

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Management of behavioural change in patients presenting with a diagnosis of dementia: a video vignette study with Australian general practitioners
AUTHORS	Jiwa, Moyez; Nichols, Pam; Magin, Parker; Pagey, Georgina; Meng, Xingqiong; Parsons, Richard; Pillai, Vinita

VERSION 1 - REVIEW

REVIEWER	Glynn Kelly Senior Lecturer, Medicine - University of Queensland
REVIEW RETURNED	26-Jul-2014

GENERAL COMMENTS	<p>Limitations are noted ie</p> <p>Limitations of this study include: (1) GPs had no opportunity to interact with the actor-patient – as such, they had no opportunity to negotiate the health problems that required immediate attention with the patient; and (2) they may have offered appropriate treatment or referral during subsequent consultations.</p>
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REVIEWER	Professor Tim Stokes Department of General Practice and Rural Health Dunedin School of Medicine University of Otago
REVIEW RETURNED	28-Jul-2014

GENERAL COMMENTS	<p>This is an important and timely paper that addresses the question as to how GPs can better diagnose and manage dementia. The use of video vignettes, delivered through the internet, has allowed the conduct of this study - at relatively low cost - to a sample of GPs across a large Australian state with many dispersed GPs. Not only have the authors demonstrated that such an intervention has had an effect - in particular with reference to referral to support agencies - the intervention is low cost and thus has the potential to be developed for use in routine educational practice.</p> <p>The paper is well written. I have only one major, and several minor, comments.</p> <p>Major</p> <p>1. The one question I have re design and presentation of results - to which I would defer to a statistician - is whether:</p>
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	<p>a) more detail should be given regarding the power calculation - is it sufficient to simply state "would have an effect of moderate size"? - would it not be better to state expected effect and which outcome specifically is being powered.</p> <p>b) in the results multiple significance testing is being conducted. There are 18 such tests in tables 2 and 3. It would be helpful to get expert advice as to whether the Bonferroni correction - or other less conservative methods - should be applied here. I am not convinced that p should be set at 0.05 without a clear detailed rationale. If a lower p value is appropriate then the discussion needs to consider this issue. Only one of the comparisons - referral to support agencies - is likely to remain statistically significant if a correction factor is applied.</p> <p>Minor</p> <p>2. It would be helpful to finish the introduction with a statement that video vignettes are a way of addressing the stated problems and that the aim of this study was to use these.</p> <p>3. There is too much detail in the methods. Questionnaire development could be usefully put into an appendix.</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer 1 Glyn Kelly	
<p>Limitations are noted ie</p> <p>Limitations of this study include: (1) GPs had no opportunity to interact with the actor-patient – as such, they had no opportunity to negotiate the health problems that required immediate attention with the patient; and (2) they may have offered appropriate treatment or referral during subsequent consultations.</p>	
Reviewer 2 Tim Stokes	
<p>Major</p> <p>1. The one question I have re design and presentation of results - to which I would defer to a statistician - is whether:</p>	.
<p>a) more detail should be given regarding the power calculation - is it sufficient to simply state "would have an effect of moderate size"? - would it not be better to state expected effect and which outcome specifically is being powered.</p>	<p>We have modified the sentence to: <i>Thirty GPs would lead to 360 observations (6 vignettes for each GP, pre-and post-intervention). With internal correlations in the dataset due to the repeated observations made by each GP, it is difficult to be precise about the minimum sample</i></p>

	size required to demonstrate a change in management. However, this number is considerably larger than that required to demonstrate a difference of moderate size amongst independent observations with 80% power and $\alpha=0.05$ (Tabachnik & Fidell: Using Multivariate Statistics. 5 th edition. Pearson International Edition, 2007). Hence this number of GPs was expected to be adequate for the study
b) in the results multiple significance testing is being conducted. There are 18 such tests in tables 2 and 3. It would be helpful to get expert advice as to whether the Bonferroni correction - or other less conservative methods - should be applied here. I am not convinced that p should be set at 0.05 without a clear detailed rationale. If a lower p value is appropriate then the discussion needs to consider this issue. Only one of the comparisons - referral to support agencies - is likely to remain statistically significant if a correction factor is applied.	In our view, the Bonferroni adjustment needs to be treated with some caution. It is appropriate when the null hypothesis is that there is no difference in all the variables being tested (concurrently). However, when we are interested in each endpoint separately, it may be that downward adjustment of the threshold p-value to indicate statistical significance is not appropriate. There has been some discussion in the literature about this issue (for example: TV Perneger. What's wrong with Bonferroni adjustments. BMJ. 1998 April 18; 316(7139): 1236–1238). Our view is that we are interested in each of the endpoints separately so that the null hypothesis that we want to test is that each endpoint has not changed (pre- to post- intervention). Therefore, we prefer to discuss the p-values with reference to the conventional significance level of 0.05.
Minor 2. It would be helpful to finish the introduction with a statement that video vignettes are a way of addressing the stated problems and that the aim of this study was to use these.	The following sentence has been added to end of the introduction to the study: <i>Video vignettes, in which actors present the behaviours of interest, are one way to address these challenges and the aim of this study is to deploy such vignettes to explore the management of people presenting to GPs in the context of a dementia diagnosis.</i>
3. There is too much detail in the methods. Questionnaire development could be usefully put into an appendix.	The development of the TPB questionnaire has now been moved out of the main paper into an appendix.

VERSION 2 – REVIEW

REVIEWER	Professor Tim Stokes Department of General Practice and Rural Health Dunedin School of Medicine University of Otago
REVIEW RETURNED	01-Sep-2014

GENERAL COMMENTS	I consider that the authors have fully addressed my comments in their revised version of the manuscript.
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