Reviewer's report

Title: Home healthcare services in Taiwan: a nationwide study among older population

Version: 1 Date: 11 May 2010

Reviewer: Ketan Vegda

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Major Compulsory Revisions

1. While respecting that English is not the primary language of the authors, the large number of simple errors (spelling and grammar) and instances where the language hinders clarity about what is being said need to be addressed prior to publication.

2. Pg 2—Research question could be clearer “We conducted a nationwide survey to examine the prevalence and pattern of home healthcare utilization, and characteristics of the home healthcare services in older population in Taiwan.”—Consider: “We conducted a nationwide study of health insurance data to examine the utilization and delivery patterns, including diagnostic indications, for home healthcare services used by seniors in Taiwan.

3. Your analysis concludes that females used home healthcare more frequently than males. Were statistical tests done to demonstrate this? I’m sure it would be significant given your high N’s, but your methods do not indicate it (ie, Table 2). Similarly, it appears that the number of visits per patient decline with advancing age group (Table 2, looking down the right sided columns). (At the same time, the age-specific prevalence of visits is highest among the >85 group, which is interesting) Your analysis does not comment on this, and I wonder what you think it means.

4. Similar to the last point, you use figure 1 to illustrate your point that “female were more likely to receive home care services than male”. I’m not convinced that this is what Figure 1 shows. I think what it shows is the frequency distribution of men/women having a certain number of visits. However, the title is confusing, and I’m not sure how this figure adds to your discussion.

5. Pg 8—“…the highest utilization was in the 75-84 group…” is not clearly worded. I think you mean to say, “Individuals in the 75-84 year old group accounted for the greatest proportion of total visits (47.0%), while those >85 group accounted for the lowest proportion of visits (24%). This problem appears again in your conclusion on page 14, “75-84 year age group had the highest prevalence in home healthcare utilization”, whereas in table 1, you calculate “prevalence” and conclude that the “prevalence” is highest in the >85 group (6.6%).

6. Related to the previous point, in table 1, the percentage in the total column are
calculated incorrectly. 5,300/1,248,489=0.4% not 0.8%. Similarly, 4950/146,978=3.3% not 6.6%. It would also make sense to display the overall totals for all age groups in a fourth row to give the big picture=0.9%.

7. Please clarify the importance of RUG’s in your analysis. Are you suggesting that funding practices are leading to over-catheterization? If so, how would this be happening. Also, “…lead to complications…” such as? Why is it surprising or unexpected that 95% of skilled nursing services are for providing tube replacement?

8. Your limitations statement lacks development. What are the implications of these limitations—for example, what would knowing demographic data, socio-economic background help you understand in addition to what you’ve collected?

9. It would be wise to include a clear statement about what the strengths of your research are or what this study adds to the body of research.

Minor Essential Revisions

1. Pg 2- You should state the overall mean+/ SD number of home visits per person receiving homecare in the first sentence of the results of the abstract.

2. Pg 2- “distributions of facilities provided home healthcare services”— What is meant by “distribution of facilities” and do you mean “which provided”?


4. Your conclusion in your abstract is “Further researches are needed to clarify this high rate of tubes replacement in home healthcare services in the elderly population in Taiwan.” However, your abstract does not indicate why this would be “high” compared with what your expectations or other studies.

5. Pg 9- “healthcare professional visits according to…”—this is a confusing sentence.

6. Pg 11- numbers are formatted incorrectly, ie, 10,0000.

Discretionary Revisions

1. I wonder if your keywords are optimally chosen: Older population ->seniors? Just a question.

2. Your results section is very redundant to read because much of it simply restates the information presented in tables. It would be advantageous for readers if you highlighted in narrative format only the data which goes on to support your key findings. For example, I do not think it is necessary to list all of the ICD9 codes in the narrative when it appears in the table.

3. Pg 9, paragraph 2/table4. The percentages for patients/visits/services are very similar. I would suggest listing only one of those in the text, whichever you deem is the most important. Suggested wording: “Community-based home nursing
institutions were responsible for providing the majority of visits (52.6%), followed by metropolitan (18.4%) and local (17.3%) hospitals, academic centre-affiliated nursing institutions (9.8%), and community health centres (0.9%).

4. Pg 12. “One of the possible reasons about the high rate of home…” I’m not sure what the purpose of this statement is.

5. Pg 13 “…a physician-based comprehensive and integrated home visit program seems to be necessary”. What does this mean? What would be involved? Are you advocating for this?

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

**Quality of written English:** Not suitable for publication unless extensively edited

**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.