P4.35 REDUCING HIV RISK BEHAVIOUR AFTER INTERVENTION WITH YOUNG LEADERS OF KEY POPULATIONS IN BRAZIL

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Introduction Peer dialogues influence the adoption of behavioural changes to reduce the risk of HIV infection (human immunodeficiency virus). By intervening experimentally in the community to change risk behaviour patterns, it may be possible to promote widespread reductions in HIV risk practices within a population.

Methods The intervention identified and trained young age range 18–26 people who are reliably identified as leaders among one of these key populations - gay men and MSM, transgender people (transvestites and transsexual women), drug users and harm reducers and sex workers - in all five regions of Brazil to act as multipliers of behavioural changes for their peers, in relation to HIV. We also include young people living with HIV, considering that it is important that these young people share the experience of living with HIV with other young people in greater vulnerability and risk.

Results 140 young people from the key populations were trained in the 5 Brazilian regions. The proportions of the key populations trained in this intervention were 41.9 per cent homosexuals and MSM, 14.5 per cent harm reduction or drug users, 8 per cent transgender people, 6 per cent sex workers and 15 per cent young people living with HIV. Approximately 70% of young people in this intervention have already developed some activity to multiply the information and attitudes towards STI amongst university undergraduates and gain an insight into their perception of sexually transmitted infections. The model considered delivery costs (micro-costing) and reimbursement (tariff) to GUM services associated with diagnosing and managing STIs. POCT strategies compared to SC were: A) POCT for CT and NG; B) POCT for CT-NG and Mycoplasma genitalium (MG); C) POCT for CT-NG-MG and Trichomonas vaginalis. Data came from published literature and unpublished estimates.

Results SC was cheaper than all POCT strategies when micro-costing, but POCT C was the cheapest strategy for tariff costings. POCT C’s incremental cost-effectiveness ratio (ICER) was £36 585 per quality-adjusted life year (QALY) gained compared to SC when micro-costing; it was cost-saving (by £26,451,382) when tariff costing was applied. POCT C also generated most benefits, with 2,407 fewer STI transmissions, 808 fewer onward transmissions, and 2,351 fewer inappropriate treatments compared to SC.

Conclusion POCTs that detect STI diagnoses may be cost-effective, cost-saving and improve patient management. However, there is variation by costing strategy, patient population, clinical setting and patient pathways. Further evidence is needed to populate model parameters to reduce uncertainty in economic analyses.

P4.36 EVALUATING THE COSTS, BENEFITS AND COST-EFFECTIVENESS OF MULTI-PATHOGEN POINT-OF-CARE TESTS FOR SEXUALLY TRANSMITTED INFECTIONS IN SYMPTOMATIC GENITOURINARY MEDICINE CLINIC ATTENDEES

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Introduction In sexual health services, availability of rapid and accurate point-of-care tests (POCTs) may enable major improvements in care pathway efficiency and outcomes. Previous economic evaluations of nucleic acid amplification test (NAAT) POCTs for Chlamydia trachomatis (CT) and Neisseria gonorrhoeae (NG) indicate they may provide a cost-effective strategy for screening genitourinary medicine (GUM) attendees. We estimated costs, benefits and cost-effectiveness of three strategies using accurate, rapid NAAT POCTs that could detect different combinations of common multiple sexually transmitted infections (mSTIs) compared with standard care (SC; laboratory-based CT/NG NAAT).

Methods A decision tree was constructed to simulate a hypothetical cohort of 65,988 patients, representing annual numbers of GUM attendees in England, symptomatic for lower genitourinary tract infection. The model considered delivery costs (micro-costing) and reimbursement (tariff) to GUM services associated with diagnosing and managing STIs. POCT strategies compared to SC were: A) POCT for CT and NG; B) POCT for CT-NG and Mycoplasma genitalium (MG); C) POCT for CT-NG-MG and Trichomonas vaginalis. Data came from published literature and unpublished estimates.

Results SC was cheaper than all POCT strategies when micro-costing, but POCT C was the cheapest strategy for tariff costings. POCT C’s incremental cost-effectiveness ratio (ICER) was £36,585 per quality-adjusted life year (QALY) gained compared to SC when micro-costing; it was cost-saving (by £26,451,382) when tariff costing was applied. POCT C also generated most benefits, with 2,407 fewer STI transmissions, 808 fewer onward STI transmissions, and 2,351 fewer inappropriate treatments compared to SC.

Conclusion POCTs that detect STI diagnoses may be cost-effective, cost-saving and improve patient management. However, there is variation by costing strategy, patient population, clinical setting and patient pathways. Further evidence is needed to populate model parameters to reduce uncertainty in economic analyses.

P4.37 THE PERCEPTION AND DETERMINANTS OF SEXUAL BEHAVIOUR OF UNIVERSITY UNDERGRADUATES AT A TERTIARY INSTITUTION IN NIGERIA – WHAT ARE THE UNDERLYING FACTORS

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Introduction Sexually Transmitted Infections are widespread, and have effects on the reproductive and sexual health of the general population particularly youths and adolescents. The study was done to assess the level of knowledge, perception and attitudes towards STI by undergraduate students. The objective was to understand and describe the drivers of sexual behaviour amongst university undergraduates and gain an insight into their perception of sexually transmitted infections.

Methods This was a cross-sectional study. A structured self-administered questionnaire on risk factors for STI was given to respondents to answer. The study was conducted in October 2016.

Results The mean age of the students (n=310) was 17.8 years (±1.77 SD): males were 0.39 times more likely to be sexually active than females [p<0.001, X²=15.0, CI=0.23–0.69], females were 2.18 times more likely to join an abstinence club [p=0.005, X²=7.6, CI=1.24–3.81]. Males were 0.3 times more likely to believe condoms protect against all STI by undergraduate students. The study was conducted in October 2016.

Conclusions This study is a step towards understanding the sexual behaviour of undergraduate students in Nigeria and will be helpful in the development of future educational programs and interventions to reduce the incidence of STI.