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# Religiousness, religious coping methods and distress level among psychiatric patients in Malaysia

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## Abstract

**Background:** Patients having psychiatric diagnoses often experience high level of distress. Religiousness is often used by them as part of their coping mechanism and problem-solving strategies.

**Objective:** To determine the level of religious commitment and coping methods in psychiatric patients and its relationship with distress level.

**Methods:** Religious commitment and coping patterns were measured with the Duke University Religious Index (DUREL) and Brief RCOPE, respectively. Psychopathology was assessed using the Brief Psychiatric Rating Scale (BPRS) and distress level was assessed with the Depressive, Anxiety and Stress Scale (DASS). Social support and experiences of recent threatening events were measured with the Multidimensional Scale of Perceived Social Support (MSPSS) and Life Threatening Events (LTE).

**Results:** A total of 228 patients were included in this study with a mean age of 40.2 years. The majority were male, Malay, Muslim, single and with psychotic disorder. The subjects had a high level of religious commitment and had used more positive coping methods. Negative religious coping, psychiatric symptoms and diagnosis of anxiety disorder or major depression were significantly associated with high distress level. Higher religious commitment was significantly associated with lower distress ( $p < .05$ ).

**Conclusion:** Psychiatric patients were religiously committed and used more positive religious coping methods. Practices of negative religious coping, severe psychiatric symptoms and anxiety/depression were associated with higher distress.

## Keywords

religious commitment, religious coping, distress, psychiatric patient, Malaysia

## Introduction

Religion is defined by Koenig (2007) as beliefs, practices and rituals related to the sacred. Religious commitment is the degree a person adheres to his or her religious values, beliefs, and practices (Hill & Hood, 1999). Koenig and Larson (2001) stated that religious beliefs and practices promote an optimistic and positive view towards daily experiences. In stressful situations, religion is often used for coping or adaptation, such as a cry out for help to God or performing religious rituals (Koenig, 2007). There are different types of religious coping methods or strategies.

Positive religious coping (e.g. prayer, benevolent religious appraisals of negative situations, etc.) reflects a secure relationship with God, a belief in a benevolent purpose to life, and a sense of connectedness with a religious community. In contrast, negative religious coping (e.g. attributions of situations to a punishing God, feelings of abandonment by God, etc.) reflects a struggle that grows

out of a perception of a tenuous relationship with God, a more ominous view of life, and a sense of disconnectedness with a religious community (Carver et al., 1997; Carver, Scheier, & Weintraub, 1989; Pargament, 1997; Tarakeshwar et al., 2006).

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It has been shown that positive religious coping improves psychological well-being and lowers distress levels or clinical psychopathologies (George & Ellison, 2002; Lewis, Maltby, & Day, 2004; Pargament, Smith, Koenig, & Perez, 1998). A meta-analysis of 34 studies on religious activity and various aspects of psychological distress found that religious activity was able to reduce the level of distress (Hackney & Sanders, 2003). In contrast, dysfunctional forms of religious coping were related to poor mental health and high distress level (Miller & Thoresen, 2003; Pargament, Koenig, & Perez, 2000). Ano and Vasconcelles (2005) conducted a meta-analysis of 49 studies investigating the relationships between positive and negative forms of religious coping and adjustment to stress. They found that negative forms of religious coping are generally related to negative adjustment.

Psychiatric disorders are highly disabling illnesses. They have a huge impact on the thoughts, behaviours and interpersonal interactions of the patients. It is known that patients with psychiatric disorders experience a high level of distress (Payton, 2009). Religiosity is used as a mediator in coping with psychological distress (Sternthal, Williams, Musick, & Buck, 2010). Mela et al. (2008) conducted a study at the Regional Psychiatric Centre Praires on 183 forensic psychiatric patients. The Duke Religious Index (DRI) was used and the result showed that there was high religious commitment among the subjects. More than one-third were attending worship at least once weekly and non-organizational religious activities or private religious commitment were practised at least daily by almost half of the respondents. Another study (Tepper, Rogers, Coleman, & Malony, 2001) that surveyed 406 patients with persistent mental illness reported that the majority (80%) had used some type of religious activity or belief to cope with their daily psychiatric symptoms, frustration or difficulties. These findings are particularly relevant to the present study because it supports the notion that some forms of religious coping are more effective than others and may be helpful in handling emotional distress.

Malaysia is a multi-ethnic and multi-religious country. The majority of Malaysians are Muslims, followed by Christians, Buddhists and Hindus. At our best knowledge, there is no previous study examining the level of religious commitment among patients with psychiatric illness and its correlation with distress level and clinical psychopathology in Malaysia. Hence, we conducted this study in view of the need of integrating religiosity in assessment, treatment and research in the field of mental illness.

## Objective

The primary objective of this study was to determine the level of religious commitment and coping methods among psychiatric outpatients in Malaysia. The secondary objective was to examine the correlations between religious

commitment, religious coping methods and other possible factors with the level of distress.

## Methods

### Study subjects and setting

This was a cross-sectional study conducted at the psychiatric outpatient clinic, University Malaya Medical Centre (UMMC), Kuala Lumpur. The psychiatric outpatient clinic consists of 'walk-in' and 'new cases' clinics, operating every weekday morning. Patients who visited the clinic during the study period (December 2010 to February 2011) were approached and an explanation was given regarding this study. Those who consented to participate were screened for the inclusion and exclusion criteria as follows.

### Inclusion criteria

- Age 18 years and above.
- Diagnosed with major psychiatric disorder based on DSM-IV criteria.
- Able to understand and read Bahasa Melayu or English.

### Exclusion criteria

- Diagnosed with dementia or mental retardation.
- Acutely psychotic or disturbed (Brief Psychiatric Rating Scale (BPRS) score of 4 or more on the following items: grandiosity, suspiciousness, unusual thought content, hallucinations, conceptual disorganization).
- Having a delusion of religiosity based on Yangarber-Hicks (2004) criteria.

The religious commitment and coping methods of the subjects enrolled in this study were measured using the Duke University Religious Index (DUREL) and Brief RCOPE, respectively. The psychiatric symptoms or psychopathology were assessed using the Brief Psychiatric Rating Scale-Expanded Version (BPRS-E) and distress level was assessed using the Depressive, Anxiety and Stress Scale (DASS). Social support and experiences of recent threatening events were measured with the Multidimensional Scale of Perceived Social Support (MSPSS) and Life Threatening Events (LTE). The socio-demographic data (age, gender, ethnicity, religion, marital status, educational level, employment) of the subjects was collected using a pre-designed questionnaire. Clinical information on psychiatric diagnosis, duration of illness and history of admissions was obtained through interview or was retrieved from the medical case records.

Ethical approval was obtained from the Medical Ethical Committee, University Malaya Medical Centre prior to the commencement of the study.

### Measurement tools

**BPRS-E.** The BPRS was developed by Overall and Gorham (1962, 1976, 1988). It is commonly used for assessment of major psychotic and non-psychotic symptoms in individuals with major psychiatric disorders. The rating is based upon observation made by the clinician or rater during a 15–30-minute interview and subject's verbal report. An expanded standardized version (BPRS-E) was adapted by Ventura, Green, Shaner and Liberman (1993) and it has been demonstrated that symptoms assessed in the BPRS-E are rather stable cross-culturally.

**DUREL.** This instrument was used to measure religious commitment of the respondent. It consists of five items covering three major dimensions of religious commitment: organization religious activity (ORA, one item); non-organizational religious activity (NORA, one item); and intrinsic religiosity (IR, three items). ORA consists of public religious activities, such as frequency of attending religious services or participating in other group-related religious activity. NORA consists of religious activities performed in private, such as prayer or reading the Bible. IR is the degree of personal religious commitment or motivation. The DUREL has an overall score range from 5 to 27 (Koenig, Meador, & Parkerson, 1997). It was translated into the Malay language and has been validated (Nurasikin, Aini, Aida, & Ng, 2010). Cronbach's  $\alpha$  was good (.80) in this study.

**Brief RCOPE.** This scale consists of 14 items to measure the religious coping methods of the respondent. It was designed to offer an efficient, theoretically meaningful way to integrate religious dimensions into models and studies of stress, coping and health. The scale consists of seven positive coping items (P COPE) and seven negative coping items (N COPE). The score of each item ranges from 0 ('not at all') to 3 ('a great deal'). The total score ranges from 0 to 21 for the subscale of positive and negative items (Pargament et al., 2000). The reliability and validity of the translated Malay version of Brief RCOPE was established in a previous study (Yusoff, Low, & Yip, 2009). P COPE and N COPE had high internal consistency in this study (Cronbach's  $\alpha$  for P COPE = .87, N COPE = .88).

**DASS21.** The 21-item DASS measures distress level and has been widely used in many studies. It consists of depression, anxiety and stress items. Each measure consists of seven items. The total score ranges from 0 to 63. The total for each subscale ranges from 0 to 21 (Lovibond & Lovibond, 1995). The scale was translated into the Malay language and has been validated (Musa, Fadzil, & Zain, 2007). All subscales showed high internal consistency (Cronbach's  $\alpha$  for depression = .87, anxiety = .85, stress = .90).

**LTE.** This scale consists of 12 items that are used to determine the experience of negative life events over the past six months (Brugha & Cragg, 1990). The questionnaire addresses the presence or absence of each

live-threatening event by frequency. It was translated into the Malay language and its reliability has been established (Ng, Amer Siddiq, Aida, Koh, & Nor Zuraida, 2009).

**MSPSS.** Zimet, Dahlem, Zimet and Farley (1988) designed this instrument specifically to address the adequacy of social support. It is a 12-item instrument designed to assess the perception of social support from three specific sources: family, friends and significant other. It was translated into the Malay language and has been validated in a previous study (Ng, Amer Siddiq, Aida, Zainal, & Koh, 2010). In this study, the instrument showed high internal consistency with Cronbach's  $\alpha$  of 0.93 for significant others, 0.88 for family and 0.96 for friends.

### Statistical analysis

All data were analysed using Statistical Package Social Science version 16.0. Descriptive statistics were performed for the characteristics data of the subjects. The level of religious commitment was estimated. Spearman's rho ( $\rho$ ) correlation was used to measure magnitude and direction between religious commitment and coping methods. Simple linear regression analysis was conducted to examine the association of religious commitment, coping methods, clinical features, socio-demographic factors, negative life events, social support and psychiatric symptoms with distress level. Significant variables ( $p < .05$ ) were included in the multiple linear regression analysis. Dummy variables were created for all categorical data with more than two groups for analysis. All analyses were two sided with a significant value of  $p < .05$ .

### Results

A total of 228 patients were included in the study. More than half were male (54.4%) and single (52.6%), and the most common ethnicity and religion were Malay (44.7%) and Muslim (47.4%), respectively. Most of the patients had at least secondary education (97.8%) and more than half were employed (55.7%). Schizophrenia or related psychotic disorders were the most common psychiatric disorder (36%) and average duration of illness was 8.5 years (Table 1).

Table 2 presents the DUREL score, which measures religious commitment of the respondent. The results of DUREL ranged from a 5 to 27, with a mean of 20.52 (SD = 5.40). There was a significant inverse weak relationship between NORA and distress (DASS) and between IR and DASS ( $\rho = -0.14, -0.15; p < .05$ ). The level of religious coping methods (Brief RCOPE) among the respondents is also shown in Table 2. The total score of positive coping method (P COPE) ranged from 7 to the highest score of 28, and for negative coping (N COPE) ranged from 7 to the highest of 28. For coping method, only N COPE showed a significant

**Table 1.** Socio-demographic and clinical characteristic of the subjects ( $N = 228$ ).

| Characteristic                                                              | <i>M</i> (SD) | <i>n</i> (%) |
|-----------------------------------------------------------------------------|---------------|--------------|
| <b>Age (years)</b>                                                          | 40.26 (13.25) |              |
| <b>Gender</b>                                                               |               |              |
| Male                                                                        |               | 124 (54.4)   |
| Female                                                                      |               | 104 (46.6)   |
| <b>Race</b>                                                                 |               |              |
| Malay                                                                       |               | 102 (44.7)   |
| Chinese                                                                     |               | 51 (22.4)    |
| Indian                                                                      |               | 63 (27.6)    |
| Other                                                                       |               | 12 (5.3)     |
| <b>Religion</b>                                                             |               |              |
| Muslim                                                                      |               | 108 (47.4)   |
| Buddhist                                                                    |               | 30 (13.2)    |
| Hindu                                                                       |               | 43 (18.9)    |
| Christian                                                                   |               | 34 (14.9)    |
| Other                                                                       |               | 13 (5.7)     |
| <b>Marital status</b>                                                       |               |              |
| Single                                                                      |               | 120 (52.6)   |
| Married                                                                     |               | 87 (38.2)    |
| Divorced                                                                    |               | 16 (7.0)     |
| Widowed                                                                     |               | 5 (2.2)      |
| <b>Educational level</b>                                                    |               |              |
| Primary                                                                     |               | 5 (2.2)      |
| Secondary                                                                   |               | 133 (58.3)   |
| Tertiary                                                                    |               | 90 (39.5)    |
| <b>Employment</b>                                                           |               |              |
| Employed                                                                    |               | 127 (55.7)   |
| Unemployed                                                                  |               | 84 (36.8)    |
| Retired                                                                     |               | 17 (7.5)     |
| <b>Psychiatric diagnosis</b>                                                |               |              |
| Schizophrenia or related psychosis                                          |               | 82 (36.0)    |
| Bipolar mood disorder                                                       |               | 32 (14.0)    |
| Major depression                                                            |               | 57 (25.0)    |
| Substance abuse                                                             |               | 21 (9.2)     |
| Anxiety disorders                                                           |               | 19 (8.3)     |
| Other                                                                       |               | 17 (7.5)     |
| <b>Duration of illness (years)</b>                                          | 8.45 (10.21)  |              |
| <b>History of admission</b>                                                 |               |              |
| Yes                                                                         |               | 114 (50.0)   |
| No                                                                          |               | 114 (50.0)   |
| <b>If yes, how long ago of last admission (years)? <math>n = 114</math></b> | 1.98 (4.29)   |              |

positive moderate relationship with DASS ( $\rho = 0.47$ ,  $p < .01$ ). No significant relationship was found between ORA and DASS and between P COPE and DASS ( $\rho = -0.09$ ,  $0.02$ ,  $p > .05$ ).

Simple linear regression analysis showed that negative coping methods (N COPE scores), religious commitment (DUREL), psychopathology (BPRS), anxiety disorder, major depression, schizophrenia and presence of recent life threatening events were associated with level of distress among the respondents ( $p < .05$ ). These factors were

**Table 2.** The level of religious commitment (DUREL), coping methods (Brief RCOPE) and correlation with distress (DASS) of the study subjects ( $N = 228$ ).

| Variable           | <i>M</i> (SD) | Range | DASS ( $\rho$ ) |
|--------------------|---------------|-------|-----------------|
| <b>DUREL</b>       |               |       |                 |
| ORA                | 3.78 (1.70)   | 1–6   | -0.09           |
| NORA               | 4.07 (1.89)   | 1–6   | -0.14*          |
| IR                 | 12.68 (3.06)  | 3–15  | -0.15*          |
| Total              | 20.52 (5.40)  | 5–27  | -0.19*          |
| <b>Brief RCOPE</b> |               |       |                 |
| P COPE             | 21.18 (5.53)  | 7–28  | 0.02            |
| N COPE             | 11.66 (4.80)  | 7–28  | 0.47**          |

DUREL = Duke Religion Index  
 ORA = Organizational religious activity  
 NORA = Non-organizational religious activity  
 IR = Intrinsic religiosity  
 Brief RCOPE = brief religious coping method  
 N COPE = negative coping method  
 P COPE = positive coping method  
 $\rho$  = Spearman's rho correlation  
 \*  $p < .05$ , \*\*  $p < .01$

included in the multiple linear regression analysis. The results illustrate that negative coping methods, BPRS scores, anxiety disorder and major depression were significantly associated with higher distress level, while religious commitment was significantly associated with lower distress level (Table 3). With five significant variables, the model explained 29.3% of the variation of distress level ( $R^2 = 0.293$ ).

## Discussion

Based on the measurement with DUREL, the mean religious commitment level obtained from this study was 20.52 (SD = 5.40), which is higher than a previous study (Mela et al., 2008) among a Canadian psychiatric population ( $M = 16$ , SD = 6). In the current study religious commitment is significantly associated with lower distress, which is consistent with previous studies (Hackney & Sanders, 2003; Koenig & Larson, 2001). It was believed that religious commitment was one of the coping mechanisms in handling distress. However, no relationship was found between ORA and distress level. This finding suggests that ORA, such as attending a religious institution to perform rituals or a religious meeting, did not affect the patient's distress level. This finding is contradictory to a previous study that reported more-frequent worship attenders had less distress in patients with depression (Baetz et al., 2009). An increase in NORA was related to low distress level as the results showed a significant, but relatively low, inverse relationship between the two ( $\rho = -0.140$ ,  $p < .05$ ). This finding supported that adherence to private religious activity such as prayer, meditation or reading the Bible/Qur'an had somewhat contributed to lowering the distress level among

**Table 3.** Factors associated with distress (DASS) among study subjects ( $N = 228$ ).

| Variables                          | SLR                     |          | MLR                     |          |          |
|------------------------------------|-------------------------|----------|-------------------------|----------|----------|
|                                    | b <sup>a</sup> (95% CI) | <i>p</i> | b <sup>b</sup> (95% CI) | <i>t</i> | <i>p</i> |
| N COPE                             | 1.26 (0.92, 1.61)       | < .001   | 1.13 (0.81, 1.46)       | 6.90     | < .001   |
| DUREL                              | -0.39 (-0.73, -0.03)    | .034     | -0.39(-0.70,-0.08)      | -2.50    | .013     |
| BPRS                               | 0.89 (0.48, 1.31)       | < .001   | 0.63 (0.26, 1.00)       | 3.37     | .001     |
| Anxiety disorder                   | 8.67 (2.15, 15.21)      | .009     | 10.07 (4.33,15.80)      | 3.46     | .001     |
| Major depression                   | 6.23 (2.08, 10.38)      | .003     | 5.65 (2.01, 9.28)       | 3.06     | .003     |
| Schizophrenia or related psychosis | -6.26 (9.99, -2.53)     | .001     | -                       | -        | -        |
| LTE                                | 1.83 (0.03, 3.62)       | .047     | -                       | -        | -        |

<sup>a</sup>Crude regression coefficient

<sup>b</sup>Adjusted regression coefficient

SLR = simple linear regression

MLR = multiple linear regression ( $R^2 = 0.293$ ; the model reasonably fits well; model assumptions are met; there is no multicollinearity problem detected)

DASS = Depression, Anxiety and Stress Scale

N COPE = negative coping items

DUREL = Duke Religion Index

BPRS = Brief Psychiatric Rating Scale

LTE = Life Threatening Events

the mentally ill patients. Meanwhile, high IR was related to low distress level ( $\rho = -0.150$ ,  $p < .05$ ). Thus, high IR was also one of the mediators to low distress level among psychiatric patients.

Our study failed to demonstrate the relationship between positive religious coping methods and distress level. This finding was contradictory to previous studies reporting that positive coping is correlated with lower distress (Ano & Vasconcelles, 2005; Lewis et al., 2005; Pargament et al., 1998). It can be speculated that high use of positive religious coping, such as religious purification and spiritual connection, were common among psychiatric patients in a Malaysian population and it did not affect their distress level. In contrast, this study provided more evidence that high use of negative religious coping was related to greater distress among psychiatric patients. This finding is consistent with previous studies (Ano & Vasconcelles, 2005; Phillips & Stein, 2007). This result indicated that the expression of coping, such as a punishment from God and a demonic reappraisal, were dysfunctional forms of coping, which was associated with higher level of distress among the mentally ill patients.

Apart from negative religious coping, psychiatric symptoms and certain psychiatric diagnoses were found to be significantly associated with high distress level. It is known that patients with more psychiatric symptoms suffer from a higher level of distress and have lower distress tolerance (Leyro, Zvolensky, & Bernstein, 2010). This is again proven in the results of current study. In addition, this study has found that patients who were diagnosed with anxiety disorder and major depression had a significantly higher level of distress. Anxiety disorders such as generalized

anxiety disorder and panic attack shared a major symptom of severe fear or worry that was persistent and pervasive (Candilis et al., 1999; Fricchione, 2004). Apart from fear, anxiety disorder also involves a wide range of physical symptoms such as palpitations, headaches and shortness of breath. It can be speculated that patients with anxiety disorder experience a higher distress level. However, the anxiety patients in this study were only represented by 8.3% of the total. A study with a larger sample size of anxiety patients is needed to obtain a robust finding. Major depression is a form of an affective disorder that is characterized by persistent sadness, hopelessness and social withdrawal. Patients may have negative thoughts congruent with the depressive symptoms. A severe form of major depression could lead to the patient committing suicide (Belmaker & Agam, 2008). There have been many reports showing the association between depression and distress in various study subjects such as medical students, interns and diabetic patients (Fisher, Glasgow, & Strycker, 2010; Hsu & Marshall, 1987; Roberts et al., 2010).

## Conclusion

In conclusion, there was a high religious commitment among the psychiatric patients in this study and this was related to a lower distress level. Meanwhile, negative religious coping and psychiatric symptoms were related to a higher distress level. Patients with a diagnosis of anxiety disorder or major depression were more distressed. Mental health services should address the importance of religious belief and integrate it into the management plan for better psychological well-being of the mentally ill patient.

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