## Abstract

AIMS/OBJECTIVE: The aim of this study was to study the fingerprint with relation to ABO blood grouping system and occurrence of hepatitis c virus in Prisoners.

MATERIALS AND METHODS: Blood samples of 400 prisoners were taken. Out of four hundred fifty seven were agreed for interview while all were come to lab for HCV testing. Fingerprints were taken with ordinary stamp pad. Blood grouping (Forward) was done with DIAGAST commercially available anti sera. HCV testing was done with Qiagen Kits and Rotor Gene Q (Real Time PCR) machine.

RESULTS: the distribution of total number of loops, arches and whorls in both hands of fingers in all fifty seven prisoners which were agreed for fingerprints. Out of total fifty seven prisoners 6.7% were arches, 30% whorls while most of them were loops (63.3%). This is the total distribution of loops, arches and whorls in fifty seven interviewed prisoners. In blood group **B** predominant pattern was loops followed by **A**, **O** and **AB** respectively. In blood group **B** whorls were the predominant followed by **O**, **A** and **AB**. In blood group (**A**) arches were the predominant followed by **O**, **AB** and (**B**). Loops were the predominant in Rh positive blood group followed by whorls and Arches respectively. The sequence of fingerprints was the same as in case of Rh negative blood groups. Total 400 prisoners were tested for HCV testing by Real Time PCR. Out of four hundred 367 were male prisoners while 33 were females. HCV positive prisoners were (291)72.75% and Negative prisoners were (109) 27.25%. Males were most infected with HCV than females. Out of 400 prisoners 266 male prisoners were HCV positive while twenty five females were positive for HCV.

CONCLUSION: Present study shows that loops & whorls were most in blood group B and Arches were most in blood group A. Loops were predominant in both Rh positive & Rh negative blood groups. 72.75% prisoners were infected with HCV infection.

Males were more infected than females. Both male and female of age group 26 to 35 were most infected with hepatitis C infection.