## P01-50 - HORMONAL STUDY OF DEPRESSION WITH CO MORBID ERECTILE DYSFUNCTION

**M. Khan**<sup>1</sup>, N. Sana<sup>2</sup>, M. Gull<sup>3</sup>, Z. Mukhtar<sup>4</sup>, H. Chaudhry<sup>3</sup>

<sup>1</sup>Psychiatry, <sup>2</sup>Psychology, Sexual Health Institute of Pakistan, <sup>3</sup>Psychology, Ganga Ram Hospital, <sup>4</sup>Psychology, AZM Hospital, Lahore, Pakistan

**Background:** Erectile dysfunction is twice common in patient with depression .Testosterone plays vital role in erectile function. Low testosterone level is found in patients of depression. High level of prolactin has depressive effect on libido function .Hypogonadism and hyperprolactinemia can be the causative factor for depression. Hormonal changes can be both cause and effect of depression with ED.

**Method:** In sample of 76 patients having depression with co morbid ED blood levels of prolactin, and free testosterone were determined.

Half of patients were treated with sex friendly antidepressants while in other half mesterolone and piribedil were used as adjunct medicines.

**Results:** In 9.2% free testosterone level was below than reference value. In 28.9% prolactin level was high.51.31 % were found having border line free testosterone level.

In younger age group free testosterone level was lower than older age group. There exist inverse relation between prolactin level and free testosterone level .Patients who were given adjunct medication showed rapid improvement both for depression and erectile dysfunction.

**Discussion:** Reduced level of free testosterone and high level of prolactin has bilateral relation with depression with co morbid ED. Although prevalence of hypogonadism and hyperprolactinemia is low in the study yet high numbers of borderline cases are of great significance. It is postulated that fall in sexual function is directly proportional to change in levels of these hormones from the base line that are reversed by adjunct medicines.

**Conclusion:** In patients with concomitant major depression and erectile dysfunction hormonal changes plays important role.