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Conflicting Representations of Pain: A Qualitative Analysis of Health Care Professionals' Discourse

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[§]This paper is dedicated to the memory of Roberto
Cipriani.

Abstract

Introduction. Studies regarding health care professionals' representations of pain indicate that doctors and nurses tend to concentrate on the organic origin of pain, and to view pain as subordinate to diagnosis and treatment of the disease; they also tend to underestimate the psychological and psychosocial components of pain, which means that they generally view the patient's subjective experience as secondary. This leads to an underestimation of pain.

Objective. The objective of this study was to analyze the representations of pain held by doctors, head nurses, and nurses in two Italian hospitals, focusing on how these representations are shaped according to the local culture in which they are constructed and negotiated.

Methods. Our study is based on a socio-constructionist approach, drawing on semi-structured, in-depth interviews with 26 health care professionals.

Results. The results show similarities and differences in how health care professionals construct their representations of pain. Three main issues emerged. First, the contents of these representations are strictly related to participants' job position and professional training; second, the representation of pain is significantly influenced by the values

and meanings associated with the different professions; and third, there are two conflicting representations of pain, focusing on the objectivity vs the subjectivity of pain, respectively.

Conclusions. To promote significant change regarding pain management within hospital organizations, it is essential to construct shared representations of the problem and its implications, particularly as regards relations with the patient. This change should take place at the educational as well as the socio-organizational level, and it should take into account ideas and proposals from the subjects involved.

Key Words. Pain; Health Care Professionals; Italy; Qualitative Research; Social Representation

Introduction

Despite advances in research about pain, it is still difficult to translate this knowledge into workable clinical practice, and in this sense, the need to develop pain management techniques has been widely documented [1–3]. Indeed, research indicates that, even though pain can be kept in check efficiently in approximately 90% of cases [4], the ratio of hospitalized patients who admit to feeling pain varies from 44% to 79% [5,6]. This data is particularly significant if one considers its stability over time [7,8]. The fact that pain continues to be undertreated seems to depend on a persisting culture of pain—articulated in terms of knowledge and representations of this problem as it relates to professional practice—which is not very sensitive to change.

Over the past three decades, a great number of studies have been developed regarding knowledge and attitudes. The main results indicate several areas of concern. First of all, health care professionals generally seem to share low goals where the relief of chronic pain is concerned [9,10]. Indeed, uncertainties have emerged both in the assessment phase, when health care providers often seem unsure of how often they should assess pain [11], and during the treatment phase, where some misconceptions regarding the pharmacological therapy of pain are evident. Researchers found that such treatment misconceptions were especially marked in the matter of opioid use, e.g., the belief that morphine has a dosage limit, or the presence of an exaggerated fear of overdosage when it comes

to opioids in general [12–14]. Furthermore, in studies aimed at investigating levels of knowledge about pain management methods [15], decision-making processes, or doctors' knowledge regarding pain management [10], there was evidence of a discrepancy between knowledge effectively possessed (mediocre) and self-evaluation (positive) as expressed by doctors and nurses. However, as much as the literature indicates the existence of a knowledge deficit on the part of care professionals, the problem of undertreating pain does not appear to be limited to this aspect [15,16]. For instance, Hoffman [17] identified several stereotypes shared by doctors and nurses; for example, the idea that women are not accurate reporters of their pain or that they are better able to tolerate pain. Based on these findings, McCaffery [18] showed the influence of patients' lifestyle features in determining analgesic dosage. In this sense, studies have shown a general tendency on the part of health care professionals to judge pain on the basis of several indicators—different from patients' accounts—such as medical evidence [19], facial expression [20,21], and socio-demographic features [10,22]. This seems to be in line with a persisting conviction that patients exaggerate their pain [23], and, correlated to this, an underestimation of the patient's role in reporting pain. This latter aspect seems to be particularly relevant. Indeed, theories regarding pain indicate that the perception of pain is a multidimensional phenomenon influenced by cognitive and psychological variables, which are in turn linked to cultural factors depending on context and past experience [19,24]. This implies that patient narratives should be considered as relevant indicators of the level of pain experienced and of the efficacy of any treatments aimed at relieving this symptom [25]. What emerges instead is the fact that patients' accounts are either little understood or totally ignored by doctors, mostly because doctors appear skeptical about the truthfulness of these accounts [26,27].

For this reason, a number of qualitative research studies have focused on doctors' and nurses' representations of pain. Such qualitative research seems to constitute a more efficient tool when it comes to collecting data compared with the use of standardized questionnaires. The latter allows for a more in-depth analysis of the representational field because participants have a chance to express themselves more freely and can therefore situate their narrative within the context of their own concrete experience [28].

The literature regarding this issue is still limited, but it provides us with useful indications. First, it appears that the representation of pain regards it as a potential diagnostic tool and therefore attributes a lesser role to the patient's subjective experience [29,30]. What is reported about pain is therefore dominated by medical and scientific language [31], concentrating mostly on the organic origin of pain, underestimating its psychological and psychosocial components [32], and viewing pain as subordinate to diagnosis and treatment of the disease [33]. This leads to an underestimation of pain, and to differences between the pain perceived by patients

and that reported by doctors and nurses [34]. Several researchers have concluded that, in order to ensure a better management of patients in pain, adequate training and information is required. To date, there is a large amount of knowledge about the impact of educational programs. These experiences often report the positive impact of courses on health care providers' knowledge and attitudes [35,36]. However, improvement of knowledge appears not be enough so long as we are unable to grasp the complex systems of theories and practices that are involved in pain management [15,37,38].

Context and Objectives of This Research Study

The framework for the present study is that of a project called "Towards a Pain-Free Hospital," which was started in 1992 at St-Luc Hospital in Canada and is now being applied in other countries such as the United States, France, Belgium, Switzerland, Spain, and Italy. The general aim of the project was to promote change in doctors' and nurses' attitudes and work practices [39], starting from the evidence that current treatment of pain is largely inadequate. Such attitudes are associated to a representation of the patient as a passive beneficiary of medicine, which explains the difficulty in involving the patient in the care and treatment process.

Among the project's specific objectives is that of identifying both the incidence and treatment of pain, and the knowledge and attitudes of health care professionals, so that training programs promoting a new culture of pain may be devised.

The problems involved in pursuing these objectives, particularly the difficulty to introduce practices that are appropriate to pain management, can perhaps be better understood by adopting a socio-constructionist approach based on the notion that pain cannot be properly understood without taking into account the fact that it lies in the interface between biology and culture [32]. This means that, on the one hand, the representation of pain is based on shared cultural models [40], and on the other hand that medical practices are a result of the interaction and negotiation between doctor and patient [41].

In line with this premise, our main objective was to analyze the content and structure of pain representations held by health care professionals in two Northern Italian hospitals, within the framework of the theory of social representations (TSR) [42–44]. Such a choice is motivated by four main reasons. The first has to do with the fact that TSR recognizes the link between the beginning of a change process—such as the "Towards a Pain-Free Hospital" project—and the need to redefine the representations of an object, in this case the representation of pain. Our analysis therefore aims to underline both continuity and change within the participants' representations of pain. Second, because TSR goes beyond any approach centered on the individual, it conceptualizes those representations as the result of a communication/negotiation

processes through which various social groups construct reality. In this sense, our research sets out to underline similarities and differences in how health care professionals construct their concept of pain. Indeed, the idea is that pain might be better understood if one could study it as part of the local culture in which it is constructed and negotiated [45]. Third, within this theoretical framework, social representations are regarded as related to specific social practices. The aim of our study was therefore to investigate how doctors and nurses position themselves with respect to the overall institutionalized and informal procedures used to assess and treat pain. Finally, the TSR theoretical framework was chosen because of the relevance given to the participants' narrative. The role of language has indeed been pointed out in many research studies aimed at investigating the concept and experience of pain [46].

Method

Sample

The study was conducted on a sample of 26 health care professionals (12 physicians, 9 nurses, and 5 head nurses), working in two different wards (internal medicine and surgery) of two Northern Italian hospitals.

Data Collection

Data were collected by means of semi-structured interviews whose aim was to explore the pain representations and practices of health care professionals. The interview grid focuses on three main areas: pain assessment, treatment activities, and rapport and communication with patients. Interviews were audio-taped and transcribed.

Data Analysis

A computer-aided content analysis was conducted by means of the software *T-Lab* (version 5.1, © Franco Lancia, for more info: <http://www.tlab.it/en/presentation.php>) [47], which analyzes the structure of a text through the same series of statistical tools used by the *Alceste* (© Image, for more info: http://www.image-zafar.com/english/index_alceste.htm) software [48,49]. Our aim was to come up with a global view of the data, so as to identify the main topics featured in participants' discourse and common/distinctive elements for each profession. To this purpose, we performed cluster analysis. Each cluster includes a set of lemmas selected by the software and the sentences in which they occur. Moreover, the program indicates the variables (in our case: nurse, head nurse, and doctor) associated with each cluster.

As such, this method is akin to content-analysis procedures. However, unlike the latter, it does not derive the internal structure of a corpus from *ad hoc* categories established by researchers, but rather from the distribution of the words in the corpus.

Results

Five clusters were identified. For each cluster, the software indicates (Table 1) the relative "weight" compared with the explanatory power of the variability affecting the whole corpus and the variables that contribute more extensively to the cluster. The themes were labeled according to typical vocabulary and sentences featured in each cluster presented in the next sections.

Cluster N° 1: "Pain Assessment"

This cluster includes words (Table 1) referring to the assessment of pain. The first aspect ("note," "assess," "measure") refers to a complex set of practices linked mainly to pain-assessment procedures ("objective," "correct," "perceive"), which represent a crucial element in pain management work practices. This issue is also discussed in terms of transformation and evolution ("evolution," "improve," "arise") as it is perceived by the participants and is part of a more general change that is still in progress regarding medical science and how it relates to patients.

From the analysis of the excerpts, it is clear that doctors perceive a new culture regarding illness, which goes together with an increased attention to pain-treatment and the pain-assessment process:

Doctors' and nurses' attention to this problem has gotten better, compared to many years ago, but we can still improve in the sense that we could use it as one of the basic post-operative parameters; we should include pain as well, that way it would force us, the doctors and the nurses, to ask the patients if they are in pain (Doctor).

Nevertheless, discourse shows a certain ambivalence because everyone agrees in principle that pain is important and should be noted, but some of the practices mentioned tend to go against this principle. For example, in the following excerpt, there is a statement regarding the importance of pain, as well as reference to behaviors such as occasional assessment, which would appear to contradict this, and the absence of any pain-assessment scale:

We sometimes check whether there is pain when we do rounds, it's one of the most important parameters because if you don't check the level of pain you miss key information but no, we don't have a pain measuring scale, we ask generic questions but there's no objective measurement (Doctor).

More generally, as seen in the previous excerpt as well, there seems to be a certain level of uncertainty regarding expected pain-assessment procedures, to the point that mandatory pain assessment is sometimes indicated as an optimal solution, when it should already be standard practice:

Nurses should have pain as one of the parameters they should check, but often they don't take it into much consideration, that is, pain should also be mandatory as a parameter to check (Doctor).

Table 1 Themes, variables, weights, and lemmas of each cluster

	CLUSTER N				
	CLUSTER 1	CLUSTER 2	CLUSTER 3	CLUSTER 4	CLUSTER 5
Weights (%)	27	17	39	10	8
Themes	Pain assessment	Filling out the new patient's chart	Pain treatment and the subjectivity of pain	Daily patient care and how this has evolved over the years	Participants' professional training, motivations and difficulties
Variables	Doctors	Common	Common	Nurses and head nurses	Nurses and head nurses
Lemmas	Note Parameter Assess Measure Instrument Objective Correct Perceive Precise Adequate Verify Correct Disagreement Evolution Improve Arise Problem Culture Practice Education	Medical chart Nurses' chart Fill out Register Progress notes Instructing Gather Problematic Expectation Needs Charge Question Judgment Request	Morphine Increase Terminal Care Die Metastasis Analgesic Pain killer Vein Home care Palliative Sufficient Painful Suffer Person Feel Experience Threshold Placebo Subjective Face Attitude	Move Walk Sit Get up Position Posture Get down Bed Wash Evening Send Watch Hygiene Morning Self-sufficient Good Calm Excessive Intolerable	Ward Surgery Medicine Specialty Profession Worse Bureaucratic Frenetic Quality Demanding School University

The issue of using a pain scale is once again presented as a need to go beyond the patient's sentences regarding his/her pain. On the one hand, this leads health care professionals to give greater credit to "objective examinations" than to what the patient communicates, and on the other hand it leads them to "seek alternatives" to the patient's words, which is why the notion of a double scale is proposed, showing that participants have serious doubts regarding the point of view expressed by the patients:

We don't have a chart that enables us to measure the patient's perception of pain, and on the other hand for what we perceive we don't have this type of instrument, at least in my ward we don't have such a precise tool that might enable us to measure if the patient's subjective sensation is four whereas my impression of that pain could be zero (Doctor).

Cluster N° 2: "Filling out the Patient's Chart"

This cluster regards the new recently introduced patient's chart, which includes a pain-assessment scale and the presence of a cluster for this topic indicates its relevance in the participants' discourse. The words are grouped into

two main topics: words referring to filling out the chart ("medical chart," "nurses chart," "fill out," "register," "progress notes") and words referring to the problems derived from the introduction of these charts ("problematic," "expectation").

The analysis of the sentences shows that there is resistance to the use of the new charts, expressed in three different ways: how little it is used, how little it is known, and a sort of "nostalgia" for past methods.

Many of the participants admitted the underuse of the chart, referring both to their own behavior and that of others:

Our patient charts includes a pain-assessment scale but we don't always fill it out, sometimes we ask verbally, we note on the chart that the patient doesn't have good pain control, but we often neglect to fill out the section regarding pain (Doctor).

For others the introduction of the new chart appears to have been more readily accepted, but its use does not always seem to be in line with the objectives of the chart itself:

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I must say though that now we have to fill out the various sheets when we update the medical chart and then we go and check and maybe we've accumulated up to seven or eight sheets and then we check them one after the other (Doctor).

What emerges is, more likely, the picture of a change that has not yet been fully understood and that is viewed as an "imposition."

Now I don't know if they fill it out after the dressing down they got from management, because management has seen incomplete medical charts, while the whole chart must be properly filled out, signed and checked, so it must be complete (Head nurse).

This is also clearly shown by the fact that talking about the chart led some of the participants to remember assessment and documentation tools that were used in the past, and what emerges is regret, without full awareness of the possible advantages of the new tool:

We're not used to the new medical chart, there are a million more things to fill out and we're not used to it, we're used to writing up good notes with everything spelled out, we were used to filling out the chart when the patient is admitted and then we would write up the progress notes every day but now there are so many things on the chart that need to be updated all the time (Doctor).

Cluster N°3: "Pain Treatment and the Subjectivity of Pain"

The vocabulary of Cluster N°3 shows that pain treatment and the subjectivity of pain are two interconnected themes in doctors and nurses/head nurses' discourse. The first theme is expressed by lemmas such as "morphine," "pain killer," and "analgesic." When speaking about treatment, the patient's clinical condition is a significant element ("metastasis," "terminal," "palliative" "treatment," "die"), because it appears that for health care professionals, there is a prototypical type of pain that is seen as a reference model for any other type of pain, namely the pain associated with neoplasia. Regarding this aspect of the interviews, an ambivalent position emerges. The analysis shows a prevailing opinion that morphine is an efficient drug, which could be used more often regardless of diagnosis or type of illness:

It often happens that they are given morphine for 4–5 days and then the patients slowly improve, and then the drug is interrupted and afterwards the patients thrive again, so at least in those days they were able to stay calm, without pain and then you see the difference (Nurse).

However, there is awareness of the fact that many care professionals still view morphine as a drug to be given only to terminal patients. For the participants that we interviewed, there is evidence of a change regarding this issue, that this change affecting attitudes and professional practices is still in progress, and that it inevitably implies a number of contradicting thoughts and opinions:

This aspect still hasn't taken hold because there are still people who believe that morphine should only

be given to patients who are dying, while morphine can easily be given to people who are simply in pain (Head nurse).

On the other hand, when the clinical condition is not that critical and therefore the patient is not seen as "objectively" suffering, the subjectivity of pain takes on a central role in determining treatment. In this sense, the terms "suffer," "feel," and "experience" seem to refer to the patient's perception, whereas the words "threshold" and "subjective" indicate an attitude consisting in seeing pain as something that varies from patient to patient.

The problem is the same as with any other subjective issue, and pain is subjective: some people are capable of tolerating more pain regardless and therefore complain a lot less, whereas other people have very low tolerance for pain (Doctor).

The stakes ultimately depend on seeing patients as capable of recognizing their own pain and seeing their point of view as an integral part of the symptom-assessment process. What emerges is a tendency to perceive the patient's behavior in polarized terms, as either exaggerating the symptoms or as hiding them. Pain is indeed associated to a specific image, that of a suffering patient's "face," as one of the clues indicating "real" pain, over and above what the patient expresses verbally. This would seem to indicate that the patient's account is seen as something that shouldn't be trusted:

People who have a hard time tolerating their pain will exaggerate their symptom, this often happens and when patients tend to exaggerate their pain, then you underestimate them and maybe you don't pay them enough attention, it is indeed difficult to understand exactly when there is real pain (Head nurse).

Cluster N°4: "Daily Patient Care and How this has Evolved over the Years"

Terms typical of this cluster refer mostly to the "physical" care of patients, either in terms of movement ("move," "walk," "get up"), or everyday activities that are not strictly related to diagnosis or treatment (e.g., "wash," "hygiene") but are indicative of what nursing professionals view as their priority. The references to temporal aspects ("evening," "morning") underline the importance of time for nurses and head nurses, who appear to be acutely aware of how time sets the pace of all the activities performed in the course of their working day. Time is also a preoccupation when discussing the lack of sufficient hospital resources: time is "never enough" and lack of time makes it difficult to effectively monitor patients' pain or their response to pain treatment.

The sentences within this cluster describe, mostly on the part of nurses and head nurses, everyday activities and interactions with the patient, including remarks on how these involve a greater workload than in the past because hospitalized patients are now usually less autonomous:

It used to be that many people were hospitalized just to do tests, they washed themselves, they were

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able to walk on their own; now the percentage of bedridden patients to care for has increased because the number of available beds has been reduced, so patients who can walk get discharged as soon as possible (Head nurse).

The description of these everyday activities brings out certain stereotypical theories, through which the patient's behavior may be viewed and interpreted, for example, the representation is that men are more "active" than women because the latter require more extensive care and attention. These are important elements inasmuch as they affect the structure of the relationship between the care professional and the patient:

Men normally try to get around more so as to be more autonomous, maybe it bothers them more to be washed by a woman, women don't really care if they are washed by a man because they've decided they can't be budged from their bed (Nurse).

More generally, there is a clear separation of tasks between nurses and doctors: whereas the former deal with communication, the latter deal with treatment:

Pain is taken under consideration more by doctors than by nurses in the sense that you tell the doctor, this patient was in pain during the night, for example, and wasn't able to sleep because he was in pain (Nurse).

Cluster N°5: "Participants' Professional Training, Motivations and Difficulties"

This category features words referring to hospital organization ("ward," "surgery," "specialty"), participants' opinion about hospital resources ("worse," "bureaucratic," "frenetic") and references to their professional education ("school," "university"). Each participant tells about his/her personal "story," explaining personal choices, motivations, and expectations. However, this description of their work is linked to a negative assessment of the resources provided by the hospital. What emerges is a discrepancy between the "means" perceived as available, and the "end" stated by the hospitals. Although this topic is present in all three professions considered here, it must be noted that it was brought up most often by head nurses. This is probably due to the fact that this profession differs from the others in terms of its greater focus on administrative tasks:

As for resources we often have to make do with what we've got and this keeps us from doing certain things. For example in this period demand is higher than our resources, we've got a lot of complicated patients and a lot of work to do, 32 patients, all with difficult problems to deal with (Head nurse).

Regarding training activities, almost all participants stressed the importance of getting more training regarding the issue of pain. In spite of this, they also point out the limitations of current training programs, which they feel are mostly centered on providing information rather than responding to care professionals' needs and daily tasks.

I wouldn't focus on getting a course on any specific topic because then you end up talking about drugs or technical subjects. If on the other hand they could organize courses where you talk more about the rapport that we healthcare professionals have or should have with patients, maybe in different ways with external or with post-op patients, with teenagers or elderly patients . . . (Nurse).

Discussion

Two main elements emerge from our analysis, and both involve all the topics discussed by the participants.

The first element has to do with perceiving that an important process of change is in progress, regarding on the one hand the way that patients see their illness, and on the other hand the relation between patients and health care professionals, in the context of a new organization within the hospital. As part of this general change process, participants contextualize and give meaning to the various innovations when it comes to assessing and treating pain, i.e., a more extensive use of opioids, the new medical chart, and the use of pain-assessment scales.

The second aspect has to do with participants' ambivalence with respect to these changes. Indeed, while they recognize the value of the innovations, they express perplexity regarding the actual usefulness of the new tools and they also refer to the persistence of previous practices, which seem to indicate opposition to these changes. Of particular interest is the oscillation that may be observed regarding the emotional and psychological aspects of the patient's experience of pain, which appear to be both recognized and "distanced" by the participants. The interviews feature explicit references to psychological and emotional components involved in defining pain that should be recognized as an essential element in caring for the patient. Affective states attributed to the patient (for example fear, agitation, anxiety), and the subjectivity which in participants' view characterizes the patients' perception of their own pain, appear to be factors that interfere with performing an "accurate assessment" of the actual pain. Furthermore, as indicated by the data, the patients' words are not seen to be a credible indicator of the actual pain experienced.

Such ambivalence may be interpreted in the light of different theoretical and conceptual perspectives. It may be seen as a form of organizational resistance, as a knowledge deficit or as an individual attitude that could be modified. Although legitimate, all these interpretations share the same limitations in that, to some degree, they all put the blame on the health care professionals themselves for not being able to fully take on the challenge of innovation.

In our perspective the focus shifts from the individual to the social level and this ambivalence can be interpreted as a tension between two conflicting, socially shared representations of pain: the objectivity vs the subjectivity of pain.

Representations of Pain: A Qualitative Analysis

In the first representation, pain is first and foremost a symptom, which is secondary to diagnosis, and its treatment may be viewed by doctors as much less important compared with the level of attention given to the illness itself and to other care activities performed by nurses. Moreover, the treatment of pain depends on the severity of the illness, which means the focus is on the pain felt by cancer or other terminal patients, because this pain serves as the basic gauge to measure all other types of pain. Such a view underlines the need to determine pain in objective terms, i.e., independently from the patient's narrative, focusing on the need for doctors and nurses to use tools specifically designed to assess and "measure" pain through standardized procedures. In the absence of such tools, identification of pain is based on individual capacity, learned and refined through professional experience, to recognize "true" pain by observing the patient's face and body.

The second representation, which emerges from the interviews through indications that the change in progress is seen as positive and especially through repeated statements regarding the need for a much less superficial relationship with the patient, paves the way for the possibility to view pain assessment and treatment as a process involving both the care provider and the patient.

In this sense, the two representations of pain refer to two epistemological models of medicine [41]. The first is biomedical, objectivistic, and *disease centered*, and it is the main reference framework in health care professionals' education. As such, it considers medicine as one of the natural sciences, seeing the illness as a natural phenomenon to observe and on which to intervene. The second is a subjectivist, *patient-centered* model, which values patient involvement as well as negotiation between health care provider and patient as tools to tackle illness.

Both models are part of current medical culture, but there is no credible integration of both views, which means that even when organizations try to promote positive innovations, they end up giving doctors and nurses the task of mediating between diverging premises and demands in the context of their professional practice.

In our opinion, this integration can be effected not only through training and educational programs aiming to increase health care professionals' knowledge regarding pain treatment modalities, but first and foremost through forming groups of hospital professionals who can reflect upon their own professional practices and cultural models, with the aim of constructing and sharing new representations of the problem.

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