

Clinical pharmaceutical services in primary health care of the Federal District: Performance frequency and conditioning factors

Débora Santos Lula Barros^{1*}, Dayde Lane Mendonça da Silva², Silvana Nair Leite³

¹Secretaria de Estado de Saúde do Distrito Federal, Brasília, Brazil, ²Universidade de Brasília, Campus Universitário Darcy Ribeiro, Curso de Farmácia, Brasília, Brazil, ³Universidade Federal de Santa Catarina, Departamento de Farmácia, Florianópolis, Santa Catarina, Brazil

Pharmaceutical services correspond to a set of actions that aim to guarantee the integral access and rational use of drugs by the population. In this sense, this study aimed to identify the frequency and conditioning factors for clinical services of primary care in the Federal District, Brazil. A quantitative cross-sectional study was conducted, in which 34 pharmacists were interviewed. The most frequently developed clinical pharmaceutical services were dispensing, pharmaceutical guidance for users, and technical-pedagogical activities for the health team. There is a greater frequency of operation of clinical services by pharmacists working in pharmacies with physical infrastructure, with better levels of adequacy, greater support from management and health staff, and the inclusion in Family Health Support Nucleus activities. Although the clinical pharmaceutical services in primary care are incipient, the study raises important data for the reorientation and qualification of these actions.

Keywords: Pharmaceutical care. Primary health care. Pharmaceutical services.

INTRODUCTION

The World Health Organization (WHO) points out, among the primary functions of the primary care pharmacist, clinical care for users with chronic non-communicable diseases (WHO, 2017). However, given the epidemiological conditions of the Brazilian population, attending to users with other diseases is also included in this level of health care. In this scenario, health programs are developed for the individuals of different life cycles (children, adolescents, adults, and the elderly); coping with chronic communicable diseases (such as tuberculosis and leprosy, for example); and for the care of other groups, such as smokers, among others (Araújo *et al.*, 2017a; Hughes *et al.*, 2017; Lui, Ha, Truong, 2017; Nascimento *et al.*, 2017).

The pharmacy, an elementary sector of basic health units, is one of the most accessed places by users of primary care, which makes it strategic for establishing bonds and offering pharmaceutical care actions and services to the user (Hazen *et al.*, 2016, Salter *et al.*, 2007, Tsuyuki, Berg, Khan, 2017).

According to the Pan American Health Organization (PAHO), primary care in pharmacy services is defined as a set of actions in the health system that seeks to ensure comprehensive, integrated and continuous attention to the needs and health problems of the population, both within the individual and collective scope (PAHO, 2013). In this context, drugs constitute an essential element, and the pharmacist, in association with other health professionals, should contribute to equitable access and rational use of these health technologies. To do so, these actions must be developed by or under the coordination of pharmacists.

Pharmaceutical services that are focused on supplying drug and other products to basic health units are classified as managerial (Araújo *et al.*, 2017a; Brazil, 2014, Pereira, Luiza, Cruz, 2015). Those dedicated to health promotion

*Correspondence: D. S. Lula-Barros. Secretaria de Estado de Saúde do Distrito Federal. CEP 72215-170 – Brasília. E-mail: debora.farmacia9@gmail.com. ORCID: <https://orcid.org/0000-0001-6459-7457>. S. N. Leite. ORCID: <https://orcid.org/0000-0002-5258-9684>

and the rational use of drugs, directly addressed to the user, the family and the community, and which are based on the model of practice called pharmaceutical care, are classified as clinical (Akerman, Freitas, 2017; Araújo *et al.*, 2017a).

Although Brazilian and international literature has been dedicating itself in recent years to the study of clinical pharmaceutical services, few investigations have been carried out in order to understand how they are conducted in the Brazilian Unified Health System (SUS). The lack of these data compromises the estimation of the quality of care, as well as it weakens the achievement of health planning. In this context, given the lack of a recent study in the area, this study aimed to identify the frequency of clinical pharmacy services in the primary care of the Federal District, comparing them to the periodicity of other pharmaceutical activities. Additionally, part of this research comprised the identification of conditioning factors for the execution of these services. According to Vargas (2016), objective and subjective conditions of work are conditioning factors for the services. According to this literature, the parameters of the objective conditions are: structure of the place and work environment, means and instruments of work, organization of work, among others. In turn, the subjective conditions are those related to the knowledge and experience of workers, among other aspects (Vargas, 2016). Although this latter dimension is important, in this analysis, priority was given to the study of objective conditions, investigating them according to the perspectives of primary care pharmacists.

MATERIAL AND METHODS

This is a quantitative, cross-sectional study with a descriptive and analytical design. For this, a total of 34 pharmacists were interviewed in the pharmacies of the basic health units of the Federal District.

Pharmacists with experience of working in primary care of the Federal District for a period equal to or greater than six months participated in the study. Professionals who had experiences in primary care, but who were allocated to other levels of health care were not interviewed.

The process of recruiting study participants began with a formal electronic request to the Health Department of the Federal District for the list of basic health units with pharmacists. These data were e-mailed by the Pharmacy Assistance Department of the secretariat in October 2016. Of the approximately 172 health units that make up the primary care establishments in the Federal District at the time of the study, only 49 had pharmacists. Only two of these units had pharmacists working for 20 hours, while the others had the professionals with a regime of 40 hours of work per week.

During the recruitment of the interviewees, it was not possible to establish telephone contact with two pharmacists, two refused to participate in the study, and seven were on medical leave. The calls were made on three different days, at different times. After the participants accepted to cooperate with the research, a visit to the corresponding basic health units was scheduled.

Initially, the study instrument was structured based on the document “*Cuidado farmacêutico na atenção básica – caderno 1*” (Pharmaceutical care in primary care – handbook 1) (Brasil, 2014). According to this reference, clinical pharmaceutical services are classified as: “Technical-pedagogical activities for the health team”, “Medication conciliation”, “Dispensation”, “Health education for the user”, “Pharmaceutical guidance for the user” and “Review of pharmacotherapy”. The pilot study was carried out, which consisted of a test to improve the research instrument. Four pharmacists were interviewed (10% of the interviewed population, randomly selected from four different basic health units), and from the information obtained with the interviewees, the instrument was re-adapted and attained its final version. The pilot study was conducted in October 2016 and the other data collection was processed from December 2016 to March 2017. The first phase of the interview had questions regarding the profile of the professional, and subsequently the questions measured the Likert-type frequency of performing pharmaceutical services with the categories “never”, “rarely”, “often”, and “always” (Frame 1).

The literature constantly discusses that pharmacists, because they are overloaded with other services, such as

management, do not have the time to perform clinical services. In this way, in addition to investigating the frequency of clinical services, the periodicity of other pharmaceutical services was also analyzed by this study for comparison purposes.

For the study of the objective conditions that could be conditioning factors for clinical services, the characteristics of pharmacy units and teams where the pharmacists worked were investigated (Table I).

The Pearson coefficient and p-value were calculated using GraphPad Prism® v7.0 to assess the association of conditioning factors and the performance of clinical pharmaceutical services.

The scalar variable “average frequency of clinical pharmacy services” (whose standard of answers varied from 0 to 3) was analyzed with the independent variables “number of servers in the pharmacy”, “participation of Family Health Support Nucleus (NASF) activities” (classification of 0 for negative answers and 1 for positive ones), “number of trainees and residents”, “level of adequacy of physical spaces” (classification from 0 to 10), and “level of support received by managers and health staff” (0 to 10) (Frame 1). These variables were identified in the interviews of the pilot study.

Analyses of statistical data involved descriptive statistical methods, which specified mean, standard deviation, and frequency of analytical process parameters. To do so, the data were processed with Statistical Package for Social Sciences (SPSS) software version 20.0.

The project was approved by the research ethics committee of FEPECS under opinion number 1,806,928, and all study participants signed the Informed Consent Term (ICT).

RESULTS AND DISCUSSION

The mean age of the pharmacists found in this study was 39 years old (standard deviation \pm 8.1). As shown in Table I, some characteristics of the respondents are similar to those pointed out by other studies, with predominance of professionals in the age group of 30 to 59 years of age, of the female gender, and having *lato sensu* postgraduate education (Araújo *et al.*, 2017a; Araújo *et al.*, 2017b; Costa *et al.*, 2017; Gerlack *et al.*, 2017).

TABLE I – Profile of primary care pharmacists in the Federal District, Brazil

Features	n	%
Gender		
Female	22	64.7
Male	12	35.3
Degree of education		
University graduate	7	20.6
Specialization	22	64.7
Master's degree	4	11.8
Doctorate degree	1	2.9
Type of higher education institution		
Private institution	5	14.7
Public institution	29	85.3
Professional courses		
English	19	55.8
Spanish	2	5.8
Typing	4	11.8
Basic computer course	2	5.8
Workload		
20 hours	3	8.8
40 hours	31	91.2
Other external work		
Yes	8	23.5
No	26	76.5
If yes, sector of the work		
Private institution	1	12.5
Public institution	7	87.5
Syndication		
Yes	9	26.5
No	25	73.5
Participation in Health Councils		
Yes	6	17.7
No	28	82.3

The comparative analysis of the frequencies of pharmaceutical services according to the different categories reveals that management services are present in a larger proportion within the work routine, with a mean of 1.94 (standard deviation \pm 0.93). After that, clinical services appear with a mean of 1.05 (standard deviation \pm 0.97), and pharmacovigilance, with a 0.85 mean (standard deviation \pm 0.81). Of the 34 pharmacists interviewed,

only 11 reported routinely performing clinical services, which corresponds to 32% of the participants. All pharmacists stated that they perform managerial services on a daily basis, and only 14% systematically perform pharmacovigilance activities. In agreement with the averages mentioned above, several types of management services presented a higher frequency of operation when compared to clinical services (Table II).

TABLE II – Frequency of accomplishment of the pharmaceutical services in the primary care of the Federal District, Brazil

Pharmaceutical services	Never n/%	Rarely n/%	Often n/%	Always n/%
Management				
Pharmacy team management	3 (9.0)	2 (6.0)	5 (15.0)	24 (70.0)
Programming	1 (3.0)	1 (3.0)	1 (3.0)	31 (91.0)
Storage				
Receiving		1 (3.0)	4 (12.0)	29 (85.0)
General stock control		1 (3.0)	2 (6.0)	31 (91.0)
Control of drug stock of ordinance 344/1998	12 (35.0)	10 (30.0)	1 (3.0)	11 (32.0)
Conservation	7 (21.0)	7 (21.0)	5 (15.0)	15 (43.0)
Discarding	5 (15.0)	9 (26.0)	4 (12.0)	16 (47.0)
Distribution	3 (9.0)	1 (3.0)	7 (21.0)	23 (67.0)
Clinical				
Technical-pedagogical activities for the health team	2 (6.0)	7 (21.0)	9 (26.0)	16 (47.0)
Drug reconciliation	26 (76.0)	2 (6.0)	2 (6.0)	4 (12.0)
Dispensing	2 (6.0)	9 (26.0)	14 (42.0)	9 (26.0)
Health education for the user	17 (50.0)	3 (9.0)	5 (15.0)	9 (26.0)
Pharmaceutical guidance to the user		7 (21.0)	11 (32.0)	16 (47.0)
Pharmacotherapy review	7 (21.0)	12 (35.0)	8 (23.0)	7 (21.0)
Other services				
Pharmacovigilance	16 (47.0)	13 (38.0)	3 (9.0)	2 (6.0)

The literature reinforces the need for effective structuring pharmaceutical services in health care networks so that the restrictive view of their activities,

which values almost exclusively their logistic component, is overcome (Araújo *et al.*, 2017a, Pereira, Luiza, Cruz, 2015). As a reflection of these notes, the results of this

study illustrate that, in addition to pharmacists performing management services more frequently (Table II), only a third of the interviewees reported performing clinical services on a regular basis.

Compared to pharmacotherapeutic follow-up, more operational services in primary care in the Federal District, such as dispensing, pharmaceutical guidance, and technical-pedagogical activities (Table II), require a shorter service time, a more practical incorporation into the occupational routine, and pharmacist's knowledge (Araújo *et al.*, 2017a, Araújo *et al.*, 2017b). Thus, these aspects may determine a greater supply of certain clinical pharmaceutical services compared to others.

The QualiSUS-Rede project, which is the result of an association between the Ministry of Health, the national states, and municipalities, aims to systematize and disseminate experiences and models, with the objective of supporting the consolidation of an integrated health service system. With similar results to those found in this study, QualiSUS-Rede data also discuss that pharmaceutical guidance to the user and dispensation are clinical services commonly offered in primary care, with a low supply of pharmacotherapeutic follow-up (Araújo *et al.*, 2017a). A study discussed by Nakamura and Leite (2016) revealed that dispensation in pharmacies was the activity most frequently performed by pharmacists of the basic health units of a region of southern Brazil.

In results similar to the Brazilian reality, Merks, Świczkowski and Jaguszewski (2016) investigated users' perceptions about the types of pharmaceutical services of a UK community pharmacy. The study included 103 respondents whose majority (86.4% of participants) reported dispensing as the main pharmaceutical activity. Almost half of the respondents (45.6%) reported that pharmacists provided guidance (Merks; Świczkowski; Jaguszewski, 2016).

Primary care pharmacists are in a strategic position to provide multiple user guidance (Hazen *et al.*, 2016, Reis *et al.*, 2013, Salter *et al.*, 2007). Although the literature addresses pharmaceutical guidance as a service (Araújo *et al.*, 2017a; Brazil, 2014), this is also present in the processing of other pharmaceutical services, which may have had an impact on the expressive frequency of operation (Table II). In other words, pharmaceutical

guidance is an integral element and a type of intervention present in the practice of pharmacotherapeutic follow-up, health education, and dispensation, among others (Araújo *et al.*, 2017b; Blenkinsopp, Bond, Raynor, 2012).

Considering that medication conciliation is described as a process of obtaining a complete, accurate, and up-to-date list of all drugs in use by the user, comparing prescription and non-prescription drugs (Brasil, 2014); the primary care pharmacist, by continuously providing care actions to the user, is in a strategic position, and therefore it is essential that this professional complements pharmacotherapies from all levels of health care (Araújo *et al.*, 2017a; Nascimento *et al.*, 2017). However, it was observed that pharmacists in the Federal District had a low frequency of operation of this service (Table II). Understanding this, it is hoped that this discussion will serve to strengthen this service in primary care of the Federal District, so as to increase the offer of medication conciliation to users.

The review of pharmacotherapy is described as a cornerstone for the management of contemporary therapeutic schemes (Salter *et al.*, 2007), since the pharmacist analyzes the need, effectiveness, safety, quality, and adherence to treatment by the user and, if any inconsistency is noticed, the professional should propose interventions (Blenkinsopp, Bond, Raynor, 2012). Although the review of pharmacotherapy is part of the *modus operandi* of pharmacotherapeutic follow-up and dispensation, among other pharmaceutical services, this service was cited with low frequency of execution by primary care pharmacists. Similar results were found in the study by Araújo *et al.* (2017a), who considered as a possible reason for it the lack of knowledge about this service by pharmacists. In addition, it should be emphasized that the Brazilian primary care literature deals only with the results review of pharmacotherapy and drug reconciliation services, unlike other countries such as Australia and the UK, for example (Castelino, Bajorek, Chen, 2010; Krska *et al.*, 2001; Zermansky *et al.*, 2006).

Pharmacotherapeutic follow-up, a service widely studied in Brazilian literature, offers irrefutable therapeutic gains, enables greater satisfaction with health services, contributes to the improvement of quality of life,

and strengthens the conceptions of self-care and safe use of drugs by users of primary care (Blondal, Sporrang, Almarsdottir, 2017; Cazarim *et al.*, 2016; Soeiro *et al.*, 2017).

Health education in primary care, in turn, provides the individual's participation in therapeutic groups, favors increased control and self-management of chronic diseases, transforms social and political reality, and empowers the user to decide on his or her health (Durme *et al.*, 2014; Eikenhorst *et al.*, 2017; Heide *et al.*, 2013). In addition, these educational processes in a group perspective strengthen the formation of bonds between individuals, which is a strategy that promotes social cohesion (Heide *et al.*, 2013).

Although the theoretical framework addresses the positive results and gains from the implementation of health education and pharmacotherapeutic follow-up in the collective health scenario, the low frequency of these services in primary care of the Federal District (Table II) reveals the indispensability of investigating which conditioning factors are absent and/or partially present *in loco* pharmaceutical services. In this way, once the obstacles to be overcome are revealed, the social actors involved will be able to develop contexts and factors to make these services viable.

In addition, the formulation, validation, and dissemination of theoretical-operative models by scientific

productions and health institutions can increase the knowledge of pharmacists about the profile, contributions, and *modus operandi* of each clinical service, and, in this way, these professionals will have better conditions to incorporate them into their care practice.

Based on National Survey on Access, Use and Promotion of Rational Use of Medicines (PNAUM) research (Gerlack *et al.*, 2017), this study aimed to identify the conditioning factors for pharmaceutical services. However, while PNAUM assessed these factors from the point of view of drug supply activities, this study investigated clinical pharmacy services in primary care.

There was a positive association between the higher frequency of operation of clinical services by pharmacists working in pharmacies with physical infrastructure with better levels of adequacy ($r = 0.72$, $p < 0.001$) (Figure 1), who had greater management support ($r = 0.83$, $p < 0.001$) (Figure 2), and were included in NASF activities ($r = 0.77$, $p < 0.001$). For the variables "number of auxiliaries" ($r = 0.18$, $p = 0.20$) and "number of residents and trainees" ($r = 0.58$, $p = 0.001$), lower correlation indexes were found. Some conditioning factors could not be investigated, for example, whether the flow of patient visits per day in the pharmacies of the basic health units influenced the frequency of clinical services performance. This occurred due to the lack of availability of these data in the scenario studied.

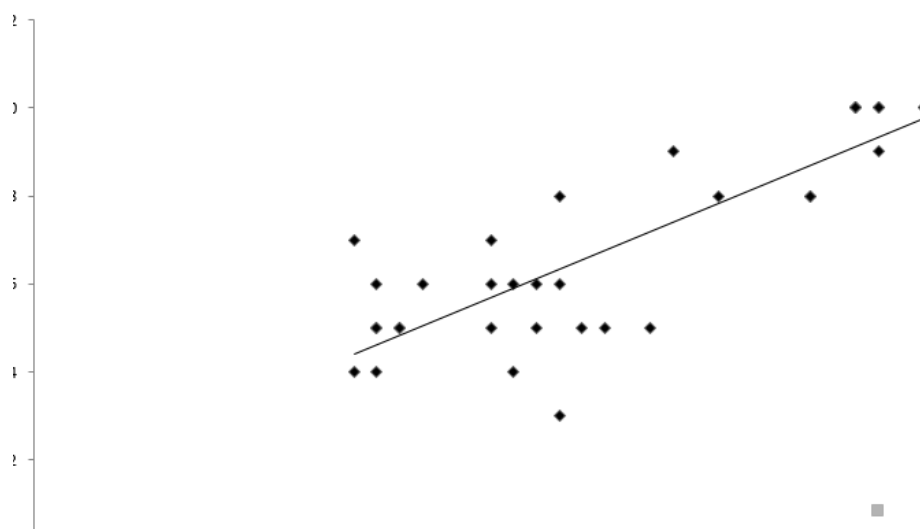


FIGURE 1 – Association between the level of health team and manager support and the frequency of clinical services ($r = 0.83$, $p < 0.001$).

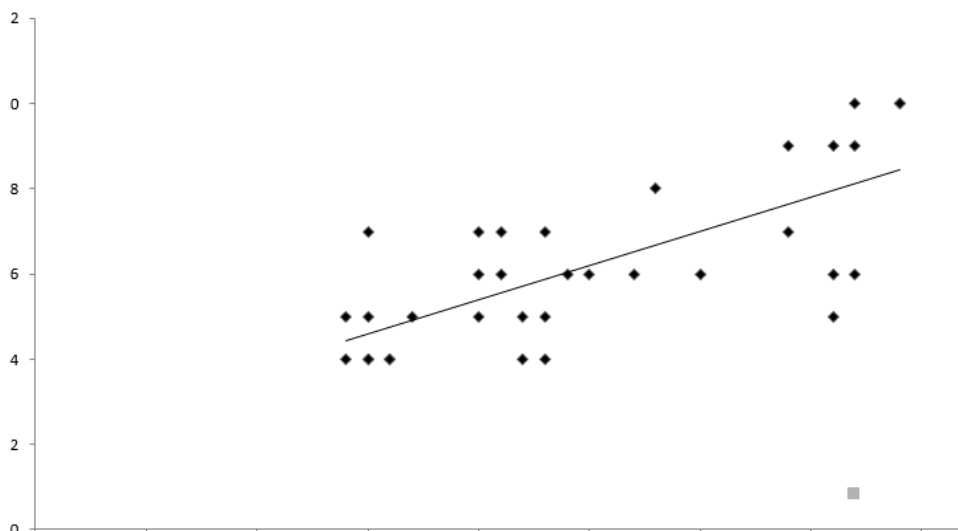


FIGURE 2 - Association between the level of appropriation of the pharmacy's physical space and the frequency of clinical pharmaceutical services ($r=0.72$, $p<0.001$).

In addition to the more evident indications that the objective conditions of work, such as adequate physical infrastructure and the support of management and the health team, are less intrinsic to the proper functioning of pharmaceutical services (Araújo *et al.*, 2017b; Leite *et al.*, 2017; Vargas, 2016), this study further reinforces NASF's strategic position as a driver of the pharmacist's participation in the patient care process. In other words, the process of integrating pharmacists into the shared care of the primary care team through NASF is an important conditioning factor and an enabling instrument for services included in the philosophy of pharmaceutical care (Jorgenson *et al.*, 2013; Jorgenson *et al.*, 2014; Trinacty *et al.*, 2014).

CONCLUSION

The most frequently developed clinical pharmaceutical services were dispensing, pharmaceutical guidance for users, and technical-pedagogical activities for the primary care team.

There was a greater frequency of operation of clinical services under the conditions in which pharmacists had adequate physical infrastructure, management and health team support, and increased insertion in NASF activities. Despite not being part of the objective of this study, it is worth emphasizing that subjective conditions,

such as degree of knowledge and work experience, are fundamental in the analysis of the conditioning factors. Thus, it is advised that new research should include these variables to deepen the understanding of the conditioning factors of clinical primary care pharmaceutical services.

This study has as a limitation the non-use of a validated instrument for data capture. It is suggested that the instrument elaborated by the authors serves as a template for due improvement and validation by other researchers. Thus, an important research tool for situational diagnosis and collective health planning will be structured.

Even though, at the time of the interview, the researchers explained that the prescription analysis service was considered as dispensation, followed by the availability of drugs and the guidelines for use, pharmacists may have overestimated the frequencies at the time of providing answers. This is because it is still prevalent in the collective imagination that the simple availability of these products is a service equivalent to dispensing, which may be another limitation of the study.

Although there has been an increase in individual and collective activities for the information on drugs over the years in primary care, the philosophy of pharmaceutical care is still incipient in the provision of services to users of the basic health units of the Federal District.

REFERENCES

- Akerman M, Freitas O. National Survey on Access, Use and Promotion of Rational Use of Medicines (PNAUM): evaluation of pharmaceutical services in the primary health care. *Rev Saúde Pública*. 2017;51(Suppl 2):1s.
- Araújo PS, Costa EA, Guerra Junior AA, Acurcio FA, Guibu IA, Álvares J, et al. Pharmaceutical care in Brazil's primary health care. *Rev Saúde Pública*. 2017a;51(Suppl 2):6s.
- Araújo SQ, Costa KS, Luiza VL, Lavras C, Santana EA, Tavares NUL. Organização dos serviços farmacêuticos no Sistema Único de Saúde em regiões de saúde. *Ciênc Saúde Coletiva*. 2017b;22(4):1181-191.
- Blenkinsopp A, Bond C, Raynor DK. Medication reviews. *Br J Clin Pharmacol*. 2012;74(4):573-80.
- Blondal AB, Sporrang SK, Almarsdottir AB. Introducing Pharmaceutical Care to Primary Care in Iceland-An Action Research Study. *Pharmacy (Basel)*. 2017; 5(2):23.
- Brasil. Ministério da Saúde. Cuidado farmacêutico na atenção básica. Caderno 1: Serviços farmacêuticos na atenção básica à saúde. 2014. [Accessed on: 20 jul 2016]. Available at: http://bvsms.saude.gov.br/bvs/publicacoes/servicos_farmacuticos_atencao_basica_saude.pdf.
- Castelino RL, Bajorek BV, Chen TF. Retrospective evaluation of home medicines review by pharmacists in older Australian patients using the medication appropriateness index. *Ann Pharmacother*. 2010;44(12):1922-9.
- Cazarim MS, Freitas O, Penaforte TR, Achcar A, Pereira LR. Impact Assessment of Pharmaceutical Care in the Management of Hypertension and Coronary Risk Factors after Discharge. *PLoS One*. 2016;11(6): e0155204.
- Costa EA, Araújo PS, Pereira MT, Souto AC, Souza GS, Guerra-Júnior AA, et al. Technical issues and conservation conditions of medicines in the primary health care of the Brazilian Unified Health System. *Rev Saúde Pública*. 2017;51(Suppl 2):12s.
- Durme T, Macq J, Anthierens S, Symons L, Schmitz O, Paulus D, et al. Stakeholders' perception on the organization of chronic care: a SWOT analysis to draft avenues for health care reforms. *BMC Health Serv Res*. 2014; 14: 179.
- Eikenhorst L, Taxis K, Dijk L, Gier H. Pharmacist-Led Self-management Interventions to Improve Diabetes Outcomes. A Systematic Literature Review and Meta-Analysis. *Front Pharmacol*. 2017; 8: 891.
- Gerlack LF, Karnikowski MGO, Areda CA, Galato D, Oliveira AG, Álvares J, et al. Management of pharmaceutical services in the Brazilian primary health care. *Rev Saúde Pública*. 2017;51(Suppl 2):15s.
- Hazen AC, Sloeserwij VM, Zwart DL, de Bont AA, Bouvy ML, de Gier JJ, et al. Design of the POINT study: Pharmacotherapy Optimisation through Integration of a Non-dispensing pharmacist in a primary care Team (POINT). *BMC Fam Pract*. 2015;16:76.
- Heide, Wang J, Droomers M, Spreeuwenberg P, Rademakers J, Uiters E. The relationship between health, education, and health literacy: results from the Dutch Adult Literacy and Life Skills Survey. *J Health Commun*. 2013;18 Suppl 1:172-84.
- Hughes CA, Breault RR, Hicks D, Schindel TJ. Positioning pharmacists' roles in primary health care: a discourse analysis of the compensation plan in Alberta, Canada. *BMC Health Serv Res*. 2017;17(1):770.
- Jorgenson D, Dalton D, Farrell B, Tsuyuki RT, Dolovich L. Guidelines for pharmacists integrating into primary care teams. *Can Pharm J (Ott)*. 2013;146(6):342-52.
- Jorgenson D, Laubscher T, Lyons B, Palmer R. Integrating pharmacists into primary care teams: barriers and facilitators. *Int J Pharm Pract*. 2014;22(4):292-9.
- Krska J, Cromarty JA, Arris F, Jamieson D, Hansford D, Duffus PR, et al. Pharmacist-led medication review in patients over 65: a randomized, controlled trial in primary care. *Age Ageing*. 2001;30(3):205-11.
- Leite SN, Manzini F, Álvares J, Guerra Junior AA, Costa EA, Acurcio FA, et al. Infrastructure of pharmacies of the primary health care in the Brazilian Unified Health System: Analysis of PNAUM – Services data. *Rev Saúde Pública*. 2017; 51(Supl. 2):13s.
- Lui E, Ha R, Truong C. Applying the pharmaceutical care model to assess pharmacist services in a primary care setting. *Can Pharm J (Ott)*. 2017;150(2):90-3.
- Merks P, Świeczkowski D, Jaguszewski MJ. Patients' perception of pharmaceutical services available in a community pharmacy among patients living in a rural area of the United Kingdom. *Pharm Pract (Granada)*. 2016;14(3):774.
- Nakamura CA, Leite SN. A construção do processo de trabalho no Núcleo de Apoio à Saúde da Família: a experiência dos farmacêuticos em um município do sul do Brasil. *Ciênc Saúde Coletiva*. 2016;21(5):1565-572.
- Nascimento RCRM, Álvares J, Guerra JAA, Gomes IC, Costa EA, Leite SN, et al. Availability of essential medicines in primary health care of the Brazilian Unified Health System. *Rev Saúde Pública*. 2017;51(Suppl 2):10s.
- PAHO. Servicios farmacêuticos basados en la atención primaria de salud. Documento de posición de la OPS/ OMS. 2013. [Accessed on: 12 dec 2017]. Available at: <file:///C:/Users/>

D%C3%A9bora/Downloads/SerieRAPSANo6-2013%20(1).pdf.

Pereira NC, Luiza VL, Cruz MM. Serviços farmacêuticos na atenção primária no município do Rio de Janeiro: um estudo de avaliabilidade. *Saúde Debate*. 2015;39(105):451-68.

Reis VS, Alves MR, Tavares VG, Fernandes MR, Radighieri RR, Alves MML. Consejos farmacêuticos a pacientes con trastornos de humor. *Rev Cubana Farm*. 2013;47(3):353-62.

Salter C, Holland R, Harvey I, Henwood K. "I haven't even phoned my doctor yet." The advice giving role of the pharmacist during consultations for medication review with patients aged 80 or more: qualitative discourse analysis. *BMJ*. 2007;334(7603):1101.

Soeiro OM, Tavares NUL, Nascimento- Júnior JMD, Guerra AA Junior, Costa EA, Acurcio FA, et al. Patient satisfaction with pharmaceutical services in Brazilian primary health care. *Rev Saúde Pública*. 2017;51(suppl 2):21s.

Trinacty M, Farrell B, Schindel TJ, Sunstrum L, Dolovich L, Kennie N, et al. Learning and Networking: Utilization of a Primary Care Listserv by Pharmacists. *Can J Hosp Pharm*. 2014;67(5):343-52.

Tsuyuki RT, Berg A, Khan NA. The ultimate opportunity for advancing pharmacy practice. *Can Pharm J/Revue Pharmaciens Canada*. 2017;150(4):225-226.

Vargas FB. Trabalho, emprego, precariedade: dimensões conceituais em debate. *Caderno CRH*. 2016;29(77):313-31.

WHO. Primary health care. 2017. [Accessed on: 11 nov 2017]. Available at: http://www.who.int/topics/primary_health_care/en.

Zermansky AG, Alldred DP, Petty DR, Raynor DK, Freemantle N, Eastaugh J, et al. Clinical medication review by a pharmacist of elderly people living in care homes--randomised controlled trial. *Age Ageing*. 2006;35(6):586-91.

Received for publication on 15th April 2019

Accepted for publication on 20th May 2020