Painkillers among people aged 20-30 according to questionnaires

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Abstract

Aim. Painkillers are one of the most widespread drugs on the pharmaceutical market, individual analgesics belong to the OTC (over-the-counter drug) group, which are also available outside pharmacies. The universality and wide availability of painkillers pose a real problem of medication errors. The aim of the study was to examine the attitude of people aged 20-30 to taking painkillers and to examine the level of knowledge of the respondents about them.

Method. The study involved 70 people aged 20-30 who voluntarily filled in an original electronic questionnaire, which included the attitude of people of this age to taking medications and questions assessing their knowledge about the medications they take. It included questions about the type of drugs taken, frequency, intensity of pain at which the respondents took analgesics and knowledge about possible adverse effects in the case of long-term use of analgesics or their overdose. The most numerous age group were people aged 20-30, they constituted 55.7% of the respondents. People aged 24-27 accounted for 24.3%, while 20% were people aged 28-30. Most respondents showed that their current place of residence is a city with over 500,000 inhabitants. Most of the respondents had secondary education and it amounted to 51.4%.

Results and conclusion. As many as 85.7% of people take painkillers. 35.7% of the respondents take medication once a month, while 34.3% take medication less frequently than once a month. 60.9% of people know the effects of chronic overuse of painkillers, but as many as 39.1% of respondents have a knowledge deficit in this regard.

The study found that 89.9% of people aged 20-30 know how to safely use painkillers, only 10.1% do not know in this regard. Most people in this age group use drugs when the intensity of pain is 4, which means that the most numerous group of people takes drugs when the intensity of pain is very high. This indicates that drugs are not taken without necessity, which results in their chronic non-use, as a result of which the risk of side effects caused by overuse of painkillers is minimised.

The study showed that 35.7% take painkillers once a month and 34.3% less than once a month. Mostly women take medication once a month, this could possibly be associated with menstrual pain. The survey shows that 60.9% of people know the effects of chronic overuse of painkillers. It follows that most of the respondents know the consequences of overusing painkillers, but a large proportion of people in this age group show a deficit of knowledge about what is dangerous to their health, therefore it is necessary to educate people aged 20-30 years in this regard.

Cognitive value. The conducted research shows the attitude of young people toward painkillers. The cognitive value is the selection of a specific research group which from an early age, has the possibility to observe easy and wide access to analgesics.

Keywords: pain killers, level of knowledge, ailments

Introduction

Analgesics are an easily available and therefore commonly used group of drugs. Painkillers of the first level of the analgesic ladder belong to the OTC (over-the-counter drug) group, and therefore there is no medical consultation prior to the use of a given preparation. On the other hand, dynamically developing pharmaceutical concerns contribute to enabling consumers to purchase individual non-steroidal anti-inflammatory drugs or paracetamol in drugstores, grocery stores and gas stations (Wójtowcz-Chomicz, 2011). The pharmaceutical market in Poland is constantly growing, the cost of drugs sold in the years 2001-2007 on the pharmacy market increased by almost 65%, while in 2006-2010 the value of drugs increased by 30% (Skrzypczak & Haczński, 2011).

Regardless of whether a given analgesic is available on prescription or belongs to the group of OTC drugs, when used contrary to the recommendations contained in the leaflet, it may result in ailments of varying severity. The high availability of painkillers and the lack of the requirement to consult a doctor before using the preparation earlier may contribute to the feeling of illusory safety of drugs belonging to the OTC group (Cichońska, Sudy, Kawa, & Pasiek, 2013).

The consumption of painkillers and their availability clearly increases every year the lack of sufficient education of the society on the possible complications of incorrect use of painkillers, especially among young people, may result in serious health problems in the future.

The most common mistake in taking painkillers is the lack of control over the dose of the preparation, which contributes to overdosing, or combining analgesics with substances or other drugs which combined may have an adverse effect on the body (Krajewski-Siuda, Chmura, & Łach, 2012). Commonly available paracetamol, in case of overdose (the daily dose of paracetamol is 4 g for adults and 1500 mg for children under 12 years of age) is manifested by diarrhea, appetite disorders, abdominal pain, excessive sweating and sleepiness, while the liver is damaged, which may lead to health consequences resulting in multi-organ failure and death.

In case of ibuprofen poisoning (the daily dose for adults and children over 12 years of age is 200-400 mg), the nervous system, kidneys and liver are dam-

aged. Conscious consumers of painkillers should know the possible side effects and symptoms that suggest discontinuation of the drug, e.g. in the case of ibuprofen, stop taking the medication in the event of gastrointestinal bleeding, stomach ulcers or skin rash.

Despite the increasing publicity of the problem of excessive consumption of painkillers, there is still a reckless approach to the use of analgesics and health effects that may result from improper drug supply, including overdose.

Material and methods

The questionnaire was in Polish. Data for the study was collected in Poland and was promoted by Facebook and Gmail. 70 people aged 20-30 participated in the study, 60% of whom were women and 40% were men. These people filled in an original electronic questionnaire, which included the attitude of people aged 20-30 towards taking medications and questions assessing their knowledge about the medications taken. The survey contained 16 anonymous questions and could be completed online. By completing the questionnaire, you consented to participate in the study. Groups were selected in terms of gender, age range, education and the use of painkillers. The survey was to be completed between May and June 2021. The study allowed us to determine the attitude of people aged 20-30 to taking painkillers and the state of knowledge about the medications taken.

In the study, groups were selected in terms of gender, age range, education and the use of painkillers (Table 1,2,3,4). Women in the age group 20-23 years old accounted for 41.4% (n = 29), in the age group 24-27 for 11.4% (n = 8), while in the age group 28-30 years the percentage of women was 7.1% (n = 5). In total, the larger group of respondents was constituted of women as they accounted for 60% of the respondents). Among men 14.3% (n = 10) were in the age group of 20-23, 12,9% (n = 9) in the age group of 24-27 and 12.9% (n = 9) were men aged 28 to 30 years old. In total, they constituted 40% of the respondents. The most numerous group participating in the study was age group 20-23 and it accounted for 55.7%.

Table 1
Age structure of respondents

Age structure				
Age of the study group	Group of women		Group of men	
	n	%	n	%
20-23 years	29	41.4	10	14.3
24-27 years	8	11.4	9	12.9
28-30 years	5	7.1	9	12.9
Overall	42	60	28	40

Source: Own research.

In terms of the place of residence, the most common answer was a city with over 500,000 inhabitants, followed by a village, which amounted to 20% of the answers.

Table 2
Place of residence of the respondents

Age of the study group	Place of residence							
	Village		A city with a population of 1000-200.000		A city with a population of 200,000 -500,000		A city with over 500,000 inhabitants	
	n	%	n	%	n	%	n	%
20-23 years	11	15.7	5	7.1	4	5.7	19	27.1
24-27 years	1	1.4	2	2.9	1	1.4	13	18.6
28-30 years	2	2.9	2	2.9	2	2.9	8	11.4
Overall	14	20	9	12.9	7	10	40	57.1
n – number of people								

Source: Own research.

Most participants had secondary school education, they amounted to 51.4% (n = 36) and higher education 34.3% (n = 24), while the smallest group was composed of people with vocational education 14.3% (n = 10).

Table 3
Education of the respondents

Age of the study group	Education					
	Vocational		Secondary		Higher	
	n	%	n	%	n	%
20-23 years	3	4.3	28	40	8	11.4
24-27 years	5	7.1	6	6	6	8.6
28-30 years	2	2.9	2	2	10	14.3
Overall	10	14.3	36	51.4	24	34.3
n – number of people						

Source: Own research.

Results and discussion

The study showed that 85.7% of the respondents use painkillers, only 14.3% of the people indicated that they do not take them.

Table 4
Structure of respondents taking painkillers

Age of study group	Respondents taking painkillers		Respondents not taking painkillers	
	n	%	n	%
20-23 years	35	90	4	10
24-27 years	15	88	2	12
28-30 years	10	71	4	29
Overall	60	85.7	10	14.3

n – number of people, % percent for each age cohort

Source: Own research.

The most frequently mentioned drugs that are taken by participants (*what range? Participants? Lepiej po prostu* by participants) were: Paracetamol-Perfalgan (Paracetamol), Apap (Paracaetamol), Ibuprofen-Nurofen (Ibuprofenon), Ibuprom (Ibuprofenon) and Ketonal (Ketoprofen). Medicines such as Aspirin (Acetylsalicylic acid), Metamizole (Metamizole), Mefacite (Mefenamic acid), No-Spa (Drotaverine hydrochloride) and Solpadein (Paracetamol+ Caffeine + Codeine) were also mentioned. 14.3% (n = 10) of people who indicated that they did not take painkillers gave the following reasons: they wanted to limit the use of drugs to an absolute minimum, decided that they were not necessary, did not think it necessary because they consider themselves healthy people and heal some of their pain in natural ways, among other things.

According to the research, people in the 20-30 age group most often take medications once a month (35.7%) and less than once a month (34.3%), 14.3% of the respondents, while only one (1.4%) reported taking painkillers twice a week. One of the respondents takes painkillers every day (1.4%). These results indicate a reasonable attitude of young people to taking painkillers, because the vast majority of respondents practice taking medications once a month or less than once a month, and as many as 14.3% do not use them at all.

Most of the respondents (74.6% n = 50) admitted that taking analgesics resulted in the reduction of pain, according to 17.9% (n = 12) of the respondents, analgesics did not show satisfactory analgesic effect, while 7.5% (n = 5) people think that taking painkillers does not reduce pain.

A satisfactory part of the respondents (609%, n = 42) is aware of the possible consequences of overusing painkillers, while 39.1% (n = 27) admit that they do not know the effects of long-term use of analgesics.

Among the possible effects of abusing analgesics, the respondents most often indicate abdominal pain, damage to the gastric mucosa, liver damage, gastric and duodenal ulcers, the occurrence of pharmacological tolerance, gastrointestinal bleeding and diarrhea.

The vast majority of respondents (88.4% n = 61) claim that they do not abuse analgesics, only 11.6% (n = 8) of respondents indicated that they had abused painkillers.

Similar results were obtained when assessing the safety of taking analgesics, where 89.9% (n = 62) of respondents declared that they know how to safely use painkillers.

There was no apparent trend when responding to respondents taking pain medication. 55.2% of people take analgesics within an hour or as soon as possible after the onset of pain.

Most of the respondents (30.9% n = 21) indicated that they take drugs on a scale of 1-5 with an intensity of four points. 26.5% (n = 18) of the respondents took analgesics in the 5th degree of pain, 25% (n = 17) in the 3rd degree, 13.2% (n = 9) in the 2nd degree, and in the first degree of pain severity drugs are taken by only 4.4% of people (n = 3).

The largest group of respondents (64.7%, n = 44) indicated that they usually buy painkillers in a pharmacy, another large group of respondents (32.4%, n = 22) buy analgesics in a supermarket. Only 3% of respondents usually buy painkillers at gas stations.

Conclusions

The high availability of OTC is not correlated with their safety, it should be borne in mind that each drug substance may have a toxic effect on the body when used contrary to the recommendations on the leaflet. The study showed that the vast majority of people aged 20-30 know how to safely use painkillers. Unfortunately, only 60.9% of respondents know the effects of chronic overuse of painkillers. It follows that a significant proportion of people in this age group are not aware of the effects of chronic pain medication use. This is a significant problem as most young people are unaware of the seriousness of overusing painkillers. Headaches may also result from the overuse of pain medications. According to research conducted by Łukasik M., in the 1990s, the number of people complaining of chronic headaches grew with the increase in the availability of painkillers. They have been associated with the abuse of Paracetamol (Łukasik, 2017).

According to the research by Magdalena Michałowska, non-steroidal anti-inflammatory drugs have a negative impact on, among others: kidneys - they can impair their function, they also have an impact on the central nervous system, cardiovascular system, hematopoietic system, liver and respiratory system. Therefore, they have a negative impact on many systems and organs with their chronic use, confirming that insufficient knowledge about the side effects of chronic use of these drugs is dangerous

The study proved that people aged 20-30 do not use painkillers very often, 35.7% use drugs only once a month and 34.3% less than once a month. Research shows that young people's awareness of the effects of chronic pain medication use should be increased.

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