

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Nurses' Sleep quality, work environment and quality of care in the Spanish National Health System: observational study among different shifts
AUTHORS	Gómez-García, Teresa; Ruzafa-Martínez, María; Fuentelsaz-Gallego, Carmen; Madrid, Juan Antonio; Rol, Maria Angeles; Martínez-Madrid, María José; Moreno-Casbas, María Teresa

VERSION 1 - REVIEW

REVIEWER	MILVA MARIA FIGUEIREDO DE MARTINO UNIVERSIDADE ESTADUAL DE CAMPINAS- SP, BRAZIL UNIVERSIDADE FEDERAL DO RIO GRANDE DO NORTE, NATAL, RN, BRAZIL
REVIEW RETURNED	11-Apr-2016

GENERAL COMMENTS	This research presented is extremely important for the knowledge of the scientific community and especially to the researchers on the work shift. The preparation of the article was carefully distributed in topics that facilitated the comprehension and understanding of the results. For that reason they suggest it is approved.
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REVIEWER	Montserrat Gea-Sánchez University of Lleida, Spain
REVIEW RETURNED	21-Apr-2016

GENERAL COMMENTS	The authors have developed the manuscript with strong argument and quality. It is methodologically well conducted. Data provided are relevant for clinical practice and working environments, specially in terms of quality of care. Although the importance of quality of sleeping, few studies have been conducted to show the relation with quality of care. I recommend the paper to be accepted.
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REVIEWER	Jun-Yu Fan Chang Gung University of Science and Technology, Taiwan
REVIEW RETURNED	22-Apr-2016

GENERAL COMMENTS	Overall <ul style="list-style-type: none">● The main objective of this study was to determine the relationship between the characteristics of nurses work environment in hospitals in the Spanish National Health System (SNHS), nurse-reported quality of care and the organization of the provision of care through different
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	<p>shifts schemes. Furthermore, this study tried to confirm the relation between job satisfaction, burnout, sleep quality and daytime drowsiness of nurses and shift work.</p> <p>One of the purposes of the study was to explore the relationship. The results of using ANOVA to identify the differences among groups can not infer to relationship. The Pearson's correlation coefficient is better to infer the relationships among continuous variables. And please add the results in result section as well as discussion section.</p> <ul style="list-style-type: none"> ● Methods: More information regarding scoring of the Self-reported assess; Job satisfaction; Maslach Burnout Inventory (MBI). ● The Tables are listed descriptive data not inferential results. ● References are up to date.
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REVIEWER	Orts.Cortés MI University of Alicante, Spain
REVIEW RETURNED	29-Apr-2016

GENERAL COMMENTS	<p>The manuscript presents a relevant and applicable topic in the provision of caring and nursing practice Background and state of the art are well conducted. Literature review is well oriented to the topic and updated. Objectives are precise and measurable. Study design is appropriate. The methods section presents all relevant and sufficient information to replicate the study. Results answer objectives described in a detailed and comprehensive manner. Discussion provides different perspectives from reference authors and related research. Ethical issues meet requirements of scientific research. Next minor modifications are suggested: Abstract: To incorporate the section "Methods": design, sampling, measures... analysis. Methods: describe more accurately the variables related to "Self-reported assessment measures of nursing professionals about the safety and quality of care provided to the patient" Result: included in the text "n= " after the absolute frequencies Table 4. Levels of Burnout: delete % of the cells. For example: 57.2% (344)</p> <p>References: review abbreviations of journals' names and style (some are in APA style) f.e.:</p> <p>3. Br J Nurs 23. Muecke S. Effects of rotating night shifts: literature review. J Adv Nurs. 24. Int J Chronobiol. (APA) 37. (APA) 2005 May;50(4):433-9. Review. PubMed PMID: 15842451</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer: MILVA MARIA FIGUEIREDO DE MARTINO

Reviewer comment: This research presented is extremely important for the knowledge of the scientific community and especially to the researchers on the work shift. The preparation of the article was

carefully distributed in topics that facilitated the comprehension and understanding of the results. For that reason they suggest it is approved.

Authors' comment: Thank you very much for the comments

Reviewer: Montserrat Gea-Sánchez

Reviewer comment: The authors have developed the manuscript with strong argument and quality. It is methodologically well conducted. Data provided are relevant for clinical practice and working environments, specially in terms of quality of care. Although the importance of quality of sleeping, few studies have been conducted to show the relation with quality of care. I recommend the paper to be accepted.

Authors' comment: Thank you very much for the comments

Reviewer: Jun-Yu Fan

Reviewer comment: One of the purposes of the study was to explore the relationship. The results of using ANOVA to identify the differences among groups can not infer to relationship. The Pearson's correlation coefficient is better to infer the relationships among continuous variables. And please add the results in result section as well as discussion section

Authors' comment: Thank you for your comments. Nevertheless, we did not the suggest change concerning to ANOVA test because we wanted to explore the relation between shift (qualitative variable) and other quantitative variables. So, in this term, we cannot use the Pearson correlation because this coefficient is used to analyze two quantitative variables

Reviewer: Jun-Yu Fan

Reviewer comment: Methods: More information regarding scoring of the Self-reported assess; Job satisfaction; Maslach Burnout Inventory (MBI).

Authors' comment: Thank you for the comment. We included more information in methods section.

Reviewer: Jun-Yu Fan

Reviewer comment: The Tables are listed descriptive data not inferential results.

Authors' comment: Thank you for the comment. Now, in the tables 1, 2, 3 and 6 there are a column showing the p-value (significance) to the inferential results.

Reviewer: Jun-Yu Fan

Reviewer comment: References are up to date

Authors' comment: Thank you for the comment. Now, 80% of references were published in last six years, and 88% in last ten years. The rest of the references are necessary to understand methods and variables used in the study.

Reviewer: Orts.Cortés MI

Reviewer comment: The manuscript presents a relevant and applicable topic in the provision of caring and nursing practice Background and state of the art are well conducted. Literature review is well oriented to the topic and updated. Objectives are precise and measurable. Study design is appropriate. The methods section presents all relevant and sufficient information to replicate the study. Results answer objectives described in a detailed and comprehensive manner. Discussion provides different perspectives from reference authors and related research. Ethical issues meet requirements of scientific research.

Authors' comment: Thank you very much for the comments.

Reviewer: Orts.Cortés MI

Reviewer comment: Next minor modifications are suggested: Abstract: To incorporate the section "Methods": design, sampling, measures... analysis.

Authors' comment: Thank you for the comment. We included the methods section in the abstract.

Reviewer: Orts.Cortés MI

Reviewer comment: Methods: describe more accurately the variables related to “Self-reported assessment measures of nursing professionals about the safety and quality of care provided to the patient”

Authors’ comment: Thank you for the comment. We included more information about the self-reported assessment

Reviewer: Orts.Cortés MI

Reviewer comment: Result: included in the text “n= “ after the absolute frequencies

Authors’ comment: Thank you for the comment. Nevertheless, we were looking for other papers published in BMJ Open to found the way the authors put the frequencies and basis on the other papers, we do not consider to include the “n=” after the absolute frequencies.

Reviewer: Orts.Cortés MI

Reviewer comment: Table 4. Levels of Burnout: delete % of the cells. For example: 57.2% (344)

Authors’ comment: Thank you for the comment. We deleted the % from this table and from others tables as well.

Reviewer: Orts.Cortés MI

Reviewer comment: References: review abbreviations of journals’ names and style (some are in APA style) f.e.:

3. Br J Nurs

23. Muecke S. Effects of rotating night shifts: literature review. J Adv Nurs.

24. Int J Chronobiol. (APA)

37. (APA)

2005 May;50(4):433-9. Review. PubMed PMID: 15842451

Authors’ comment: Thank you for the comment. We had revised all the references in the paper.

VERSION 2 – REVIEW

REVIEWER	Jun-Yu Fan Chang Gung University of Science and Technology Taiwan
REVIEW RETURNED	25-May-2016

GENERAL COMMENTS	Overall The authors carefully responded to each review comment and have an interesting and valuable outcome. λ Just reminded the consistency of decimal digits, in same table, there are two types of decimal digits of SD.
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REVIEWER	María Isabel Orts-Cortés University of Alicante Spain
REVIEW RETURNED	10-May-2016

GENERAL COMMENTS	The authors have carried out the pertinent modifications. My recommendation is to publish acceptance.
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VERSION 2 – AUTHOR RESPONSE

Reviewer: Jun-Yu Fan

Reviewer comment: The authors carefully responded to each review comment and have an interesting and valuable outcome.

Authors' comment: Thank you very much for the comment.

Reviewer: Jun-Yu Fan

Reviewer comment: Just reminded the consistency of decimal digits, in same table, there are two types of decimal digits of SD.

Authors' comment: Thank you for the advice, we revised the tables changing standardizing the data.

Reviewer: Orts.Cortés MI

Reviewer comment: The authors have carried out the pertinent modifications. My recommendation is to publish acceptance

Authors' comment: Thank you very much for the comment.