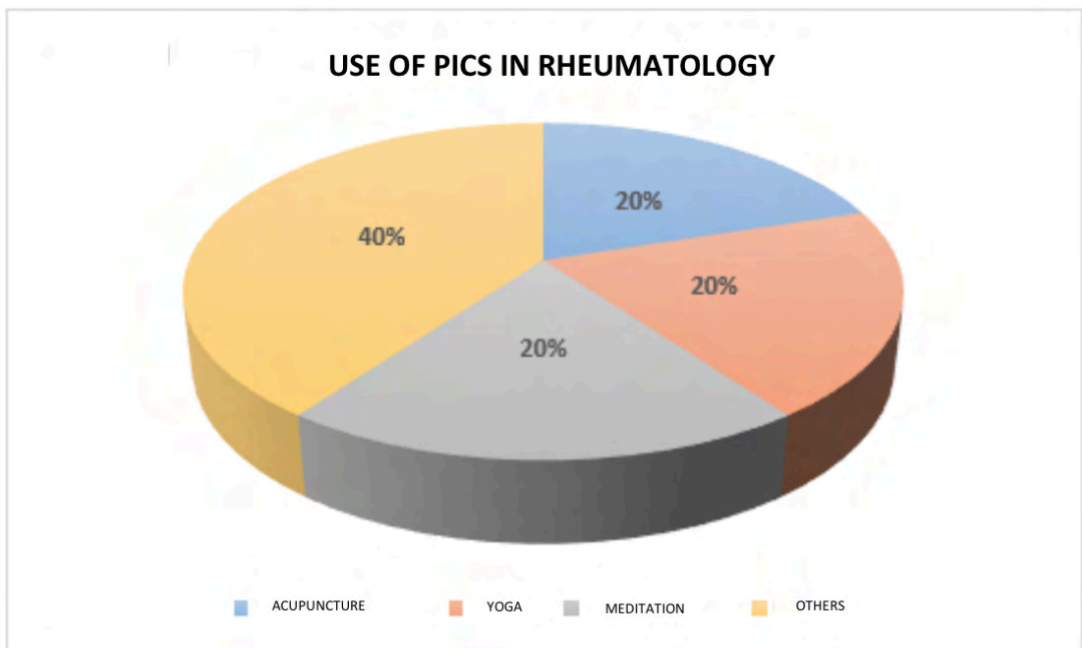
MEDICAL SPECIALTY PERCENTAGE OF USE PERCENTAGE OF EFFECTIVENESS		
ONCOLOGY	23%	71%
RHEUMATOLOGY	16%	60%
PSYCHIATRY	13%	100%
NEUROLOGY	11%	86%
GYNECOLOGY AND OBSTETRICS	8%	80%
OBESITY TREATMENT	8%	60%
GERIATRICS	5%	100%
CARDIOLOGY	5%	100%
INFECTOLOGY	3%	100%
ACUTE PAIN	3%	100%
PEDIATRICS	2%	100%
PNEUMOLOGY	2%	100%

Table 2 -Use and effectiveness of complementary therapies according to the medical area.



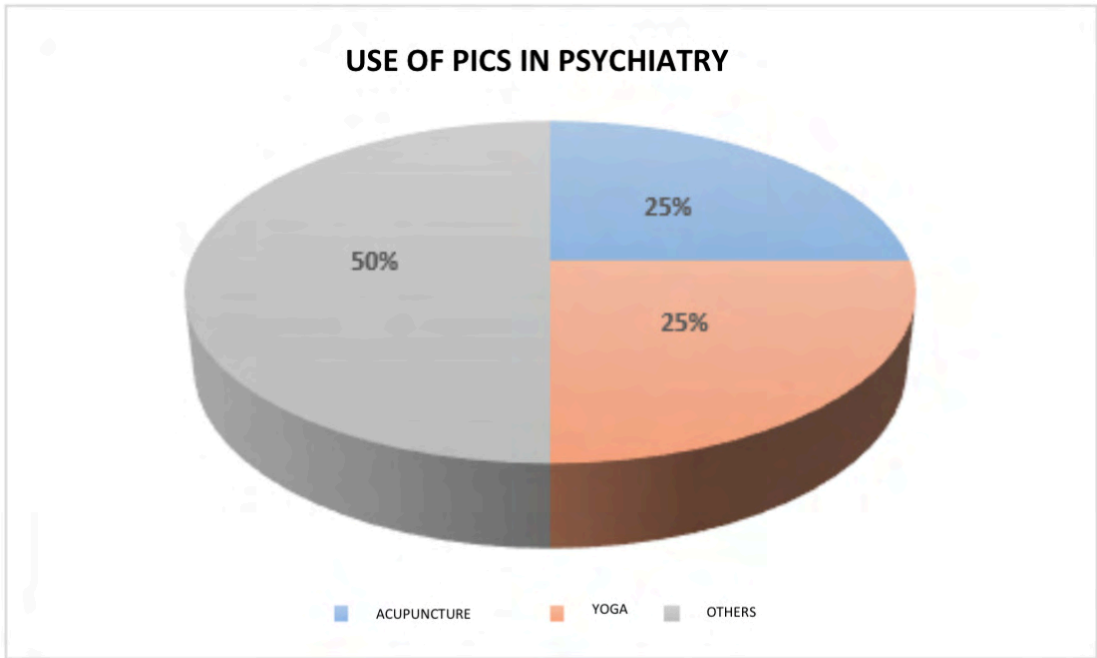
Graph 1: Use of PICS in oncology.

Source: (BLACK, PENG, & SLEIGHT, 2017); (CARLSON, et al., 2017); (LOPEZ, et al., 2018); (MILBURY, et al., 2020); (DENG, et al., 2018); (YOON, et al., 2019); (GARCIA, et al., 2021); (LU, et al., 2016); (SUN, MAO, LIU, YANG, & HE, 2020); (SHAO, et al., 2021); (WANG, YANG, FAN, & PEI, 2021); (McQUADE, et al., 2017); (LIMA, et al., 2021); (HACK, et al., 2020).



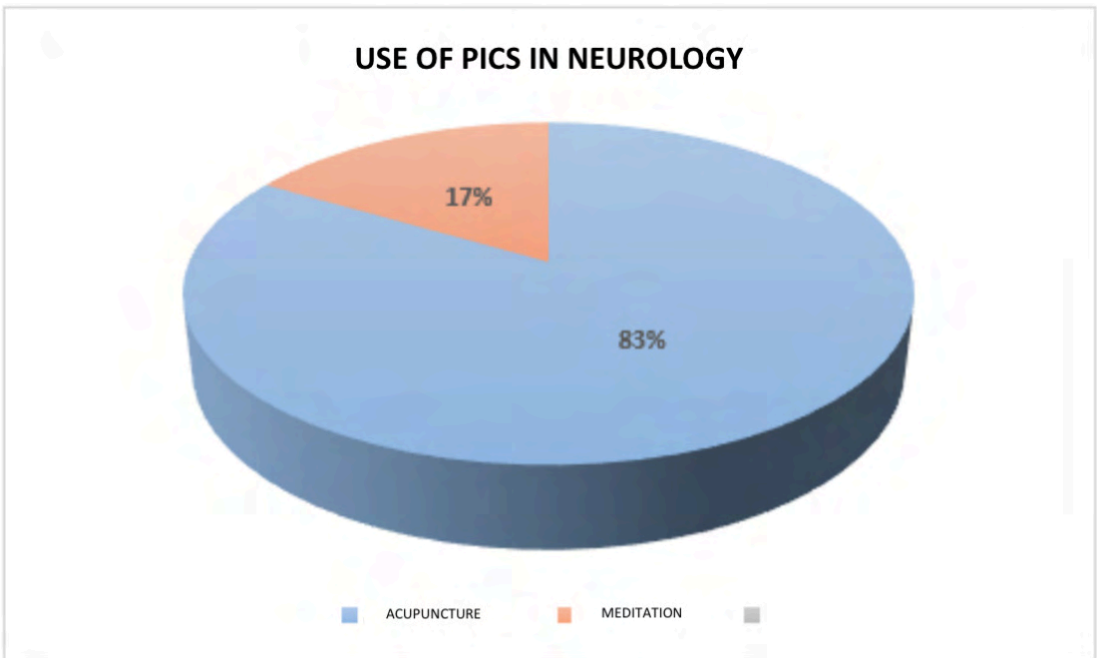
Graph 2: Use of PICS in rheumatology.

Source: (LEE, et al., 2017); (GARDINER, et al., 2021); (HEO, et al., 2021); (CHUNG, et al., 2016); (CHUANG, et al., 2017); (HUAN, et al., 2017); (SAPER, et al., 2017); (MOREIRA, et al., 2019); (WANG, et al., 2021); (KESSLER, et al., 2018); (LAUCHE, et al., 2021).



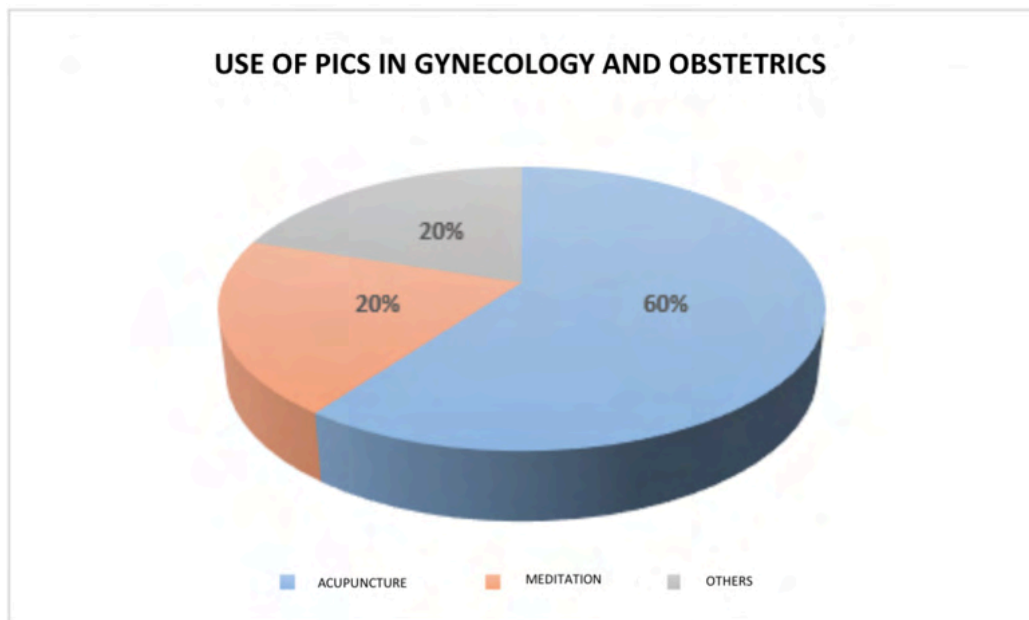
Graph 3: Use of PICS in Psychiatry.

Source:(ZHAO, et al., 2019); (WEI, et al., 2021); (PRATHIKANTI, et al., 2021); (TAKAHASHI, et al., 2020); (JESPERSEN, OTTO, KRINGELBACK, SOMEREN, & VUUST, 2019); (DAUKANTAITE, TELLHED, MADDUX, SVENSSON, & MELANDER, 2021); (US, MOHANTY, & SAOJI, 2021); (KEEFE, MAO, SOELLER, LI, & AMSTERDAM, 2016); (GRENSMAN, et al., 2021).



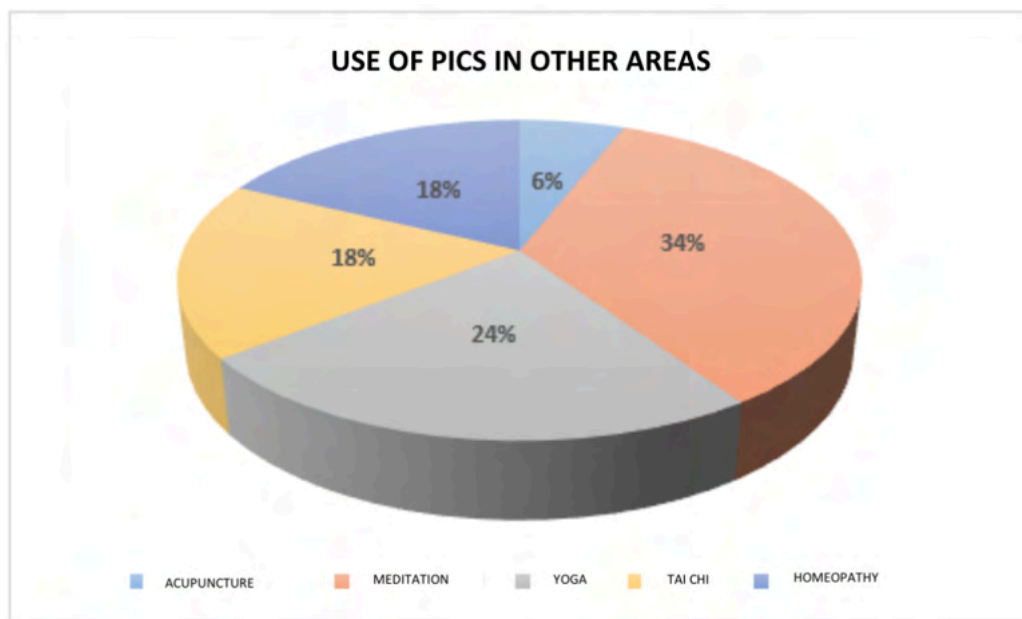
Graph 4: Use of PICS in Neurology.

Source:(LEI, et al., Research Article, 2021); (KONG, et al., 2021); (CHAO, et al., 2019); (ESTORES, CHEN, JACKSON, LAO, & GORMAN, 2017);(BAO, et al., 2021); (INNES, SELFE, KHALSA, & KANDATI, 2016); (FANG, et al., 2021).



Graph 5: Use of PICs in gynecology and obstetrics.

Source:(DUNCAN, et al., 2021); (ARMOUR, DAHLEN, ZHU, FARQUHAR, & SMITH, 2021); (Shetty, GEETHA, & MOOVENTHAN, 2018);(WU, et al., 2021); (LEVETT, SMITH, BENSOUSSAN, & DAHLEN, 2021).



Graph 6: Utilização das PICs nas demais áreas.

Source:(PALM, et al., 2017); (RONAN, et al., 2020); (RIOUX & HOWERTER, 2019); (CRAMER, THOMS, ANHEYER, LAUCHE, & DOBOS, 2016); (DAUBENMIER, et al., 2016); (ADLER, et al., 2017); (RAJAKHAN, et al., 2017); (GROESSL, MAYIA, CHAMLZL, WING, & JESTE, 2021); (MORONE, et al., 2016); (PENN, et al., 2021); (CRAMER, SELLIN, SCHUMANN, & DOBOS, 2021); (LEE, HWANG, KANG, & YANG, 2021); (BLOTCHER, et al., 2021); (RAAK, et al., 2019); (WANG, et al., 2020); (DENG, et al., 2020); (GARLAND, et al., 2017).

medicine in the treatment of overweight. Such limitations can be reversed when the treatment is done in a multidisciplinary and holistic way (RIOUX & HOWERTER, 2019).

In the area of infectology, there are other factors that contribute to the growth of complementary techniques, such as the lack of evidence on the effectiveness of antibiotic therapies, especially when these drugs are used against recurrent sore throat. There is also the unnecessary use of antibiotics, and other drugs with their toxicities, leading the patient to seek less aggressive therapies, such as homeopathy or phytotherapy (PALM, et al., 2017). Not only in infectology, it can be said that the results of the various authors surveyed show an expressive effectiveness of complementary therapies, with a result of 88% of effectiveness in the health of patients undergoing treatment in the areas of medical specialty that made less use of these integrative practices.

Regarding the therapies applied, in general, it can be concluded that acupuncture is the most used practice, covering 31% of all therapies addressed, and being effective in more than 70% of the cases in which it was administered. the previously mentioned studies, which claimed that therapeutic practices using energy points are well accepted and effective in helping to treat various diseases (MOOVENTHAN, A; SHETTY, Balakrishna; SHETTY, Gheetha, 2018, s/p). two most used integrative practices are meditation, with 24%, and yoga, with 15% of use among the other practices mentioned in the analyzed surveys.

Overall, research indicates that integrative practices proved to be effective, with a high percentage of improvement in the health of patients among the different areas of medicine and most of the therapies studied, with the exception of cupping therapy. It is noteworthy that the percentage of effectiveness reported

by these clinical managements are mostly 100% efficiency(TAKAHASHI, et al., 2020) (JESPERSEN, OTTO, KRINGELBACK, SOMEREN, & VUUST, 2019)(PALM, et al., 2017)(RONAN, et al., 2020).

Such a survey carried out by this systematic review demonstrates that, although PICs are mostly ancient techniques, and that throughout the evolution of modern medicine they were suppressed, they are currently gaining a new propagation and trend in the market, since they are practices that see the patient in a different way. holistic approaches treat the human being as a whole.

FINAL CONSIDERATIONS

From the analysis of the articles, it is concluded that the most used integrative and complementary practice today is acupuncture, followed by meditation and yoga practices, all of which cover various application techniques and are significantly effective in helping patients therapeutically.

The areas of conventional medical specialty in which patients most seek and use integrative medicine are oncology, rheumatology and psychiatry. In agreement with the effectiveness of the practices in general, the therapies have demonstrated the ability to help the progress of the treatment, even when conventional medicine has limitations.

Such notes suggest that the Integrative and Complementary Practices that make up Integrative Medicine are promising within health care in general, and that this integrated model of patient care is beneficial for progress in health and quality of life, deserving more breadth in the its use, disclosure of its benefits and surveys of its use.

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