Author's response to reviews

Title: Pain medication management of musculoskeletal conditions at first presentation in primary care: analysis of routinely collected medical record data

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Version: 3 Date: 11 November 2014

Author's response to reviews: see over
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Version: 3  Date: 11 November 2014

Author's response to reviews: see over
Comments from the Associate Editor:

Thank you for submitting your paper to BMC. I enjoyed reading it and am asking that you make some fairly minor revisions. I look forward to seeing the revised version.

1. In the introduction you make the statement "However, there is little evidence that GPs adhere to such guidance, and indeed what strategies they adopt when managing new musculoskeletal pain." I think this statement may lead readers to believe that there has been no research in this area. There is some research, including two papers that I co-authored, so I think some revision is required here. I think you could easily make more of the specific contribution your study makes and how it differs to others. For example we did not conduct any of the analyses you have done in Tables 2-4 and that is a clear advance on what we did. I think you could take the opportunity to position your study and sell the importance more in the introduction.


Authors’ response: Thank you for your positive comments. We agree that our statement may be misleading and have now amended the introduction including reference to these 2 papers (references 6 and 7), starting line 80:

“Despite guidance advocating similar approaches for neck and low back pain, their management strategies have been shown to be different in terms of the analgesics prescribed and other therapies.[6] Whilst even with the introduction of guidelines, analgesic prescribing in patients with low back pain has not been shown to change.[7] Other influences than guidelines may affect a GP’s decision making, for example GPs may feel a more potent analgesic in the first instance is more appropriate than basic analgesics if the patient presents with severe and debilitating pain despite risk of side effects. The extent and type of analgesic prescribning in new episodes of musculoskeletal pain is unclear, as is how it varies by site of problem (for example, knee, hip, back), or whether there are characteristics of the patient which are associated with the decision to prescribe analgesia and the type of analgesia prescribed.”

2. I think the second reviewer makes a good point that in general non-drug therapies are offered as first line treatment for the bulk of MSK conditions. That would certainly be the case for OA and spinal pain. I mention this because when I read your manuscript I get the sense that the non-prescribers were viewed as not following the guidelines; when they possibly could be. Could I ask that you consider this issue.

Authors’ response: Thank you for the suggestion. We have now added to the discussion (starting line 278)

“Our study found less than half of new consulters for musculoskeletal pain received an analgesic. A previous study of those aged over 50 consulting in primary care for
musculoskeletal pain, and who had not consulted in the previous 30 days, also reported that less than half were prescribed analgesics [17] and this is also similar to findings from studies focussed on neck and back pain [6,7] and on osteoarthritis.[18] It is feasible that GPs may be following guidelines that recommend the early use of exercise and other physical therapies with or without analgesia and further research is needed to determine if this is happening.[1,19]"

3. The first reviewer asks for more information on specific diagnoses but I doubt that would be available. The suggestion she makes that would improve your manuscript would be a better description of the medicines in each category. I think that could be done with an appendix.

Authors’ response: We have now described the analgesia in the medication groups by adding a figure (Figure 1) to the manuscript. This gives examples of the analgesia included in each group.

As you have indicated, it would not be feasible to give information on specific diagnoses. Also, GPs often manage conditions based on region (for example, the guidelines available for management of back pain) and record a regional pain symptom (e.g. knee pain) when they could record a diagnosis (e.g. knee osteoarthritis). However the condition may well be managed on the same regardless of whether a regional symptom or diagnosis label is given. We have added the following to the Discussion (starting line 359):

“We did not evaluate the prescribing of pain medication by specific diagnoses. However, patients often present to primary care with a regional musculoskeletal symptom, such as back or knee pain, which is not initially labelled with a diagnosis. Region specific management is common in primary care, for example for back pain [1] and GPs may prefer to work with a regional pain label than a complex diagnostic label.”
Reviewer's report

Title: Pain medication management of musculoskeletal conditions at first presentation in primary care: analysis of routinely collected medical record data

Version: 2  Date: 19 October 2014

Reviewer: Christina Abdel Shaheed

Reviewer's report:
This is a study evaluating pharmacological management of new musculoskeletal conditions and the characteristics which influence prescribing pattern. The paper is well written and poses an important research question.

Major issues: musculoskeletal conditions are not clearly defined. The results are described according to pain location however more is needed about the actual condition. For example was the patient presenting with an acute sprain or non-specific low back pain? This information seems critical to addressing the primary aim of the study.

Authors’ response: Thank you for your positive comments. Please see our response to Comment no.3 from the Associate Editor. We have also added more information in the Methods (starting line 114):

“Musculoskeletal consultations were identified as those recorded with any Read code within Chapter N “Musculoskeletal and connective tissues diseases” or with Read codes considered by consensus of 2 GPs to be musculoskeletal in nature within Chapters R "Symptoms, Signs and Ill-defined conditions", and 1 "History/Symptoms. Four GPs then allocated all such Read codes to individual body regions (e.g. back, knee) or unspecified if no region could be allocated. “Unspecified” problems tended to be codes where either no region was described in the associated Read Term (e.g. the term simply specified "arthritis") or the problem covered more than one region (e.g. "generalised osteoarthritis").”

Minor issues: authors should include examples of the types of drugs or drug combinations that went into each category. It would also be useful to report these results separately.

Authors’ response: As indicated in response to Comment no.3 from the Associate Editor, we have now included a figure (Figure 1) indicating the type of drugs within each of the groups.

Abstract
Regression results are not included in the abstract. This should be added.

Authors’ response: We have now added results from the regression analysis into the abstract.

Methods: more description of the types of musculoskeletal conditions needs to be included. Authors refer to citation 8 however this needs to be described in some detail in the methods.
Authors’ response: Please see our response to this Reviewer’s Major issue above.

Results: the authors present results based on pain location rather than condition. It would be useful to know what the condition was that patients presented with

Authors’ response: Please see our previous responses to the Associate Editor and this Reviewer.

conclusion: lines 346 and 347 please state what these factors were

Authors’ response: We have amended the sentence to read (new lines 377-379): “This study highlights that age, deprivation, body region of pain, comorbidity and previous analgesic prescriptions are associated with analgesic prescribing in primary care when treating patients with a new consulting episode of a musculoskeletal condition”.

Level of interest: An article of importance in its field
Quality of written English: Acceptable
Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.
Declaration of competing interests:
NA
Reviewer's report

Title: Pain medication management of musculoskeletal conditions at first presentation in primary care: analysis of routinely collected medical record data

Version: 2 Date: 22 October 2014

Reviewer: Rafael Pinto

Reviewer's report:
This is an observational study investigating the type of analgesics prescribed by primary care clinicians. The authors found that nearly half of the patients presenting with a new episode of a musculoskeletal condition receive prescribed pain medication. NSAIDs were prescribed more often than simple analgesics. However, when analysis was conducted to specific region of pain, Strong analgesics were quite popular for those suffering with back pain. The study is well written and provides useful information to clinicians, researchers and government.

Authors’ response: Thank you for your positive comments.

Minor comments
Methods –
Page 5: Please clarify whether this was a prospective or retrospective study.

Authors’ response: This was a retrospective study. First sentence of the methods now reads (line 99):
“This was a retrospective study based in the Consultations in Primary Care Archive (CiPCA).”

Page 6- Line 116: I would strongly recommend the authors to include a better explanation about the hierarchical analgesic categorisation presented by Bedson and colleagues (reference 11). This hierarchical analgesic categorization is essential for readers to understand and interpret the results of this paper. Please consider asking European Journal of Pain to use the same flowchart. May be possible to use the copyrighted material.

Authors’ response: Thank you for the suggestion. We have now included a figure (Figure 1) which gives examples of the medications in each group.

Results- Page 10 and 11: I would suggest to keep ‘95%CI’ before authors report CI in the results section.

Authors’ response: We have now done this.

Discussion- Line 316-326: I think it is worth mentioning that primary care physicians are not following back pain guidelines when prescribing analgesics to patients presenting with a new episode of back pain.
Authors’ response: Thank you for the suggestion. This relates also to the Associate Editor’s 2nd comment. It is not possible to categorically state that physicians are not following guidelines when they prescribe analgesics for a new episode of back pain. Some patients may well have tried over-the-counter analgesia before consulting, and so GPs may give lifestyle/physical therapy advice at the same time as prescribing a stronger analgesic than the one the patient had been using. Guidelines for low back pain offer the opportunity to give such advice in conjunction with the prescribing of analgesia, so it is therefore quite possible prescribing GPs have adhered to them. We have now added to the Discussion (starting line 278):

“Our study found less than half of new consulters for musculoskeletal pain received an analgesic. A previous study of those aged over 50 consulting in primary care for musculoskeletal pain, and who had not consulted in the previous 30 days, also reported that less than half were prescribed analgesics [17] and this is also similar to findings from studies focussed on neck and back pain [6,7] and on osteoarthritis.[18] It is feasible that GPs may be following guidelines that recommend the early use of exercise and other physical therapies with or without analgesia and further research is needed to determine if this is happening.[1,19]”

Level of interest: An article of outstanding merit and interest in its field
Quality of written English: Acceptable
Statistical review: Yes, and I have assessed the statistics in my report.
Declaration of competing interests: none