**DRY BLOOD SPOT (DBS) TESTING IN INJECTING DRUG USERS**

Stephens B P1, Tait J1, Dillon J

Ninewells Hospital and Medical School (1)

**Background**: Intravenous Drug Use (IVDU) is widely recognised as the main transmission route of the Hepatitis C Virus (HCV) within the U.K. Access to People who Inject Drugs (PWID) to identify duration of HCV infection has proved difficult prior to the introduction of DBS testing.

**Methods**: A DBS testing programme was initiated across Drug Treatment and Harm Reduction services in Tayside, Scotland in July 2009. Patients were offered and encouraged to return for yearly HCV antibodies testing using DBS tests and clinics were established within the needle exchange to facilitate diagnosis and treatment of chronic infection specifically within the IVDU community.

**Results**: 2630 DBS tests have been carried out to date with over 94% of all results being issued. Where low risk factors for HCV transmission were identified (tattoo, sexual and prison environment), only 8/312 (2.6%) were found to be HCV positive.

The significant risk factor identified was IVDU with 88.1% (2318/2630) of all tests from 1671 individual patients. 29.2% (678/2318) were found to be HCV antibody positive. HCV PCR has been obtained in 88.5% (600/678) of HCV antibody positive cases at specialist clinics and 403/600 (67.2%) individuals were HCV PCR positive.

429/1671 (25.7%) of those active PWID initially HCV negative returned for a second test with 82/429 (19.1%), having sero-converted to HCV antibody positive within the time period. 129 returned for a third test with 22 (17%) becoming HCV positive in the interim period. Upon fourth test, 4/36 (11.1%) were positive with 1in 9 and 1 in 2 positive at fifth and sixth test.

**Conclusion**: DBS testing is an effective diagnostic tool in high risk populations, and reveals a 20% per annum risk of HCV seroconversion in a needle exchange environment.