The pharmacist in the Brazilian Primary Health Care: insertion under construction

Abstract The objective is to analyze the insertion of the pharmacists work in primary health care in Brazil. The search was performed on BVS, SciELO, Lilacs e Medline databases from 1998 to 2016. From the 157 articles found, excluding the duplicates, theses, dissertations and reviews, after the complete reading the review included 9 articles dealing with the pharmacists work describing experiences, attributions, potentialities, difficulties and challenges. Results show incipient production and predominance of qualitative studies starting in 2007. The insertion in the team is the central topic of the studies, pointing out the challenges and the difficulties related to the recognition and acceptance of the pharmacists interventions. The potentialities reside in the area of actions directed to the client, the families and the team, as well as in the professional training field as well as in the dissemination of the results of the pharmaceutical actions. The pharmacists’ isolation in the primary care prevails, albeit there are perspectives of strengthening the integration in the team that has been stimulated by the recent institutional and regulatory transformations in the national scenario. Beyond the present difficulties and experiences reported, the researchers focus on the potentialities for the professional practice, glancing at the construction of the future.

Key words Pharmaceutical services, Primary health care, Work, Pharmacists, Review
Introduction

The Brazilian National Health System (SUS) in Brazil is governed by the principles of universality, equity and comprehensiveness, thus requiring health care practices that expand beyond the medical care model, a result of the Flexnerian paradigm. One of the greatest challenges for managers is to implement practices that contribute to the implementation of their principles in a service network that is adequate to the needs of the population. In this sense, governmental policies have reinforced primary health care (PHC), known in Brazil as Basic Care, as a structuring strategy to change the health care model in SUS. At the same time it is sought to promote changes in the conception of the disease health process through investments in the training of workers and managers using the sanitary paradigm and in the sanitary practice1-3.

The complexity context of the health-disease-care process requires the organization of the work process in PHC through multiprofessional teams with an interdisciplinary and intersectoral approach4. Among the group of professions that make up these teams, the pharmacist may be acting in the Health Centers or in referral teams of the Family Health Support Unit (NASF)5.

The pharmacists have the responsibility for the implementation of strategies to promote the rational use of drugs due to the harmful consequences of their inappropriate use, as well as the financial repercussion that the medicines represent for the health services and for the community. The work of the pharmacists is a fundamental component of the quality of Pharmaceutical Assistance, which in turn has direct implications on the efficiency of health systems6.

Some normative achievements in the last 19 years enhance the performance of the pharmacists in PHC: the National Medicines Policy7; the National Policy on Pharmaceutical Assistance (PNAF/2004); the National Primary Care Policy (PNAB/2006), updated in 2011; and the publication of the initial ordinance of the Family Health Support Center (NASF) in 2008, updated in 2014. It also contributed, within the scope of the Ministry of Health, to the structuring of the Department of Pharmaceutical Care (DAF) in 2003. Adding to those regulations, the series on Pharmaceutical Care in Basic Care8 describe a pilot project on pharmaceutical care with guidelines for pharmaceutical assistance actions in SUS and consequently for the work of the pharmacists. The World Health Organization (WHO) has also launched publications on the renewal of primary care in the Americas, including a document on PHC Pharmaceutical Services9.

This context requires the construction of a new professional identity of the pharmacists to act beyond the traditional management of the medicine, with a care approach. The main challenges are the integration of the pharmacists in the teams, the training and use of new technologies to work in PHC and the building of the bond with the community and with the clients10-12. This process “expands the interfaces to be managed and poses new challenges in the area of competencies”13, generating new ways of working in relation to the traditionally known.

In this sense, this study analyzes the insertion of the pharmacists’ work in primary care in Brazil, seeking to identify experiences, attributions, potentialities, difficulties and challenges for the practice of this type of professional.

Methods

Scherer and Scherer14 carried out a review of the literature on the work of the pharmacists in Primary Health Care that was used as a reference to this study.

The search for articles was carried out in databases BVS, SciELO, Lilacs e Medline (via PubMed). The Cochrane Library and Embase databases were not available for consultation due to the fact that the licenses for use were not renewed in the Virtual Health Library (BVS) during the period of the research. The research included articles published since 1998 when the National Medicines Policy was issued, which disseminated the concept of Pharmaceutical Care and represented a milestone for the area and the work of the professionals, until March 2016 when data were collected.

The Health Sciences Descriptors (DeCS) used were: (“Primary Health Care” OR “Basic Health Care” OR “Family Health”) AND (“Pharmaceutical Care” OR “Pharmacists” OR “Pharmaceutical Care”). The search was conducted in English for Medline and in Portuguese, Spanish and English for the others. The combination was performed using the Boolean operators “AND” and “OR”.

In the Lilacs and Bireme databases, filters were used to direct the search, such as Country/Region “Brazil”, Language “Portuguese, English and Spanish”, publication year 1998 to the 25th of March 2016, document type ”articles”. In the
SciELO, only the “Brazil” and “Public Health” options were selected in the Collections filter, excluding the collections “Colombia” and “Spain” that presented articles that did not meet the research objectives. In the PubMed database it was necessary to put the keyword “Brazil”.

Two researchers carried out the search for the articles. 30 articles were published in the BVS, 56 in Lilacs, 60 in SciELO and 11 in Medline (via PubMed), reaching a total of 157 articles. From these results the selection by titles was carried out, with 71 texts remaining. After reading the titles and before examining the abstracts 32 publications were withdrawn, reaching a total of 39 texts. The reading of the abstracts was done by three researchers and resulted in the selection of 14 articles for the complete reading, with 14 works remaining. Three researchers read the articles and 5 articles were deleted, leaving 9 for analysis. The articles were analyzed using the software Atlas.ti ®.

We included articles from periodicals dealing with the work of the pharmacists in the PHC in Brazil answering the following guiding questions: Does the study address the work of the pharmacists in PHC? Does the study report the professional’s attributions, work experiences, potentialities, difficulties and challenges for the PHC practitioner’s practice? Does the study make recommendations, criticisms, or suggestions for the pharmacist’s work at PHC? The thesis, dissertations and literature reviews were considered exclusion criteria, and no review was found. Figure 1 represents the steps of the search.

Results

Of the 9 articles selected for analysis, 3 studies were conducted in the South, 4 in the Southeast, 1 in the Central-West and 1 in the Northeast regions (Table 1). From the journals of origin of these papers, one is international and eight from the Southeast region. Of them, seven use a qualitative approach, one is quantitative and one quantitative/qualitative. Most of the studies did their research with health workers15-19, three with clients20-22 and a case study23. All the studies dealt with at least one of the elements of analysis (Table 1): attributions, experiences, potentialities, difficulties and challenges for the PHC practitioner practice. None of them included all the elements. The nine articles were published between 2007 and 2015 with proportional distribution (Chart 1). Out of the total of the studies two presented attributions of the pharmacist in the APS16,19, two reported challenges16,19 and five difficulties15-18,23.
four described experiences\(^{17,21-23}\) and six signaled potentialities\(^{15-17,19,20,22}\).

Of the nine studies analyzed, two that were performed with health professionals mentioned attributions for the work of the pharmacist in PHC both in management and care\(^{16,17}\). Of these two studies one was performed with doctors, dentists and nurses\(^{16}\) and another with managers, clients, pharmacists, health unit managers and pharmacy assistants\(^{19}\).

The results of the review indicated that, with regard to management activities, the pharmacists organize the actions of pharmaceutical care; promote rational use of medicines; guarantee availability, quality and conservation of medicines\(^{16}\); improve pharmacies; performs medication control (shelf-life checks, physical-chemical conditions); accompanies, evaluates and implements phytotherapy program; develops secondary management activities at the central level of the municipality as well as monitoring activities in the toxicological information centers\(^{19}\).

Regarding the professional performance in the area of assistance, pharmacists provide care services; obtaining, evaluating and disseminating information about medicines and health from an educational perspective\(^{16}\); dispensing medication with evaluation of the prescription and conducting pharmaceutical orientation; develops secondary management activities at the central level of the municipality as well as monitoring activities in the toxicological information centers\(^{19}\).

The present review evidences the use of different terms by the authors as ways of expressing the activity of the professional linked to pharmaceutical assistance: pharmaceutical assistance\(^{16,17,21-23}\), pharmaceutical services and pharmaceutical care\(^{19}\). In addition, the term pharmacotherapeutic emerges as part of the pharmacist’s work\(^{20}\).

The reports of professional experience regarding pharmaceutical care are covered in four articles\(^{17,21-23}\) which show the experience of teamwork and its importance to solve problems related to medicines (MRP), to improve the quality of life of clients, to promote change in the care model and to create a new vision of the work of the pharmacist\(^{17,21-23}\). The home visits were described as fundamental tools to get acquainted with the family environment of the client\(^{22}\).

The experience of implanting a pharmaceutical care service changed the view of PHC practitioners related to the work of the pharmacists. Their professional characteristics as technically oriented and controllers have been replaced by the vision of professionals in charge of caring and being responsible for the client\(^{17}\). However, one study showed that the low acceptance of pharmacists’ interventions by other health professionals is seen as a difficulty, possibly because the pharmacists in that context do not belong effectively to the team\(^{23}\). In another study done including doctors, dentists and nurses, the pharmacist was perceived by the staff as a practitioner working with the medicines and as such, their regular presence was not seen as necessary. This would be due to the historical context of low insertion in activities of primary care, resulting in lack of social recognition. Additionally their technical training has little emphasis in the clinical aspects as well as in the Brazilian National Health System\(^{16}\). In these two studies\(^{16,23}\) the pharmacists worked with family health teams.

In addition to the difficulties related to the acceptance and recognition of the pharmacists’ work, there were evidences of the lack of struc-
There is a major challenge: to show to the public the need of having pharmacists in order to give comprehensive care\(^16\). Additionally, when working in primary care teams the reality is multifaceted and the professionals’ performance has remained restricted to the technical management of the drug\(^19\).

Of the total number of studies included in the present review, there are six articles showing the potentialities for the pharmacists’ work in PHC. Those articles can be grouped in the scope of the actions directed to the user, the families and the team, as well as in the professional training and the diffusion of the results of the pharmaceutical actions. Medicines become a central issue in the actions, thus enhancing the insertion of the pharmacists in PHC to the extent that this insertion is used under the perspective of promotion,

<table>
<thead>
<tr>
<th>Reference</th>
<th>Year</th>
<th>Location</th>
<th>Magazine</th>
<th>Type of study and methodology</th>
<th>Study participants</th>
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<tbody>
<tr>
<td>20</td>
<td>2007</td>
<td>PR</td>
<td>Revista de Ciências Farmacêuticas Básica e Aplicada</td>
<td>Qualitative Prospective descriptive study, Interview.</td>
<td>Clients</td>
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<tr>
<td>21</td>
<td>2007</td>
<td>SP</td>
<td>Therapeutics and Clinical Risk Management</td>
<td>Quantitative Prospective study</td>
<td>Clients</td>
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<td>22</td>
<td>2008</td>
<td>SC</td>
<td>Revista Brasileira de Ciências Farmacêuticas</td>
<td>Qualitative Case study</td>
<td>Clients</td>
</tr>
<tr>
<td>15</td>
<td>2008</td>
<td>SP</td>
<td>Cadernos de Saúde Pública</td>
<td>Qualitative Analysis of secondary data, documentary analysis, semi-structured interviews.</td>
<td>Health professionals- F, FUS, FCAF</td>
</tr>
<tr>
<td>16</td>
<td>2009</td>
<td>SC</td>
<td>Brazilian Journal of Pharmaceutical Sciences</td>
<td>Qualitative Semi-structured interview.</td>
<td>Health professionals- doctors, dentists and nurses</td>
</tr>
<tr>
<td>23</td>
<td>2010</td>
<td>GO</td>
<td>Saúde Sociedade São Paulo</td>
<td>Qualitative Experience report</td>
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<tr>
<td>17</td>
<td>2012</td>
<td>MG</td>
<td>Revista APS</td>
<td>Qualitative Semi-structured interview</td>
<td>Health professionals- doctors, nurse’s aides, administrative staff, health center manager.</td>
</tr>
<tr>
<td>18</td>
<td>2012</td>
<td>PE</td>
<td>Arquivos Brasileiros de Ciências da Saúde</td>
<td>Qualiquantitative Questionnaire Interview</td>
<td>Health professionals- pharmacists</td>
</tr>
<tr>
<td>19</td>
<td>2015</td>
<td>RJ</td>
<td>Saúde debate</td>
<td>Qualitative Documentary research Interviews</td>
<td>Health professionals (managers, clients, pharmacists, health center managers, pharmacist aides)</td>
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This is particularly noticeable in the actions related to healthcare users identifying the elderslies, preventing and solving problems related to medicines (PRM). The studies mention that pharmacists are educators who can clarify regarding the active principle, the purpose of the drug and the treatment, promoting therapeutic adherence and contributing to behavior change regarding the use of the drug.

The pharmacist plays a key role in the implementation of pharmaceutical services in PHC. The presence of this professional can foster comprehensiveness of services, improve the process of care and avoid damages to health, as well as being instrumental to consolidate the pharmaceutical practice in SUS. The pharmacists’ contribution to family health teams can be developed in several aspects: in the dispensing of medicines with pharmaceutical care; in the composition of professional teams that serve the population offering support for an adequate intervention regarding the use of medicines, including the resolution of PRM. In this sense, it is remarked the importance of pharmacists with an integral and continuous vision of the processes knowing the care network, the care pathways and the work process of the teams.

When the pharmacists participate in the processes and engage in the activities of their unit, they legitimize and value their work as team members. The dissemination of the actions that this professional group performs can give visibility and recognition to their work, giving relevance to those studies that focus on the positive effects of the pharmaceutical actions to generate information for the service and for the population.

Professional training is also indicated as a possibility for aligning the pharmacists’ work with the current professional practice assignments. Several outstanding examples were those specializations focused on family health associated with professional experience, in addition to continuing education.

Discussion

The review of the literature evidenced that there is a low number of articles in journals published in the consulted databases dealing with the pharmaceutical professional work process in the Brazilian PHC. The studies have been published since 2007 showing how recent is the interest in this area, something that may be in tune with the development of the Department of Pharmaceutical Care in the Ministry of Health in 2003 followed with the advent of the National Pharmaceutical Care Policy in 2004, prompting changes in the way of thinking and offering health services in the scope of pharmaceutical care. This movement was reinforced in 2008 with the creation of the NASF, which includes pharmacists. In spite of this fact there is still an incipient repercussion in the literature focusing on the analysis of the pharmacists’ work.

The studies point to the low number of publications in the field of health promotion and consequently of PHC on the pharmaceutical practitioner, concurring with the findings presented here. Research on the characteristics of Brazilian scientific production on pharmaceutical care highlights that despite the limited number of studies it is expected that publications will increase in order to contribute to the recognition of the actions of the pharmacists in the health teams. We can infer that as the extent to which pharmacists’ insertion in PHC expands, and as work experience is constructed, new studies will tend to emerge.

The recent development in Brazil of approaches linking the pharmacist to clinical healthcare activity, as well as the guidelines of the World Health Organization are also factors that may favor new experiences, consequently increasing publications on the subject.

The concentration of publications in journals originated in the Southeast region seems to be associated with the fact that this region concentrates periodicals with an interest in the topic and also related with the fact that in this region there are three magazines in the area of pharmaceutical sciences (Chart 1).

Emphasis on qualitative studies with health practitioners as participants demonstrates the interest in using professional experience as a foundation for research. There is a need to understand the work process in order to transform it, and this transformation necessarily involves building on the workers’ point of view. This perspective has guided studies in the field of collective health.

Pharmacists are traditionally professionals working with knowledge and techniques related to drugs. The findings revealed that the activities related to the management and care aspects of professional practice predominate in primary care. Those activities can be grouped according to the classification proposed by Araújo et al., in two complementary areas: one related to drug...
management technology and another related to the technology of its use. The process of clarification of the roles of the pharmacist in PHC found in the articles of this review is an important step towards guiding the professional activity, overcoming the lack of clear and consensual objectives on the activities of the pharmacists in PHC. Although only two articles make this distinction, it demonstrates an enlarged understanding of what the pharmacists are doing insofar as these results come from researches with different professions, managers and clients.

To describe the pharmacists’ work with health service users, the terms “pharmaceutical assistance”, “pharmaceutical care” or even “pharmaceutical services” are used with similar meanings in the analyzed articles. There is a need for standardization of nomenclatures in Brazil. The standardization may contribute to a greater diffusion of the work of the pharmaceutical professional with the users as well as to enable a better understanding on the part of those who seek to delve into the subject.

It should be noted that recent documents of the Ministry of Health have used the term pharmaceutical care, defined as a set of actions that include health education, health promotion activities and actions to promote the rational use of medicines (such as clinical-assistance and technical-pedagogical activities). This directive tends to favor the incorporation of this term into the research and organization of pharmaceutical services.

Teamwork was highlighted in the articles analyzed as a fundamental tenet in order to solve problems related to medication consequently improving the quality of users, concurrent with PHC studies that highlight the importance of the team and the interdisciplinarity for the effectiveness of the principle of comprehensiveness. For this end it is not only necessary to invest in the linkage of actions among the professions and incorporation of new knowledge and practices, but also to preserve the specificities of each one, at the same time overcoming the fragmentation in the daily life of the services. The presence of the pharmacist in the team can contribute to an articulated work in health care, linking with the users and optimizing adherence to treatment.

There are still few experience reports on the pharmacists’ work, but they already point to present challenges. There is a consensus that factors such as the low number of pharmacists in APS, together with the lack of perception of these professionals as part of the team and the lack of clarity about their attributions contribute to the lack of recognition of the pharmacists in this field. The success of the cooperative work of an interdisciplinary team depends on the understanding that each professional has about the role of another, taking into account each other’s competencies.

The issue of the team insertion seems to be faced by other professionals in the Brazilian APS. Studies related to dentists’ work describe the isolation of this type of professional as well as the difficulties in linking with the team due to the organization of the work process centered solo practice.

Reports from other countries corroborate the data found in this research. In England the analysis of the pharmacists’ integration experience in PHC showed that despite the emergence of new interactions with general practitioners, pharmacists still do not feel as part of the teams. They do not have access to patient records, and other professional categories are reluctant to understand the importance of pharmacist participation in the service. However, the authors point out that these new relationships need to be worked out and those relations take time to establish.

In Canada, low participation of pharmacists in the teams may be related to the lack of time to carry out team activities as well as to policies and norms that discourage collaborative models of care, added to poor access to information among clients, among others.

In Chile pharmacists are not considered a relevant actor in the care network, as there is a lack of knowledge of professional skills mainly for working with pharmaceutical care and therefore they face obstacles to implement quality management.

Regarding pharmacists’ perception of their integration into the team, a study in Canada with seven pharmacists identified that practitioners had two perceptions about their actions: (1) they provide information and support for physicians to act in decision-making instead of acting as direct agents of clinical activities; (2) participate actively in the activities of management of the supplies, having the patient as the central target of these actions.

Despite the low number of studies, the results of the review indicate that as the pharmacists link with the health team, they begin to show results and the importance of their work, thus gaining recognition. In this sense, training deserves attention because it has the potential to depart from the professional isolation. There is a need for general training with qualification to work as a team.
and for the development of pharmaceutical care activities allowing a new look at the user in the prevention and resolution of PRM.

The intervention of the pharmacist in education and counseling activities on drug therapy has provided benefits for health promotion, especially adequate in the context of demographic and epidemiological transition that requires care for the elderly as highlighted in the results of this literature review.

The reinforcement in the management of the units and the insertion in the planning of the team are significant factors for the strengthening of the pharmaceutical services in PHC. The good management of human resources, coupled with incentives and recognition of the value of pharmacists inserted in the healthcare process, has potential in the organization of services including pharmaceutical care. In this perspective making the work of the pharmacist visible to users and other professions and managers is a strategy for insertion of this professional in the health teams.

The performance of the pharmacists in the NASF represents a strategy to improve the quality of APS, being an opportunity to reinforce the insertion in the multiprofessional team. In this proposal the pharmacists may improve the comprehensiveness care to users and at the same time enhancing the joint actions with other professionals in a matrix support fashion.

Changes in the professional formation have been implemented in order to adapt to the new demands for the work. There was a reformulation of the National Curricular Guidelines and investments in training were made by the Ministry of Health and by Brazilian universities. It is worth mentioning the course “Pharmacists in Basic/Primary Care: working in networks” promoted by the Federal University of Rio Grande do Sul (UFRGS). In addition, specialization courses were held for pharmacists in Pharmaceutical Assistance Management.

The need for formal professional training or continuing education is a challenge for pharmacists, as it is for all occupational categories in PHC. Workers are at the center of health actions. Due to this centrality, investments in improving working conditions, democratic organization and management, as well as adequate training related to need might contribute to the ability of professionals to deal with public health challenges. These challenges need to be addressed and debated among health teams and SUS management bodies. The WHO has encouraged the construction of action plans focused on planning and management, training and cooperation for workers, in order to provide favorable contexts for the development of skills. In this way the pharmacists may avoid taking the blame because of tasks that are performed according or differing with the context of PHC.

Based on the results, it is possible to arrive at some conclusions. There is a need to systemize the experience of the pharmacists in PHC. It is recommended to perform studies that allow not only the understanding of the professional choices in the context where they are inserted, as well as to identify the actions developed, thus giving visibility to the pharmacists. This will contribute with the construction of pharmaceutical assistance in the SUS. As per the elements analyzed in the studies, the predominance of findings related to potentialities indicates ownership of a set of norms guiding the professional practice.

This signals the way to go in order to strengthen the integration of the pharmacists to the teams, which has been driven by the recent institutional and normative changes in the national scenario. In addition to the difficulties and reporting experiences describing the picture of the present moment, the researchers focus on the potential for professional practice glancing to the future that is under construction.

Collaborations

LC Barberato participated in the conception, planning, data collection, analysis, interpretation, writing of the paper and final approval. MDA Scherer participated in the conception, planning, analysis, interpretation, writing of the work and final approval. RMC Lacourt participated in data collection, analysis, data interpretation, essay writing and final approval. The three authors approved the final version submitted.

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