

DEVASTATING RISE OF HEPATITIS-C CASES IN RURAL SINDH, PAKISTAN IDENTIFICATION AND TREATMENT OF A PUBLIC HEALTH THREAT

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BACKGROUND

AS OF DECEMBER 2022, PAKISTAN HAS THE HIGHEST GLOBAL BURDEN OF HEPATITIS C VIRUS (HCV) INFECTION, WITH 10 MILLION INFECTED INDIVIDUALS. ACCORDING TO THE US CENTRE FOR DISEASE ANALYSIS, FROM 2015-2021 APPROXIMATELY HALF A MILLION NEW CASES WERE REPORTED IN PAKISTAN. SINDH PROVINCE HAS THE SECOND HIGHEST PREVALENCE IN PAKISTAN AT 6%. MOST INFECTED INDIVIDUALS IN PAKISTAN DO NOT KNOW THEIR HEPATITIS STATUS WHILE WHO STATES THAT, 95% OF PEOPLE INFECTED WITH HCV CAN BE CURED WITHIN 2-3 MONTHS WITH HIGHLY EFFECTIVE DIRECT-ACTING ANTIVIRAL DRUGS.

PURPOSE

THE AIM OF THIS STUDY WAS TO IDENTIFY AND TREAT PATIENTS OF HEPATITIS-C IN SINDH, PAKISTAN. SECONDARILY, THE STUDY AIMED TO ASSESS THE MOST COMMON RISK FACTOR LEADING TO THE POTENTIAL TRANSMISSION OF HEPATITIS-C IN THE REGION.

METHOD

INFORMED CONSENT WAS OBTAINED FROM ALL PARTICIPANTS. ADULTS ABOVE 18 YEARS VISITING A PRIMARY CARE CENTRES IN GHARO, SINDH WERE RANDOMLY SELECTED FOR HEALTH SCREENING. HCV RAPID ANTIBODY TEST WAS USED TO SCREEN FOR HEPATITIS-C. INDIVIDUALS THAT SHOWED A REACTIVE RESULT WERE FURTHER ASKED ABOUT THE POTENTIAL RISK FACTORS BEFORE A CONFIRMATORY PCR TEST WAS PERFORMED. ONCE IDENTIFIED, DACLATASVIR AND SOFOSBUVIR WERE DISPENSED FOR 03 MONTHS WITH MONTHLY FOLLOW UP WHERE BASELINE BLOOD WORK UP WAS TAKEN TO MONITOR OVERALL PATIENT CONDITION.

RESULT

DURING A 21-MONTH PERIOD A TOTAL OF 3476 SCREENING TESTS WERE CONDUCTED FROM MARCH 2021 TILL NOVEMBER 2022. THE MEAN AGE OF THE PARTICIPANTS WAS 37 YEARS AND THE MAJORITY OF THE INDIVIDUALS SCREENED WERE FEMALE (62.7%). A TOTAL OF 498 INDIVIDUALS (14.3%) TESTED POSITIVE ON THE SCREENING TEST AND THE CONFIRMATORY PCR DIAGNOSED 247 INDIVIDUALS (FIGURE 1) SUFFERING FROM HEPATITIS-C. WHEN ASKED ABOUT THE POTENTIAL RISK FACTORS THE MAIN CAUSE IDENTIFIED WAS INTRAVENOUS MEDICATION AT CLINICS WITH A REUSED NEEDLE. OTHER CAUSES ARE SHOWN IN FIGURE 2. COMPLETE TREATMENT LEADING TO A DISEASE-FREE STATE WAS SEEN IN 53 INDIVIDUALS WHILE THE REMAINING ARE STILL UNDER CARE. TWO CASES REPORTED A POSITIVE PCR AFTER 3 MONTHS OF TREATMENT AND WERE REFERRED TO SPECIALIST CARE.

FIGURE 1: PCR POSITIVITY RATE PER MONTH

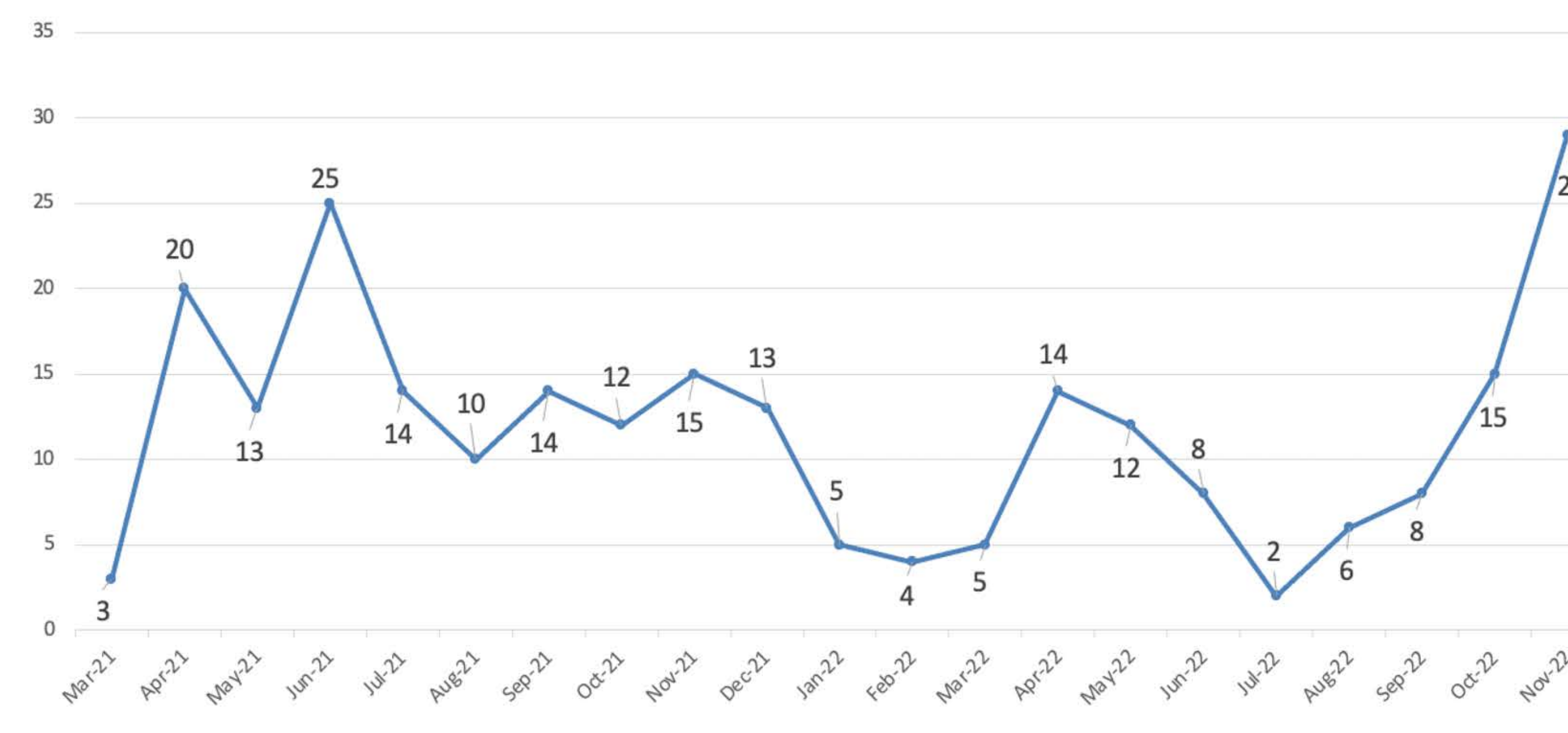
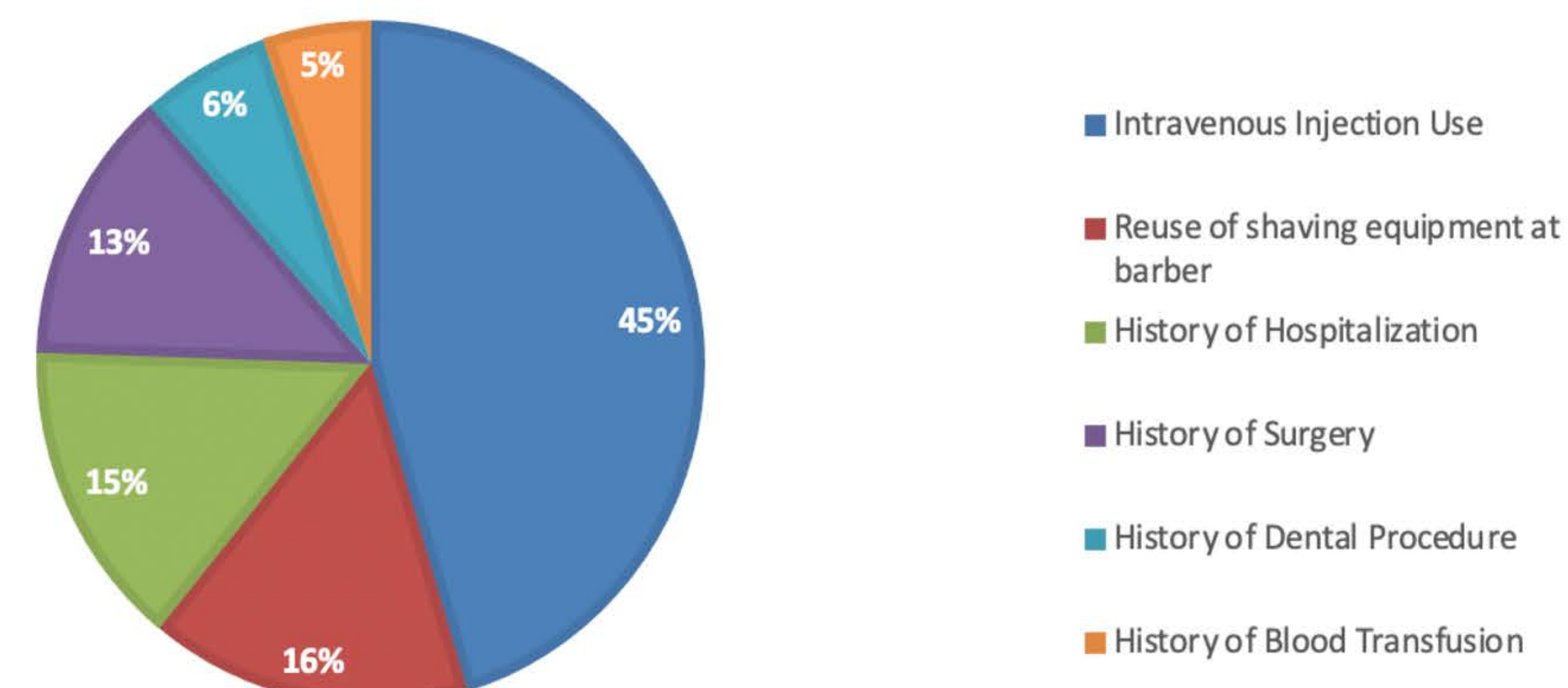


FIGURE 2: RISK FACTORS OF HEPATITIS-C IN RURAL SINDH



CONCLUSION

CONSIDERING THE DEVASTATING RISE IN HEPATITIS-C CASES, EMERGENCY PROTOCOL SHOULD BE IMPLEMENTED TO CURB THE DISEASE BURDEN IN THE REGION. SCREENING OF THE DISEASE SHOULD BE CONDUCTED AT A COMMUNITY LEVEL VIA HOME VISITS AND PREVENTIVE INTERVENTIONS SHOULD BE ENCOURAGED, ESPECIALLY, HEALTH EDUCATION METHODS AND EDUCATION CONTENT CREATION IN THE REGIONAL LANGUAGE OF THE AREA. RESISTANT CASES TO TREATMENT SHOULD BE REPORTED TO THE HEALTH AUTHORITIES AND PATIENTS SHOULD BE SUPERVISED TO ENSURE ROUTINE MEDICATION INTAKE. IF NO ACTION IS TAKEN HEPATITIS-C CASES WILL LEAD TO A BREAKDOWN IN THE HEALTHCARE SYSTEM OF PAKISTAN.

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ABSTRACT P101

