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DEPRESSION AND ANXIETY FOLLOWING OPEN HEART SURGERY: MEDIATION OF COPING, SPIRITUAL STRUGGLE AND INTERLEUKIN-6

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Introduction: Factors pertaining to religion and spirituality have been linked with well-being and adequate coping. Few studies have investigated negative aspects of religious coping, such as spiritual struggle.

Objectives: Based on multidisciplinary literature and previous findings, our study's objectives are to estimate the parallel psychophysiological pathways from pre-operative distress to post-operative depression in patients undergoing open heart surgery.

Aims: The study's aims are to examine the association in depression, anxiety, and how coping, spiritual struggle and interleukin-6 play a role in patients following open heart surgery.

Methods: Plasma samples for interleukin-6 (IL-6) were obtained before open heart surgery. Patients' history and demographic information obtained through interviews 2 days before surgery. Follow up interview for mental health and religious were conducted before and after surgery.

Results: The results showed that a link between spiritual struggle and IL-6 mediated the indirect effects of pre-operative anxiety on post-operative depression. Anxiety had positive indirect effects on post-operative hostility. Further, hope played a protective mediating role to moderate the undesirable influences of the spiritual struggle-IL-6 link and maladaptive coping on post-operative mental health attributes.

Conclusions: Our study estimated important psychophysiological pathways from pre-operative distress to post-operative maladjustment. To our knowledge, this model is the first analysis to demonstrate the significant mediating effect of the spiritual-IL-6 link, alongside that of positive religious coping and other maladaptive coping, in this population.