Reviewer’s report

Title: Predictors of Substance Misuse in Patients with Chronic Pain, A Prospective Cohort Study

Version: 3 Date: 24 September 2005

Reviewer: James Zacny

Reviewer’s report:

General

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. I noted in a prior study by the authors published in the same journal that an abstract was included. The version I was asked to review did not have an abstract.

2. The study was well-designed and the results appear to be valid, and the authors produced a well-written paper. However, this reviewer is unclear as to whether this study informs on predictors of prescription opioid abuse in a chronic pain population. This would be extremely valuable information to have. It seems like the authors wanted to address this issue: see p. 2, lines 18-20, and parts of the 2nd and 3rd paragraphs of the Discussion section. For example on p. 2, the authors state specifically generalists are said to worry about misuse and diversion of prescription opioids. But the study was apparently designed to focus on substance abuse in general. So from the results we know that predictors of substance abuse include history of cocaine abuse, alcohol abuse, and previous drug or DUI conviction or multiple drug convictions, and age. Does this tell a primary care physician anything about potential red flags indicating possible diversion or abuse of prescription opioids? This reviewer believes the answer is “no.” What this reviewer would like, but does not know if it is possible, is to focus on those patients who showed evidence of prescription opioid abuse (and call them the “users”) and re-run the bivariate and multivariate statistical analysis. Perhaps the same results would occur....that patients who had problems with prescription opioids (as explicitly defined on pp. 5 and 6) had histories of cocaine and alcohol abuse and had convictions, etc. But perhaps not. A study by Dunbar and Katz (Journal of Pain and Symptom Management, 11:163-171) showed that prior alcohol abuse was not a predictor of prescription opioid abuse. Chabal et al. (Clin J Pain, 1997 13:150-155) reported that past opiate or alcohol abuse failed to be predictors of prescription opioid abuse. The present study is a good study but it could have been more informative to doctors who are concerned about prescription opioid abuse amongst their patients if they focused on prescription opioid misuse and not substance misuse in general. This reviewer believes this needs to be added as a caveat to the study. Also the 2nd and 3rd paragraphs of the Discussion section are a bit confusing because both substance abuse and opioid abuse are discussed as if they are the same thing.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. Background, line 8-11: this sentence probably should be modified. It implies that as a result of the recent increase in prescription drug diversion, 28 states have enacted prescription monitoring programs (PMPs). A number of states have had PMPs for many years (see Journal of Pain and Symptom Management, volume 23:231-238).

2. Page 3, lines 1-3: again this sentence should probably be modified. At least to this reviewer it
implies references 21-26 all deal with studies in patients who were receiving substance abuse treatment. Reference 25 was not a study but a conceptual issues paper. I am not sure of the relevance of Ref 26, as this was a study done in chronic pain patients in a primary care setting (perhaps some of the patients had histories of substance abuse but that was not an inclusion criterion to study entry).

3. I am not sure where to put this comment, but I will place it here. Page 7: were patients asked whether they had abused prescription opioids or heroin? Were they only asked whether they abused cocaine? This reviewer would think that a past or current history of heroin use or a past history of prescription opioids would predict substance misuse during the 1-year prospective study.

4. Discussion, page 12, lines 6,7: the authors state that the pattern of substance abuse in their population often suggested polysubstance abuse. Can the authors provide some data to back up this claim?

5. P. 10, line 13: typo. Instead of “predicted substance misuse” should be “predictor of substance misuse.”

6. p. 14, lines 13-16: Can the authors elaborate on what are the restrictive new DEA regulations with regard to the provision of Schedule II opioids? This is a strong statement to make, and I am not convinced the DEA is doing anything to prevent the supply of such drugs as morphine and oxycodone to doctors and patients. Also the authors make an assertion that needs some references: is it indeed true based on survey data that physicians are reluctant to prescribe opioids? And is it due to the DEA’s apparent actions and reporting of high profile cases of prosecution of pain-treating physicians? The sentence appears to be conjecture.

It is not clear whether smoking was used in the bivariate and multivariate analyses. A study by Michna et al. (JPSM, 28:250-258) indicated that chronic pain patients who displayed aberrant drug behavior were more likely to be smokers.

Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.