

SELF-MEDICATION WITH NONSTEROIDAL ANTI-INFLAMMATORY DRUGS IN THE ELDERLY

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Introduction

Nonsteroidal anti-inflammatory drugs (NSAIDs) are one of the most commonly recommended classes of medication for pain and inflammation. The prevalence of NSAID use in patients over 65 years old is as high as 96% in the general practice setting. Professional societies recommend using NSAIDs with caution and limit their use to the lowest effective dose and shortest duration. Considering this recommendation, through collaborative interprofessional teamwork, pharmacists could increase awareness of NSAID risks among their patients, evaluate patient risk factors and provide information to patients to ensure appropriate, safe use of these drugs.

Keywords

Pharmacists, non-steroidal anti-inflammatory drugs, older adults, self-medication in the elderly

Purpose

This study aimed to evaluate community pharmacists' point of view on non-steroidal anti-inflammatory drugs use in the elderly and to determine the areas of their implication in providing safety information-related NSAIDs to older patients.

Material and methods

Study with descriptive design. The study was conducted between January 2020 – April 2020 on community pharmacists. Our study included 390 pharmacists and pharmacist assistants aged between 22 and 57 years. The research was carried out using questionnaires concerning self-administered OTC NSAID drug consumption of older adults from pharmacists point of view. The questionnaires were anonymous and the data obtained were used exclusively for statistical processing. Were recorded an 93% response rate. The questionnaire contents 15 mixt questions, consisting of 3 parts: stratification of the group of respondents, closed-ended and open-ended questions.

Results

A total of 390 pharmacists and pharmacist assistants were interviewed, 97,43% female and 2,57% male, and the median age was 32 years, which activate in urban environment (94,62%) for less than 5 years (42,3%) (tab 1.) The frequency of self-medication with NSAIDs drugs was 96,41% in the elderly. The most frequent symptoms that required self-medication with NSAIDs were: osteo-articular problems (95,38%) (fig. 7). Older adults opt for oral forms of administration (89,79%) (fig. 4) and analgesic effect of NSAID (53,07%) (fig. 2). Knowledge of older adults about doses (68,46%) and duration of treatment with NSAID (84,61%) are insufficient and they don't know about possible adverse reactions (83,84%) and preventions methods of NSAID medications complications (91,28%) (tab. 2). A worrying fact is that elderly people choose the NSAID drug based on TV/radio advertising (73,85%), friends (63,85%) or relatives (62,31%) advice and only in 48,46% cases on specialists recommendations (fig. 1).

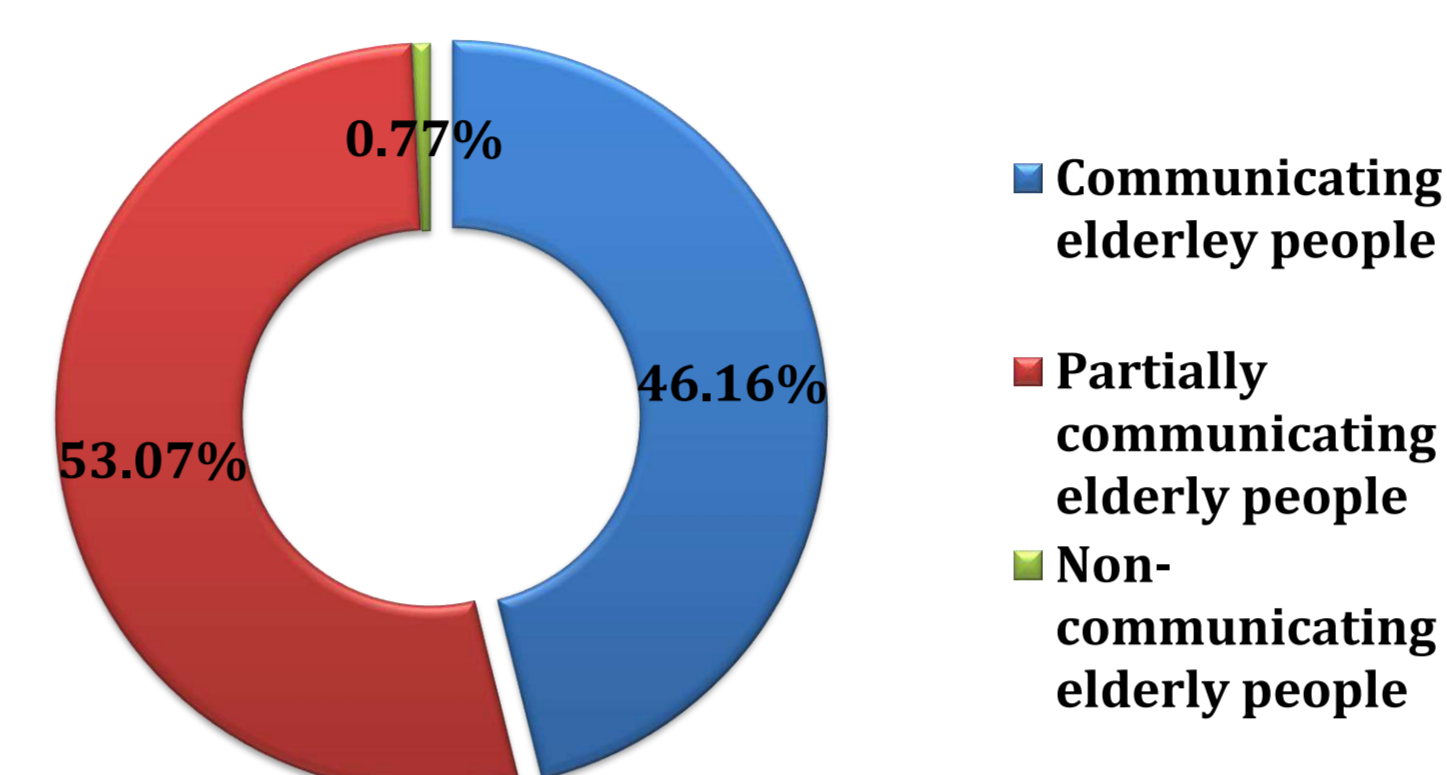


Figure 3. The type of older adults according to their communication skills

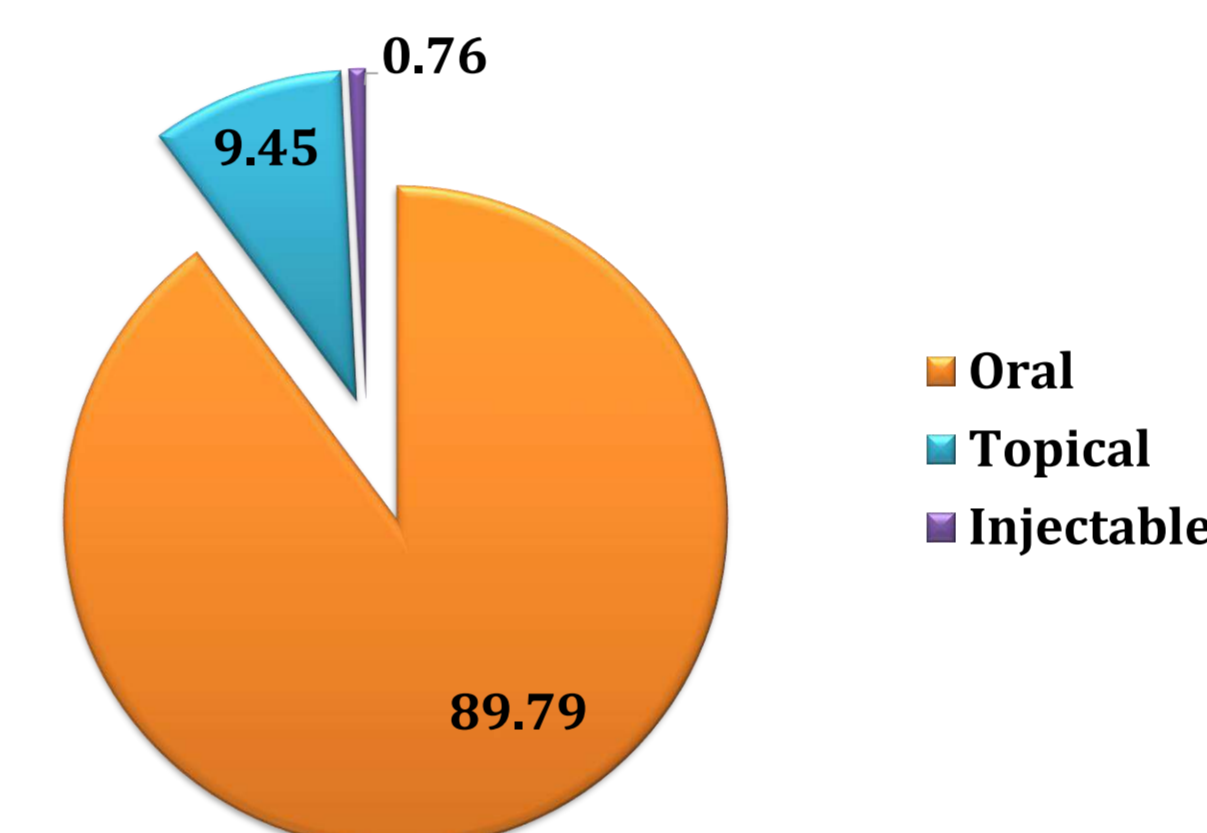


Figure 4. Forms of NSAIDs for which opt older adults

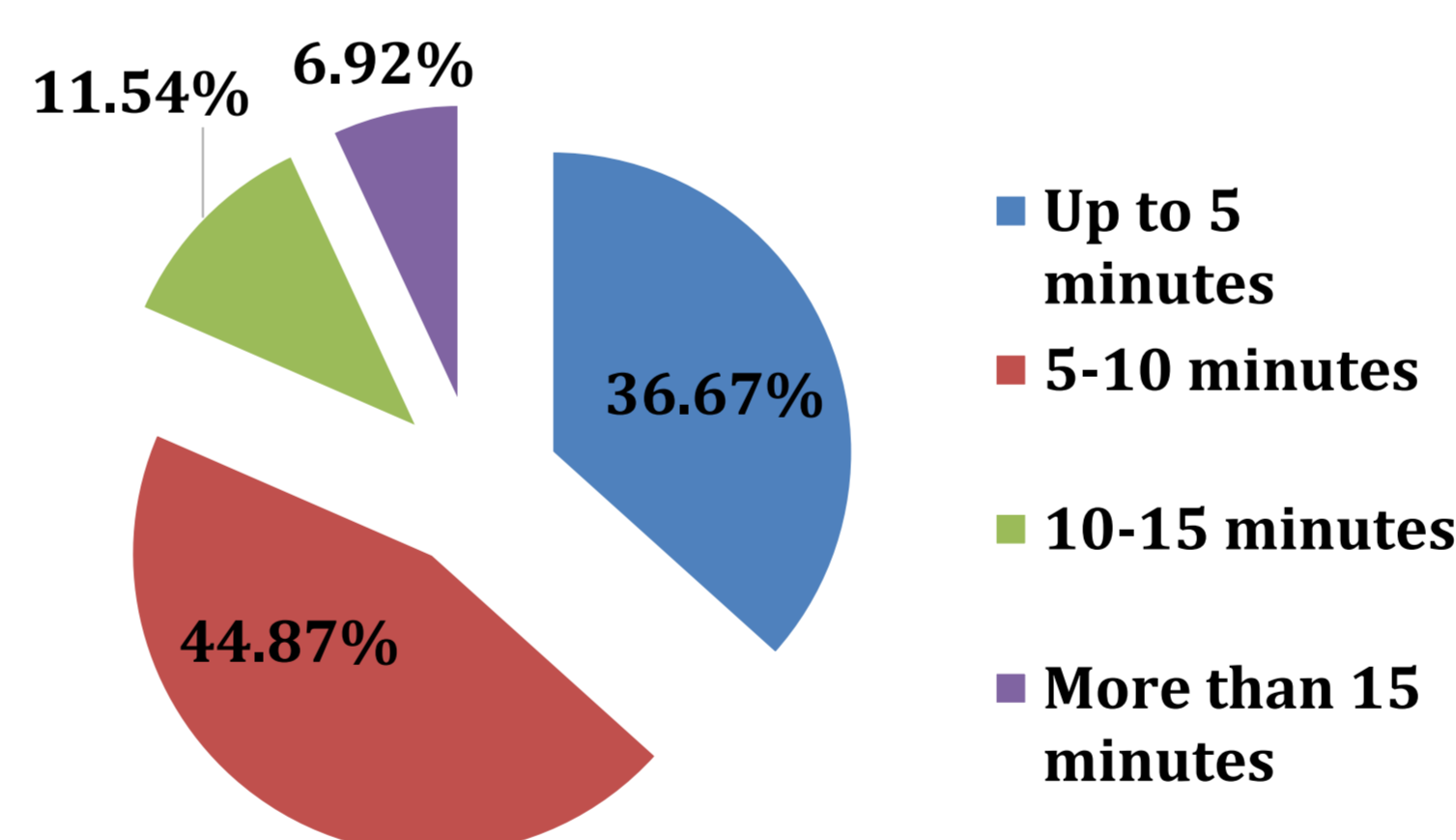


Figure 5. Duration of NSAIDs use counselling of elderly people

53,07% of respondents appreciate older adults as a partially communicating people according to communication skills (fig. 3). In this regard, is an opportunity to pharmacists to identify ways in which they can better communicate with elderly patients. Also, the majority of pharmacists mentioned that they counselling elderly patients less than 10 minutes (fig. 5), this is insufficient to establish caring relationships and to encourage dialogue by discussing the benefits of medication adherence, offering support, and explaining the pros and cons of treatment.

According to OTC List, updated at 21.10.2019, NSAIDs compose 20,2% from all 1144 drugs. Ibuprofen (76,92%), diclofenac (75,38%) and ketoprofen (46,92%) are among the most widely used analgesics (fig. 6). This medications are potentially harmful drugs in the elderly according with guidelines for NSAIDs use, for example American Geriatrics Society Beers Criteria, STOPP/START criteria and The PRISCUS list etc.

Ibuprofen	(300)
Diclofenac	(294)
Ketoprofen	(183)
Nimesulid	(96)
Naproxen	(81)
Acid acetilsalicilic	(57)
Meloxicam	(51)
Indometacină	(42)
Piroxicam	(39)
Etoricoxib	(36)
Ketorolac	(33)
Paracetamol	(33)
Aceclofen	(24)
Metamizol	(15)
Celecoxib	(12)
Lornoxicam	(6)

Figure 6. The descending order of asked OTC NSAID according to request frequency

Table 1. Respondents characteristics

Variable	n (%)
Gender	
<input type="checkbox"/> Female	380 (97,43)
<input type="checkbox"/> Male	10 (2,57)
Age	
<input type="checkbox"/> 20-30	165 (42,3)
<input type="checkbox"/> 31-40	174 (44,62)
<input type="checkbox"/> 41-50	33 (8,46)
<input type="checkbox"/> 51-60	18 (4,62)
Seniority	
<input type="checkbox"/> 0-5 years	165 (42,3)
<input type="checkbox"/> 6-10 years	138 (35,39)
<input type="checkbox"/> 11-15 years	33 (8,46)
<input type="checkbox"/> > 16 years	54 (13,85)
Work environment	
<input type="checkbox"/> Urban	369 (94,62)
<input type="checkbox"/> Rural	211 (5,38)

Table 2. OTC NSAIDs medication-use-related characteristics of the older adults from pharmacists point of view

Variable	n (%)
Indicate if older adults know the dose of asked NSAID drug?	
<input type="checkbox"/> Da	123 (31,54)
<input type="checkbox"/> Nu	267 (68,46)
Indicate if older adults know the duration of treatment with asked NSAID drug?	
<input type="checkbox"/> Da	60 (15,39)
<input type="checkbox"/> Nu	330 (84,61)
Consider that older adults know about possible adverse reactions of asked NSAID drug?	
<input type="checkbox"/> Da	63 (16,16)
<input type="checkbox"/> Nu	327 (83,84)
Consider that older adults know about methods of prevention of NSAID drugs adverse reactions?	
<input type="checkbox"/> Da	34 (8,72)
<input type="checkbox"/> Nu	356 (91,28)
Consider that actual knowledge of pharmacists are sufficient for offering complex counselling to older adults about NSAIDs use?	
<input type="checkbox"/> Da	168 (43,08)
<input type="checkbox"/> Nu	222 (56,92)

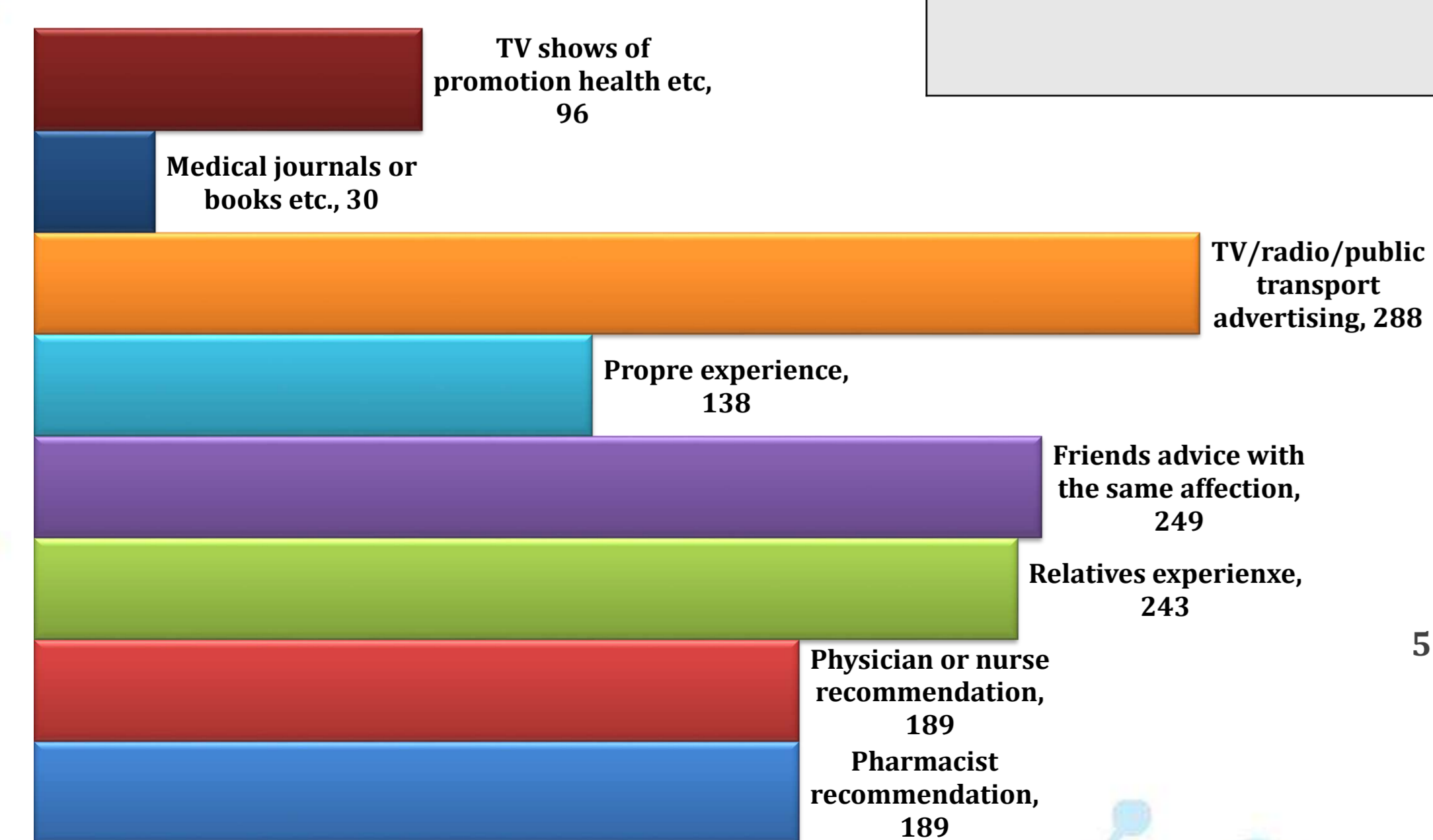


Figure 1. Surces of information based on which older adults choose NSAIDs

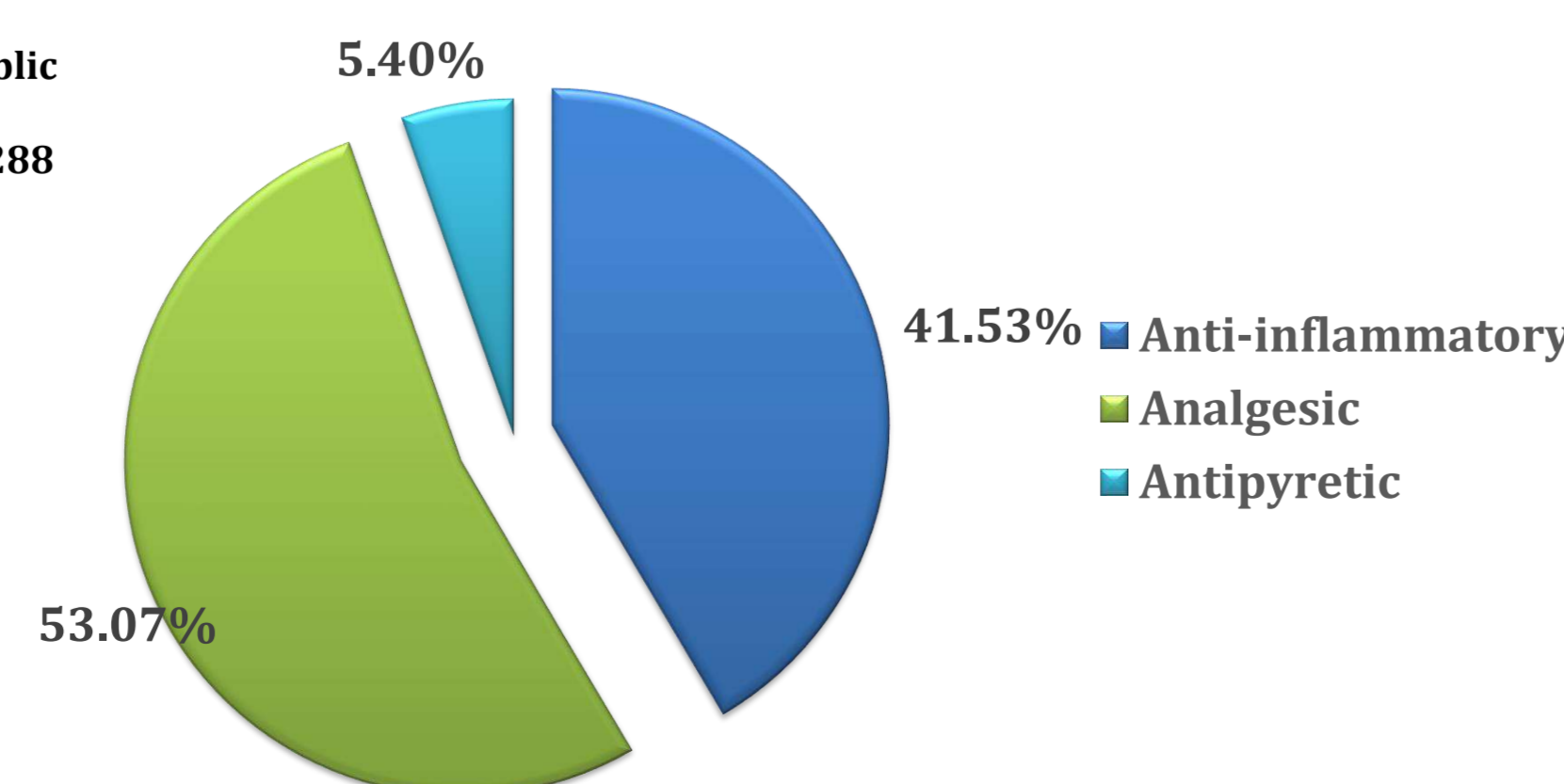


Figure 2. Effects of NSAIDs for which opt older adults according to request frequency

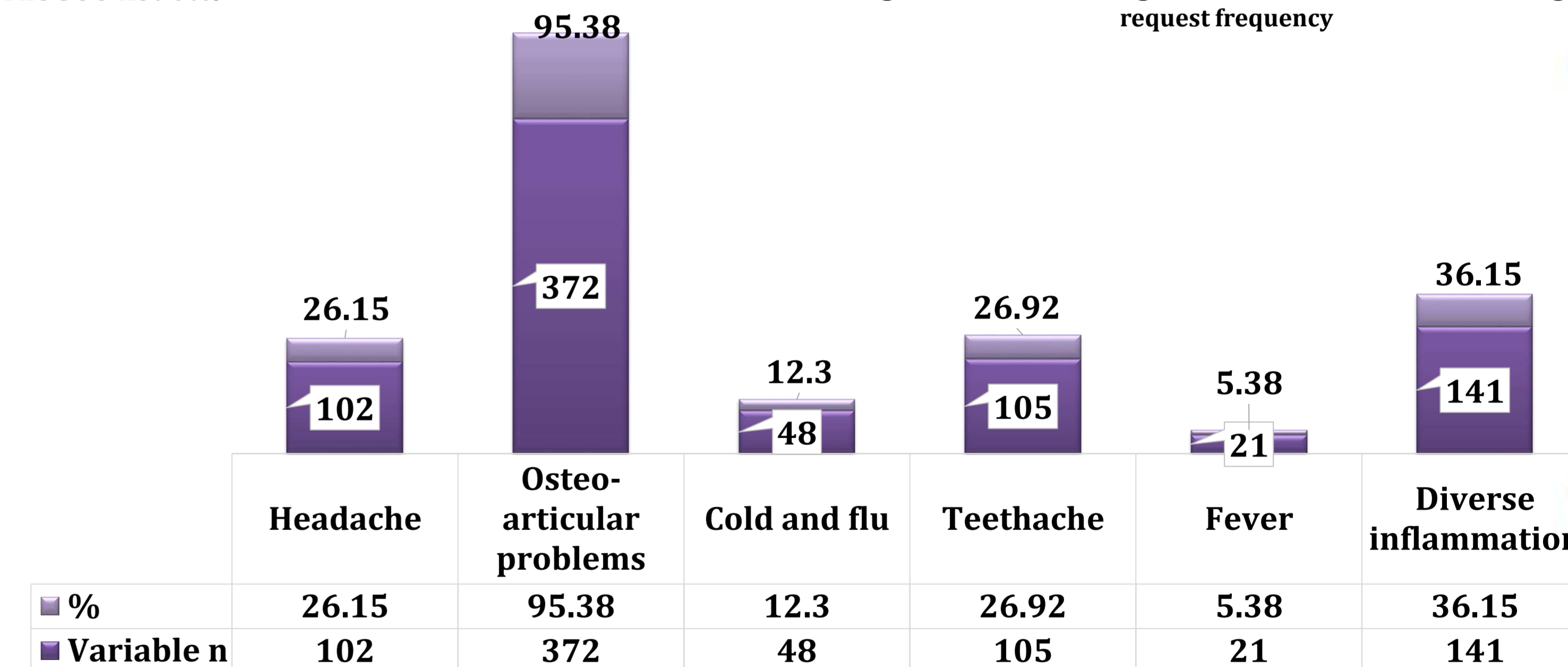


Figure 7. The reason why older adults ask for an NSAID drug

Actual knowledge of pharmacists in their opinion (56,92%) are not sufficient for offering complex counselling to older adults about NSAIDs use (tab. 2). For a significant and positive impact on patient care and therapeutic outcomes, the majority of pharmacists (78,97%) mentioned that it is necessary to possess more skills, namely:

- ✓ good communication and listening, make sure the environment is communication friendly;
- ✓ speak slowly and simplify sentences, don't use optical jargon or medical terminology;
- ✓ having clinical empathy;
- ✓ be friendly, kind, sincere and respectful;
- ✓ avoid being impatient, indifferent or contemptuous, never appear rushed or uninterested;
- ✓ exercise patience and compassion;
- ✓ improve time management skills, take extra time for communication and give time to process what is being asked or said etc.

To the question regarding the ways to learn pharmaceutical geriatric skills pharmacists indicated:

- to participate in diverse training, webinars that provide the tools and techniques for older person-centered interventions, case reviews and interactive polls;
- to continue education oriented to enhance geriatric workforce development;
- extensive education to guarantee that pharmacists are constantly up to date on the newest research and information regarding NSAID medications in the elderly;
- to participate in pharmaceutical meetings, conferences, whether it's a annual event or monthly training and acquire qualifications
- network with professionals from the medical environment etc.

Conclusions

Based on obtained results it becomes obvious that preventing risks of self-medication with OTC NSAIDs should become one of the main concern of pharmacists, as they are responsible for information, therapeutic advice and education of elderly population. Whenever pharmacists are releasing drugs, they should give proper instructions for the older patient about doses, duration and adverse effects of NSAIDs to understand and make his own decisions. Given information should be at patient's comprehension level so that it will be helpful for them to understand NSAIDs management. Educational and pharmaceutical strategies need to be implemented.