

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

ESPS manuscript NO: 30355

Title: Prevalence of Hepatitis C Infection among Hemodialysis Patients in the Middle-East; a Systematic Review and Meta-Analysis

Reviewer's code: 03487933

Comments to authors This is an interesting research question to be addressed especially for the Middle East region. The study in my view however requires major revision as outlined below. Major comments Introduction "Screening for HCV mainly focuses on testing those who have an individual risk factor for exposure, who have evidence of liver disease, and who belong to specific demographic groups that have a high-prevalence of infection. Without screening, many infected individuals will be identified late which may lead to longer hospitalization and death." These statements need to be supported by references. **Done** Methods 1. The methodology for the review shows several gaps for example, the exact search criteria for each database and the date of search were not included, the eligibility criteria were not clear... **It is now more clarified as well as possible** 2. It is also not clear SDs and confidence intervals were extracted for which variables. **Since primarily we obtained our method from a similar study in which they had extracted these parameters, we did it too, but at the time of analysis we found that they had no use, so you are correct, these parameters are now omitted. Thanks** Results 1. Many statements appear to be mixing results with discussion. The results should include strictly the results of the review and any interpretations and comparison with the literature should be left for the discussion. **This was such a cruel comment, (just joking!) Thank you for the suggestion, we had to revise the whole part and it took a big time but worth. The discussion related parts are now transferred and the results is revised thoroughly.** 2. The reasons

for exclusion of documents during the full-text screening stage are missing. **It is now mentioned.** They were excluded due to methodological problems or faults in outcome report 3. In the flow diagram, there is no need I think for the boxes specifying “no new reports added”. **With respect, I’d rather keeping the term for letting the readers know** 4. It is not clear whether the reported genotypes are specifically among hemodialysis patients or among the entire population. **It is among the general population, that why we mentioned it after reporting the prevalence among the general population.** 5. The number of studies identified for each country is missing. **Respectfully, this is mentioned in table 1** 6. “In UAE, it seems that the medical care providers still do not take HCV infection, especially among patients undergoing dialysis treatment, into account.” This statement needs to be rephrased and supported by adequate references. **Done** 7. “Conclusively, Qatar is assumed to be among the high prevalence countries for HCV infection among general population.” This statement is not technically correct. **Done** 8. Figure 2, Why is Syria and Saudi Arabia in the graph if there is only one study for each of these countries. **We preferred to have all of the countries with even one report in the figure in order to let the readers have them all in a glance and be able to compare them, even with one study.** Discussion 1. The discussion will need to be revised by including more information that were previously stated under “Results” **Done** 2. In Discussion, “Syria even had a higher prevalence than Egypt, a country with the highest reported HCV infection among the middle-east countries (97); this might be due to the regional wars and complicated political situation of Syria which can result in weak hygiene control and observations on the dialysis centers” I don’t think the authors can make this statement based on a single study for Syria. **Done, the statement is now omitted. Either lack of sufficient studies or high prevalence in this country even in one report, are concerns.** 3. “It seems that the overall prevalence of the infection is decreasing while in some countries, the rates are still concerning, for instance in Yemen, Syria, Jordan, and Egypt.” I don’t think the data are sufficient to make these statements. **The statement is omitted, you are correct, with thanks and respect** Minor comments 1. The formatting is not consistent throughout the document. Please conform to the journal’s style. **Done** 2. In Abstract, line 3, “aiming to reduce”

rather than “aiming to reducing” **Done, you are a fantastic reviewer, thanks** 3. In Abstract, line 5, “Middle East” not “middle-east” **Done** 4. In Introduction, p3, line 6, ‘to prioritize” **Done** 5. In Introduction, PCR not defined. **Done** 6. In Introduction, p4, line 6, “immunocompromised” **Done** 7. In Introduction, p4, line 10, the acronym for DOPPS should be between parentheses not the actual name. **Done** 8. In Methods, I would use an alphabetical order in listing country names **Done** 9. The acronym for UAE was not defined at first use. **Done** 9. In “Lebanon” the overall prevalence should be among “hemodialysis in Lebanon” not “hemodialysis in Iran”. **Done, with thanks to you and all other 7 reviewers, and your really great efforts toward the review, we learned much. Regard.**

Reviewer’s code: 00053556

Comments to the Editor: Thanks for inviting me to review the review article entitled" Prevalence of Hepatitis C Infection among Hemodialysis Patients in the Middle-East; a Systematic Review and Meta-Analysis". Minor Comment: ? The editing of the manuscript has to be thoroughly revised. Spelling mistakes were obvious. **Done** ? Language level: B. Revision is needed in term of grammar and structure. ? **Done** Conflict of interest is missing **Done** 1. TITLE reflect the major content of the article, however hepatitis C has to be replaced by hepatitis C virus. **Done** 2. ABSTRACT Fulfill the journal requirements. The aim of the work as well as the conclusion were clearly identified **Done** 3. Text: The section is almost well organized and the overall theoretical analysis concerning the provided data is fulfilled, however, authors are advised to put in consideration the following remarks: ? **Done** Prevalence of HCV infection among general population or hemodialysis patients is not clearly identified throughout the text. Mixing has to be avoided. **Done, the whole results and discussion is revised and reorganized.** ? References from 11-20 & 144-146 are better to be updated. **Done as well as possible.** ? Study question: It was mentioned that the authors depend on evaluation of presence of positive HCV-antibody in blood samples based on any of the tests like ELISA or RIBA/PCR tests. PCR is not a test for antibody detection and this has to be revised. In my opinion, it

is better to unify the parameter of interest either antibody detection or RNA evaluation by RT-PCR. Moreover, the authors in the results section mentioned that the reported prevalence in this study is based on ELISA test results. This has to be revised and unified. **Done with thanks to your great suggestion.** ? For HCV, it is RT-PCR rather than PCR test and this has to be revised. **Done** ? Results: mean age of the study subjects lack \pm SD. It has to be mentioned. **Done** ? Qatar: The conclusion here is not evidence based and need further explanation. **Done, the whole result is modified and some parts and explanations are transferred to discussion according to all 7 reviewers comments.** ? Iraq: Data in this paragraph regarding the prevalence of HCV is not totally comparable with figure -2 and this has to be carefully revised. **Done** ? Syria: Unaccepted explanation for the high prevalence of HCV in Syria. The cited references were early before the emergence of the current political situation and the internal war. This has been mentioned also in discussion. Plausible explanation is better to be added. **Done, the part is revised, but the facts that the prevalence is high even in one study, and the lack of sufficient efforts toward gathering data in this field in this country are not negligible. By the way, you are correct and the part is omitted.** ? Lebanon: The first word in the last line of the paragraph, it is Lebanon not Iran "the overall prevalence of HCV infection among hemodialysis patients in Iran according to the last ten years". This has to be corrected. **Done** ? Egypt: The authors mentioned studies during 1900's and cited references (125-131), however, references 126, 130, 131 were not comparable to this time period and this has to be revised. Also, the authors have to specify the study group whether, hemodialysis patients or not. **Done, for the results in each country we'd rather to give a report of the overall prevalence of the country from the latest report and the most dominant genome of the virus, then we report the last ten year's HCV prevalence among HD patients, moreover, the whole part is now revised, with respect.** ? Table -1: ? More descriptive data were lacking within the text. ? It is better to add a column for the prevalent genotype in each country. ? **The table legend was revised. Since the genotypes were among the general populations and data lacked for providing the genotype data among hemodialysis infected patients, we assumed that there is no need to report the genotypes among general population in the table of**

hemodialysis patients. Moreover, it is now clarified that the genotypes are from the general population not the HD patients. The title has to be specific whether it is the prevalence among hemodialysis patients or in all population. Separate columns for each prevalence are preferable. **Done** ? Footnote is better to be added to mention the eight countries that were not included because of insufficient data. **Done** ? Figure -2: The title has to be specific whether it is the prevalence among hemodialysis patients or in all population. The figure has to be carefully revised. **Done** 5. References: ? Finally relevant nearly adequate references, especially the most current literatures were cited. ? PMID is missing for all references. **Done**? Some references are better to be updated (References from 11-20 & 144-146). **Done as well as possible. With thank to you and the other 6 reviewers for the great efforts to ward reviewing this paper and helping in making it perfect. Regards**

Reviewer's code: 02528812

Dear Editor-in-Chief of World Journal of Gastroenterology The manuscript entitled "Prevalence of Hepatitis C Infection among Hemodialysis Patients in the Middle-East; a Systematic Review and Meta-Analysis" by Seyed Moayed Alavian, attempts to provide an overview regarding the prevalence of HCV infection among hemodialysis Patients in the Middle-East. Although this study is well presented and reports valuable results, it did not provide any new information. There are several studies in this regards by the same author. Core tip is missing. **Done** Introduction section is well-written but too long. It should be more summarized. **Done** The methodology suffers from several shortcomings. **Done, well revised** The references are not according to the format of the journal. **Revision done** Reference section: PMID and DOI should be included. **Done** Text: The reference numbers should be superscripted in square brackets at the end of the sentence. Some references are better to be updated. **Done** English style should be revised throughout the manuscript. **Done** I would recommend a linguistic revision of the manuscript by a native speaker as some parts

do not read very well. **Done with thanks to your great suggestions.**

Reviewer's code: 00052926

The paper "Prevalence of Hepatitis C Infection among Hemodialysis Patients in the Middle-East; a Systematic Review and Meta-Analysis" is a very detailed review in its field. However I have some comments. 1.It is no obvious when the prevalence rates mentioned concern the general population and when the hemodialysis patients. **Clarification is now done** 2.The contents in Iran and Turkey data should be more condensed. There are too many detail in the prevalence of geographical regions of Iran and Turkey. The information is too much and not important. The same information is included in Fig 2, so is abundant. **Revision is now done** 3.One decimal digit is enough. In some points there are two and in others one decimal digit. **Done, the whole data and tables were revised** 4.In Iraq the prevalence rate ranges from 42.6% in 2014 to 6.6% in 2015. Apparently, the big difference is not attributed to the adherence to infection precautions as the authors stated but to the different hemodiaysis Centers which were used in the two consecutive years. **Done and rephrased** 5.The statistical analysis of Figure 2 should be seen by a statistician. This kind of analysis is usually used for demonstrating the effect of a characteristic or a drug on the patient population (positive or negative effect on survival for example). This use for the prevalence rates should be further examined by a specialist. **With respect, since one of the authors is a PhD of Biostatistics and planned for this type of analysis according to his and other's previous experiments, we accepted to go through with this method. According to similar studies in this regard I think this method is not wrong. With thanks to your great efforts toward reviewing this paper, I learned a lot personally.**

Reviewer's code: 00012216

Ashkani-Esfahani et al carry out an extensive review of published cross-sectional studies in the last decade about the HCV prevalence among patients submitted to haemodialysis in the Middle East. The authors perform a meta-analysis to estimate 95% confidence interval of HCV prevalence in the different countries. The methodology is appropriate and the information is interesting in order to define the problem of HCV transmission in the kidney failure population on haemodialysis and to evaluate strategies to improve the current situation. Only minor comments: the manuscript and references should be edited according to WJG editing rules. **Done** The introduction should be shorten. The English should be edited by a native speaker. **Done with thanks and respect.**

Reviewer's code: 02996557

COMMENTS TO AUTHORS

This is a very interesting review article on the prevalence of hepatitis C among hemodialysis patients among the Middle-East countries. I have some minor suggestions: - Please use "RT-PCR" instead of PCR since hepatitis C is an RNA virus. **Done** -Description of figure 2: please change enzyme-linked immunosorbent assay (instead of antibody) **Done with thanks and respect**

Reviewer's code: 00503530

The author is investigating the infection state of HCV of the Middle East region in the precise. I think that the content of an investigation is good. How is the source with a concrete thing in which the infection rate of HCV is especially high? **Revision was done, the whole result and discussion parts are revised according to all 7 reviewers' comments** Please also explain the medical state of the



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Middle East region. By whom is a dialysis treatment prepared? Is a dialysis treatment difficult in case of low income?? Description of an Middle Eastern medical state and the discussion about a route of infection think a requirement. **With thanks to your suggestion, but to our knowledge as immigrants of this region, the income among different classes of people varies from area to area and country to country and we cannot say one is low and one is how, it is not classifiable. About the treatments and healthcare providers, there is no noticeable different to be reported. Thanks to you and all 7 reviewers of this paper.**