

Assessment of Adverse Drug Reaction Pattern and Frequency in Oncology Patients; A Retrospective Cross –sectional Study

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BACKGROUND

Cancer therapy carries substantial ADR risk because of potent drugs, polypharmacy, narrow therapeutic indices and comorbidity. Local evidence from specialized cancer hospitals in Pakistan is limited. Systematic ADR surveillance can support earlier detection, prevention and safer chemotherapy.

OBJECTIVES

- Describe the types and frequency of chemotherapy-associated ADRs.
- Assess probability, severity and preventability using standardized tools.
- Identify risk factors and inform patient-safety recommendations.

METHODS

DESIGN	Retrospective observational study
SETTING	Shaukat Khanum Memorial Trust; ADR cases identified through the Hospital Information System (HIS)
SAMPLING	Census sampling of all identified ADR cases during the study period
ELIGIBILITY	Included registered cancer patients; excluded non-cancer and diagnostic patients
ANALYSIS	SPSS and Microsoft Excel

CONCLUSION

Systematic ADR monitoring at SKM characterized the burden, severity, outcomes, management and preventability of reactions in cancer patients. Intensive surveillance can support early detection, reduce recurrence in subsequent chemotherapy cycles and strengthen the safe, rational use of anticancer medicines.

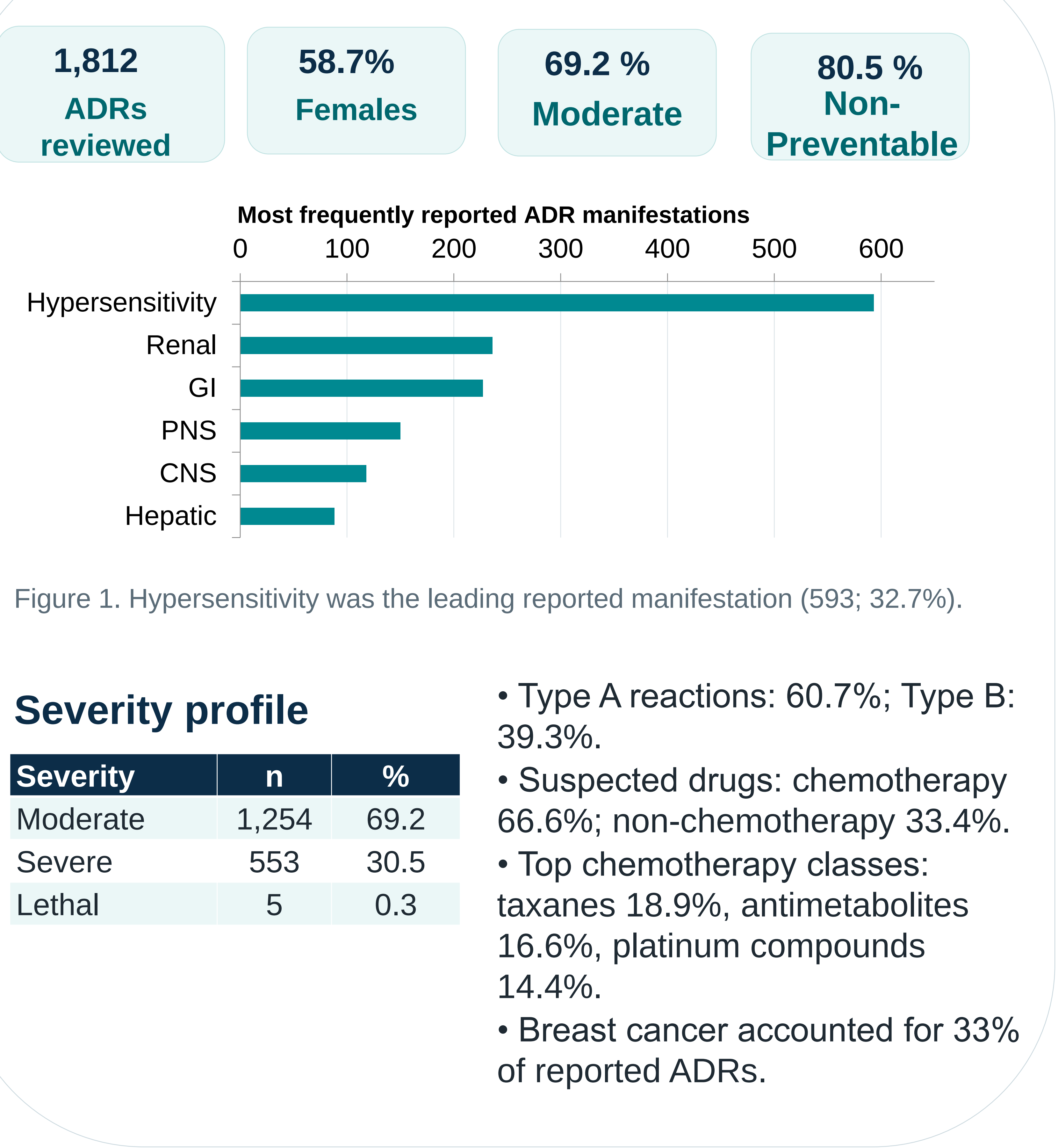
KEY TAKEAWAYS

- 1,812 ADRs were identified across 2022–2024.
- Hypersensitivity was the most frequent manifestation (32.7%).
- Moderate ADRs predominated (69.2%); lethal events were rare (0.3%).
- Chemotherapy accounted for 66.6% of suspected drugs.
- Most ADRs were classified as non-preventable (90.5%).

CONTACT / ACKNOWLEDGMENT

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RESULTS



DISCUSSION

- Most ADRs were predictable Type A reactions and of moderate severity, supporting targeted monitoring and anticipatory management.
- Hypersensitivity, renal and gastrointestinal reactions represented major surveillance priorities.
- Findings support proactive pharmacovigilance, regimen modification and supportive care in oncology practice.

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