Reviewer's report

Title: Health Related Quality of Life and its Influence Factors in Patients with Chronic Gastritis and Peptic Ulcer: A Longitudinal Questionnaire Survey

Version: 2  Date: 28 April 2014

Reviewer: Linda Dirven

Reviewer's report:

Major essential revisions:

Abstract
1. Background: The exact rationale for this study is not clear. Why is it important to look at differences in HRQoL between patients with chronic gastritis and peptic ulcers?

Background
2. Third paragraph, last sentence; The authors state that the CSF-36 showed good validity and reliability, but small responsiveness, but conclude that it is a good and useful instrument for patients with chronic disease at some situations. First, doesn’t the small responsiveness concern the authors? This would especially be problematic in longitudinal studies, as is the case in this study. Second, what do the authors mean with ‘at some situations’? Is this questionnaire useful for this population and for this analysis or not?

3. The exact rationale for this study remains unclear to me. Why are these two diseases chosen? Do you expect differences? What are the hypotheses? And how are the results of this study valuable for clinical decision-making? This should be described more clearly.

Results
4. Second paragraph (HRQoL comparisons across diseases); The authors find some statistical differences, but are these differences also clinically relevant? That would be more important than finding statistical significant differences. And what would be the cut-off for clinically meaningful differences?

5. Fourth paragraph (HRQoL change after treatments); The authors describe that HRQoL changed more for patients with peptic ulcer than for patients with chronic gastritis, but was this investigated? As far as I can read in the method section, the authors compare baseline with follow-up scores for the two groups separately. They do not make a comparison between the two groups, so I think such an conclusion is not valid. Moreover, if there are differences, are these clinically relevant?

6. Fourth paragraph (HRQoL change after treatments); Nothing about the SRM is described in the results section, while this was part of the analysis. The authors should add this.
Discussion

7. Patients with chronic gastritis had lower HRQoL than patients with peptic ulcer. Did the authors expect this? How can this be explained? It is more obvious that patients have lower HRQoL than the general population, because they do have an illness affecting HRQoL.

8. Second paragraph, first sentence; Do the authors think that a difference of 3 years in age is a significant or clinically relevant difference? The table also shows a small beta, so I wonder if this explanation is valid.

9. Fifth paragraph: ‘Overall, patients education... to have higher domain scores’. On which data is this conclusion based? On the beta in table 4 and 5? I wonder if this is fair comparison, because the beta is also dependent on the amount of categories (for each variable) chosen by the authors. And if this reasoning is used, why is marriage not considered to be equally important?

Minor essential revisions:

Abstract

1. Methods: it is not described how changes over time are analyzed.

Background

2. Second paragraph, line 2; ‘because of the importance it places on a variety of health-related, including physical...’. What do the authors mean? A variety of health-related..?

3. Fourth paragraph; The authors describe that the study of Hallerback et al. included 1526 patients, but if I sum the 4 (instead of 5) categories of patients, it adds up to 1023, not 1526.

4. Last paragraph; the last two sentences should we described before the ‘goals’ of this specific study.

Methods

5. Third paragraph (survey method); ‘which was about two weeks after discharge’. This should be described in the results section. In addition, the authors should provide the mean (SD) or the median (IQR) for the time between hospitalization and discharge, separately for patients with chronic gastritis and those with peptic ulcer. It is important to know if these groups are comparable at discharge.

6. Third paragraph (survey method); Where was the information on socio-demographic and clinical variables retrieved? A separate questionnaire or through medical charts?

7. Moreover, it is important to mention the mode of administration (paper, electronically, etc).

8. Fourth paragraph (analysis method); The authors state that they determine the SRM, but they don’t explain how these effect sizes should be interpreted. Therefore, I would suggest to add a sentence with the definition of a small,
moderate and large SRM (as is explained later in the manuscript).

9. Fourth paragraph (analysis method); It is not clear whether the authors determine the association between baseline variables and PCS and MCS scores at baseline or PCS and MCS scores at discharge?

10. Fourth paragraph (analysis method); What do the authors mean with ‘p-in = 0.05’ and ‘p-out=0.10’?

Results

11. First paragraph (socio-demographic characteristics of the study population); minor detail, but it would be better to report ‘mean (±SD) age of 45.2 (±15.4)’ instead of ‘mean age of 45.2 (±15.4)’, to make clear that the other number represents the standard deviation.

12. It may also be worth mentioning if all patients were ‘better’ when they were discharged. What were the reasons for discharge? And what was the mean time in the hospital for the two patients groups separately. I wonder if all patients were in the same physical condition when discharged, because this would introduce bias and would hamper the interpretation of the results.

13. The authors use statistical analysis that require complete cases. It is therefore important that they describe in detail the amount of missing data. In total, 206 patients completed both baseline and follow-up data. I guess these patients were used for the ‘change’ analysis? Were these patients different from the patients with only baseline measurements? In other words, was there selection bias?

14. Second paragraph (HRQoL comparisons across diseases); The first sentence is part of the methods, not the results. The authors could also describe the results into more detail, i.e. describe some numbers or percentages. Although they are also displayed in the table, when reading it is easier to interpret results when some scores or percentages are described. This should at least be done for the main findings. Also, it would be helpful if the authors describe more clearly that the first compare the baseline scores between the groups and next the mean scores at discharge (who many patients were left in each group? Total of 206, but what is the distribution?).

15. Fifth paragraph; What are ‘disease-type’ factors? This has not been described before.

16. Fifth paragraph; When describing the factors that are associated with HRQoL, the authors report also factors that have a p-value >0.05. Do they consider this to be significant? Or as a trend? This should be described more clearly (in method and results section).

Discussion

17. Why was RP not improved after treatment?

18. Last sentence of the first paragraph (‘Patients who were…quality of life’); Is this at a group level? Thus patients with chronic gastritis and peptic ulcer combined?
19. About the number of male/female in the two groups, was it tested if there were significant differences on baseline variables between patients with chronic arthritis and those with peptic ulcer?

20. Last sentence of the second paragraph; ‘Future research… for the differences’. Wasn’t this the goal of this study??

21. As previously described, are the change scores described in the fourth paragraph also clinically meaningful?

22. The authors correctly state that patients being admitted to the hospital are likely to respond differently to the questions on RF than patient who were at home, suggesting that the timing of questionnaire administration is important. What would the authors suggest to be the best time for administering such questionnaires to these patients?

23. Fourth paragraph: ‘Some possible explanations for these non-significant results are..’ Which non-significant results do the authors refer to? I would suggest to begin a new paragraph in which all study limitations are described.

24. How do the authors explain differences between males and females with respect to their score on the mental component?

25. Sixth paragraph: ‘The factors influencing HRQoL at cross-sectional are..’. Cross-sectional what?

26. Seventh paragraph, last sentence: what do the authors mean that HRQoL research may be used as the final step? This should be explained more clearly. Do they mean that both quantity (survival) and quality of life are important to determine the effect of a new treatment strategy?

27. Last paragraph: The authors suggest to investigate why HRQoL is linked to socio-demographic factors. Can they provide a suggestion how to do that?

Table and figures:

28. Table 4 and 5: It would be more clear if the factors in table 4 and 5 are reported differently. For example, gender. It would be better to report the factor ‘male gender’. When seeing the B, it is easily interpreted, because you immediately see females are the reference category.

29. Table 4 and 5: It is difficult to see that factors such as education, perceived income and occupation are included as categorical variables. It would be helpful to see the reference category in the results.

Discretionary revisions:

Title

1. I would suggest to revise the title into: ‘Health-related Quality of Life in patients with chronic gastritis and peptic ulcer and factors with impact: a longitudinal study.

Abstract

2. Methods: Maybe better to say that the questionnaire was administered twice to
patients? Longitudinally suggests that there was a long follow-up. Stating that there were two time-points also explain why specific statistical techniques were used.

Background

3. Second paragraph, line 3; I would suggest to revise this sentence to: ‘In the last 30 years, HRQoL has become an important outcome measure for patients with cancer and chronic diseases. The Medical Outcomes Study 36-items Short-Form Health Survey (SF-36) has been widely used as HRQoL instrument [4-5]. Moreover, the SF-36….’

4. Third paragraph; I would suggest to change the sentence ‘1688 respondents … Hangzhou’ into ‘A total of 1688 respondents were recruited by multi-stage mixed sampling in 1000 households in 18 communities of Hangzhou’.

5. Third paragraph, line 6; This sentence should be split into multiple sentences, because now it is very difficult to read.

6. Third paragraph, line 17-20; I think it is not necessary to mention all the different types of psychometric properties that were evaluated. Just mentioning that many psychometric properties were evaluated is sufficient.

Methods

7. First paragraph (Patients), second sentence; Better to rewrite. I would suggest: ‘All patients were considered for inclusion, but it was required that they were able to read, understand and complete the questionnaires. Patients who were illiterate and those with advance disease status were therefore excluded from participation’.

8. Fourth paragraph (analysis method); I would suggest to change the heading of this paragraph to ‘statistical analysis’.

9. Fourth paragraph (analysis method); It is not necessary to describe how the categorical variables were recoded as this information can be retrieved from table 1. It is sufficient to mention which continuous and which categorical variables were considered in all analyses.

10. Fourth paragraph (analysis method); It is sufficient to mention that the statistical analyses were performed with SPSS, it not relevant that this was performed on a Windows XP platform.

Results

11. Fifth paragraph; I would suggest to change the heading of this paragraph to ‘Factors with impact on HRQoL’.

Discussion

12. Third paragraph, first sentence: I would suggest to add the following, ‘… and side effects caused by treatment.’

13. In the seventh paragraph, the authors repeat some results, which is unnecessary and could therefore be removed.
Tables and figures:
14. Table 1: It may be informative to show if there are significant differences in socio-demographic variables between the two patients groups?
15. Table 1: ‘partly-pay’?
16. Table 2, title: There misses a ‘)’
17. Table 3: It would be more clear if all abbreviations are described in the legend (CR, SRM etc).
18. Table 4 and 5, titles: May be better to state ‘Factors with impact on HRQoL’ instead of ‘Impact factors on HRQoL’.

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

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I have no competing interests