

# Why patients are afraid of opioid analgesics: a study on opioid perception in patients with chronic pain

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## KEY WORDS

cancer pain, fear, opioids, opiophobia

## ABSTRACT

**INTRODUCTION** Opiophobia is deemed one of the key barriers in effective pain management.

**OBJECTIVES** The study aimed to assess the overall perception of opioids in cancer patients treated for chronic pain, as well as to determine the nature of their most common related fears.

**PATIENTS AND METHODS** The study included 100 palliative care patients who suffered from chronic cancer or noncancer pain. Initially, they had to complete a survey exploring their knowledge on analgesics and potential fear of using opioids. The second phase was based on in-depth interviews with 10 palliative care patients suffering from cancer pain who were reluctant to use opioids.

**RESULTS** Of the 100 patients, 43 expressed concerns over commencing the treatment with opioids. Fear was reported more often in patients already on strong opioids, who either overtly expressed it (group C) or not (group B), as compared with patients treated with weak opioids (group A) (50%, 48%, and 19% of groups C, B, and A, respectively). The main concerns were drug addiction, fear of death or dying, and undesirable side effects. A qualitative study revealed similar types of fear among patients expressing concerns prior to being put on strong opioids.

**CONCLUSIONS** Opiophobia seems to be common among palliative care patients (up to 50%) treated with strong opioids. They mainly fear drug addiction, undesirable effects, and death or dying. Better awareness of patients' preconceptions about opioids may become instrumental to alleviating their suffering through enhanced pain management.

**INTRODUCTION** Pain is one of the most common symptoms in cancer and noncancer patients. An estimated 70% to 80% of patients with advanced cancer suffer from moderate and severe pain.<sup>1</sup> Patients, especially those with a life-threatening disease, often have concerns about pain, its cause, and whether they will be able to control it. Paradoxically, a medication such as an opioid analgesic, specifically aimed at alleviating pain, may induce fear of taking it. The decision to start chronic opioid therapy in patients with noncancer pain should be accompanied by a careful risk-to-benefit assessment, with continuing discussion with the patients and the clinicians' assistance in their education.<sup>2-6</sup> In fact, the very suggestion to have an opioid analgesic introduced may well be met with resistance on

the part of patients or their caregivers, or may result in the patient's noncompliance once the therapy is started.<sup>7</sup>

The Pain and Policy Study Group at the University of Wisconsin defined "opiophobia" as a phenomenon in which exaggerated concern about the risks associated with opioids prevents appropriate medical use of opioid analgesics.<sup>8</sup> Recent recommendations on cancer pain management, as published by the European Society for Medical Oncology or the National Institute for Health and Care Excellence (NICE), highlighted the need to assess the risk of opiophobia in patients.<sup>9,10</sup> The NICE guidelines even recommend that a physician first discusses with the patient the potential concerns about opioid analgesics before actually prescribing them. However, little is

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known on a diagnostic approach to opiophobia and which specific interventions might be potentially effective in its management.<sup>11-13</sup>

The present study aimed to assess the general perception of opioid analgesics among palliative care patients with chronic pain. In particular, we sought to determine the most vulnerable areas triggering concerns about opioid use and how these concerns are expressed by patients.

**PATIENTS AND METHODS** The study consisted of 2 stages (FIGURE 1). The first stage was aimed at a quantitative assessment of the existing body of knowledge and perception of opioid analgesics in patients with chronic pain, treated in 4 palliative care centers in Poland. Two of these centers are located in Bydgoszcz: the Blessed Father Jerzy Popiełuszko Hospice (home care, outpatient clinic, inpatient unit) and the Antoni Jurasz University Hospital No. 1 (outpatient clinic, inpatient unit), and the other 2 in Chojnice: Hospice of the Annunciation of the Virgin Mary (home care, inpatient unit) and the Society of Hospice Friends (home care). The second part of the study was a qualitative assessment of concerns about the use of strong opioids, as expressed by patients.

Participants were recruited from among palliative care patients with advanced cancer. The study protocol was approved by the Bioethics Committee at Collegium Medicum in Bydgoszcz, Nicolaus Copernicus University in Toruń, Poland (Ref. No. KB 466/2007). Each participant provided informed written consent to voluntary participation in the study.

**Stage 1** In the first stage of the study, 106 patients recruited from all areas of palliative care (home care, outpatient clinic, inpatient unit) consented to participate in the study protocol. In the case of 6 patients, it was necessary to discontinue the protocol due to fatigue (3 persons), delirium (2 persons), and dyspnea (1 person). The final sample size included 100 patients.

Patients were asked to answer the questions on their knowledge of analgesics, express their opinion on the overall effectiveness of their pain management, and identify specific concerns as to the potential introduction of opioids into their therapy. The survey questionnaire included both open- and closed-ended questions. Patients expressed their concerns in their own words, while their statements were written down. They were also asked to assess the intensity of symptoms, using the Edmonton Symptom Assessment Scale.

**Stage 2** The second stage of the study included patients with chronic cancer pain who expressed concerns about starting treatment with strong opioids. An individual in-depth interview was conducted with 11 patients (of whom 1 patient decided to discontinue the study). The interview covered a few specific issues that were essential to the study's assumptions. In line with the phenomenological approach, the participants'

preconceptions were reviewed with the aim to identify the root of the problem.<sup>14-16</sup>

All interviews were recorded and then transcribed. Conversations took place either at patients' homes or at other places that could ensure privacy and confidentiality. The in-depth interviews followed a structured scenario, developed by the principal investigator in association with other professionals (ie, psychologists and physicians), who verified the overall pertinence and validity of the survey questions.<sup>17-19</sup> The questions were purpose-developed and not standardized. The interviews were conducted by a physician experienced in palliative care and trained in enhanced communication techniques. Patients with well-managed pain (first- and second-step medications in the analgesic ladder) were interviewed first. The second interview was scheduled after patients had been administered strong opioid analgesics, within the period of optimum and stable pain relief. Only 1 patient attended both interviews, as the other patients had died prior to the second interview.

Subsequently, we appointed 4 individuals (with no medical training or education) whose task was to identify the areas of concern by marking all statements that they believed expressed fear. Following the review, all statements were assessed. Then, a multidisciplinary team of 3 physicians and 4 psychologists (ie, competent judges) appointed by the investigator conducted data analysis. They were asked to evaluate the extent to which the statements were consistent with specific concerns by allocating each statement to a category that best described it. Allocation to more than 1 category was permitted.

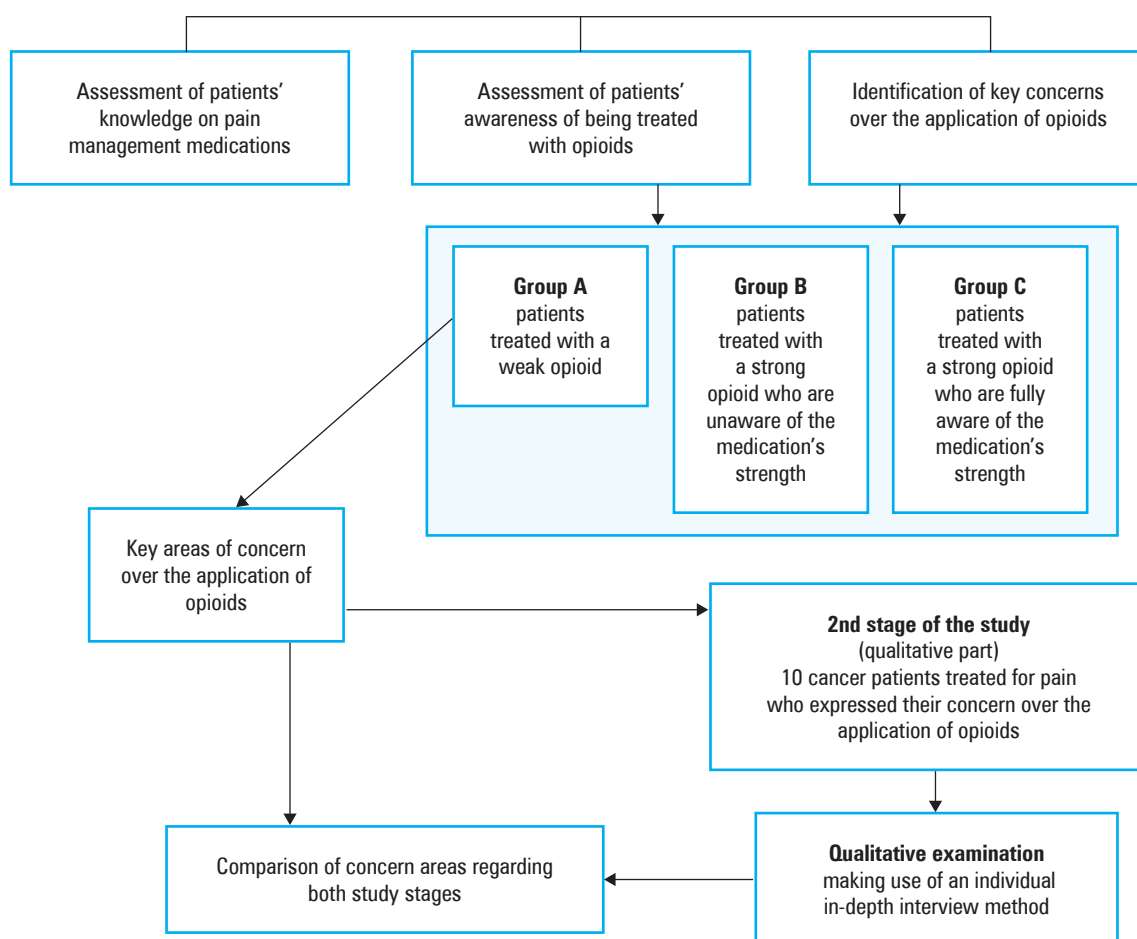
**Statistical analysis** The statistical analysis was conducted using Statistica 10.0 for Windows. Data were presented as mean (SD). To evaluate the concordance of the respective statements and categories between the judges, the Kendall's W coefficient of concordance was applied, which is a normalization of the Friedman test statistics. The Kendall's W ranges from 0 (no concordance) to 1 (full concordance).

**RESULTS Stage 1** The study sample included 100 patients (TABLE 1), most of whom showed a performance within the range of 40 to 60 on the Karnofsky scale. The average intensity of symptoms was moderate (3–4.5), and only in the case of nausea and dyspnea, it was described as low (1–1.5). The most common opioid administered during the study was morphine (n = 37), followed by tramadol (n = 11) and fentanyl (n = 9). Because many patients did not know the international names of the medications, 26% of them answered the question “none of the above” and “I do not know”, when they did not know which medication they took. One patient ticked 3 opioid analgesics, and 7 patients—2. Most participants received opioids orally (n = 92). The transdermal route, in the form of the transdermal therapeutic

**TABLE 1** Basic characteristics of patients participating in stage 1 of the study (n = 100)

Parameter		Value
Age, y	Mean (SD)	64.74 (12.11)
	Range	32–89
Sex, n	Female	47
	Male	53
Education	Higher	18
	Secondary	4
	Vocational	52
	Elementary	26
Disease that caused pain, n	Cancer	94
	Noncancerous diseases	6
	Chronic chest pain syndrome (after thoracic surgery)	1
	Syringomyelia	2
	Chronic pancreatitis	1
	Sclerosing cholangitis	1
	Phantom pain (loss of the right upper limb in a traffic accident)	1
Performance according to the Karnofsky scale (n = 93), n	90	3
	80	6
	70	8
	60	16
	50	30
	40	22
	30	8
	Mean	52.58
	S <sub>x</sub>	14.59
	Not evaluated	7
Intensity of symptoms according to ESAS, mean (SD)	Pain	3.11 (2.54)
	Fatigue	3.81 (2.70)
	Nausea	1.29 (2.73)
	Depression	3.37 (3.18)
	Anxiety	3.22 (3.18)
	Drowsiness	3.21 (3.20)
	Appetite	3.86 (3.16)
	Well-being	4.20 (2.74)
	Dyspnea	1.33 (2.17)
Opioid medication taken (according to the patients), n	Tramadol	11
	Codeine	1
	Dihydrocodeine	0
	Morphine	37
	Fentanyl	9
	Buprenorphine	1
	Methadone	1
	None of the above	26
	"I do not know"	21
Route of drug administration (according to the patients), n	Oral	92
	Intravenous	16
	Subcutaneous	20
	Sublingual	4
	Sticking plasters (TTS)	31
	Suppositories	8
	Infusions	2

Abbreviations: ESAS, Edmonton Symptom Assessment Scale; TTS, transdermal therapeutic system



**FIGURE 1** Functional flowchart of the study protocol (stages 1 and 2)

system, was used in 31 patients, while the subcutaneous route—in 20. Patients who answered “intravenously” usually received opioids subcutaneously with a butterfly needle.

**Concerns and fears expressed by patients about the use of opioid analgesics** Of the 100 patients, 43 expressed concerns about starting opioid treatment (both weak and strong opioids). The most common concerns were drug addiction ( $n = 18$ ), fear of death and dying ( $n = 12$ ), undesirable effects ( $n = 9$ ), and others ( $n = 4$ ). Morphine was most often regarded as a strong opioid, and most patients taking morphine expressed their concerns about the medication (66%, as compared with 39% of individuals treated with transdermal opioids).

Following a preliminary evaluation of all research data, the patients expressing any concern ( $n = 43$ ) about the use of opioids were divided into 3 subgroups (FIGURE 1): group A ( $n = 21$ ; patients on weak opioids; group B ( $n = 23$ ; patients unaware of taking strong opioids: they answered “No” to the question whether they had been put on a strong opioid, even if they had previously been advised on the specific type of medication administered to them); and group C ( $n = 56$ ; patients on strong opioids and aware of the type of the medication).

Concerns were expressed more often by patients already on strong opioids, both those in group C (50%,  $n = 28$ ) and group B (48%,  $n = 11$ ), as compared with those treated with weak opioids (group A; 19%,  $n = 4$ ). In group C, the main concern was fear of drug addiction (26%), while in group B, this concern was less common (17.5%). Group B more often expressed fear about death and dying (30.5%). The most common concern in group A was potential side effects.

The questionnaire consisted of open-ended questions that could be answered in own words. Patients could describe whether they actually had any concerns about the use of opioids (either weak or strong, as used in their pain therapy; groups A and C) or whether they would have any concerns before taking strong opioids in the future (groups A and B). Examples of concerns expressed by patients in the respective groups are presented in TABLE 2.

Based on an interview with 22 participants, the most important factors that contributed to a reduction in the level of fear were as follows: a bedside talk with an attending physician (including the physician’s opinion) or a nurse (6 patients); a possibility to counter the side effects, or absence of any side effects (2 patients); a reduced dose of the medication (1 patient); and a good therapeutic effect (13 patients). Patients would

**TABLE 2** Concerns and fears associated with the use of opioid analgesics, as reported by patients during stage 1 of the study (examples)

<b>Group A (n = 21): patients on weak opioids</b>
Concerns about weak opioids:
<ul style="list-style-type: none"> <li>• “Having read the leaflet, I was concerned about the side effects, mostly constipation”</li> <li>• “From the very start I took large doses of the medication, and I had stomach problems”</li> <li>• “The medication may not bring any benefits”</li> </ul>
Concerns about future use of strong opioids:
<ul style="list-style-type: none"> <li>• I am concerned about the side effects, eg, stupefaction”</li> <li>• “Would this be effective at all? I took the medication in the past, but it had no effect!”</li> <li>• “I am concerned about a bitter taste, nausea, and mental problems”</li> <li>• “I am concerned about suffocating when vomiting” (a patient confined to bed due to multiple fractures)</li> <li>• “I would not like to take this medication, as only seriously sick people have to take it”</li> <li>• “I would be concerned about potential addiction”</li> </ul>
<b>Group B (n = 23): patients unaware of taking strong opioids</b>
Concerns about future use of strong opioids (mainly death and dying, and drug addiction):
<ul style="list-style-type: none"> <li>• “The medication will put me to sleep”</li> <li>• “Death will be near”</li> <li>• “Fear of being seriously sick and having to take such a medication”</li> <li>• “My condition is getting worse”</li> <li>• “This is the end of my world, the cancer keeps on growing. This will be the end; my husband had cancer and took morphine before his death”</li> </ul>
<ul style="list-style-type: none"> <li>• “I am afraid this is a narcotic medication and I do not want to become addicted”</li> <li>• “Addiction, that’s what I am afraid of!”</li> </ul>
<b>Group C (n = 56): patients aware of taking strong opioids</b>
Concern about drug addiction:
<ul style="list-style-type: none"> <li>• “When I was to start taking morphine, I was concerned about addiction, about the fact that it was a narcotic medication, but I took it, because I just had to”</li> <li>• “It is addictive, these medications damage the body”</li> <li>• “I am concerned about addiction hazard; what if the pain gets worse, would it then help me?”</li> </ul>
Other concerns:
<ul style="list-style-type: none"> <li>• “I associate morphine with a horrible death of my grandfather”</li> <li>• “I am so sick that I just have to take such a strong medication, this is the end”.</li> <li>• “I thought about my husband who died a year ago from lung cancer”</li> <li>• “The side effects, I slept most of the time, I felt as if I was separated from life”</li> <li>• “I was concerned about the side effects, and about the interaction with the medication I was already on, and whether this would be effective”</li> <li>• “I was anxious that I would feel spaced out and have appreciably reduced mental and physical performance”</li> <li>• “This is a very strong analgesic, and it makes me think of death; it is taken as the last resort only, when things cannot be helped anymore”</li> <li>• “I am quite apprehensive about this medication; when I used the sticking plasters before, I was either totally out, or extremely drowsy, and I would not recognize people’s faces”</li> </ul>

typically say: “I feel much better after I have taken this medication”; “I would be afraid of the future without them”; “Morphine helps alleviate my pain after a few months of suffering, sleepless nights”; “I am no longer in pain and can go on.” According to 4 patients, the most important factor that increased their level of fear was the incidence of side effects (constipation, drowsiness).

**Stage 2** Stage 2 of the study was conducted in 10 patients (TABLE 3). The 5 key areas of concern were identified, which were fully consistent with those identified in stage 1: 1) fear of addiction; 2) fear of undesirable effects; 3) fear of death; 4) fear of dying; and 5) other concerns. Drug addiction and undesirable effects were treated as separate categories because there were discrepancies in the way patients defined those 2 areas. Death and dying were also treated separately: death meant a specific point in time, whereas dying—an ongoing process. Whenever the patient’s statement did not fit into one of the above categories, it was classified as “other concerns”. The answers to the open-ended questions were then assessed.

The statements originally provided by patients (in the form of 45 quotes) were analyzed by the competent judges who, independently of one another, allocated them to the 5 categories. In most cases the judges agreed on allocating the respective statements to specific categories. If a statement related to more than one area, the judges would allocate it to more than one category. As indicated in their comments, the most difficult task was to allocate the statements referring to the “death” and “dying” categories. The examples of such statements are as follows: “It makes me think of the end; so that there is something that will let me... die without suffering any pain”; “When I was in the hospital and someone was given morphine... it meant that it was the end”, “I think that this is the end. The end of life—this is what it is all about. Simply the end of well-being and the end of therapy”.

The first review of the statements allocated to the respective areas of concern did not allow for their clear distribution to the designated categories. Therefore, we decided to separate the statements allocated by the judges to specific categories depending on whether the judge was a psychologist or physician. This revealed differences in the understanding and interpretation of the statements between those 2 professional groups. Psychologists expressed more doubts when naming the areas of concern, particularly with regards to death and dying. On the other hand, physicians seemed to discriminate these 2 categories far more clearly. The greatest differences in the reviews made by psychologists and physicians were observed for the following statements: “This is a strong medication; it is offered when there is no other way out”; “If I am given morphine, this must be the last stage”; “When I was sitting at the table, next to him, then he (the doctor) said: grandpa, I do not want to kill you. Because this is the last resort—he said. And you do not need it yet, as your condition is not so serious”; “The greatest fear I have with regards to this medication is that this heralds the end”.

Statements that could not be allocated to any of the first 4 categories were classified as “other concerns”. This category included, for example, statements related to the administration of opioids (not included in categories 1–4) and those



**TABLE 3** Demographic and clinical characteristics of the patients participating in stage 2 of the study (n = 10)

No	Sex	Age, y	ICD-10 diagnosis	Disease onset	Duration of palliative care	Date of interview(s)
1	Female	72	Breast cancer	2009	24 February 2011 – 5 July 2016 (1289 days)	14 June 2012 12 July 2012
2	Female	58	Sigmoid colon cancer	June 2011	20 June 2012 – 5 July 2012 (16 days)	29 June 2012 <sup>a</sup>
3	Female	71	Unknown primary focus	February 2012	13 July 2012 – 5 August 2012 (24 days)	21 July 2012 <sup>a</sup>
4	Female	73	Pancreatic cancer	February 2012	17 August 2012 – 8 October 2012 (53 days)	23 September 2012 <sup>a</sup>
5	Female	66	Ovarian cancer	2010	14 September 2012 – 23 October 2012 (40 days)	28 September 2012 <sup>a</sup>
6	Female	79	Ovarian cancer	1990, relapse September 2012	12 October 2012 – 6 January 2013 (91 days)	18 October 2012 <sup>b</sup>
7	Female	58	Liver tumor	July 2012	3 October 2012 – 5 September 2015 (1067 days)	04 December 2012 <sup>c</sup>
8	Female	69	Breast cancer	November 2011	19 December 2012–19 March 2013 (91 days)	20 December 2012 <sup>b</sup>
9	Male	77	Lung cancer	October 2012	18 December 2012 – 25 December 2012 (8 days)	22 December 2012 <sup>a</sup>
10	Female	70	Lung cancer	January 2012	9 January 2013 – 1 September 2013 (235 days)	09 December 2013 <sup>b</sup>

**a** Second review was not performed due to the deterioration or death of the patient.

**b** The patient refused to participate in the second interview.

**c** Second review was not performed because treatment with strong opioids was not introduced.

Abbreviations: ICD-10, *International Classification of Diseases, Tenth Revision*

related broadly to fears and concerns. The examples include: “The biggest fear—so it does not hurt”, “Morphine—it makes me think of my family’s helplessness when faced with pain”, “I am most afraid of suffering”. The judges agreed on allocating all these statements to this category and added their own comments. They also suggested that several new subcategories of fear should be introduced, such as fear of pain and imminent suffering, as well as the sense of helplessness in the patient’s family when faced with disease and its symptoms.

Because the judges expressed doubts as to the precise allocation of the above statements, we decided to determine the extent of concordance between the actual statements and the specific categories. Therefore, a group of 3 more independent competent judges (none of them being a psychologist or physician) was appointed to evaluate the concordance of the respective statements and categories. The Kendall’s W exceeded 0.7 in all categories except the “death” category. This indicated high concordance with the reviewers’ appraisal. When the “death” and “dying” categories were combined, the coefficient was also high (0.82).

The discrimination between the fear of dying (perceived as a process) and the fear of death (perceived as the actual moment of death) is questionable. It is likely that patients understood these 2 terms differently than we assumed or that they did not see the difference at all. Naturally, patients who are aware of their disease and who experience different symptoms do think about the inevitability of death. They see dying as a gradual progression towards the final point—death. Dying and death are in fact

inseparable, even though each of them may be filled with a different meaning.

During stage 2 of the study, the intensity of fear, depression, and aggression was assessed in each patient (Hospital Anxiety and Depression Scale, HADS). Only in 1 patient, the score indicated depression.

**DISCUSSION** The study demonstrated that nearly half (43%) of the patients treated for chronic pain expressed different concerns related to opioid analgesics. Patients that took weak opioids were more often concerned about the undesirable effects of treatment with strong opioids. Most patients who already took strong opioids and were aware what these drugs are expressed concern about drug addiction. Finally, patients who were on strong opioids but were unaware of what type of drugs they are taking mostly expressed concern about death and dying. It is likely that in those patients the fear of disease progression and limited life expectancy was associated with their lack of awareness of the opioid therapy they were actually on.

One of the key conclusions of our study is that even among patients receiving specialized palliative care, nearly 30% of individuals treated with strong opioids were either unaware of this or did not understand this, or were even in denial, and yet they would often express fear of death and dying. Furthermore, half of the patients who were aware that they were on strong opioids were still afraid of using them, particularly of becoming addicted.

An Australian study demonstrated that one third of patients experienced clinically significant pain that hindered their daily activities,

despite the use of analgesics. They were more inclined to use alternative treatments to exercise more effective control over their pain rather than to talk to medical professionals. The underlying reason was often a significantly higher concern over potential undesirable effects of the analgesics they received.<sup>20</sup>

In our study, 84% of the patients reported that the attending physician was the key source of credible information on medications. In fact, those patients who admitted to a reduced level of opiophobia also indicated the importance of good analgesic effect and/or a conversation with the physician.

Unfortunately, our study also revealed a negative effect of a consultation with the physician, showing that it either induced or reinforced opiophobia among patients. Physicians would tell their patients that they would not kill them with morphine, or that it was far too early to use an opioid analgesic. Physicians themselves have fears about using opioids, which often affects their clinical practice, prescription of opioids, and the way they talk with their patients about opioid treatment. Therefore, it is important to educate physicians on pain management and opioid use.<sup>21,22</sup>

The largest number of patients were concerned about drug addiction, serious adverse effects, the process of dying, and faster death due to opioid use. These concerns may have been associated, at least to some extent, with the fact that physicians often tend to use opioids as the “last resort medication.” Therefore, many patients connect these drugs with death, end of life, dying, and disease progression. For some patients, the use of strong opioids correlated with the final stage of their disease. Morphine is often used at the end of life, which for many patients means that they will be dying soon.<sup>21</sup>

This prompts questions not only as to the rationale for prescribing opioids but also as to whether physicians can adequately respond to the fears expressed by patients and their families by means of effective communication. Effective communication entails personal credibility and the actual message one intends to convey.<sup>23</sup> To put it shortly, as long as the attending physicians are afraid of introducing opioids themselves, they will not be able to communicate effectively with their patients about this treatment.

In the present study, the fear expressed by patients was largely reduced by effective communication with the attending physicians before the administration of opioids. Patients were also found to cope much better with the undesirable effects of the medication or experienced no adverse effects altogether. The lack of adequately structured information is often a serious cause of concern (“No news is bad news; it is an invitation to fear”).<sup>24</sup>

Interestingly, the largest percentage of patients were concerned about drug addiction. Opioid medications are frequently linked with

drug addiction, but this is typically associated with the nonmedical use of opioids. Nonetheless, these common misconceptions make the patients quite reluctant about increasing the dosage. Consequently, the doses they take are too low to ensure effective pain control, which leads to undue suffering. Patients also claim that they do not want to “die like drug addicts”. To a large extent, this is how they tend to manifest their wish to respect their dignity.

Unfortunately, medical professionals tend to neglect the problem of drug addiction in patients with advanced cancer, primarily because of their short life expectancy. It is important to increase the awareness of physicians that drug addiction is a legitimate concern, even if the patient will live only a few months, weeks, or even days longer.<sup>25</sup>

Experts in palliative medicine incorporated all the above issues into their guidelines for pain management in cancer.<sup>26-28</sup> The NICE recommendations also clearly highlight the need for a careful discussion with the patient before introducing a strong opioid into the management scheme. Such bedside conversation must primarily be focused on identifying and addressing any fears and concerns expressed by patients and their caregivers.<sup>10,29</sup>

The conversation with the patient should include a number of simply structured questions that will allow the physician to identify if the patient is resistant to undergo opioid treatment. Hands-on guidelines for physicians on prescribing strong opioids still need to be developed. This is particularly important considering that the objective of communication with the patient is not only to determine the specific areas of concerns the patient may have about therapy with strong opioid, but, first and foremost, to educate patients about the benefits as well as the possible side effects of this therapy. Our results clearly indicate that for the communication with the patient to be fully effective physicians should overcome their own fears and concerns related to opioids. (TABLE 4). Our study also showed that physicians should ask patients about their preconceptions rather than ask directly about their concerns. The way patients voice their preconceptions always carries information about their fears and concerns, as well as highlights any information gaps they may have. By asking patients about their preconceptions, physicians may avoid inadvertently suggesting any answers. To address the preconceptions, physicians need to identify their causes. Cognitive behavioral therapy (eg, components of the rational behavior therapy developed by Maultsby) may be helpful.<sup>30</sup> One of its key assumptions is: “It is not facts that cause our emotions, but rather our beliefs about facts”.

The main limitation of the present study is the lack of another round of interviews that might have revealed the effect of palliative care on the patients’ concerns about opioid therapy. Unfortunately, the deteriorating health condition and short survival of patients made it impossible

**TABLE 4** A proposed outline of a conversation between an attending physician and a patient before the recommended introduction of a strong opioid into the therapeutic management

The physician explains to the patient the reasons for introducing a strong opioid (discusses a specific type of medication and gives the reasons why it needs to be introduced at this point).
The physician asks the patient, if he or she is OK with this decision.
If the patient accepts the decision, the physician asks the patient if he or she has any queries regarding the proposed therapy.
If a patient has no queries, then the physician asks the patient about what he or she knows about opioids.
If the patient does not accept the decision to have an opioid introduced into the therapy, the physician asks the patient for the reason for his or her refusal.
In both cases (the patient accepts/declines the opioid option), the physician listens attentively to what the patient says and asks some open-ended questions, while being aware that identical medical terms used by patients and doctors may have altogether different connotations (meanings).
The physician asks the patient about the causes of his or her preconceptions about opioids, while being aware that any such preconceptions stem from both the patient's actual knowledge and his or her individual emotions.
Having learned what the patient's preconceptions and their causes are, the physician can make use of the elements of the rational behavior therapy in order to convince the patient refusing the opioid option to change his or her mind, or to reinforce the decision made by the patient who accepted this therapeutic option.
The physician responds to any concerns expressed about the introduction of a strong opioid into the therapy.
The physician explains to the patient that the medication is going to be administered in small doses first, which will be gradually increased if necessary. The physician also explains that there is no such thing as a critical dose, and the objective is to establish the smallest effective dose.
The physician assures the patient that any adverse effects can be mitigated or prevented, and that the therapy may be modified or switched to an alternative one should the patient develop intolerance to a specific type of opioid.
The physician informs the patient that if the pain decreases during opioid treatment or any adjuvant therapies (eg, blockade, neurolysis, or radiotherapy), the dose of a strong opioid will be reduced accordingly, and when pain completely subsides, the treatment will be gradually discontinued.

to conduct this part of the qualitative study, which is a common problem in palliative care patients.

**Conclusions** Approximately half of palliative care patients on chronic pain treatment is concerned about the use of opioid medications. Moreover, many patients who have agreed to take these medications still have some concerns about this treatment, most commonly relating to drug addiction, undesirable effects, and to fear that "morphine and other such medications" may result in earlier death and that death is imminent.

According to the most recent NICE guidelines on prescription of opioid medications to adult patients, physicians should explain to their patients the key principles of opioid therapy, ask them about any concerns and preconceptions they may have, and identify the possible causes of these concerns and preconceptions, thus allowing patients to readdress and perhaps mitigate their fears. Already the first conversation at bedside is important because for most patients their attending physicians are the most credible source of information about pain management.

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**SUPPLEMENTARY MATERIAL** Supplementary material is available with the online version of the article at [www.pamw.pl](http://www.pamw.pl)

**CONFLICT OF INTEREST** MG has received honoraria for lectures from Mundipharma, Takeda, Teva, Stada, and Molteni (manufacturers of opioids). MK has received honoraria for lectures, organization of conferences/trainings, membership in expert groups, and/or reimbursement of expenses for participation in conferences from Mundipharma, Takeda, Teva, Stada, Angellini, and Molteni (manufacturers of opioids). MK is also head of a foundation whose educational activities are supported by these companies.

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## REFERENCES

- 1 Dandrea S, Montanari M, Apolone G. Prevalence of undertreatment in cancer pain. A review of published literature. *Ann Oncol.* 2008; 19: 1985-1991.
- 2 Chou R. Clinical Guidelines from the American Pain Society and the American Academy of Pain Medicine on the use of chronic opioid therapy in chronic noncancer pain: what are the key messages for clinical practice? *Pol Arch Med Wewn.* 2009; 119: 469-477.



- 3 The 2017 Canadian Guideline for Opioids for Chronic Non-Cancer Pain. [http://nationalpaincentre.mcmaster.ca/documents/Opioid%20GL%20for%20CMAJ\\_01may2017.pdf](http://nationalpaincentre.mcmaster.ca/documents/Opioid%20GL%20for%20CMAJ_01may2017.pdf). Accessed November 22, 2017.
- 4 Dobrogowski J, Wordliczek J, Szczudlik A, et al. [Long-term strong opioid use in noncancer pain: A Review of the Literature and Recommendation of the Polish Association for the Study of Pain, Polish Neurological Society and Polish Society of Family Medicine]. *Ból*. 2015; 16: 9-30. Polish.
- 5 Hurstak EE, Kushel M, Chang J, et al. The risk of opioid treatment: Perspectives of primary care practitioners and patients from safety-net clinics. *Subst Abus*. 2017; 38: 213-221. [↗](#)
- 6 O'Brien T, Christrup L, Drewes AM, et al. European Pain Federation position paper on appropriate opioid use in chronic pain management. *Eur J Pain*. 2017; 21: 3-19.
- 7 Overcoming Opiophobia & Doing Opioids Right. [www.pain-topics.org](http://www.pain-topics.org) <http://www.thblack.com/links/RSD/OvercomingOpiophobia.pdf>. Accessed November 22, 2017. [↗](#)
- 8 Pain & Policy Studies Group. Opiophobia. <http://www.painpolicy.wisc.edu/glossary/opiophobia>. Accessed November 22, 2017. [↗](#)
- 9 Ripamonti CI, Santoni D, Maranzano E, et al. SMO Guidelines working Group: Management of cancer pain: ESMO Clinical Practice Guidelines. *Ann Oncol*. 2012; (Suppl 7) 7: 139-154.
- 10 National Institute for Health and Clinical Excellence. NICE Clinical Guideline: Opioids in palliative care: safe and effective prescribing of strong opioids for pain in palliative care of adults. <https://www.nice.org.uk/guidance/cg140>. Accessed November 22, 2017.
- 11 Bender JL, Hohenadel J, Wong J, et al. What patients with cancer want to know about pain: a qualitative study. *J Pain Symptom Manage*. 2008; 35: 177-187. [↗](#)
- 12 Blanchard H, Batten B. Designing and producing a patient leaflet on morphine. *Eur J Palliat Care*. 1996; 3: 106-108.
- 13 Reid CM, Gooberman-Hill R, Hanks GW. Opioid analgesics for cancer pain: symptom control for the living or comfort for the dying? A qualitative study to investigate the factors influencing the decision to accept morphine for pain caused by cancer. *Ann Oncol*. 2008; 19: 44-48. [↗](#)
- 14 Creswell JW. Qualitative inquiry and research design. Choosing among five traditions. Thousand Oaks, CA: Sage; 1998.
- 15 van Manen M. Researching lived experience: human science for an action sensitive pedagogy. New York, NY: Albany: State University of New York; 1990.
- 16 Coyle N. In their own words: seven advanced cancer patients describe their experience with pain and use of opioid drugs. *J Pain Symptom Manage*. 2004; 27: 300-309. [↗](#)
- 17 Silverman D. [Chapter IV, Interviews]. In: Silverman D. [Interpretation of qualitative data]. Warszawa, Poland: Wydawnictwo Naukowe PWN; 2009: 111-144. Polish.
- 18 Silverman D. [Chapter VI, Natural conversation. Interpretation of qualitative data]. In: Silverman D. [Interpretation of qualitative data]. Warszawa, Poland: Wydawnictwo Naukowe PWN; 2009: 183-213. Polish.
- 19 Coyle N, Tickoo R. Qualitative research: What this research paradigm has to offer to the understanding of pain. *Pain Med*. 2007; 8: 205-206. [↗](#)
- 20 Potter VT, Wiseman CE, Dunn SM, Boyle FM. Patient barriers to optimal cancer pain control. *Psychooncology*. 2003; 12: 153-160. [↗](#)
- 21 Twycross R. Pain relief in advanced cancer (Misunderstandings about morphine). New York, NY: Churchill Livingstone; 1994 (Reprinted 1998): 333-347.
- 22 Fallowfield LJ, Jenkins VA, Beveridge HA. Truth may hurt but deceit hurts more: communication in palliative care. *Palliat Med*. 2002; 16: 297-303. [↗](#)
- 23 Woodruff R. Psychological and psychosocial aspects of pain control. Melbourne, Australia: Asperula Pty Ltd, European Edition: 1997: 74-80.
- 24 Fletcher C. Listening and talking to patients. *BMJ*. 1980; 281: 994. [↗](#)
- 25 Matthias MS, Krebs EE, Collins LA, et al. "I'm not abusing or anything": patient – physician communication about opioid treatment in chronic pain. *Patient Educ Couns*. 2013; 93: 197-202.
- 26 Portenoy RK. Treatment of cancer pain. *Lancet*. 2011; 377: 2236-2247. [↗](#)
- 27 Ripamonti C, Bandieri E. Pain therapy. *Crit Rev Oncol Hematol*. 2009; 70: 145-159. [↗](#)
- 28 Gunnarsdottir S, Signurdardottir V, Kloke M, et al. A multicenter study of attitudinal barriers to cancer pain management. *Support Care Cancer*. 2017; 25: 3595-3602. [↗](#)
- 29 Stannard C. All Party Parliamentary group on Drug Misuse Inquiry Response on behalf of the British pain Society. Risk of addiction to opioids prescribed for relief pain. London: British Pain Society; 2007.
- 30 Maxie C, Maultsby JR. [Rational Behavioral Therapy. Cognitive Behavioral Therapy Handbook] 3 ed. Żnin, Poland: Wydawnictwo Vulkan; 2013. Polish.