## Effectiveness of progressive muscle relaxation in reducing depression, anxiety and stress among haemodialysis patients attending a Public Hospital at Central Java Indonesia

## **ABSTRACT**

The increasing trend of Chronic Kidney Disease (CKD) prevalence in Indonesia is a public health concern as it increases mortality, morbidity and burden of disease that has great implication on the health economic. In addition, CKD patients who are more likely to undergo hemodialysis is commonly associated with psychological problems such as depression, anxiety and stress and these have added more to the disease burden. Immediate measures such as progressive muscle relaxation (PMR) to reduce the psychological symptoms is of great importance before the symptoms progress into psychiatric disorders. The study was aimed to evaluate the effectiveness of PMR in reducing symptoms of depression, anxiety and stress among patients undergoing hemodialysis. It was a quasi-experimental, pretest-posttest control study that recruited 60 eligible respondents who underwent hemodialysis and was randomly allocated into intervention and waitlist control groups. Respondents in the intervention group performed PMR twice a day for two weeks. Mean scores of depression, anxiety and stress of respondents were examined before and after intervention using Depression, Anxiety and Stress Scale-21 questionnaire (DASS-21). Results showed that mean scores of depression, anxiety and stress differed significantly before and after intervention between groups and within the intervention group (p<0.05). PMR was effective to reduce the psychological symptoms among patients underwent hemodialysis. This highlight the importance to screen psychological symptoms among those patients and PMR should be taught to them as one of the stress-reducing measures.><0.005). PMR was effective to reduce the psychological symptoms among patients underwent hemodialysis. This highlight the importance to screen psychological symptoms among those patients and PMR should be taught to them as one of the stressreducing measures.

**Keyword:** Hemodialysis; Progressive muscle relaxation (PMR); Depression; Anxiety; Stress