

Epidemiological study of Dengue Fever in a Tertiary Care Hospital, Dera Ismail Khan, Khyber Pakhtunkhwa, Pakistan

Muhammad Anan Khan

Department of Medicine, MTI Gomal Medical College, Dera Ismail Khan

Ahtesham Khan

Department of Medicine, MTI Gomal Medical College, Dera Ismail Khan

Abstract:

Background: Dengue fever significantly burdens healthcare, particularly in resource-limited settings. Objective was determination of epidemiology of dengue patients admitted to the hospital

Materials & Methods: This cross-sectional study was conducted at the department of Medicine, Gomal Medical College, Dera Ismail Khan, Pakistan from September to December 2024. 168 confirmed dengue cases were taken through consecutive non-probability sampling technique. Ethical approval and informed consent were obtained. Data collected through Structured questionnaires.

Results: Among 168 dengue cases men were 137 (81.5%), commonest age group was 16–30 years 101 (60.1%). Most cases were from District Tank 63 (37.5%), followed by Lakki Marwat 46 (27.4%) and D.I. Khan 44 (26.2%). High-grade fever was observed in 168 (100%) followed by body aches 167 (99.4%), hemorrhagic manifestations 15 (8.9%) & skin rashes 19 (11.3%). Dengue IgM and IgG positivity rates were 13 (7.7%) and 9 (5.4%), respectively. The peak incidence was in November 108 (64.3%). Travel history was reported in 54 (32.1%) of cases.

Conclusion: Dengue fever peaks post-monsoon and disproportionately affects males and young adults. District Tank and Lakki Marwat reported the highest burden. Poor sanitation and inadequate mosquito control drive transmission, underscoring the need for targeted vector control, public awareness, and improved healthcare infrastructure.

Keywords:

Dengue fever, Epidemiology, Vector-borne disease, Tertiary care hospital, Dera Ismail Khan, Khyber Pakhtunkhwa, Seasonal variation, Public health, Disease burden, Mosquito control, Pakistan.