

Access to pain management for cancer patients treated under the Brazilian private healthcare system

Acesso ao tratamento da dor de pacientes com câncer atendidos no sistema de saúde privado brasileiro

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ABSTRACT

Objective: To reflect about current pain management in cancer patients treated under the Brazilian Private Healthcare System, considering legal boundaries, access to essential drugs and involved ethical issues. Panelists aimed to reach a consensus about recommendations to increase access to proper analgesia for patients with cancer secondary pain. **Methods:** Four Brazilian specialists, being a radiation oncologist (and bioethicist), an oncologist, a pain specialist and a CEO of a private healthcare plan, met after the 2019 American Society of Clinical Oncology (ASCO) meeting, held in Chicago, and discussed the aforementioned subjects. A consensus was reached and is described below. **Results:** Cancer pain is prevailing in our country, probably undertreated, and may be a prevalent cause of medical services overuse, which may increase healthcare costs. Thus, there may be an opportunity to improve patient's quality of life, with a positive budget impact for private healthcare plans, if this treatment becomes mandatorily reimbursed. There are several studies in the literature showing similar results, but this should be prospectively studied, preferable using real word evidence, at the Brazilian scenario. Cancer pain treatment protocols, designed by specialists, should be designed in agreement with all stakeholders. **Conclusion:** Panelists agreed that pain treatment, which must be considered a human right, is a clear priority in Brazil. All stakeholders should collaborate in designing protocols to improve patient's quality of life, consequently improving health insurance's budgets. If so, this would have clear consequences in access to innovative cancer treatments, as those discussed during the 2019 ASCO meeting.

RESUMO

Objetivo: Refletir sobre o manejo atual da dor em pacientes com câncer atendidos no sistema de saúde privado brasileiro, considerando limites legais, acesso a medicamentos essenciais e questões éticas envolvidas. Os participantes do painel procuraram chegar a um consenso sobre recomendações para aumentar o acesso à analgesia adequada para pacientes com dor secundária ao diagnóstico de câncer. **Métodos:** Quatro especialistas brasileiros reuniram-se após a reunião da Sociedade Americana de Oncologia Clínica (ASCO) de 2019, realizada em Chicago, e discutiram os mencionados assuntos. Um consenso foi alcançado e é descrito abaixo. **Resultados:** A dor oncológica prevalece em nosso país, provavelmente subtratada, e pode ser uma causa predominante de uso excessivo de serviços médicos, o que pode aumentar os custos com saúde. Assim, pode haver uma oportunidade de melhorar a qualidade de vida do paciente, com um impacto orçamentário positivo para planos de saúde privados, se esse tratamento for obrigatoriamente reembolsado. Existem vários estudos na literatura que mostram resultados semelhantes, mas isso deve ser estudado prospectivamente, preferencialmente usando evidências provenientes de dados de mundo real, no cenário brasileiro. Os protocolos de tratamento da dor do câncer, preparados por especialistas, devem ser elaborados de acordo com todas as partes interessadas. **Conclusão:** Os participantes do painel concordaram que o tratamento da dor, que deve ser considerado um direito humano, é uma

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clara prioridade no Brasil. Todas as partes interessadas devem colaborar na elaboração de protocolos para melhorar a qualidade de vida do paciente, consequentemente melhorando os orçamentos do seguro de saúde. Nesse caso, isso teria consequências claras no acesso a tratamentos inovadores contra o câncer, como os discutidos durante a reunião da ASCO em 2019.

Introduction

Pain is one of the main concerns for patients with malignant neoplasms, mainly for those with more advanced pathologies (Winslow *et al.*, 2005). This symptom was defined in 1979 by the International Association for the Study of Pain, as “an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage” (Pain terms: a list with definitions and notes on usage. Recommended by the IASP Subcommittee on Taxonomy, 1979). According to data reported in literature, pain is a symptom that affects 64% of patients with locally advanced or metastatic tumors, 59% in patients during their oncology treatment, and 33% of patients who have been cured from their pathologies, with over one third of these rating their pain as moderate or severe (van den Beuken-van Everdingen *et al.*, 2007). This data, regarding prevalence of pain in patients surviving cancer, was recently confirmed in the North-American population and, in this latter study, the presence of pain was related to a lower education level, lack of healthcare insurance, and the fact that the former patient was unemployed, which, in the United States setting, is related to a less effective access to medical care (Jiang *et al.*, 2019). In addition to this alarming prevalence, pain may bring important and severe consequences, which comprise a set of maladaptive responses in the physical, psychological, family, and social settings (Brennan *et al.*, 2007), besides the evident impairment in the subject’s quality of life (Cipta *et al.*, 2015).

A recent systematic literature review showed that the rate of cancer pain undertreatment varied from 8 to 82% (mean: 43%), which implies that almost 1 out of 2 patients has their cancer pain insufficiently treated (Deandrea *et al.*, 2008). Several robust trials regarding visits to emergency care units, both in the United States and in Canada, have shown that undertreated pain is the main cause of the use of that service (Barbera *et al.*, 2010; Mayer *et al.*, 2011). Also, in addition to approximately 60% of visits resulting in hospitalization, around 30% of these events could have been avoided (Adam *et al.*, 2015; Rivera *et al.*, 2017), showing a clear and rare opportunity to reduce the costs in oncology treatment (Sullivan *et al.*, 2011).

Brazil is one of the countries around the world with the lowest *per capita* opioid consumption, which is far below the estimated ideal. It is estimated that, in the country, only 7% of the appropriate amount of these drugs is used, when compared to the amount used in rare countries where pain management reaches the best outcomes (Seya *et al.*, 2011). Thus, the authors’ purpose with this paper, after their

participation in the Annual Congress of American Society of Clinical Oncology (ASCO), held in the city of Chicago, between May 31 and June 4, 2019 is to: reflect on the current management of pain in the Brazilian private healthcare system; identify the barriers to the effective management of cancer pain and unmet needs in this setting, and guide financially sustainable opportunities for improvement in the oncology patient’s journey. Specialists were interviewed by telephone for one hour before the panel, which was a three-hour *in-loco* discussion about the following topics: current status of cancer pain management, emergency services, opportunities for resource optimization, unmet needs, and suggestions for service improvement. The following is a summary of this discussion.

Brazilian Healthcare System

Brazil is the largest country in Latin America, with a population of almost 210 million inhabitants and a *per capita* gross domestic product (GDP) of 15,600.00 US dollars, according to 2017 data (Central Intelligence Agency, 2019). Since 1988 Constitution, all Brazilian citizens have the right to full assistance to healthcare, through *Sistema Único de Saúde* [Single Health System], SUS, which is unique in the continent, funded by taxes and insurance payments (Victora *et al.*, 2011). In addition, approximately 20% of the population has a private healthcare insurance (Ferreira *et al.*, 2016). Currently, the country spends US\$ 1,318 *per capita* in healthcare, a little more than 8% of its GDP, which is close to the average in the region. However, within this figure, public and private expenses are considered, with a great imbalance between both systems. With almost 20% of the population having access to the private healthcare system, over 54% of the previous amount is spent, while less than half of the total healthcare budget is directed to the remaining 80%, who exclusively rely on SUS (Atun *et al.*, 2015), which is an important indicator of inequity of healthcare access in the country.

The Brazilian private healthcare system is ruled by Law 9656, promulgated in 1998 (Hirota *et al.*, 1998). Since then, all patients who have healthcare insurances have the right to receive, if necessary, all procedures included in a list published by *Agência Nacional de Saúde* [National Healthcare Agency] (ANS), called “ANS List of healthcare procedures and events.” The renewal process of such document occurs every two years through the technical analysis by an expert committee, with representatives from several stakeholders, called *Comitê Permanente de Regulação da Atenção à Saúde* [Standing Committee for Healthcare Regulation] – COSAÚDE,

which considers, for new incorporations, criteria such as efficacy, cost, and infrastructure availability for technology use all over the country (Agência Nacional de Saúde complementar, 2016). After a technical analysis, the results are subject to a public inquiry. Healthcare operators are free to extend their coverage beyond the procedures mentioned in this list. However, monthly fees are adjusted based on such document, considering only new procedures that will be included in the document. Thus, manager decisions, if not endorsed by the National Agency, cannot include eventual cost adjustments to be transferred to their users. There is no clear cost-effectiveness threshold defined in Brazil, although discussions are being conducted towards a consensus that has not been reached yet.

Since 2018, drugs for adverse event management and adjuvant drugs related to antineoplastic therapies have mandatory coverage by the private healthcare plans HMOs, according to the List of *Agência Nacional de Saúde*. However, this coverage is restricted to analgesics, opioids, and derivatives, according to medical prescription, for patients with pain related to the use of antineoplastic drugs that has such side effect mentioned in the package insert. Thus, the pain caused by the tumor itself or the progression of some of its metastases is excluded. There is also mandatory coverage for prophylaxis and management of nausea and vomiting related to antineoplastic agents, according to the emetogenic risk of the chemotherapy scheme used (Agência Nacional de Saúde Suplementar, 2019).

Key aspects discussed between the participant specialists

Causes and impact of cancer pain

The disordered growth of neoplastic cells may result in nociceptive, neuropathic, inflammatory, and ischemic elements that induce cancer pain. Peripheral phenomena occur as a consequence of the sensitization of primary afferent neurons by released inflammatory mediators. In addition, there are central mechanisms (spinal and supraspinal) that may affect the painful sensation. The pain may be caused by direct tumor action (e.g., related to tumor invasion) or may be treatment-related (e.g., mucositis due to chemotherapy or radiation therapy) (Table 1). For the appropriate pain management, a thorough patient evaluation is essential (Chwistek, 2017). The consensus is that every patient should be asked and assessed for the presence of pain during each oncology visit. Pain severity should be measured, with the type of pain being characterized, whenever possible. Pain assessment should include severity, clinical features, rhythm, interference with sleep and daily activities, triggering factors, as well as relief factors. In addition, it is essential to understand the pain in a broader setting. Aspects such as psychological vulnerabilities, which include anxiety, depression, catastrophism (Syrjala *et al.*,

2014), and previous chronic pain, which may change the integrity of descending modulatory endogenous pathways (Botelho *et al.*, 2016), impact on development, maintenance, and response to treatment.

In addition to physical and psychological costs of untreated pain, there are also economic costs, which are usually relevant and paradoxically, little considered. People with inappropriately treated chronic pain are twice more likely to have difficulties at work. A recent systematic review has shown that untreated chronic pain is clearly associated with a low socioeconomic level and a low participation by the workforce (Verhaak *et al.*, 1998). An Australian study has found a clear correlation between chronic pain and unemployment, with the receipt of social benefits due to this condition (Blyth *et al.*, 2001). A recent research based on telephone reports has assessed prevalence, severity, treatment and impact of chronic pain in 15 European countries, and showed that 20% of the respondents experienced chronic pain in levels that varied from moderate to severe. This research has also assessed the impact of pain on healthcare resource utilization, showing that 60% of patients reported between 2 and 9 visits and 11% reported at least 10 visits to their doctors and/or emergency services due to pain in the 6 previous months. The impact on work is shown in the result that 60% of patients with moderate to severe pain informed that they were unable to perform their job, and another 20% had

Table 1. Etiologies of pain in cancer patients

Pain from cancer	Treatment-related pain
<ul style="list-style-type: none"> Primary bone pain or due to metastatic disease Plexopathies and neuropathies due to tumor involvement of peripheral nervous system Headaches and facial pain related to primary or metastatic lesions of brain, skull, or cranial nerves Visceral pain due to the invasion of abdominal organs or obstruction Paraneoplastic syndromes (thromboembolic phenomena, polymyositis, osteoarthropathy) 	<ul style="list-style-type: none"> Painful syndromes after chemotherapy Painful peripheral neuropathy (associated to platinum, taxanes, and vinca alkaloids) Avascular necrosis of femoral head or humerus Plexopathy related to intra-arterial infusion Mucositis Hormone therapy-related pain Gynecomastia with hormone therapy for prostate cancer (GNRH analogue) Post-surgery pain syndromes <ul style="list-style-type: none"> Post-mastectomy pain Post-thoracotomy pain Post-radical neck dissection pain Phantom limb pain Post-radiation therapy pain syndromes <ul style="list-style-type: none"> Plexopathies Post-radiation therapy chronic myelopathy Chronic enteritis and proctitis Osteoradionecrosis

lost their jobs due to the pain. In addition to patient-related impacts, the economic impacts related to increased severity of pain symptoms are huge. In European countries, the cost is estimated to be 1% to 10% of the gross domestic product (GDP), which would conservatively account for approximately \$ 140 billion US dollars (Breivik *et al.*, 2006).

Barriers for the appropriate pain management

In spite of the broad knowledge and global efforts to improve pain management, there was little progress in the past few years (van den Beuken-van Everdingen *et al.*, 2016). Several barriers associated to both professionals and patients and to healthcare system as a whole prevent the appropriate pain management. The medical knowledge deficit about pain and the use of opioids, together with a lack of support for evaluation strategies and global pain management, cause the underprescription and a delay in appropriate patient management. Patients, in their turn, generally have prejudice and incorporate false information regarding the appropriate opioid use, mainly caused by the association between morphine and end of life (Knaul *et al.*, 2018). In addition, cultural and ethnic differences need to be taken into consideration. A quantitative review published by Rahim-Williams *et al.* showed important ethnic differences in the perception of experimental pain, with Afro-American patients experiencing a lower threshold (more pain) than non-Hispanic White patients. The lack of structure and support by caregivers is also a contributing factor of inappropriate management (Rahim-Williams *et al.*, 2012). The healthcare system, in its turn, lacks an epidemiological plan for pain management. The failure in treatment horizontality and in the ability of appropriate prescription in all potential patient hospitalizations and follow-ups in the system breaks down the care plan, even if initially well designed. In Brazil, the lack of planning is reflected in the unusual use of morphine at high doses (above 30 milligrams every four hours) by non-specialist physicians. This is not an issue when patients are treated at hospitals with palliative care units or pain clinics, since they may be referred to an accessible specialist. However, for hospitals that do not have this type of service, the lack of experience by the non-specialist physician often leads to an inappropriate management of pain (Deandrea *et al.*, 2008).

Reaching the appropriate use of opioids is not an easy task. According to recent estimates, 66% of the world population does not have access to this type of medication, setting a serious situation that obviously requires urgent measures. Then, 10% have very little access to this type of therapy, while only 7.5% of inhabitants in this planet have appropriate access to these therapies. Although a trend towards improvement (between 2006 and 2010, 67 countries approached the appropriate use of opioids) is seen with an overall calculation, the situation is still complex and, as a result, the vast majority of patients with a diagnosis of

cancer, with moderate or severe pain, is not receiving the therapy that they so urgently need. In the specific case of Brazil, it is always worth remembering that it is estimated that approximately 7% of the required amount of opioid that is used for an appropriate therapy and worthy of all patients with pain levels requiring this type of medication. This result puts us relatively among countries with lower use of this drug worldwide (Seya *et al.*, 2011), although a significant increase of 465% was seen in opioid sales in Brazil during the period from 2009 to 2015, mainly due to codeine and oxycodone formulations. However, even so, we are still far from a comfortable situation (Krawczyk *et al.*, 2018).

There is, on the other hand, always the risk of opioid overuse, as we have been seeing, with dismal consequences, in the United States, where more the 90 people die, every day, due to related causes (Scholl *et al.*, 2018). But this is, generally, not a problem related to cancer treatment (Bruera & Paice, 2015; Chino *et al.*, 2018), mainly in our country where we face, as previously described, the opposite problem. Related concerns should not interfere, thus, with an adequate cancer pain management policy, avoiding patients from receiving satisfactory pain management.

Examples of the impact of pain in healthcare system utilization

In the setting of Brazilian private healthcare system, two of the authors of this paper (Neto JPR and Stefani SD) have conducted an epidemiological survey with 46,407 beneficiaries of a Brazilian private healthcare insurance, of whom 4,700 reported a variety of symptoms, including 1,469 (31%) with complaints of pain (not necessarily related to cancer). Primary data regarding expenses with hospitalization and use of medical services for a period of 12 months from beneficiaries reporting pain were reviewed and compared to those from subjects without this symptom. Information based on a pharmacy benefit program regarding 54,843 units of reimbursed drugs was collected in order to identify most frequently used drugs for this symptom. Of the beneficiaries reporting pain, 30% of them reported pain mostly in lower limbs, 30% in lumbar spine, 18% in the joints, 9% in abdomen, and 13% in other parts (Figure 1). The correlation between both groups (with and without pain) showed that patients with the symptom had a 2.6-fold greater use of medical and hospital services and had an annual *per capita* expense of US\$ 581.35 when compared to US\$ 233.55 in the control group ($p < 0.001$) (Figure 2). Among most frequently reimbursed drugs, 36% were products usually used for pain relief: 10.5% were nonsteroidal anti-inflammatory drugs, 9% were antiepileptics, 7.3% were opioids; 4.4% anxiolytics, 3.8% antidepressants, and 1% were neuroleptic drugs. The authors concluded, then, that there is a high prevalence of complaints of spontaneous pain and a higher demand for resources by those patients who spontaneously reported this

symptom. The evidence from this study suggests, although a causal relationship cannot be inferred, that there is the need to implement effective support measures for patients with chronic pain, with the potential goal of resource optimization (Reis Neto & Stefani, 2009).

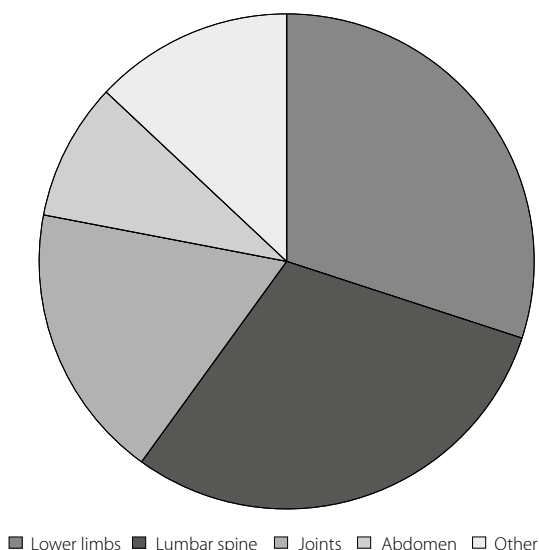


Figure 1. Pain location.

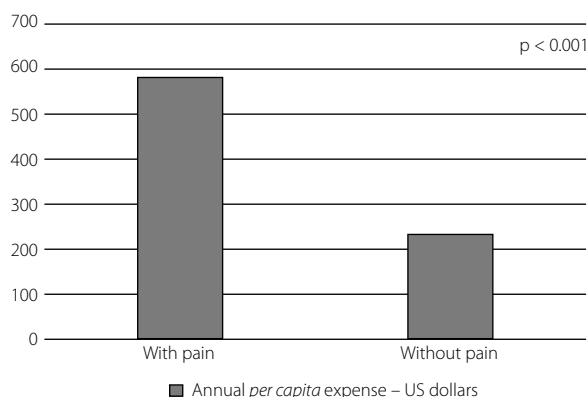


Figure 2. Annual *per capita* expenses of beneficiaries.

It was also seen, in a similar study conducted by the same authors, considering the database of a Brazilian Private Healthcare Operator that, between 2007 and 2009, 1897 deaths due to all causes were recorded. Then, the services from outpatient healthcare and hospital were evaluated in the year of death and in the 4 previous years. The analysis was restricted to total direct costs with medical-hospital care, under the payer perspective. The variables (demographics, clinical, and costs) were subject to statistical handling. Of a total of 1,897 deaths evaluated, most of them occurred in men (60.4%) who were 60 years old or older (77.0%). The overall mean age of the deceased was 70.6 years (95% CI: 69.9-71.4). The cost during 60 months of study was BRL 115,970,135.85. Of this total, 66.8% were reimbursed in the year of death, with hospitalizations corresponding to 89.2% of this total (Table 3). Among the main causes of death, neoplasm and chronic diseases had a greater influence on costs. The authors concluded, then, that the costs in the last year of life had to be considered in the cost projections with healthcare, as well as the aging factor. One of the alternatives that seem to be important at the end of life, once again with the purpose to optimize resources, is the effective implementation of palliative and support care (Neto, 2012).

In 2018, during ISPOR (International Society for Pharmacoeconomics and Outcomes Research) Congress, an analysis was presented for the economic impact of chronic pain in a population of beneficiaries of a healthcare insurance through a morbidity survey referred in 97,983 insured people, where a sample of 2,188 subjects was collected, and these

Table 2. WHO pain staging

Degree	Drugs
1	Painkillers and anti-inflammatory + adjuvant drugs
2	Painkillers and anti-inflammatory + adjuvant drugs + week opioids
3	Painkillers and anti-inflammatory + adjuvant drugs + strong opioids
4	Painkillers and anti-inflammatory + adjuvant drugs + strong opioids + invasive methods

Table 3. Total and percentage accumulated cost during the months before the death of healthcare insurance beneficiaries, by expense type

Months before death	Outpatient cost		Hospital cost		Total cost	
	BRL	% accumulated	BRL	% accumulated	BRL	% accumulated
1 to 12	10 529 574.50	41.70	66 966 658.48	73.80	77 496 232.98	66.80
13 to 24	6 119 043.86	24.20	11 136 667.97	12.30	17 255 711.83	14.90
25 to 36	3 526 445.10	14.00	4 792 565.66	5.30	8 319 010.76	7.20
37 to 48	2 743 808.20	10.90	4 682 259.01	5.20	7 426 067.21	6.40
49 to 60	2 330 855.61	9.20	3 142 257.46	3.50	5 473 113.07	4.70

BRL: Reals (Brazilian currency).

subjects answered to categorical questions about the presence of pain with no apparent reason. In affirmative cases, the duration of pain and the use of relief therapies were investigated. The use of healthcare insurance and annual costs involved were assessed and compared to those who did not report pain. Of the total, 43.9% reported back pain, 16.2% lower limb pain, 14.9% headache, 9.6% abdominal pain, 8.1% upper limb pain, and 7.3% pain in other parts. In the group of beneficiaries who reported pain, the use of healthcare insurance was significantly higher for medical appointments ($p = 0.004$, OR 4.66) and tests ($p < 0.001$; OR 4.73), and was non-significant for therapies ($p = 0.352$, OR 4.85) and hospitalizations ($p = 0.652$, OR 4.09). The annual expense was BRL 5,400.97 vs. BRL 4,866.19 in patients who did not report pain ($p < 0.001$; OR 4.29). Considering the prevalence and incremental cost, the estimated annual impact of chronic pain in the healthcare operator was BRL 7,332,235.34. When this study separated patients with pain and a diagnosis of cancer of different types and stages (4.3% of surveyed patients), the physical and financial use of healthcare insurance resources were even higher, with an estimated financial impact of BRL 1,334,828 for the healthcare operator only with this group of patients (Reis Neto & Busch, 2018).

Suggestions for the Brazilian private healthcare system with the purpose of appropriate use of opioids in cancer pain management

Interventions or improvement projects may be designed to change non-ideal conditions. The suggestion is to adopt formal strategies used in management to implement improvements and reduce process variability (Courtlandt *et al.*, 2009). Ideally, data regarding the current status should always be obtained, i.e., how we are managing pain in a specific hospital or supplemental system (e.g., the prescription rate of strong opioids). Knowing the impact of poorly managed pain in the patient's journey (e.g., number of emergency room visits due to pain) may be the first step to define indicators that may be used to monitor the proposed improvement plans. Below we suggest the main topics that need to be taken into consideration in order to obtain better outcomes in pain management. We reinforce that each topic needs to be broken down and handled according to local needs and possibilities of implementation.

Focus on educating professionals who treat oncology patients

The first step towards an improvement of the setting described above, which was a consensus between speakers, will be the result of investing in medical qualification, as well as training and improvement of paramedic professionals. Due to the large number of professionals integrating teams that manage the oncology patient throughout their treatment, as the Brazilian system is structured, clinicians, surgeons, hospitalists, emergency doctors may be in the frontline

during different stages of the disease. The obstacle of the large number of professionals who are not qualified and not comfortable to prescribe and monitor an appropriate therapy needs to be overcome. For such, knowledge building is required, with the development of mental maps that guide patient management. A recent systematic literature review that comprehensively assessed almost 40 years of educational research in cancer pain points towards this direction, concluding that educational measures with the purpose of improving medical professional knowledge may improve knowledge, although only this attitude is not sufficient to improve the patient's quality of life (Adam *et al.*, 2015).

Develop a multidimensional approach to pain

There is the need to promote the development of a multidimensional approach that involves assessing the patient in a broader manner, deeply exploring the nature of pain and its impact on physical, psychological, and social dimensions. Educating professionals regarding non-technical skills, such as the effective communication with patients and their families with the purpose of fighting against barriers of non-adherence to therapy, such as prejudice, failure to identify adverse events, resistance to the use of opioids. In addition, promote the adoption of non-pharmacological strategies of analgesia and, ultimately, encourage the need for frequent reassessment of the proposed therapy, aiming at optimizing their physical, psychological, and social welfare (Adam *et al.*, 2015).

Define protocols to manage pain

The adoption of protocols to manage pain that are appropriate to the national reality should be encouraged. These protocols should ideally be consensual, endorsed by all the stakeholders involved in the process, with the purpose of going towards the mandatory coverage of cancer pain management *latto sensu* by healthcare insurances, and not only pain management from antineoplastic therapy, as it is nowadays. This specific cause of pain is less frequent and has probably less importance in the overall context of oncology treatment (Falk *et al.*, 2014). As it has been exhaustively described above, pain management, if appropriate, is an opportunity that will be potentially reversed to less use of medical services, such as emergency care or hospitalization, which is likely to result in a better use of resources. And this without considering a potential secondary effect of a broader and more prevalent discussion regarding the need for a wide implementation and availability of palliative care: there is evidence in the literature that the maturity of discussion, in this sense, in addition to the possibility to improve the patient's quality and amount of life (Temel *et al.*, 2010), may, once again, be reversed in truly cost-effective attitudes, further improving and optimizing management of available resources (Gade *et al.*, 2008; May *et al.*, 2015; Smith *et al.*, 2014).

Raise awareness of leaderships and managers

Raising awareness of decision-makers about the need to create pain management programs and endorse them, promoting a balance between sufficient access to prescription substances of medical and scientific purposes and avoiding the improper opioid use is, therefore, an urgent path to be considered. However, all specialists present in the discussion agree that this potential saving, in addition to improving patient's quality of life, needs to be proven in practice. Since, currently, this is at most a likely hypothesis. Real-world data obtained from the effective and courageous implementation of the policies described herein are extremely important for the manager's decision, confirming or not this theory. It is the skillful handling of this reality, with actuarial monitoring of outcomes, that will pave this path towards the future (Garrison *et al.*, 2007). This would be the preponderant role of the manager.

Conclusions

Before any illations regarding the potential economic benefits that an appropriate palliative care may provide to cancer patients, all the speakers agree that pain management should be considered as a human right, where their dignity is anchored, which is a characteristic that is, by definition, nonnegotiable. The burden relief of pain and severe suffering associated with healthcare conditions that threaten life is a health imperative and an essential step towards equity and quality of life, as well as quality of death.

Although there is a direct correlation between development and opioid use, the speakers present in this discussion do not consider that the access deficit to appropriate medications for pain management have a secondary effect on costs involved in the purchase of these medications, once the cost of these drugs is relatively low. Eventual disabilities are very likely to be due to the physician's unfamiliarity with management of these drugs. In the authors' experience, negative reactions or resistance to improvements are rare when the context and the urgency for improvements are explained in detail and considered in the improvement planning. Also, when conditions for service improvement are provided.

Promoting education and knowledge diffusion regarding the appropriate and safe use of opioids, based on protocols designed for the local reality and in solid scientific evidence, is the initial path. The creation of national consensual guidelines based on international recommendations for appropriate use, such as drug selection, dose calculation, management of high-risk patients, and treatment monitoring is the expected consequence. The foreseeable outcome is the improvement of cancer patients' quality of life associated with a setting that provides for resource optimization, generating a virtuous cycle. Careful and perennial data observation is believed to confirm this hypothesis.

Therefore, the challenges faced by the Brazilian healthcare managers are not small. However, there are tools that may help them with their job, making the provision of healthcare feasible and practicable by the Brazilian private system in the next years. For the sake of their patients. In spite of the inexorable increase of costs seen in the daily practice.

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