Reviewer's report

Title: How much time do nurses have for patients? A longitudinal study quantifying hospital nurses’ patterns of task time distribution and interactions with health professionals

Version: 1 Date: 14 September 2011

Reviewer: Michelle Butler

Reviewer's report:

Overall
Written well, clear, likely to be of interest to readers of BMC Health Services Research both in terms of the subject and methodology

Criteria for assessment
1. Is the question posed by the authors well defined?
   Yes

2. Are the methods appropriate and well described?
   Yes. However, further information should be provided on the setting, the selection of the 10 categories of tasks (see below) and the specific tests (? t-tests) used in the analysis of the data.

3. Are the data sound?
   Yes. However, further details of the tasks should be provided in relation to: a) how they are related, and b) the indirect tasks in Figure 1 (see below)

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
   Yes

5. Are the discussion and conclusions well balanced and adequately supported by the data?
   Yes. However, the discussion could be developed further to explore the findings in relation to what was happening on the two units over the two time periods and in relation to the literature – see specific points below.

6. Are limitations of the work clearly stated?
   Yes

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
   It would appear so.
8. Do the title and abstract accurately convey what has been found?
Yes

9. Is the writing acceptable?
Yes, this is well-written. However, citations should be included within its corresponding sentence and not after the full-stop (period). This is also the case where references to tables are inserted.

Revisions

Discretionary revisions
Clarify which university provided ethical approval

Findings – report that data were collected on FTEs - ? provide summary for two time periods to show that they were equivalent – differences in staffing may relate to task prioritisation and time spent of tasks between two periods.

Minor essential revisions
Need to provide further details of the setting for readers to make sense of the findings – How is nursing care organized /patients allocated on the unit? E.g. primary nursing, what shift lengths/ patterns are used? Did these change between years 1 and 3? Case mix, ratios etc

Say more about the WOMBAT tool – where it has been used to date and how it has been shown to be reliable, how 10 categories were derived

Study Design and Procedures, paragraph 4 – when introduce table 1, state that this provides a summary of the 10 categories and their definitions.

Major compulsory revisions
Figure 1: three items are listed as ‘indirect care’ – confusing

Discussion
I would suggest you to explore /follow-up some of the findings further
• Why did time on professional communication decline?
• Reduction in time with other nurses – state the relevance of this
• Decline in professional communication and low level of collaboration /interdisciplinary working – is this important? E.g. refs 12 and 13 Introduction section
• Why did time spent in transit fall?
• Why was there a significant increase in average length of individual medication tasks?
• Why did time completing tasks using a permanent paper record increase?

I think further information and discussion is required on the tasks referred to, for example:
• Paragraph 3 – nursing work characterized by a pattern of rapidly changing short tasks – what were those short tasks and is it appropriate that they should be so fragmented?

- How are tasks related? E.g. a nurse assessing a patient may undertake a range of tasks, record vital signs, assess condition of pressure areas etc but they are all part of the same package with the same goals. Therefore concerns about task-switching and switch costs may not be relevant.

- How does this relate to the notion of holistic care and to the model used to allocate nursing care/ patients?

• Paragraph 5 – multi-tasking and interruptions – there is a concern in the literature about task-orientation and the loss of a holistic approach to care. So a nurse ‘chatting’ to a patient while administering medication may also be assessing the patient’s cognitive state or obtaining important information about the patient’s social background, which may be difficult to obtain otherwise. True, there is concern about interruptions and medication errors and I am aware of several interventions aimed at reducing interruptions. I think the two issues need to be separated and the task-orientated versus holistic issue developed further.

The likelihood of increased computerisation is mentioned (discussion paragraph 4) – what are the implications/benefits of this?

**Level of interest:** An article of importance in its field

**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