Reviewer's report

**Title:** Perceptions and Use of the National Kidney Foundation KDOQI Guidelines: A Survey of U.S. Renal Healthcare Providers

**Version:** 1  **Date:** 16 May 2013

**Reviewer:** Nicolas Rognant

Reviewer's report:

The study reported by Estrella et al. aimed to evaluate the frequency of the KDOQI guidelines utilisation in the population of renal care providers and to find out the reasons for the non-use of these guidelines. The justification of the study arose from the finding that suboptimal care are delivered to patients with CKD, which is a paramount concern because it is responsible of adverse outcomes of the CKD patients, probably poor quality of life and also a waste of health systems resources. The disinterest of care providers with regard to the guidelines or others similar initiatives is probably one of the factors that are involved in these suboptimal care.

The study presents the results of an online survey conducted in USA between May and September 2010. This survey contains 38 questions (both open and multiple choices) and has been sent to every physician or allied health professional with an email address recorded in the National Kidney Foundation (NKF) professional database. In addition to assess the practices and opinions of the renal care providers concerning the use of KDOQI guidelines, the survey asked about the use of the new Clinical Action Plans (CAP) developed by the NKF.

The study is interesting and original. The manuscript is readable. The subject is an issue of concern in the field. The results hint that the survey consisted of pertinent questions. The discussion is properly structured.

Major Compulsory Revision

However, this study presents a major drawback that undermined the validity of its results: the doubtless large proportion of non-respondents. Indeed, assuming that the proportions of non-renal or non-American renal care providers are the same in the non-respondents population than in the respondent’s population, the response rate is only 5.82%.

In the discussion section, I acknowledge that the authors rightly state that there is concern about the generalizability of their results. However, I think that it is primarily related to the low response rate and not to the fact that the survey has been sent only to people included in the NKF database.

The authors claim that they were not able to calculate the response rate because some care providers may not have received the survey (page 11, line 11). This argument sounds elusive because I do not believe that the number of people who were unable to answer the survey just owing to “technical” problems (email
address change, inability from various technical causes to answer) is so high that it would have led to reach a 60% response rate (the response rate considered as desirable according to the authors instructions from the Journal of American Medical Association (1)). About the appropriate response rate of a survey, it can also be noted that the federal authorities before funding a survey, ask to review the survey by submitting an analysis plan of nonresponse bias if the response rate is expected to be lower than 80% (2) (however, this recommendations are not specifically dedicated to survey in health sciences).

Furthermore, the authors also claim that they were unable to determine the response rate among US renal providers because the proportion of each profession is unknown in the non-respondents. Although I agree that the response rate cannot be accurately determined, it is likely to be low. Assuming that the true response rate is 60%, that would mean that in the 15372 providers that did not respond, only 400 would be renal care providers, which means that only 6.56 % of all the professional recorded in the NKF database are actually renal care providers. This proportion rises to 12.7% if we assume that the response rate is 30%.

Finally, even if we suppose that both some providers did not receive the survey properly (in a way that made them unable to complete it) and some others may have been non-renal care providers, it is likely that the true response rate is very low. Therefore, there is an important non-response bias in the study that let the reader without knowing if the results are properly representative of the actual use of the guidelines by the community of renal care providers and of their opinions about these guidelines.

Currently, some experts in the field advocate to evaluate and report the non-response bias (which is proportional to the non-response rate) rather than the sole response rate (2),(3),(4) because even with high response rate, some no-response bias can be high. Moreover, some techniques exist that allow to adjust the results for the bias (imputation, re-weighting)

(1)http://jama.jamanetwork.com/public/instructionsForAuthors.aspx#GeneralInformation
(2) Davern M, Health Serv Res 2013
(3) Johnson TP and Wislar JS, JAMA 2012
(4) Albesleben JRB and Whitman MV, Health Serv Res 2013

Minor Revisions
- - Page 5, lines 21-22 and page 6, lines 1-6: to better emphasize the importance of the quality of care, the authors might rely on the quite recent findings of an observational French study which showed the link between the quality of care during predialysis period and subsequent patients outcomes. In this study, Thilly et al. found that the quality of care, evaluated during the 12 months before dialysis start based on the achievement of 5 clinically relevant targets (control of BP, anaemia, Ph-Ca disorders, hyperlipidaemia and metabolic acidosis), was correlated with survival during the first of dialysis treatment (Med Care 2012). Interestingly, the same team found previously that some characteristics of the care (including quality and also the time since referral to a nephrologist) were
also able to positively impact some components of the quality of life (assessed by the KDQOL 36 questionnaire). This study is different from the Jones study (ref 8) in that the quality of care has been well quantified and also because it showed the impact on mortality during the early dialysis period where the mortality rate is the highest (17.5% in USA according to DOPPS data, Bradbury et al. CJASN07).

- I think the reader could be interested by reading a copy of the entire questionnaire (that could be provided with the manuscript)
- Please, let know to the reader if some responders have given only partial responses or not. If so, what were the proportion and the affected question (s)?
- I think that the results section could be shortened because most of the results are given both in the tables or figures and in the text
- Page 15, line 7: a reference is requested about the development and implementation of clinical decision support system in UK (maybe this one: “engaging primary care in CKD initiatives: the UK experience” Stevens PE et al. NDT 2012 ?)

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

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

I declare that I have no competing interests