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RESEARCH

A QUALITATIVE STUDY OF ELDERS' VIEWS ON MEDICINE USAGE

ABSTRACT

Introduction: Within many studies little attention has been paid to elders' ideas about medicines. This qualitative study set out to explore the experiences of elderly requiring chronic treatment.

Materials and Method: Four focus groups were conducted with 27 participants aged 65-88 years. Interviews were taped, transcribed, and coded by two independent researchers, who identified major themes by relevance.

Results: The main themes emerging from the analyses were: perceived properties of drugs; proper usage of drugs and experience of drug usage.

Participants described these in their words as;

'Everybody has a disease, but I am a drug addict; I have used drugs all my life'.

'I'm not worried about taking them, mostly because if they're going to kill me earlier I don't care because I just want to get rid of the problem'.

'I don't know the names; I recognise them looking at their sizes and colours'.

'I need to get a continuous way, but sometimes I do not. If I forget to drink I take it after I remember'.

Conclusion: To understand elderly' experience and behaviors helps to meet their medication related needs and can avoid problems due to improper drug usage.

Key Words: Elderly; Use of medication; Medication experience.



ARAŞTIRMA

YAŞLILARIN İLAÇ KULLANIMI HAKKINDAKİ GÖRÜŞLERİ ÜZERİNE NİTELİKSEL BİR ÇALIŞMA

Öz

Giriş: Birçok çalışma kapsamında yaşlıların ilaç kullanımları hakkında düşüncelerine az dikkat gösterilmiştir. Bu niteliksel çalışma, kronik tedavi gerektiren yaşlıların ilaç kullanım deneyimlerini araştırmak için tasarlanmıştır.

Gereç ve Yöntem: Yaşları 65-88 arasındaki 27 katılımcı ile dört odak grup oturumu yürütülmüştür. Görüşmeler, kayda alınarak iki bağımsız araştırmacı tarafından ana temayla ilgili olarak çözümlenmiş ve kodlanmıştır.

Bulgular: Yapılan analizler sonucunda ana temalar; ilaçların algılanan özellikleri, ilaçların doğru kullanımı ve ilaç kullanım deneyimleri olarak belirlenmiştir.

Katılımcılar bu durumu aşağıdaki sözleriyle ifade etmişlerdir;

'Herkesin bir hastalığı var, ama ben ilaçlarla yaşıyorum ve ömür boyu kullanmak zorundayım'.

'Ben, onları almak hakkında endişeli değilim, çünkü eğer onlar beni erken öldüreceklerse umurumda değil ben sadece sorunun geçmesini istiyorum'.

'...isimlerini bilmem; onları boylarına bakarak ve renklerine göre ayırıyorum'.

'Benim sürekli bir şekilde kullanmam gerekiyor, ama bazen yapamıyorum. İçmeyi unutsam hatırladığımda alıyorum'.

Sonuç: Yaşlıların ilaç kullanım davranış ve deneyimlerini anlamak onların ilaçlarla ilgili gereksinimlerini karşılamaya yardımcı olur ve uygunsuz ilaç kullanıma bağlı sorunların önüne geçilmesini sağlar.

Anahtar Sözcükler: Yaşlı; İlaç Kullanımı; İlaç Deneyimi.

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INTRODUCTION

With increasing life expectancy, the probability of multiple comorbidities in an individual also increases. This often results in polypharmacy. Indeed, research suggests that most elderly people now use three or more drugs each day, often for 5 years or longer (1-3). Similar results have been obtained for Turkey (4-6). This situation increases the likelihood of unwanted drug side effects and drug-drug interactions, thereby complicating the treatment. It has also been stated that polypharmacy increases the rate of medication compliance problems, which further increases the risk of adverse effects (7-9). Older adults often seek care from different physicians; in clinical practice, one clinician could be unaware of the medication recommendations made by another, which could lead to unintentional polypharmacy (4, 9). Moreover, the elderly often have limited knowledge about their drugs and can have poor compliance, which can also increase the risk of adverse effects (10-13).

Although medication self-management is essential to drug safety, particularly in older people, it remains a challenging issue. Despite adequate information from doctors and the use of patient information sheets, older patients can face problems in understanding their medication regimens, and despite the use of pillboxes, older patients can often have difficulty remembering to take their medications (14). Adherence to medication regimens is an important factor in effective treatment. Awareness of the problems that elderly patients experience while using drugs, and that affect their treatment compliance, can help prevent problems. Relevant problems associated with incorrect amount of doses and dosage regimens include adverse/toxic effects, unnecessarily prolonged treatment and failure to achieve adequate therapeutic response (15-17).

Diminished functions and loss of sense with age might lead elderly to use drugs incorrectly (7,-9, 18). Several factors can bring about medication compliance problems and usage difficulties in the elderly, including a decline in cognitive and functional capacity, different levels of knowledge, expectation and satisfaction, the quality of communication with the doctor and diminishing visual acuity and manual skills. Taken together, these situations can result in medication non-compliance (7-9, 11,13).

It is thought that one in four elderly patients take medication breaks (stop their medications) because they are not sufficiently aware of the importance of regular drug intake (7, 15, 19). Studies have been conducted to identify the factors

associated with polypharmacy and compliant drug use in the elderly. It is known that the attendant risks can be reduced by patient education and physician education, but that continued monitoring of the use and requirement of medication is essential (10-13,19,20).

Several researchers have studied medication and treatment compliance and on the associated side effects, but few have studied the problems that the elderly face when using medications by means of concerning their opinions. A few studies have reported that the elderly have trouble with treatment compliance and the correct use of drugs (21-24). In light of this literature, we aimed to explore the experiences of elderly patients requiring chronic treatment.

MATERIALS AND METHOD

We conducted a qualitative study of four focus groups each consisted of 7-8 participants with a total of 27 participants (2 women and 15 men) aged 65-88 years recruited by purposive sampling. We asked them about the drugs that they have to use because of their chronic diseases, their experiences and their opinions about the health care they receive. The questions based on the literature (7,9,11,14,18,24).

The following questions were addressed to the group during the focus group study:

1. Can you explain what your experience is of using drugs? How does continuous drug use affect your life? Which things do you think are affected?
2. Do you experience difficulties? What type of difficulties are they?
3. How do you distinguish between the drugs? How do you remember when you have to take them?
4. Do you ever forget to take drugs? Do you ever skip taking one?
5. Have you ever experienced side effects from the drugs you use? Do you think you are addicted to the drugs?
6. Is drug use a limiting issue for you? Is it important to you?

The time period of the focus groups ranges between 75-125 minutes for each focus group.

The goal of qualitative phenomenological research is to describe the 'lived experience' of a phenomenon. The focus group interviews were recorded through a voice recorder and transcribed verbatim. Data collection and analysis were performed simultaneously by two independent researchers and the analysis of transcripts was initiated as soon as they were



collected: we used theoretical sampling that involved simultaneously collecting, coding and analysing data and then deciding what data to collect before developing the phenomenology study.

Coding data by the data reduction method produced codes (typically words or features) to identify the themes for qualitative research. The phenomenological data analysis used a strategy that allowed the method of analysis to reach and create the nature of the data itself. To determine the essential meaning of an experience, we used abstract themes to explain and search for the relations between the individuals and the thing that they aimed to learn or understand. Theoretical sampling continued until the categories of the substantive theory were saturated. Analysis of the data involved open, axial and selective coding.

The first step was to name and give meaning to the open data coding before comparing the codes to the other contents; similarities or differences were then subsequently grouped to form categories. Axial coding followed open coding. Three conceptual categories were created through the process of developing the main categories. This process was used to make connections between categories and subcategories and to al-

low a conceptual framework to emerge. Selective coding was then used to link all categories and subcategories to the core category. The core category was defined as the central category that linked all the data and accounted for variations in the data.

Approval was obtained from the Ethics Committee of Dokuz Eylul University Medical Faculty. The investigation conformed to the principles outlined in the Declaration of Helsinki. Participants were informed of the purpose and nature of the study and were assured that their data would be kept confidential and that their participation was voluntary and they could withdraw from the study at any time without any effect on the care they were receiving. Once the participants had verbally agreed to take part, their written consent was obtained.

RESULTS

In our study, the focus group the mean age of elderly was 73.19 ±6.72 years. Most had been educated to at least primary school level, belonged to the middle-income class, had no caregivers and cohabited. The average daily drug intake was 4.81. The patient characteristics are summarised in Table 1.

Our primary expectation was that problems would occur with understanding medications, their regimens and compliance and that patient may have difficulties in reading drug labels or opening packaging. In addition, we expected to see evidence of forgetfulness in drug usage. The statements of the participants in this study confirmed these expectations and were consistent with the findings of previous research. The three main themes specified in our analyses were as follows: the perceived properties of drugs, using drugs properly and the experience of drug usage. To supplement this, examples of subcategories, categories and themes observed in older patients' views on medicine use are shown in Table 2. The participants expressed themselves within the framework of these main themes.

Perceived Properties of Drugs

The involvement of the elderly in the treatment of disease may become easier if they internalise the perceived properties of drugs. Taking responsibility for their treatment could also improve compliance. Therefore, it is of great importance that individuals have an idea about the properties of drugs if they are to continue using them, even though these problems may arise among older patients in terms of both understanding

Table 1— Characteristics of the Participants

Age (Mean±sd) (Min-Max) year	73.19±6.72 (65-88)
Gender n (%)	
Female	12 (44.4)
Male	15 (55.6)
Education n (%)	
Primary school	17 (63.0)
High school	10 (37.0)
Self-reported income level n (%)	
Low	14 (51.8)
Middle	13 (49.2)
Self-reported chronic conditions (n)	
Hypertension	24
Diabetes mellitus	9
Cardiovascular disease	9
Cerebrovascular disease	9
Number of prescription medications	
Mean±sd	4.81±2.81
Range	1 to 10
Number of people at home	
Mean±sd	2.04±0.64
Range	1 to 4
Having caregiver n (%)	
Yes	1 (3.7)
No	26 (96.3)

**Table 2**— Examples of Subcategories, Categories and Themes About Older Patients' Views on Medicine Usage.

Informant Data	Categories	Theme
'You have to get accustomed to it. Once you get accustomed, there will be no problems. If the balance is disturbed, all of you did will disappear'	Knowledge about properties of drugs	Perceived properties of drugs
'Since it is an incurable disease, I have to use it 'till I die'	Acceptance of drugs	
'...of course I try to balance it in the morning and in the evening but I try to reduce it as much as possible when I feel good'	Drug compliance	Proper usage of drugs
'I don't know the names; I recognise them looking at their sizes and colours	Using habits of drugs	
'I need to get a continuous way, but sometimes I do not. If I forget to drink I take it after I remember'	Own life happenings about drug usage	Experience of drug usage
'I am used to carrying them with me. I don't forget them often. You try to take them regularly afterwards'	Effort and exertion about drug usage	

and implementing the treatment. In our study, patients expressed this issue as follows:

'Everybody has a disease, but I am a drug addict; I have used drugs all my life'.

'Therefore, it's four a day; three plus a painkiller. We also take these without difficulty; each has a healing effect'.

'You have to get accustomed to it. Once you get accustomed, there will be no problems. If the balance is disturbed, all of you did will disappear'.

'I can't walk if I don't take painkillers, yet the drugs don't agree with my stomach. I first take a pill to protect my stomach in the morning'.

'The doctor has to adjust the dosage considering my constitution'.

'Since it is an incurable disease, I have to use it 'till I die'.

Rationale Usage of Drugs

Elderly patients sometimes reacted to their treatment by not taking any drugs or by taking too many drugs. About half of the patients did not comply with their prescribed dosage. Treatment compliance was affected by cognitive disorders, unacceptable side effects, difficulties obtaining repeat prescriptions, high costs, complicated dosage regimens, lack of faith in the treatment and breakdowns in the doctor–patient relationship. The following are representative examples:

'I have been using some nervines for 4–5 months, but I have given up using them'.

'I'm not worried about taking them, mostly because if they're going to kill me earlier I don't care because I just want to get rid of the problem'.

'...of course I try to balance it in the morning and in the evening but I try to reduce it as much as possible when I feel good'.

'...we take it afterwards when we forget. I want the drug, my cholesterol drug strains me ... I'm OK, but it constantly strains me'.

'I don't know the names; I recognise them looking at their sizes and colours'.

'I have a cupboard for the drugs. I have separate boxes in the cupboard. The names of each box are written separately on cards stuck on boxes. I go and buy whichever one depletes'.

'...in order not to mix them up... in fact there are eight, but I don't remember now. It can be found in pharmacies; maybe one of you has used it before that little box with four parts ... for the morning, noon, evening, etc. I put the pills in it. If I see a pill, I understand that I have forgotten to take it and so I take the pill. I came up with this solution'.

'I use so many drugs that I can't remember the names. I have a bag that I took from the pharmacy. I put all my drugs into it; I have to take it with me wherever I go'.

'There are lists in my bags, room and kitchen'.

'...no, I put them in order. There are different colours and names on them; I distinguish between them by these differences. I use them constantly'.

'...of course, they are next to my bed, together, in a bag. I have a bag in the cupboard, somewhere I can always reach'.



Experience of Drug Usage

Elderly individuals with chronic diseases usually continue on long-term drug therapies at home. However, they can inadvertently use incorrect dosages for a variety of reasons. For example, they can forget to take them because of declining sensory functions and the need to use more than one drug, which complicates their treatment. Also, they might not understand the importance of their drug therapy and could be put off by side effects like sickness and vomiting. In this study, patients expressed their opinions as follows:

'I need to get a continuous way, but sometimes I do not. If I forget to drink I take it after I remember'.

'The drugs I take are incalculable. I take drugs in the evening. I think I have reflux or something like that. The drugs made me almost vomit. It was like poison. Even though I drank a bottle of water, the bitter taste didn't disappear. I don't know. I am not happy with these drugs. I don't like taking them; I take them with difficulty'.

'I am used to carrying them with me. I don't forget them often. You try to take them regularly afterwards'.

In the introduction, we stated that the increasing rate of comorbidities in the elderly, coupled with the increasing number of treatments and declining cognitive and functional capacity, are resulting in problems understanding drug therapy and being compliant with it. Medication compliance refers to the degree to which a given patient follows a prescribed treatment schedule and is related to numerous factors. These factors include the patient's knowledge of the drug and his or her memory, expectations and satisfaction, as well as the quality of communication with the doctor. Thus statements of participants outline similar expressions. Also according to a qualitative research results medications are viewed as a necessary, often unquestioned, the overall medication experience is positively or negatively influenced by the doctor patient relationship and the assumption that it is the physician's role to communicate medication information. And they stated that elders have a lack of insight regarding the complexities of the medications they are taking and their medications connection to their chronic health challenges (25). We also found that forgetfulness was a problem that was commonly expressed by our participants. Our study is consistent with previous reports that the elderly often have inadequate knowledge of drugs that can lead to non-compliance and increased side-effect burdens. Some of the patients in our study distinguished between drugs by looking at their colours and ignoring other

properties, which was not ideal. Programs need to focus on improving the ability of elderly patients to use drugs correctly, but this will require good communication between patients, relatives and doctors (12). Drug compliance could be helped by providing lists or individualised labelling to prevent drugs being mixed up or used improperly. Such individualised patient care and patient training could facilitate the participation of patients in their own treatment, thereby increasing their independence (17).

This study provides useful insights into the hidden doubts and complexities experienced by older people. Doctors need to ensure that older adults adhere to their medication by assessing their medication-related behaviours. This assessment should ensure that drugs and other nutritional supplements are both appropriate for the identified health problems and that their patients are aware of the need for them. Management strategies need to focus on providing clear and reliable information on side effects and drug interactions in a manner that patients can understand. They should also facilitate communication between patients and doctors and should provide patients with the ability to disclose concerns about medication to different clinicians.

CONCLUSION

As a first step toward the assessment of drug usage among elderly patients, doctors need to become familiar with each individual and their unique environment through home visits and medication reviews. Every opportunity must be taken to prevent mistakes with drug usage, notice errors early and take necessary precautions.

Limitations

Our study has some limitations. Firstly, it will be known that the nature of the study does not allow us to determine causality. The sampling strategy used in our study was stated purposive and therefore cannot be considered representative for means of larger population. According to qualitative research tradition, this study does not purport to offer findings that are objective, representative or generalizable. Second, the results of the study may have been affected by personal statements. Further research will be used to quantify the perceptions expressed by the participants in our study.

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Conflict of Interest

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