



Patients participation in pharmaceutical care consultations in Brazil

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Abstract

Background The effectiveness of pharmaceutical care has already been evidenced in several studies and scenarios; the lack of patient's consultation has been little explored in the literature. Unprovided care is a missed opportunity to offer care to another individual who needs attention to their health. The need for investigation of missed consultations in a Brazilian pharmaceutical care service arises. **Objective** To evaluate the participation and characteristics of patients in pharmaceutical care consultations in a university outpatient unit in the Brazilian city of Divinópolis. **Methods** A descriptive study was carried out from a secondary source of information. The socio-demographic profile of the patients who were absent from the pharmacy consultations from January to December 2017 was outlined. **Results** Of the 832 scheduled appointments from January to December 2017, 501 were not attended by patients, revealing 60.2% missed consultations. The female gender was predominant, corresponding to 67.8% of the patients. A total of 63.8% of the absentees were over 60 years of age. Most of the patients had two comorbidities (32.5%) and came from an active identification by the Outpatient unit pharmacists (86.60%). Furthermore, the patients who were more absent from the consultations had their primary health care units farther away from the outpatient unit, and this could be one of the causes of the high number of absent patients from the pharmaceutical consultations. **Conclusion** The lack of participation in patient's consultations is high. It is necessary to articulate new strategies aimed at reducing absences from consultations, since this is a source of waste of financial resources and opportunities to improve the patients' health and quality of life.

Keywords Brazil · Clinical pharmacy · Patients participation · Pharmaceutical appointments · Pharmaceutical care

Impacts on practice

- There is a serious lack of participation of patients in pharmaceutical care consultations in Brazil.
- When making appointments for pharmaceutical care consultations, patients should be reminded of the importance of such meetings.
- Patients should best be reminded of their appointments with pharmacist, for instance by phone calls.

Introduction

In 1990 the concept of pharmaceutical care as the “responsible provision of pharmacological treatment for the purpose of achieving concrete results that improve the quality of life of patients”, was determined [1]. Since then, this movement has been growing all over the world, including Brazil. An example is Resolution 499 of the Federal Council of Pharmacy from 2008, which provides for the provision of pharmaceutical services, ranging from the elaboration of the pharmacotherapeutic profile, to evaluation, and also the follow-up of the pharmacological therapy of medication users in Brazil [2]. Since then, pharmaceutical care has been offered in hospitals, pharmacies, primary health care units and even in private services. However, despite the implementation of resolutions and laws that regulate pharmaceutical care in Brazil, this activity still very scarce in the country [3].

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Today, the pharmacist's clinical area is already facing difficulties. The lack of patient consultations is the reality of a problem that affects the whole world [4]. Un-provided care is a missed opportunity to offer assistance to another patient who needs attention to their health and also a financial and market loss, compromising the image of the institution before society [5].

Unfortunately, missed consultations in the pharmaceutical care service may lead to future problems in the health service, considering that non-attendance may lead to the postponement of care needs, service dissatisfaction, service waste, imbalance in service provision, and even loss of the opportunity to include another patient in the schedule [4].

There are several studies on the impact of pharmaceutical care. Some authors in their research followed a group of patients for a year, and observed that the follow-up of the pharmaceutical care program resulted in improved use of medications, as well as favoring their health conditions [6]. However, there is still a great lack of studies on the missed consultations of this type of service. George et al. [7] evidenced the need for new work for interventions that improve the attendance of patients in health services. In view of these precedents, it is necessary to investigate the lack of patient's consultations in a Brazilian pharmaceutical care service.

Aim of study

To evaluate the participation and characteristics of patients in pharmaceutical care consultations in a university clinic in Brazil.

Ethics approval

The work was approved by the Research Ethics Committee of the Federal University of São João Del Rei (UFSJ), CAAE: 58510716.8.0000.5545.

Methods

This is a descriptive study carried out with a secondary source of information, the Integrated Health System (IHS) of the city of Divinópolis, in the state of Minas Gerais (MG), Brazil. From this electronic system, information was collected on patient appointments and absences for frequency calculations, in the pharmaceutical care service at the university outpatient unit of the Unified Health System (SUS), from January to December 2017. This outpatient unit is part of the secondary health care services of the municipality. The socio-demographic profile of the patients who were absent from the consultations was also outlined. Only

appointments and absences from the first consultations were analyzed, and the follow-up appointments were excluded.

The pharmaceutical care service in the outpatient unit is a public service which emerged in 2015, in partnership with UFSJ, located in the central region of the city of Divinópolis. Patients coming from primary health care units who need support related to the correct use of their drugs are attended at the outpatient clinic. Other ways by which the first appointment can be scheduled are through active identifications, referrals from outpatient unit doctors, or even by spontaneous demand. Active identifications are performed by pharmacists according to relevant data found in IHS, such as alteration of laboratory tests and interactions between the medications the patient uses. In these cases, the patient is contacted and invited to attend the service for a pharmaceutical consultation. The pharmaceutical care service has qualified professionals to provide care to the patient, advising them on the rational use of medication. The service has four pharmacists, who underwent a training process before starting activities. Consultations are scheduled separately for each pharmacist. The returns of the patients were scheduled by clinical pharmacists during the consultations.

The variables analyzed in the present study were gender, age, provenance (primary health care unit, referral by doctors from the outpatient unit, active identification or spontaneous demand), number of comorbidities, and health unit of origin of the patients.

Results

Between January and December 2017, 832 consultations were scheduled at the outpatient unit pharmaceutical care service. Of these, 441 patients did not attend, being absent from 501 consultations, demonstrating 60.2% of absence. Figure 1 shows that the absence rate is proportional to the number of scheduled appointments and it has a seasonal variation.

The female gender was predominant, corresponding to 67.8% of the patients. Regarding the age group, 437 patients 60 years of age or older were scheduled and 281 (64.30%) were absent. 181 patients which are between 40 and 59 years were scheduled and 129 (71.27%) were absent. 38 patients 40 years age or younger were scheduled and 31 (81.58%) were absent. Most of the patients had two comorbidities (32.5%) and came from an active identification by the outpatient unit pharmacists (86.60%) (Table 1).

Another variable studied was the primary health care unit of origin of each absent patient. The majority of patients who missed these appointments are from Family Health Strategies that are located on average, 4.1 km away from the outpatient unit, according to Google Maps. These patients represent 15.1% of the absentees.

Fig. 1 Number of scheduled appointments and absences in the clinical pharmacy service at the university outpatient unit in 2017

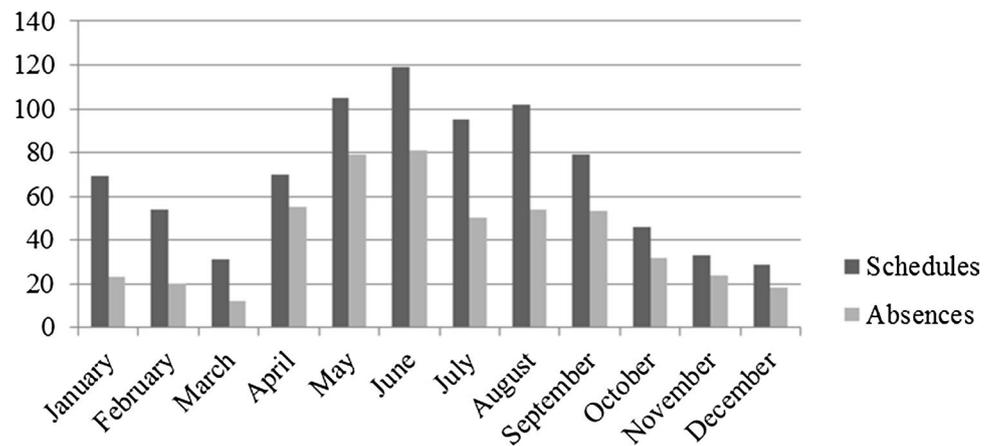


Table 1 Distribution of frequency of absent patients in the pharmaceutical consultations in Divinópolis (n=441)

Variable	N (%)
<i>Gender</i>	
Female	299 (67.80%)
Male	142 (32.20%)
<i>Age</i>	
≤ 40 years	31 (7.03%)
41–59 years	129 (29.25%)
≥ 60 years	281 (63.72%)
<i>Number of comorbidities</i>	
1	94 (21.31%)
2	143 (32.43%)
3	108 (24.49%)
4	53 (12.02%)
5	12 (2.72%)
Without information	31 (7.03%)
<i>Provenance</i>	
Primary Health Care Unit	13 (2.95%)
Active identification	383 (86.85%)
Referral from the OU	40 (9.07%)
Spontaneous demand	5 (1.13%)

Discussion

The non-attendance rate of the SUS users to appointments and exams scheduled in both primary and specialized care is significantly high (generally above 25%), as observed by authors in a study conducted in clinics in the states of Amazonas and São Paulo [8]. However, the lack of patient's consultation rates observed in the present study (60.2%) is extremely high when compared to the percentage in studies with specialized medical appointments (27.45%), and dental appointments (28.52%) [4]. In the outpatient unit, we observed differences when

we compared the rate of absence of patients in physicians' consultations, which are around 40%. This can be explained by the fact that the practice of pharmaceutical care is recent in Brazil, which means that few are aware of its impact on the health of medication users. A study carried out with 110 hospital outpatients in Brazil showed that when asked about the professionals who assisted them in pharmacological treatment, the pharmacist was not mentioned [9]. Thus, the non-recognition of the clinical pharmacist by the Brazilian general population may be one of the justifications for the high rate of absence of patients in the present study. In addition, no telephone calls were made the day before the appointment in order to remind patients of the appointment, which may also have influenced the absence rate.

In Fig. 1 it can be observed that absences follow a constant pattern throughout the year. It can also be observed that in the middle of the year there were larger numbers of scheduled appointments. An active identification was performed in the city's health system during this period, in which patients with diabetes mellitus and hypertension were selected to be monitored by the pharmacists of the service. As the number of schedules was higher in the middle of the year due to the active identification performed, and the great majority of patients in the study coming from active identification, this may explain the higher absence rate in this period. Through pharmaceutical care, professionals can contribute to the prevention of pharmacotherapeutic problems, and reduce health costs, providing an improvement in patients' quality of life [8]. The lack of knowledge of the pharmaceutical services by the patients may have contributed to the significant number of patients who were absent from active identification. When they are referred by a doctor or a nurse, the patient is likely to receive directions and indications from the professionals in the service, which may contribute to their attendance.

The results of the present study indicate that the elderly represent the majority among the patients who are absent.

This may influence the ultimate causes of missed consultations. Travassos et al. [10] affirm that access to health is strongly influenced by the social condition of the people and the location where they live. In relation to the elderly, there are other aggravating factors such as functional capacity and availability of support.

Female patients represented the majority of the patients who were absent from the pharmaceutical consultations. However, when checking the patients scheduled for the consultations, it was noticed that 66.87% were women, which explains the result found.

Regarding the number of comorbidities, it can be observed that among the patients analysed, the majority had two comorbidities, followed by individuals who had three comorbidities. This would lead us to the conclusion that a greater number of comorbidities did not interfere with non-attendance of the patients. The three primary health care units which most account for patients who are absent are located longer distance from the outpatient unit (4.1 km), than other health units (3.4 km). This distance can also be a cause of the high absenteeism from the pharmaceutical consultations. These data reinforce the need for the implementation of pharmaceutical care services in the primary health care units, which could contribute to the greater access of the population to the benefits of the pharmacotherapy monitoring service. The primary health care service, represented by the primary health care units, is the gateway to the health system, with a focus on disease prevention and health problems. In the city of Divinópolis, there are five primary health care units that provide the pharmaceutical care service and that contribute to the rational use of drugs, guaranteeing a better quality of life for the patients. Another example in Brazil is in the Brazilian Public Primary Health Care Unit located in the municipality of Salto Grande, São Paulo state [11]. The insertion of clinical pharmacists in other primary health care units would increase the number of patients attended.

Besides the distance, other reasons for absence could be the difficulty of displacement, the need for companions, conducting consultations during business hours, or that the patient is unaware of the importance of the pharmaceutical care service.

In addition, some authors suggest the need for flow management and the need to value the referral/counter referral dynamics of the SUS, when the absence rate to a health service is very high. Such action would bring good results for the patient, making the patient understand the multi-disciplinarity of the health system, as well as the importance of the care offered by the particularities of each professional [12].

As limitations, we can highlight the lack of human and financial resources to contact patients in order to identify the real causes of absences from the consultations. Another important issue is that future pharmacists consider

the telephone call the day before the consultation to seek improvements in the attendance rate, which was not performed in the present study.

The absence of patients in physicians and nurses' consultations represents a subject little explored in the literature. In the case of pharmaceutical consultations, this is the first study conducted to verify the absence rates of patients in a pharmaceutical care service.

Conclusion

Absence from pharmaceutical consultations is high (60.2%), and patients in more advanced age groups, women, coming from active identification, and who have primary health care units that are farthest from the clinical pharmacy service prevail among those who are absent.

The causes of missed consultations in pharmaceutical care should be studied individually. It is necessary to articulate new strategies aimed at reducing absences from consultations, since this is a source of waste of financial resources and opportunities to improve the patients' health and quality of life.

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Conflicts of interest The authors declare that they have no conflict of interest.

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