7. CONCLUSION

The overall incidence of ADRs in patients with mental illness was 37.6%. Psycholeptics (45.8%) and psychoanaleptics (42.2%) were the commonest class of medication implicated in ADRs while, escitalopram (15.9%) and olanzapine (12.1%) were the most commonly implicated individual medications. Gastrointestinal system (22.7%) was the commonly affected system organ class and dry mouth was the frequently reported ADR. Long-term ADRs accounted for 14.7% of the total ADRs, while short term ADRs accounted for 85.6%. About one half of the ADRs were ‘probable’ in their causal relationship and 76.5% of the ADRs were ‘mild’ in their severity, while majority of ADRs were ‘non serious’ in nature. Predictable and preventable reactions accounted for 76.7% and 18.7% respectively. Female gender (p=0.002), patients presented with co morbid conditions (p=0.001), and drug-drug interactions (p=0.000) were the predictors of both short & long-term ADRs. The total and average cost associated with the management of ADRs was INR 114731.00/- and INR 482 respectively. The incidence of ADI with respect to the total number DDIs was 12%. Pharmacodynamic interactions accounted for the majority (68.5%) of ADIs. One-half of the ADIs were caused by moderate DDIs. Majority (64.7%) of ADIs were ‘probable’ in their causal relationship. Patients receiving more than five drugs were found to have six times higher risk in developing ADIs than the patients receiving less than five drugs [OR 7.024  95% CI; 2.745-17.976; P=000].

The study observed that one-third of patients with mental disorders developed ADRs. Also, ADRs resulted in significant health and economic burden to patients with mental illness. As considerable number of ADRs were due to DDI and were preventable, it is important to develop and implement strategies to overcome such
adverse consequences occurring due to DDIs. An early detection and prevention of potential DDIs may result in improved therapeutic outcomes and decreased unnecessary healthcare expenditure. Clinical pharmacist can play a vital role in the detection, prevention and management of ADIs.
8. FUTURE DIRECTIONS

- Develop and implement strategies to prevent/ minimize the ADRs in psychiatric practice.
- Establish information management systems to detect and report adverse drug events in mental health services.
- Assess and prevent medication errors resulting in ADRs.
- Implementation of consumer reporting of ADRs
- Educating patients/care givers about the safe and quality use of their medicines and integrating into the routine care planning and monitoring.
- Develop and implement clinical practice guidelines in mental health practices to improve patient safety.
9. LIMITATIONS

- Drug-drug interactions leading to adverse reaction were not confirmed objectively by measuring the plasma concentration of suspected drugs.
- The difference in severity levels between the DDI-checkers poses a challenge in classifying the DDIs.
- The relatively homogeneous study sample may limit the generalisability of our findings to other populations.