

### **3. Abstract**

#### **3.1 Background**

WHO estimates that depression and HIV/AIDS are forecasted to be the world's two leading causes of disability by 2030. Depression is the most frequently observed psychiatric disorder among HIV patients. The effect of depression on adherence among MSM HIV patients has not been well studied in the Philippines. Depression is commonly undiagnosed and consequently untreated which leads to a negative influence on ART adherence. Other risk factors such as HIV-related stigma, self-body image satisfaction, and nutritional status are recognized as a potential barrier to access HIV prevention and treatment services issues and poor adherence. Social and family support are essential in patient's lives to support disclosure process, daily routine activities, medical assistance, and psychological support which help patients to stick on the treatment regimen and improve their treatment outcomes and Quality of Life. The main objective of this study is to assess the prevalence of depression and its effect on ART adherence among adult ( $\geq 18$  years) MSM HIV outpatients enrolled on ART in the Sustained Health Initiatives of the Philippines (SHIP clinic) in Manila.

#### **3.2 Methodology**

A nested cross-sectional study was conducted amongst outpatients of SHIP clinic. The Hospital Anxiety and Depression Scale (HADS) was used to screen depressive symptoms during the scheduled visit at the clinic. ART adherence was self-reported using a visual scale questionnaire covering the last 30 days. Structured questionnaires were used for measuring risk factors and demographic data. Bio-

electrical impedance analysis (BIA) device was used to measure body composition. Data collection was conducted with a tablet-based questionnaire developed in Open Data Kit to assess depression, anxiety, self-esteem, social and family support, alcohol behavior, stigma, and body image. Logistic regression was used to determine associations between depression or other risk factors and ART adherence.

### **3.3 Result**

176 participants were recruited from the SHIP clinic until the end of June 2018. Of 176 patients, 39 (22.2%) were depressed (defined as HADS score  $\geq 8$ ) and 21 (11.9%) were non-adherent to the medications (defined as  $\leq 95\%$  of medication taken as prescribed). The most common reason to skip pills was simply forgotten (17 out of 21). Only 2 of non-adherent patients answered the reason of skip dose was because of depression. The crude odds ratio (OR) between depression score and non-adherence was 1.14 (95%CI: 1.02-1.27). The adjusted OR between depression score and non-adherence for patients with less lean body muscles (defined patients with above the mean) was 1.39 (95%CI: 1.10 – 1.76) p-value 0.0060 while the OR for patients with more lean body muscles was 1.12 (95%CI: 0.94 – 1.35). SFS and BI were significantly associated with both depression and non-adherence. Factors significantly associated with depression included: using intravenous drugs, having a relationship, anxiety score, self-esteem score, stigma score.

### **3.4 Conclusion**

Depression is a common symptom among HIV patients. However, most non-adherent patients did not answer that feeling depressed was a reason why they did not take ART medications. Moreover, the unrecognized or neglected depression was affecting

the adherence of a patient with less physical practice along with social family support and body image. Further prospective studies are needed to address the causal/ reverse causal pathway between depression and non-adherence and if improving HIV patients' lean body muscle by providing protein enriched nutrition supplement or physical practice such as aerobics exercise mitigates their depression and also improve the adherence level or not.