Peer Review Report

Review Report on Pain as a symptom of mental health conditions among undocumented migrants in France: Results from a cross-sectional study

Original Article, Int J Public Health

EVALUATION

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

the authors looked into the association of pain and mental health among undocumented immigrants in two area in France. Some types of pain variables were statistically significantly associated with mental health after controlling for confounders(social determinants of health). Stratifying by gender, some associations remained significant others not mainly because of lack of power.

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

the main limitations is the cross sectional nature of the study. however, the authors were not looking at causality as much as correlations. sample size is another limitation when tey explored several types of pain and mental health indicators. this is considered multiple comparisons and would require a larger sample size. example they had only 37 who reported headache and 25 pelvic pain and only 12 chest pain and yet they did bivariate analyses and univariate association. Putting all those pain types in tables made the table, crowded and with no useful information. I suggest they only analyze musculoskeletal pain and any type of pain. so two pain variables only.
another limitation is the use of scales in different languages and not mentioning which language. most importantly is that those questions/scales need to be validated.
Using only translated scales without validation can result in information bias.
a major issue for me is not knowing the time frame for the pain and for the mental health conditions.
asking a general question on mental health conditions then if participants say yes ask about specific entity could lead to under estimation of the prevalence if they don't consider they have any issues or could be over estimating if they are seeking health services.
nothing on intensity of pain.
the most important strength would be recruiting a diversity of population and addressing the issue of mental health among this vulnerable population.

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.**

in the previous sections, I highlighted the strengths and limitations based on my evaluation. So I suggest that tables include only two types of pain with the mental health indicators. To evaluate statistical significance, p value should be adjusted for multiple comparisons.
writing needs to be improved.
just as examples : page 2 line49, missing "been"
page 4 line 116, replace attend by assess
In the background, the authors refer to the "fear avoidance model". they need to briefly state what it is, or explain it briefly
the main objective was to "to explore whether the association between mental health and pain

109 remained among UM in France after adjusting for the social determinants of health" then the authors in the data analysis part they state that they will study the association and look if they are influenced by gender . what is the basis of this. they mention two references on the methods (p 6 line 167)

in the results, authors need to provide more information on the profile of the participants and not only country of origin, gender and age

data on prevalence not available in tables

Given that abdominal, pelvic, headache and chest pain are not very prevalent, i suggest that authors perform bivariate and multivariate on the

overall measure of pain and musculoskeletal . therefore they can have two dependent variables, more power for detecting significant differences

and more precise confidence intervals. tables will be less crowded and better presented and therefore clearer. when tables are corrected, text should follow. results in table 7 should be revised.

page 7 line 215/. this is the first time that UM is not from health care settings. i would put this statement maybe in the study strengths and start

reflecting on the main results to answer the research questions and objectives.

that UM is not from health care settings. i would put this statement maybe in the study strengths and start reflecting on the main results to answer the research questions and objectives.

you cannot bring new results to discussion. p 9 line 264

PLEASE COMMENT

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

title ok, they can add cross sectional

Q 5   **Are the keywords appropriate?**

need to add immigrants. mental health, undocumented immigrants

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

No, need to do more editing

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

No.

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

yes to a great extent

QUALITY ASSESSMENT

Q 9   Originality — 3/5

Q 10   Rigor — 2/5

Q 11   Significance to the field — 3/5

Q 12   Interest to a general audience — 2/5

Q 13   Quality of the writing — 3/5

| Q 14 | Overall scientific quality of the study | �▮ ▮▮ ▭ ▭ ▭ |

REVISION LEVEL

| Q 15 | Please make a recommendation based on your comments: |

Major revisions.