



## Empirical Articles

# Mental Health Workers' Views About Their Suicide Prevention Role

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## Abstract

**Aim:** Mental Health workers bear responsibility for preventing suicide in their client group. Survey studies have indicated that staff can be seriously adversely affected when a client suicides. The aim of the current study is to describe and evaluate the effects on mental health (MH) workers of their ongoing role in managing suicidal behaviours and to identify the thoughts and feelings associated with this role.

**Method:** A survey was administered to 135 MH workers via an on-line self-report vehicle. The survey comprised standardised measures of anxiety and burnout as well as a questionnaire developed for this study concerning perceptions and attitudes to suicide and suicide prevention.

**Results:** Factor analysis of 12 retained items of the questionnaire identified three factors: 1) preventability beliefs (beliefs about suicide being always and/or permanently preventable); 2) associated distress (stress/anxiety about managing suicidal behaviour); and 3) the prevention role (covering views about personal roles and responsibilities in preventing suicidal behaviours). Analysis of these factors found that many MH workers experience an elevation of stress/anxiety in relation to their role in managing suicidal behaviours. This distress was associated with the emotional exhaustion component of burnout. Measures showed adverse responses were higher for outpatient than inpatient workers; for those who had received generic training in suicide prevention; and for those who had experienced a workplace related client suicide.

**Conclusion:** There is a need for the development of appropriate self-care strategies to alleviate stress in MH workers exposed to suicide.

**Keywords:** mental health workers, suicide prevention, impact of role, emotional exhaustion, burnout

Psychology, Community & Health, 2016, Vol. 5(1), 1–15, doi:10.5964/pch.v5i1.174

Received: 2015-10-09. Accepted: 2016-03-08. Published (VoR): 2016-03-24.

Handling Editor: Filipa Pimenta, William James Center for Research (WJCR), ISPA – Instituto Universitário, Lisbon, Portugal

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## Introduction

World Health Organisation (WHO) reports ([www.who.int](http://www.who.int)) indicate that suicide is one of three leading causes of death in those between 15-44 years of age and a problem that contributes significantly to disease burden. The WHO estimates that almost one million people suicide each year. In Australia, official reports (ABS, 2010) show that 2,132 Australians died by suicide in 2009 – representing 1.6% of all deaths for that year. That suicide causes much concern is indicated by the significant funding which has been devoted over the past 20 years to research intended to provide better understanding of the phenomenon (Wasserman & Wasserman, 2009). Such research is intended to inform the implementation of strategies targeting the reduction of suicide frequency.

Studies have also indicated that there is an increased risk of suicide in people suffering from mental health disorders (cf. [Lonnqvist, 2009](#)). This places a particular burden on health and community workers charged with the task of caring for people with a mental illness. Several studies have investigated the impact on Mental Health (MH) workers of the suicide of a client ([Alexander, Klein, Gray, Dewar, & Eagles, 2000](#); [Chemtob, Hamada, Bauer, Kinney, & Torigoe, 1988](#); [Courtenay & Stephens, 2001](#); [Dewar, Eagles, Klein, Gray, & Alexander, 2000](#); [Foley & Kelly, 2007](#); [Gulfi, Castelli Dransart, Heeb, & Gutjahr, 2010](#); [Hendin, Lipschaditz, Maltsberger, Pollinger Haas, & Wynecoop, 2000](#); [Horn, 1994](#); [Linke, Wojciak, & Day, 2002](#)) and have found significant effects. For example, effects have been found in terms of the stress and anxiety felt by MH workers ([Linke et al., 2002](#)) and increased levels of anxiety specifically about working with at-risk clients ([Gulfi et al., 2010](#)). Also, there are common feelings of shock, anxiety, guilt, shame and grief, plus insomnia, fear of blame and loss of confidence in their work ([Alexander et al., 2000](#); [Dewar et al., 2000](#); [Hendin et al., 2000](#)). These effects may contribute to the incidence of burnout seen in this group.

Mental health workers have been identified by several researchers as showing high levels of emotional exhaustion ([Melchior, Bours, Schmitz, & Wittich, 1997](#); [Onyett, Pillinger, & Muijen, 1997](#)) and low morale, with increased levels of sick leave and resignations ([Pines & Maslach, 1978](#)). However, such associations have not always been found, with, for example, nurses working in acute psychiatric units in England, displaying relatively high levels of morale and personal accomplishment despite exhausting job demands ([Bowers et al., 2008](#)). While stress in MH workers is likely to be attributable to a range of factors, the risk of client suicide and the role of managing this risk in their day-to-day jobs is potentially a significant and continuing cause of stress ([Moore & Cooper, 1996](#)).

[Courtenay and Stephens \(2001\)](#) support, through a sample collected in the U.K., that the risk of client suicide is high in people with mental illness: of the 203 psychiatric trainees assessed, 54% had already experienced a patient suicide – with 75% of the respondents rating the effects on them as being ‘moderate to severe’. A qualitative study of U.K. MH workers found that outpatient staff feel strongly and uncomfortably that they are “constantly responsible for their clients’ well-being and actions” ([Reid et al., 1999](#)). The “actions”, in MH settings, include expressions of suicidal thoughts and intentions, and suicidal behaviours. [Valente \(1994\)](#) reviewed studies of therapist responses to client suicide and found that due to the ensuing trauma, persistent grief, self-blame, self-doubt and guilt, patient suicide should be considered an occupational hazard for those working with MH clients.

Bearing in mind the difficulty of predicting suicide and its negative impacts on MH workers, [Balon \(1987\)](#) argued that formal training and support programs should be implemented as standard practice. Twenty years later, [Balon \(2007\)](#) observed, to his disappointment, that he was still awaiting these reforms. He also suggested that the fear of losing a client to suicide may be the greatest occupational fear for many health workers ([Balon, 2007](#)). It is likely that MH workers do indeed experience their role in managing or “preventing” suicide as an “occupational hazard”, and that they pay an emotional price for this; however, this role, and its consequences, may not be reflected in support provided by their employing organisations.

Despite [Balon’s \(1987, 2007\)](#) bleak assessment, there have been several attempts to identify needs that could inform training programs. [Linke et al. \(2002\)](#) surveyed community MH professionals in London to identify the kinds of support they needed in order to cope with client suicide. Many respondents suggested the need for attitudinal change, to more accurately acknowledge both the level of risk in MH settings and the difficulty of preventing suicide. This was later emphasised by [Pridmore, Ahmadi, and Evenhuis \(2006\)](#), who argued that it is unrealistic to expect MH professionals to always predict and prevent suicide. Moreover, to maintain such unrealistic expectations distorts

the way such events are scrutinised and generates unfair reflections on the integrity and professionalism of the MH workers (Pridmore et al., 2006). These expectations may serve to inculcate a belief in patients, in relatives and advocates, and in the legal services, that suicide is frequently the result of inadequate risk assessments within MH services (Mulder, 2011).

The universal concern about suicide, and the accompanying desire to prevent it, may mean that workers in MH settings carry a high level of burden on behalf of the broader community. This is likely to apply to the ongoing role of managing the suicidal behaviours of clients, whether or not these behaviours lead to an actual suicide event. Consequently, the aims of the current study were as follows: 1) to identify the attitudes and opinions of MH professionals regarding their role in managing suicidal behaviours and develop and validate an instrument for evaluating these attitudes; 2) to assess the impacts of this role, with respect to stress and burnout, and the contributions of personal characteristics and experience; and 3) to survey current support and training needs.

## Methods

### Participants

Of approximately 500 invitations sent to MH professionals working within the Hunter New England Health MH Service, New South Wales, Australia, 138 (27.6%) staff responded. Three responses were excluded from analysis - one from an administrator, one from a MH promotion and prevention worker and one from a pharmacist - on the basis that their jobs did not involve day-to-day clinical management of MH clients. One participant did not complete the demographic questions (including those related to gender, age or years of work), however, they did complete the questionnaire and so their data were included in the analysis.

### Materials

Participants completed an on-line Zoomerang survey (MarketTools, Inc., San Francisco), which included: demographic and work-related questions; a locally devised questionnaire investigating the effects on MH workers of working with client suicidality, and their attitudes to this role; and two standardised scales – the Maslach Burnout Inventory – Human Services Survey (MBI-HSS) (Maslach & Jackson, 1981; Maslach et al., 1996; Kalliath et al., 2000); and the State version of the State-Trait Anxiety Inventory (STAI-S) (Spielberger, 1983; Iwata et al., 1998). The MBI (HSS version) comprises 22 questions related to three aspects of burnout: emotional exhaustion; depersonalisation (indicating impersonal, uncaring responses to recipients of service); and personal accomplishment - measuring sense of competence and achievement at work. To contextualise the State Anxiety assessment, participants were asked to recall a recent event of managing client suicidality and to write responses to a series of questions about that event (primarily to aid recall). They were then asked to complete the 20 items of the STAI-S.

The questionnaire assessing the views of MH workers about their role in suicide prevention included a mixture of items and response options, covering four broad areas: 1) the predictability and preventability of suicide (informed by questionnaires developed by Alexander et al. (2000) and Dewar et al. (2000); 2) responsibility for preventing suicide; 3) their role in managing suicidality and any stress or anxiety experienced while working with suicidal clients, and 4) any training about suicide and suicide prevention that participants had received. The questionnaire also included some open-ended responses and supplementary questions for those workers who had experienced a client suicide.

## Procedure

Approval for the survey was obtained from the Human Research Ethics Committee of the University of Newcastle and from the Hunter New England Area Health Research Ethics Committee (Approval Number: 10/06/16/4.04). Permission was obtained from the copyright holders of the MBI and the STAI to transfer these instruments to an online format solely for the current study. Participants were recruited via email listings of Hunter New England MH Services and the participant information document was included as a PDF attachment to the email. A URL link provided in the email opened the online survey. The survey was available for completion for a period of four weeks. One general reminder email was sent out two weeks after the initial approach. The order of survey questions was as follows: questions seeking demographic information; the MBI; questions about participants' role in suicide prevention; recall of a recent event of managing suicidal behaviour; STAI-S; completed suicide event questions, then further questions.

## Data Analysis

The Statistical Package for Social Sciences (SPSS version 17.0; Chicago, IL, USA) was used for data analysis. There were four main components to the analysis: 1) descriptive analysis of participant characteristics and experiences; 2) examination of responses to the questionnaire items about suicide prevention roles and impacts, and derivation of factors and scores; 3) simple comparisons of aggregate scores on the standardised measures with data from normative samples; and 4) subgroup comparisons, based on personal characteristics and suicidality experiences, examining relationships with stress (STAI-S), burnout (MBI), and the factors derived from the suicide prevention questionnaire.

# Results

## Participant Characteristics

As shown in [Table 1](#), the participants ( $n = 135$ ) covered a variety of workplaces and professional disciplines. There were 89 females (65.9%) and 45 males (33.3%), with 83 participants working in outpatient settings and 51 in inpatient settings (1 participant did not complete these questions). Participants ranged in age from 21 to 64 years ( $M = 44.8$  years,  $SD = 11.1$  years), while the number of years of working in MH services ranged from 0.66 to 45 years ( $M = 14.11$  years,  $SD = 10.8$  years).

Of the 135 participants, 95 (70.4%) indicated that they had experienced a client suicide, while 68 (50.4%) indicated that they had experienced a connection with suicide in their personal lives – none withdrew from the research. Ninety-six participants (71.1%) had attended a training program on suicide prevention, while 38 (28.1%) had not, with one non-response. The majority of respondents (95, or 70.4%) stated that the increased risk of client suicide in their MH workplace was never indicated to them in training, job advertisements, duty statements or interviews; of the 40 (29.6%) to whom it had been suggested, only 14 had heard it in a training context. For the rest, the risk remained implicit or inferred. Ninety-seven (71.9%) responded "no" to the question "Have you ever received any training which informed you how to manage your own distress/concerns following the death of a client through suicide"; 37 (27.4%) had received such information.

Table 1

*Participant Characteristics: Mental Health Workplace Type and Professional Discipline (N = 135)*

Participant characteristic	N	%
<b>Mental Health workplace type</b>		
Adult	77	57.0
Child and adolescent	15	11.1
Rehabilitation	12	8.9
Older people	10	7.4
Drug and alcohol/Dual diagnosis	7	5.2
Psychotherapy	4	3.0
Forensic	3	2.2
Other	7	5.2
<b>Professional discipline</b>		
Nurse	71	52.6
Psychologist	26	19.3
Social Worker	14	10.4
Occupational therapist	9	6.7
Psychiatrist	6	4.4
Doctor (MD other than psychiatrist)	6	4.4
Other	3	2.2

## Measuring MH Workers Beliefs About Suicide Prevention Roles and Impacts

The questionnaire initially devised for this study was not designed for its psychometric properties so much as for its ability to extract pertinent responses from MH professionals about their attitudes, experiences and roles in suicide prevention. However, in the absence of other comparable, brief measures, we have used the data collected to help refine the measure down to a 12 item set, which we are happy to share with other researchers (see [Appendix](#)). The item selection and scoring routines are outlined below.

There were initially 19 Likert style questions asking about feelings of responsibility for suicide prevention, beliefs about predictability and preventability of suicide, and whether training influenced these views. Based on an examination of response distributions, item correlations, and some preliminary factor analyses, seven items were either dropped or combined. Some items were dropped because they had narrower response distributions and did not correlate as well with the set of items, relative to a close competitor item; for example, “In general, how predictable is the suicide of a client?” was dropped in favour of “In general, how preventable is the suicide of a client?” (Item 1) (both these items were originally used in a questionnaire published by [Alexander et al., 2000](#)). Some items were largely redundant (e.g., enquiring both about current and potential circumstances), resulting in the selection of one version (e.g., Item 4), or they originally comprised sub-questions that could be expressed as a single question (Items 6 and 7). Some items were also dropped because they had moderate loadings on several factors in preliminary analyses (e.g., “Does your own anxiety about the potential for suicide ever influence the amount of detail you include in clinical notes?”).

[Table 2](#) reports factor loadings and communalities from an exploratory principal components analysis of the 12 retained items, using an oblique rotation. Three factors emerged with eigenvalues greater than 1, which together accounted for 69.8% of the item variance. An examination of the scree plot, together with factor interpretability,

suggested that this was a reasonable solution; for example, the eigenvalue for the fourth factor was only 0.60 (or 5.0% additional variance explained). The correlations between these factors were: 0.11 (Factors 1 and 2); 0.46 (Factors 1 and 3); and 0.21 (Factors 2 and 3). In summary, the three identified factors were: 1) Preventability Beliefs, which assessed participants' beliefs about whether suicide is always or permanently preventable; 2) Associated Distress, which included stress/anxiety about managing suicidality; and 3) Prevention Role, which covered views about personal roles and responsibilities in preventing suicidal behaviours.

Table 2

*Factor Loadings and Communalities From a Principal Components Analysis of the Suicide Prevention – Clinician Questionnaire (Oblique Rotation, N = 135).*

Suicide Prevention Questionnaire Item <sup>a</sup>	Factor 1 (Preventability Beliefs)	Factor 2 (Associated Distress)	Factor 3 (Prevention Role)	Communality
2. Beliefs about actions that will always prevent suicide	<b>.866</b>	-.002	.038	.781
3. Beliefs about actions that will permanently prevent a client from suiciding	<b>.814</b>	-.035	.028	.679
10. Beliefs about the impact of suitable and adequate suicide prevention training	<b>.838</b>	.014	-.022	.688
11. Beliefs about the impact of adequate risk assessment and appropriate follow-up action on suicide prevention	<b>.765</b>	.042	.066	.646
5. Frequently of experiencing stress/anxiety about managing suicidality	-.081	<b>.819</b>	.232	.781
6. Strength of stress/anxiety feelings about managing suicidality	-.093	<b>.677</b>	.335	.633
7. Concerns about being held responsible for a client suicide	.101	<b>.809</b>	-.155	.639
8. Experiencing unacceptable level of workplace stress about the prospect of a client suiciding	.033	<b>.904</b>	-.230	.782
9. Associated stress when not at work	.020	<b>.834</b>	.065	.728
1. Ability to prevent the suicide of a client – in general	.023	-.028	<b>.869</b>	.764
4. Belief that suicide prevention should be one of the main responsibilities of your job	.193	-.092	<b>.710</b>	.643
12. Beliefs about percentage of client suicides that are preventable after undergoing suicide prevention training	.136	.202	<b>.645</b>	.617

*Note.* Factor loadings greater than .6 are shown in boldface.

<sup>a</sup>See Appendix for actual wording.

Guided by the factor loadings in Table 2, three aggregate scores were derived by summing responses to the items allocated to each factor, as follows: Factor 1 (Preventability Beliefs, 4 items: 2, 3, 10, 11), potential range 4-20,  $M = 6.07$ ,  $SD = 3.01$ ,  $Mdn = 5.00$ ; Factor 2 (Associated Distress, 5 items: 5 to 9), potential range 3-25,  $M = 10.79$ ,  $SD = 4.38$ ,  $Mdn = 10.00$ ; and Factor 3 (Prevention Role, 3 items: 1, 4, 12), potential range 3-16,  $M = 8.90$ ,  $SD = 3.12$ ,  $Mdn = 9.00$ . The internal consistency coefficients (Cronbach alphas) for these three factors were, respectively 0.85, 0.87 and 0.72.

## Anxiety and Burnout Among MH Workers – Normative Comparisons

Table 3 presents state anxiety (STAI-S) profiles for the current sample, together with descriptive comparisons with normative samples. The STAI was completed by 127 (94.1%) of the participants. Scores ranged from 20 to 66, with a non-normal distribution (Kolmogorov-Smirnov statistic 0.11,  $p = 0.001$ ) and a positive skew (0.85). The median score was 33, with an interquartile range of 12.75. The mean anxiety scores were comparable to the general Australian adult population, but slightly lower than the original normative samples from [Spielberger \(1983\)](#). The standard deviations also indicated slightly lower variance in distribution compared with other samples.

Table 3

*State-Trait Anxiety Inventory – State Version (STAI-S) Profiles for the Current Study and Normative Samples*

Data Source, Subgroup	<i>N</i>	<i>M</i>	<i>SD</i>	Cronbach Alpha
<b>Current study</b>				
<b>Mental Health workers</b>				
Males	43	34.39	8.18	0.85
Females	84	33.73	10.70	0.94
Combined	127	33.95	9.89	0.92
<b>Normative sub-samples</b>				
<b>Working adults</b>				
Males	1,387	35.72	10.40	0.93
Females	451	35.20	10.61	0.93
<b>Tertiary students</b>				
Males	324	36.47	10.02	0.91
Females	531	38.76	11.95	0.93
<b>General Australian adult population</b>				
Combined (Males: 378; Females: 382)	760	33.91	11.75	0.94

*Note.* Normative sub-samples – see [Spielberger \(1983\)](#) for working adults and tertiary students; and [Crawford et al. \(2011\)](#) for general Australian adult population estimates.

Burnout (MBI) profiles for the current sample are summarised in [Table 4](#). The MBI Emotional Exhaustion and Depersonalisation scales were completed by 134 (99.3%) participants and the Personal Accomplishment scale by 128 (94.8%) participants. The Kolmogorov-Smirnov statistics for these measures also indicated non-normal distributions, with Emotional Exhaustion (0.93) and Depersonalisation (2.02) being positively skewed and Personal Accomplishment being negatively skewed (-1.26); corresponding median scores - Emotional Exhaustion: 18.0; Depersonalisation: 3.0; and Personal Accomplishment: 39.0. In the current study, Emotional Exhaustion scores were reasonably comparable with the normative samples; Depersonalisation scores were lower than the overall normative sample but comparable with the MH occupational sample; while Personal Accomplishment scores were higher than both comparison samples.

Table 4

Maslach Burnout Inventory (MBI) Profiles for the Current Study and Normative Samples.

Data Source, MBI scale	<i>N</i>	<i>M</i>	<i>SD</i>
<b>Current study</b>			
<b>Mental Health workers</b>			
Emotional Exhaustion	134	19.30	11.40
Depersonalisation	134	4.50	4.45
Personal Accomplishment	128	37.68	6.97
<b>Normative samples</b>			
<b>Overall normative sample</b>			
Emotional Exhaustion	11,067	20.99	10.75
Depersonalisation	11,067	8.73	5.89
Personal Accomplishment	11,067	34.58	7.11
<b>Normative sub-sample: Mental Health occupation</b>			
Emotional Exhaustion	730	16.89	8.90
Depersonalisation	730	5.72	4.62
Personal Accomplishment	730	30.87	6.37

Note. Normative samples – see Maslach, Jackson & Leiter, 1996.

Relationships between the three factors derived from the suicide prevention roles and impacts questionnaire and the state anxiety and burnout scales were examined using Pearson's correlations. Scores on Factor 2 (Associated Distress) were positively correlated with state anxiety ( $r = 0.42$ ;  $p < 0.001$ ), MBI Emotional Exhaustion ( $r = 0.48$ ;  $p < 0.001$ ) and MBI Depersonalisation ( $r = 0.31$ ;  $p < 0.001$ ), while scores on Factor 3 (Prevention Role) were positively correlated with MBI Personal Accomplishment ( $r = 0.26$ ;  $p = 0.003$ ).

## Comparisons Between Subgroups Based on Personal Characteristics and Suicidality Experiences

In view of the exploratory nature of the current study, several different (non-independent) binary subgroups were chosen for the major analyses, based on personal characteristics and suicidality experiences: gender (male/female); work location (inpatient/outpatient MH unit); connections with suicide in personal life (yes/no); any experience with a MH workplace related client suicide (yes/no); any formal briefing about increased risk of suicide in MH patients (yes/no); any experience of training in suicide prevention (yes/no); and any experience of training in managing your own distress in relation to client suicide (yes/no). Simple univariate analyses were conducted for each of these subgroup comparisons for the seven outcomes of interest, namely state anxiety (STAI-S), the three burnout (MBI) scales, and the three factors derived from the suicide prevention roles and impacts questionnaire. Mann Whitney U tests were employed for these analyses, considering the non-normal distributions of the continuous variables and the dichotomous nature of the predictor variables. Statistically significant subgroup comparisons for the state anxiety and burnout measures are reported in Table 5, while those for the suicide prevention and roles factors are reported in Table 6.



Table 5  
Statistically Significant Subgroup Comparisons from Univariate Analyses of the State Anxiety (STAI-S) and Burnout (MBI) Scales

Outcome measure, Predictor	Subgroup	N	Mdn	Range	Mean rank	p <sup>a</sup>
<b>Anxiety (STAI-S)</b> Work location (MH unit)	Inpatient	48	29.5	20-53	55.5	0.043
	Outpatient	79	33.0	20-66	69.1	
Training in managing own distress in relation to client suicide	Yes	37	29.5	20-64	54.4	0.062
	No	94	33.0	20-66	68.2	
<b>MBI – Emotional Exhaustion</b> Gender	Male	44	19.5	4-54	76.8	0.039
	Female	89	15.5	2-52	62.2	
Work location (MH unit)	Inpatient	50	12.5	4-54	56.7	0.017
	Outpatient	83	19.0	2-52	73.2	
Training in suicide prevention	Yes	95	19.0	3-54	70.6	0.090
	No	38	13.0	2-50	58.1	
Experienced suicide event – MH workplace	Yes	94	19.0	3-54	72.1	0.018
	No	39	12.0	2-50	54.7	
<b>MBI – Depersonalisation</b> Experienced suicide event – personal life	Yes	67	3.0	0-16	59.5	0.016
	No	67	4.0	0-25	75.5	
Training in managing own distress in relation to client suicide	Yes	37	2.0	0-12	55.8	0.037
	No	96	4.0	0-25	73.3	
<b>MBI – Personal accomplishment</b> Gender	Male	43	37.0	14-48	53.9	0.026
	Female	84	39.0	14-48	69.2	
Experienced suicide event – personal life	Yes	64	40.0	16-48	75.7	0.001
	No	64	37.0	14-46	53.3	

Note. STAI-S: State-Trait Anxiety Inventory – State version; MBI – Maslach Burnout Inventory.  
<sup>a</sup>p value (two-tailed) from Mann-Whitney U.

As shown in Table 5, male MH workers reported higher levels of Emotional Exhaustion and lower levels of Personal Accomplishment. Likewise, MH workers in outpatient settings scored higher on the MBI scale of Emotional Exhaustion, and they also reported higher levels of state anxiety. MH professionals who had experienced a suicide in their own personal lives scored lower on the Depersonalisation scale and higher on the scale of Personal Accomplishment. Receiving training on suicide prevention was associated with higher scores on the MBI scale of Emotional Exhaustion, whereas those who had received training in personal care and stress management scored significantly lower on the MBI scale of Depersonalisation and they also tended to report lower levels of anxiety ( $p = 0.062$ ). Finally, the MH workers who had experienced a workplace related client suicide scored higher on the MBI scale of Emotional Exhaustion.

Table 6

Statistically Significant Subgroup Comparisons from Univariate Analyses of Scores Derived From the Suicide Prevention – Clinician Questionnaire

Suicide prevention views and role, Predictor	Subgroup	N	Mdn	Range	Mean rank	$p^a$
<b>Preventability Beliefs (Factor 1)</b>						
Gender	Male	45	6.0	4-16	77.9	0.020
	Female	89	4.0	4-16	62.3	
<b>Associated Distress (Factor 2)</b>						
Work location (MH unit)	Inpatient	51	8.0	3-22	52.6	< 0.001
	Outpatient	83	11.0	3-24	76.6	
Training in suicide prevention	Yes	96	11.0	3-24	73.7	0.003
	No	38	9.5	3-20	51.8	
Training in managing own distress in relation to client suicide	Yes	37	10.0	3-15	57.3	0.060
	No	97	11.0	3-24	71.4	
Experienced suicide event – MH workplace	Yes	95	11.0	3-24	72.1	0.032
	No	39	10.0	3-23	56.3	
<b>Prevention Role (Factor 3)</b>						
Training in suicide prevention	Yes	96	10.0	3-16	74.5	0.001
	No	38	7.0	3-15	49.9	

<sup>a</sup> $p$  value (two-tailed) from Mann-Whitney U.

As shown in Table 6, male MH workers scored higher than females on Factor 1 (Preventability Beliefs). MH workers in outpatient settings scored higher on Factor 2 (Associated Distress), as did those who had experienced a workplace related client suicide. Interestingly, those who had received training on suicide prevention scored higher on Factor 3 (Prevention Role), but they also reported higher levels on Factor 2 (Associated Distress). Finally, consistent with the state anxiety findings in Table 5, those who had received training in personal care and stress management tended ( $p = 0.060$ ) to report lower scores on Factor 2 (Associated Distress).

## Discussion

The decision to develop a novel questionnaire was taken because of the lack of availability of any validated scales for testing attitudes about managing client suicidal behaviours, although previous questionnaires have surveyed impacts of actual client suicide (Alexander et al., 2000; Dewar et al., 2000). Given the strong and interpretable

factor structure of the questionnaire (see [Table 2](#)), and the observed relationships with both well validated standardised scales (STAI-S and MBI) and other, locally devised, suicidality related questions about previous personal and work experiences, it seems reasonable to suggest that the current findings are meaningful and interpretable. Even so, the limitations of this study must be borne in mind. In particular, the survey requires psychometric validation, the sample size is small and the responses come from employees working in an integrated mental health service in a circumscribed geographical area. Also, it may be that non-respondents have different views or patterns of suicidality experience that are not reflected in the observed responses.

The aim of the current study was to evaluate the impact, if any, on MH workers of their role in managing and dealing with client suicidality. The relationships between the three questionnaire factors, representing attitudes to client suicide, the scaled measures of stress and burnout, and the questions about service provision (such as inpatient versus outpatient work location) are complex but can be understood in terms of carer circumstances and conditions.

Participants working in outpatient environments scored significantly higher on MBI Emotional Exhaustion and on Factor 2 (Associated Distress) indicating greater stress and concerns about client suicidal behaviour. This supports the finding of [Prosser et al. \(1999\)](#) that workers in outpatient settings experience significantly higher levels of stress. These researchers also suggest that the lack of a ceiling to the caseloads of workers in the community, compared with the limit on bed numbers in an inpatient setting, could account for this difference. Here, however, the relationship with Factor 2, probably suggests that managing suicide risk in the uncertain and less controllable setting of the community, as opposed to the more controlled and co-worker supported inpatient setting, significantly contributes to the stress experienced by community MH workers.

Participants who had attended training in suicide prevention scored significantly higher on the MBI Emotional Exhaustion scale and on Factors 2 and 3 (Associated Distress and Prevention Role). Although these results appear to be somewhat anomalous, as they imply that further training results in greater stress, it may simply be the case that those working in higher acuity or more stressful environments are more likely to receive at least some level of generic suicide prevention training. However, it is important to note that those MH workers who had received training in personal care and stress management registered lower scores on the STAI-S and on MBI Depersonalisation and Factor 2 (Associated Distress). Notwithstanding, only one in four clinicians actually reported receiving specific training in managing their “own distress/concerns following the death of a client through suicide”.

The low overall levels of Depersonalisation and high levels of Personal Accomplishment reported by the current sample, together with corresponding links for those with personal experiences of suicide, also tend to suggest that, on the whole, MH workers are a fairly resilient group, which is consistent with findings reported by [Bowers et al. \(2008\)](#) for mental health nurses in acute inpatient settings.

Taken together, these results indicate that training in suicide prevention needs to include a focus on personal self-care and stress management for workers. If training merely emphasises the burden of responsibility on MH workers, without providing help in how to deal with the emotional toll of working with suicidality, then it may be counter-productive, or even destructive, in terms of MH workers' emotional health.

The aim of this project was to investigate the impacts on MH workers of their role in managing suicidality on a daily and ongoing basis. If an important social agenda is to reduce the incidence of suicide (and, demonstrably, it is an important WHO target, implemented via widespread national and community-based prevention initiatives),

and a particular group of workers are charged with the responsibility of conducting suicide prevention on behalf their communities, then it seems incumbent on the architects of such programs to understand how best to support these workers and reduce the negative impacts. This is indicated because of its potential influence on the care MH clients receive, and also from an Occupational Health and Safety perspective, as well as a broader humanitarian perspective of appropriately supporting those who provide an important public service. One continuing avenue for research may be to establish whether our findings that outpatient MH workers experience greater emotional exhaustion and associated distress is generalizable, and to investigate the factors which influence these differences. Such investigation may, for example, lead to implementation of strategies to reduce the burden experienced by outpatient MH workers relative to their inpatient colleagues. This project has asked questions of MH workers that they have not before had an opportunity to answer and has enabled the development of a questionnaire - *Views about Suicide Prevention - Clinical Questionnaire* - which can be used to further investigate and understand the issues that may arise for this workforce and their clients in delivering this potentially stressful aspect of their duties.

## Funding

Funding for this project was provided by the School of Psychology, University of Newcastle, NSW, Australia.

## Competing Interests

The authors have declared that no competing interests exist.

## Acknowledgments

The authors have no support to report.

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## Appendix

<b>Views about Suicide Prevention – Clinician Questionnaire #</b>						Office Use	
One of the roles of mental health clinicians is to manage suicidality. This questionnaire asks about your attitudes and experiences in relation to this part of your work.					☑ Please tick your answers		
1. In general, how <b>preventable</b> is the suicide of a client?	<input type="checkbox"/> <sub>1</sub> Not at all	<input type="checkbox"/> <sub>2</sub> To a small extent	<input type="checkbox"/> <sub>3</sub> Moderately	<input type="checkbox"/> <sub>4</sub> To a great extent	<input type="checkbox"/> <sub>5</sub> Completely preventable	C	
2. How much do you believe there are actions you can take that will <b>always prevent</b> suicide?	<input type="checkbox"/> <sub>1</sub> Not at all	<input type="checkbox"/> <sub>2</sub> Slightly	<input type="checkbox"/> <sub>3</sub> Moderately	<input type="checkbox"/> <sub>4</sub> Strongly	<input type="checkbox"/> <sub>5</sub> Extremely	A	
3. How much do you believe there are actions you can take that will <b>permanently prevent</b> a client from suiciding?	<input type="checkbox"/> <sub>1</sub> Not at all	<input type="checkbox"/> <sub>2</sub> Slightly	<input type="checkbox"/> <sub>3</sub> Moderately	<input type="checkbox"/> <sub>4</sub> Strongly	<input type="checkbox"/> <sub>5</sub> Extremely	A	
4. Do you believe that <b>it should be</b> one of the main responsibilities of your job to prevent suicide?	<input type="checkbox"/> <sub>1</sub> Not at all	<input type="checkbox"/> <sub>2</sub> Slightly	<input type="checkbox"/> <sub>3</sub> Moderately	<input type="checkbox"/> <sub>4</sub> Strongly	<input type="checkbox"/> <sub>5</sub> Extremely	C	
5. How <b>frequently</b> do you experience stress/anxiety about managing suicidality? <small>If you answered "Never", go to Question 7</small>	<input type="checkbox"/> <sub>1</sub> Never	<input type="checkbox"/> <sub>2</sub> Once or twice	<input type="checkbox"/> <sub>3</sub> Sometimes	<input type="checkbox"/> <sub>4</sub> Frequently	<input type="checkbox"/> <sub>5</sub> Very frequently	B	
6. When this occurs, <b>how strongly</b> do you feel stress/anxiety (about managing suicidality)?	<input type="checkbox"/> <sub>1</sub> Slightly	<input type="checkbox"/> <sub>2</sub> Moderately	<input type="checkbox"/> <sub>3</sub> Strongly	<input type="checkbox"/> <sub>4</sub> Very strongly	<input type="checkbox"/> <sub>5</sub> Extremely	B	
7. How strongly have you felt concerns that you will be <b>held responsible</b> for a client suicide? <small>Leave BLANK if concerns Never experienced.</small>	<input type="checkbox"/> <sub>1</sub> Slightly	<input type="checkbox"/> <sub>2</sub> Moderately	<input type="checkbox"/> <sub>3</sub> Strongly	<input type="checkbox"/> <sub>4</sub> Very strongly	<input type="checkbox"/> <sub>5</sub> Extremely	B	
8. Do you ever experience what you consider to be an <b>unacceptable level of workplace stress</b> about the prospect of a client suiciding?	<input type="checkbox"/> <sub>1</sub> Never	<input type="checkbox"/> <sub>2</sub> Once or twice	<input type="checkbox"/> <sub>3</sub> Sometimes	<input type="checkbox"/> <sub>4</sub> Frequently	<input type="checkbox"/> <sub>5</sub> Very frequently	B	
9. Does such stress ever effect you <b>when you are not at work</b> ?	<input type="checkbox"/> <sub>1</sub> Never	<input type="checkbox"/> <sub>2</sub> Once or twice	<input type="checkbox"/> <sub>3</sub> Sometimes	<input type="checkbox"/> <sub>4</sub> Frequently	<input type="checkbox"/> <sub>5</sub> Very frequently	B	
10. Do you believe that with <b>suitable and adequate suicide prevention training</b> you can always prevent suicide?	<input type="checkbox"/> <sub>1</sub> Not at all	<input type="checkbox"/> <sub>2</sub> Slightly	<input type="checkbox"/> <sub>3</sub> Moderately	<input type="checkbox"/> <sub>4</sub> Strongly	<input type="checkbox"/> <sub>5</sub> Extremely	A	
11. Training in suicide prevention often involves learning how to conduct a risk assessment. Do you believe that suicide can <b>always be prevented</b> with adequate risk assessment and appropriate follow-up action?	<input type="checkbox"/> <sub>1</sub> Not at all	<input type="checkbox"/> <sub>2</sub> Slightly	<input type="checkbox"/> <sub>3</sub> Moderately	<input type="checkbox"/> <sub>4</sub> Strongly	<input type="checkbox"/> <sub>5</sub> Extremely	A	
12. What percentage of client suicides do you believe a clinician would be able to prevent <b>after undergoing suicide prevention training</b> ?	<input type="checkbox"/> <sub>1</sub> 0%	<input type="checkbox"/> <sub>2</sub> 10 – 20%	<input type="checkbox"/> <sub>3</sub> 30 – 40%	<input type="checkbox"/> <sub>4</sub> 50 – 60%	<input type="checkbox"/> <sub>5</sub> 70 – 80%	<input type="checkbox"/> <sub>6</sub> 90 – 100%	C
Office Use # Version 1 (April, 2013): Hunter New England Mental Health Service and the University of Newcastle, Australia. See Ross et al., Psychology, Community & Health, 2016, Vol. 5(1). Score zero (0) for Questions 6 and 7 if left BLANK.				Subscale	Total		
				A: Preventability Beliefs (4 items)			
				B: Associated Distress (5 items)			
				C: Prevention Role (3 items)			