

## Peer Review Report

# Review Report on Nationwide Population-Based Study about patterns of prescription opioid use and misuse among young adults in Spain

Original Article, Int J Public Health

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### EVALUATION

#### **Q 1** Please summarize the main findings of the study.

The prevalence of prescription opioid use was 4.9% and the prevalence of opioid misuse was 13.4% among young adults in Spain. Misuse of other substances (e.g., cannabis and tranquilizers) and perceived availability of opioids were associated with greater misuse.

#### **Q 2** Please highlight the limitations and strengths.

Strengths:

1. Appears to address a gap in the literature (i.e., recent data on the prevalence of opioid use in Spain)
2. Used a large, nationwide epidemiological sample.

Limitations:

1. Rationale for examining associated factors (e.g., SES; perceived availability of opioids; etc.) are not presented in the Introduction.
2. More detail is needed about study questions (particularly re: associated factors) to be replicable.
3. Authors decided to limit data to 18–34 year age group.

#### **Q 3** Please provide your detailed review report to the authors. The editors prefer to receive your review structured in major and minor comments. Please consider in your review the methods (statistical methods valid and correctly applied (e.g. sample size, choice of test), is the study replicable based on the method description?), results, data interpretation and references. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

Major Comments:

Introduction:

1. The authors state that their objective is to examine the prevalence of opioid use and misuse “along with associated factors” (line 71). The meaning of “along with associated factors” is unclear here. In addition, it would be helpful if the authors could present a brief rationale as to why they examined these particular factors (e.g., has other research indicated that they are associated with the prevalence of opioid use or misuse? Were there different hypotheses re: associated factors for prescribed opioids vs. misused opioids?).

Methods:

1. More information is needed regarding some study variables. For example, the authors state that “Risk perception regarding consumption of these drugs, availability and the self-perceived health of respondents were also considered as study variables” but do not provide any information as to the wording of these questions or their response format (i.e., yes/no; 5-point scale, etc.), making a comparison of their findings with those from other studies difficult.

Results:

1. The authors state that higher prevalence rates were found “among the female population (4.52% in 137 men vs. 5.27% in women,  $p=0.175$ )” (line 136). However, if  $p=.175$ , then this would not be a statistically significant difference and should not be presented as such.

#### Minor Comments:

#### Introduction:

1. On a minor note, the authors describe “national misuse” statistics on line 39; although this paragraph describes both American and European data, I assume this sentence is referring to American data (if so, perhaps replace “national” with “American” to clarify).

#### Methods:

1. The authors state that the “EDADES survey includes a personal home interview, and information is gathered through a questionnaire.” Usually “interviews” and “questionnaires” are distinct; is the EDADES a questionnaire that was administered as an interview?

2. Both lines 121 and 132 indicate that  $p$  values of less than .05 were used (i.e., stating once for all analyses should suffice).

#### Results:

1. The authors state “When we performed analyses based on independent variables...” (line 142); the meaning of “analyses based on independent variables” is unusual phrasing and unclear to me.

2. The authors appear to present two significant risk factors (“The low risk perceived for using prescription opioids, as well as the ease with which they may be obtained ( $aOR=2.74$ ; 95% CI: 2.10–3.57)” (line 167), but present the  $aOR$ s and CIs for only one; similarly, the authors appear to present several significant findings in the prior paragraph, but only report the  $aOR$  and CI for one (line 163). Was there a reason for highlighting the data for some findings but not others?

3. The authors state “...shows behavior as a protective factor of the age variable, with young adults aged between 25 and 34 years presenting the lowest misuse probability.” By “behavior”, are the authors referring to substance misuse?

#### Discussion:

1. The authors state that “4.89% stated that they had used a prescription opioid in the past year, 13.4% of which involved prescription opioid misuse” (line 184). My understanding of the results is that the 4.9% who used a prescription opioid were independent of the 13.4% who misused; as written, however, “of which” may be misconstrued to indicate that the 13.4% is a subset of the 4.9%.

2. The next sentence appropriately compares findings to that of another study (Hudgins et al., 2019), noting that opioid prevalence is lower among the 18–34 year-old Spanish sample than among the 18–25 year-old American sample. Given that rates may differ somewhat by age group, presenting the 18–24 age prevalence in comparing to the 18–25 year age group of the Hudgins et al. study would provide a clearer sense of the extent to which rates differed across studies.

3. The authors next note the somewhat surprising finding that the misuse prevalence was higher in their study than that found in the American sample by Hudgins et al. Were the questions asked in similar manners across the two studies (including specification of the particular opioids) and if not, could such methodological differences partially explain the different prevalence rates?

4. Given the cross-sectional nature of the study “correlates of” would be more appropriate than “predictors for” prescription opioid use (line 322).

#### Contributions to the Field:

1. The authors state that “Our findings have important implications for public health, since they offer scientific evidence concerning the non-misuse of prescription opioids among young Spanish adults.” Do the authors mean “misuse” rather than “non-misuse”?

#### General:

1. While the manuscript is fairly well written, there are a number of word choices (e.g., “socio-sanitary” costs on p. 2 instead of “healthcare”; “success of our study depended on...” – the meaning of “success” of a study is

unusual and unclear; the Spanish “y” instead of “and” on line 156; “self-report” instead of “self-declared” in line 313) that need to be addressed.

#### PLEASE COMMENT

##### **Q 4** Is the title appropriate, concise, attractive?

Yes, although the title would benefit from noting that the study was conducted in Spain (i.e., "Nationwide" is not terribly useful for an international journal).

##### **Q 5** Are the keywords appropriate?

"Misuse" is probably too broad; perhaps "substance misuse", etc., instead.

##### **Q 6** Is the English language of sufficient quality?

The English is generally adequate with several exceptions (which I note in my response to Q3).

##### **Q 7** Is the quality of the figures and tables satisfactory?

Yes.

##### **Q 8** Does the reference list cover the relevant literature adequately and in an unbiased manner?

Yes.

#### QUALITY ASSESSMENT

##### **Q 9** Originality



##### **Q 10** Rigor



##### **Q 11** Significance to the field



##### **Q 12** Interest to a general audience



##### **Q 13** Quality of the writing



##### **Q 14** Overall scientific quality of the study



#### REVISION LEVEL

##### **Q 15** Please make a recommendation based on your comments:

Major revisions.