

“They ask me: why consult with a pharmacist?” - Patients’ experiences with a comprehensive medication management service

“Me perguntam: por que consultar com o farmacêutico?” - Experiência de pacientes com um serviço de gerenciamento da terapia medicamentosa

“Me preguntan: ¿por qué consultar con farmacéutico?” - Experiencia de pacientes con el servicio de gestión integral de la farmacoterapia

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Abstract

This study aims to reveal the patients’ experiences with a comprehensive medication management (CMM) service delivered in a specialty pharmacy in Brazil. This is a qualitative study performed from September 2015 to February 2016. In-depth semi-structured interviews were conducted with 10 patients followed-up in a CMM service in a specialty pharmacy located in Minas Gerais state. The interviews were recorded, transcribed and analyzed with the assistance of the NVivo11® software. According to the participants, they did not know what to expect from CMM at first. They showed difficulties on establishing a solid concept for CMM, however, they pointed some key aspects of pharmaceutical care philosophy based on their experience with the service. The interviewees identified the CMM pharmacist, seen as a care professional, as a different professional compared to the traditional pharmacist, mainly identified by them as a salesman. The ability to listen and the time that the CMM professional dedicated in the consultations were highlighted as primordial in the process of building a therapeutic relationship with the patient. The difficulties the patients have for establishing a solid concept for CMM might be due to the lack of pharmacists exerting this function, considering CMM is still a new service in Brazil. The results of this work can guide efforts to build a better interaction between patients and pharmacists, in a constant search for offering the best care possible.

Keywords: Pharmaceutical care; Specialty pharmacy; Qualitative research; Patient experience.

Resumo

O objetivo deste estudo foi revelar a experiência de pacientes com o serviço de gerenciamento da terapia medicamentosa (GTM) ofertado em uma farmácia do Componente Especializado no Brasil. Trata-se de um estudo qualitativo realizado em setembro de 2015 a fevereiro de 2016. Foram conduzidas entrevistas semiestruturadas em profundidade com 10 pacientes acompanhados em um serviço de GTM ofertado em uma farmácia do Componente Especializado do estado de Minas Gerais. As entrevistas foram gravadas, transcritas e analisadas com o auxílio do programa NVivo11®. De acordo com os participantes, eles não sabiam o que esperar do serviço de GTM a princípio. Eles mostraram dificuldades em estabelecer um conceito sólido para o GTM, contudo, eles identificaram pontos-chave da filosofia da atenção farmacêutica a partir de suas experiências com o serviço. Os entrevistados identificaram o farmacêutico provedor do GTM, visto como profissional do cuidado, como um profissional diferente comparado ao farmacêutico tradicional, identificado por eles como vendedor, ligado ao comércio. A habilidade de escuta e o tempo

que o profissional de GTM dispõe para atendimento foram destacadas como primordiais na construção de uma relação terapêutica com o paciente. As dificuldades apresentadas pelos pacientes em estabelecer um conceito sólido para o GTM podem ser devido à escassez de farmacêuticos exercendo essa função, uma vez que o GTM ainda é um serviço novo no Brasil. Os resultados deste trabalho poderão guiar os esforços necessários para que se possa construir uma melhor interação entre farmacêuticos e pacientes no GTM, em uma busca constante de aprimorar o oferecimento do cuidado.

Palavras-chave: Assistência farmacêutica; Medicamentos do componente especializado da assistência Farmacêutica; Pesquisa qualitativa; Experiência do paciente.

Resumen

Este estudio tuvo como objetivo revelar la experiencia de pacientes con el servicio de gestión integral de la farmacoterapia (GIF) ofrecido en una farmacia del Componente Especializado en Brasil. Se trata de un estudio cualitativo realizado desde septiembre de 2015 hasta febrero de 2016. Se realizaron, en profundidad, entrevistas semiestructuradas con 10 pacientes acompañados en un servicio GIF ofrecido en una farmacia del Componente Especializado del estado de Minas Gerais. Las entrevistas fueron grabadas, transcritas y analizadas con la ayuda del programa NVivo11®. Según los participantes, al principio no sabían que esperar del servicio GIF. Mostraron dificultades para establecer un concepto sólido para el GIF, sin embargo, pudieron identificar puntos clave en la filosofía de la atención farmacéutica a partir de sus experiencias con el servicio. Los entrevistados identificaron al farmacéutico que proporcionó el GTM, visto como un profesional de la atención, como un profesional diferente comparado al farmacéutico tradicional, identificado por ellos como vendedor, vinculado al negocio. La capacidad de escucha y el tiempo que dispone el profesional GIF para atender se destacaron como primordiales en la construcción de una relación terapéutica con el paciente. Las dificultades que presentan los pacientes para establecer un concepto sólido de GIF pueden ser debidos a la escasez de farmacéuticos que ejercen esta función, ya que GIF aún es un servicio nuevo en Brasil. Los resultados de este trabajo pueden orientar los esfuerzos necesarios para construir una mejor interacción entre farmacéuticos y pacientes en el GTM, en una búsqueda constante por la mejoría de la prestación de cuidados.

Palabras clave: Servicios farmacéuticos; Medicamentos del componente Especializado de los servicios farmacéuticos; Investigación cualitativa; Experiencia del paciente.

1. Introduction

A high level of drug-related morbidity and mortality has been identified worldwide by various authors in the past few decades (Souza et al., 2014; Saha et al., 2008; Gurwitz et al., 2003; Ernst & Grizzle, 2001). Furthermore, the prevalence of multiple chronic non-communicable diseases is continuously growing and demanding the use of a high number of medications. These changes make it even more urgent to have a professional that is capable of taking the responsibility for the optimization of drug use (Ramalho-de-Oliveira, 2011).

Pharmaceutical care is a person-centered practice that was developed in this context with the primary objective of identifying, preventing and solving drug therapy problems (DTP) to ensure that all the medications in use by the patient are necessary, effective, safe, and that the patient is able to adhere to the therapy. In this practice, the professional assumes the responsibility of being co-responsible for the best results of drug use. The philosophy and the methodological principles of pharmaceutical care guide the provision of a clinical service called comprehensive medication management (CMM) (Cipolle et al., 2012; Hepler & Strand, 1990).

National and international literature highlights the importance of CMM by demonstrating positive clinical, economic and humanistic results (Amaral et al., 2018; Hui et al., 2014; Ramalho-de-Oliveira et al., 2010; Planas et al., 2009). In Brazil, Detoni et al. (2017) showed positive impact of CMM service on clinical outcomes of patients with COPD, followed up in the same specialty pharmacy. Neves et al. (2019) and Santos et al. (2021) showed statistically significant reduction in the values of glycated hemoglobin, systolic blood pressure, low-density cholesterol, and total cholesterol in Brazilian patients that received CMM in primary health care.

As CMM is guided by a patient-centered care, it is important to understand patient experience with the service (Lyra Júnior et al., 2005). Although there are studies that describe in deep the pharmacist-patient relationship (Bissel et al., 2008; Guerreiro et al., 2010; Renberg et al., 2006), little is known about how patients perceive this relationship within a CMM

service, and how the change in the care paradigm affects their perception and clinical results. Most of the studies conducted with this aim used satisfaction and health quality surveys (D'andrea et al., 2012; Amarante et al., 2010; Montgomery et al., 2009; Lyra Júnior et al., 2005). Such study designs have the advantage of reaching a great number of participants simultaneously, but they are not able to provide a deep understanding of the meaning of the investigated phenomena for the individuals. Only by a more comprehensive approach one will be able to capture, with all the inherent complexity, patients' feelings and experiences. Thus, the objective of this study was to comprehend patients' perceptions about a CMM service in a Brazilian specialty pharmacy.

2. Methodology

2.1 Setting

The study was performed in a specialty pharmacy in the state of Minas Gerais, Brazil. The specialty pharmacy (called in Brazil Farmácia do Componente Especializado da Assistência Farmacêutica) is a national program of the public health care system, which goal is to guarantee access to medications for the treatment of complex diseases in the outpatient level. In order to achieve its goals, the program counts with several dispensing units widespread over the country (Brasil, 2013). The specialty pharmacy provides medicines for more than 80 pathologies, including chronic obstructive pulmonary disease (COPD). The research setting is one of the dispensing pharmacies, with private rooms where the CMM consultations take place. The CMM service is offered by three pharmacists, aimed at patients who receive medicines for the treatment of COPD.

2.2 Study design

This qualitative study was performed from September 2015 to February 2016, having as reference Minayo (2010). In-depth semi-structured interviews were carried out with patients followed up in the CMM service. To be eligible, the respondent should have at least three CMM consultations and demonstrate good cognitive ability to answer to the interviewer's questions. Four main topics were addressed for the semi-structured interview guides: (1) patients' initial perceptions about the service; (2) how they perceive CMM; (3) the role of the pharmacist in CMM service; (4) how the subjects perceive the clinical benefits of the service. Ten patients were interviewed and this number was considered sufficient by the researcher to reach data saturation and to meet the aim of this work.

2.3 Data Collection and Data Analysis

The interviews were recorded, transcribed *verbatim* and re-read while listening to the audio records to check for possible mistakes and misunderstandings. The analysis was performed using an iterative coding process, which consists in reading the transcriptions and comparing each new piece of data with the previous findings to identify repetitive themes. The individual sentences receive labels according to the meaning they carry and are grouped into nodes with the help of the software NVivo11®.

2.4 Ethical Considerations

This study was approved by the Ethics Committee of the Federal University of Minas Gerais and by the Ethics Committee of the Municipal Health Secretary of Minas Gerais, under the same approval number (CAAE number: 25780314.4.0000.5149). The identity of participants was preserved and the confidentiality of the information was guaranteed. All participants signed the free and informed consent form prior to the interview. All the names are fictive.

3. Results

The interviews took on average 28 minutes. The data were grouped into five major categories as a result of the thematic analysis of the transcripts.

3.1 Estrangement about pharmaceutical care

None of the interviewees referred having previous contact with such type of service. In general, they all felt an “estrangement” regarding the offering of care in a dispensing pharmacy.

I've been getting my medicines in this pharmacy for a while now, but they had never invited me for anything like that before. I thought it was strange. But since they had set an appointment, I said: 'here we go'. (Caetano)

Nevertheless, as they normally get their medications in this unit, they easily associated the CMM service to aspects concerning their drug therapy.

I thought that you [the pharmacist] might want to know whether I am satisfied or not, whether my medication is working or not. (Gilberto)

3.2 The disparity between the traditional pharmacist and the CMM pharmacist

Participants demonstrated to have difficulties in talking about the role of the pharmacist in CMM service, since none of them have had clinical appointments with this professional before. They identified the pharmacist mainly as someone who works in drugstores, linked to sales of pharmaceutical products, and described their lack of interaction with this professional in this environment.

The pharmacist from the drugstore, the salesman, he just wants to sell you things. He is a seller in the drugstore. What does the pharmacist do in a drugstore? I never had direct contact with the pharmacist in a drugstore, just with you here. (Belchior)

When comparing the role of the CMM pharmacist with the drugstore pharmacist, the interviewees pointed out as differential the comprehensive approach used to identify their pharmacotherapeutic needs.

Well, there is this woman in the drugstore where I buy my medications. She stays on the counter and she asks me: 'are you taking your drugs properly?' And I answer: 'yes. I am'. (...) In here [CMM service] it is more complete, right? I show her [CMM pharmacist] my prescription. We talk more in here. She asks for my exams (...) She calls me at my house to check how I am taking my medicines. That captivates us. In here she asks everything about my disease. (Chico)

3.3 The previous experience in health care – discovering new possibilities

The briefness of the traditional clinical consultations was a concerning point mentioned by the participants. The absence of a therapeutic relationship is felt when the patients' experiences and concerns are put aside by a disease-led approach.

Well, if you go the doctor, you are going to tell him what you're feeling, right? Then the doctors just ask you to do some exams without even looking at your face. (...) They don't ask you about your struggles, what's wrong with you, beyond health issues. Do you understand? (Milton)

(...) each one just looks at one specific thing: prostate is prostate, kidney is kidney. And I was losing everything. (Chico)

The importance of an individualized and shared decision-making process was highlighted and these aspects were considered by the participants as part of the CMM pharmacist approach.

She [CMM pharmacist] talks, but she also clears out my doubts, asks me if I still have any doubts and whether I agree or not with what she said. I mean, she doesn't want to impose anything, she divides the problem with us. (Caetano)

Also, participants' demonstrated to understand that, although they were included on the CMM service initially because of the COPD treatment, the pharmacist assessment has a comprehensive approach and the CMM care process is not directed only to the management of this single health problem.

She [the CMM pharmacist] solves many of my doubts and helps me a lot. Not only about the inhalers, but also about all of my other medications. About blood pressure, thyroid. She always asks me about how I am feeling, this is pretty important, right? (Elis)

3.4 Making sense of CMM

3.4.1 Recognizing an unfilled space on the patient care process

In the excerpts below, the participants talk about how they perceive a need for a professional that is able to evaluate patients' drug use. In their speeches, it is also pointed how the pharmacist could be the adequate professional for exerting this function.

You have the doctor and the patient, and then you have the pharmaceutical industry and the distribution of the medications. So, the doctor prescribes. Between the doctor, the patient and the drugstore, I couldn't imagine anything (...) So you [the CMM pharmacists] evaluates the consumption and the use of medications... It is a way to continuously evaluate patients' treatments. (Tim)

3.4.2 The role of the pharmacist on CMM

The participants described the interventions made by the pharmacist on their drug therapy, demonstrating how they perceive the role of the pharmacist when offering a CMM service. It is important to point that, since there were no other health professionals in the specialty pharmacy, when necessary the contact with the physician was made by letters, containing all the pharmacist recommendations.

Well, I was taking a drug that was making me ill. It was suspended. There were some other medicines I had to use that I was not using. She asked me to do some blood tests; I went to the doctor and did it. Then I started taking another drug that I needed. (...) I was taking a pill and she asked me to stop. I stopped taking it and got better. (...) I also had

this pain on my knees... a terrible pain on my legs. Then she told me to buy a medicine. I bought it and now I feel better. (Belchior)

Although the interviewees showed difficulties on establishing a solid concept for CMM, they seemed to be able to exemplify actions performed by the pharmacists on the consultations and connect those in order to build an empirical concept that approaches the real function of the CMM service.

They ask me: "why consult with a pharmacist?" And I say: she [CMM pharmacist] called me to set and appointment, to talk about my medication and when to take it. To talk about the drug's effects. It is a consultation that helps a lot, I have my doubts answered. (Elis)

When I have any doubt, I call her like I just did, "some things changed here, what do you think?" (...) I brought my new prescription for her to take a look... I came now to see if I should take her letter to the doctor (...) So I think it is nice, she guides me, how to take my medicines, what I should or shouldn't do, whether to stop a treatment or not. I think it is very useful. They explain to me how I should take my medications, what to change or what not to change. (Belchior)

3.4.3 Perception about the clinical benefits

Also, participants highlighted the clinical benefits and the importance of being followed up in the CMM service.

Changing my medicines has helped a lot. I was just getting new prescriptions with the same medicines, for a while I did not do any monitoring exams. So she [the pharmacist] requested new exams and I did them. She suggested to increase or decrease the doses of some medications, or even to change the drugs. (...) Now, some of the drugs have changed and I even started to use new medicines. Now I am feeling better. (Alceu)

3.5 The pharmacists' limitations in patient care

The absence of autonomy for the pharmacist to order exams was pointed as a barrier for establishing an effective care process. Nevertheless, the interviewees demonstrated to understand the value of consulting with the pharmacist even though he has to deal with these difficulties:

Having to send me to the doctor for me to be able to do the exams delays a little the progress of the treatment, but it's helpful because otherwise, without the pharmacist's referral, I wouldn't even initiate the process. So it's a good start for me as a patient. I know I'm being taken care of. (Belchior)

4. Discussion

The results presented above through the patients' speeches enable a better understanding of the patients' experiences with a comprehensive medication management service delivered in a specialty pharmacy in Brazil. To ensure that the patient knows what to expect from the professional and from the service is critical when working in a person-centered approach. This way, the pharmacist can prioritize decisions by understanding patients' own demands (Ramalho-de-Oliveira, 2011).

The participants did not know what to expect from CMM at first since they have never had contact with the pharmacist offering this service. This fact was expectable, considering this is still a new service in Brazil. Because of that,

respondents recognized the major function of the pharmacist as usually related to sales, since they formerly only had contact with this professional on commercial environments such as drugstores. Although drugstores constitute a connection between the production chain and the drug use by the patient, they transformed themselves more into a commercial establishment than into health establishment (De Barros, 2004). In a study conducted by Olsson et al. (2002), most of the interviewees mentioned that the main function of the pharmacist is to serve the customer as a “businessman” that earns money by selling medicines and whose professional motivation is to sell the most in the shortest possible time.

However, after some appointments, the interviewees demonstrated to understand how the CMM pharmacist has different responsibilities compared to the traditional pharmacist in drugstore. They perceive the CCM pharmacist as a healthcare provider and pointed out as differential the comprehensive approach used to identify their pharmacotherapeutic needs. This is a major point in pharmaceutical care’s philosophy of practice: even when CMM is offered only to specific patients who have specific diseases, the pharmacist must work in a holistic manner, assessing all of the patients’ pharmacoterapeutic needs.

In Brazil, the university reform that happened during the military dictatorship was strongly influenced by the Flexner Report (1910). The Flexnerian reform occurred in the United States in 1910, contributing to an educational process that privileges the high-level scientific training and stimulating the professional specialization, characteristics of the biomedical model of care (Neves et al., 2005). This educational pattern leads, in clinical practice, to an impersonal and fragmented care, mentioned by the interviewees as a concern. In accordance with this idea, Ismael (2005) presents Ivan Illich’s observations that “it is more important for the doctor to auscultate the patient than to listen to him, abrogating the human face of medicine”. Moreover, the short time available for the professionals to evaluate the patient’s situation make it hard for empathy to take part on the process, turning it into a “mere search for symptoms as a way of prescribing the adequate medicines for the complaints presented by the patients” (Pereira & Azevedo, 2005).

The lack of attention and time devoted for listening to the patients was a recurrent theme for all the interviewees, evidencing that the patients want to be heard and to co-participate on their own care process. They also described how the CMM pharmacist payed attention to their demands. This is a key point of a person-centered approach, one of pharmaceutical care’s philosophical principles: the professional must consider that when the patient searches for her/his help, she/he brings her/his own experiences, expectations, feelings and social values. The practitioner must take all of these into consideration for choosing the best alternative to solve the patient’s problem. Good communication between professionals and patients leading to the establishment of a therapeutic relationship is unequivocally connected to better results on what concerns not only patient satisfaction, but also about his/her clinical course (Sandhu et al., 2015; Sweeney et al., 2014; Pereira & Azevedo, 2005).²⁸⁻³⁰

As Greenhalgh et al. (2004) stress, clinical decisions should not be merely based on clinical trials. Not only physiological, but also psychological and sociocultural factors can influence the drug treatment for a given patient and should be taken into consideration. Furthermore, Ryan et al. (2006) talk about the clinical benefits achieved when clinicians share decisions about the treatment with the patient. They criticize the traditional and vertical method where the health professional does not considered the value of the narratives and motivations of the patient. In contrast, the interviewees recognized the CMM pharmacist’s effort to listen to their needs and to share responsibilities and decisions.

All of the points mentioned above were also highlighted by Ramalho-de-Oliveira et al. (2012) in a study that aimed at providing and discussing strategies for pharmacists to broaden their view of patients’ experiences with drug use and how these influence the therapeutic outcomes achieved. The authors point out, among other strategies, 1) the importance of actively listening to the patients and developing a therapeutic relationship, acknowledging their experiences, feelings and concerns, and 2) the importance of negotiating with the patient the goals for her/his therapy and involving him on the decision-making process.

The absence of autonomy for the pharmacist in the CMM service was pointed as a barrier for establishing an effective care process. In fact, as the pharmacist cannot legally alter a prescription or prescribe medications (except for those that require no prescription), it takes a lot more time to solve some of the patients' problems. In some places, such as in Fairview Health Services in the United States, where CMM service has already gained more recognition, pharmacists already have autonomy and the "decision-making power" to prescribe or change prescriptions for patients (Maracle et al., 2012). In fact, this is still a very important limitation for the pharmacists in Brazil to be able to make their interventions in a more effective manner. However, despite these difficulties, the interviewed patients seem to understand the value of being attended by a pharmacist.

Although the participants showed difficulties on establishing a solid concept for CMM, they were able to exemplify actions performed by the pharmacists on the consultations and connect those in order to build an empirical concept that approaches the function of the CMM service. Furthermore they demonstrate to perceive how they benefit from the service.

One of the interviewee points out a very important issue regarding his prescriptions: he was just getting the same prescriptions from the doctors, without doing any monitoring exams to check if his treatment was working. This seems to be a very recurrent problem on the healthcare system (Filardi et al., 2017; Price et al., 2017; Lillis & Lord, 2011). The authors discuss that this prescription behavior might increase convenience for patients and avoid clinicians' burden; nevertheless, it is very important to attempt to the safety of this practice, because it can generate many avoidable risks and harms for the patients. As discussed by Lillis and Lord (2011), in order to improve safety in repeat prescribing, the communication with the pharmacist should be enhanced to reduce potential errors and harms. CMM pharmacists have a very important role on solving this as in her/his work, she/he will evaluate the effectiveness and safety of the drug treatment and then suggest modifications if he considers it is not appropriate.

As Cipolle et al. (2012) observe, within the context of pharmaceutical care, the focus of the pharmacist change from the product (the drug) to the person (the patient). This change of focus is clear in Cipolle's (1986) quote "drugs don't have doses – people have doses".

5. Final Considerations

This study enables a better understanding of the patients' experiences with a comprehensive medication management service delivered in a specialty pharmacy in Brazil. The interviewed patients have difficulties for establishing a solid concept for CMM since none of them had previous knowledge about the service or previous contact with another pharmacist offering a care service. Despite that, on their speeches they talk about aspects they consider pivotal on a consultation: the time dedicated by the professional to listen to their demands, how the practitioner respects their decisions and experiences, the holism and the open dialogue disconnected from the paternalism present on the traditional medical consultations. This way they identify some major cornerstones of the patient-centered care previewed by pharmaceutical care that must be incorporated by the practitioners offering a CMM service.

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References

- Amaral, P. A., Mendonça, S. A. M., Ramalho-de-Oliveira D., Peloso, L. J., Pedroso, R. S. & Ribeiro, M. A. (2018). Impact of a medication therapy management service offered to patients in treatment of breast cancer. *Braz. J Pharm Sci*, 54(2), Article e00221.
- Amarante, L. C., Shoji, L. S., Beijo, L. A., Lourenço, E. B. & Marques, L. A. M. (2010). A influência do acompanhamento farmacoterapêutico na adesão à terapia anti-hipertensiva e no grau de satisfação do paciente. *Revista de Ciências Farmacêuticas Básica e Aplicada*, 31(3), 209–215.

- Bissell, P., Blenkinsopp, A., Duncan Short, D. & Mason L. Patients' experiences of a community pharmacy-led medicines management service. (2008). *Health and Social Care in the Community*, 16(4), 363–369.
- Brasil. Ministério da Saúde. Portaria no 1.554, de 30 de julho de 2013. Dispõem sobre as regras de financiamento e execução do Componente Especializado da Assistência Farmacêutica no âmbito do Sistema Único de Saúde (SUS). http://bvsmis.saude.gov.br/bvsmis/saudelegis/gm/2013/prt1554_30_07_2013. Accessed 15 June 2016.
- Cipolle, R. J. (1986). Drugs don't have doses--people have doses! A clinical educator's philosophy. *Drug Intell Clin Pharm*, 20(11), 881-2.
- Cipolle, R. J., Strand, L. M. & Morley, P. C. (2012). *Pharmaceutical Care Practice - The Patient-Centered Approach to Medication Management* (3rd ed.). McGraw-Hill Companies.
- D'andréa, R. D., Silva G. P., Marques L. A. M. & Rascado, R. R. (2012). A importância da relação farmacêutico – Paciente: percepções dos idosos integrantes da UNATI (Universidade aberta à terceira idade) sobre a atuação do farmacêutico. *Revista Eletrônica de Farmácia*. IX(2), 49-60.
- De Barros, J. A. C. (2004). *Políticas Farmacêuticas: A Serviço dos Interesses da Saúde?* UNESCO.
- Detoni, K.B., Oliveira, I. V., Nascimento, M. M. G., De-Caux, T., Alves, M. R. & Ramalho-de-Oliveira, D. (2017). Impact of a medication therapy management service on the clinical status of patients with chronic obstructive pulmonary disease. *Int J Clin Pharm*, 39(1), 95-103.
- Ernst, F. R. & Grizzle, A. J. (2001). Drug Related Morbidity and Mortality : Updating the Cost of Illness Model. *Journal of the American Pharmacists Association*. 41(2), 1–10.
- Filardi, A. F., Araújo V. E., Nascimento, Y. A. & Ramalho-de-Oliveira, D. (2017). Use of psychotropics in everyday life from the perspective of health professionals and patients: a systematic review. *Journal of Critical Review*, 4(3),1-8.
- Flexner, A. (2002). Medical education in the United States and Canada. From the Carnegie Foundation for the Advancement of Teaching, Bulletin Number Four, 1910. *Bulletin of the World Health Organization*, 80(7), 594-602.
- Greenhalgh, T. Kostopoulou, O. & Harries, C. (2004). Making decisions about benefits and harms of medicines. *British Medical Journal*, 329(7456), 47–50.
- Guerreiro, M., Cantrill, J. & Martins, P. (2010). Acceptability of community pharmaceutical care in Portugal: a qualitative study. *Journal of Health Services Research & Policy*, 15(4), 215–22.
- Gurwitz, J. H., Field, T. S., Harrold, L. R., Rothschild, J., Debellis, K., Seger, A. C., Cadoret, C., Fish, L. S., Garber, L., Kelleher, M. & David W Bates, D. W. (2003). Incidence and Preventability of Adverse Drug Events Among Older Persons in the Ambulatory Setting. *Journal of American Medical Association*, 289(9), 1107–1116.
- Hepler, C. D., & Strand, L. M. (1990). Opportunities and responsibilities in Pharmaceutical Care. *American Journal of Hospital Pharmacy*, 47, 533–43.
- Hui, R. L., Yamada, B. D., Spence, M. M., Jeong, E. W. & Chan, J. (2014). Impact of a Medicare MTM program: evaluating clinical and economic outcomes. *Am J Manag Care*, 20(2), e43-51.
- Ismael, J. C. (2005). *O médico e o paciente : breve história de uma relação delicada* (2a ed.). Mg Editores.
- Lillis, S. & Lord, H. (2011). Repeat prescribing—reducing errors. *J Prim Health Care*, 3(2),153-158.
- Lyra Junior, D., Amaral, R. T., Abriata, J. P. & Pelá IR. (2005). Satisfaction as an outcome of a pharmaceutical care program for elderly in Ribeirão Preto-São Paulo (Brazil). *Seguimento Farmacoterapêutico*,3(1), 30-42.
- Maracle, H. L., Ramalho-de-Oliveira, D. & Brummel, A. (2012). Primary Care Providers' experiences with Pharmaceutical Care -based Medication Therapy Management Services. *Innovations in Pharmacy*, 3(1), 1–12.
- Minayo, M.C.S. (2010). *O Desafio do Conhecimento - Pesquisa Qualitativa em Saúde* (12a ed.). Editora Haucitec.
- Montgomery, A. T., Sporrang, S. K., Manap, N., Tully, M. P. & Lindblad, A. K. (2010). Receiving a pharmaceutical care service compared to receiving standard pharmacy service in Sweden-How do patients differ with regard to perceptions of medicine use and the pharmacy encounter? *Research in Social and Administrative Pharmacy*, 6(3), 185-195.
- Neves, N. M. B. C., Neves, F. B. C. S. & Bitencourt, A. (2005). O Ensino Médico no Brasil: Origens e Transformações. *Gaz méd. Bahia*, 75(2),162-168.
- Neves, C.M., Nascimento, M. M. G., Silva, D. A. M. & Ramalho-de-Oliveira, D. (2005). Clinical Results of Comprehensive Medication Management Services in Primary Care in Belo Horizonte. *Pharmacy (Basel)*, 7(2), Article 58.
- Olsson, E., Tuyet, L. T. N., H A Nguyen, H. A. & Lundborg, C. S. (2002). Health professionals' and consumers' views on the role of the pharmacy personnel and the pharmacy service in Hanoi, Vietnam--a qualitative study. *Journal of Clinical Pharmacy and Therapeutics*, 27(4), 273–280.
- Pereira, M. G. A. & Azevêdo, E. S. (2005). A relação médico - paciente em Rio Branco/AC sob a ótica dos pacientes. *Revista da Associação Médica Brasileira*, 51(3), 153–157.
- Planas, L. G., Crosby, K. M., Mitchell, K. D. & Farmer, K. C. (2009). Evaluation of a hypertension medication therapy management program in patients with diabetes. *Journal of the American Pharmacists Association*. 49(2), 164.
- Price, J., Man, S.L., Bartlett, S., Taylor, K., Dinwoodie, M. & Bowie, P. (2017). Repeat prescribing of medications: A system-centred risk management model for primary care organisations. *J Eval Clin Pract*, 23(4), 779–796.
- Ramalho-de-Oliveira, D. (2011). *Atenção Farmacêutica: da filosofia ao gerenciamento da terapia medicamentosa*.RCN editora.

- Ramalho-de-Oliveira, D., Brummel, A. R. & Miller, D. B. (2010). Medication therapy management: 10 years of experience in a large integrated health care system. *Journal of Managed Care Pharmacy*, 16(3), 185–195.
- Ramalho-de-Oliveira, D., Shoemaker, S. J., Ekstrand, M. & Mateus R Alves. (2012). Preventing and resolving drug therapy problems by understanding patients' medication experiences. *Journal of the American Pharmacists Association*, 52(1),71-80.
- Renberg, T., Lindblad, A. K. & Tully, M. P. (2006). Exploring subjective outcomes perceived by patients receiving a pharmaceutical care service. *Research in Social & Administrative Pharmacy*, 2(2),212-31.
- Ryan, K., Bissell, P. & Morecroft, C. (2006). Narratives about illness and medication: a neglected theme/new methodology within pharmacy practice research. Part I: medication narratives in practice. *Pharmacy World & Science*, 29(4), 353–60.
- Saha L., Pandhi P., Malhotra S. & Sharma N. (2008). Adverse Drug Event (ADE) related medical emergency department visits and hospital admissions: a prospective study from a north Indian referral hospital. *Journal of Clinical and Diagnostic Research*, 2(1), 600–604.
- Sandhu, S., Arcidiacono, E., Aguglia, E. & Priebe, S. (2015). Reciprocity in therapeutic relationships : A conceptual review. *International Journal of Mental Health Nursing*, (8), 1–11.
- Santos, B. D., Nascimento, M. M. G., Oliveira, G. C. B., Nascimento, Y. A., Mambrini, J. V. M., Cid, A. S., Piovesan, T. G. C., Fernandes L. B., Martins, U. C. M., Neves, C. M., Silva, D. F. & Ramalho-de-Oliveira, D. (2021). Clinical Impact of a Comprehensive Medication Management Service in Primary Health Care. *Journal of Pharmacy Practice*, 34(2):265-271.
- Souza, T. T., Godoy, R. R., Rotta, I., Pontarolo, R., Fernandez-Llimos, F. & Correr, C. J. (2014). Morbidade e mortalidade relacionadas a medicamentos no Brasil: revisão sistemática de estudos observacionais. *Revista Brasileira de Ciências Farmacêuticas Básica e Aplicada*, 35(4), 519–532.
- Sweeney, A., Sweeney A., Fahmy, S., Nolan, F., Morant, N., Fox, Z., Lloyd-Evans, B., Osborn, D., Burgess, E., Gilbert, H., McCabe. R., Mike Slade, M. & Johnson, S. (2014). The Relationship between Therapeutic Alliance and Service User Satisfaction in Mental Health Inpatient Wards and Crisis House Alternatives: A Cross-Sectional Study. *PLoS ONE*, 9(7), 1-13.