Factors related to adherence to treatment from the perspective of the old person

Abstract

Adherence to treatment is essential for the success of pharmacotherapy for old people. Regarding this phenomenon, the objective of this study was to identify and understand the factors associated with adherence to drug treatment. For this, a qualitative study was carried out with the old people considered non-adherent by the instrument of Morisky, Green and Levine. The research scenario took place at the Hospital Universitário de Brasília from March to August 2015. The relationship between the old people and treatment adherence proved to be complex and included the following factors: changes in routine, access to medicines and health services health, polypharmacy, consequences of medication effects, medicalization and relationships with health professionals. For the old people considered non-adherent, intentions and conduct of adherence to treatment were observed. In other words, “adherence” and “non-adherence” are phenomena experienced by old people simultaneously, following the life dynamics of individuals. Nevertheless, the recognition and understanding of the factors discussed were important for the deepening of academic knowledge on the topic, in addition to supporting the gathering of crucial information for the qualification of local pharmaceutical assistance.

Keywords: Medication Adherence. Drug Utilization. Health of the elderly.

1 Universidade de Brasília, Departamento de Farmácia, Programa de Pós-Graduação em Ciências Farmacêuticas. Brasília, DF, Brasil.
2 Universidade Federal de Santa Catarina, Departamento de Ciências Farmacêuticas; Programa de Pós-graduação em Ciências Farmacêuticas. Florianópolis, SC, Brasil.

The authors declare there are no conflicts of interest in relation to the present study.
No funding was received in relation to the present study.

Correspondence
Débora Santos Lula Barros
debora.farmacia9@gmail.com
INTRODUCTION

The increase in longevity is often associated with the increase in the number of chronic non-communicable diseases, physical, cognitive and mental disabilities, as well as the consumption of medicines. Old people often need to use drugs chronically and, in this sense, the promotion of treatment adherence (TA) is a crucial element for therapeutic success.

TA reflects the extent to which the user follows and complies with the recommended treatment in relation to time, dosage and form of use. In the context of drug treatment, complex therapeutic regimens are often necessary for the effective management of different associated comorbidities, requiring greater attention, memory and organization from the old person regarding administration times.

The literature points to some factors associated with non-adherence by old people, such as: polypharmacy, adverse effects, disappearance of symptoms, misperception about treatment, problems with access to medicines, difficulties in administration, social isolation, low educational level and memory deficit. However, most recent studies discuss these aspects in the context of primary health care and, therefore, few Brazilian studies investigate the phenomenon of TA by old people in the hospital setting.

A qualitative study, carried out at the University Hospital of Brasília (HUB), argues that the forgetfulness, the lack or incompleteness of the information provided by health professionals and the difficulties of access to medicines were scored as factors that affect TA.

In view of the need for routine consumption of medicines by old people, the characterization of factors associated with TA in specific groups can contribute to improving the pharmaceutical assistance offered in health services, in addition to contributing to the production and updating of academic knowledge regarding the theme. In this sense, this study aimed to identify and understand the factors associated with TA in old people treated at a hospital in the Federal District (DF), Brazil.

METHOD

This is a qualitative research developed at the Multidisciplinary Center for Old People (CMI), a reference service in geriatric and gerontological care in the Federal District, located at the University Hospital of Brasília (HUB).

The research was conducted by a researcher who, through an active search, approached the old people in the CMI waiting room before the start of consultations, for those who arrived earlier, or after medical care. All the old people who came to the clinic on Wednesday and Thursday mornings from March to August 2015 were approached. Although the researcher’s approach took place in the collective space of the CMI, from the moment that the old person consented to participate in the study, both were directed to an office, to prevent interruptions and to ensure the confidentiality of information.

For the inclusion of participants, the following inclusion criteria were observed: old person under chronic medication use, responsible for conducting treatment and without prior diagnosis of dementia or psychiatric disorder.

For the group of patients considered non-adherent, interviews were conducted with a script. This questionnaire was structured based
on research in the scientific literature[^3-9]. During the interview, if the participants showed doubts about any question, clarifications were provided at any time and as many times as necessary. The recording of this information was systematized through audio recordings and notes on printed forms.

---

**Chart 1.** Adherence measure to the treatment of the Morisky, Green and Levine instrument[^14], Brasília, Federal District, Brazil.

<table>
<thead>
<tr>
<th>Questions of the scale</th>
<th>Yes (0)</th>
<th>No (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you sometimes have trouble remembering to take your medication?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you sometimes neglect your medication schedule?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When you are feeling better, do you sometimes stop taking your medications?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sometimes, if you feel worse about taking the medication, do you stop taking it?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Chart 2.** Script used in interviews with old people considered non-adherent, Brasília, Distrito Federal, Brazil.

<table>
<thead>
<tr>
<th>Interview Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have difficulty taking your medications? If so, quote why.</td>
</tr>
<tr>
<td>Do you change the dose or form of use when you feel good or when you feel bad?</td>
</tr>
<tr>
<td>What do you do when you forget to take your medication?</td>
</tr>
<tr>
<td>Have you been without medication? Why? What do you do when you run out?</td>
</tr>
<tr>
<td>Do you think you take too much medicine? Why?</td>
</tr>
<tr>
<td>Do you have any concerns about the use of medications?</td>
</tr>
<tr>
<td>Do you realize the benefits of taking medication? Talk about it.</td>
</tr>
<tr>
<td>What makes it difficult for you to adhere to / follow the treatment?</td>
</tr>
</tbody>
</table>

---

The search for participants took place until the theoretical saturation of the elements that emerged from the speeches of the old people. According to the literature, qualitative research aims to apprehend and understand the selected cases, without the need for generalization and, therefore, the samples are purposeful[^15-17]. In this sense, there was no previous determination of the sample. In this way, “theoretical sampling” was considered.

Qualitative interviews were analyzed using the thematic content analysis technique[^17]. The analysis was privileged from the “theme”, because within an analytical field, here contextualized for the TA content, the theme is usually a reflection of trends, impulses and convictions expressed in the speeches. Thus, the speeches were organized by adopting the following stages of analysis[^15-17]:

1° Initial reading - it was an exhaustive and comprehensive reading of the transcribed material. We sought to have a view of the whole, to develop initial assumptions, to organize a form of initial classification and analysis guidance[^15-17].

2° Material analysis - it consisted of the “exploration” phase of the transcriptions already organized initially. In this stage, excerpts, phrases and fragments of the texts were separated (material decomposition), considering the “themes” as a reference in the formation of the registration units themselves[^15-17].

3° Distribution of the decomposed material in the categories[^15-17].

4° Writing of the texts: description of the categorization results, also considering the
inferences - logical deduction from the content with premises already accepted from other studies on the theme15-17.

The research project was approved by the Research Ethics Committee (CEP) of the Faculty of Health Sciences (FS) of the University of Brasilia (UNB), with authorization under number 1.042.855. All participants signed the Free and Informed Consent Form (ICF).

RESULTS AND DISCUSSION

The study initially involved a total of 38 participants. From the application of the Morisky, Green and Levine instrument14, 30 old people (79%) were classified as non-adherent. Of this group, 27 individuals went on to the next stage, as 3 refused to participate in the later stage. The main reason for the refusal was the unavailability of time.

The majority of the sample is composed of women (71%), aged 75 or over (63.2%). The age varied between 60 and 90 years, with an average of 76.6 years. In the total of participants, 44.7% have education> 8 years (table 1).

In group 2, from the application of the test by Morisky, Green and Levine15, the most reported non-adherent behavior was carelessness regarding the medication administration time, being reported by 24 individuals (80%). Following, the second most cited problem was the difficulty of remembering to take the medication, which was present in the report of 27 old people (56%).

Based on the speeches of the old people considered non-adherent, the analysis of the content related to TA produced seven categories described below: “changes in routine”, “access to medicines and health services”, “polypharmacy”, “unfolding of medicinal effects”, “medicalization”, “relationships with health professionals”.

Table 1. Characterization of the profile of the old people interviewed at the Medicine Center for Old People, Brasilia, Federal District, Brazil, 2015.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group 1* n (%)</th>
<th>Group 2** n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>27 (71.0)</td>
<td>21 (78.0)</td>
</tr>
<tr>
<td>Male</td>
<td>11 (29.0)</td>
<td>06 (22.0)</td>
</tr>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60-64</td>
<td>02 (5.3)</td>
<td>01 (3.7)</td>
</tr>
<tr>
<td>65-69</td>
<td>04 (10.5)</td>
<td>03 (11.2)</td>
</tr>
<tr>
<td>70-74</td>
<td>08 (21.0)</td>
<td>06 (22.2)</td>
</tr>
<tr>
<td>75-79</td>
<td>12 (31.6)</td>
<td>07 (25.9)</td>
</tr>
<tr>
<td>≥80</td>
<td>12 (31.6)</td>
<td>10 (37.0)</td>
</tr>
<tr>
<td>Education (years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 4</td>
<td>05 (13.1)</td>
<td>04 (14.8)</td>
</tr>
<tr>
<td>4-8</td>
<td>14 (36.8)</td>
<td>12 (44.4)</td>
</tr>
<tr>
<td>&gt; 8</td>
<td>17 (44.7)</td>
<td>10 (37.0)</td>
</tr>
<tr>
<td>NA</td>
<td>02 (5.4)</td>
<td>01 (3.8)</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>20 (52.6)</td>
<td>12 (44.4)</td>
</tr>
<tr>
<td>Widowed</td>
<td>13 (34.2)</td>
<td>12 (44.4)</td>
</tr>
<tr>
<td>Single</td>
<td>03 (5.3)</td>
<td>03 (11.2)</td>
</tr>
<tr>
<td>Divorced or separated</td>
<td>02 (7.9)</td>
<td>00 (0.0)</td>
</tr>
</tbody>
</table>

*Refers to the total number of old people in the survey; ** Refers to old people detected as non-adherent.
Changes in routine

Despite not being constant in the content of the testimonials, the strong link between the administration of medications and the routine can interfere in TA:

“[…] sometimes it’s the rush, doctor […] for example, today I didn’t take the diuretic, because when I go out, I don’t take it in the morning. Because it’s difficult, right? We come by bus, so I don’t take diuretics. But I take it when I get home […]” (old person 11).

Given the above, in addition to individually investigating treatment preferences, the whole issue of the user’s daily life must be explored. The literature demonstrates that administering medications does not seem to be a hindrance to TA when you have a well-established routine. Thus, the management of drug treatment by the old person should be the result of an agreement in which the health professional and the user align how the incorporation of therapy will occur in the day-to-day health care.

Nevertheless, still in the wake of TA and its interface with the daily routine, oldy people also shared the strategies that are adopted when there are delays in the administration of medications:

“[… when I remember, like, sometimes, the time passes a little, about 10 or 15 minutes, I take it. I don’t stop taking it, no. If many hours pass, then I don’t take it, I leave it to take it the next day” (old person 05).

Thus, considering the use of medication as an important instrumental activity of daily living, the following reflection is also identified: following the dynamics of life, it is understandable that old people self-adjust the way of managing treatments. In this sense, challenges arise and, in parallel, strategies are developed, which despite being similar for some old people, such as administering medications at meals, at bedtime, among others, within the micro clinical, social and emotional reality of each individual, the consumption of pharmacotherapy is not identical and can have several outcomes. Therefore, it is essential that the old person is instrumentalized in consolidating the practical and effective management of medicines in the routine, to guarantee the continuity of pharmacological care, as well as the therapeutic success of the treatment.

Access to medicines and health services

Failing to buy medicines for financial reasons was not a constant among respondents. However, despite the dedication to obtaining the medication, some old people reported greater financial difficulties:

“Ah, without a doubt, lack is bad […] Sometimes, some of these remedies I don’t find at the health center. Some I don’t buy because they are very expensive and others because sometimes I go to the clinic and they don’t have it…” (old person 17).

“Okay, we in the humble environment, we have difficulties in everything. We have difficulty getting to health, where we take care of our health… Sometimes we even have difficulties to buy medicines… We take them when we have them” (old person 14).

Although the discussion, a priori, focused on the difficulty of access to medicines, the reports also reveal that the inequalities affect not only the treatment, but reflect a scenario of general precariousness in accessibility in health. Most of the inequalities observed in the health field are directly related to those observed in other social life planes.

The inequalities now displayed, even though they have an impact on the different groups of users of health services, are manifested in a dramatic way in the life of old people. The accelerated aging of the population, whose pace is not accompanied by the implementation of public health policies, may collide with a network of services that is not prepared to attend the health of old people in their entirety. Thus, when investigating access to medicines by old people, this theme should not be dissociated from the itinerary adopted by the group in relation to global accessibility to health care.
Polypharmacy

When asked about the concern about treatment, the speeches highlighted as the main expression the amount of drugs to be administered:

“[...] ah! It is because it is a bunch, look there. See it in the prescription, right? Too much medicine. 6 or 8 pills! ”(old person 11). 

“I don’t know, every day, every day it piles up, other things appear, there is more than those, right? [...] it’s the need, right. Worse, different problems appear and you will have to take it [...] I would prefer not to take it”(old person 04).

Although taking medication is a common health intervention, its long-term use has repercussions for individuals, especially when therapeutic schemes are complex and framed in the context of polypharmacy12,18-20.

The adoption of health care habits is taught early in an individual’s life, such as hygiene practice, healthy eating, active lifestyle25. However, the need for routine medication consumption usually emerges with the aging process, resulting in yet another demand for self-care that, from the perception of a new habit to be developed, can provoke resistance on the part of the old person, especially when pharmacotherapy administration is complex and frequent12,18-20.

Unfolding of medicinal effects

The experience in self-care allows the old person to perceive autonomy to manage their therapy:

“[...] I have had asthma for many years, you know? So I already learned to live with my disease and that’s why I have this autonomy, this freedom to sometimes interrupt a medication or to decrease ... weaning, right? From cortisone... We take high cortisone and wean it off [...] I, for example, I know how far I am going to solve the problem at home or run to the hospital?”(old person 01). 

Scientific production already points out that non-TA is experienced by different audiences and this is often a reflection of the medication effects36,20. In this sense, it is evident in the reports above that experiences with pharmacotherapy can lead to feelings of security and autonomy to adjust treatment by the old person, even though this compromises TA12,18-20. However, part of the reported adjustments were listed as therapeutic strategies, itineraries adopted by users aiming at health and well-being12,18-20. Thus, reports that would apparently be framed only as non-adherent behaviors, in the practice of caring for the old person, are reinterpreted by individuals as protection and zeal in the face of some harmful responses triggered by treatments26-29.

Negative effects arising from treatment, such as adverse reactions to medications, lead to discontinued use and/or interruption of therapy by the old person:

“[...] I took it and it gave me a softness, a weakness... Dry mouth, droussiness... It seems that it ended me. Boy, it gave me everything. No the courage to even walk, the medicine was so bad. [...] I stopped” (old person 30). 

In this context, it is important that the old person’s view of the therapeutic response is constantly investigated by health professionals, even to assess the relevance and the need to maintain or not the proposed intervention18-20. However, it is also known that some classes of drugs, even though they result in undesirable adverse reactions, are the best therapeutic options to treat certain cases18-20. Therefore, adverse reactions and the respective managements must be addressed in periodic health care, to estimate the risk-benefit ratio of the instituted therapy and, in parallel, to identify the impact of these effects on TA26-29.

However, regarding the topic of effectiveness, it is also necessary to report to the old person that some pharmacological groups require some time to produce their effects and that TA is strategic to achieve therapeutic success26-29.

The reduction or impairment of functionality perceived by the old person was also cited as a limiting aspect of TA:

“[...] Well, I have some tranquiliizers that I sometimes stop [...]. Because I work with scissors and stuff, and I get a little soft, you know? That
hand... lets the scissors fall, everything falls. Then I stop taking for a moment. Then when I get really nervous, I start taking it again. That’s it!” (old person 26).

The functionality of the old person is an essential aspect and is linked to autonomy and quality of life. Medicines are elementary instruments in the practice of care, but because they precipitate debilitating adverse effects, in some cases, they reduce the functionality of the old person. Thus, when evaluating treatment, the impact of pharmacotherapy on functionality should also be considered by professionals, as well as old people should be encouraged to report these data in health care.

Medicalization

In addition to their clinical and therapeutic functions, medications can acquire other meanings in the lives of old people, and many of these go beyond their therapeutic role. Thus, some interviews reveal that health care is also understood by the act of “using medicines”:

“It is because the doctor had taken all the medicines away from me. I was out of medicine. Until that time, I was not taking any medication. I ordered that omega 3 for me to take, because it says that it is good...” (old person 20).

“I don’t sleep, it’s no use, without the medication I don’t sleep” (old person 07).

Medicalization can be defined as the translation or transformation of human conditions and behaviors into opportunities for health interventions. This phenomenon proclaims the idea that “having a problem is the same as having a medication”, which, in addition to being an overly reductionist view, contributes to the disregard of other dimensions involved in the illness process, such as the subjects’ historicity, the psychological component, eco-social aspects, among others. In addition, some disorders experienced by old people correspond to the physiological changes resulting from aging, which often does not imply the use of pharmaceutical interventions as the only resolution proposal.

Relationships with health professionals

It can be seen from the analysis of the interviews that the old person’s appreciation of doctors contributes to TA:

“I trust the doctor. They know it, right? If they give and explain how it is, it certainly doesn’t hurt, I take it” (old person 12).

“[…] I think that since doctors give that medicine, it’s reliable, right?” (old person 16).

In this context, it is necessary to reflect the different concepts of adhesion. Used in works published in the English language, there is a differentiation between the concepts of compliance and adherence. Compliance suggests that the user passively follows the ‘orders’ of the health professional and that the treatment plan is not based on the alliance or contract established between them. It may even represent a user’s agreement to his prescription, but, preliminarily, there was no consultation regarding his will. Adherence, in practice, should be understood as a process that considers the participation and wishes of users in relation to their own treatments. Therefore, it derives from this concept that adherence presupposes the active participation of the subjects who use the medications.

Still on the theme of the relationship between health professionals and old people, some aspects reinforce compliance instead of adherence itself. The confidence in the prescription, the low knowledge about the therapy itself, the reduced clarity about the health-disease process and the number of medications translated as health care lead old people to obey the instructions they are given. In this way, compliance is evident, even though these old people have autonomy in their lives.

In addition, it should be noted that adherence is an advanced stage in relation to the concept of compliance. In addition to discipline and routine consumption of medicines as a habit, which are
inherent to compliance, self-awareness and autonomy of the old person in relation to treatment are also necessary, elements that allow users to achieve a new dimension, that of adherence.4-6,32,33

When asked about concerns about pharmacotherapy, old person 15 complained about the lack of guidance on medications:

“If you ask, they explain, but if you don’t ask...”(old person 15).

According to WHO34, health literacy is the ability to obtain, assimilate and understand information in order to use it to maintain health effectively, being essential for the individual’s empowerment. If there is no knowledge about the disease and its treatment, there is no possibility to reflect on gains (benefits) or losses in health independently.

However, it is also noteworthy that this type of education, despite being a fundamental component in health knowledge, is not yet fully incorporated into care practice.20 Thus, in addition to the guidance given to the old person in response to spontaneous demands, it is essential that the health professional actively incorporates dialogues that promote health education, raising awareness of the importance of TA and self-care.18-20

The fact that the interviews take place within the service’s routine may have facilitated the recruitment of old people for the study. However, the concern and anxiety about medical consultations, which is the objective of old people going to the CMI, may have impacted the quality of the reports, which constitutes a possible limitation of this investigation.

CONCLUSION

For several reasons discussed in this article, it is notable that TA has multifactorial dimensions for old people. In general, it was possible to identify and understand the following factors associated with TA: changes in routine, difficulties in accessing medicines and health services, polypharmacy, effects produced by medicines, medicalization and relationships with health professionals.

While non-TA behaviors are verified, to some degree, intentionalities and adherence behaviors coexist. That is, “adherence” and “non-adherence” are phenomena experienced by old people simultaneously and that manifest themselves according to the life dynamics of individuals. Therefore, there are no “compliant/obedient” and “non-compliant/disobedient”, but moments when the old person has a greater tendency towards one or the other behavior.

Regarding the reasoning about the care of old people and their medications, it is worth emphasizing the importance of understanding TA in a broad and comprehensive sense, since the simple categorization of old people into adherent and non-adherent does not offer enough inputs for care in health is resolute and singular. In this sense, recognition and understanding of the factors discussed above are important. In addition, the information collected contributes to academic production by deepening the theoretical discussions on the topic, improving debates from the perspective of those who best experience the phenomenon: users of medicines.

REFERENCES


27. Tavares DMS, Matias TGC, Ferreira PCS, Pegorari MS, Nascimento JS, de Paiva MM. Qualidade de vida e autoestima de idosos na comunidade. Ciênc Saúde Colet. 2016;21(11):3557-64.


