Benedito Rodrigues da Silva Neto
(Organizador)

Alicerces e Adversidades das Ciências da Saúde no Brasil 2

Atena Editora
Ano 2019

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APRESENTAÇÃO

A coleção “Alicerces e Adversidades das Ciências da Saúde no Brasil 2” é uma obra composta de quatro volumes que tem como foco as bases e as interfaces multidisciplinares dos trabalhos desenvolvidos em diversos locais do país que compõe os diversos capítulos de cada volume. De forma categorizada os trabalhos, pesquisas, relatos de casos e revisões tentarão demonstrar ao leitor os princípios de cada área da saúde assim como suas peculiaridades.

Nesse primeiro volume apresentamos de forma clara diferentes estudos desenvolvidos em várias instituições de ensino e pesquisa do país. Os capítulos transitaram principalmente entre fundamentos da farmacologia, nutrição, educação e pesquisa básica abordando: Uso da maconha, hiperêmese gravídica, Saúde Pública, Diabetes Mellitus, Qualidade De Vida, Idoso, Tratamento Farmacológico, Câncer de boca, Doença celíaca, Educação em Saúde, Formação em Saúde, *Toxoplasma gondii,* Nefrose lipoide, Atividade antioxidante, interação medicamentosa, Ansiedade, Terapia Cognitivo-Comportamental, Reprodução Humana, Glicose sanguínea, Doenças crônicas não transmissíveis e Atenção farmacêutica.

A fundamentação, e o estabelecimento de conceitos e padrões básicos é muito importante na ciências da saúde uma vez que novos estudos e pesquisas tanto de revisão quanto experimentais sempre se baseiam em técnicas e fontes já publicadas. Assim, destacamos a relevância deste material com informações recentes sobre diversas temáticas da saúde.

Deste modo a obra “Alicerces e Adversidades das Ciências da Saúde no Brasil 2” oferece ao leitor teoria bem fundamentada aliada à resultados práticos obtidos pelos diversos grupos de pesquisa em saúde do país, que arduamente desenvolveram seus trabalhos aqui apresentados de maneira concisa e didática. A divulgação científica de qualidade, em tempos de fontes não confiáveis de informação, é extremamente importante. Por isso evidenciamos também a estrutura da Atena Editora capaz de oferecer uma plataforma consolidada e confiável para estes pesquisadores apresentarem e divulguem seus resultados.

Desejamos à todos uma excelente leitura!

Benedito Rodrigues da Silva Neto

SUMÁRIO

CAPÍTULO 17

PREVALÊNCIA DE POLIFARMÁCIA EM USUÁRIOS DE UM SERVIÇO DE SAÚDE DE UMA CAPITAL DO NORDESTE BRASILEIRO

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RESUMO: Objetivo: avaliar a frequência de polifarmácia em pacientes assistidos pela Estratégia de Saúde da Família em uma capital do nordeste brasileiro (São Luís, Maranhão, Brasil). **Metodologia:** estudo do tipo transversal, focado em atingir resultados terapêuticos com melhores custo-efetividade para a saúde dos participantes. A amostra foi composta por 171 pacientes, de ambos os sexos, maiores de 18 anos e portadores de hipertensão arterial e/ou diabetes mellitus, do tipo 2, vinculados a uma Unidade Básica de Saúde (UBS) da capital em estudo supracitada. Buscou-se avaliar a prevalência de polifarmácia e seus fatores associados. **Resultados:** esse estudo contou com 11,11% (19/171) de usuários polimedicados, com predomínio do sexo feminino 73,68% (15/19), destacando-se ainda os sedentários (78.95%) e os que não se consideram saudáveis (73.68%). Obteve-se resultados estatisticamente significativos para as variáveis situação conjugal (*p-valor* 0.045) e diabético (*p-valor* < 0.001). Com relação aos medicamentos, destacaram-se aqueles referentes ao sistema cardiovascular (27,05%). **Conclusão:** A prevalência de polifarmácia encontrada neste estudo foi considerada baixa em comparação com outros estudos; no entanto, conhecer o perfil da comunidade usuária da polifarmácia nos permite adequar as ações de saúde existentes e desenvolver novas, a fim de melhorar os indicadores de morbimortalidade, incapacidade e qualidade de vida dos pacientes com doenças crônicas não transmissíveis por meio de medicação.

PALAVRAS-CHAVE: Atenção farmacêutica. Diabetes. Hipertensão. Atenção primária à saúde.

PREVALENCE OF POLYPHARMACY IN USERS OF A HEALTH SERVICE IN A

ABSTRACT: Objective: to evaluate the frequency of polypharmacy in patients with hypertension and /or diabetes who are assisted by the Family Health Strategy in a capital of the Brazilian northeast (São Luís, Maranhão, Brazil). **Methodology:** the study is of the transverse type, focused on achieving more cost-effective therapeutic results for the participants' health. The sample was composed of 171 patients, both men and women, over 18 years of age and with arterial hypertension and/or diabetes (type 2), linked to a Basic Health Unit. **Results:** This study had 11,11% (19/171) of polymedicated users, with a predominance of females 73.68%, standing out the sedentary ones (78.95%) and those who did not consider themselves healthy 73.68%. We obtained statistically significant results for the variables marital status (p-value 0.045) and diabetic (p-value <0.001). Regarding the medicines, the ones referring to the cardiovascular system were highlighted (27.05%). **Conclusion:** The prevalence of polypharmacy found in this study was considered low compared to other studies; however, knowing the profile of the community using polypharmacy allows us to adjust existing health actions and develop new ones, in order to improve indicators of morbidity and mortality, disability and quality of life of patients with chronic non-transmissible diseases using medication.
KEYWORDS: Pharmaceutical care. Diabetes. Hypertension. Primary health care.

INTRODUCTION

There are different conceptual trends in literature about what can be characterized as polypharmacy, in these, there is one common aspect, which is that polypharmacy is understood as the concomitant usage of multiple pharmacies by one individual. The condition of polypharmacy is classified in three (03) ways: light, moderate and acute, having the number of medicines being used as a quantitative standard. Knowing this, the light classification is defined with the use of two or three pharmaceutics, the moderate is the use of four to five and acute, the use of more than five medicines and defining polypharmacy purely by an arbitrary number of medicines, however, fails to acknowledge that the potential risk of adverse effects of medicines can vary widely. It is also known as appropriate or inappropriate (TROMBIM et al., 2016).

Not transmissible chronicle diseases such as arterial hypertension and mellitius diabetes, isolated or associated, justify the need of using multiple daily pharmaceutics, aiming to reach clinical and metabolic standards, reduce the negative impacts of the disease, prolong the patients' longevity and act in a better life quality of them. In this situation, the risk/benefit evaluation of polypharmacy reveals that these practices are a strategy of the pharmacological intervention as positives aspects to the user health, since well monitored and manipulated. It is important to highlight that polypharmacy do not has only negative points and that its positive impacts can be realized, as well as evaluated and sometimes are more important than negatives (TROMBIM et al.,

2016).

Having few studies evaluated polypharmacy in primary care and in public health, this study aimed to evaluate the frequency of polypharmacy in patients with systemic arterial hypertension and/or mellitus diabetes, assisted by the Family Health Strategy in a Brazilian northeast capital (São Luís, Maranhão, Brazil).

METHODS

Transversal development study, made at a Family Health Unity in a Brazilian northeast capital (city of São Luís, Maranhão State, Brazil). Part of the population of this study were attend to a Basic Health Unit quoted above, which belongs to a Family Health Strategy (FHS), diagnosed confirmed of Systemic Arterial Hypertension (SAH) and/or Mellitus Diabetes (MD), aged equal or superior to eighteen of medicine usage to diseases quoted above, without gender or ethnic distinction.

For the standard of polypharmacy prevalence on the Brazilian population a study was made, that shows a polypharmacy prevalence between 14,3% to 35,4% (Santos et al., 2013). The following estimative were used: total of registered people in registered in the single health system of the Family Health Strategy; polypharmacy prevalence in the Brazilian population: maximum of 32% (p); Sample error: 5% (e); Trust pause: 95% (Z). Thus, the calculated sample were 155, accessed by 5% for possible lost or refuses, totalizing 163 necessary participants for the sample, however, we obtained a final total of 171 participants.

All the users that must had attended the following criteria, were included: to have a confirmed diagnosis of SAH and/or MD and to be registered at FHS; be equal or older than 18 and to attend the Basic Health Unit regularly (at least once in a month).

As non-inclusion criteria, there are: cognitive incapacity that disable the comprehension and answer to the questionnaires; to be institutionalized (hospitalized, shelter or in privative state of freedom) at the moment of data collection by the questionnaire (script) application and pharmaceutics support.

The data collection was made through direct observation and the Script of Pharmaceutics Services proposed by the Caring Notebook from the Health Department (2014), adapted. The method had the following stages: invitation to participate in the study, study stage and situational analysis; and global health evaluation.

The actions occurred at Basic Health Unit and during the domiciliary visits, with the participation of the health team (medic, pharmaceutical, nurse and communitarian health agents) and the researchers. The interviews/visits were made respecting the routine from the communitarian health agents, aiming to systematize the activities.

The questionnaire was directed to investigate the following independent variables: gender, age, auto declared skin color, familiar income, schooling, engagement situation, exercise practices (at least 03 times/week), beer consume, smoking (was considered the use at least once last month), health auto perception, arterial

hypertension, mellitus diabetes, familiar antecedents of cardiovascular diseases, acute myocardial infarcts and regular medicine use. The dependent variable was polypharmacy.

About the hemodynamics, the arterial pressure was checked, obtained by two checks, made by only one evaluator (according to the Cardio Brazilian Society) (SOCIEDADE BRASILEIRA DE CARDIOLOGIA, 2013), using the calibrated mercury column aneroid sphygmomanometer and stethoscope, with a 5 minutes break between each measure at least and not using the auscultatory technic.

The medicine classification used was based in the first and third level of the Nordic Council on Medicine Anatomical Therapeutic Chemical (ATC) classification system (VIEIRA, CASSIANI, 2014; WORLD HEALTH ORGANIZATION, 2016).

All data were registered in number codified questionnaire, aiming to maintain the identity secret just as a way of the data organization while the tabulation (with double typing). The Ethics and Researches Committee of the Presidente Dutra Academic Hospital approved the study numbered 289.937 and had the financing by the Support for Researches Foundation (FAPEMA) – Research for the SUS: shared health management, FAPEMA Edictal 016/2013.

The database was always filled at the end of each domiciliary visit counting with the support of the software Microsoft Office Excel® (2013 version). The data analysis involved the descriptive statistics application, which for categorical variable were frequently relatives and absolutes and for regular variables were expressed as average and standard deflection. The diagnoses of normality were done with the Shapiro-Wilk Test, done with the support of statistics program Stata® (version 14). For the analysis of the associated polypharmacy facts was applied the Chi-square test. For the statistics results interpretation, in all tables and tests were adopted significance alpha level inferior to 0.05 and trust pause of 95%.

RESULTS

This study had the participation of 171 participants, both genders, average age of 60.54 (± 11,41) years old, auto-declared skin color as not white (85.38%), with 08 years of study (48.54%), with partners (52.05%), receiving less than 1 basic salary (59.65%) (Basic Brazilian Salary of R$ 957.00 – converted in nowadays euros prize is € 250,53. Base for the calculations: 1 € = 3,74 R$) (Table 1).

Variables	POLYPHARMACY		p-value[1]
	YES n (%)	NO n (%)	
Gender			0,576
Male	5 (26.32)	47 (30.92)	

Female	14 (73.68)	105 (69.08)	
Age group			0.416
<60 years old	7 (36.84)	71 (46.71)	
≥ 60 years old	12 (63.16)	81 (53.29)	
Auto declared skin color			0.878
White	3 (15.79)	22 (14.47)	
Not white	16 (84.21)	130 (85.53)	
Income			0.132
No income	2 (10.53)	3 (1.97)	
<1	12 (63.16)	90 (59.21)	
1 to 2	5 (26.32)	50 (32.89)	
>2	0 (0.00)	9 (5.92)	
Schooling			0.144
Never studied	7 (36.84)	27 (17.76)	
Until 8 years	7 (36.84)	76 (50.00)	
> 8 years	5 (26.32)	49 (32.24)	
Marital situation			**0.045***
Without partner	5 (26.32)	77 (50.66)	
With partner	14 (73.68)	75 (49.34)	

Table 1: Socio-demographic variables associated to polypharmacy in assisted users by one Health Family Strategy in a northeast Brazilian capital (São Luís), 2015.

1Test X^2, * Statistical significance p< 0,05.

About the health data, 84,80% are only hypertensive; 42,69% only diabetics and 27.49% have both. The majority does not present familiar antecedents for cardiovascular diseases (59,65%). And the health general auto perception showed that 56,14% does not consider themselves healthy (Table 2).

Variable	POLYPHARMACY		p-value[1]
	YES n (%)	NO n (%)	
Alcohol drinker			0.278
No	17 (89.47)	118 (77,63)	
Yes	2 (10.53)	34 (22,36)	
Smoker			0.355
No	18 (94.74)	133 (87.50)	
Yes	1 (5.26)	19 (12.50)	
Exercise Practice			0.837
No	15 (78.95)	123 (80.92)	
Yes	4 (21.05)	29 (19.08)	
Health auto-perception			0.102
No	14 (73.68)	82 (53.95)	
Yes	5 (26.32)	70 (46.05)	
Hypertension			0.201
No	1 (5.26)	25 (16.45)	

Yes	18 (94.74)	127 (83.55)	
Diabetes			**< 0.001***
No	2 (10.53)	100 (65.79)	
Yes	17 (89.47)	52 (34.21)	
Familiar Antecedents Cardiovascular Disease			0.741
No	12 (63.16)	90 (59.21)	
Yes	7 (36.84)	62 (40.79)	
Chronic Kidney Disease			0.798
No	15 (78.95)	116 (76.32)	
Yes	4 (21.05)	36 (23.68)	
Stroke			0.071
No	9 (47.37)	103 (68.21)	
Yes	10 (52.63)	49 (32,23)	
Myocardial Infarction			0.626
No	13 (68.42)	112 (73.68)	
Yes	6 (31.58)	40 (26.32)	

Table 2: Health conditions profile associated to polypharmacy in assisted users by one Health Family Strategy in a northeast Brazilian capital (São Luís), 2015.

1Test X^2, * Statistical significance p< 0,05.

About the use of medicines, those who belongs to the cardiovascular system represents the pharmacologic group of antihypertensive and diuretics were prevalent (classification ATC 1º and 3º level: C02; C07; C08; C09; C03) with 27,05%; followed by those who belongs to the alimentary and metabolic treatment, represented by the oral anti-diabetics (classification ATC 1º and 3º level: A10B) with 7,06%; the active in the central nervous system (SNC) represented by the anti-depressives (N06A); anti-convulsing (N03A); anti-psychotics and neuroleptics (N03A) and at last, the musculoskeletal actives system represented by the anti-inflammatory (M01) all these with 4,70% of the total use of medicine (Table 3).

Medicine group (ATC 1)	Pharmacological group	ATC 3rd level	n (%) Related to the group total ATC 1
C - Cardiovascular System	Antihypertensive and Diuretics	C02; C07; C08; C09; C03	23 (27,05)
	Antilipemic	C10	1 (1,17)
	Vasoprotectant and venotonic	C05B	1 (1,17)
A - Alimentary and metabolic treat	Anti-diabetics	A10B	6 (7,06)
	Antidiarrhoeal opioids (Antiemetic)	A04	1 (1,17)
	Antisecretors (Antiulcerous)	A02B	3 (3,53)
B- Blood and hematopoietic organs	Antiplatele agents and antithrombotic	B01; B02	2 (2,35)

C- Nervous system	Anti-depressive	N06A	4 (4,70)
	Anti-convulsing	N03A	4 (4,70)
	Antiparksonian	N04A	1(1,17)
	Antipsychotics and Neuroleptics	N05A	4 (4,70)
	Imidazopyridine (Non-Benzodiazepine)	N05C	1 (1,17)
	Antivertiginous	N07C	1 (1,17)
D- Antifungal-dermatological of systemic use	Antifungal	D01B	2 (2,35)
L-Immunomodulator and antineoplastic agents	Antineoplastic	L01	1 (1,17)
M- Musculoskeletal system	Antirreumatic (Anti-inflammatory action)	M01	1 (1,17)
	Anti-inflammatory	M01	4 (4,70)
	Muscular relaxant	M03	1 (1,17)
R- Respiratory system	Anti-histaminic	R06A	3 (3,53)
Others	Others	-	21 (24,70)
Total			**85 (100)**

Table 3: Medicine Anatomical Therapeutic Chemical classification system (1st level) and pharmacological (3rd level) of the used medicine by one Health Family Strategy in a northeast Brazilian capital (São Luís), 2015.

Font: The author himself; WHO, 2016; ATC, 2017.

The evaluation of the relation between polypharmacy and socio-demographic variables showed that 11.11% (19/171) participants use five or more medicines, predominant in the female gender (73.68%); age higher or equal to 60 years old (63.16%); auto-declared skin color as not white (84,21%); with partner (73,68%); income less than 1 basic salary (63,16%); prevail those who does not have schooling or have until 8 years of study (36,84%); This analysis obtained some significant statistical association (p-value 0.045) only for the situational engagement variable (Table 1).

About the health variables, verified that 73.68% of those who are using multiple medicines does not consider themselves healthy; does not drink (89.47%) and smoke (94.74%). Had the verification even bigger of sedentary people in this group (78.95%), highlighting for the arterial hypertension (94,74%), compared to mellitus diabetes (89.47%). Besides the missing of chronicle kidney diseases in both groups (78.95%) and (76.32%) respectively and myocardial infarcts (68.42%) and (73.68%) respectively. However, prevailing differences were detected on the studied group to the stroke variables, obtaining a bigger prevalence of poly-medicine usage (52.63%) (Table 2).

DISCUSSION

The prevalence of polypharmacy observed in this present study (11.11%) was similar Nascimento et al. (2017) and to that of primary care in Germany (10%) (GRIMMSMANN, HIMMEL, 2009) and below 20.8% in adults primary care in Scotland (GUTHRIE *et al.*, 2015). Studies on polypharmacy in primary health care, including the general population, are scarce, and the incidence and prevalence of this phenomenon is strongly linked to multiple factors such like: social, economic, geographic; healthy situation; health auto-perception; intervention approach; interaction between the professional that prescripts and the patient; prescription quality; age; quantity of pathologies; marital state; income; schooling and auto-medication. All this factor can justify the fact this practice be characterized as a high impact around the world. Raising the chances to occur the inadequate medicine prescription, potentially unnecessary and dangerous for the user; precipitating possible adverse reactions and creating bigger wastes with non-pharmaceutics and pharmaceutics treatment (SALES, SALES, CASOTTI, 2017).

The polypharmacy has a relation with the risk raising and the seriousness of developing and adverse reaction to the medicine; negative medicinal interaction; cumulative toxicity; morbid-mortality raising; spent with health and loss of life quality (RILL, 2016). The poly-medication when done irrationally can end up in negative consequences to the treatment, for the public treasure and for the user safety (RIKER, SETTER, 2013). However, is worthy to register that besides what was quoted above, the polypharmacy when need, previously evaluating the risk/benefit, used rationally and monitored, contributes positively for the pathological control and for the better clinical state and raise of the user life quality (MARIN *et al.*, 2008).

Although most studies investigate polypharmacy in the elderly, the present study an important percentage among people under 60 years of age. In this way, these data need to be better understood to and qualify care in primary care.

When the effect of polypharmacy was tested in the socio-demographic variables was possible to find a statistically significant association (p-value 0.045) only for the marital situation. Nevertheless, there is a tendency of polypharmacy influence other variables, affecting even the treatment quality and the users lives that does not receive orientation and effective support from the health professionals and are not actives participants in the therapeutic process.

So, it is necessary to stimulate the pharmacological support to help directed orientations for the individual, the population e to the professionals involved at the caring and promoting health through actions like the rational use of medicines; adverse reactions; the collateral effects; the possible drug interaction; the promotion and following up the therapeutic adhesion and effective articulations of inter-subject in developed health in this scenario (VIEIRA, CASSIANI, 2014).

The active and positive familiar participation in the procedure referred to the caring

and pharmacological treatment and non-pharmacological is essential and represents a difference at the treatment results. Just as those who are using multiple medicines and suffer of cognitive deficit must have the family support aiming to remember then to use the medicines and help the treatment adhesion and It is important to register that according to the literature, the majority of the researches point that being married (to have a partner) represents a factor of harm protection and collaborates to bigger adhesion taxes of the treatment (ALMEIDA *et al*., 2017).

The way how the patient perceives his or her mental state has a direct relation with the ways him or her face questions of auto-care and with their attitudes related to health and adhesion of the medicinal and non-medicinal treatment (CONFORTIN, GIEHL, ANTES, 2015). Some studies associated that the negative health auto-perception weakens the practices of auto-caring and correct attitudes in the treatment, what complicates the clinical condition and collaborate to development of new harms to the health.

The health perception is a very useful instrument to personal evaluations in researches about health profile data collection, especially about the need of medicine as the most used resources on diseases treatment and represents a good indicator of the population health (CONFORTIN, GIEHL, ANTES, 2015). In the population are using multiple medicines does not consider themselves healthy is consistent because it is obvious the connection between health problem and use of medicines. This technique is useful, even, for the preparation and application of health strategies that may help the interventions pointing to a positive health perception and promotion of strategies that supports the people health quality, especially those who are poly-medicated.

The study analysis presented a statistically significant result (p-value<0,001) for the diabetes variable, obtained in comorbidity evaluations and pharmaceutics therapy data associated to polypharmacy among the research's patient. This result is in line with other and coherent about the non-transmissible chronicle diseases epidemiological profile in Brazil, where diabetes is recognizing as an important public health problem with relevant biopsychosocial impacts (SCHMIDT *et al*., 2011) and whose control and treatment presuppose the use of various medications. However, one of the limitations of this work refers to the analyzed as the concomitant use of multiple drugs (concept of polypharmacy), without taking the checked the reasons for the prescription of the medicinal products, in order to enable the evaluation of the of the use of each medicinal product.

The majority of the population using medicines that have an action on the cardiovascular system (TAC1-C) and alimentary and metabolic treat (TAC1-A) like antihypertensives and oral anti-diabetics observed in this investigation is a reflex of the sample distribution which is basically formed by porters of both diseases. Other pharmacological groups also appear distinguished in this study, the anti-depressives; the anti-convulsing; the antipsychotics and neuroleptics and anti-inflammatory.

Medicines that belong to the list of drugs potentially inappropriate for use in the elderly, according to Beers criterion (AMERICAN GERIATRICS SOCIETY, 2015).

The Beers criterion is an important health care for the elderly population and should be incorporated into the (medical records) to support the prescribing process and to identify situations that impair the patient's safety or that non-pharmacological measures may be more appropriate (AMERICAN GERIATRICS SOCIETY, 2015).

In a research done with elders in Goiânia (n=418) that obtained a bigger participation of the female gender very aged and a polypharmacy prevalence of 28% were detected similar prevalence to those found in the actual research about the use of medicines and its classification about the following results: cardiovascular (49,2%), alimentary and metabolic treat (18.0%) and nervous system (12.2%) (PAIVA *et al.*, 2014).

The expressive polypharmacy prevalence can be configured as a phenomenon really perceived in the communities and independent hospitals of the location and depend on socioeconomic aspects, cultural, psychological and the installed diseases quantitative. For instance, a study done in Barbacena/MG obtained 32,4% of polymedicated (≥ 5 medicines) for cardiovascular pathologies (PAIVA *et al.*, 2014). In Santa Caratina, in a studied of medicine use with 104 participants pointed 28,8% in a situation of polymedication (≥ 5 medicines) (GALATO, SILVA, TIBURCIO, 2010). In other case with 78 participants of SAH or MD listed in an FHS of Santo Ângelo city, in the State of Rio Grande do Sul, obtained 36,5% of polymedicated (AMES *et al.*, 2016). In São Paulo, a research about the use of medicine was done with 209 participants and obtained 46,4% of polymedicated (LUCCHETTI *et al.*, 2010).

In Curitiba, researchers analyzed the dietary consume, health state, population health condition and other standards in different neighborhood and observed the prevalence of 70% of less than 5 medicines used (1 to 4 drugs) daily and at Bahia, in the urban zone of Aiquara analyzed factors associated to polypharmacy in user attended by the local FHS and verified a prevalence of 55,1% of 272 participants in total and a 499 total medicines (classification ATC) (SALES, SALES, CASOTTI, 2017).

In Belém, authors studying polypharmacy and medicine interactions, evaluated 258 prescriptions of 85 interned patients and obtained an average value of 9,2 (DP± 3,75) drugs by patient, configuring polypharmacy. An epidemiological study promoted in urban sectors of the Brazilian northeast, pointed a prevalence of polymedication consume of 11% (Neves *et al.*, 2013).

In all these studies, about the medicine classifications was observed that the most highlighted in this polymedication scenario were those which acts is the cardiovascular system, diuretics, hypoglycemics and in few cases the psychotropics. The presence of these classifications in prescriptions evidences the need of therapeutic monitoring and general caring of this therapeutic resource, aiming to avoid undesirable events that may corroborate to leaving the treatment or to non-adhesion to it (RAMOS *et al.*,

2016).

The more complex is the prescription the bigger are the chances of having problems during its execution, it is necessary to stimulate moments of reflection by multiple looking that may be possible to discuss and adopt actions to rational medicine use to stimulate the correct prescription, functional and based not only on patient clinics, but also in socioeconomics and psychosocial factors originated of each situation is the user. This attitude can collaborate to make the multiprofessional in health field teamwork stronger, articulated and more effective. As important as the education stimulation by the prescriber, the augment of health services, the pharmacoepidemiological study and the adoption of measures about pharmacological assistance that fit to real and preponderant demands of the individual and or assisted communities (NEVES *et al*., 2013).

This research's participant population is under medicine influence and need to be under active medicinal monitoring to do regular evaluations of polymedicated health and thus, do, always it is necessary, the interventions about the adequate doses, how to and time to use, taking away and/or substitutions of actives, aiming to reach the hoped results and bring more rationality and safety to the use. In this pharmaceutics process, the most indicated to support the multiprofessional heath team involved in the caring of the user with associated pathologies and that's why the use of multiple medicines (polypharmacy) for using effectively and capably to guarantee that the medicines present good performance and the results of the therapeutic plan be reached efficiently and with quality without any great harm for the user, in case it happens.

Moreover, about this, it is possible to verify in literature works that defend the opportune idea of needing to develop strategies to strengthen the pharmaceutics actuation at clinical field, social and educational, developing actions based in science and safe, focusing on the patient and his/her major needs, filling the lack of information, overall about medicine, because when used correctly configure an protection element and a strong ally in the treatment, but, if used irrationally can present a threat to the user health and a fragility in the therapeutic plan.

Finally, this study has limitations, for example the sample size and the regionalism; although, all information obtained in this research are relevant and serve as base to trace new actuations plans of the multiprofessional team competently and that answer positively the need of major health in the assisted population.

CONCLUSION

The prevalence of polypharmacy found in this study was considered low compared to other studies; however, knowing the profile of the community using polypharmacy allows us to adjust existing health actions and develop new ones, in order to improve indicators of morbidity and mortality, disability and quality of life of

patients with chronic non-transmissible diseases using medication.

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