

INTEGRATIVE AND COMPLEMENTARY PRACTICES BY ELDERLY PEOPLE

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ABSTRACT: The prevalence of Integrative and Complementary Practices (ICPs) and factors associated with these practices among elderly people in a municipality in the south of the state of Mato Grosso, Brazil, is identified and analyzed. Current transversal population-based analysis was undertaken with 115 elderly people of a municipality in the mid-western region of Brazil. Data were collected in the homes of elderly people by a half-structured questionnaire. A multiple logistic regression model was employed. ICPs were reported by 57.39% (n=66) of elderly people and was significantly higher among females (PR=1.18; CI95% 1.18 – 1.19). Medicinal herbs was the most common ICP used (63.44%). Results show elderly people make use of ICPs, especially phytotherapy, and the practice is associated with females. ICPs' enlargement and diversification is required to contribute towards the integral care of the population.

KEY WORDS: Complementary therapies; Elderly people, Prevalence.

USO DE PRÁTICAS INTEGRATIVAS E COMPLEMENTARES POR IDOSOS

RESUMO: O objetivo deste estudo foi identificar a prevalência de uso das Práticas Integrativas Complementares (PICs) e os fatores associados a esta prática entre idosos de um município do sul de Mato Grosso. Trata-se de um estudo transversal de base populacional, realizado com idosos de um município da região Centro-oeste do Brasil. Participaram do estudo 115 idosos. Os dados foram coletados nos domicílios dos idosos por meio de questionário semiestruturado. Foi utilizado um modelo de regressão logística múltipla. O uso de PICs foi relatado por 57,39% (n= 66) dos idosos e foi significativamente superior entre as mulheres (RP = 1,18; IC95% 1,18 – 1.19). A PIC mais utilizada foi plantas medicinais (63,44%). Conclui-se que os idosos utilizam as PICs, sobretudo na forma de fitoterapia, e que esta prática está associada ao gênero feminino. Os resultados indicam a necessidade de ampliação e diversificação das PICs a fim de contribuir para um atendimento integral à população.

PALAVRAS-CHAVE: Terapias complementares; Idoso; Prevalência.

INTRODUCTION

Integrative and Complementary Practices (ICPs) are therapeutic systems, practices and resources which have been labeled as complementary/alternative medicine by the World Health Organization¹. Health practices concerned involve an approach that employs natural mechanisms for disease prevention and health recovery². ICPs strengthen the principles and guidelines of the Brazilian National Health System (SUS) since it promotes health care based on integrated assistance through humane and qualification of care, focused on the person's lifestyle, emotional and spiritual status and social relationships³.

Current practices are due to debates worldwide on the abusive use of technologies within the context of health segment and the iatrogenic effects that medicines and medical interventions may cause⁴. In 2006, the Brazilian Ministry of Health approved the National Policy of Integrative and Complementary Practices (PNPIC), whilst in 2017 and 2018 new practices were included to the above mentioned policy^{4,5,6}. At present, PNPIC comprises guidelines and institutional responsibilities for the establishment/adaptability of traditional Chinese medical activities and services/acupuncture, homeopathy, medicinal herbs, phytotherapy, anthroposophic medicine, artherapy, ayurveda, biodance, circular dance, meditation, musicotherapy, naturopathy, osteopathy, chiropractic, reflexotherapy, reiki, shantala, integrative community therapy, yoga, aromatherapy, apitherapy, bioenergetics, familial constellation, chromotherapy, geotherapy, hypnotherapy, imposition of hands, anthroposophic /anthroposophy medicine applied to health, ozone therapy, floral therapy and social thermalism /crenotherapy^{1,5,6}. The state of Mato Grosso ranks 17th with regard to ICP supply when compared with other Brazilian states⁷.

Physiological, psychological and social changes caused by aging makes the care of people within this phase a challenging task for health professionals and for the health system. In fact, the social group under analysis requires specific and unique care for which health policies are still preparing to adopt⁸. Strategies for disease prevention and health promotion specifically

addressed to the elderly are essential for the construction of healthy aging, decrease in hospitalization costs and excessive use of medicines. Within such a perspective, ICPs contribute towards the control of arterial pressure, pain killing, enhancement of a healthier mood, better body equilibrium and improvement of self-esteem of the elderly, within a healthier aging stance⁹.

Analysis of ICP profile and use may contribute towards the elaboration of strategies for the widening and strengthening of practices, especially among elderly people who are more prone to have non-transmittable chronic diseases and to changes which are characteristics of aging and senescence process⁸. However, there are still few population studies on ICPs at the national and international levels. Current paper identifies the prevalence of the use of ICPs and factors associated to the practice among elderly people in a municipality in the south of the state of Mato Grosso, Brazil.

METHODOLOGY

Current analysis is a segment of a wider survey called The Use of Integrative and Complementary Practices by Health Professionals and Users of SUS in a municipality in the state of Mato Grosso, Brazil. The population and transversal research comprises adults (20-59 years olds) and elderly people (≥ 60 years old) who live in the urban area of Rondonópolis MT Brazil. It includes 115 elderly people who participated in the population survey. Institutionalized elderly people, individuals who could not answer the questionnaire due to speech and hearing difficulties, and bed-ridden people were excluded.

A reference population of 119,935 individuals, or rather, people over 20-year-old living in the urban area, with a 50% unknown prevalence, was taken into consideration for sampling. The above rate is used when prevalence of the variable under analysis is unknown, at 95% reliability level and 5% sampling error. Sampling process was performed by conglomerates divided into two stages, namely census and home sectors. The former comprised 37 census sectors with proportional probability to size, expressed by the number of homes in each, following methodology by the Brazilian Institute for

Geography and Statistics (IBGE)¹⁰. The latter comprised a systematic sampling of homes in each census sector, based on previously given home lists. In the case of homes with more than one person at the instance of data collection, a draw with randomized numbers was performed.

Data were collected between February and March 2018 by home interviews through a previously tested half-structured questionnaire. Researchers were trained to approach participants and they filled the form to standardize data collection. A pre-test with 20 persons in non-sampled census sectors was undertaken for the study. Each participant was instructed on the aim of the research, with a clear idea that participation is voluntary. The researcher read each question on the form in a loud voice and registered responses within the standardized way (following the sequence of questions, putting an 'x' to close responses and a literal transcription to open responses), following training.

The research's dependent variable was the employment of self-reported ICPs comprising the 2017 PNPIC with the following modalities: acupuncture, homeopathy, medicinal herbs and phytotherapy, social thermalism/chrenotherapy, anthroposophic medicine, artherapy, ayurveda, biodance, circular dance, meditation, musicotherapy, naturopathy, osteopathy, chiropractic, reflexotherapy, reiki, shantala, integrative community therapy and yoga⁵. Independent variables were gender, schooling, marital status, self-confessed skin color, work, income (2018 minimum salary of R\$ 954,00), health insurance, hospitalization during the previous year (12 months prior to data collection), urgency/emergency service during the previous year (12 months prior to data collection), use of Family Health Strategy (ESF), regardless of periodicity, monthly visit of the Community Health Agent (ACS), use of medicine during the previous 15 days prior to data collection.

Data were digitalized twice and stored in a database within Microsoft Excel 2007. Databases were compared and validated by Epi Info 7.2.1. After correction, final database was obtained. The program was also employed as a tool for data treatment by simple descriptive statistics with the generation of absolute frequencies. Since dependent variables has only two rates, the use or not of ICPs, or rather, the dichotomy variable,

required adjustment of multiple logistic regression model to verify possible associations with independent variables at 5% significance level and 95% reliability interval (IC). Software R was employed for analysis.

Current study was approved by the Committee for Ethics in Research of the Universidade Federal de Mato Grosso (n. 2.354.295). All ethical aspects for research with human beings were complied with, following Resolution 466/2012. All participants signed the Free Consent Term.

RESULTS

Most elderly in current survey were males (n=78; 67.83%), with up to 8-year schooling (n=78; 67.83%), with partner (n=61; 53.04%), white (n=56; 48.69%), unemployed (n=91; 79.13%) and an income of up to two minimum wages (n=80; 69.57%). Most participants did not seek urgency service (n=74; 64.35%); they were not hospitalized (n=94; 81.74%) during the previous year; they did not have any health insurance (n=79; 68.70%), and used ESF services (n=82; 71.30%); they did not have home visits by ACS (n=63; 54.78%). Further, 84.35% (n=97) of participants used some type of medicine during the previous 15 days (Table 1).

Prevalence of ICPs by the population under analysis reached 57.39% (n=66), with a higher rate among females (64.1%), with up to 8-year schooling (62.8%), self-reported black skin colored (66.6%), hospitalized during the previous year (66.6%), with health insurance (69.4%), received ACS home visits (63.5%) and used some sort of medicine during the previous 15 days (60.8%) (Table 1).

Table 1. Socio-demographic characteristics, use of health service and prevalence of ICPs use by elderly people. Rondonópolis, MT, Brazil, 2018. n = 115

Variables	N	%	Prevalence of ICPs use
Gender			
Male	78	67.83	43.3
Female	37	32.17	64.1
Schooling			
Up to 8 years	78	67.83	62.8
More than 8 years	37	32.17	45.9
Marital status			
With partner	61	53.04	59.0
Without partner	54	49.96	55.5
Skin color			
White	56	48.69	58.93
Brown	59	43.48	54
Black	9	7.83	66.67
Work			
Yes	24	20.87	54.2
No	91	79.13	58.2
Income			
Up to two minimum wages	80	69.57	58.7
More than two minimum wages	35	30.43	54.3
Urgency in previous year			
Yes	41	35.65	53.6
No	74	64.35	59.4
Hospitalization in previous year			
Yes	21	18.26	66.6
No	94	81.74	55.3
Health Insurance			
Yes	36	31.30	69.4
No	79	68.70	51.8
ESF			
Yes	82	71.30	57.3
No	33	28.70	57.6
ACS visits			
Yes	52	45.22	63.5
No	63	54.78	52.4
Use of medicine			
Yes	97	84.35	60.8
No	18	15.65	38.8

Table 2 gives result of logistic regression analysis. Use of ICPs by elderly people has been associated with females (RP = 1.18; IC95%: 1.18 – 1.19).

Table 2. Association between use of ICPs, socio-demographic variables and health services used by elderly people. Rondonópolis, MT, Brazil, 2018

Variables	Gross PR (CI95%)	Valor de <i>p</i> *	PR ajustada (CI95%)	Valor de <i>p</i> *
Gender				
Male	1.00			
Female	1.17 (1.07- 1.32)	0.119	1.18(1.18 -1.19)	0.026
Schooling				
Up to 8 years	1.05 (0.89-1.10)	0.092	**	
More than 8 years	1.00			
Marital status				
With partner	1,03 (0.86-1.22)	0.453	**	
Without partner	1.00			
Skin color				
White	1.11 (1.05-1.23)	0.527	**	
Brown	1.00			
Black				
Work				
Yes	0.83 (0.83-1.43)	0.216	**	
No	1.00			
Income				
Up to two minimum wages	1.00			
More than two minimum wages	1.04 (0.09-1.57)	0.737	**	
Urgency in previous year				
Yes	1.00			
No	1 1.27 (0.59 -2.73)	0.255	**	
Hospitalization in previous year				
Yes	1.00			
No	0.62(0.23-1.67)	0.176	**	
Health Insurance				
Yes	0.47 (0.21-1.09)	0.110	**	
No	1.00			
ESF				
Yes	1.01(0.45-2.29)	0.823	**	
No	1.00			
ACS visits				
Yes	0.63 (0.3-1.34)	0.151	**	
No	1.00			
Use of medicine				
Yes	0.41(0.15-1.15)	0.153	**	
No	1.00			

PR: ratio of prevalence; CI95%: 95% reliability interval; *logistic regression; **removed from analysis due to loss of statistical significance for adjusted analysis at $p \geq 0.05$.

Table 3 shows medicinal herbs (n=59; 63.44%), homeopathy (n=16; 17.20%) and phytotherapics (n= 10; 10.75%) were the most employed.

Table 3. ICPs used by elderly people in Rondonópolis, MT, Brazil, 2018

ICPs	n	%
Medicinal herbs	59	63.44
Homeopathy	16	17.21
Phytotherapeutic Medicine	10	10.75
Acupuncture	5	5.39
Integrative & community therapy	1	1.07
Thermalism	1	1.07
Yoga	1	1.07
Total	93	100

DISCUSSION

ICPs may improve the life quality of elderly populations since their use stimulates the development of a healthy life style, prevention and treatment of diseases and promotes the elderly population's active participation to cope with diseases⁹. The prevalence of ICPs by the elderly in Rondonópolis reached 57.39%. A home research in Saudi Arabia identified 42.8% of elderly people using ICPs¹¹. Transversal cohort research employing data retrieved from Health Interview Survey in the USA reached a prevalence of 26.3% in the elderly¹², whilst a national Australian survey revealed that 24.9% of the elderly practice some type of complementary medicine¹³. In Montes Claros MG Brazil, the prevalence of ICPs by elderly people reached 14.5%, although in this survey not all ICPs approved by the 2017 PNPIC were included, such as phytotherapy and medicinal herbs. The above may have contributed towards a low adhesion to alternative therapies¹⁴.

Brazilian studies on ICPs with elderly populations are rare and more in-depth research in the area are needed since they contribute towards their lifestyle and the strengthening of PNPIC. ICPs should be acknowledged as legitimate forms of care, but they require due capacitation and engagement of health professionals and managers for the application⁴.

Current research determined the epidemiological profile of ICP-users among the elderly population. Cruz and Sampaio demonstrated that most of the population who uses ICPs are females within the 53 – 59- year-old bracket¹⁵. Steel et al. verified that females, people with chronic diseases, without health insurance,

high schooling level and those who were not seeking jobs were those with the highest prevalence rates in complementary medicine¹³. In their study, Elolemy and Albedah stated that ICP users were mostly females, housewives and illiterate people¹¹. The reasons for the use of alternative therapy are complex and include the costs of traditional therapy, more holistic approach to treatment and dissatisfaction with current therapy, besides socio-demographic factors¹⁶.

In current study, there was an association between ICPs and females, corroborated by results of several research works 13,15,16,17. According to the Department of Basic Care, during 2016, there was a greater adhesion of females than of males with regard to ICPs offered by SUS¹⁸. The use of popular practices for and by females is related to the awareness that these practices provide with regard to their lifestyle and reveal the importance they give to self-care¹⁹. Consequently, it is highly relevant that gender difference is taken into account in activities for health promotion and disease prevention within the population's perception on the health-disease process²⁰.

Medicinal herbs were the most used ICPs by the population under analysis. In the USA, herbs, chiropraxis and massage were the most sought after alternative medicines²¹. In São Caetano do Sul SP Brazil, the most used alternative and complementary methods were acupuncture, homeopathy and phytotherapy²², whilst self-massage and tai chi chuan were most practiced in the Federal District²³.

Current research's limitations comprised self-reported variables which depend on memory and may lead towards sub-estimation or super-estimation of usages and exploratory variables, although it is a valid procedure employed in several scientific investigations. High points of current research include population base and strictness in data collection.

CONCLUSION

Current research revealed the high prevalence in ICPs usage among elderly people, especially by females. Medicinal herbs were the most frequently used ICPs. Data showed the need for broadening and diversification

of ICPs, making necessary the strengthening of PNPIC and the promotion of an integral care for the health of the population.

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