# Integrative and complementary health practices among university students: reasons for use or non-use'

Práticas integrativas e complementares em saúde entre estudantes universitários: motivos de uso e de não uso

#### Vinicius Pereira de Carvalhoª

https://orcid.org/0000-0001-5249-2818
E-mail: viniciuscarvalhoba@gmail.com

#### Maria Thereza Ávila Dantas Coelhoª

https://orcid.org/0000-0001-7857-7473 E-mail: maria.thereza@ufba.br

#### Maria Beatriz Barreto do Carmoª

https://orcid.org/0000-0002-5257-7683 E-mail: mariabeatrizbc@gmail.com

<sup>a</sup>Universidade Federal da Bahia. Instituto de Humanidades, Artes e Ciências Professor Milton Santos. Salvador, BA, Brasil.

### Abstract

The objective of this study is to understand the reasons for use or non-use of the integrative and complementary practices among university health students. It is a quantitative and qualitative research, with data collected with questionnaires (667) and interviews (34), and investigated by content analysis. Therapeutic effects, family influence, and offer of alternatives to biomedicine were the main reasons for use of integrative and complementary practices, while the absence of demand, disinterest, and lack of opportunity were the most frequent barriers for use. Therefore, the motivations for use emphasize advantages obtained with these practices and some contexts that determine their adoption. Regarding the barriers for use, a scenario of low availability and dominance of biomedicine in contemporary western culture stands out. Therefore, these results corroborate the demand to confront the monoculture of biomedicine. as well as the inclusion of integrative practices in higher health education. Thus, university can be built on dialogues between different cultures in health, facilitating the use of non-hegemonic practices and expanding the epistemic bases of care in the formation and the life of the academic community.

**Keywords**: Complementary Therapies; Students; Health; Universities.

#### Correspondence

Vinicius Pereira de Carvalho Rua Barão de Jeremoabo, PAF V (Sala 208b), s/n. Salvador, BA, Brasil. CEP 40170-115.



<sup>1</sup> This work was carried out with the support of the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Brazil (CAPES) -Financing Code 001, a scientific initiation scholarship provided by the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) - Process 138842/2021- 3 and a Technical Research Support grant - AT - 1A from the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) - Process 372273/2022-0

### Resumo

O objetivo deste estudo é compreender os motivos de uso e não uso das práticas integrativas e complementares entres estudantes universitários da área da saúde. Trata-se de uma pesquisa quanti-qualitativa, com dados coletados por meio de questionários (667) e entrevistas (34) e submetidos à análise de conteúdo. Os efeitos terapêuticos, a influência familiar e a oferta de alternativa à biomedicina foram as principais razões elencadas para o uso das práticas integrativas e complementares, ao tempo que a ausência de demanda, o desinteresse e a falta de oportunidade foram as motivações mais frequentes para o não uso. Nesse sentido, as motivações de uso enfatizam as vantagens obtidas através da interlocução com essas práticas e alguns contextos que determinam sua adoção. Em relação às motivações de não uso, destaca-se um cenário de baixa oferta e dominância da biomedicina na cultura ocidental contemporânea. Portanto, esses resultados corroboram a demanda de enfrentamento da monocultura da biomedicina, bem como a abordagem das práticas integrativas na educação superior. Desse modo, a universidade pode se construir a partir da tessitura entre diferentes culturas em saúde, com a facilitação do emprego das práticas não hegemônicas e a ampliação das bases epistêmicas de cuidado na formação e vida da comunidade acadêmica.

Palavras-chave: Terapias Complementares; Estudantes; Saúde; Universidades.

### Introduction

Integrative and Complementary Practices (ICPs) comprise a group of complex medical systems and therapeutic resources that share characteristics with a broad approach to human health. These practices were accepted into the Brazilian Unified Health System (SUS) through the publication of the National Policy on Integrative and Complementary Practices, in 2006, and with the observation of experiences of use in health services, they were expanded in 2017 (Brasil, 2017) and in 2018 (Brasil, 2018).

However, the provision of these practices does not yet cover all assistance services accredited by the SUS (Barbosa et al., 2020), which points to the need to strengthen and expand existing activities, in addition to organizing other initiatives. In the state of Bahia, for example, a local policy for ICPs was produced, which aimed, among other things, to expand access and enable mechanisms to guarantee professional training (Bahia, 2019). This second point deserves to be highlighted, as the low number of health workers qualified to manage these practices is considered one of the obstacles to implementation in the SUS (Ruela et al., 2019).

In the context of higher education, research shows that academic curricula in the health area have a timid inclusion of Integrative Practices (Albuquerque et al., 2019; Medeiros et al., 2021). However, studies carried out in Brazil and in different countries indicate the adoption of these practices among students (Albadr et al., 2018; Coelho; Carvalho; Porcino, 2019, Nguyen et al., 2016; Radi et al., 2018, Saha et al., 2017; Silva et al., 2021), which may be related to their acceptance by the university community. In addition to investigating the adoption of these practices, it is also necessary to assess the reasons that guide their uses or nonuses, as understanding these motivations could be useful in thinking about institutionalization and access to them in the health system, contributing to the construction of strategies in this regard. Likewise, knowledge of these reasons can serve to see from which points of view ICPs have been perceived in universities, given their subordinate status in relation to biomedicine. Proof of this is how the rejection of subjects on this topic in

health courses can be guided by prejudice (Barros; Fiuza, 2014).

Academics' health habits are related to their social experience in college, a place where they stay for several hours a week, develop therapeutic choices, and come into contact with different concepts and practices of health, illness and care. Especially in Brazil, there is still a low number of studies that analyze the experiences linked to ICPs among university students, pointing out the need for further study of the topic. In this sense, this research aimed to understand the reasons for using or not using ICPs among students on a university health course in the state of Bahia.

### Methodology

This is a study with a quantitative-qualitative approach. We began according to the tradition of investigations supported by theoretical assumptions developed in the medical rationality category. Along these lines, biomedicine (contemporary Western medical rationality) is located as a system that holds hegemony in the health field and is based on the normalitypathology paradigm, in which there is a great focus on diseases. In contrast, vitality-energy constitutes the paradigm from which medical systems that focus on health and harmonization between micro and macrocosm, such as Ayurvedic and anthroposophical medicine, originate. In this way, the so-called therapeutic resources, which are also part of the list of ICP, are outlined as health practices that are present (or not) in one or more medical rationales in the therapeutic system (Nascimento et al., 2013). Furthermore, in this study we consider the contributions of the epistemologies of the South framework, in an attempt to direct, to some degree, a critical reflection on the monoculture of biomedicine and the need for decolonization of knowledge and practices established in the health field, its criteria validation and its social destinations (Guimarães et al., 2020; Santos, 2018).

We counted on the participation of students enrolled in the Interdisciplinary Bachelor's Degree in Health at the Universidade Federal da Bahia (UFBA), an undergraduate course that constitutes the first stage of training in cycles in health and which has its own terminality, even though it is not professional in nature (Veras et al., 2018). In view of this, the inclusion criteria were being enrolled in this university course and enrolled in curricular components at the time of data collection. The exclusion criterion was being under 18 years old. The research project was submitted for consideration by the Ethics Committee of the UFBA School of Nursing, having been approved under opinion 2,349,850. Before the data collection process, students received information about the research, read and signed an informed consent form (Brasil, 2013).

Data collection was carried out in two stages, without prior stimulation of knowledge or use of ICP. The first occurred through the use of a semi-structured questionnaire, consisting of questions about the participants' sociodemographic profile and the concepts and practices related to health and disease processes. In the case of ICP, the instrument initially asked about the use of these practices and then asked students to provide their reasons for use ("If you use them, what leads or led you to adopt such practices?") and non-use ("If you don't use these practices, what are the reasons?"). In this sense, the same student could point to more than one reason for the answer given and the questions referred to ICPs in general, not delimiting such practices. Our choice to deal with practices in a generalized way followed the approaches to the topic established by the Ministry of Health, which grouped a diverse number of rationalities and therapies under the same label. The questionnaire was printed and applied to subjects that are part of the curricular matrix of the selected university course, in the first academic semester of 2017, 2018, and 2019. After answering it, the students were invited to contribute to the second stage of the collection, which corresponded to the carrying out of semi-structured interviews. This invitation was also made by email to all people enrolled, so that those who agreed to participate in the interviews but who had not previously answered the questionnaire, were able to access the instrument at the end of the interview. Carrying out this second stage aimed to deepen the understanding of the research object.

In this way, all students who participated in the interviews also responded to the questionnaire, resulting in 667 completed questionnaires and 34 interviews conducted.

After collection was completed, the data was typed and transcribed into electronic spreadsheets. Sociodemographic data were processed in IBM SPSS Statistics and those relating to the reasons for using and not using ICPs were processed in the Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires (IRaMuTeQ). However, before feeding the data into IRaMuTeQ, we divided the responses into two analysis corpuses, one corpus referring to reasons for use and the other dedicated to reasons for non-use. Next, the text fragments from each corpus were manually lemmatized by grouping those with a common meaning into the same term, so as to ensure greater homogeneity in the response groups and ease of analysis. In this software, we used the word cloud feature, which allows the creation of a figure in which it is possible to examine terms based on their frequency of appearance in the corpus (the larger the term size in the cloud, the greater its frequency in the *corpus*) (Camargo; Justo, 2013). Using IBM SPSS Statistics, the frequency delineation (absolute and relative) of the characteristics of the participants was made possible, from which we built a table.

In the IRaMuTeQ processing, the manual lemmatization was adjusted according to the need to make the most of the answers, in order to adapt them to the systematization of the analytical process. Lemmatization does not mean that the terms examined are on opposite poles, and it is possible to bring them closer together without overlapping them. The question about reasons for use generated 415 answers, whereas the question about reasons for non-use produced 275. From these sets, we grouped the answers that had the same meaning based on the delimitation of 16 cores of meaning in reasons for use and 10 cores of meaning in the reasons for non-use, as shown in two examples. Answers that pointed to the difficulty of accessing spaces offering ICPs were grouped under "inaccessibility": "viable places to go," "I never found any place that offered anything like that," "difficult to access through the [private] health plan," and "The ones I don't do are

because I don't have access." In "lack of opportunity," the common idea in the answers was the lack of perceived opportunity to experiment or use the practices on an ongoing basis: "I didn't use most of them due to lack of opportunity," "an opportunity I didn't have," "I didn't have opportunity to practice yet," and "I never had the opportunity to try it." To broaden the understanding of the meaning and distinguish some of these terms, we used statements collected in the interviews, which explored them in more depth. Some statements, such as those below, for example, helped us to distinguish the "lack of opportunity" from "inaccessibility," given that the former is explained through reference to contexts in which it was not possible to use ICP, not to the lack of access to their offering sites: ..."[...] I discussed it at HACA50 [optional subject Rationalities in Health: Medical Systems and Alternative Practices], but I didn't have the opportunity to participate ...[...]" and ..."[...] in a some weeks there was community therapy, but I never had the opportunity to participate ...[...]".

Considering that the research is located in the state of Bahia, for this study we considered all the responses that referred to the ICPs mentioned in the State Policy on Integrative and Complementary Practices in Health in Bahia (to cover the supply and use in this state) (Bahia, 2019). We adopted the thematic-categorical content analysis technique, according to Laurence Bardin (2016). The categories were created a priori, seeking to cover content related to the object of analysis of the investigation, namely: profile of the group of participants, reasons for use and reasons for non-use. These categories were formed by numerical and textual data processed using the aforementioned software, with the content coming from lexical lemmatization examined according to the diversity of propositions presented in the speeches. For the thematic analysis, each reason for use and non-use lemmatized with the support of IRaMuTeQ was considered as a theme and subsumed into the research categories. The interpretation of the participants' answers sought to highlight the meanings underlying their content, using as a basis the statements collected in the interviews, given their greater extensiveness and depth. We carried out a detailed interpretation of the themes, in an attempt to achieve a timely understanding of the categories. In order to maintain the anonymity

of participation, the students' names were replaced with the names of medicinal plants.

**Results** 

\_

### Participant group profile

Considering the 667 questionnaires answered, most people declared themselves to be cisgender

women (454, 68.07%), with a family income of two to four minimum wages (269, 40.33%) or five to seven minimum wages (158, 23.68%), access to public health services (473, 70.91%) and private health insurance (354, 53.07%). As for university life, at the time the questionnaire was administered, 70.01% (467) were in the first or second semester of the course and 60.27% (402) were taking four or five subjects (Table 1).

# Table 1 — Profile of healthcare undergraduate students at a university in the state of Bahia, 2017, 2018 and 2019 (n=667)

Characteristic	Ν	%
Gender		
Cisgender woman <sup>2</sup>	454	68.07
Cisgender man	207	31.03
Transvestite	I	0.15
Other gender	2	0.3
Did not answer	3	0.45
Family income		
Up to 1 minimum wage	134	20.09
From 2 to 4 minimum wages	269	40.33
From 5 to 7 minimum wages	158	23.68
From 8 to 10 minimum wages	41	6.15
Above 10 minimum wages	48	7.2
Did not answer	17	2.55
Work		
Yes	106	15.89
Νο	557	83.51
Did not answer	4	0.6
		continues

2 Transgenderness/transvestility refers to non-self-identification with the gender assigned at birth, while cisgender is related to self-identification with the gender assigned at birth.

### Table 1 - Continuation.

Characteristic	Ν	%
Access to public health services		
Yes	473	70.91
No	188	28.19
Did not answer	6	0.9
Private health plan		
Yes	354	53.07
No	312	46.78
Did not answer	I	0.15
Semester		
ıst and 2nd semester	467	70.01
3rd and 4th semester	119	17.84
5th and 6th semester	42	6.3
7th and 8th semester	7	1.05
Undetermined	5	0.75
Did not answer	27	4.05
Number of subjects enrolled in the sem	ester	
3 or less	69	10.34
4 or 5	402	60.27
6 or 7	129	19.34
8 or 9	42	6.3
io or more	16	2.4
Did not answer	9	1.35

# Reasons for using integrative and complementary practices

In this research, the following reasons for using ICPs were given: therapeutic effects (151 occurrences in the analysis *corpus*), family influence (52), alternative (48), recommendation (47), well-being (41), belief (29), curiosity (21), health (21), religion (20), interest (18), culture (17), quality of life (13), opportunity (8), university (8), balance (7), and experimentation (7) (Figure 1).

Figure 1 – Reasons for using Integrative and Complementary Practices among undergraduate healthcare students at a university in the state of Bahia, 2017, 2018, and 2019 (n=667)

# quality\_of\_life opportunity religion university curiosity interest Well-being alternative therapeutic\_effects family\_influence grecommendation belief health<sup>balance</sup> experimentation

According to the students, the therapeutic effects that drive the adoption of ICPs encompass the care aimed at diseases and unique states of illness, which may be linked to everyday life or be brought about by particular and specific needs. In this process, the recommendation of health workers and friends, as well as family influence (undertaken only in childhood or throughout life), is also an important reason for accessing these practices. Likewise, use based on the desire to achieve well-being, health, quality of life, and balance is the result of the positive effects produced by ICP, involving, in some cases, the promotion of constant dialogue as a means of achieving regular organization of the routine.

I looked for it because I'm looking for different methods to control my anxiety, especially now that I'm approaching the end of the course [...]. (Sabugueiro) [...] think about ways to take care of certain problems not necessarily linked to the disease, but to everything that makes me sick. Because health is a dynamic thing, right! I'm healthy, great! [...] But there are times when it falters, [...] and in one of those episodes, I sought out meditation and it was great. (Melissa)

I use it because of family influence. When we have an illness, sensations, that our grandmother says: use this, it's good for you [...]. (Pitanga)

[...] I felt that all that weight I carried during the day, from demands, capitalist demands, everything was resolved when I got there, I started to breathe and focus on myself. It was a space I had for myself, which I couldn't have at any other time of the day [...]. So much so that I was able to organize my daily life, gain insights into things I didn't notice during the day, so I think it was very important, a therapeutic moment [...]. (Quixabeira)

The offering of an alternative to biomedicine, with an emphasis on the demand for therapies based on natural products and with less iatrogenesis, is another reason listed in the responses. Furthermore, towards a critical examination of contemporary Western medical rationality, which includes validation mechanisms established in the health field, individual beliefs, religion, and culture (without affinity relations with biomedical rationality in statements about motivations for use) are cited as responsible for the use of ICP.

[...] due to the discomfort I have with our health practice, which is very biomedical, very professional-centered, and also very direct on a specific thing, in this case with medications. Also propose other alternatives that I think would be interesting [...]. (Babosa)

I use it because I'm from Cachoeira [a city in the Recôncavo region of Bahia], that's what my whole

life has been. Leaf, tea, to believe! I'd much rather drink tea than take medicine. (Canela)

I prefer what is natural over what is industrialized. So, if I have a natural remedy for what I'm feeling, I prefer the natural one [...]. I used to use it at the spiritist center I went to was in my town [...], it was the way they found to pass on energy [...]. (Kava-kava)

The university is also recognized as encouraging the use of these practices, as it is an environment in which students study and use them. Therefore, it is a place where some other motivators take shape, such as curiosity, interest, opportunity, and experimentation.

# I did it to find out, as I had a subject on integrative practices in one semester [...]. (Alecrim)

I did it out of curiosity, I always saw people doing it here [at the university] so I went for it [...]. The teacher [of a university subject] asked me to do it, I did it and I liked it, naturally I do it in almost every [class]. (Gerânio)

Therefore, the student's reasons for using reflect the experiences obtained in dialogues with the ICP. From these experiences also comes the knowledge mobilized by the participants to talk about these practices during the interviews based on studies undertaken at the university and the uses they made in therapeutic and family environments, which are part of the cultural universe of this group.

# Reasons for not using integrative and complementary practices

Some reasons mentioned for not using ICPs include lack of demand (69 occurrences in the *corpus*), lack of interest (66), lack of opportunity (58), cost (48), lack of time (44), lack of knowledge (39), inaccessibility (34), disbelief (16), lack of recommendation (7), and culture (6) (Figure 2). Figure 2 – Reasons for not using Integrative and Complementary Practices among undergraduate healthcare students at a university in the state of Bahia, 2017, 2018 and 2019 (n=667)



The lack of demand is based on the individual perception that there is no need to use them, either because these people think that the biomedical practices adopted are sufficient to deal with health and illness/disease processes or because they do not believe they live in scenarios of life and health that can be supported by ICP. In both perspectives, culture is another reason for non-use that appears in the responses, referring to the domination of biomedicine in the health field. Related to this dominance, more reasons for not using these practices are cited: inaccessibility and lack of opportunity are justified by the majority of health services being directed towards biomedical rationality; the cost is indicated based on the belief that many ICPs are not offered in the public health system and, when they are, it is not easy to practice; the lack of time is seen as a consequence of the excess of daily activities, which enhances the use of biomedicine as it appears more frequently in institutions and is more standardized, specific, and directed towards the treatment of signs and symptoms; and the lack of recommendation is due to the lack of health workers trained in the management and/or guidance for the use of ICPs.

I didn't use because of the time. [...] when I have cramps I take ibuprofen, I find it quicker than stopping to make tea. You take the medicine, put it in your mouth and it's over [...]. (Transagem)

It's not very easy to access. We are very induced to look for biomedical medicine whenever we are going through something, even as a culture in Western society as a whole. My grandmother was taught this way, my mother was taught this way, I was taught this way. For me to get out of this, I have to start something from myself that I will seek with much more effort. For example, I don't know where there is homeopathy here in [name of city], Chinese medicine. But I know where there is a hospital, a clinic, a drugstore [...]. (Gengibre)

I've wanted to do it, but the problem is that I think it's still very restricted. I don't know if the [university medical service] has it. I've heard there is, but it's very difficult to get it. It's also a financial issue, because doing it privately is very expensive. I believe there must be public services, very selective ones, but I don't know about them [...]. (Dendezeiro) Similarly, lack of knowledge about ICPs is a reason for non-use, with disbelief being a reason determined by a lack of trust in these practices' validation mechanisms and of affinity with the spiritual/religious precepts that some of them carry. Disinterest, in turn, is characterized by fear (of the needles used in acupuncture practices, for example), disapproval (of the taste of medicinal plant preparations, for example), and lack of willingness to seek information on the subject.

I didn't like acupuncture, because it punctures, and I'm terrified of needles. So, I didn't use it again. [...] the thought of doing it again made me tense, so I didn't go anymore. (Unha-de-gato)

I don't use it because I think you have to have more skill to use something, you can't use it with superficial knowledge. (Valeriana)

[...] I'm a bit scientistic, so when I look at these alternative things, it doesn't fill my eyes too much to want to try them out. (Macassá)

Although there seems to be a mix between the meanings of some of these themes, we see that they delimit different contents. The "lack of demand", for example, is adopted to indicate the understanding of informants who indicate that they do not have a need to use ICPs, but does not reveal a lack of knowledge or disbelief in these practices ("I do not use these practices because I feel good, regarding health" - Urucum / "I have not yet identified the need to carry out such practices" - Artemísia). Likewise, "lack of interest" comes from a lack of desire to partake in them or a lack of taste for them, even if they are recognized among the participants ("I'mnot interested in any of them" - Ginkgo Biloba/"The ones I didn't do because I don't like them" - Mamona).

### Discussion

In Brazil, the creation and recent expansion of the National Policy on Integrative and Complementary Practices indicated a certain acceptance toward the institutionalization of ICPs in the public health network (Brasil, 2006, 2017, 2018). However, the national scenario still has an incipient supply of it (Barbosa et al., 2020; Ruela et al., 2019), corroborated by the results of this study, when we verified that the non-use of these practices is defined by reasons linked to biomedical domination in the health field, with effects seen in the organization of services, in the training of human resources, and in directing the production and consumption of knowledge and health practices. According to Maria Beatriz Guimarães et al. (2020), this medical rationality operates as colonialism in the dimensions of knowledge, being, and power, delimiting what is credible and should be adopted in human care. In this sense, the colonial imposition of biomedicine on Western culture, associated with modern scientific rationality, determined obstacles to the intelligibility and use of other medical systems and therapeutic resources, with emphasis on those originating from the cultures of colonized peoples, such as Latin-Americans and Africans.

We also consider that the socioeconomic situation prescribed in the neoliberal and capitalist system hinders the access to ICP, given the orientation (and precariousness) of the dynamics of human life towards an excess of work activities closely related to biomedicine, explicit in the high production of pharmaceutical industry inputs (Guimarães et al., 2020). Thus, the lack of time to use ICP, for example, can be referenced in the demand for high daily productivity, which negatively affects the organization of (self)care itineraries. Regarding the group of participants in this survey, it is important to highlight that 15.89% declared to be working and 28.04% were taking six or more subjects at the time the questionnaire was administered. In another survey, carried out with nursing graduates from a higher education institution in the state of São Paulo, it has been found that people who study and work at the same time face learning difficulties characterized, among other things, by tiredness and lack of time (Santos et al., 2020), which in this study can be reproduced in the unavailability for the adoption of ICPs.

On the other hand, the reasons for use seem to have a counter-hegemonic meaning, as they emphasize the results achieved (which do not stop at intervention in the treatment of diseases) from the use and a family, religious and (counter)cultural connection (avoiding the massification of biomedicine). Therefore, even if low availability of ICPs is perceived, the students who listed reasons for use were successful in accessing these practices in the health system, in the home environment, and in local communities (in their relationships and macro and microsocial spaces) in which they live/lived, demonstrating the need to expand and reflect on these experiences and initiatives.

The dissatisfaction with the biomedical rationality present in this group points to the path of re-elaboration of actions related to health, certainly influenced by social networks and spaces of sociability and power accessed by students. An interesting characteristic of the reported experiences is that the university, in the form of its curricular components and its health care service, is referred to as an institution that motivates the adoption of ICPs. In another survey, also carried out with students of the Interdisciplinary Bachelor's Degree in Health, there was reference to the use of these practices (Coelho; Carvalho; Porcino, 2019), which ensures the indispensability of their offer in the student health care service maintained by the university. However, the students interviewed in this investigation viewed access to the practices offered by this service as difficult, which may be related to a lack of knowledge of the institutional flow for its use, the bureaucracy with which appointments are made, and/or the overload of the service.

Regarding the use of ICPs in curricular components, we observed that this can occur as part of the pre-established programmatic content or based on the interest of teachers/students. created during the course, in enabling experiences in these practices. In both situations, the use of such practices reveals some curricular receptivity and implies contact with ICPs, which could serve as a basis for professional learning to manage these practices. In studies that outlined the situation of integrative practices in the curricula of higher education health courses, there was a predominance of non-mandatory subjects (Albuquerque et al., 2019; Medeiros et al., 2021), which suggests the need to examine the nature of the curricular components taken by students of the Interdisciplinary Bachelor's Degree in Health. In addition to the disciplines, integrative practices can also be present in higher education in health, as a topic for study groups, university extensions, research projects (Albuquerque et al., 2019; Medeiros et al., 2021), and other activities worthy of investigation in this course.

The curricular framework of the Interdisciplinary Bachelor's Degree in Health is made up, for the most part, of optional curricular components, both from the field of health and from miscellaneous areas (from any area of study). In this way, students are given autonomy and flexibility in designing interdisciplinary health training paths. It remains to be seen whether this design has been directed by students towards reinforcing or criticizing the monoculture of biomedicine. As the course adopts a counter-hegemonic proposal (Veras et al., 2018), it is likely that the second option is more truthful. For example, in "Rationalities in Health: medical systems and alternative practices," a curricular component taken by Interdisciplinary Bachelor's students, the reflection and debate on the marginalization of non-hegemonic care practices and individual and collective conceptions of health are encouraged in addition to the study of rationalities included as ICPs (Franco et al., 2017). This curricular experience reveals a way of expanding knowledge about the different cultures in the area, which, among our informants, may have determined some degree of dissemination of integrative practices in individual care it ineraries. As shown in the results, students have the possibility of learning about and experiencing ICPs in various academic activities, developed and offered to the university community.

Research carried out with students from different university courses in different countries (Albadr et al., 2018; Nguyen et al., 2016; Radi et al., 2018, Saha et al., 2017; Silva et al., 2021) confirm most of the reasons for using and not using ICPs found in this study, showing that the scenario of introducing these practices into health systems and staff training courses must have some common determinant, namely, confronting the monoculture of biomedicine. However, we noticed that our participants mentioned some reasons not reported in the literature collected, such as the use of ICPs as an alternative to biomedicine in the search for well-being, quality of life and balance. These reasons indicate dissatisfaction with hegemonic medical rationality and the way of life it supports, viewing ICPs as escape devices

and (self)care. We thus verify that the university is presenting some possibilities for opening up students' diverse knowledge and practices, a basis for supporting expanded and comprehensive training and therapeutic trajectories. This is a shift in the way knowledge is produced and shared, given the critical reorientation towards the recognition and visibility of diversity in health. In the contemporary Western history of institutionalization and adoption of these practices, social movements intensified in the 1960s precisely based on a concept of alternativeness, demanding the construction of a new world based on counterculture (Barros, 2008). The appearance of ideas of a similar nature among students may indicate that biomedicine still prescribes the same ways of life and health from that time, with the desire to break with this model also persisting.

We believe that this rupture must be directed towards the decolonization of the health field, with the confrontation of the monoculture of biomedicine and the opening to different types of knowledge and practices, highlighting those that have historically been made invisible and marginalized. In this sense, epistemologies of the South have proposed the construction of tools to collaborate with the emergence of this subalternized knowledge. The perspective of ecologies of knowledge seeks to overcome the monoculture of scientific reason and the construction of epistemological, ontological, and practical webs that comprise relationships of co-presence/participation. In these ecologies, all forms of knowledge have meaning and visibility, with hierarchies dependent on the contexts of action (Guimarães et al., 2020; Santos, 2018). In the context of higher education in health, a way of enabling the conception of ecologies of knowledge may be to claim the validity of traditional, integrative, and complementary skills and practices, so as to give them visibility and allow them to interact within curricula. The adoption of this strategy in liberating education practices, not subject to the epistemologies of colonization, can play an important role in the creation of curricula committed to the health needs of communities, in their different dynamics, dimensions, and meanings. The path to its implementation will certainly not be simple, as it involves opposing the dominant model represented by biomedicine. However,

the results will certainly translate into gains for higher education in health.

### **Final considerations**

In this study we found that different reasons for use and non-use determine undergraduate students' access (or lack of access) to ICPs on a university health course. The main reasons cited emphasize the advantages obtained by articulating with these practices and the cultural, spatial, social, and ideological links that determine their adoption. The reasons for non-use, in turn, corroborate the scenario of biomedicine dominance in contemporary Western culture.

In the context of health training, the results of this research point to the need to include ICPs in academic trajectories and pedagogical projects of university courses. This insertion must be capable of promoting experiences to raise awareness of the theme and professional training in the use of these practices, making it possible to produce health workers who can manage them to some degree. As the Interdisciplinary Bachelor's Degree in Health does not present professional guidance, it would be interesting to observe how the training of these students continues throughout the cycle regime, in its professionalizing phase. In light of this, it will be possible to see the university's projection in the professional qualification for the management of these practices, as well as in the delimitation of the reasons for using or not using them among students.

Still in the process of emergence in the health field, ICPs comprise important resources for human care (according to the students' own statements in this survey), considering those that have ancestry in Brazilian territory and those that were inserted/ erected more recently. In the context that forms the backdrop of this emergence, confronting the monoculture of biomedicine seems to be the biggest challenge. We believe that new studies should also be produced with the aim of investigating more deeply the issues surrounding the adoption, accessibility, and provision of these integrative practices in Brazil, including the possible role of the university (and its students) in this journey. Furthermore, it is necessary to look at traditional Brazilian practices, given their subordinate status in the health field. Understanding their indications, recognition mechanisms and reasons for using each one can certainly contribute to their institutional visibility and to enhancing their use in communities, in order to emphasize motivations of local origin.

The generic treatment of ICPs in this study can also be considered a limitation. Although in some responses the students mentioned or alluded to some of these practices explicitly, in general they approached them as part of the same set, according to the formulation of the questions in the data collection instruments. It becomes necessary to advance in the production of research that elucidates the use of each one individually, considering the heterogeneity of the rationalities that are included in the acronym ICP. Another perceived limitation is the non-probabilistic sample used in the survey, which means that the results cannot be generalized to all university students.

### References

ALBADR, B. O. et al. Attitude of Saudi medical students towards complementary and alternative medicine. *Journal of Family and Community Medicine*, Mumbai, v. 25, n. 2, p. 120-126, 2018. Disponível em: <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5958523/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5958523/</a>. Acesso em: 23 jun. 2020.

ALBUQUERQUE, L. V. C. et al. Complementary and Alternative Medicine teaching: evaluation of the teaching-learning process of Integrative Practices in brazilian medical schools. *Revista Brasileira de Educação Médica*, Brasília, DF, v.43, n.4, p.109-116, 2019. Disponível em: <https://www.scielo.br/j/ rbem/a/vbVNgQsGRfWdQTcscjMNzrM/?lang=en>. Acesso em: 23 jun. 2020.

BAHIA (Estado). *Política Estadual de Práticas Integrativas e Complementares em Saúde na Bahia.* Salvador: Secretaria Estadual de Saúde, 2019.

BARBOSA, F. E. S. et al. Oferta de Práticas Integrativas e complementares em saúde na estratégia saúde da família no brasil. *Cadernos de Saúde Pública*, Rio de Janeiro, v. 36, n. 1, e00208818, 2020. DOI: 10.1590/0102-311X00208818

BARDIN, L. *Análise de conteúdo*. Lisboa: Edições 70, 2016.

BARROS, N. F. *A construção da medicina integrativa*: um desafio para o campo da saúde. São Paulo: Hucitec, 2008.

BARROS, N. F.; FIUZA, A. R. Evidence-based medicine and prejudice-based medicine: the case of homeopathy. *Cadernos de Saúde Pública*, Rio de Janeiro, v. 30, n. 11, p. 2368-2376, 2014. DOI: 10.1590/0102-311X00183513

BRASIL. *Resolução nº 466, de 12 de dezembro de 2012.* Aprova as diretrizes e normas regulamentadoras de pesquisas envolvendo seres humanos e revoga as Resoluções CNS nos. 196/96, 303/2000 e 404/2008. Brasília, DF: Conselho Nacional de Saúde, 2013.

BRASIL. *Política Nacional de Práticas Integrativas e Complementares no SUS*. Brasília, DF: Ministério da Saúde, 2006.

BRASIL. *Portaria n° 849, de 27 de março de 2017*. Inclui a Arteterapia, Ayurveda, Biodança, Dança Circular, Meditação, Musicoterapia, Naturopatia, Osteopatia, Quiropraxia, Reflexoterapia, Reiki, Shantala, Terapia Comunitária Integrativa e Yoga à Política Nacional. Brasília, DF: Ministério da Saúde, 2017. Disponível em:

<a href="https://bvsms.saude.gov.br/bvs/saudelegis/gm/2017/">https://bvsms.saude.gov.br/bvs/saudelegis/gm/2017/</a> prto849\_28\_03\_2017.html>. Acesso em: 23 dez. 2022.

BRASIL. *Portaria n° 702, de 21 de março de 2018.* Altera a Portaria de Consolidação n.2/GM/MS, de 28 de setembro de 2017, para incluir novas práticas na Política Nacional de Práticas Integrativas e Complementares – PNPIC. Brasília, DF: Ministério da Saúde, 2018. Disponível em:

<a href="https://bvsms.saude.gov.br/bvs/saudelegis/gm/2018/">https://bvsms.saude.gov.br/bvs/saudelegis/gm/2018/</a> prto702\_22\_03\_2018.html>. Acesso em: 23 dez. 2022.

CAMARGO, B. V.; JUSTO, A. M. IRAMUTEQ: um software gratuito para análise de dados textuais. *Temas em Psicologia*, Ribeirão Preto, v. 21, n. 2, p. 513-518, 2013. Disponível em: <a href="http://pepsic.bvsalud.org/pdf/tp/v21n2/v21n2a16.pdf">http:// pepsic.bvsalud.org/pdf/tp/v21n2/v21n2a16.pdf</a>>. Acesso em: 23 jun. 2020.

COELHO, M. T. A. D.; CARVALHO, V. P.; PORCINO, C. Representações sociais de doença, usos e significados atribuídos às Práticas Integrativas e Complementares por universitários. *Saúde em*  *Debate*, Rio de Janeiro, v. 43, n. 122, p. 848-862, 2019. DOI: 10.1590/0103-1104201912215

FRANCO, A. L. S. et al. Racionalidades em saúde: sistemas médicos e práticas alternativas considerações sobre o papel desse componente curricular na formação dos estudantes do Bacharelado Interdisciplinar em Saúde. In: COELHO, M. T. A. D.; TEIXEIRA, C. F. (Org.). *Problematizando o campo da saúde*: concepções e práticas no Bacharelado Interdisciplinar. Salvador: EDUFBA, 2017. p. 135-148.

GUIMARÃES, M. B. et al. As Práticas Integrativas e Complementares no campo da saúde: para uma descolonização dos saberes e práticas. *Saúde e Sociedade*, São Paulo, v. 29, n. 1, e190297, 2020. DOI: 10.1590/S0104-12902020190297

MEDEIROS, N. T. et al. Complementary and Integrative Medicine in academic health education. *Complementary Therapies in Medicine*, Edinburgh, v. 63,102785, 2021. DOI: 10.1016/j.ctim.2021.102785

NASCIMENTO, M. C. et al. A categoria racionalidade médica e uma nova epistemologia em saúde. *Ciência & Saúde Coletiva*, Rio de Janeiro, v. 18, n. 12, p. 3595-3604, 2013. Disponível em: <https://www.scielo.br/j/csc/a/pc64qpYhDGL9Q DZp9DnJWzc/?lang=pt>. Acesso em: 22 jun. 2020.

NGUYEN, J. et al. Use and interest in complementary and alternative medicine among college students seeking healthcare at a university campus student health center. *Complementary Therapies in Clinical Practice*, Amsterdam, v. 24, p. 103-108, 2016. Disponível em: <a href="https://pubmed.ncbi.nlm.nih">https://pubmed.ncbi.nlm.nih</a>. gov/27502809/>. Acesso em: 23 jun. 2020.

RADI, R. et al. Attitudes and barriers towards using complementary and alternative medicine among university students in Jordan. *Complementary Therapies in Medicine*, Amsterdam, v.41, p.175-179, 2018. Disponível em: <a href="https://pubmed.ncbi.nlm">https://pubmed.ncbi.nlm</a> nih.gov/30477835/>. Acesso em: 23 jun. 2020.

RUELA, L. O. et al. Implementação, acesso e uso das Práticas Integrativas e Complementares no Sistema Único de Saúde: revisão da literatura. *Ciência & Saúde Coletiva*, Rio de Janeiro, v. 24, n. 11, p. 4239-4250, 2019. Disponível em: <a href="https://www.scielo.br/j/csc/a/DQgMHT3WqyFkYNX4rRz">https://www.scielo.br/j/csc/a/DQgMHT3WqyFkYNX4rRz</a> X74J/?lang=pt>. Acesso em: 22 jun. 2020. SAHA, B. L. et al. General perception and selfpractice of complementary and alternative medicine (CAM) among undergraduate pharmacy students of Bangladesh. *BMC Complementary and Alternative Medicine*, London, v.17, n.1, p.314, 2017. Disponível em: <https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC5471669/>. Acesso em: 23 jun. 2020.

SANTOS, B. S. *Construindo as Epistemologias do Sul*: para um pensamento alternativo de alternativas. Ciudad Autónoma de Buenos Aires: CLACSO, 2018. (Antologias do Pensamento Social Latino-americano e Caribenho, v.1).

SANTOS, J. E. R. et al. Estudar e trabalhar: motivações e dificuldades de graduandos de Enfermagem. *Revista Nursing*, São Paulo, v. 23, n. 263, p. 3678-3682, 2020. Disponível em: <a href="https://www.revistanursing.com.br/">https://www.revistanursing.com.br/</a> index.php/revistanursing/article/view/659/646>. Acesso em: 12 out. 2021.

SILVA, A. L. P. et al. Percepções sobre homeopatia na perspectiva de discentes dos cursos de saúde de um centro universitário de Recife-PE. *Revista SUSTINERE*, Rio de Janeiro, v. 9, n. 1, p. 323-337, 2021. Disponível em: <a href="https://www.epublicacoes.uerj.br/index.php/sustinere/article/view/54738/38604">https://www.epublicacoes.uerj.br/index.php/sustinere/article/view/54738/38604</a>>. Acesso em: 14 dez. 2022.

VERAS, R. M. et al. A formação em regime de ciclos do Bacharelado Interdisciplinar em Saúde da Universidade Federal da Bahia e a proposta de Educação Interprofissional. *Avaliação: Revista da Avaliação da Educação Superior (Campinas)*, Sorocaba, v.23, n.2, p.294-311, 2018. DOI: 10.1590/S1414-40772018000200002.

### **Contribution of the Authors**

Carvalho participated in the study design; collected, processed, analyzed, and interpreted data; wrote and approved the final version of the manuscript. Coelho conceived the design and guided all stages of the research; contributed to data analysis and interpretation; reviewed and approved the final version of the manuscript. Barreto do Carmo contributed to data interpretation; participated in the critical review and approved the final version of the manuscript.

Received: 12/29/2022 Resubmitted: 04/17/2023 Approved: 11/18/2023