

Behaviors are Deceptive in Pain Estimation: A Comparison between Nurses and Psychiatrists

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Abstract

Aim: This study assessed the influence of pain behaviors on pain estimation by nurses and psychiatrists. **Materials and Methods:** Pain ratings performed by nurses and psychiatrists who observed the case scenarios using role plays were assessed. The data were computed and frequencies were derived. *t*-test was used to compare the ratings between the groups. **Results:** There was significant difference in the ratings of the pain severity by nurses and psychiatrists. **Conclusions:** Pain assessment is essential for the comprehensive management of pain. Training health professionals in pain assessments is very essential.

Keywords: Nurses, pain behaviors, pain severity, psychiatrists

INTRODUCTION

A comprehensive pain assessment is the foundation of effective pain management. However, the subjective sensation of pain makes its objective, assessment challenging. Pain behaviors tend to influence estimation of pain severity, as documented in our previous study,^[1] where we assessed nurses' rating of the intensity of pain based on two mock clinical situations using role plays to determine if pain behavior of patients affects the assessment of pain severity. We found that overt pain behaviors influenced the nurses rating of pain more than the subjective report of pain by the patients.

A faulty assessment can lead to underestimating the pain severity, which in turn can lead to its ineffective management.

In the present study, we aimed to replicate the assessment of rating of pain by psychiatrists using the same mock clinical situations used in the previous study and to compare the assessment of ratings between the two groups.

MATERIALS AND METHODS

The sample of this study was formed by the participants of a series of workshops for the assessment and management of chronic pain for health-care professionals. The participants included nurses and psychiatrists who attended the workshop on chronic pain assessment and management. Two role

plays showcasing clinical scenarios of two patients reporting the same objective pain rating (i.e., 7) on the visual analog scale (VAS) of 0–10 were used to assess the participants. The two scenarios however differed in the overt pain behaviors depicted by the two patients.

Scenario 1 depicted a 35-year-old woman with a history of lower back pain for 1 year with severe pain at times. At the time of assessment, the pain is severe with her being unable to sit comfortably in one position. She moans in pain holding her back with her hands and is tearful when describing details of her pain. As mentioned, she rates her pain as 7 on the VAS.

Scenario 2 depicted a 39-year-old man with upper back pain for a year. He has severe pain at times. On the day of the interview, his pain is severe with him being unable to sit comfortably. He tries distracting himself from the pain and is not showing any overt signs of distress. As mentioned, he also rates his pain as 7 on the VAS.

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The participants were asked to observe both clinical scenarios and rate pain severity on the VAS (between 0 and 10) and also rate on a scale of 1–10 their perceived suffering of both patients. They were asked to cite reasons for both ratings. More details of the methodology are described in a previous publication.^[1]

RESULTS

The total number of participants was 23 in the first group (nurses) and 27 in the second group (psychiatrists). The results showed that in the first group, only four (17%) of participants rated the intensity of pain correctly as 7 in either case scenario. In both case scenarios, pain was underestimated by most of the participants, more so in scenario 2 with the mean rating for pain being 5.52 ± 1.50 for case 1 and 4.22 ± 1.95 for case 2.

In the second group, the mean rating for pain was 6.85 ± 0.86 and 5.67 ± 1.70 for case 1 and 2, respectively. Fifteen participants (53.57%) rated pain correctly as 7 for the first scenario and eight participants (28.57%) for the second scenario. Participants rated the pain of the patient in the second scenario lower than in the first scenario [Table 1].

Mean rating scores were compared by *t*-test between the groups. Participants of the first group had significantly rated pain with lower scores as compared to the second group in both scenarios ($t = 4.8$; $P = 0.001$).

In the first group, the mean rating of suffering in case 1 was 5.48 ± 1.43 and 4.30 ± 2.12 in case 2. In the second group, the mean rating of suffering in case 1 was 7.55 ± 0.93 and in case 2 was 4.30 ± 1.24 . The rating of the suffering due to patient's pain was statistically lower for scenario 2 as compared to scenario 1 in both groups ($t = 2.8$; $P = 0.007$).

The various reasons given by the participants for rating pain intensity in case scenario 1 were stated as below:

- The patient was grimacing and moaning
- She appeared distressed and uncomfortable
- She could not sit still
- She was crying during the interview.

The various reasons the participants for rating pain intensity in case scenario 2 were stated as below:

- The patient appeared comfortable
- He did not look distressed.

DISCUSSION

The above findings clearly indicate that both among nurses and psychiatrists, the overt behaviors of pain expression such as moaning and grimacing influenced the pain assessment more than the subjective report of pain by the patient. Participants rated the patient who was moaning and grimacing in the first clinical scenario with higher pain severity scores as compared to the calm and composed patient in the second clinical scenario who was not showing any outward signs of distress. The participants were less influenced by the subjectively reported pain ratings by the patients, which was 7 in both clinical scenarios. Pain being a subjective experience is to be rated based on the patient's subjective rating of the same. Sole emphasis on overt pain behaviors may lead to erroneous ratings and faulty pain management. These findings reflect that of previous studies^[1-3] in other clinical settings that have shown that pain is often underestimated. Studies^[3-5] also reported that pain ratings were influenced more by the patient's behavior rather than the subjective report of pain.

Poor pain assessment is considered the single, most important barrier to adequate pain management.^[6,7] It is therefore imperative for education and awareness regarding comprehensive pain assessment among nurses, psychiatrists, and other health-care professionals.

Another finding of interest in our study was that psychiatrists rated pain closer to the correct rating of 7 in both scenarios. The reasons for this may be better training in pain management and training to not always judge clinical situations solely on the basis of what is overt or obvious behaviors. This further highlights the need for training in pain assessment in health-care settings.

It was also observed that whether the pain patient demonstrates excessive emotional distress or behaviors or appears stoic and calm, pain is underestimated! It is noteworthy that estimation of suffering in a person showing overt behaviors is overestimated by psychiatrists as compared to nurses; however, suffering of a quiet person is rated equally by both nurses and psychiatrists.

Pain behaviors can be influenced by many factors gender, culture, past experiences, and experiences with health systems.^[8,9] Subjective reporting of pain also can be influenced by secondary and tertiary gains that the pain is likely to bring in. Hence, a balanced approach of both subjective and objective signs may be necessary in the assessment of pain.

CONCLUSIONS

Accurate assessment of a patient's pain by health-care professionals will greatly reduce the distress and suffering of the patient. The analysis of the behavioral factors that

Table 1: Mean median and mode of the observer rating scores of pain as compared to the patient's rating of pain

	Case 1 excessive emotional behaviors		Case 2 inhibited behaviors	
	Nurses	Psychiatrists	Nurses	Psychiatrists
Patients actual rating of pain	7	7	7	7
Observer rating of pain				
Mean	5.22	6.85	4.22	5.67
Standard deviation	1.50	0.86	1.95	1.70
Median	6	7	4	6
Mode	5, 6	7	2	7

influence pain assessment, existing knowledge deficiencies among health-care professionals, and formulation of strategies such as education and awareness to overcome the same can help avoid the underestimation and under treatment of pain. Health professionals should go by what the pain patient says or reports, rather than by their behaviors, which may be deceptive.

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Conflicts of interest

There are no conflicts of interest.

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