

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Effectiveness of a Computerised System of Patient Education in Clinical Practice: a Longitudinal Nested Cohort Study
AUTHORS	Su, Chia-Hsien; Li, TsaiChung; Cho, Der-Yang; Ma, Wei-Fen; Chang, Yu-Shan; Lee, Tsung-Han; Huang, Li-Chi

VERSION 1 – REVIEW

REVIEWER	Manisha Verma Einstein Healthcare Network USA
REVIEW RETURNED	21-Nov-2017

GENERAL COMMENTS	<p>Dear Authors:</p> <p>This is a great project to be implemented in routine clinical care, and is expected to improve patient education. The project clearly describes the development phase of the program, and will assess the effectiveness in several ways.</p> <p>Please note below a few things to consider:</p> <ol style="list-style-type: none">1. Since your intervention aims to improve patient education, are you going to assess its impact on patient health outcomes (such as quality of life, medication adherence, etc).2. What specific patient population is targeted is unclear. Is it for a specific disease category or chronic diseases in general?3. Self-reporting and assessment is good, but do you also plan to audio record some of the nurse patient discussions to understand the qualitative levels of details. It will provide a very rich data of the actual intervention implementation and its fidelity assessments <p>Thank you.</p>
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REVIEWER	Andrea Centrella-Nigro Holy Name Medical Center, Teaneck, NJ, USA and Ramapo College of NJ, Mahwah, NJ, USA
REVIEW RETURNED	01-Feb-2018

GENERAL COMMENTS	<ol style="list-style-type: none">2. In the abstract the participants are not only those nurses who are operating the PEADRS but also include the control group of nurses. It is more accurate to state that participants are nurses from one acute care hospital who are involved in carrying out patient education. <p>Key words should reflect more than just education but rather should include patient or client education to yield more complete results.</p> <ol style="list-style-type: none">3. I would recommend a non-equivalent quasi-experimental design without purposive sampling to lend to greater generalizability. For
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	<p>example the design can include all eligible nurses from Units X, Y, Z in the intervention group (experimental electronic health record) and all nurses from units A, B, C in the control group (standard care, paper documentation). If a purposive sample is chosen for the participants in the intervention and control groups there is greater bias.</p> <p>6. Outcome # 3 More information about the questionnaire needs to be included. Is this a valid and reliable tool? If created new have you established validity?</p> <p>Outcome #4 : You need to specify more how this outcome will be measured It states "professional cooperation will be measured by the PEADRS system". Specify what you are actually measuring.</p> <p>8. Many references are more than 5 years old. There are no references from 2016 and 2017, only one from 2015. Please update the references as close to the current month and year.</p> <p>12. Potential limitations are discussed however an additional limitation should be included; the limitation of your sample as a convenience sample as these can be biased and limit generalizability.</p> <p>15. There are some grammatical errors throughout the manuscript. Some wording of sentences is awkward and needs refinement. This is not major and can easily be rectified.</p> <p>Overall Comments: The verb tense needs to be consistent throughout the paper. This is a research proposal and yet in one section in particular is written in the past which confuses the reader. For example on page 7, line 46 it states, "the effectiveness of the PEADRS will be established, developed and built. One page 9 points #1 and on page # 10 point #2 are written in the past tense. If this is preliminary work it should be labeled as such as it confuses the reader.</p> <p>Overall the topic of this research proposal is very worthwhile to study. I would recommend changing from the term "electronic medical record" to electronic health record" as it contains more than medical information. When the term "medical information" is used, I would suggest changing that to "health information" as it encompasses the role of other health care professionals including nurses.</p>
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VERSION 1 – AUTHOR RESPONSE

reviewers' comments	Page number	Amendment replying reviewers' comments
<p>Reviewer: 1</p> <p>1. Since your intervention aims to improve patient education, are you going to assess its impact on patient health outcomes (such as quality of life, medication adherence, etc).</p>	P.17	<ul style="list-style-type: none"> ● Thank you for those valuable considerations and comments. ● Patient health outcome is an important indicator in patient education. However, it would cost more and complicated design in this stage of study. Your suggestions will be the further stage of study as possible.
<p>2. What specific patient population is targeted is unclear. Is it for a specific disease category or</p>	P.7	<ul style="list-style-type: none"> ● The patient population is who admitted in a hospital or preparing for invasive examination

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chronic diseases in general?		or surgery, which is mentioned on design of methods.
3. Self-reporting and assessment is good, but do you also plan to audio record some of the nurse patient discussions to understand the qualitative levels of details. It will provide a very rich data of the actual intervention implementation and its fidelity assessments	P.12 & P.14	<ul style="list-style-type: none"> ● Thank you for suggestions. The interview nurses in applying PEADRS will be recorded as one of the data collection.
Reviewer: 2 1. Please state any competing interests or state 'None declared': None	P.17	<ul style="list-style-type: none"> ● This statement has been added.
2. In the abstract the participants are not only those nurses who are operating the PEADRS but also include the control group of nurses. It is more accurate to state that participants are nurses from one acute care hospital who are involved in carrying out patient education. Key words should reflect more than just education but rather should include patient or client education to yield more complete results.	Abstract Key Words	<ul style="list-style-type: none"> ● The sentence has been revised. The participants are nurses who are involved in patient education by using traditional record or the PEADRS at a medical center. ● Key words have been corrected. Patient education, Patient education record system
3. I would recommend a non-equivalent quasi-experimental design without purposive sampling to lend to greater generalizability. For example the design can include all eligible nurses from Units X, Y, Z in the intervention group (experimental electronic health record) and all nurses from units A, B, C in the control group (standard care, paper documentation). If a purposive sample is chosen for the participants in the intervention and	P.7	<ul style="list-style-type: none"> ● The study is a quasi-experimental and non-synchronous design. Participants can be randomly recruited when they are providing patient education in preparing for invasive examination or surgery in the general wards.

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control groups there is greater bias.		
6. Outcome # 3 More information about the questionnaire needs to be included. Is this a valid and reliable tool? If created new have you established validity?	P.13	<ul style="list-style-type: none"> The instrument will be developed under the psychometric process of tests. The validity and reliability are also provided in the paper.
Outcome #4 : You need to specify more how this outcome will be measured It states "professional cooperation will be measured by the PEADRS system". Specify what you are actually measuring.	P.13	<ul style="list-style-type: none"> Professional cooperation can be measured by system in experiment group and traditional nursing records in control group.
8. Many references are more than 5 years old. There are no references from 2016 and 2017, only one from 2015. Please update the references as close to the current month and year.	P.18-20	<ul style="list-style-type: none"> The references have been updated. Six references from 2015-2016 were added.
12. Potential limitations are discussed however an additional limitation should be included; the limitation of your sample as a convenience sample as these can be biased and limit generalizability.		<ul style="list-style-type: none"> Thank you for the suggestion. The participants will be recruited by random sampling which would not be a limitation of this study.
15. There are some grammatical errors throughout the manuscript. Some wording of sentences is awkward and needs refinement. This is not major and can easily be rectified.		<ul style="list-style-type: none"> The manuscript has been edited by a native English speaker. Please recommend any corrections if needed.
The verb tense needs to be consistent throughout the paper. This is a research proposal and yet in one section in particular is written in the past which confuses the reader. For example on page 7, line 46 it states, "the effectiveness of the PEADRS will be established, developed and built. One page 9		<ul style="list-style-type: none"> The errors have been corrected. Thank you for your accurate review.

reviewers' comments	Page number	Amendment replying reviewers' comments
<p>points #1 and on page # 10 point #2 are written in the past tense. If this is preliminary work it should be labeled as such as it confuses the reader.</p>		
<p>I would recommend changing from the term "electronic medical record" to electronic health record" as it contains more than medical information. When the term "medical information" is used, I would suggest changing that to "health information" as it encompasses the role of other health care professionals including nurses.</p>		<ul style="list-style-type: none"> ● The words has been revised as suggestion. The term "electronic medical record" to electronic health record" and medical information" to "health information" in the manuscript.