Author's response to reviews

Title: Day care cataract surgery in Central and Southern Italy: a multicentric survey

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Author's response to reviews: see over
To: Iratxe Puebla  
Senior Assistant Editor  
BMC-series journals  

Object: MS: 1922920355115936 - Day care cataract surgery in Central and Southern Italy: a multicentric survey

Dear Editor,

I am pleased to return the revised version of the paper in object with the additional changes required from your referees.

Reviewer 1

Major Compulsory Revisions:
1) In the methods section, the authors list the centers involved in the study. Was this the total number of sites where the survey was sent or just a list of those centers that responded to the survey? The authors should present the survey response rate (total number responding / total number sent).

In the Methods Section we have added the sentence: “A two-stage stratified cluster sampling method was used to draw a sample of Cataract Surgery Unit from Ophthalmic Units (in the first stage we have sampled all the Ophthalmic Units of the leading cities of Italian regions involved in the study, in the second stage we have collected the ophthalmic surgery units working since 2000 with the possibility to carry out both an ordinary recovery and a Day Surgery). In 2005, a questionnaire [see Additional file 1] was sent to 25 Cataract Surgery Unit in 9 health district. The response rate was 42%, resulting in at least one completed questionnaire for each of these 9 district.

2) The authors should also describe who completed the surveys (i.e. was it the head hospital administrator, chief medical officer, etc.).

In the Methods Section, we have added the sentence “The chief medical officers of the Cataract Surgery Units completed the surveys”.

Minor Essential Revisions:
1) Table 1 can be improved by including the location of the hospitals and the total number of surgeries. This eliminates figure 1 which, on its own, is not particularly interesting. The title of table 1 should note that these hospitals are located in Central and Southern Italy.
We agree with the referee and we have added in Table 1 the location of the hospitals and the total number of surgeries. Hence, as suggested, we have deleted Figure 1 and we have modified the Title of Table 1

2) The second sentence of the results section needs to be re-written to make these results more clear. Are there any data on the trends of complications following cataract surgery. This should be mentioned in the discussion section.

The second sentence of the results section has been re-written to make these results more clear.
In Discussion section we have added the sentence “These differences are not related to the complexity of procedure, rather they are related to a typical socio-economic condition of the South of Italy, including patient characteristics, different sanitary politics, administrative approach and disponibility of budget for every single region and for the single surgical units following the Drug Related Groups (DRG) Classification.” and the sentence “For example, in our public hospital about the 1.2% of elderly patients had significant systemic complications postoperatively, 45% of whom required hospitalization”.

**Discretionary Revisions**

1) Please spell out IASS on page 6

On page 6 we have spelt out IAAS adding “International Association for Ambulatory Surgery (IAAS)”

**Reviewer 2**

**Major Compulsory Revisions:**

1) The description of the methodology is quite poor. One misses information on key aspects of the accomplishment of the study like the following ones:
It is not known how the centres of each region were selected to participate in the study. Was it made at random? or the investigators chose the centres?. This aspect is important because it could indicate certain bias in the collection of the information.

In the Methods Section we have added the sentence: “A two-stage stratified cluster sampling method was used to draw a sample of Cataract Surgery Unit from Ophthalmic Units (in the first stage we have sampled all the Ophthalmic Units of the leading cities of Italian regions involved in the study, in the second stage we have collected the ophthalmic surgery units working since 2000 with the possibility to carry out both an ordinary recovery and a Day Surgery).
In 2005, a questionnaire [see Additional file 1] was sent to 25 Cataract Surgery Unit in 9 health district. The response rate was 42%, resulting in at least one completed questionnaire for each of these 9 district”.
Also, in the Methods Section, we have added the sentence “The chief medical officers of the Cataract Surgery Units completed the surveys”.

2) Under my point of view, the questionnaire that the authors include in the supplement presents at least two problems: 1. - on the one hand, it includes a quite high number of open questions. As it is already well-known, to handle the data obtained by open-ended questions is quite complicated and the information obtained is usually poor; 2. – on the other side, the rest of the questions are dichotomized (yes/no) which do not provide much more detailed data. Those who respond have only two options. The open questions usually are advised to be used in the initial phases, or
exploratory, of knowledge of a subject to help to construct closed-ended questions later. Closed-ended questions, which provide more information, must include, usually, more than two categories. For that reason, this questionnaire seems to provide little information, although some of the questions could be acceptable but within a questionnaire that included more questions with various categories.

The utilization of a short and simple questionnaire is due to the need to know the number of surgical procedures performed and the tipology of admission (inpatient, outpatient) in the hospital center. The other questions about the kind of anesthesia, the infection profilaxis before surgery, and the request of preoperative blood surveys, the time of postoperative follow up, were included to confirm the tipology of admission and the adherence to standard guidelines for cataract surgery.

3) Like with any questionnaire, it is important to provide information on its “validity” properties. This information is not included in this study.

As stated before, the aim of our survey was not to validate our questionnaire and moreover in literature there is no validated questionnaire in this field of interest. The geographic variability of this survey has hindered the useful items for the validation of the analysis and we chose a simple questionnaire (a pilot questionnaire) which could represent every single local reality.

4) The most important aspect of the manuscript is the study of the variability between different geographic zones, but the authors do not do a in depth analysis of this aspect providing, for example, with information of the characteristics of the hospitals that have participated in the study on relation to that variability, or of the patients who receive one type or another of health care … etc.

The aim of our study was not to analyze the reasons of regional differences as regarding the tipology of hospital admission but to verify if the administrative and economical issues may reflect a change in the indicators of appropriate hospital admissions. Our study doesn’t evaluate the tipology of patient or the possible influence of socio-economic issues on the patient’s demand.

5) Also, to be a good study of variability they must have included all the centres, or most of them, of the geographic zones studied, something unknown because they do not provide with information on how many centres participated, and responded, by each zone.

The difficulty to record all the units performing cataract surgical procedures has worsened by the heterogeneity of sanitary offer in the same region, with an insufficient level of informations and an absence of relationship between the operative units. But we have outlined a dispersion of economical funds due to a not appropriate use of hospital admissions.

6) The authors do not refer which was the response rate to the questionnaire they sent by the different geographic zones. That is to say, we do not know the percentage of non-response, neither an analysis of it, aspect quite relevant to give credibility to the study.

We have added the response rate in the Methods Section. Also, in our study the response rate in centers studied was relatively low (42%) because of poor will among different hospital to work together to find general behavioural attitudes.
7) I wonder if they could have been able to provide with some additional interesting information to that included in the questionnaire from the administrative data, the mentioned as “Hospital Discharge Report” database from the Ministry of Health.

8) The obtained data from the “Hospital Discharge Report”, could have been contrasted with the corresponding one of the questionnaire, and, in certain way, could it have served to validate partially some questions of the questionnaire?

In Italy there was a North-South trend which differentiates the type of admission. These regional trend of ordinary hospital and Day Hospital admissions in the different Italian regions, updated to 2003 (last available year) are available in the website: http://www.ministerosalute.it/programmazione/sdo/ric_informazioni/default.jsp

9) For a health services research study as this one, it would have been important to know what factors influence the variability in the rate of interventions of day-care surgery between the different regions. That is to say, to respond to the obvious question “why so different rates between regions were found”. However, the investigators provide very basic and descriptive information.

There are several factors that may influence the differences in the Day Hospital admissions for cataract surgery, a surgical procedure very simple and easily applicable. Some factors may depend on patient (hospital admissions for chronic diseases, invalidity, post surgical complications). The true limiting factor is the economical and administrative differences that influence the budget of every single region for the cataract surgery.

10) It would have been necessary that in the discussion the authors evaluated the possible bias associated with the use of the questionnaire, as the quite likely presence of information bias.

11) The authors do not make any mention to any other of the possible limitations, or problems, of the study (no response, selection bias, validity of the questionnaire, generability of the results… etc.).

In discussion session we have added a sentence regarding possible bias or limitations of the study: “However, as possible limitation of our study, it was carried out at country level and this unavoidably brings with it some imperfections. We were not able to study within-country variations. The use of day surgery within countries varies considerably. This variation may result from specific hospital or physician characteristics that cannot be studied at country level. Since in many countries, healthcare policy is still a national matter, and reforms often effect the whole country, it is necessarily useful to identify the effect of national healthcare organization characteristics and their effect on national level. Another limit of our study is the relatively low response rate (42%), because of poor will among different hospital to work together to find general behavioural attitudes, that doesn’t let us to draw any consistent conclusion but only a descriptive analysis.”

12) The discussion does not approach all the aspects contemplated in the presentation of the results (perioperative management - e.g antibiotic prophylaxis-, blood tests, type of anesthesia, uses of topical skin disinfectants, average Time of hospitalization and postoperative follow-up), which in the cases in which non justified variability was found would have been pertinent. Also, and this it is a fundamental aspect, one misses in the discussion a deeper analysis of the causes of that important variability and a comparison with other studies.

The other aspects evaluated in the study seem to confirm that the clinical approach to cataract disease is similar in different sites and for this reason we can state that the clinical and surgical issues do not influence the specificity of hospital admissions in the single region. The true limiting
factor and the major concern are the economical differences, the different administrative approach and the disponibility of budget for every single region and for the single surgical units following the Drug Related Groups (DRG) Classification System.

The international literature do not report data comparable to our situation or to other countries, because of a different sanitary politics and the peculiar relationship between citizen and National sanitary System in several countries.

Sincerely yours,
Salvatore Cillino, MD