**OPPORTUNISTIC VERSUS STANDARD HEPATITIS B VACCINATION FOR PEOPLE WHO INJECT DRUGS (PWID) IN THE SUPERMIX COHORT**

Peter Higgs, NDRI, Curtin University

Josi Luppi, Centre for Population Health, The Burnet Institute

Shelley Cogger, Centre for Population Health, The Burnet Institute

Paul Dietze, Centre for Population Health, The Burnet Institute

Joseph Doyle, NHMRC Clinical Research Fellow, University of Melbourne,

Margaret Hellard, Centre for Population Health, The Burnet Institute

**Background:** People who inject drugs (PWID) are at risk of hepatitis B virus (HBV) infection through unsafe injecting practices and unprotected sexual activity. Despite availability of an effective vaccine, in a Melbourne-based cohort of PWID, about 20% were identified as susceptible to HBV. We aimed to improve HBV vaccination uptake and immunity by offering opportunistic vaccination to this cohort.   
  
**Methods:** HBV serologically naïvePWID in the Melbourne-based SuperMIX cohort were eligible for HBV vaccination. Participants were randomised to receive either a standard vaccination course (three doses at 0, 1 and 6 months) or an opportunistically-delivered course (three doses at least 7 days apart with one dose 12-months later. A nurse immuniser delivered vaccination in the field using assertive outreach to maximise completion. Vaccine completion and immunity (measured by HBV surface antibody titre >10 U/l) after vaccination were the primary outcomes.   
  
**Results:** Fifty PWID were recruited and thirty-eight participants (76%) completed three vaccination doses: two participants withdrew from the standard arm and ten were lost to follow up (four, standard arm; six, opportunistic arm). Three-dose vaccination completion was the same using the standard versus opportunistic schedule: 19/25 (76%) versus 19/25 (76%). However, in the opportunistic arm vaccination uptake at 12-months was lower (12/25, 48%; p=0.041). In intention-to-treat-analysis, protective immunity was detected among 9/25 (36%) of those who received the standard schedule compared with 13/25 (52%) who received opportunistic vaccination (p=0.254). In per-protocol analysis, after three vaccine doses protective immunity was lower among those who received the standard schedule (9/19, 47%) compared with those who received opportunistic vaccination (13/16, 82%) (p=0.039).

**Conclusion:** We found moderately-high uptake of HBV vaccination among our cohort of PWID using assertive field-based outreach. Findings suggest opportunistic three-dose vaccination is feasible and an effective alternative to standard vaccination schedules in hard to reach populations.