Author's response to reviews

Title: A preliminary study of aged care facility staff indicates limitations in awareness of the link between depression and physical morbidity

Authors:

Joanna Atkins (joanna@med.usyd.edu.au)
Sharon L Naismith (sharon.naismith@sydney.edu.au)
Georgina M Luscombe (georgina.luscombe@sydney.edu.au)
Ian B Hickie (ian.hickie@sydney.edu.au)

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Author's response to reviews: see over
Reviewers’ reports and responses

Title: A survey of aged care facility staff indicates limitations in awareness of the link between depression and physical morbidity
Version: 2 Date: 6 October 2012
Reviewer: Mark Haddad
Reviewer's report:
This paper addresses an important topic, building on the extensive existing literature concerning clinicians’ attitudes and understanding of depression. It is a well-written and clearly presented paper, that mostly reviews the relevant literature accurately.

Discretionary Revisions
Within the background section, the authors might consider making reference to large-scale studies such as Egede 2007 (~30,000 participants), Moussavi et al 2007 (~250,000 participants in 60 countries).

Minor Essential Revisions
The statement (p4) that ‘...there is good evidence that treating the physical condition can improve depression and treating depression can improve physical morbidity’ should be reconsidered and more cautiously framed. There is good evidence at depression which is comorbid with medical conditions can be effectively treated with reasonable effects for depression outcomes; however data concerning the effect of depression treatment on physical health outcomes is in general sparse, conflicting and difficult to pool, with small or non-existent effects evident in many of the studies concerning diabetes or cardiac outcomes. For stroke it may be that more consistent and substantial effects are evident. I'm not sure about the value of the point that treating medical conditions can benefit depression - certainly patients should receive the best treatment of all health problems - but surely the rationale for clinician education, depression case-finding and associated clinical guidelines, is that depression (comorbid or otherwise) should be identified and treated using specific evidence-based interventions.

See revisions page 3: It is important for aged care staff to understand the complex inter-relationship between depression and physical illness so they can identify care recipients who may be at risk and provide appropriate evidence-based interventions in a timely manner to avoid unnecessary suffering.

Word ‘good’ removed from page 4

Changes to page 14: It is important that cases of depression are identified and that there is optimal evidence-based treatment for both the mental and physical health needs of older persons in care environments. Treatment of physical health issues is essential in reducing the risk for future depression and reducing the risk for greater morbidity and mortality. The need for regular ongoing high quality training to improve knowledge and awareness of this relationship and identification of depression is indicated.

Major Compulsory Revisions
The major limitation and problem with this study is the research instrument that is
used to examine the key variable of interest seems to been inadequately developed and has not been (sufficiently if at all pre-tested.

**See revisions to title, page 1 to reflect preliminary nature of study**


International Journal of Psychiatry in Medicine 2002;32(1):1-20) have examined the attitudes and knowledge of health professionals to depression, but the opportunity to build upon and adapt these has not been utilised by the authors.

**References added page 5:** While a number of studies have examined the knowledge of depression held by various health care professionals [35-38], and aged care staff [39-41], none of these asked about the relationship between depression and physical health factors. To our knowledge, only one published study has explored awareness of the link between depression and physical health, which is the specific area of interest of the current study.

The instrument that has been developed lacks face validity and other aspects of its reliability and validity have not been tested.

**See changes page 14,** The research has some limitations including the use of non-standardised instruments to measure awareness and knowledge of the depression/physical health link. While it would have been preferable to use a validated instrument none could be found that met the requirements of the current study. Further analysis to establish the validity and reliability of the survey instrument is required.

The 'awareness questions' are especially problematic - I am uncertain that any of the noted physical ill-health features 'lead' to depression - there is an association which is bi-directional and which involves multiple interacting pathways. I am most uncertain as to what a scaled (VAS) response to these questions indicates about respondent's awareness.

**See revisions page 6:** A survey was devised by the authors (published researchers in the field of older age and depression: including one psychiatrist, one psychologist, one neuropsychologist)
Twenty-three items assessed the awareness of staff of the link between physical health factors and symptoms of depression. All of these areas have been empirically shown to have bidirectional relationships with depression (see Background section of this report).

Awareness of the relationship between depression and the other factors was operationalized as being indicated by scores on this scale, with a higher score indicative of greater awareness of the relationship.

Note that the bidirectional nature of the relationship is noted in the questions with Q4 being asked in the reverse direction (page 23).

It is unclear what process was used to generate the set of knowledge questions - I would expect an initial pool to have been derived from relevant literature and then subjected to some form of explicit panel review.

The physical health issues included: functional impairment, asthma, stroke, arthritis, heart disease and diabetes and were all based on the findings of various studies of chronic disease and depression [reviewed in 1] and agreed upon by consensus of the authors.

These questions should have been subjected to a pre-testing procedure - usually such item analysis provides item difficulty index results, item discrimination results (discrimination coefficients) and consideration of measure acceptability and reading ease.

[Gabriel & Violato (2009) describe the development of a depression knowledge measure (for patients with regard to these psychometric characteristics) (and Haddad et al have a depression knowledge measure for nurses development paper in press - Journal of Sch Health)]

Without consideration of the essential characteristics of the measurement instrument, it is difficult to ascertain the value of the findings reported in this paper. The authors may consider using their data to conduct and publish essential testing of their knowledge measure. Without substantial revision I cannot recommend the publication of this paper.

Level of interest: An article whose findings are important to those with closely related research interests

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.
Reviewer’s report 2
Title: A survey of aged care facility staff indicates limitations in awareness of the link between depression and physical morbidity
Version: 2 Date: 20 December 2012
Reviewer: Carrie A Levin
Reviewer’s report:
Very important topic and I believe that caregivers (and their patients) could greatly benefit from its publication. I believe that it has the potential to affect the way that care is provided in LTC.

Major compulsory revision:
1. As a non-Australian, I think that it is necessary for the authors to explain in more detail what is meant by a community aged care facility and how providers of care in these facilities do/do not differ from providers of care in other settings. Again, not knowing too much about these individuals, I am assuming that their job description vastly differs from those in other settings as well as does the patient population that they serve. It would be useful to this reviewer to see if indeed they are different. See revisions page 6: The sample consisted of 119 staff (including personal carers, nurses, managers and other professionals) from high and low care residential facilities, and from community care organisations. In Australia, care recipients are assigned to high or low care status in accordance with the Aged Care Funding Instrument (ACFI) guidelines based on the severity of scores on three domains: activities of daily living, behaviour, and complex health care (see: http://www.health.gov.au/internet/main/publishing.nsf/Content/ageing-acfi-using-weightings.htm). Nursing home accommodation is provided for care recipients with high support needs and hostel accommodation for care recipients with low support needs who do not have complex ongoing care needs but require some assistance with the demands of daily living. In community care in Australia, visiting direct care workers provide needs-based care to older persons with both high and low support needs, in their own homes, including personal care, cleaning, shopping etc. and is similar to the care provided by personal care assistants in residential facilities. For this reason staff from both residential care facilities and from community care organizations are considered ‘personal carers’ in the current study.

Major compulsory revision:
2. Please address the issue of using a true/false response set. I could go on forever as to why these aren’t great questions, but I will suffice it to say that even if you were just guessing and put either all true or all false, you would be correct 50% of the time. This does not constitute a true test of any knowledge - you could score 50% just by guessing See revisions page 14:

Level of interest: An article of importance in its field
Quality of written English: Acceptable
Statistical review: Yes, and I have assessed the statistics in my report.