

The challenges of Pharmaceutical Care for people with hearing impairment

Os desafios da Atenção Farmacêutica às pessoas com deficiência auditiva

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Abstract

Introduction: Pharmaceutical care consists of a set of care actions, focused on promoting, protecting, and recovering health, aiming at the rational use of medicines. However, this care requires special attention when directed to people with disabilities. **Objectives:** The objective of this research was to reflect on the challenges faced by Pharmaceutical Care in the care of people with hearing impairment, to guarantee the right of access to good pharmaceutical guidance. **Methods:** This is an integrative review in Google Scholar search sources and in SciELO, LILACS, PUBMED databases, and in the repositories of Brazilian universities, between 2012 and 2022. **Results:** According to the literature review, the results pointed to the importance of inclusive pharmaceutical care. For this, knowledge of Libras is necessary for effective communication with deaf patients, while actions such as lip reading, writing or mimicry are palliative. **Conclusions:** It is concluded that the main challenges faced in Pharmaceutical Care for deaf or hard of hearing people are the lack of knowledge of Libras and the lack of interest in knowing and understanding the culture of deaf people. **Keywords:** pharmacists; sign language; guidance

Resumo

Introdução: A Atenção Farmacêutica consiste em um conjunto de ações de cuidado, direcionadas à promoção, proteção e recuperação da saúde, visando o uso racional de medicamentos. No entanto, este cuidado requer atenção especial quando o atendimento é direcionado às pessoas com deficiência. **Objetivos:** O objetivo desta pesquisa foi refletir sobre os desafios enfrentados pela Atenção Farmacêutica no atendimento às pessoas com deficiência auditiva, no intuito de garantir o direito ao acesso à uma boa orientação farmacêutica. **Métodos:** Trata-se de uma revisão integrativa em fontes de busca no Google Acadêmico e em bases de dados: SciELO, LILACS, PUBMED, e nos repositórios das universidades brasileiras, entre 2012 e 2022. **Resultados:** De acordo com a revisão de literatura, os resultados apontaram a importância de o atendimento farmacêutico ser inclusivo. Para isso, é imprescindível o conhecimento de Libras para se ter uma comunicação eficaz com pacientes surdos, ao passo que as ações de leitura labial, escrita ou mímica são paliativas. **Conclusões:** Conclui-se que os principais desafios enfrentados na Atenção Farmacêutica para pessoas surdas ou com deficiência auditiva são a falta de conhecimento de Libras e interesse em conhecer e compreender a cultura das pessoas surdas.

Palavras-chave: farmacêuticos; língua de sinais; orientação

Revista de Atenção à Saúde | v. 21 |e20238944 | jan.-dec. | 2023. https://doi.org/10.13037/ras.vol21.e20238944



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Introduction

Pharmaceutical Care (ATENFAR) is a model of pharmaceutical practice, articulated in the context of Pharmaceutical Assistance (PA), and includes the professional's attitudes, ethical values, skills, behaviors, commitments, and coresponsibilities prevent to diseases, promote and recover health, according to Resolution No. 338/2004 of the National Health Council¹.

ATENFAR was first established as an pharmacological action provide to treatment to achieve concrete results and ensure patients' quality of life². In this sense, it constitutes a new philosophy of professional practice for pharmacists, whose attitudes aim at promoting and recovering people's health³. It should be taken into account that the quality of the results is directly proportional to the improvement in the quality of life provided the patient. achieved through to pharmacotherapy optimization and drugrelated problem-solving².

The pharmacist in his ATENFAR work must assist all citizens, as it is a public right, regardless of sex, age, sexual orientation, religion, social condition, or any other condition. In this regard, People with Disabilities (PcD) shall be considered since, according to Law No. 13.146/2015, they are citizens of rights with long-term impairment (physical, mental, intellectual or sensory) that, in interaction with one or more barriers, may hinder their full and effective social participation in equal conditions with other citizens⁴.

It should be noted that, by virtue of the service provided by ATENFAR for PcD, accessibility is essential to ensure the quality of this service, especially because these patients have the right to full health, like any other person, without being discriminated against in view of their particularity, as determined by Resolution No. 662 of October 25, 2018. Pharmaceutical Care faces a great challenge, especially in relation to adequate training to offer quality service to all users⁵.

In this setting, the following guiding question was used to develop this research: challenges faced what are the bv Pharmaceutical Care in the care of people with hearing impairment to ensure the right to access and rational use of medicines? To answer this question, this work aimed to discuss the challenges faced bv Pharmaceutical Care to the inclusive care in Pharmacies, especially of people with hearing impairment, who are the ones having partial or total hearing loss, but who interact and understand the world through visual instruments, such as the Brazilian Sign Language (Libras).

Materials and Methods

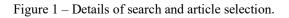
The study was an integrative review, with a descriptive and qualitative approach. Scientific articles from 2012 to 2022 addressing the topic in question, which were found in search sources in Google Scholar, in SciELO, LILACS, PUBMED databases, and in repositories of Brazilian universities, were grouped. The descriptors used were: pharmaceutical care, people with disabilities, deaf, and hearing impairment.

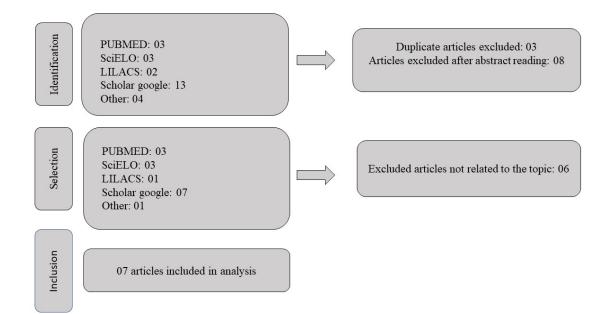
The critical analysis of the included studies on the theme was divided into three steps: 1 - reading of the articles titles; 2 reading of the abstracts; and 3 - full reading of the texts discussing PA for hearing PcD. The exclusion criteria were duplicate articles, those without free access, those not available in full in the databases, and those not related to the research theme. Based on the reflections of this review work, a flowchart of access of the deaf and/or hearing impaired patient in Pharmacies or Drugstores was proposed.

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The stages of selection of the articles included in the work were presented as follows (Figure 1).





In the literature search, 25 publications were found and 7 scientific articles were selected.

Table 1 – Analysis of the selected articles.

AUTHOR, YEAR	OBJECTIVES	SAMPLE	DRAW	MAIN RESULTS
Cunha e Dias, 2020	To analyze the main difficulties faced by the deaf person and dependence on others in the use of their medications.	06 deaf people	Questionnaire with deaf patients	There are many difficulties for deaf and hearing people to interact more easily, the main problems being communication and lack of investment in education.

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AUTHOR, YEAR	OBJECTIVES	SAMPLE	DRAW	MAIN RESULTS
Paula et al., 2022	Identify inclusion experiences involving people with deafness/blindness within pharmaceutical care practices.	499 articles	Analysis of articles in 5 databases	There are gaps regarding the experiences of pharmacists and/or undergraduate pharmacy students on health education for deaf people. The articles highlight the pharmaceutical services and the importance of offering and promoting pharmaceutical care for deaf people. The language barrier is a challenge, which needs to be overcome, so that the deaf patient can acquire the necessary information about the use of medicines.
Araújo et al., 2019	To evaluate undergraduate pharmacy curricula at Federal Institutions of Higher Education in Brazil to identify courses in sign language and other content related to providing care to deaf patients.	35 Pharmacy courses	Cross- sectional and descriptive study	Learning sign language in pharmacy courses is important for future professionals, who could provide humanistic and integral care to deaf patients. Therefore, it becomes necessary to improve sign language teaching for Pharmacy undergraduate students in Brazil.
Viana, 2020	To demonstrate the importance of the use of Libras in inclusive care in the pharmacy for deaf people.	06 pharmaceutical professionals	Case study by means of an electronic questionnaire	After the study, it was found that most professionals know Libras, although they do not use it. However, pharmacists are aware that Libras is an important channel for effective communication and quality care.
Ferguson e Liu, 2015	Identify communication barriers of deaf and hard of hearing patients in pharmaceutical care, and better understand the impact of poor communication on therapy adherence and medication errors.	16 deaf and 04 hearing impaired	Focus Group Discussion	Deaf and hard of hearing patients have unique needs that pharmacists must understand and address. Effective communication and literacy assessment are essential to ensure safe medication use and optimal health outcomes. Pharmacist education and staff training are necessary to increase awareness of the needs of this population and strengthen the patient- pharmacist relationship.

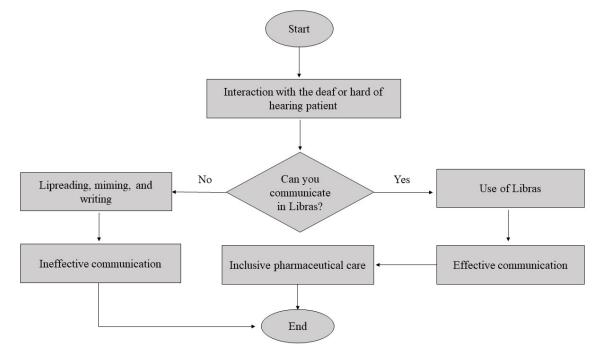
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AUTHOR, YEAR	OBJECTIVES	SAMPLE	DRAW	MAIN RESULTS
Ferguson e Shan, 2016	Collect information from pharmacists regarding their attitudes and methods of interaction with deaf patients.	working in an environment with	Cross- sectional study, with the application of an online questionnaire	When interacting with a deaf patient, pharmacists may experience communication barriers, which they must overcome to communicate appropriately with deaf people.
Hyoguchi, et al, 2020	Observe knowledge about hearing impairment, practice of appropriate actions, and confidence in medication education for deaf and hard of hearing patients.	20 deaf, 19 disabled and 20 listeners	Application of 2 questionnaires and the promotion of a lecture	communicate and take appropriate actions when providing medication education to hearing impaired patients.

After analyzing the information obtained in the articles, a flowchart of the deaf or hearing impaired patient's access to Pharmacies and Drugstores was proposed (Figure 2).

Figure 2 - Flowchart of the deaf or hearing impaired patient's access to inclusive pharmaceutical care in a Pharmacy or Drugstore.



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Discussion

The study by Cunha and Dias $(2020)^6$ aimed to analyze the main difficulties faced by the deaf person and the dependence on other people for the use of their medicines. For the authors, one of the main difficulties is that oral language is privileged over other forms of communication, which hinders the deaf from understanding the information, and thus not seeking pharmaceutical care. In pharmacists do not addition, have knowledge of Libras to assist the deaf, thus building barriers between the customer (the deaf person) and the professional. Therefore, this communication is intermediated by family or friends during the acquisition of medicines.

Many times, the deaf do not have access to the Portuguese language and the essential knowledge about health and diseases, being at a disadvantage when it comes to hygienic care and disease prevention. Thus, the deaf's social inclusion still requires improvement, especially through public policies⁶.

Communication has an important role health professionals-patients in the professionals interaction, so some experience obstacles when assisting deaf people and the latter feel the same way. The language barrier hinders the acquisition of information about the proper use of medicines. Therefore, pharmacists need to contribute learn Libras to to the of improvement the quality of Pharmaceutical Care in the community⁷.

Health professionals in PA feel unprepared to assist deaf or disabled people, although there is legislation guiding the curriculum of the pharmacists' training, as well as being a right of PcD. However, there are some applications, such as Hand Talk (Libras translator), which help the communication between the pharmacist and the deaf/hard of hearing people, although the most used technique for attendance is the written one, even when the professionals do not know the literacy level of the people with hearing impairment⁷.

Araújo et al. (2019)⁸, through a crosssectional and descriptive study, sought to analyze the undergraduate curricula in pharmacy in Federal Institutes of Higher Education (IFES) in Brazil, aiming to identify the presence of sign language courses in the provision of care to deaf patients. Thus, in practice, the lack of knowledge of Libras and deaf culture by professionals and the lack of literacy by patients have hindered communication between them, potentially causing problems with pharmacotherapy and negative outcomes.

Of the researched IFES, the authors found that of 35 pharmacy schools eligible for analysis, only 18 offered the course of Libras, and of these, only 04 included theoretical and practical content. Another important fact about the pharmacy courses in Brazil is that Libras was offered at any time during the course, while in programs in other countries, the subject of sign language was offered at the beginning of the undergraduate course. There are some students who prefer the course at the end of the undergraduate course, because it is more accessible and consolidated with practice. Therefore, pharmacy schools and universities shall review their curricula, to meet the demands of population diversity⁸.

Viana (2020)⁹, in his research, aimed to demonstrate the importance of the use of Libras in inclusive care in the pharmacy to deaf people. In addition, he aimed to identify the context of drug consumption by deaf people in Açailândia -MA, to present the relevance of valuing and including deaf people as a customer and, finally, to show the pharmacy attendants'

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opinion about the implementation of Libras in the service. For the author, most professionals know Libras (67%), but do not use it, since they were not trained.

Professionals shall make the service to deaf people more accessible and of higher quality, because strategies such as mimicry or even writing or lip reading do not make the service more inclusive and citizenly. In fact, when pharmacists recognize the failure of communication in the care of deaf consider improving the people. thev service. Thus, when Libras is included, communication improves and feelings of confidence and self-esteem precede feelings of accessibility and personal and professional fulfillment⁹.

Ferguson and Liu (2015)¹⁰ sought, through a focus group with 16 deaf people and 04 hearing PcD, to identify these patients' barriers and communication needs during PA, aiming to understand the impacts of poor communication for therapy adherence and drug to administration. The authors highlight the need for pharmaceutical professionals to know the sociocultural context of deaf or impaired people. hearing Therefore, considering the aspects of cultural diversity in the training of health professionals is of utmost importance, especially to act and communicate better, to provide equitable PA.

Regarding other survey results, Ferguson and Liu (2015)¹⁰ found that only 06 patients out of 20 tried to communicate with pharmacists. Patients are unaware of the role of people working in the pharmacy, and feel insecure in using some medications due to lack of instructions. For the pharmacists who showed insensitivity in serving deaf/hard of hearing people, there was a great risk of weakening the patientprofessional relationship. The authors think professionals have to be trained to be aware of the existence of this audience and to strengthen the relationship between the patient and the pharmacist.

Ferguson and Shan (2016)¹¹, in their study, aimed to understand how the interaction (communication) of pharmacists with deaf patients occurs, as well as to investigate the knowledge of pharmacists about their legal responsibility towards these patients. A significant portion of the pharmacy professionals have no knowledge of Libras, which hinders the interaction in the care of deaf people. Consequently, having the ability for effective communication is very important at the time of PA to give correct information about the medicines. Thus, it is important to ensure that patients understand the use of medicines according to their clinical conditions and to prepare health care effectively and safely.

Regarding pharmaceutical services for deaf patients, and professionals' knowledge of communication methods, the legal obligation regarding drug information is complex. In this context, pharmacists should be assisted by an interpreter to ensure safety regarding the use of medication^{11,12}. For Ferguson and Shan (2016)¹¹, even though there is legislation mandating patient-centered care, there are still gaps about best care practices for deaf people.

Regarding communication during this care, writing is the most used method when dealing with deaf people. However, one cannot affirm that deaf people understand what pharmacists inform about medicines, as they do not know deaf people's level of literacy, according to Ferguson and Shan (2016)¹¹. Therefore, pharmacists need to strive to better communicate with deaf people and comply with legal obligations.

For Hyoguchi et al. $(2020)^{12}$, pharmacists have to adopt practices that allow effective communication with deaf patients; they should get informed about hearing impairment to effectively provide the necessary care for these patients' health and quality of life. For the authors, although

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there is legislation requiring professionals to acquire knowledge and practice in handling with deaf people, the actions to promote deaf people's inclusion start with the attitudinal barrier, that is, the awareness and elimination of discrimination among health professionals in relation to this disability.

In this regard, the authors agree with the adoption of continued training on methodologies in communication and clinical observations strengthen to pharmacy students' language skills. These methods should contribute to improve and professionals' level of students' confidence regarding drug information to the deaf or hearing impaired. Thus, the information of a medicine to deaf people necessarily goes through the ability to perform effective communication, SO pharmacists training in sign language to improve the quality of life of patients, and not to hold on to the rustic forms of communication, such as lip reading¹², is imperative.

Pharmacists need to learn and understand about culture and hearing impairment to perform an effective communication and a more appropriate PA practice, especially in the guidance of rational use of medicines to hearing impaired patients. First, it is necessary, among other actions, to eliminate the attitudinal barrier, to raise the awareness that all subjects have the same rights and that only from continued training in sign language will true inclusion be achieved¹².

The flowchart presented demonstrates the need for pharmaceutical care to be more inclusive in Pharmacies and Drugstores. It details the steps for deaf and/or hard of hearing people to access the Pharmaceutical Care service. Assuming that the pharmacist communicates in Libras, he/she will provide care using this language. Otherwise, he/she will use palliative methods, such as lip reading, mimicry, and writing. For pharmaceutical care to be inclusive, the professional shall properly guide the use of medicines; this action is related to their form of communication (use of Libras or not). The Libras allows effective use of communication between the pharmacist and the patient, directly influencing quality pharmaceutical guidance. If there is no good communication, the pharmaceutical service will be compromised.

Conclusion

This integrative review brought together some studies on the relevance of effective communication through the use of Libras in inclusive pharmaceutical care. The main challenges found were the lack of knowledge and/or awareness of health professionals regarding their training in Libras and the deaf culture, or that of people with hearing impairment, compromising the Pharmaceutical Care regarding the rational use of medicines. Moreover, this study has shown the importance of implementing policies for more accessible public pharmaceutical care, as well as inclusion actions in Pharmacies and Drugstores. It is expected that it contributes significantly to the dissemination of the Pharmaceutical Care service with a focus on assistance to people with disabilities.

References

1. Brasil. Conselho Nacional de Saúde (CNS). Resolução nº 338, de 06 de maio de 2004. Brasília, DF. [citado em 2022 Set 20]. Available from: https://bvsms.saude.gov.br/bvs/saudelegis/cns/2004/res0338_06_05_2004.html.

Revista de Atenção à Saúde | v. 21 |e20238944 | jan.-dec. | 2023. https//doi.org/10.13037/ras.vol21.e20238944



2. Costa LF et al. Atenção Farmacêutica para portadores de cuidados especiais. Rev Eletrônica Farm. Suplemento. Goiânia, 2006; 3 (2): 19-21. [citado em 2022 Set 20]. Available from: https://revistas.ufg.br/REF/article/view/2098.

3. Ivama AM et al. Atenção farmacêutica no Brasil: trilhando caminhos – relatório 2001-2002. Brasília: Organização Pan-americana da Saúde, 2002 a. 46p. [citado em 2022 Out 02]. Available from: www.opas.org.br/medicamentos/docs/atenfar.pdf.

4. Brasil. Lei nº 13.146, de 6 de julho de 2015. Institui a Lei Brasileira de Inclusão da Pessoa com Deficiência (Estatuto da Pessoa com Deficiência). [Diário Oficial da União]. Brasília, DF, 07 de julho de 2015. [citado em 2022 Set 19]. Available from: <u>http://www.planalto.gov.br/ccivil_03/_ato2015-2018/2015/lei/113146.htm</u>.

5. Brasil. Conselho Federal de Farmácia (CFF). Resolução nº 662, de 25 de outubro de 2018. Estabelece as diretrizes para a atuação do farmacêutico no atendimento à pessoa com deficiência. [Diário Oficial da União]. Brasília, DF, 19 de novembro de 2018. [citado em 2022 Set 20]. Available from:

https://www.in.gov.br/web/guest/materia/-/asset_publisher/Kujrw0TZC2Mb/content/id/50681997/do1-2018-11-19-resolucao-n-662-de-25-de-outubro-de-2018-50681708.

6. Cunha AGFR, Dias EC. A dependência dos surdos em administrar medicamentos no cotidiano: dificuldades e estratégias de solução. Anais. VII Conedu. 2020. [citado em 2022 Set 30]. Available from: https://editorarealize.com.br/artigo/visualizar/67554

7. De Paula KC, Mendes Francisco GSA, De Sá TM, Miranda ES. Experiências de práticas de cuidado farmacêutico para pessoas surdas: uma revisão integrativa da literatura. Res Soc Dev. Rio de Janeiro, 2022; 11(1): e12411124604. [citado em 2022 Set 30]. Available from:

https://rsdjournal.org/index.php/rsd/article/download/24604/21693/292056.

8. Araújo DCSA, Santos JS, Barros IMC, Cavaco AMN, Mesquita AR, De Lyra Júnior DP. Sign Language in Brazilian Pharmacy Education. Am J Pharm Educ. 2019 Oct; 83(8): 1676-80. doi: https://doi.org/10.5688/ajpe7239 9. Viana TA. Clientes surdos: como o setor farmacêutico de Açailândia - MA percebe a importância do atendimento inclusivo. 2020. 29f. Trabalho de Conclusão de Curso. Curso de Administração da Faculdade Vale do Aço (Favale). Açailândia-MA. [citado em 2022 Out 01]. Available from: http://repositorio.favale.edu.br:8080/jspui/bitstream/123456789/27/1/TCC%20FINALIZADO%20-%20Thoniel%20de%20Araujo%20Viana.pdf.

10. Ferguson McK, Liu M. Communication needs of patients with altered hearing ability: Informing pharmacists' patient care services through focus groups. J Am Pharm Assoc. 2015 Mar-April; 5(2): 153-60. doi: https://doi.org/10.1331/JAPhA.2015.14147

11. Ferguson McK, Shan L. Survey evaluation of pharmacy practice involving deaf patients. J Pharm Pract. 2016 Oct; 29(5): 461-6. doi: <u>https://doi.org/10.1177/0897190014568379</u>

12. Hyoguchi N, Kamauchi T, Hoshino M, Kubota T. Survey of Pharmacists' knowledge, actions and Confidence and Medication Education to Patients with hearing disabilities. Yakugaku Zasshi. 2020; 140(10): 1295-8. doi: https://doi.org/10.1248/yakushi.20-00100

How to cite this article:

Medeiro DL, Oliveira EG. The challenges of Pharmaceutical Care for people with hearing impairment. Rev. Aten. Saúde. 2023; e20238944(21). doi https//doi.org/10.13037/ras.vol21.e20238896

Revista de Atenção à Saúde | v. 21 |e20238944 | jan.-dec. | 2023. https://doi.org/10.13037/ras.vol21.e20238944

