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Plenary Abstracts

S018 - Home Self-Sampling/Self-Testing: New Technologies

Eric Chow

Plenary Session 3 - Future Clinical Management, October 28, 2023, 08:30 - 10:00

Home Self-Sampling/Self-Testing: New Technologies

Eric P.F. Chow^{1,2,3}

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A timely diagnosis of HIV and sexually transmitted infections (STI) is essential for HIV/STI prevention and control. There has been a shift in self-sampling or self-testing in recent years. COVID-19 has also accelerated the use, implementation and development of self-sampling or self-testing for HIV/STI to minimise the risk of exposure to COVID-19 and overcome the barriers to accessing healthcare services and testing during the lockdown. Self-sampling is referred to the users who collect their own samples either in a clinical setting or non-clinical setting. Self-testing is referred to the users who collect their own samples, perform the test and interpret the testing results on their own.

This presentation will discuss the pros and cons of using at-home self-sampling and self-testing. Some benefits of using at-home self-sampling and self-testing include providing privacy for users and may overcome social stigma that is related to testing or attending sexual health services; it also increases the accessibility of testing particularly among those vulnerable populations and people who live in remote or regional areas. However, at-home self-sampling and self-testing also have their own limitations, and this includes the logistics of sample handling (e.g. postage, storage, laboratory workflow and reporting), linkage to care if tested positive, pre- and post-testing counselling, regulations and payment.

S021 - "It is more than STI prevention!": Intention to use and procurement of doxycycline prophylaxis

Kai Jonas

Plenary Session 2 - Future Biomedical Interventions, October 27, 2023, 16:00 - 17:30

"It is more than STI prevention!": Intention to use and procurement of doxycycline prophylaxis

Kai J. Jonas

Maastricht University

Recent bio-medical studies point towards a potential benefit of doxycycline-use for postexposure-prophylaxis (PEP) or preexposure-prophylaxis (PrEP) to prevent sexually transmitted infections (STI). While prescribing doxycycline as a prophylactic is not common practice and part of prevention protocols, apart from mainly healthcare providers in the US of America, this phenomenon is already common practice in certain subgroups of men-who-have-sex-with-men (MSM), especially in contexts where antibiotics are available as over-the-counter medication. Little is known about the underlying motives and intentions to use doxycycline-based prophylaxis among MSM, their concerns about side-effects and antimicrobial resistance (AMR), and consequences for STI testing or partner notification. This talk is presenting first data to alleviate these knowledge gaps.

Methods

We conducted three anonymous online surveys among MSM in the Netherlands (among PrEP early adopters and MSM in general) and Thailand (local and foreign MSM), to investigate the current extent of doxycycline use, intentions and determinants of PEP or PrEP within the MSM community in Spring/Summer of 2023. An additional interview study with representatives of community-based organizations (CBO) in Europe was conducted to assess the views of community representatives on the matter during the same time.

Results

Our results showed that a minority of MSM has been using doxycycline-based prophylaxis in the past, yet that this use has been practice for several years, based on informal procurement. Overall interest was high, AMR was less of a concern. Motives to use doxycycline-based prophylaxis was not only STI prevention, but also the license to have perceived risk-free sex and feelings of agency and control. Perceived consequences of doxycycline-based prophylaxis were less STI-testing and overall low disclosure of this behavior to both sexual partners and healthcare providers. The results from the interviews with CBOs showed surprisingly low awareness of the phenomenon, divided views, and by-and-large an absence of policy recommendations on the matter.

Conclusion

Our data shows that the concept of doxycycline-use for prevention of STIs is already known and applied in the MSM community, albeit in subcommunities, but that the overall interest is high,

which allows for the interpretation that its use, and informal procurement, given current policies, will increase in the near future. Healthcare providers and CBOs need to prepare for this trend and need to develop policies that can be translated into adequate counselling and recommendations.

S023 - STIs care in conflict regions: lessons learned

Ismael Maatouk

Plenary Session 1 - Future Challenges & Key Populations, October 27, 2023, 09:00 - 10:30

STIs care in conflict regions: lessons learned

Ismael Maatouk

Sexually Transmitted Infections (STIs) continue to pose a significant public health challenge globally, and their impact is amplified in conflict-affected areas. This session explores the prevalence, consequences, and challenges of addressing STIs in regions grappling with armed conflicts. In such areas, healthcare systems are disrupted, and access to medical services is severely limited, exacerbating the spread of STIs among vulnerable populations, including refugees, internally displaced persons (IDPs), and host communities. The session will highlight the importance of comprehensive strategies that encompass prevention, testing, treatment, and awareness campaigns. Effective responses require strengthening healthcare systems, training healthcare providers, and providing essential medical supplies. Community-based awareness programs are essential to combat stigma, promote safe sexual practices, and encourage seeking timely medical care. Initiatives aimed at protecting vulnerable groups, particularly women, children, and survivors of sexual violence, are imperative. The session will also emphasize the significance of partnerships between local governments, NGOs, international agencies, and donors to mobilize resources and expertise. By implementing evidence-based interventions and monitoring progress, there is an opportunity to mitigate the burden of STIs in conflict-affected areas and safeguard the sexual and reproductive health of affected populations.

S027 - Mpox, Lessons Learned For Future STI Outbreaks

Daniel Richardson

Plenary Session 3 - Future Clinical Management, October 28, 2023, 08:30 - 10:00

Mpox, lessons learned for future STI outbreaks?

Daniel Richardson, professor of sexual health and HIV, University hospitals Sussex NHS foundation trust; Brighton & Sussex Medical School, Brighton, UK

Mpox (previously known as monkeypox) is a pox virus first described in primates in the 1970s. Through the 1980s-1999, Mpox caused a febrile illness and rash in humans similar to smallpox affecting people in central and West Africa who had direct contact with animal hosts. Imported cases where animal to human transmission was first reported in the USA in 2003. The epidemiology of Mpox is likely to be affected by previous smallpox vaccination conferring ~85% protection. In 2022, the first human-human transmission was seen affecting mainly in men who have sex with men in high income settings starting in the UK and peaking in the USA. Twenty nine percent of MSM were diagnosed with a concurrent sexually transmitted infection, 73% presented with anogenital lesions and people living with HIV experienced a more severe syndrome leading to death in 27% of those with a CD4 count below 100cells/ml. Public health interventions included messaging to sexual networks of MSM to reduce the number of sexual partners, handwashing and country specific rapid smallpox vaccination programmes mainly through existing sexual health service networks. There continues to be significant stigma surrounding infectious diseases and sexually transmissible infections which can significantly hamper public health interventions. Globalisation and our relationship with the natural world has increased the number of zoonotic diseases including COVID-19 and now Mpox. Are we ready for the next epidemic?

S030 - The Ecosystem of HIV & STI prevention in the biomedical era – keeping upbalances

Udi Davidovich

Plenary Session 2 - Future Biomedical Interventions, October 27, 2023, 16:00 - 17:30

The Ecosystem of HIV & STI prevention in the biomedical era – keeping up balances.

The interplay between HIV & other STIs was present from the first day HIV entered the ring. Throughout the years this interplay took many forms and presented different challenges to different key populations. Today with the continuous introduction of new biomedical prevention strategies for both HIV and STI prevention, the balance is constantly shifting. But who is calling the shots? Are those the guardians of epidemics or the actual key populations? A listening ear to users' needs and prevention modality innovations are key!

S032 - Doxycycline Prophylaxis To Prevent Sexually Transmitted Infections

Béatrice Berçot

Plenary Session 2 - Future Biomedical Interventions, October 27, 2023, 16:00 - 17:30

Professor Béatrice Bercot is Head of the Department of Bacteriology at St Louis Hospital (Paris) and in charge of gonococcal expertise at the National Reference Center for Bacterial STIs (phenotypic and genotypic monitoring by WGS). She supervises the French clinical trial concerning meningococcal vaccine (Bexsero) and/or post-exposure prophylaxis to doxycycline.

Title: Doxycycline Prophylaxis to Prevent Sexually Transmitted Infections

Increased rates of bacterial sexually transmitted infections (STI) are reported among men who have sex with men (MSM), in particular those using pre-exposure prophylaxis for HIV (PrEP). Interventions to reduce STI incidence are needed. Our team performed the ANRS Ipergay trial to monitor the impact of doxycycline post-exposure prophylaxis (DoxyPEP) on the occurrence of bacterial STI in this high-risk population. Doxycycline PEP significantly reduced the incidence of *Chlamydiae trachomatis* and syphilis in MSM without impact on *Neisseria gonorrhoeae* (Molina *et al*, Lancet Infect Dis. 2018;18:308-17). These results were confirmed on the large ANRS Doxyvac trial with an additional impact on the incidence of *Neisseria gonorrhoeae* (Molina, *et al*, CROI 2023). Similar observations were described in another clinical trial recently published on MSM in New York (Luetkemeyer, *et al*, N Engl J Med 2023;388:1296-306). However, this strategy has failed to reduce chlamydia incidence in young women in Kenya (Soge OO *et al*, Sex Transm Dis. 2023). In addition, the benefit against gonorrhoea is limited or absent, due to the high rates of high-level tetracycline resistance in Africa. Surveillance of the resistance of STI-causing bacteria is ongoing on the ANRS Doxyvac trial and needs to be monitored as well as the impact of the use of this prophylaxis on the emergence of resistance in bacterial flora. Antimicrobial resistance of *Mycoplasma genitalium* and *Neisseria gonorrhoea* from positive specimens in the ANRS Ipergay study were retrospectively screened for resistance and compared by arm. These results will be discussed in Malta.

S034 - C. Trachomatis Screening, Where To Go Next? Broaden To Asymptomatic STI Screening...

Nicole Dukers-Muijers

Plenary Session 3 - Future Clinical Management, October 28, 2023, 08:30 - 10:00

C. Trachomatis Screening, Where To Go Next? Broaden To Asymptomatic STI Screening...

Nicole Dukers-Muijers

Public Service South Limburg & Maastricht University; Living Lab Public Health

C. Trachomatis (CT) is the most common bacterial sexually transmitted infection (STI) worldwide. CT is mainly asymptomatic. Test-and-treat strategies are widely implemented to prevent transmission and complications. However, strategies to test for asymptomatic CT are being debated. Concerns are emerging to test and treat asymptomatic persons for urogenital CT, and extragenital CT (whereby testing symptomatic persons is not under debate).

In this talk, we will explore the pros and cons of testing asymptomatic persons for CT, guided by state-of-the-art evidence and the clinical guidelines. What are challenges for implementation in clinical practice?

This talk precedes and links to the panel discussion on CT screening Saturday afternoon.

S035 - Syphilis & Neurosyphilis Update

Nicolas Dupin

Plenary Session 3 - Future Clinical Management, October 28, 2023, 08:30 - 10:00

IUSTI

Malta

Syphilis and Neurosyphilis up date

Nicolas Dupin

In Western countries, the rates of neurosyphilis (NS) varied from 0.5 to 2 cases per 100000 with a prevalence of 2% in patients with early syphilis. It has been reported in the early days of HIV, that the prevalence of NS is higher (twice) in HIV infected persons, which is probably different by these days. NS could be differentiated as asymptomatic and symptomatic, although there is no consensual definition for asymptomatic syphilis. Symptomatic NS could also be differentiated as early and late NS. Early NS is the most frequent form of NS and late NS seems to be very rare at least in western countries. Patients with early NS may have meningitis, cranial-nerve palsies comprising ocular and auditory neuropathies, stroke, confusions and epilepsy. Meningo-vascular NS may be observed during early or late NS while tabes and general paresis are the clinical manifestations associated with late NS. CSF anomalies comprised pleiocytosis up to $10/\text{mm}^3$ mainly lymphocytes, high protein level and a positive non treponemal test which has a low sensitivity (less than 50%). A negative non TT in serum is quite uncommon in patients with NS comprising those with late NS, and a negative TT in CSF can eliminate a NS. All guidelines recommend intravenously administration of penicillin G for 14 days as the first line treatment although some data support the efficacy of ceftriaxone as an alternative in some situations as it seems to be efficient, well tolerated and will decrease the duration of hospitalization.

S036 - Sexually Transmissible Infections: A New Paradigm?

David Lewis

Plenary Session 1 - Future Challenges & Key Populations, October 27, 2023, 09:00 - 10:30

Abstract

Sexually Transmissible Infections: A New Paradigm?

David A. Lewis

The term ‘venereal disease’ (morbus venereus) traditionally referred to diseases contracted and transmitted by sexual contact, caused by microorganisms that are transmitted via semen, vaginal secretions, or blood during sexual intercourse. A great many bacterial, viral, protozoal, fungal and parasitological infections can be transmitted this way. Medical terminology evolved as a response to high levels of stigma associated with term ‘venereal disease’ and the term ‘sexually transmitted disease’ (STD) was introduced. Whilst the term ‘STD’ remains in frequent use in the United States, clinicians in many other the parts of the world chose to use ‘sexually transmitted infections’, as an alternative term, in recognition of the important role asymptomatic infections play in sustaining on-going transmission. Examples of asymptomatic ‘STIs’ are widespread, including viral (e.g., human papillomavirus, herpes simplex virus), bacterial (e.g., *Neisseria gonorrhoeae* and *Chlamydia trachomatis*) and protozoal (e.g., *Trichomonas vaginalis*) infections. The advent of highly sensitive molecular diagnostic techniques to detect STI pathogens has highlighted the importance of oral colonization in sustaining continued some infections within communities. However, a growing number of infections exist which are predominantly transmitted through non-sexual routes, but for which sexual acquisition may also be possible. Epidemiological investigations have widened the appreciation of the importance of sexual transmission of these infections, which are better referred to as ‘sexually transmissible infections’ (also abbreviated as STIs) in recognition of their predominantly non-sexual routes of transmission. Examples of the growing list of these non-traditional STIs include infections due to enteric bacteria (e.g., *Shigella* species), meningococcal infection, viruses (adenoviruses, Ebolavirus, Zika virus and, most recently, MPox), protozoa (e.g., *Giardia lamblia*), fungi (e.g., *Tinea genitalis*) and ectoparasites (e.g., *Sarcoptes scabiei*). This evolving landscape, with a focus on scabies and MPox, will be further discussed during this presentation.

S039 - Vaccination Against Bacterial STIs – Update & Mode Of Action

Georg Stary

Plenary Session 2 - Future Biomedical Interventions, October 27, 2023, 16:00 - 17:30

Vaccination against bacterial STIs – update and mode of action

Bacterial pathogens lead to common sexually transmitted infections (STI) worldwide with tremendous impact on public health. Urogenital and extragenital co-infections among bacterial STIs are not only frequent but can also cause long-term sequelae. Many STIs are currently increasing in Europe, especially among individuals engaging in high-risk sex- practices. As preventative measurements are either expensive for the health care system (screening) or have the concern of antimicrobial resistance (pre- or post-exposure antibiotic prophylaxis), vaccines would be highly valuable for bacterial STIs. However, there are currently no vaccines approved for bacterial STIs. In this lecture, I will provide information about the current status of vaccination against the most common bacterial STIs (chlamydia trachomatis infection, gonorrhoea, syphilis, mycoplasma genitalium infection) and discuss challenges of vaccine development and evasion strategies of these pathogens.

S043 - STI In Teenagers & Adolescents: Role Of COVID, Social Media & Community Engagement

Errol Fields

Plenary Session 1 - Future Challenges & Key Populations, October 27, 2023,
09:00 - 10:30

Adolescents Online: Opportunities and Threats of Social Media to Adolescent and Young Adult Sexual Health

Errol L Fields, MD, PhD, MPH

Worldwide, adolescents and young adults (AYA) have the highest STI burden of any age group. In 2019, global estimates of STI incidence (i.e., syphilis, chlamydia, gonorrhea, trichomonas and genital herpes) was highest among youth ages 10- 24 years with the greatest burden affecting sexual and gender diverse youth and youth from minoritized racial and ethnic groups. The following year, during the COVID-19 pandemic, disruptions in access to STI screening and other sexual health services disproportionately affected AYA populations and likely widened these disparities. The pandemic also prompted a shift to virtual life that created both opportunities and threats to AYA sexual health. Increased online utilization presented new opportunities to use social media and other online spaces to reach and engage youth about their sexual health. However, AYA utilization of sexual networking and other dating apps which have been associated with increased HIV/STI acquisition risk also increased. This session will discuss the following opportunities and threats for AYA sexual health: social media and other online spaces as both risk environments and access points for reaching vulnerable youth, as tools for youth engagement and the development of youth informed sexual health interventions, and as platforms for promoting sexual health and increasing access to sexual health services.

Symposia Abstracts

S001 - Sexually Transmitted Infections In The Middle East & North Africa And Its Refugee Populations

Ghina Mumtaz

Symposium 1 - Vulnerable populations I, October 27, 2023, 12:00 - 13:00

Curable sexually transmitted infections among refugees and internally displaced populations

Ghina R. Mumtaz, PhD

The last decade has witnessed an increasing number of humanitarian crises which led to massive population movements. At the end of 2022, there were 35.3 million refugees worldwide, 62.5 million internally displaced people and 5.4 million asylum-seekers, half of whom are women. About half of refugees come from the Middle East and North Africa. Disrupted healthcare systems, depleted resources, limited accessibility of services, poverty, increased exposure to sexual and gender-based violence, and other contextual factors increase the vulnerability of affected populations in humanitarian settings to poor sexual and reproductive health outcomes, including sexually transmitted infections (STIs). Yet, the burden of STIs in these populations remains poorly understood. This plenary discusses the context of vulnerability and presents the findings of a recent global systematic review of the prevalence of curable STIs - namely gonorrhea, chlamydia, trichomoniasis, and syphilis – among refugees and internally displaced people. The plenary will also present preliminary findings from the first studies estimating the prevalence of STIs among various sub-groups of Syrian refugee women in Lebanon. Overall, the data reveals a large knowledge gap in the epidemiology of STIs, particularly among Syrian refugees who are currently the largest refugee population worldwide. This knowledge gap hampers a data-driven and context-specific response that is needed to effectively address the sexual health needs of these populations. The presentation will discuss the current modalities of and barriers to the delivery of sexual health interventions to forcibly displaced populations, and will summarize research and programmatic recommendations in relation to curable STIs in these populations.

S002 - Taking Patient Sexual History From Clients With A Migrant / Strict Religious Background

Raj Patel

Symposium 1 - Vulnerable populations I, October 27, 2023, 12:00 - 13:00

Symposium 1 Vulnerable populations Friday 27th of October 2023

Taking Patient Sexual History from Clients With A Migrant / Strict Religious Background

Dr Raj Patel, University of Southampton

Taking a patient's sexual history is an important aspect of healthcare, as it helps healthcare providers understand the patient's overall health and assess potential risks. However, when dealing with patients from migrant or strict religious backgrounds, it's essential to approach this sensitive topic with cultural awareness, respect, and consideration for their values and beliefs. This is all about **cultural sensitivity** - recognising that different cultures have varying attitudes towards discussing sexual matters. What might be considered acceptable to discuss openly in one culture could be taboo in another. Being aware of these differences is crucial to providing respectful and patient-centred care.

The presentation will focus on the following areas :

Building Trust, Using Neutral Language, Asking Open-ended Questions, Taking Permission and Consent, Respecting Privacy, Addressing Religious or Cultural Concerns Offer Education when needed, Providing Options (particularly if the patient is uncomfortable speaking with you), Role of referral if necessary, Training and Sensitivity for staff, the role of documentation of patient Preferences

The primary goal is to provide the best care possible while respecting the patient's cultural, religious, and personal beliefs. Tailoring one's approach to each individual and always prioritizing their comfort and well-being.

S003 - STIs and female sex workers. Can new technologies make a difference in global settings?

Symposium 1 - Vulnerable populations I, October 27, 2023, 12:00 - 13:00

STIs and female sex workers. Can new technologies make a difference in global settings?

Professor Tariq Sadiq

Abstract

Sex workers represent diverse and often hard to reach populations globally, facing many challenges related to poverty, violence, high rates of genital and extragenital sexually transmitted infections (STIs) and HIV, reproductive health morbidity, mental health, human rights violations, and lack of access to basic healthcare. STIs can spread rapidly among sex workers, which may serve as bridging groups for transmission into the wider population. Deprioritised STI testing and surveillance programs coupled with a lack of access to extragenital testing, exacerbates the knowledge gap and creates missed opportunities for improving health and social outcomes. Mobile health (mHealth) technology interventions are beginning to demonstrate utility for improving outcomes related to reproductive health care including pre-exposure prophylaxis for HIV and retention to antenatal care. These interventions have potential to be linked with simplified and easily deployable rapid STI tests or STI surveillance technologies, to further improve health outcomes, although care is needed to mitigate risks to privacy, violence and abuse, that may arise from digital health interventions.

S004 - Responding to Sexual Violence, What's Our Role?

Rachel Caswell

Symposium 1 - Vulnerable populations I, October 27, 2023, 12:00 - 13:00

Responding to Sexual Violence, What's Our Role?

Dr Rachel Caswell, University Hospitals Birmingham

Evidence of the full impact of trauma has been emerging for several decades. We know that the effects of trauma can be wide-ranging, long-lasting and substantial. Resulting from harmful experiences such as violence, neglect, war and abuse, trauma can affect people of all ages, genders and from all socio-economic groups and ethnicities, and represents an almost universal experience across the countries of the world.

Trauma resulting from sexual violence can impact people's interaction with healthcare services. One of the ways is for some people to find attendance at healthcare consultations challenging and this can result in delayed or missed healthcare opportunities. People avoiding appointments and procedures such as dental appointments, endoscopies, or services requiring intimate examinations like cervical sampling or STI testing can result in poorer health outcomes. During this presentation I will discuss how changes to service delivery can remove barriers to care and create safer environments for patients. I will discuss how working as healthcare professionals means we should be knowledgeable about the impact of trauma, and how it is important to consider changes where we work, including changes in how we interact with patients, in order to improve outcomes.

S005 - Inequality In STI Care In Central & Eastern Europe: Don't Forget Women

Deniz Gökengin

Symposium 2 - Vulnerable Populations 2, October 28, 2023, 11:30 - 13:00

Sexually transmitted infections (STIs) have become a major health issue recently in the European Region of the World Health Organization (WHO). The number of bacterial STIs, including chlamydia, syphilis, gonorrhoea, and lymphogranuloma venereum, have increased significantly by 9%, 25%, 55%, and 75%, respectively, between 2015 and 2019 in the European Union (EU)/European Economic Area (EEA).

LGV is largely underdiagnosed in Europe because several countries—mostly in Central and Eastern Europe (CEE)—lack appropriate diagnostic tools. Although estimates for the global burden of *M. genitalium* is lacking, antibiotic resistance to the bacteria continues to increase, jeopardizing effective treatment. STIs significantly impact sexual and reproductive health and expanding drug resistance creates a major threat in controlling the spread of STIs worldwide. Very limited data is available on STIs in the non-EU countries in CEE due to many factors such as:

heterogeneity in surveillance systems,

underdiagnosis and underreporting,

lack of access to testing and treatment by key populations such as men who have sex with men,

transgender men and women, migrants, people who inject drugs, cis-gender women, and incarcerated

people who are most vulnerable to and disproportionately affected by STIs, and

unavailability of modern testing technologies.

To date, the focus of STI prevention was mostly on improving diagnosis, access to treatment, and quality of care. Limited data suggests that there are significant disparities between regions, countries and key populations leading to inequalities in accessing diagnostic, treatment, and preventive tools. The main reasons for this heterogeneity are:

economic, cultural, social, and political diversity between countries,

lack of good quality epidemiological data and reporting,

differences in healthcare systems,

structural barriers such as costs, limited public funding and reimbursement,

lack of political will, and

stigma and discrimination associated with sexual and reproductive health

An ambitious and holistic approach with multilevel interventions is the key to overcome individual, social, structural, and political barriers to improve STI care in Europe.

S007 - A Non-Binary Perspective on Sexual Health Care

Camiel Welling

Symposium 2 - Vulnerable Populations 2, October 28, 2023, 11:30 - 13:00

Camiel Welling, M.D.

Medical Supervisor of the Amsterdam Trans Clinic

The Amsterdam Trans Clinic is a collaboration between trans community organization Trans United Europe and the Center for Sexual Health of the Amsterdam Public Health Center

Title: A Non-Binary Perspective on Sexual Health Care

The challenges surrounding sexual health access for transgender and gender diverse (TGD) people have garnered increasing attention as society strives for more inclusive healthcare systems. TGD communities encounter unique barriers when seeking sexual health services due to the lack of tailored resources and understanding within the existing healthcare framework. Systemically, healthcare facilities often lack the necessary knowledge, training, and resources to provide appropriate care for non-binary patients. The rigid binary framework of healthcare often excludes non-binary identities, leading to feelings of alienation, discomfort, and mistrust.

When studying data on non-binary experiences, traditional demographic forms and medical records fail to adequately represent the experiences of non-binary individuals and their partners, leading to inaccurate statistics and underrepresentation in scientific publications. Binary thinking, although mostly associated with gender identity, causes not only collection errors for TGD communities, but also limits accurate data representation in relation to biologic sex (excluding data on intersex individuals) and sexual orientation (excluding those who have romantic or sexual relations with TGD individuals or intersex people). A non-binary perspective disrupts conventional definitions of sex, gender, and sexual orientation, posing a challenge to accurate data collection and the classification systems typically used in research and healthcare settings. Moreover, the interplay between gender identity and sexual orientation within non-binary communities further challenges data collection efforts, as individuals' understanding of their own identities may evolve over time.

To address these challenges, healthcare systems must prioritize inclusivity and education, while researchers and policymakers should collaborate to develop nuanced methodologies that respect and reflect the diverse experiences of non-binary individuals. The intricate interplay of non-binary perspectives on sex, gender, and sexual orientation further hampers the collection of accurate data, impeding efforts to address the unique healthcare needs of both TGD communities, as well as several other marginalized groups (such as intersex people and those with a sexual orientation that includes TGD and intersex people).

S008 - Access To Sexual Healthcare For Disabled Persons/Homeless People

Symposium 2 - Vulnerable Populations 2, October 28, 2023, 11:30 - 13:00

Access To Sexual Healthcare For Disabled Persons/Homeless People

Lorraine Stanley

Sexual health services in the UK pride themselves in being free and available to everyone. In reality, for disabled people, and homeless people (including the “hidden” homeless), this is far from the truth. In her presentation, Lorraine offers insight into this reality, and suggests possible solutions.

Although services have the desire to become accessible for all, funding, staffing and pressures such as the MPox epidemic have meant that other changes to services have been put further behind in priority.

Regarding disability: Lorraine Stanley, CEO SWAD (Sex with A Difference) and Dr Cordelia Chapman, Consultant in Sexual Health and HIV , Bournemouth developed a joint plan to improve the patient experience for disabled people.

Methods:

Two members of SWAD attended the local service to undertake an assessment on a patient journey, and to give advice on improvements and changes that would make the service fully accessible.

Results/Discussion:

The visit was an extremely valuable process for both SWAD, who could see the service environment and facilities, and the pathway for patients - and for the sexual health service, who realised that although they had managed to be accessible to some, there was a long way to go before they were truly accessible to all.

This resulted in some suggestions to work on; some of which could be solved quickly and some that were going to be more challenging. These suggestions ranged from website improvements, communication with patients prior to appointment and at the first point of contact, logistics within the service, advertising and outreach work.

Regarding homelessness: Lorraine has faced challenges in accessing sexual and reproductive healthcare for herself during periods of housing insecurity and imminent homelessness. She advocates for, and supports, other disabled people facing eviction or in housing crisis. This is pan-disability and includes mental health issues (“brown envelope anxiety”). On a very practical note, there are no electric charging points for powered wheelchairs if you end up living in a cardboard box under a bridge.

S009 - How To Organize Your STI Consultation

Donia Gamoudi

Symposium 3 - From The Clinic, October 28, 2023, 14:00 - 15:30

Abstract-

Sexual health is a multifaceted broad concept which is not just defined by issues such as sexually transmitted infections, pregnancy and contraception but it is a 'state of physical, emotional and social wellbeing in relation to sexuality' - WHO 2006. One cannot have a good general health without a good sexual health. Positive sexual health outcomes are seen as important to individuals and they have also been recognized by the government as a major public health issue.

Sexual history can be neglected in a routine medical assessment. Not knowing how to ask sensitive questions can leave the healthcare professional feeling awkward or embarrassed asking sensitive questions on sex and sexuality. In this presentation we will discuss tips to assist in making a sexual history taking session as comfortable as possible for both the patient and healthcare professional. There is evidence that healthcare professionals find sexual history taking to be one of the most challenging aspects of the consultation. There are different reasons that might contribute to this: feeling not equipped to ask questions of such a sensitive nature, fear of raising more questions which cannot be dealt with and the general social embarrassment and the difficulties talking about sex in general. Other barriers such as age difference between patient and service provider, gender and cultural differences also play a role. These barriers can lead to patient discomfort and fear of dismissal of their complaints.

Receptiveness and openness are crucial for a successful and meaningful outcome. To improve quality of the clinical outcome, we need to make doctors culturally competent and consequently improve communication. This means an awareness of the linguistic and cultural diversity that goes beyond race and ethnicity. During this presentation we delve deeper and try to understand more of these barriers and ways of how to overcome them.

S010 - Scabies. The Limits We Need To Set In Our Cohabitation With *Sarcoptes Scabiei*

TBC

Symposium 3 - From The Clinic, October 28, 2023, 14:00 - 15:30
IUSTI Malta 2023.

Symposium "From the Clinic" on Saturday 28 October 2023, from 14:15 to 14:30.
Speaker: Cristina Galván-Casas

Title: Scabies. The limits we need to set in our cohabitation with *Sarcoptes Scabiei*

Summary:

Scabies is a long-standing and never solved human infestation. Global burden of the disease is unacceptable and generates great stigma and DALY impact.

As an STI, it differs from the others in that transmission is cross-flow, community and sexual. Its greater impact on underserved populations means that it is not a preferred research target from which economic benefits can be expected. We face many difficulties to control this communicable disease, and the talk will expose the most important drawbacks, advances and cracks that we need to solve for a better control of this neglected, not only tropical, disease.

S011 - Online STI Testing Uptake For Disadvantaged Populations: Potential & Implementations

Delphine Rahib

Symposium 3 - From The Clinic, October 28, 2023, 14:00 - 15:30

Delphine Rahib

Title : Online STI testing uptake for disadvantaged populations : potential and implementations.

Abstract : Internet has become part of the sexual conversation. Meeting with new partners, accessing community-based resources, information on sexual health... The numeric space has reshaped interventions opportunities. In this context, unsupervised testing methods offer new ways to promote sexually transmitted infections screening online. Self-test or home- sampling can now be offered to support testing campaigns using web portals, chatbots, social marketing campaigns. Some offers are for general population whereas other targets key populations. While studies show that users are mainly white, female, with a good economic background, these interventions also have the potential to reach key populations and improve the uptake of testing. This communication will focus on design and implementation factors contributing to a better access to online interventions for STI testing for disadvantaged people. The continuum between existing in-person testing and care services and online offers will be investigated.

S012 - Herpes

Raj Patel

Symposium 3 - From The Clinic, October 28, 2023, 14:00 - 15:30

Recent years have not seen the breakthroughs hoped for in clinical practice. Research continues for new and useful diagnostics and therapies.

With the recent demonstration of sterilizing immunity across two animal models researchers are hopeful of vaccine breakthroughs. Currently mRNA technology (for prevention) and therapeutic vaccines using more traditional glycoprotein approaches are entering phase 2 studies. Novel immunological mechanisms are also being investigated using humanized monoclonal antibodies (eg HDIT101) – these have now reached phase 2 studies.

Helicase primase inhibitors continue to be developed. Pritelavir has now been shown to be a safe and effective in 28 day human trials in infection resistant to aciclovir. This having followed on the demonstration of superiority in suppressing herpes shedding on continuous use above that of valaciclovir therapy. The next generation of helicases such as IMO-250 are now entering early studies and their effectiveness is being evaluated.

Diagnostics are also in development allowing near patient nucleic acid technology to be exploited. These will allow the rapid identification of HSV 1 or HSV 2 allowing early and appropriate patient counselling.

S013 - Symposium introduction and The significance of Non-Fatal Strangulation in Sexual Assault Disclosures

Deborah Wardle

BASHH Symposium, October 27, 2023, 11:00 - 12:00

Dr Deb Wardle, a Consultant in Genitourinary Medicine & Sexual Health in the UK and Chair of the BASHH Sexual Violence Special Interest Group will introduce this symposium on the role of health in sexual violence disclosures. Dr Wardle will remind us of the potential influence clinicians have on the risk of developing short and long term sequelae and will inform us of the importance of increasing our recognition of non-fatal strangulation by those disclosing sexual violence and / or domestic abuse. Raising our awareness of the potential late complications and the increased risk of subsequent death by homicide.

S014 - Trauma Informed Care in action

Rachel Caswell

BASHH Symposium, October 27, 2023, 11:00 - 12:00

Dr Rachel Caswell, a Consultant in HIV and Sexual Health Medicine in the UK and doctoral candidate at University of Birmingham, presents trauma informed care in action. Dr Caswell interviews a patient who discusses her healthcare experiences when accessing routine cervical cytology. The patient explains the impact trauma has had on her ability to access healthcare and provides practical tips on how to improve healthcare interactions. Dr Caswell will mention some of the challenges we might face as healthcare professionals when trying to implement trauma informed care.

S015 - Personality Disorders and trauma - Understanding Personality disorder and achieving successful interactions with healthcare

Russell Green

BASHH Symposium, October 27, 2023, 11:00 - 12:00

Dr Russell Green is a Consultant Psychiatrist and Medical Director for mental health services across 50 prisons and immigration removal centre in England. There is a risk of re-victimisation particularly in hard to reach populations and those with vulnerabilities who are at additional risk of sexual exploitation. For those who develop emotional unstable personality disorder, engagement with services and effective interactions can be challenging. Dr Russell Green will enhance our understanding of this diagnosis, explaining some of the behaviours and how to achieve more effective outcomes with this potentially hard to reach group.

S016 - HPV/LSc/PeIN - Scientific and Clinical Update

Christopher Bunker

EADV IUSTI Symposium, Genital Dermatoses & Artificial Intelligence, October 28, 2023, 10:00 - 11:00

Male Genital Lichen Sclerosus (MGLSc), HPV & Penile Intraepithelial Neoplasia (PeIN) – Scientific & Clinical Update

The latest information on the aetiopathogenesis, management and prognosis of MGLSc and PeIN will be shared.

Evidence will be presented that shows -

MGLSc is due to the inflammation of susceptible preputial epithelium by occluded urine.

Zoon's balanitis does not exist as a separate entity but usually indicates underlying MGLSc.

Obesity and urological interventions and piercings are risk factors for MGLSc.

HPV is certainly not involved in the pathogenesis of MGLSc.

There are several clinical (and dermatoscopic) manifestations of PeIN – HPV-related (undifferentiated) and LSc-related (differentiated); these may overlap and are not mutually exclusive.

Pseudoepitheliomatous keratotic and micaceous balanitis (PEKMB) represents chronic undiagnosed or misdiagnosed, untreated or mistreated unstable MGLSc with a high risk of multifocal differentiated PeIN and verrucous carcinoma; it is certainly not HPV related.

The impact of these new and emerging insights on the prevention, diagnosis, management and prognosis of these important pre-cancerous male genital dermatoses will be discussed.

S017 - The Spectrum Of Vulvar Dermatoses - A Dermatologist's Perspective

Monique Cachia

Workshop 3 - Maltese Association of Dermatology and Venereology (MADV), October 27, 2023, 14:00 - 15:30

Vulval dermatoses, a diverse group of skin conditions affecting the female genitalia, provide a significant challenge in clinical practice due to their varying clinical presentations, overlapping symptoms, and potential impact on patients' quality of life. This lecture aims to provide a thorough overview of vulval dermatoses, encompassing their etiology, clinical manifestations, diagnostic approaches, and contemporary management strategies. A basic understanding of the anatomy of the vulval region followed by an overview of the various vulval dermatoses, such as, lichen sclerosus, lichen planus, psoriasis, eczema, contact dermatitis and common vulval lesions will follow, highlighting their distinctive clinical features and potential differential diagnoses. In conclusion, this lecture will offer an overview of vulval dermatoses, equipping healthcare practitioners with a deeper understanding of these complex conditions.

S022 - Intersectional, eco-social, and stigma-informed approaches to reducing sexual health disparities: Examples across diverse social geographies

Carmen Logie

Opening Ceremony, October 26, 2023, 18:00 - 19:30

Intersectional, eco-social, and stigma-informed approaches to reducing sexual health disparities: Examples across diverse social geographies

Carmen Logie, PhD

Professor, Factor-Inwentash Faculty of Social Work, University of Toronto, Canada

Canada Research Chair in Global Health Equity & Social Justice with Marginalized Populations

How can intersectional, eco-social, and stigma-informed approaches help to address sexual health disparities? Drawing from five case studies across diverse social and geographical contexts (including Canada, Jamaica, Uganda, Kenya, and Congo Republic), this talk will explore the potential utility of each of these approaches for informing sexual health research, including interventions, with a focus on HIV and STI prevention and care. Intersectional approaches address differential access to power across social categories—and individual and community strengths at the intersection of marginalized positionalities.

Eco-social framings address social and ecological drivers that shape access to sexual health and sexual health outcomes—such as environmental and contextual influences, including those resulting from the effects of climate change. Stigma-informed approaches address drivers and facilitators of stigma, stigma marking across multiple interlocking health and social categories, stigma manifestations, and impacts on healthcare access and outcomes. Case studies from community-based research that will be shared include qualitative, quantitative, mixed-methods, and intervention research with diverse populations disproportionately affected by HIV and STI and social marginalization, including a) Northern and Indigenous youth in Arctic Canada; 2) sexually and gender diverse persons living with HIV in Jamaica; 3) refugee and displaced youth in Uganda, 4) climate-affected youth in Kenya; and 5) sex workers in Congo Republic. Cases will explore research findings focused on understanding and reducing sexual health disparities and promoting sexual health, including via self-care (e.g., HIV self-testing), mobile health (e.g., SMS), and arts-based strategies (e.g., digital comics, video, song) across these diverse settings, and share lessons learned for theoretically-informed community-based research to advance sexual health equity.

S024 - Spotlight On Malignant & Pre-Malignant Genital Cutaneous Lesions

Daniel Micallef

Workshop 3 - Maltese Association of Dermatology and Venereology (MADV), October 27, 2023, 14:00 - 15:30

Spotlight on Malignant and Pre-Malignant Genital Cutaneous Lesions

Akin to skin of rest of the body, premalignant and malignant lesions may develop on genital skin. Penile and vulval intraepithelial neoplasia represent insitu carcinoma and can manifest in various ways including erythroplasia of Queyrat in males and Bowen disease in both males and females. HPV infection is probably the most important risk factor. There are several treatment modalities including surgery and 5% 5-fluorouracil. The risk of progression to invasive disease is estimated at 10- 33%.

Squamous cell carcinoma is the commonest penile and vulval malignancy. The most important risk factors are the presence of foreskin in males and chronic dermatoses (especially lichen sclerosus) and HPV infection in both males and females.

Untreated, lymphatic and distant metastases are common. Such tumours require staging and management by a multidisciplinary team and survival is highly- dependent upon rapid diagnosis and treatment. Hence, maintaining a high index of suspicion is crucial.

Less common genital malignant tumours include verrucous carcinoma, extramammary Paget disease and malignant melanoma although most other cutaneous malignancies can also present in the genital areas.

S025 - Demystifying Hidradenitis Suppurativa

Dillon Mintoff

Workshop 3 - Maltese Association of Dermatology and Venereology (MADV), October 27, 2023, 14:00 - 15:30

Abstract: HS presentation _ Dillon Mintoff

Hidradenitis Suppurativa is a chronic, inflammatory disease of the pilosebaceous unit. Patients with HS experience multiple, painful nodules, abscesses and tunnels most commonly in the axillae, groin and buttock. Hidradenitis Suppurativa is a complex trait and it's pathophysiology is still largely unknown. It is however understood that the main risk factors of Hidradenitis Suppurativa are environmental, lifestyle and genetic factors which culminate in hyperkeratinization and autoinflammation at the pilosebaceous unit. The aim of this presentation is to describe how hidradenitis suppurativa manifests in the Maltese population and to enable confident diagnosis and first-line management.

S028 - International migration and health

Apostolos Veizis

Opening Ceremony, October 26, 2023, 18:00 - 19:30

Refugees and migrants may be among the most vulnerable of all populations. They are at risk of significant adverse physical and mental health outcomes, both in transit and when they arrive at their destinations. Access to essential health services may be compromised by political, administrative and financial barriers, as well as social determinants.

Migration is a determinant of health. Since the movement of populations inevitably leads to consequences for healthcare delivery, national governments and international bodies have a responsibility to ensure that, in keeping with their pledged obligations on no migrant or refugee is “left behind.”

Factors that determine the varying needs are influenced by where the refugee population originates from, the reason for their forced departure, the nature and added risks of their journeys, the cultural context they encounter on arrival, and the type of health system in their destination country.

Within refugee camps, the provision of healthcare is often challenged due to the inadequacy of resources, ongoing security risks, and the diverse health needs of the populations as determined by previous physical and mental trauma.

Additionally, tackling mental health issues in refugees requires both psychological and pharmacological measures

Essential health services themselves may not be able to provide culturally and linguistically appropriate care. Countries should address the lack of health professionals, services and programmes to provide for the cultural and linguistic needs of refugees and migrants. Investing in the health of refugees and migrants, including through provision of health promotion and disease prevention services, is a sound public health strategy. It is also good economic practice, as the health and financial costs of excluding these groups are likely to be higher than the cost of implementing inclusive policies.

Advocacy and public education concerning refugees and migrant health should focus on its vital contribution to a “One Health” world. A mix of short-term and longer-term public health interventions should provide access to health promotion and disease prevention as well as the continuity and quality of essential health care.

S029 - A Panel Discussion On Chlamydia Screening

John White

A Panel Discussion On Chlamydia Screening, October 28, 2023, 16:40 - 17:00

Test-and-treat is a key strategy in the control of Chlamydia trachomatis (CT). Recent evidence calls into question the validity of urogenital, rectal, and pharyngeal CT test-and-treat strategies in women and in men who have sex with men (MSM). This suggests a need to redefine best practices for the prevention and management of this most common bacterial sexually transmitted infection. This session will present a summary of the evidence and the new European Chlamydia Management Guideline. A survey regarding CT screening will be circulated throughout the conference for attendees to complete and results will be presented for discussion.

S031 - Skin Diseases In Syrian Refugees In Lebanon

William Abou Shahla

ILDS Satellite Symposium, Migrants Health (continued), October 26, 2023, 14:00 - 16:00

STI and Major Skin Diseases Among Refugees in Lebanon

Working with vulnerable populations in Lebanon is difficult due to many political, economic, and social beliefs challenges. Regarding sexual health among Lebanese and refugees who belong to the LGBTQ+ community, ProudLeb, and other NGOs are putting efforts to support the community and provide awareness regarding sexual health. However, such efforts are challenged by limited resources, social discrimination, and the criminalization of the grouping of this population by law. The lack of continuous funds, microscopes, the ability to perform blood lab tests, and PCRs oblige the doctors in such centers to diagnose cases clinically and prescribe medications accordingly. Besides, patients are not feeling safe receiving healthcare services from the public hospital due to gender discrimination. This puts more pressure on the local NGOs to promote healthcare among such communities in their mobile or centralized clinics. The stigma associated with sexual infections plays a major role in avoiding getting the necessary help.

From another perspective, the field assessment done in the clinics in the Beqaa Valley by UK and Malta experts showed that more effort must be done regarding women's physical health. Lots of common skin diseases, infectious cases, and inflammations are kept untreated even after getting the right diagnosis due to the financial status and the lack of medications. An initiative was taken in June 2023 to collaborate with one of the local NGOs in the Beqaa to spread awareness about STIs, skin diseases among refugees, women's health and pap smears, and family planning by promoting and providing contraceptive tools.

A detailed presentation will show more data and clinical cases that were discussed and followed up on since the initiation of the mission.

S033 - Genital dermatoses: a view through the lenses of Artificial Intelligence

Alexandra-Irina Butacu

EADV IUSTI Symposium, Genital Dermatoses & Artificial Intelligence, October 28, 2023, 10:00 - 11:00

“Genital dermatoses: a view through the lenses of artificial intelligence” Alexandra-Irina Butacu, George-Sorin Tiplica

Genital dermatoses may be categorised in non-sexually transmitted inflammatory diseases, including genital psoriasis, lichen sclerosus and atrophicus, vitiligo, non-sexually transmitted infections, sexually transmitted infections, malignant disorders and neurological or pain syndrome related. As the incidence of these afflictions rises in our ever-evolving society, the associated burden on the lifestyle of patients and the healthcare related costs should benefit from the ascending possibilities provided by the current developments of computer sciences, including artificial intelligence (AI). From novel diagnostic techniques, assisted by AI in providing an accurate and complete diagnosis, to patient related methods of clinical assessment and clinical application of genomics in diagnosis, treatment decision and prognosis prediction, AI ensures exhaustive possibilities of development in the field of genital dermatoses. Developing machine learning models and evaluating their performance in predicting HIV and other sexually transmitted infections represent current interests and AI assisted prediction of at-risk patients studying epidemiological data could decrease the rate of transmission of sexually transmitted infections. This presentation aims to provide an up-to-date review of the role of AI in the management of genital dermatoses.

S037 - What Artificial Intelligence can bring to venereology?

Ionela Manole

EADV IUSTI Symposium, Genital Dermatoses & Artificial Intelligence, October 28, 2023, 10:00 - 11:00

What Artificial Intelligence can bring to venereology?

Ionela Manole, Alexandra- Irina Butacu, George- Sorin Tiplica

As the incidence of sexually transmitted infections (STIs) continues to rise globally, the need for innovative, technologically advanced solutions becomes more crucial. Leveraging a diverse range of functionalities, including predictive modeling, advanced diagnostics, and tailored educational programs, artificial intelligence (AI) stands as a powerful tool, singularly equipped to provide an innovative solution to this pervasive challenge in venereology. The advanced computing techniques represented by machine learning algorithms, show promising strides in predicting the occurrence of STIs by processing demographic and behavioral data, heralding a new era of preemptive medical interventions. Subsequent to this, AI plays a significant role also in diagnosis. Its exceptional skill to decipher dermatological images and accurately pinpoint skin-related symptoms of STIs is under examination, revealing a level of competence that can be compared to that of seasoned dermatologists. Of particular interest is also AI's role in patient education, promoting sexual health literacy through personalized, interactive content. AI-powered chatbots and virtual health assistants are highlighted as tools that deliver accurate information, reduce stigma, and encourage safe practices.

S038 - Non-Venereal Male Genital Dermatoses Revisited

Dr Lawrence Scerri

Workshop 3 - Maltese Association of Dermatology and Venereology (MADV), October 27, 2023, 14:00 - 15:30

Non-Venereal Male Genital Dermatoses – Revisited

The male genitocrural area may be effected by various non-venereal mucocutaneous lesions and eruptions. These include benign lesions namely pearly penile papules, Fordyce spots, angiokeratomas of Fordyce and cysts, as well as a number of malignant and pre-malignant lesions. Inflammatory dermatoses that have a predilection for the genitocrural areas include Zoon's balanitis, psoriasis, lichen planus, lichen sclerosus, contact dermatitis, fixed drug eruption and circinate balanitis. Infectious dermatoses that may involve the inguinal/genital area include tinea cruris, erythrasma and Fournier's gangrene. The genital area may also be the focus of cutaneous sequelae from underlying psychological disturbances such as lichen simplex and genital preoccupation/dysmorphophobia. Apart from pharmacological/surgical management, in most cases it is important that the clinician allays fears of harbouring venereal infections, which may be lurking at the back of these patients' minds.

S040 - Is There A Place For Probiotics In 2023? & What Is The Place Of Molecular Tests In The Study Of Vaginitis?

Pedro Vieira-Baptista

Workshop 6 - ISSVD, Vaginitis, October 28, 2023, 10:00 - 11:00

[Is there a place for probiotics in 2023?](#)

Pedro Vieira-Baptista

Probiotics, according to the International Scientific Association for Probiotics and Prebiotics (ISAPP), are “live microorganisms that, when administered in adequate amounts, confer a health benefit on the host”.

The idea of “correcting” changes in the microbiota and avoiding the use of antibiotics and/or antifungals is very intuitive and appealing.

Nevertheless, despite the wide offer of probiotics and the claims of efficacy, quality data supporting its use in vaginitis are low.

The available data does not show benefit from the the use of probiotics in the treatment of candidiasis.

Concerning bacterial vaginosis, the available data does not show advantage on its isolated use. However, limited data show that it may increase the time to relapse in recurrent cases.

Disappointingly, probiotics have not shown benefit during pregnancy.

While the evidence is not encouraging, the concept behind probiotics is logical and that is one line of research that must be continued. Studies with longer populations, well defined groups, and using strains that dominate in the vagina of healthy women are needed. Another question that remains unanswered is whether the oral or vaginal route will lead to better results. The changes in the regulations concerning probiotics in several countries may contribute to a better knowledge in this field.

On the tranquilizing side, probiotics seem to do no harm – which can be “too good to be true” for a product that has a therapeutic effect.

Can the choice of more appropriate strains change the results? Or do we need more than pure strains of bacteria to have an impact (probiotics vs. vaginal microbiome transplants?)

S042 - 100 year IUSTI

Michael Waugh

Opening Ceremony, October 26, 2023, 18:00 - 19:30

A History of IUVDT/IUSTI over the last 100 years. "Old men forget" Henry V, Act IV, Scene III. Wm. Shakespeare

Henry de Vries has asked me to talk. Thank you, Jackie Sherrard, for organising the history of IUSTI magnificently on the Web.

1953 after the successful eradication of endemic syphilis in Yugoslavia IUV became IUVDT. Regions followed; 1954 Europe, 1975 Asia Pacific, 1978 Africa.

I have known IUVDT/IUSTI since 1969. I had only been in venereology a few months when my chief went to the 26th General Assembly of IUVDT in Budapest.

My story returns to Malta 1975 (IUVDT) where Willie Harris was also there.

IUVDT Leeds 1978 was my real introduction to politics of IUVDT/IUSTI. Axel Perdrup, Copenhagen became President followed by Duncan Catterall, London presiding over assemblies in East Berlin in 1980, and Dublin in 1982.

In 1984, an Executive meeting of IUVDT was held near London Airport. I arrived to be congratulated on becoming the Secretary General. Anton Luger was now President and he had not got on well with Willie Harris who had been my predecessor.

I was Secretary General under three Presidents Anton Luger, Vienna; Andre Siboulet, Paris and Detlef Petzoldt, Heidelberg. I shall talk about travelling and support in Australia and South East Asia. I became President in Singapore in 1995. I shall talk about the opening of Eastern Europe after the collapse of the Soviet Union. I shall talk about the rise of HIV/AIDS and cooperation with WHO. My achievement was getting the name change to IUSTI passed at the General Assembly in Melbourne in 1997. At a meeting of EADV in Crete I had asked Peter Kohl to help resurrect the Europe Region of IUSTI resulting in IUSTI Goteborg, 1998.

After 1999, my term of duty finished. But 2000+ is another chapter.

Oral Presentations

FO001 - Sexually transmitted infection testing and rates in event based HIV pre-exposure prophylaxis users

Dr Kiersten Simmons, Mx Colin Fitzpatrick, Daniel Richardson

Free Oral Presentations - PrEP, October 27, 2023, 08:00 - 09:00

Event based dosing HIV pre-exposure prophylaxis (EBD-PrEP) is as effective at preventing HIV transmission in MSM as daily dosing. We aimed to explore differences in sexual behaviour, sexually transmitted infection (STI) testing and STI rates between EBD-PrEP users and daily users

Methods

We performed a cross-sectional analysis of PrEP-users between January 2020 – January 2021 in our large urban sexual health clinic which provides HIV-PrEP to 2100 individuals per year.

Results

418 attended for HIV-PrEP during this time period: 402 (96%) MSM, 1 (0.2%) cis-woman and 9 (2.1%) transgender people. The median age was 41 years-old (IQR=32-50) and 300 (72%) described their ethnicity as white. Overall, 83 (20%, 95% CI=16.1-24.0) were using EBD PrEP. EBD-PrEP users had fewer sexual partners per year [$p=0.008$] and fewer STI tests per year [$p<0.001$] than daiy users however there were no differences in STI rates (chlamydia, gonorrhoea, or syphilis) between EBD-PrEP and daily users (35% .v.34%, $p=0.54$).

Conclusion

This study has demonstrated reduced STI testing frequency but no differences in STI rates between EBD-PrEP and daily users. More research is needed to understand the optimal frequency for STI testing in MSM using EBD PrEP

FO002 - PrEP knowledge among healthcare professionals in Türkiye

Oğuzhan Oğuzhan Acet, Hüsnü Pullukçu, Meltem Taşbakan, Deniz Gökengin

Free Oral Presentations - PrEP, October 27, 2023, 08:00 - 09:00

Background

Pre-exposure prophylaxis (PrEP) is a major tool to control the growing HIV epidemic and achieving the 95-95-95 targets of UNAIDS. PrEP knowledge and awareness may be low in countries where PrEP is unavailable. PrEP has become available very recently in Türkiye. This study aims to measure the knowledge level of healthcare professionals (HCP) in Türkiye about PrEP.

Methods

Healthcare professionals were asked to respond to a web-based 15-item survey between November 15 and 30, 2022. The survey was based on the recommendations in the national and international PrEP Guidelines. PrEP knowledge was compared between genders, age groups, medical students and medical doctors, students with clinical and basic medical education and those who had and had not heard of PrEP. The Mann Whitney U test was used for comparison of independent groups and associations between continuous variables were analyzed with the Spearman's rho test; a p value <0.05 was considered statistically significant.

Results

Out of 260 HCP 160 (61.5%) were medical students, 170 (65.4%) were female and the average age was 25.5 ± 8.02 years; 86 (33.1%) were doctors, 2 (0.8%) were dentists, 6 (2.3%) were nurses, and 5 (1.9%) were health technicians. One hundred sixty (61.5%) participants had heard of PrEP. The two most common sources of information were scientific journals/articles/books (n=88; 33.8%) and doctors (n=87; 33.4%). The average number of correct answers was 9.28 ± 1.98 (min:4, max:14). Response rates were not significantly different in terms of age (Spearman's rho test, $p=0.093$) and gender (Mann Whitney test, $p=0.439$). Students with clinical medical education had significantly better knowledge than those with basic medical education (Mann Whitney test, $p=0.047$). There was no significant difference between medical students and medical doctors in terms of knowledge level (Mann Whitney test, $p=0.785$). Participants who had heard of PrEP had a significantly better performance compared to those who had not (Mann Whitney test, $p=0.002$).

Conclusions

This is the first study in Türkiye to measure the level of PrEP knowledge among HCP. Usage and management of PrEP is possible with a good level of knowledge. The average knowledge level for PrEP among HCP is low and requires immediate interventions.

FO003 - Renal outcomes of emtricitabine/tenofovir disoproxil fumarate oral PrEP over five years among MSM in Amsterdam

Mark van den Elshout, Dita Bolluyt, Eline Wijstma, dr. Anders Boyd, dr. Elske Hoornenborg, prof. dr. Maria Prins, prof. dr. Liffert Vogt, Maarten Schim Van Der Loeff

Free Oral Presentations - PrEP, October 27, 2023, 08:00 - 09:00

Tenofovir disoproxil fumarate/emtricitabine (TDF/FTC) is broadly used as oral pre-exposure prophylaxis (PrEP) to prevent HIV. TDF is known to be potentially nephrotoxic, although the risk of renal adverse events in PrEP users appears to be low. We assessed the association between PrEP use and kidney function over the course of five years.

Methods

We included men who have sex with men (MSM) from the Amsterdam PrEP demonstration project (AMPrEP) at the Public Health Service of Amsterdam, who had at least one follow-up creatinine measurement. Plasma creatinine was measured yearly, between August 2015 and December 2020. Participants were offered a choice between daily or event-driven PrEP. We examined the effect of PrEP and various risk factors for kidney failure by modelling the mean estimated glomerular filtration rate (eGFR), as calculated by the CKD-EPI equation, over time, using a multivariable linear regression model with generalised estimating equations.

Results

Among 351 participants analysed, mean eGFR at baseline was 100 mL/min/1.73m² (SD 14) and declined -0.30 mL/min/1.73m² per year (95%CI -0.59,-0.01) during a median follow-up time of 54.2 months (IQR 47.0, 57.6). Among 261 participants (74.4%) who were followed-up at least 48 months, mean eGFR at 48 months was 96 mL/min/1.73m² (SD 15). Over time, lower mean eGFR was observed in those using daily compared to event-driven PrEP (-2.30 mL/min/1.73m²; 95%CI -3.75,-0.85) and older participants (per 10 years at baseline: -5.75 mL/min/1.73m²; 95%CI -6.70,-4.80). Twelve participants (3.4%) had an incident eGFR <60 mL/min/1.73m² during follow-up, but this persisted in none.

Conclusion

Oral PrEP using TDF/FTC gave no concerns for renal safety over the course of five years. The decline in eGFR over time was small and within the range expected due to normal ageing. These data support guidelines advising less frequent or optional screening among younger people without kidney-related comorbidities.

FO004 - What do MSM think of antibiotic PEP or PREP to prevent STIs?

Dr. Amy Matser, Bas Hulstein, Prof. dr. Henry de Vries, dr. Elske Hoornenborg, prof. dr. Maria Prins, Udi Davidovich, Maarten Schim Van Der Loeff

Free Oral Presentations - PrEP, October 27, 2023, 08:00 - 09:00

Clinical trials have shown that doxycycline as post-exposure prophylaxis after sexual contact (doxy-PEP) prevents sexually transmitted bacterial infections (STI). We investigated current awareness about informal use of antibiotics as pre- and post- exposure prophylaxis to prevent STI (STI-PrEP/PEP) among men who have sex with men (MSM). In addition, we investigated psychosocial determinants of actual informal use.

Methods

Data were collected in the Amsterdam Cohort Study among MSM, the Netherlands, between October 2021 and October 2022. In an online questionnaire, we assessed socio-demographics, sexual behavior, bacterial STI diagnoses, STI-PrEP/PEP awareness, perceived effectiveness of, and beliefs and attitudes towards STI-PrEP/PEP, and intention to use it. STI-PrEP/PEP users were described and (ordinal) logistic regression analysis was conducted to identify factors associated with STI-PrEP/PEP awareness (yes/no) and intention to use STI-PrEP/PEP (7-point Likert scale).

Results

Among 593 MSM (median age 46 years [IQR 36-53]), 102 (17.2%) were aware of STI-PrEP/PEP and 15 (2.5%) had ever used it. STI-PrEP/PEP awareness was associated with living with HIV, HIV-PrEP use in the preceding 6 months, and sexualized drug use with casual partner(s). Median intention to use STI-PrEP-PEP was 3 (IQR 2-4). Higher intention to use STI-PrEP/PEP was associated with HIV-PrEP use, sexual contact with casual partners, being worried to get an STI, self-protection as reason to use it, the intention to reduce STI testing and sexual experimenting. Stigmatizing beliefs regarding STI-PrEP/PEP users were associated with a lower intention.

Conclusion

Preventive use of antibiotics for STI prevention is limited among MSM in the Netherlands in 2021/2022. Some men have a high intention for use. Self-protection and enhanced sexual pleasure are amongst the intrinsic motivators for higher intention to use STI-PrEP/PEP. Studies are needed on the safe use of STI-PrEP/PEP.

FO005 - A 3-year response to a HIV outbreak among homeless people who inject drugs (PWID)

Michelle McIntyre, Dr Suzanne Todd, Mrs Susan Semple, Dr Kathy Li, Dr Louise McCorry, Dr Helena Bond, Dr Michael Hunter

Free Oral Presentations - PrEP, October 27, 2023, 08:00 - 09:00

An outbreak of HIV among homeless people who inject drugs (PWID) in Belfast, Northern Ireland started in August 2020. Previously, injecting drug use accounted for only 0-5 cases per year in Northern Ireland. Traditionally HIV care has been hospital based. We describe our approach to delivering HIV care, to those most difficult to engage, within our local community during this 3 year period.

Methods

An interdisciplinary group comprising HIV clinicians, public health, homeless, prison and addiction services was rapidly established. Following a 6 week information gathering pilot a weekly outreach clinic was set up to deliver care to positive patients and those injecting at high risk of HIV (June 2021). The aim was to improve engagement of HIV positive patients and raise awareness to those at high risk of acquiring HIV. In October 2022, after a reduction in the number of new HIV diagnoses, monthly outreach clinics are now delivered within our local homeless inclusion centre.

Results

We describe 24 HIV cases in PWID. 46% (11/24) are male. Median age is 30yrs (range 23-43). 90% (18/20) were Hepatitis C co-infected. 52% (11/21) had negative HIV test in the preceding year. 88% (21/24) inject heroin and 86% (18/23) cocaine. There have been 3 deaths (all female). Over 25 months we have delivered 44 outreach clinics; 97 HIV-positive episodes of care and reviewed 83 high-risk injecting patients. 90% (19/21) of HIV positive patients are on anti-retroviral treatment. 86% (18/21) have achieved viral suppression (<200 copies/ml). 2 patients are neither on anti-retroviral treatment nor engaged with services.

Conclusion

A low barrier approach within the community is required to engage this vulnerable and chaotic cohort. Good partnerships across all services and regular multi-disciplinary discussion is key. Education, adherence support and needle exchange is essential to reduce viral load and onward transmission.

FO006 - Prevalence of cefixime-resistant *Neisseria gonorrhoeae* in Melbourne, Australia, 2021-2022

Eric Chow, M Kerrie Stevens, Ms Vesna De Petra, Professor Marcus Chen, Professor Catriona Bradshaw, Dr Norelle Sherry, Ms Ivette Aguirre, Dr Lindley Barbee, Professor Deborah Williamson, Ms Kate Maddaford, Dr Lenka Vodstrcil, Professor Benjamin Howden, Professor Christopher Fairley

Free Oral Presentations - Marginalised Populations, October 27, 2023, 14:00 - 15:30

The rise of antimicrobial-resistant *Neisseria gonorrhoeae* is a global health threat. While ceftriaxone remains the first-line treatment for *N. gonorrhoeae*, the US CDC has recommended cefixime as a second-line treatment; however, cefixime is not currently available in Australia. This study aimed to examine the prevalence of cefixime-resistant *N. gonorrhoeae* among individuals attending a sexual health clinic in Melbourne, Australia.

Methods

We conducted a cross-sectional study among individuals attending the Melbourne Sexual Health Centre between 9-August-2021 and 18-July-2022. We included individuals with culture-confirmed *N. gonorrhoeae* where their isolates underwent antimicrobial susceptibility testing for cefixime, azithromycin and ceftriaxone. Multivariable logistic regression with a generalised estimating equation was performed to examine the factors associated with cefixime-resistant *N. gonorrhoeae*.

Results

1176 *N. gonorrhoeae* isolates were included. The prevalence of cefixime resistance was 6.3%, azithromycin resistance was 4.9% and ceftriaxone resistance was 0%. Cefixime resistance was the highest among women (16.4%, 10/61), followed by men-who-have-sex-with-women (6.4%, 7/109), men-who-have-sex-with-men (6.0%, 65/1090) and gender-diverse people (0%, 0/24) ($p=0.006$). Cefixime resistance did not differ across anatomical sites (urethral, oropharyngeal and anorectal) ($p=0.568$). Multivariable logistic regression showed that women (adjusted odds ratio [aOR]=2.75, 95%CI: 1.23-6.11) had higher odds of having cefixime-resistant *N. gonorrhoeae*. Age, HIV status, PrEP use, sex workers, and having partners from overseas in the past 12 months were not associated with cefixime-resistant *N. gonorrhoeae*.

Conclusion

Prevalence of cefixime-resistant *N. gonorrhoeae* among sexually-active individuals in Melbourne exceeds the maximum 5% resistance rate recommended by WHO for using an antimicrobial as a standard treatment regime. Cefixime treatment may have limited benefits in Australia, particularly in certain groups. Future work should characterise cefixime-resistant lineages circulating in our setting.

FO007 - Antimicrobial resistance using Ceftriaxone monotherapy versus dual-therapy with azithromycin for gonorrhoea treatment in Melbourne, Australia

Eric Chow, M Kerrie Stevens, Ms Vesna De Petra, Ms Ivette Aguirre, Dr Courtney Ierano, Professor Marcus Chen, Professor Catriona Bradshaw, Dr Norelle Sherry, Associate Professor Jason Ong, Professor Deborah Williamson, Professor Benjamin Howden, Professor Christopher Fairley

Free Oral Presentations - Marginalised Populations, October 27, 2023, 14:00 - 15:30

Since the late 2020s, several countries have changed gonorrhoea treatment from ceftriaxone (0.5g IM)/azithromycin (1g po) dual therapy to ceftriaxone (1g IM) monotherapy as per the CDC guidelines. Dual therapy is still the first-line treatment in Australia. In August-2021, the Melbourne Sexual Health Centre (MSHC) in-house gonorrhoea treatment guidelines were changed from dual therapy to monotherapy. This study aimed to examine changes in antimicrobial susceptibility and antimicrobial consumption before and after the guideline update.

Methods

We compared antimicrobial resistance (i.e. ceftriaxone, azithromycin, ciprofloxacin and tetracycline) and consumption between the dual therapy period (3-Aug-2020 to 08-Aug-2021) and monotherapy period (09-Aug-2021 to 26-Aug-2022) at MSHC. Monthly consumption of ceftriaxone and azithromycin was calculated and expressed as defined daily doses [DDD] per 1000 presentations. The European Committee for Antimicrobial Susceptibility Testing (EUCAST) interpretive criteria for the minimum inhibitory concentration of antibiotics was used.

Results

2,223 *N. gonorrhoeae* isolates were included. Monthly use of ceftriaxone increased (mean=24.1 vs 55.5 DDD/1000 presentations; $p < 0.0001$) and azithromycin decreased (mean=83.5 vs 24.0 DDD/1000 presentations; $p < 0.0001$) from the dual-therapy to monotherapy period. After changing from dual-therapy to monotherapy, there was an increase in azithromycin resistance (0.8% vs 5.2%; $p < 0.0001$), ciprofloxacin resistance (49.6% vs 73.4%; $p < 0.0001$) and tetracycline resistance (47.6% vs 62.1%; $p < 0.0001$). There was a reduction in decreased susceptibility to ceftriaxone (1.1% vs 0%; $p < 0.0001$). Multivariable analyses showed that while the switch to monotherapy was not significantly associated with azithromycin resistance (aOR=1.02; 95%CI:0.21-4.97); the re-opening of Australia's international borders (i.e. 15-Dec-2021) was significantly associated with azithromycin resistance (aOR=8.21; 95%CI:1.99-33.80).

Conclusion

Following switching from dual-therapy to ceftriaxone monotherapy, we saw a reduction in gonococcal strains with decreased susceptibility to ceftriaxone. While there was a rise in azithromycin resistance, this was associated with reopening of Australia's borders. Future genomic work should assess the lineages of *N. gonorrhoeae* currently circulating in our setting.

FO008 - Guideline changes aiming to reduce the evolution of gonorrhoea antibiotic resistance may not be implemented

Bryony Charlotte Victoria Rogers, Miss Priyanka Jerath, Dr Emily Clarke

Free Oral Presentations - Marginalised Populations, October 27, 2023, 14:00 - 15:30

UK diagnoses of gonorrhoea are at the highest levels since records began in 1918. The British Association for Sexual Health and HIV (BASHH) updated national gonorrhoea guidelines in 2019 in response to evolving antibiotic resistance. First line treatment changed to ceftriaxone 1g IM monotherapy. Recommendations for epidemiological treatment of sexual contacts changed, with those presenting within 14 days of exposure being treated epidemiologically, and those presenting after 14 days being tested and only positive contacts receiving treatment. This audit aimed to determine whether guidelines for the management of sexual contacts of gonorrhoea had been implemented.

Methods

A retrospective electronic notes review was undertaken of all gonorrhoea contacts presenting in 2022 to six sexual health clinics across Cheshire and Merseyside, a large region in the north-west of England including Liverpool, with a population of 2.7 million. Duplicates, patients miscoded as contacts of gonorrhoea, and contacts with missing information for the primary outcome 'gonorrhoea infection', were excluded. Demographic data, clinical characteristics, antibiotic susceptibility data and outcome data were extracted, and audited against BASHH guidelines. P values were calculated using a chi-squared test. Gonorrhoea prevalence was defined as the percentage of patients with a positive NAAT at any site.

Results

Prevalence of gonorrhoea amongst contacts was 55.3% (223/403), with higher a prevalence amongst females (75.4%, 101/134) versus males (45.5%, 121/266) ($p < .00001$), and in men having sex with men (54.2%, 65/120) versus heterosexual men (35.9%, 46/128) ($p < .00001$). 16.8% (68/403) had chlamydia and gonorrhoea co-infection and 24.1% (97/403) had only chlamydia infection. 98.9% (368/372) of treated contacts received first line therapy of ceftriaxone. Of contacts with information on time since exposure 72.3% (290/401) presented within 14 days, of whom 96.9% (281/290) received epidemiological treatment. 76.6% (85/111) contacts presenting after 14 days of exposure received epidemiological treatment without awaiting a test result.

Conclusion

Epidemiological treatment of sexual contacts presenting after 14 days of exposure continues to occur despite recommendations and may hamper efforts to control evolution of antibiotic resistance. Possible reasons include lack of acceptability in delaying epidemiological treatment for patients or clinicians, and further studies should be undertaken to investigate this further

FO009 - Surveillance and Epidemiology of *Neisseria gonorrhoeae* in Ireland, 2019-2022

Angeline McIntyre, Ms Mary Archibald, Dr Mark Campbell, Dr Brendan Crowley, Ms Martha Neary, Dr Kate O'Donnell, Ms Antoinette Power, Ms Sinead Saab, Dr Derval Igoe

Free Oral Presentations - Marginalised Populations, October 27, 2023, 14:00 - 15:30

Gonorrhoea, caused by the bacteria *Neisseria gonorrhoeae* is one of the most common sexually transmitted infections (STIs) globally. Worldwide, countries are reporting increased incidence rates of gonorrhoea. Antimicrobial resistance is reducing options for treatment, making gonorrhoea a major public health concern.

In 2022, 4,075 gonorrhoea cases were notified in Ireland. Of these, 83% were male and 17% female. The gonorrhoea notification rate (85.6/100,000 population) in 2022 increased by 45% when compared to the pre-pandemic year 2019, and the increasing trend continues in 2023. Between 2019 and 2022, notification rates increased in young people (15-24 years) by 55% (54% in males and 57% in females). Gonorrhoea notifications in gbMSM (where mode of transmission was known (50%)) increased by 50% in 2022. In 2022, 71% identified as gay, bisexual, and other men who have sex with men (gbMSM), 24% as heterosexual and 5% as "Other".

In January 2021, Ireland introduced a pilot free STI home-testing service for those aged 17 years or older, including timely referral for additional testing and management where required. It has expanded since then and was launched as a national service in October 2022. The service is used by many people doing an STI test for the first time. While 18% of gonorrhoea notifications in 2022 were from home testing, and contribute to the overall increase in notifications, STI clinics (38%) and GP practices (22%) remain the most common testing venues.

Antimicrobial resistance data for a panel of 119 Irish isolates collected between September and December 2021 under the EURO GASP surveillance programme (HPSC), show 72% of isolates were resistant to one or more antibiotic tested: an increase from 63% in 2020 and 50% in 2019. There were no ceftriaxone resistant isolates in this panel, but 3% exhibited decreased susceptibility to ceftriaxone.

Ireland is experiencing an unusually high rate of gonorrhoea, with an epidemiological picture similar to that seen in other countries. The increase seen in young people, females, and in gbMSM may warrant targeted national campaigns. Timely surveillance data are valuable for decision makers considering public health policies to control gonorrhoea.

FO010 - Factors and presenting symptoms associated with intestinal spirochaetosis in MSM: a systematic review

Lucy Rabuszko, Mr Callum Chessell, Professor Carrie Llewellyn, Daniel Richardson

Free Oral Presentations - Various Pathogens, October 27, 2023, 08:00 - 09:00

INTRODUCTION: The transmission dynamics and presenting symptoms of intestinal spirochaetosis (*Brachyspira pilosicoli*, *Brachyspira aalborgi*) are poorly understood but is seen more frequently in men who have sex with men (MSM), where sexual transmission may occur. We aimed to systematically review the literature to define the factors and presenting symptoms associated with intestinal spirochaetosis in MSM.

METHODS: We systematically searched 3 bibliographical databases (MEDLINE, EMBASE and Scopus) for manuscripts in English up to November 2022. The primary author conducted an initial screen and three authors conducted independent reviews to determine the final eligible manuscripts. We only included manuscripts where there were specific data on factors and presenting symptoms associated with intestinal spirochaetosis in MSM.

RESULTS: Fifteen manuscripts published between 1981 and 2022, met the inclusion criteria that included 188 MSM. Sexually transmitted intestinal spirochaetosis in MSM was associated with: living with HIV (including having a low CD4 count <200mm³), having a concomitant sexually transmitted infection, a history of a sexually transmitted infection, co-infection with intestinal parasites; and sexual behaviour including oro-anal sexual contact, oro-genital contact, fisting, condom-less anal sex, receptive anal sex, multiple non-regular sexual partners and increased number of lifetime sexual partners. The presenting symptoms of MSM with intestinal spirochaetosis were diarrhoea, abdominal pain, constitutional symptoms and proctitis, including rectal pain, rectal bleeding, rectal discharge, flatulence and tenesmus.

DISCUSSION: We have highlighted some biological and behavioural factors, and presenting symptoms associated with intestinal spirochaetosis in MSM, which provide insight for clinicians, guidelines, and future public health control strategies.

FO011 - Factors associated with sexual transmission of *Entamoeba histolytica* in MSM: A Systematic Review

Mr Robbie Hughes, Daniel Richardson, Mx Colin Fitzpatrick

Free Oral Presentations - Various Pathogens, October 27, 2023, 08:00 - 09:00

Entamoeba histolytica is an enteric protozoal infection which causes colitis and extra-intestinal sequelae. *E. histolytica* is endemic in certain tropical areas however transmission has also been described between men who have sex with men (MSM). The transmission dynamics and factors associated with sexual transmission are poorly understood. We aimed to systematically review the published literature to explore factors associated with sexual transmission of *E. histolytica* in MSM.

Methods

We searched MEDLINE, Embase, CINAHL and Web of Science Core Collections for all studies published up to November 2022. Only peer-reviewed English language studies of primary research were included. Risk of bias was assessed using Joanna Briggs Institute (JBI) critical appraisal tools. Results were synthesised by extracting factors identified by the included manuscripts and categorised as either epidemiological, biological or behavioural. The review is registered on PROSPERO (CRD42022366168).

Results

9 manuscripts consisting of 682 individuals with *E. histolytica* met the inclusion criteria including 6 cross-sectional studies, 2 case-control studies and 1 cohort study. Sexually transmitted *E. histolytica* in MSM was associated with: increasing age, transmission in warm seasons, lower educational achievement, concurrent and previous sexually transmitted infections (syphilis, gonorrhoea, chlamydia and hepatitis B), concurrent enteric infection (shigella and giardia), oral-anal sex, receptive anal sex, sadomasochism and having an increased number of sexual partners.

Conclusion

We have identified some important factors associated with the sexual transmission of *E. histolytica* in MSM which increases our understanding of the transmission dynamics and target MSM sub-populations affected by *E. histolytica*. This provides insight for future clinical guidelines and public health control strategies.

FO012 - Managing Syphilitic Osteitis, A proposed management strategy for a rare complication of early Syphilis infection.

Michael Butler, Dr Olamide Dosekun, Fareed Shiva

Free Oral Presentations - Various Pathogens, October 27, 2023, 08:00 - 09:00

A 43 HIV-negative man presented to the oncology service with a 3-month history of headaches waking him at night. Skull imaging showed multiple punched out lytic lesions in the parietal and frontal bones suggestive of a neoplastic process. A thorough work up revealed no underlying malignancy. Syphilis serology was reactive with a Rapid Plasma Reagin (RPR) of 1:128, whilst a cerebrospinal fluid analysis ruled out neurosyphilis. He was treated with intramuscular benzathine penicillin for syphilitic osteitis.

We found no guideline on the management of osteitis in early syphilis. We aim to perform a literature review and propose a management strategy.

Methods

A PubMed literature search between 1967 and 2022 was performed to look for cases of osteitis, periostitis or osteomyelitis in early syphilis and extract data on: diagnostic technique used (serological, radiological or biopsy); presence of concomitant neurosyphilis; treatment regimen given; and follow up results. Cases were excluded if key information (such as diagnostic technique or treatment regimen) was missing. A standardised management plan is proposed based on these findings.

Results

Of the 32 confirmed syphilitic osteitis cases 50% presented with headaches and/or pain at lesion site. The commonest bones affected were the frontal (47%) and parietal skull (44%) and the tibia (38%); diagnosed by CT scan (44%), MRI scan (41%) or bone scintigraphy (44%). Where an RPR titre was recorded, it was consistently >1:32.

22% were treated for concomitant neurosyphilis according to local guidelines.

Uncomplicated osteitis was treated with weekly intramuscular benzathine penicillin (32%); daily intravenous Penicillin G (27%) or intramuscular procaine penicillin (27%). In cases followed up, significant radiological and serological improvement was achieved by 3.6months and 4.4months respectively.

Conclusion

Syphilitic osteitis most commonly affects the tibia and skull. Our findings suggest that treatment should be determined on the presence or absence of neurosyphilis. Intramuscular benzathine penicillin once weekly for three weeks seems to be adequate treatment in uncomplicated syphilitic osteitis with good serological and radiological response.

FO013 - Evidence for the sexual transmission of *Strongyloides stercoralis* in men who have sex with men

Callum Chessell, Miss Lucy Rabuszko, Daniel Richardson, Professor Carrie Llewellyn

Free Oral Presentations - Various Pathogens, October 27, 2023, 08:00 - 09:00

Background: *Strongyloides stercoralis* is a parasitic worm with a complex life cycle and can cause significant morbidity including dermatological, respiratory, and gastrointestinal disease including diarrhoea, and a life-threatening hyper-infection syndrome. Limited reports from non-endemic areas including in men who have sex with men (MSM) suggests some sexual transmission. Understanding the (sexual) transmission dynamics of *S. stercoralis* in MSM and any associated factors will provide insight for future clinical guidelines and public health control strategies. The aim of this systematic review was to synthesise the published evidence and associated factors for the sexual transmission of *S. stercoralis* in MSM.

Methods: A systematic review of the literature was conducted adhering to PRISMA and SWiM guidelines and by searching MEDLINE, CINAHL and EMBASE bibliographical databases. Using predefined inclusion and exclusion criteria a two-stage process was used to identify articles eligible to be included in the review. The primary author screened abstracts from the search results and screened the full articles for eligibility. Two secondary authors further screened the full articles to eliminate selection bias. Articles were eligible if they were written in English, contained primary data, and had factors of sexual transmission, an MSM population and *S. stercoralis*.

Results: Seven articles from Europe, North America, and Brazil were eligible for inclusion in the review from 1981 to 2021 and included four case reports, two case series and one clinical trial. In total there were 119 MSM participants with *S. stercoralis*. Specific biological factors (living with HIV and having a low CD4 count/not on antiretrovirals, having a concomitant sexually transmitted infection and at least one protozoal infection) and behavioural factors (travel to *S. stercoralis* endemic area, multiple sexual partners from endemic areas, oro-anal sexual contact and chemsex) were found to be associated with *S. stercoralis* in MSM.

Conclusion: Although significantly limited by the number and the methodology of articles, our review suggests that *S. stercoralis* may be sexually transmitted in some MSM. Furthermore, we have highlighted some important biological and behavioural risk factors associated with *S. stercoralis* in MSM which could be used to both target future research and *S. stercoralis* control interventions.

FO014 - Parasitic infections in MSM between 1987 and 2023: a case series study at SRH, Italy.

MD CHIARA BALLABIO, MD Angelo Roberto Raccagni, Clinical Data Manager Riccardo Lolatto, MD Anna Danise, MD Matteo Chiurlo, MD Martina Ranzenigo, MD Antonella Castagna, MD Silvia Nozza, Statistician Sara Diotallevi, MD Roberto Burioni

Free Oral Presentations - Various Pathogens, October 27, 2023, 08:00 - 09:00

Men who have sex with men (MSM) are at increased risk of sexually transmitted enteric infections (STEI).

The aim of this study is to describe STEIs, focusing on parasitic infections among MSM engaging in high-risk sexual behaviours and evaluate the associated sexually transmitted infection (STI).

Methods

Case-series on MSM in care at the Infectious Diseases Unit, San Raffaele Scientific Institute, Milan, Italy, with ≥ 1 positive stool sample for a parasite, causative of gastrointestinal infections, between January 1987 and February 2023. Individuals with symptoms consistent with a STEI received parasite stool testing on three samples. Previous and concurrent STIs were retrieved. Individual's characteristics were considered at time of STEI diagnosis. MSM's characteristics according to HIV status were compared with Mann-Whitney and Fischer's exact test.

Results

Overall, 95 MSM were included: 78 (82.1%) were PLWH and 5 (5.3%) PrEP users. Median age was 40 years (interquartile range, IQR=34.6–45.9). Parasitic infections were 61 (64.2%) giardiasis, 24 (25.7%) amoebiasis (18.9% *Entamoeba histolytica*, 3.2% *Endolimax nana*, 3.2% *Entamoeba coli*, 1.1% *Iodamoeba butschlii*) and 17 (17.9%) *Blastocystis hominis*. Previous STIs were 57 (60%) [42 syphilis, 15 chlamydia, 10 HSV, 9 gonorrhoea, 8 HPV, 7 molluscum, 5 mycoplasma and 2 mpox] and concomitant ones 13 (13.7%) [6 syphilis, 4 HSV, 2 mycoplasma and 2 chlamydia]. *Entamoeba histolytica* was more frequent among people without HIV (47.1% vs 12.8%, $p=0.003$).

Conclusion

MSM engaging in high-risk sexual behaviours and previous STIs, living either with or without HIV, and presenting with consistent symptoms, should undergo stool testing for parasitic STEIs, as the sexual transmission is becoming more and more frequent. Given a STEI diagnosis, STIs screening is needed as concomitant STIs were observed.

FO015 - The rise of STIs in Malta: epidemiological trend (2005-2022) and public health implications

Dr Matthew Valentino, Donia Gamoudi, Dr Katya Muscat, Dr Alexandra Gauci, Valeska Padovese

Free Oral Presentations - Chemsex & Gender Based Violence, October 27, 2023, 11:00 - 12:00

The Genito-Urinary Clinic (GUC) is the Maltese islands' only public sexual health clinic providing free and anonymous sexually transmitted infections (STIs) testing in key populations and people at risk. Recent socio-demographic changes, characterised by increased migration both from intra-European and third countries, have dramatically impacted STI prevalence in Malta.

To review STI epidemiological trends pre- and post-COVID-19 using GUC data and discuss challenges and public health implications.

Methods

This is a retrospective analysis of medical records collected at the GUC from January 2018 to December 2022. Patient demographics, including gender, sexual orientation, clinical presentation, risky behaviours and STIs diagnoses were analysed. In addition, STIs trend was produced.

Results

In the study period we recorded a yearly increase in the total number of patient consultations, with the exception of 2020, which registered a fall of 35% compared to the previous year. Interestingly, there was an overall fall in the number of asymptomatic consultations from 50% to 38% likely due to symptomatic cases taking priority during the COVID-19 pandemic.

A shift in patient demographics occurred, with an increase of bisexual and other men who have sex with men (MSM) attending clinic (from 26% in 2018 to 37% in 2022), a steady fall in Maltese nationals and an increase in third country nationals (TCNs), from 12% to 21%. There has also been a steady increase in the number of PLWH attending clinic, from 231 to 301. Concerning STIs prevalence we registered a drop of Chlamydia, Gonorrhoea and Syphilis in 2020 in relation to decreased testing, followed by a sharp rise.

Conclusion

Despite the impact of lockdown measures during the COVID-19 pandemic, we experienced a rise of bacterial STIs at the GUC in Malta. This was registered mainly in key populations including bisexual and other MSM and migrants from third countries, explaining the shift of demographics. This has posed significant challenges due to linguistic and cultural barriers arising in consultations. Moreover, change in clinical practice in relation to increased PrEP awareness in MSM and the Mpox outbreak have led to increased testing and clinic attendance in the last 2 years.

FO016 - The prevalence of chemsex amongst men who have sex with men: systematic review and meta-analysis

Yauheni Luksha, Professor Anna Mia Ekström

Free Oral Presentations - Chemsex & Gender Based Violence, October 27, 2023, 11:00 - 12:00

Chemsex, the use of substances during sex with the intent to modify the sexual experience, occurs amongst groups of men who have sex with men (MSM) and is associated with potential adverse sexual and health-related consequences such as sexually transmitted infections or HIV. Monitoring and study of chemsex is necessary to guide public health policy and implementation of evidence-based risk-reduction strategies. Differences in chemsex definitions result in a heterogeneity of reported prevalence estimates making between-study comparisons problematic. This review aims to establish an up-to-date analysis of chemsex prevalence grouped by commonly used chemsex definitions and studied populations.

Methods

A search was conducted for the keywords “chemsex” and “MSM” in three commonly used medical databases on the 12th of December 2022. Studies were included if a clear definition of chemsex was provided and study population as well the recall timeframe specified. For inclusion it was required that the chemsex definition included methamphetamine and GBL/GHB and excluded alcohol and/or tobacco. Studies examining subgroups of MSM other than attendees of HIV-, PrEP- or STI-services were excluded. Studies were grouped by commonly used chemsex definition (3-/4-chems, broad definition or all drugs), study population and recall timeframe and a cumulative estimate was calculated.

Results

After study selection 47 quantitative, original data studies were included in the analysis. The prevalence ranged from 3,2% to 87,5% with studies often published from the Netherlands (n=12) or the UK (n=8). The most used definition was the 3-/4-chems definition where the cumulative prevalence was 4 159/24 918 (16,69%) and 2 317/22 905 (10,12%) and studies using the broad definition of chemsex a cumulative incidence of 2 025/9 712 (20,8%) and 3 632/20 976 (17,3%) during the past 6 and 12 months respectively. Chemsex was more prevalent amongst MSM attending HIV-/PrEP- or STI-services than MSM recruited through social media/dating services.

Conclusion

Chemsex is common amongst MSM especially those attending sexual health services. One in ten to one in five MSM are expected to have engaged in chemsex during the past year or 6 months depending on the definition of chemsex. Future studies should report data using one or both definitions.

FO017 - Sexualised Drug Use and Chemsex in Italy: a questionnaire study in Milan

Serena Giacalone, Dr Marco Cusini

Free Oral Presentations - Chemsex & Gender Based Violence, October 27, 2023, 11:00 - 12:00

Chemsex is a heterogeneous phenomenon with differences in diffusion, setting, motivations and type of substances consumed between countries. Scientific literature shows that chemsex is associated with sexual acts (e.g., orgies, sex parties, prolonged sexual sessions, fisting), which often take place without the use of protective devices such as condoms. This identifies a category of patients who is more susceptible to common sexually transmitted infections (STIs). For the above-listed reasons, numerous studies underline the need to consider the phenomenon a public health priority. The lack of data at national level of the Italian situation creates a perception of reduced need for intervention.

Methods

Anonymous paper questionnaires were distributed to patients who had registered themselves at the STI Department IRCCS Ca' Granda Policlinico in Milan

Results

A significant association was demonstrated between chemsex and the following variables:

1. Number of partners: in the group of clients with more than 5 partners users were more than twice compared with those in the group with less than 5 partners (35.2% vs. 16.2%) $p < 0.0001$.
2. Use of dating apps: more than one out of two persons who used drug during sex affirmed looking for partners on internet, $p = 0.0059$.
3. Low condom uses with occasional partners: (44.6% vs 21.4%); $p = 0.0006$
4. Use of post exposure prophylaxis (PEP) $p = 0.0021$.

Conclusion

Sexualised drug use and chemsex are frequently practiced in Milan. This survey identified a specific population with higher-risk sexual behaviours and increased incidence of acute bacterial STIs.

FO018 - Sexual and gender-based violence and sexually transmitted infections among Syrian refugee women in Lebanon

Sasha Fahme, Dr. Maia Sieverding, Ghina Mumtaz, Dr. Jennifer Downs, Dr. Daniel Fitzgerald, Dr. Jocelyn DeJong

Free Oral Presentations - Chemsex & Gender Based Violence, October 27, 2023, 11:00 - 12:00

Approximately 1.5 million Syrians live in Lebanon, where one in four persons is a refugee. Syrian refugees in Lebanon endure protracted crises which uniquely impact women and increase their risk of sexual and gender-based violence (SGBV). Numerous studies demonstrate that symptoms of sexually transmitted infections (STIs) are prevalent and inadequately treated among Syrian women, though rigorous epidemiologic data are lacking. The purpose of this study is to 1) quantify the prevalence of and risk factors for SGBV among a vulnerable community-based cohort of Syrian refugee women, and 2) determine the association of SGBV with four curable STIs in this population.

Methods

This mixed-methods study follows an explanatory sequential design. Participants are reproductive-age Syrian refugee women residing in an urban refugee camp in Beirut, Lebanon. At enrollment, participants are screened for SGBV, food insecurity, and war trauma exposure. Participants provide self-collected vaginal specimens for GeneXpert® analysis of *C. trachomatis*, *N. gonorrhoeae*, and *T. vaginalis*. Whole blood is collected for Acro Biotech™ rapid syphilis testing. Women diagnosed with an STI are treated and followed at 3- and 6-months for repeat testing and to participate in an in-depth interview of their experiences with partner notification and intimate partner violence. Data collection is currently ongoing.

Results

We have thus far enrolled 83 participants (target N=250). Nine in ten women experience SGBV, including sexual violence (27.3%), violence in health systems (42.1%), and physical violence (67.5%). One case of trichomoniasis was identified; no other STIs were detected to date. Over 90% of participants are food insecure; transactional sex was identified as a negative coping strategy. Severe food insecurity was perfectly predictive of sexual violence and strongly associated with physical violence (OR 7.08 [1.21-41.46] $p < 0.05$). Women described feeling disempowered to discuss sexual violence and seek care due to shame, guilt, stigma, and fears of punitive responses from their families.

Conclusion

Syrian refugee women suffer an alarming burden of SGBV, though this may not confer an increased risk of STIs. Stigma and violence in health systems are major deterrents to care-seeking among survivors. Health systems must respond by providing confidential and safe spaces for women to receive comprehensive sexual health care.

FO019 - Doing sexual health and SGBV research in detention: a case study from Malta

Ms Isotta Rossoni, Valeska Padovese

Free Oral Presentations - Chemsex & Gender Based Violence, October 27, 2023, 11:00 - 12:00

Over the years, the annual country reports on detention facilities in Malta published by the Asylum Information Database (AIDA) and the European Council on Refugees and Exiles (ECRE), have testified to the substandard living conditions of Maltese detention, arguably amounting to inhuman and degrading treatment in breach of article 3 ECHR. As a recent WHO report (2023) argues, while access to health should be guaranteed to immigration detainees, adequate healthcare provision faces numerous barriers related to the constraining context of immigration detention itself, overcrowding and unsanitary living conditions leading to the spread of communicable diseases and uncertainty over the duration of one's detention affecting people's mental health.

Via the SSKAPP Project, a project managed by the Ministry of Health of Malta, a research team composed of a dermatologist-venereologist, a research assistant and a cultural mediator gained access to the only detention centre on the island, Hal Safi. Through regular visits over approximately 6 months, the team was able to see approximately 60 patients to assess their sexual health needs, as well as explore potential experiences of sexual and gender-based violence. The nationalities encountered cover a wide spectrum of countries in the North-African Region (Egypt, Algeria, Morocco); Africa (Ivory Coast, Angola and Eritrea); the Middle East (Lebanon and Iraq); South-Eastern Europe (Serbia); Colombia and Venezuela (South America); Central Asia (Uzbekistan); and Asia (Thailand and Bangladesh). 80% were male and 20% female. Sexual patterns among the sample varied greatly with participants who had never had sex, and participants who had had various sexual interactions in their home country, during the journey to Malta and post arrival, including with sex workers. A small percentage of participants (18%) comprises foreign sex workers detained pre-deportation. Knowledge of STIs and sexual health varied across the sample with a generally high knowledge of HIV (62%) and a lower knowledge of other STIs (37%). Experiences of SGBV recorded included sexual violence during childhood, violence during the journey and in the context of sex work. The research contributes to shedding light on sexual health and protection needs among the detained population in Malta.

FO020 - STI/HIV burden and healthcare engagement of migrant and Western-born male sex workers in the Netherlands

Charlotte Peters, Dr. Ymke Evers, Dr. Karlijn Kampman, Dr. Marie-José Theunissen-Lamers, Drs. Mark Van de Elshout, Nicole Dukers-Muijers, Prof. Dr. Christian Hoebe

Free Oral Presentations - Marginalised Populations, October 27, 2023, 14:00 - 15:30

Background: Globally migrant sex workers have a higher STI/HIV burden. However, it is unclear to what extent migrant male sex workers who have sex with men (MSW-MSM) experience worse sexual health outcomes compared to Western-born MSW-MSM in Western Europe. This unique and large study aimed to assess demographics, STI/HIV burden and engagement in sexual healthcare of first-generation migrant (FGM) and second-generation migrant (SGM) MSW-MSM versus Western-born MSW-MSM.

Methods: A large number of coded STI clinic consultations (n=6970) from 3116 individual MSW-MSM attending any Dutch STI clinic between 2016-2021 were included. FGM is defined as born outside of central/western Europe/North America/Oceania and SGM as at least one parent born outside of central/western Europe/North America/Oceania. Logistic regression analysis was used to assess associations between STI in first consultation and MSW-MSM groups. Incidence of first repeat consultation was compared between migration groups using Cox proportional hazard regression, stratified by STI in first consultation. All analyses were adjusted for age and urbanity of STI clinic region.

Results: FGM MSW-MSM (n=1085) were mostly born in Latin America (50%), while SGM MSW-MSM (n=368) mostly originated from North Africa (30.4%).

There was a significant difference in diagnosis of any STI (33.2%; 29.3%; 23.3%; p<0.001) between the FGM, SGM and Western-born MSW-MSM.

FGM MSW-MSM had an aOR of 1.60 (95%CI:1.34-1.90, p<0.001) of getting an STI diagnosis in the first consultation compared to Western-born MSW-MSM. Overall, incidence of first repeat tests per 100 person-years was 25.8 (95%CI 23.5-28.2) among FGM, 19.7 (95%CI:16.6-23.1) among SGM and 16.7 (95%CI:15.4-18.1) among Western-born MSW-MSM.

FGM MSW-MSM (compared to Western-born) have a hazard ratio of 1.51 (95%CI:1.30-1.76, p<0.001) of having a first repeat consultation at any time, when stratified for no STI in the first consultation. This association was absent when stratified for having an STI in the first consultation.

Conclusion: The STI/HIV burden is high among all three MSW-MSM groups and FGM have a higher odds of STI. Results suggest that FGM are not more lost to care and highlight the importance of low-threshold access to STI testing and care for (migrant) MSW-MSM.

FO021 - Sexual Minority Stress Processes are Associated with Lower PrEP Engagement Among Men who Use Stimulants

Leah Ewart, Dr. Ariana Johnson, Dr. Renessa Williams, Nicole O'Dell, Sidney Carr, Samantha Dilworth, Dr. Christian Grov, Dr. Adam Carrico

Free Oral Presentations - Marginalised Populations, October 27, 2023, 14:00 - 15:30

Background: Sexual minority men (SMM), experience significant stress because of stigma and discrimination. This cross-sectional study sought to (1) identify the profiles of sexual minority stress specific to SMM who use stimulants (2) examine associations with measures relevant to engagement in the pre-exposure prophylaxis (PrEP) care continuum.

Methods: A national US sample of 105 cis-gender SMM who used stimulants and currently were not taking PrEP were included in the analysis. We utilized a latent profile analysis to characterize underlying patterns of sexual minority stress to identify 'profiles' or sub-groups of participants. Participants completed self-report measures of sexual minority stress including: internalized homophobia, concealment of sexuality, and prejudice events. ANOVA and Chi Square analysis were used to examine the correlates of profile membership.

Results: Participants were on average 39.4 years old (SD = 9.13), self-identified as gay (75%), predominantly White (70%) and non-Hispanic (79%). Four distinct profiles of sexual minority stress were identified: (1) Assimilation – low internalized stigma with moderate concealment and prejudice events; (2) Marginalization – high internalized stigma and concealment with low prejudice events; (3) Integration - low internalized stigma and low concealment with high prejudice events; and (4) Separation – moderate internalized stigma and concealment with high prejudice events. Profile membership of group 1, Assimilation, was characterized by moderate probabilities of concealing their sexual identity and having experienced a prejudice event significantly higher proportions of men without health insurance ($p=0.03$), who were mostly White (83%), and the lowest average intentions to use PrEP (8.54; SD = 2.30). SMM in group 4, Separation, that had the most difficulty with PrEP self-efficacy ($p < 0.01$; mean efficacy score 26.6 (SD= 3.81)) had the highest probability of experiencing a prejudice event compared to the other profiles.

Conclusions: Findings underscore the importance of understanding the full spectrum of sexual minority stress to optimize PrEP engagement in sexual minority men who use stimulants.

FO022 - It's not over.....HIV among socially marginalised populations

Binta Sultan, Miss Martha Veitch, Miss Dee Menezes, Ms Jennifer Fearnley, Ms Sive O'Regan, Mr John Gibbons, Professor Al Story, Mr Julian Surey

Free Oral Presentations - Marginalised Populations, October 27, 2023, 14:00 - 15:30

UNAIDS aims for HIV elimination with the 95:95:95 target, which London achieved first. However, marginalised groups still face barriers to care. Health inequalities are increasing, with more homelessness and drug use. England has seen record drug-related deaths and a 23% rise in homelessness since 2010. Homelessness is known to increase the risk of acquiring HIV, but these groups are not prioritised in HIV elimination programs. They have poor access to HIV testing and care. Our study shares HIV testing data from >4000 people tested by the Find&Treat service. They provide point-of-care outreach testing for bloodborne viruses among socially marginalised populations in London.

Methods

We used anonymised data taken from routinely collected health service data from Find&Treat for patients who consented for their data to be used. Everyone who was tested for HIV experienced unstable housing. The data collected information about demographic characteristics, risk factors for HIV, HIV testing outcomes, and engagement in HIV care for those living with HIV (PLWHIV). R was used to undertake analyses

Descriptive analyses are presented. We report sample estimates for the HIV care continuum for those living with HIV. Multinomial regression analysis is being undertaken to identify variables associated with two outcomes (new or previously diagnosed HIV) versus no infection.

Results

4596 were tested for HIV between 2020-2022. 18.2% were currently street homeless, 91% were male, 38% were born outside of the UK, the median age was 43. Prevalence of HIV was 2.1%, n=96. Of those PLWHIV, 82% were male, 46% were white British, 44% were Black or Asian, 55% had ever injected drugs, 55% heterosexual, 17% reported ever being paid for sex. Only 66% were engaged in care at the time of interaction.

Conclusion

There is a high prevalence of HIV among people experiencing homelessness in London with poor engagement in care. Injecting drug use was the most common risk factor. HIV elimination and prevention strategies must prioritise the needs of people experiencing homelessness and using drugs, with new models of care to support people into care.

FO023 - Insights into women's sexual and reproductive health in the Beqaa Valley, Lebanon

Sofia Labbouz, Ms Isotta Rossoni, Dr Anne-Sophie Sarkis, Valeska Padovese

Free Oral Presentations - Marginalised Populations, October 27, 2023, 14:00 - 15:30

Women's sexual and reproductive health (SRH) is frequently poorly addressed. The unstable situation in Lebanon, further compounded by the Syrian refugee crisis, shifted priorities away from SRH issues. Women are the most at-risk group during conflicts and displacement. Early marriage as a result of poverty and insecurity is common among Syrian refugees, leaving young women vulnerable and prone to sexual violence. Contraception is often unaffordable for Syrian refugee women in Lebanon who tend to become pregnant earlier than in their native country. Similarly, their pregnancies become more closely spaced with an increased rate of maternal and obstetric complications after displacement.

Methods

A cross-sectional study was conducted over one week across seven clinic sites in the Beqaa Valley, Lebanon. The study design consisted of a survey presented on a mobile device (phone, laptop, iPad) to consecutive patients attending dermato-venereology clinics. The survey was part of a broader study conducted on 417 patients with a focus on SHR among the 284 (68%) female participants. It included questions on socio-demographic factors, contraception, smear test, abortion and miscarriage. The survey was presented in English and questions interpreted in Arabic by the doctor or other members of the healthcare team present during the consultation.

Results

The highest proportion of participants (20.4%[n=58]) were aged 31-40 years, were Syrian (65.5%[n=186]) and refugees (59.9%[n=170]). Half were married (49.7%[n=141]) with primary school being the most frequent level of education achieved (28.9%[n=82]). Of the females who were asked, nearly a third used no contraception (28.2%[n=80]); when utilised, the oral contraceptive pill (33.3%[n=8]) and intrauterine device (33.3%[n=8]) were most common. Most respondents never had a smear test (29.6%[n=84]). Of those who had, it was most commonly 1-3 years ago (66.7%[n=8]). A third of female participants were parous (29.9%[n=85]). Of those asked, 28.2%[n=80] experienced an abortion and 22.3%[n=64] a miscarriage.

Conclusion

An understanding of SRH practices and care provision is crucial to develop effective and inclusive policies which address the needs of displaced refugee women. Lack of access to a comprehensive health service can result in adolescent pregnancy, sexually transmitted infections, increased maternal mortality and obstetric complications, and gender-based violence.

FO024 - Chlamydia trachomatis viability testing at six different anatomical sites in women (CHLAMOUR)

Kevin Janssen, Mayk Lucchesi, MD Chantal Weijzen, Nicole Dukers-Muijters, PhD Petra Wolffs, Christian Hoebe

Free Oral Presentations - Clinical 1, October 28, 2023, 10:00 - 11:00

Background.

Nucleic acid amplification tests (NAATs) have revolutionized our ability to diagnose Chlamydia trachomatis (CT). But notably, in previous research we showed that some NAAT positive tests are due to detection of non-viable CT. With diagnostic stewardship in mind, the application of viability testing could be of interest for future diagnostic settings. But for this purpose it is important to understand the CT viability in different anatomical sites. Therefore, the aim of this study was to assess CT viability in six different anatomic sites in women.

Methods.

Immediately prior to treatment (STI clinic South Limburg), 28 vaginal NAAT-CT-positive (COBAS4800 CT/NG) adult women, were included in the 'CHLAMOUR' study. We used V-PCR to assess CT viable load (\log_{10} CT/ml) in same clinician taken standardized samples from the cervix, vagina, perineum, anus, optional rectum, and pharynx. Mean loads were compared using t-tests.

Results.

Twenty-eight women were included of whom 68% (19/28) consented to proctoscopic examination (rectal). NAAT-CT-positive rate was 75% for cervix, 79% vagina, 64% perineum, 64% anus, 74% rectum, and 21% for pharynx. Viable load was detected in 90% (19/21) CT positive cervix, 77% (17/22) vagina, 11% (2/18) perineum, 61% (11/18) anal, 93% (13/14) rectal, and 0% (0/6) pharynx samples. The mean viable load was marginally higher in cervical compared to vaginal samples (4.37 [SD:1.35] vs. 3.45 [SD:1.05], $p=0.055$). Mean viable load was higher in rectal compared to anal samples (3.51 [SD:0.51] vs. 2.70 [SD:0.42], $p=0.01$). Viable load was 2.72 [SD:1.69] CT positive perineum samples.

Conclusions.

The amount of viable CT varied by anatomic site, and were highest 'upward in the body', which is thus likely to represent actual site of infection. Still, the vaginal and anal sites (that are usually self-sampled) had high concordance with the cervical and rectal sites. CT at the perineum may indicate autoinoculation.

FO025 - Use of sitafloxacin for previously treated *Mycoplasma genitalium* urethritis in an STI clinic in Barcelona

Vicente Descalzo Jorro, Dr Patricia Álvarez López, Dr Jorge Néstor García Pérez, Dr Jesús Trejo Zahinos, Dr Maider Arando Lasagabaster

Free Oral Presentations - Clinical 1, October 28, 2023, 10:00 - 11:00

Mycoplasma genitalium (MG) has become the second most frequent cause of non-gonococcal urethritis. Simultaneously, higher rates of resistance to antibiotics such as macrolides and moxifloxacin have been observed. European and British guidelines include pristinamycin and minocycline as therapy for moxifloxacin-failing MG infection, and Australian guidelines recommend sitafloxacin when all previous treatments have failed, suggesting an efficacy over 90%. However, sitafloxacin is not available in Spain and needs validation from National Agency of Medicines to be purchased abroad. This study presents the data of a series of multiple-antibiotic-failing MG cases treated with sitafloxacin in an STI clinic in Barcelona.

Methods

This is a retrospective study of patients with MG urethritis requiring sitafloxacin in Vall d'Hebron-Drassanes STI Unit from May 2022 to July 2023. Included patients had symptomatic and laboratory confirmed urethritis with a positive NAAT for MG, persistent after multiple treatment options. Macrolide resistance test was available since September 2022. Sitafloxacin was used following Australian guidelines: 100 mg BID in combination with doxycycline for one week. A test of cure (TOC) was performed 3 to 5 weeks after treatment's completion. Time to clearance was calculated from the start of first line antibiotic to the date of negative TOC.

Results

Four patients were included in this series, all MSM with a median age of 31 years old. Macrolide resistance was tested in two patients, resulting positive, and the other two failed to first line doxycycline-azithromycin sequenced therapy. Moxifloxacin was not used in one patient due to previous intolerance and was ineffective for the rest. All patients also failed to pristinamycin and minocycline therapies. Sitafloxacin was administered with good tolerability and no remarkable side effects. TOC was negative for 3 patients (75% effectiveness) and the mean time to clearance was 152 days. One patient persisted positive, but symptoms became milder.

Conclusion

Antibiotic resistance is a growing concern, also in STIs and particularly in the case of MG. Although the sample study is small, it is relevant that sitafloxacin was the last therapeutic alternative for these patients and it took a mean time of 5 months to cure 75% of them.

FO026 - Incidence and Management of Benzathine Penicillin-G Adverse Drug Reaction Among Pregnant Women in Nigeria

Chiedozie Nwafor, Obiageli Alintah, Dr Johnson Nw-iue, Mr Sorbari Igbiri, Andrew Storey, Dr Owens Wiwa, Dr Olugbenga Ijaodola

Free Oral Presentations - Clinical 1, October 28, 2023, 10:00 - 11:00

Over 7 million pregnancies occur annually in Nigeria, with an estimated 75,000 cases of congenital syphilis. Without intervention, 60% would result in death. Effective implementation of early maternal syphilis screening and treatment can actualize elimination of vertical transmission of syphilis. The World Health Organization has maintained Benzathine Penicillin-G (BPG) as the recommended treatment for syphilis for more than 70 years, but queries regarding its safety and anticipated Adverse Drug Reaction persist. Studies on the incidence of BPG ADR among pregnant women in Africa is mostly lacking and grossly insufficient.

Methods

In March 2023, the Federal Ministry of Health in collaboration with CHAI and relevant partners commenced scale up of congenital syphilis elimination efforts across the 37 states, following an initial pilot that rolled out the dual HIV/syphilis Rapid Diagnostic Tests (RDT) between 2019 and 2021 in three early adopter states. 1,678 healthcare workers were trained to administer BPG, manage anaphylactic shock and other ADRs that may result. Between March and May 2023, CHAI administered a mixed-method online survey to Health Care Workers in the three pilot states to document their experience with the incidence and management of BPG ADR.

Results

203 HCWs responded to the survey; 36% from public Primary Health Centers, 49% secondary hospitals, 12% tertiary, and 3% from private hospitals. 96% affirmed testing pregnant women with the dual RDT, while 4% used VDRL or other tests. Syphilis positive PW were treated using BPG in 77% of the facilities. Other treatments included Ceftriaxone (1.5%), Erythromycin (0.96%), while 20% provided no treatment information. 96% of the HCWs reported no incidence of ADR to BPG. Of the 4% that indicated reports of ADR, the common presentations included nausea/vomiting 50%, itching 25%, and headache/dizziness 25%. No deaths were reported from BPG administration.

Conclusion

This study reveals a very low incidence of BPG ADR among pregnant women. Where reported, no serious or life-threatening outcome resulted. This gives impetus to recommendations on BPG safety in pregnancy. Ministries of health and partners are encouraged to invest in scaling up treatment in line with diagnostics.

FO027 - Sexual health in women from migrant and refugee backgrounds

Negin Mirzaei Damabi, Dr Jodie Avery, Dr Mumtaz Begum, Dr Zahra Ali Padhani, Associate Professor
Zohra Lassi

Free Oral Presentations - Clinical 1, October 28, 2023, 10:00 - 11:00

Background and Aims: Migrant and refugees are likely to experience significant stress due to language barriers, financial difficulties, discrimination. Consequently, migrants and healthcare professionals may give less priority to sexually-related concerns, despite their significant role in their quality of life and well-being. This study aims to identify the evidence base and knowledge gap regarding sexual function in women from migrant and refugee backgrounds.

Methods: We conducted a scoping review adhering to the 2020 PRISMA guidelines and identified relevant studies from online databases, including Medline, CINAHL, Cochrane, etc without any limitations regarding time, language, or study type. To ensure capturing all relevant studies, we also searched grey literature sources and reference lists of the included articles. Using the Covidence software, two authors independently screened and extracted data from selected studies based on eligibility criteria. A thematic analysis was performed, and the results were reported descriptively.

Results: Initially, we identified 6063 studies and ultimately included 11 studies in the review. The study identified a limited body of research regarding sexual function among migrant and refugee women. However, all these studies indicated similar results: anxiety related to sexual activity is reported to be higher among migrant populations and can adversely affect their sexual pleasure. Furthermore, migrants tend to have less sexual knowledge, experience, and liberal attitudes, leading to lower rates of desire, arousal, and pleasure compared to non-migrant women. The acculturation process, whereby migrants assimilate into Western cultures, can also affect sexual attitudes and behaviours.

Conclusion: This study can facilitate the evaluation of programs aimed at addressing sexual dysfunction inequities faced by migrant and refugee women, ultimately improving their sexual health and overall well-being. Also, it is crucial for future research to prioritize neglected populations and develop sustainable and culturally sensitive interventions that can help reduce sexual health disparities experienced by migrants.

FO028 - The NEW UK BASHH sexually transmitted enteric infection guideline 2023

Daniel Richardson, Dr Mark Pakianathan, Dr Michael Ewens, Dr Holly Mitchell, Mx Hasan Mohammed, Dr Amy Evans

Free Oral Presentations - Clinical 2, October 28, 2023, 11:30 - 13:00

Sexually transmitted enteric infections have been described since the 1960s and can cause significant poor health: recent outbreaks of extensively drug resistant (XDR) *Shigella sonnei* and *Shigella flexneri* pose a major public health concern.

BASHH formed a group (of clinicians, an epidemiologist and patients) to design and publish comprehensive guidelines for managing sexually transmitted enteric infections. This guideline is primarily aimed for tertiary sexual health clinics (in the UK) however may also be applicable to other settings and outside of the UK.

Methods

The guideline recommend: sexual history, occupational history and genital/ano-rectal examination, and stool samples being sent for microbiology testing before any antimicrobial use and the use of molecular (PCR) testing for bacterial enteric pathogens (BEP) (*Shigella*, *Campylobacter*, *E. coli*, *salmonella*) and the parasites; *giardia duodenalis* & *Entamoeba histolytica*. Where microscopy is only available for parasite diagnosis, 3 separate stool samples should be sent. Where PCR testing is used to diagnose BEP, reflex culture for antimicrobial resistance testing is necessary.

Results

Comprehensive sexually transmitted infection testing including HIV, syphilis and hepatitis; and partner notification is recommended with a look-back period of 4 weeks (except for *Entamoeba histolytica*). Sexual contacts are only tested if symptomatic (except for *E. histolytica*). Empirical or sensitivity driven antimicrobials are not necessary for BEP and should only be considered in hospitalised patients who are unwell/immunosuppressed where expert microbiological advice should be sought. In cases of *E. histolytica*, all patients with positive results should be treated.

Conclusion

First line treatment for *giardia* is tinidazole 2g stat (second line is paromomycin); first line treatment for *E. histolytica* is Tinidazole followed by paromomycin (a cysticidal).

FO029 - Self-collection of capillary blood using an innovative device for HIV, Syphilis testing among PrEP-using MSM

Cornelia Goense, Dr Ymke J Evers, Dr Inge HM van Loo, Rosalie Heuts, Prof Dr Christian JPA Hoebe, Dr Chase A Cannon, Dr Nicole HTM Dukers-Muijers

Free Oral Presentations - Clinical 2, October 28, 2023, 11:30 - 13:00

Background. Recently home-based testing for HIV and sexually transmitted infections (STI) has become available. Blood collection is required for reliable (laboratory) results on Syphilis and HIV testing. Current self-sampling with fingerstick collection are often not adequate and not always perceived acceptable. The Tasso+ collection device has potential to collect larger blood volumes. We assessed acceptability and feasibility of this device among men who have sex with men (MSM) who currently use PrEP and, performance of the device (i.e., blood volume collection).

Methods. Between August 2022 and January 2023, 47 MSM were recruited during their routine PrEP consultation (with STI, HIV and creatinine screening) at Dutch STI Clinics. Participants tested the device directly after their consultation. An online questionnaire determined acceptability and feasibility of the device and home-based care in general. Volumes were measured after sampling, and remaining serum volume after performing routine screening tests for HIV and Syphilis.

Results. Based on direct experience 87% of participants had positive attitude and 77% would use the device again in the future for blood sampling at home. Acceptability of home-based care in general was lower (77% positive attitude, 72% intention). Participants examined the device easy to use (96%). On average 536 μ l whole blood (244 μ l serum) was collected. Nearly all samples (96%) had sufficient blood for Syphilis and HIV screening. After screening, an average residue of 192 μ l remained in 85% of samples. Residual volume is sufficient for additional testing (e.g., Hepatitis B, creatinine).

Conclusions. Self-collection of blood with this device is highly acceptable among PrEP-using MSM. Potential for future use for home-based testing is high. Use of the device has been feasible for collecting sufficient blood volumes for required Syphilis and HIV tests and possibly additional tests. Therefore, home-based testing including the novel Tasso+ device may be considered a valuable addition among PrEP-using MSM.

FO030 - BASHH standards for the management of sexual health in UK prisons

Dr Susanna Currie

Free Oral Presentations - Clinical 2, October 28, 2023, 11:30 - 13:00

The British Association of Sexual Health & HIV's (BASHH) Prisons Special Interest Group (SIG) was re-established in 2020. Its aim is to define standards of care for sexual health provision in prisons in the UK; provide support to those facilitating sexual health provision in prisons in the UK; and enable the standardisation of practice across prisons in the UK. Members and co-optees of the BASHH Clinical Standards Unit, the BASHH Prison Special Interest Group, and others* have written the first BASHH Standards for the Management of Sexual Health in UK Prisons (publication due Summer 2023).

Methods

Two genitourinary medicine trainees successfully applied for BASHH Educational fellowships to work with the Prison SIG. They joined the writing and strategic groups from across all areas of sexual health care provision, including patient representatives.

The two key areas the standards concentrated on were 1. improved recognition and management of urgent sexual health needs: emergency contraception; identification of pregnancy; continuation of critical medication on reception or transfer e.g. antiretrovirals; post exposure prophylaxis (PEP); sexual assault aftercare. 2. equitable access to HIV prevention: condoms, lubricant, dental dams; HIV PEP; HIV PrEP; HIV testing; and peer support.

Results

By concentrating on the two key areas above people in prison in the UK should expect first and second stage health assessments; trauma informed care; standardised training of staff; robust links to level 3 GUM; strategies to provide out of hours care e.g. PEP PGD. They should also expect improved recognition of the need for HIV prevention; maintained confidential access to sexual health services; recognition of the importance of peer support in HIV prevention; and continuity of care on transfer/ release.

Conclusion

These are the first UK standards for sexual health in prisons. They are intended to bring equity of care to people in prison with sexual health needs. The standards are aimed at all who commission, provide, deliver and use sexual health care in prisons across the UK.

FO031 - Opt-out Blood Borne Virus (BBV) testing in 33 Emergency Departments (EDs) in England

Rachel Hill-tout, Ian Jackson, Stephen Hindle, Mark Gillyon-Powell, Georgia Threadgold, Dr Beatrice Emmanouil, Agnes Webb, Mohammed Absar

Free Oral Presentations - Clinical 2, October 28, 2023, 11:30 - 13:00

On World AIDS Day 2021, the UK Government committed £20 million to expand opt-out HIV testing in EDs in extremely high HIV prevalence (>5/1000) areas as part of their commitment to achieve zero new HIV infections and HIV-related deaths by 2030. 34 EDs in London, Brighton, Greater Manchester and Blackpool were included. The initiative started in April 2022 and expanded to include hepatitis C (HCV) and hepatitis B (HBV) testing in collaboration with the HCV Elimination programme.

Methods

All adults undergoing blood tests in EDs had BBV testing (4th generation HIV test, HBV surface antigen and HCV antibody with reflex RNA if HCV antibody positive) unless they opted-out. An opt-out approach was taken, based on successful pilots, to maximise uptake and minimise impact on ED workload. Testing information was displayed using accessible and translated posters in EDs. HIV/Sexual Health and Hepatology managed all reactive/ positive results.

Results

By March 2023, 33 EDs had implemented HIV testing, 25 HCV and 19 HBV. From April 2022 through March 2023 there were 1,384,378 ED attendances with blood tests. 853,015 HIV, 346,041 HBV and 452,284 HCV tests were performed. In March 2023, median test uptake was 62% (HIV), 57% (HBV) and 62% (HCV).

ED opt-out BBV testing identified 2002 new diagnoses (343 HIV, 1190 HBV, 484 HCV) and 473 people who were previously diagnosed but not in care (HIV 209, HBV 156, HCV 108). Linkage to care was 339/552 (61%) for HIV, 329/1346 (24%) for HBV and 292/592 (49%) for HCV.

Conclusion

Opt-out BBV testing in EDs has proven extremely effective for making new BBV diagnoses and re-engaging those previously diagnosed but not in care. We found unexpectedly high rates of HBV. Initial linkage to care is encouraging and is expected to increase over time.

FO032 - Identification of Non-fatal strangulation in Sexual Health Setting; successful development of an integrated care pathway

Jane Ashby, Mr Daryll Baker, Marie Fitzpatrick, Mr Darren Tippetts, Ms Sarah Mccarthy, Ms Ango Fado, Dr Sarah Parry, Ms Marian Nur

Free Oral Presentations - Clinical 2, October 28, 2023, 11:30 - 13:00

New laws in the UK in 2022 introduced the new criminal offence non-fatal strangulation or suffocation (NFS).

NFS is an extremely high-risk indicator in domestic abuse (DA), with 7 times increased risk of death, and 12 times increased risk of suicide.

In addition to risk of homicide, emerging evidence indicates potential immediate and delayed medical complications including carotid dissection, hypoxic brain injury and death, as a result of non fatal injury during NFS.

In light of the emerging data, we sought to identify NFS amongst Sexual Health (SH) service users, and set up an integrated pathway for assessment and safeguarding.

Methods

The SH safeguarding leads underwent training about NFS.

SH engaged with local partners to create an integrated pathway for safeguarding and clinical assessment of NFS survivors.

Service wide teaching and training within SH about NFS was delivered to all staff. Methods to enquire about experiences of NFS were developed.

An NFS policy to aid assessment was developed. A local inter-professional working group has been formed to develop the management pathways and includes SH safeguarding lead, local named professional for adult and children's safeguarding, Carotid artery vascular lead and VAWG (Violence against women and Girls) representation.

Results

In the first 4 months of the project there were 14 spontaneous disclosures of NFS within SH services. 0/14 of these had previously been counselled about the risks of NFS or referred for imaging.

13/14 patients have been given verbal and/or written information about risks of immediate and delayed complications. 13/14 reported it occurred as part of sexual assault, domestic abuse or so-called 'breath play'; 1/14 was assaulted by non-intimate partner. 12/14 have been offered referral for imaging and assessment. So far 9/14 have accepted referral for imaging and assessment. 13/14 have been offered referral for support from an IDVA

Conclusion

This project shows that identification of NFS within SH setting is effective, and allows timely referral for imaging and safeguarding and demonstrates the benefit of partnership working.

We are introducing routine enquiry about NFS to all SH service users, including those participating NFS as part of so-called consensual 'breath play'

FO033 - Arthritis – which STI? A clinical conundrum

Dr Mayene Deboub, Dr Sian Pearson, Nadi Gupta

Free Oral Presentations - Clinical 2, October 28, 2023, 11:30 - 13:00

We present the case of a 20 year old white-British bisexual male who attended the Genitourinary clinic to discuss PrEP. However, it was observed that he was limping, requiring crutches to walk, due to a 4 day history of unilateral foot, knee and wrist pain and swelling. He had no history of fever, nor any genitourinary symptoms. He had no past medical history of note.

Prior to the onset of arthropathy, he recalled a widespread rash which resolved spontaneously. He had initially seen his primary care physician who had prescribed flucloxacillin and obtained X-rays, and a rheumatological blood panel.

Methods

Examination revealed tenderness and swelling of the left first and second metacarpophalangeal joints, right knee, and dactylitis of the second toe on the right. A few subtle red papules over the dorsum of the feet were noted. (clinical images will be presented) Full systemic examination, including neurological examination and inspection of the oropharynx and genitalia, was unremarkable. A rheumatological opinion was sought.

Results

Point-of-care-test was reactive for syphilis. A penicillin injection was administered for presumed secondary syphilis. There was minimal improvement.

Subsequent investigations; Syphilis-RPR 32, CRP 91, WCC 8, Rheumatoid-factor, ANA, CCP, uric acid, HLA-B27, HIV, C.trachomatis all negative. Positive Rectal and pharyngeal Neisseria gonorrhoeae PCR. A 7-day course of Ceftriaxone injections were commenced for possible disseminated gonococcal infection. There was a rapid response within 48 hours, the patient being able to walk unaided. His symptoms did not completely resolve however. Mycoplasma genitalium PCR was requested and was detected in the rectum. 7 days doxycycline followed by 3 days of Azithromycin were prescribed.

Conclusion

STI-related arthritis is undoubtedly under-diagnosed and seldom considered. With UK STI rates rising exponentially, we suggest routinely testing all young people with arthritis. Untreated infections may cause chronic disease and costly complications. Determining aetiology was complex in our case; whether disseminated gonorrhoea, syphilis, reactive arthritis, mycoplasma or a combination.

FO034 - Characterisation of the clinical spectrum of balanitis: a retrospective observational study

Dr Pedro Matos, Dr Filomena Azevedo, Carmen Lisboa

Free Oral Presentations - Clinical 2, October 28, 2023, 11:30 - 13:00

Balanitis is defined as inflammation of the glans penis and balanoposthitis if the foreskin also becomes involved, even though these terms are used interchangeably. Approximately 3% of uncircumcised men are affected globally.

Balanitis is a clinical diagnosis and covers a range of heterogeneous conditions with similar clinical presentation. Predisposing factors include preputial dysfunction, diabetes mellitus, obesity and trauma. Balanitis can be caused by infections, inflammatory dermatoses and premalignant and malignant conditions. When an aetiology can be identified, candida infection is the most common. There is contradictory evidence if chronic balanitis may predispose to premalignant and malignant lesions.

Methods

In this observational, retrospective case series we reviewed all medical records of patients presenting with balanitis that had attended the Sexually Transmitted Diseases (STD) clinic in a tertiary hospital during the last decade (2013-2023). We accessed the database and collected and analysed parameters such as age, history of STI or diseases such as diabetes, immunosuppressive treatments, complementary exams such as swab cultures or skin biopsy, treatments for balanitis, complications and follow up.

Results

A total of 204 patients were evaluated. Of these, 31 patients (15,2%) the diagnosis was not confirmed.

For the remaining 173 patients, the mean age was 51 years. Diabetes mellitus was found in 12.7 % (22/173). Biopsy was performed in 42.8% of the patients, corresponding to atypical clinical presentations, persistent non specific balanitis or suspected cases of neoplasia.

Regarding the aetiology of balanitis, 21.4%.of patients had lichen sclerosus, 17.3%lichen planus, 14.5% Zoon's balanitis, 8.7% candida balanoposthitis and 6.4% had psoriasis. Squamous cell carcinoma was confirmed in 4.6% of the patients. In 24.9% of the patients no aetiology could be established.

Conclusion

Balanitis is a common complaint and an important cause for patient evaluation in STI clinic. Management of balanitis remains a clinical challenge.

Our study focused on patients referred to a tertiary hospital for balanitis. There are an important percentage of patients without a definite aetiology.

FO035 - Transformative communication for HIV prevention with and for Northern and Indigenous adolescents in Arctic Canada

Carmen Logie, Dr. Candice Lys, Dr. Zerihun Admassu, Ms. Anoushka Lad, Dr. Shira Taylor, Ms. Kayley Inuksuk Mackay, Dr. Kalonde Malama

Free Oral Presentations - Behavioral Interventions & Implementation, October 28, 2023, 14:00 - 15:30

Background: Youth are disproportionately affected by sexually transmitted infections (STI) and teen pregnancy in Arctic regions, including the Northwest Territories, Canada. Indigenous peoples comprise just over half (50.7%) of the NWT population and experience health disparities rooted in historical and current contexts of colonization and marginalization. Our mixed-methods study examined Northern and Indigenous adolescent participation in arts- and land-based Peer Leader Retreats in the NWT and associations with sexual health outcomes.

Methods: We conducted 9-day Peer Leader Retreats in the NWT with purposively sampled adolescents aged 13-17 years old annually between 2016-2021. Retreats addressed HIV and STIs, safer sex, healthy relationships, and gender equity using interactive learning approaches. We conducted pre-post retreat surveys measuring socio-demographic variables and safer sex self-efficacy, and post-retreat focus groups. We conducted thematic analysis of focus groups informed by transformative communication frameworks that distinguish between technical (factual knowledge, technical skills) and transformative communication (fostering empowerment by building communication skills). We conducted paired sample t-tests, and multiple linear regression, to assess pre-post retreat changes in safer sex self-efficacy (SSSE) and HIV/STI knowledge scores.

Results: There were 326 participants (mean age: 14.5, standard deviation: 1.3), most Indigenous (87%) and women (64%). Qualitative narratives revealed retreats contributed to technical communication (HIV and STI knowledge, correct condom use) and transformative communication (confidence, healthy relationships, sex-positivity). Paired sample t-tests results revealed significant mean score pre-post test increases in SSSE ($M=2.14$, Standard Deviation [SD]: 5.2, $p<0.001$) and HIV/STI knowledge ($M=6.13$, SD: 0.25). In adjusted linear regression, higher pre-test SSSE ($\beta=0.59$, 95%CI, 0.51, 0.67) and gender (women) ($\beta=1.84$, 95%CI=0.77, 2.92) were associated with higher post-test SSSE scores. In adjusted analyses, sexually diverse ($\beta= -1.14$, 95%CI= -2.25, 0.03) and food insecure ($\beta= -2.44$, 95%CI = -5.05, 0.16) participants had smaller post-test SSSE increases, and Indigenous participants had lower HIV/STI knowledge post-test score increases ($\beta= -1.63$, 95%CI = -2.50, -0.77).

Conclusion: Enabling environments such as those fostered in arts- and land-based Peer Leader Retreats can build technical and transformative communication to empower youth in the NWT to engage in HIV prevention practices. Findings can inform HIV and STI youth prevention programming in other Arctic regions.

FO036 - Advancing graphic medicine methodology to advance HIV research: case study findings in Uganda and Jamaica

Carmen Logie, Dr. Moses Okumu, Ms. Alyssa McAlpine, Mr. Simon Odong Lukone, Mr. Nelson Kisubi, Ms. Miranda Loutet, Dr. Isha Berry, Mr. Jean-Luc Kortenaar, Ms. Frannie MacKenzie, Mr. Robert Hakiza, Ms. Brenda Katisi, Ms. Kandasi Levermore, Mr. Patrick Lalor

Free Oral Presentations - Behavioral Interventions & Implementation, October 28, 2023, 14:00 - 15:30

Background: Intersectional stigma presents barriers to HIV research and cascade engagement. Graphic medicine, the use of images and text such as in comic books, has been employed to depict lived experiences to promote health, wellbeing, and education. Comic books provide a low-cost, youth-friendly approach to health promotion that is accessible to varying literacy levels. Limited research, however, has described the process of developing graphic medicine approaches for HIV interventions, data collection, and knowledge mobilization with marginalized youth in low and middle-income contexts. To address this knowledge gap, we developed the Qualitative Comic Book Mapping approach, whereby qualitative data alongside theoretical and empirical literature was used to inform scenarios that addressed intersectional stigma.

Findings: Four case studies focused on youth aged 16-24 include: 1) HIV prevention, with a focus on post-exposure prophylaxis (PEP) (Bidi Bidi refugee settlement, Uganda), 2) HIV testing (Bidi Bidi), 3) HIV knowledge mobilization (urban refugees in Kampala, Uganda), and 4) data collection with young people with HIV, including sex workers, transgender women, and gay and bisexual men (Kingston, Montego Bay, and St. Ann, Jamaica). Steps included conducting focus groups and in-depth individual interviews with affected communities and key informants to explore lived experiences of intersecting stigma, coping, and recommendations to reduce stigma. The Qualitative Comic Book Mapping approach involved: thematic analysis of qualitative data and identification of overarching themes; aligning qualitative themes with theories of change for HIV cascade engagement and stigma reduction; and co-developing comic book scenarios with youth and community experts to integrate lived experiences alongside theoretical underpinnings. To engage participation, participants were provided completed and blank versions of comics to complete themselves.

Findings: Comics were well received by youth and service providers. Best practices include: multi-lingual comics; integrating strengths-based and gender-transformative scenarios; and ensuring contextually relevant comic scenarios (e.g., landscape, clothing). Comics were associated with reduced sexual violence stigma and increased PEP knowledge and acceptance among refugee youth. This comic methodology generated richer data than traditional focus group/interview approaches.

Conclusions: Theoretically-informed graphic medicine can be developed from qualitative data to inform HIV research and intervention approaches in community-based research with youth experiencing intersecting stigma.

FO037 - Evaluating the implementation of home-based sexual health care among MSM using the RE-AIM framework; Limburg4Zero

Cornelia Goense, Dr Ymke J Evers, Jonas Manait, Prof Dr Christian JPA Hoebe, Dr Inge HM van Loo, Dr Dirk Posthouwer, Robin Ackens, Roland van Hooren, Roxanne Theuerzeit, Dr Rik Crutzen, Dr Sarah E Stutterheim, Dr Nicole HTM Dukers-Muijers

Free Oral Presentations - Behavioral Interventions & Implementation, October 28, 2023, 14:00 - 15:30

Background. Testing and subsequent treatment is an important strategy to improve clinical outcomes and reduce sexually transmitted infections (STI) and HIV transmission in at-risk groups, such as men who have sex with men (MSM). Home-based sexual health care can reduce barriers to testing and reach MSM who do not (regularly) test, including younger MSM and MSM living in less urban areas. This study aimed to systematically evaluate the implementation process of home-based sexual health care among MSM in the South-eastern part of the Netherlands.

Methods. Recently the Centre of Sexual Health implemented home-based sexual health care, including self-sampling STI/HIV tests for MSM not using pre-exposure prophylaxis (PrEP). Via a mixed methods study which included a cross-sectional survey with MSM who received a test kit (n = 362) and in-depth interviews with 10 care providers, we assessed (R) reached population, (E) effectiveness, (A) adoption of the innovation by care providers, (I) implementation fidelity, and (M) maintenance (REAIM).

Results. As of December 2022, 362 participants were reached with sexual health information and received a self-sampling testkit. Of participants (median age 30), 44% had never tested for HIV and 38% reported not testing every 6 months. Subgroups more represented than clinic-visiting MSM included MSM living in less urban areas (52% vs. 47%) and younger MSM (27% vs. 18%) (effectiveness). Adoption by care provider was highly acceptable when involved and due to expected extended reach of MSM. Key elements were implemented as intended (fidelity), with co-created adjustments. Infrastructural boundaries were mentioned as a hurdle to maintenance of the implementation.

Conclusions. Implementing home-based sexual health care has reached at-risk MSM who have never tested before. Care providers assess a co-created home-based sexual health care acceptable for implementation. Therefore, home-based sexual health care should be considered a necessary addition to regular clinic-based sexual health care.

FO038 - MPOX Vaccination: Embedding sexually transmitted infection (STI) testing and prevention to make every contact count

Fahad Naser, Dr Oliver Bull Olozabal, Mr Hinal Lukha, Miss Gemma Gilson, Mrs Cristina Dascalu, Mr Lovemore Rusere, Dr John McSorley

Free Oral Presentations - Behavioral Interventions & Implementation, October 28, 2023, 14:00 - 15:30

Background

The recent outbreak of Mpox, resulted in approximately 90,618 cases and 157 deaths across 115 countries. Primarily diagnosed in gay, bisexual, and other men who have sex with men, it was declared a public health emergency of international concern in July 2022. In the UK, 3,732 cases were reported, with London identifying around 2,359 cases. Our local community clinics in outer London implemented a one-stop shop approach, recognising that our population may have simultaneous unmet sexual health needs, by combining Mpox testing and vaccination, with STI testing, PrEP provision and other vaccinations. This study documents the outcomes of our approach.

Methods

Electronic Patient Records (EPR) were reviewed for patients receiving a first dose of MPOX vaccine. Patient demographic and outcome data was collected for patients enrolled in the first three months of the programme. All clients receiving a first dose of MPOX vaccine were assessed at presentation for eligibility for Hepatitis A and B and Human papillomavirus (HPV) vaccination, STI testing and treatment and HIV PrEP. MPOX second dose completion was measured after every candidate had at least two months to attend for the Day 28 dose.

Results

A total of 1,070 patients (age range 19 to 80 years) attended during the study period. All patients (100%) signed a consent form. 541 (50.6%) of patients received their second dose MPOX vaccine within five months. A total of 108 hepatitis A, B, and HPV vaccination courses were initiated. 879 patients (82.5%) consented for STI screening, 110 STIs including gonorrhoea, chlamydia, herpes, syphilis, warts, non-specific urethritis (NSU), and 2 new cases of HIV were diagnosed. 163 (15%) individuals were already living with HIV. PrEP was issued to 659 of 890 (74%) eligible patients, of whom 113 were new starters.

Conclusion

This study demonstrates a one stop shop model is effective in administering Mpox vaccine, and in identifying and responding to that population's additional needs for STI and HIV testing and prevention including PrEP provision, "Making Every Contact Count".

FO039 - What impacts Mpox vaccination-uptake? Assessing the effect of intention-to-vaccinate versus other psychosocial variables among MSM

Vita Jongen, Marije Groot Bruinderink, dr. Anders Boyd, Jeffrey Koole, MD, PhD-candidate Buhari Teker, Nicole Dukers-Muijers, Ymke Evers, Maarten Schim Van Der Loeff, prof. dr. Maria Prins, Henry De Vries, Dr. Amy Matser, Udi Davidovich

Free Oral Presentations - Behavioral Interventions & Implementation, October 28, 2023, 14:00 - 15:30

Background: In May 2022, the first mpox cases were reported in multiple European countries and by 12 June 2023, 1,265 cases had been reported in the Netherlands, the majority of which occurred in Amsterdam. In response to the outbreak, pre- or post-exposure prophylactic vaccination with a third-generation smallpox vaccine (MVA-BN) was offered to men who have sex with men (MSM) at increased risk for mpox infection. Successful vaccine campaigns are commonly leveraged by high vaccine intention, yet intention might not always lead to uptake. We therefore assessed the impact of intention-to-vaccinate and other socio-psychological factors on vaccination uptake among participants of the Amsterdam Cohort Studies (ACS).

Methods: In July 2022, an online questionnaire regarding mpox intention-to-vaccinate, as well as e.g. beliefs, attitude, subjective norms, and perception of risk was sent to ACS participants. Vaccination uptake was self-reported during study visits. The association between vaccination uptake and high intention, and determinants of high intention, was jointly assessed using a generalized structural equation model (GSEM) based on the components of the Theory of Planned Behavior (TPB). In a second GSEM, determinants of high intention were allowed to have a direct effect on vaccination uptake.

Results: 492 MSM (median age 46 years) were included in analyses; 380 (77%) had a high intention-to-vaccinate and 238 (48%) received at least one vaccine dose. In the classic TPB model with only a direct relation between intention and uptake, TPB components predicted intention as expected, and high intention-to-vaccinate was significantly associated with vaccination uptake ($\beta=1.1$, 95%CI=0.6-1.5). However, 175/380 (46%) participants with high intention-to-vaccinate did not get vaccinated. In the second model, the effect of intention on uptake was non-significant, and only perceiving to be at higher risk of infection significantly increased vaccination uptake ($\beta=0.42$, 95%CI=0.26-0.59). Having a steady relationship decreased the likelihood of vaccination ($\beta=-0.59$, 95%CI=-1.0 to -0.18).

Conclusions: While intention-to-vaccinate for mpox was high among MSM, high intention did not necessarily result in vaccine uptake; mpox risk perception played a more pivotal role in the decision to vaccinate.

FO040 - A novel interagency sexual health initiative for Ukrainian refugees in Public Health Area D, Ireland.

Olga Jackson

Free Oral Presentations - Behavioral Interventions & Implementation, October 28, 2023, 14:00 - 15:30

Since 2022, approximately 11,000 Ukrainian Refugees have arrived in Public Health Area D (DPH). There is a known higher burden of some infectious diseases including HIV within this population. In the absence of a National Systematic Infectious diseases screening system, a partnership was developed between DPH Area D and the Sexual Health Centre Cork (SHCC). We collaborated with the SHCC on expanding their existing DASH (Drugs Alcohol & Sexual Health) service to the Ukrainian cohort.

The aim was to support this population by bringing services out to communities. This enabled the delivery of an equitable, accessible mobile sexual health service.

Methods

From July to December 2022, a mobile sexual health team, from the DPH Area D and the SHCC carried out 12 outreach visits delivering brief health interventions and opt-in HIV testing to Ukrainian Refugees across the region. Outreach visits were promoted via community networks supported by HSE Social Inclusion, Community Work partners, accommodation managers and Ukrainian support workers. Prior promotion occurred via WhatsApp and Telegram messaging. Sexual health information leaflets were translated into Ukrainian and Russian and circulated digitally and in paper format. Sexual health products, comprising of condoms, lubricant, period products were distributed, and pregnancy tests were provided.

Results

In the absence of an Irish National screening service, this initiative provided opportunities for brief sexual health interventions and a testing service to those that wanted to know their HIV status. We reached out to approximately 3600 Ukrainians within 12 congregate settings. Approximately 860 Ukrainians presented. 149 opt-in rapid HIV tests were performed. 2,200 sexual health information leaflets in English, Ukrainian, and Russian were developed and distributed. 4,614 condom packs and 1,682 period product packs were provided.

Conclusion

This initiative demonstrates how sexual health outreach work can deliver effective sexual health improvement. It has helped to empower people to make healthier decisions regarding their sexual health. It provides an effective model for flexible adaptive health improvement within marginalized communities. It may represent a model for future outreach work.

FO041 - Dating App Safety: An eHealth Intervention RCT to Improve Sexual Health in MSM

Edmond Pui Hang Choi, Ms Kitty Wai Ying Choi, Dr Pui Hing Chau, Eric Chow

Free Oral Presentations - Behavioral Interventions & Implementation, October 28, 2023, 14:00 - 15:30

Smartphone dating applications (apps) are popular tools for seeking romantic and sexual partners among men who have sex with men (MSM). A systematic review found that dating app users tend to engage in higher-risk sexual behaviors than non-users, including having sex with multiple partners and engaging in condomless anal sex. Another systematic review found that compared with non-users, app-users were more likely to have gonorrhea and chlamydia. We developed an interactive web-based intervention using a participatory design approach, and we aimed to evaluate the effectiveness of this intervention in improving sexual health for dating app users.

Methods

This study was a two-arm, assessor-blinded, randomized, parallel-group trial with a 6-month follow-up period, conducted in Hong Kong from 2020 to 2022. Participants were enrolled using convenience sampling. The intervention group received gamification elements and educational content focusing on consistent condom use, regular HIV/STI testing, pre-exposure prophylaxis, and harm reduction in chemsex practices. The control group was provided with brief information and educational materials about sexual orientation and identity. The primary outcome was the occurrence of condomless anal sex, measured by a self-report item. The intention-to-treat principle was applied throughout the study. The trial was registered on ISRCTN (ISRCTN16681863).

Results

Overall, 480 MSM enrolled in the study (240 in the intervention and 240 in the control group). The generalized linear mixed-effects model found that participants in the intervention group demonstrated significantly larger reductions in the likelihood of having engaged in condomless anal sex in the last 3 months (time-by-group interaction $P < 0.05$). The linear mixed-effects models found that the intervention group demonstrated a significantly larger improvement in condom use self-efficacy, as measured by the Condom Self-Efficacy Scale total score (time-by-group interaction: $P < 0.001$), and attitudes towards condom use, as measured by the UCLA Multidimensional Condom Attitudes Scale total score (time-by-group interaction: $P < 0.001$).

Conclusion

This study suggests that a web-based intervention can reduce condomless anal sex and enhance condom use self-efficacy and attitude towards condom use among MSM dating app users.

Poster Presentations

P001 - FEMALE SEXUAL AND REPRODUCTIVE HEALTH CLINIC IN AN ADDICTION CLINIC- CAN IT BE DONE?

Dr Lina Hijazi

Women who use drugs (WHUD) have increased risk of sexually transmitted infections (STI), unplanned pregnancy and untreated menopausal symptoms and face multiple barriers to attending other clinics including conflicting responsibilities, fear of discrimination and difficulty finding health care professionals who understand addiction medicine and its complications.

As a large multidisciplinary inner-city private addictions clinic providing opiate antagonist treatment (OAT), we have long provided injectable long-acting contraception for free and encouraged the WHUD to attend Gynaecology services and were aware that only a small proportion of WHUD attended.

Methods

In June 2022 we started a sexual and reproductive health (SRH) service within the addiction clinic, provided by doctors trained in both SRH and addiction medicine, aiming to improve access for WHUD. Attendance followed either referral by the addiction doctor or self-referral. The services provided include contraceptive advice and provision; STI screening and management; Papanikolau (Pap) smear; follow up during pregnancy and menopause diagnosis and management.

Results

50 patients were referred and 45 were seen in this service: 17 (38%) for PAP smear, 8 (17%) female check-up, 7(14%) contraception, 6(13%) menopause. The average age was 43.7 years (18-61 year). 14 (31%) attended at the first appointment and 7 (15%) returned out of their own volition. PAP smear was done on 17 (38%), 27/45 (60%) had at least 1 previous PAP smear, on average 4.56 (3-18) years previously, for 2 women this was their first ever smear. 1/3 women with menopausal symptoms started on hormonal therapy.

5 women never attended despite getting 5 appointments each.

Conclusion

These data show that provision of specialist and addiction services under-one-roof in a privately funded clinic is feasible and is a service the women choose to return to, so improving access for this group of women.

P002 - Reproductive Healthcare for women in secure facilities of incarceration in the United Kingdom

Dr Katie Humphries, Dr Natasha Bell, Dr Sum Yee Chan

Women represent less than 5% of the total incarcerated population in the United Kingdom. However, this population may have complex needs and barriers to accessing reproductive healthcare in the community. Time of incarceration may represent a unique time to engage with this population and the potential to reduce health inequalities. The care provided should be at least equivalent to what is available in the community.

We aimed to discover what services were available in UK facilities and identify that improvements should be made.

Methods

We conducted a cross-sectional survey of the 150 secure facilities of incarceration in the United Kingdom from December 2021 to March 2022. A questionnaire was emailed to the healthcare team if they housed female inmates at any point they were asked to complete a section on provision of reproductive healthcare services. Answers were self-reported by the team and emailed back.

Results

Contact established with 144/150 facilities, 83/144 completed questionnaires and 15/83 reported they housed female inmates. 15/15 centers offered a contraceptive choice to female inmates, 15/15 could offer the depot, 12/15 could offer the implant/IUD. On arrival 9/15 reported offering a pregnancy test. Emergency contraception requirement was assessed in 5/15 facilities and if required 7/15 could offer this. A pathway for providing termination of pregnancy existed in 10/15 facilities. Need for cervical and breast screening was assessed in 15/15 facilities, smear tests were provided in 13/15 and breast screening in 12/15.

Conclusion

Despite possible bias amongst what centers responded, our study provides a view of what reproductive healthcare is provided for female inmates in the United-Kingdom. It was satisfactory that all centers can offer contraceptive choices but inadequacies in providing options for emergency contraception and management for unwanted pregnancies should be addressed.

P004 - Laboratory and ultrasound methods for diagnosing cervicitis

Mrs Halyna Vetokh, Professor Tetiana Tatarchuk, Professor Natalia Koseii, Ph.D. Tetiana Kvasha

Adverse consequences of untreated cervicitis include the spread of infection to the upper genital tract and, as a result, inflammatory diseases of the pelvic organs. The diagnosis of cervicitis is both simple and complex.

Methods

56 reproductive-age patients were examined. Among them, 28 patients with clinically, colposcopically, and laboratory-confirmed nonspecific cervicitis comprised Group I, while Group II consisted of 28 healthy women without cervicitis. *Candida* spp. was found in 21.42% of patients in Group I, cytomegalovirus in 7.14%, *Gardnerella vaginalis* in 32.14%, and mixed infection in 39.28%. Patients with detected upper genital tract infections were not included in the study.

Results

Ultrasonographic examination of the pelvic organs, color and energy Doppler mapping of the uterine cervix, colposcopy, bacterioscopic analysis, PCR determination of opportunistic pathogens and viruses, and florocenosis were performed. The following ultrasonographic and Doppler markers of cervicitis were used: increased or decreased echogenicity, heterogeneity of ecto- and endocervix structure and cervical stromal structure, increased number of vascular loci, decreased pulsatility index, and resistance index. Ultrasonographic markers were identified in 82.1% of patients in Group I and 10.7% of the control group, while Doppler markers were found in 75% and 3.57%, respectively.

Conclusion

The study demonstrates that ultrasonographic, Doppler, and laboratory methods of investigation should complement each other in the diagnosis of asymptomatic and undiagnosed nonspecific cervicitis, which is a potential predictor of endometritis, salpingitis, and oophoritis.

P005 - Health Policy and STI Rates: Findings and Implications

Dr. Elissa Barr, Ms. Meredith Pinard, Dr. Beomyoung Cho

Introduction and Purpose: Comprehensive policy regarding sexual health education has improved sexual health outcomes.¹⁻⁴ These policies include abstinence, contraception, condom education, and more. This study explored sexual health education policies of 67 Florida districts to determine the impact on sexual health outcomes among teens. In Florida, chlamydia, gonorrhea and syphilis diagnoses continue to rise, and 1 in 157 adults are living with HIV.^{5,6}

Methods: First, using qualitative and secondary data, district level policy was collected for all 67 districts. Five policy “levels” were identified ranging from most restrictive, “Abstinence-Only,” to most inclusive, “Comprehensive.” Next, district level health data including teen chlamydia, birth and HIV rates were collected from Florida CHARTS,⁽⁶⁾ an online resource managed by the Florida Department of Health. One-way ANOVAs assessed differences in outcomes across the 5-level policy classification, and independent t-tests assessed differences across a 2-level policy classification (restrictive policy, comprehensive policy). A significant P-value was set at .05.

Findings and Implications: Of the five policy levels, those that included contraception and condom education in both middle school and high school resulted in significantly lower rates of chlamydia, while those with an “Abstinence-Only” policy in middle school had the highest rates. Comprehensive policies that include contraception and condoms as prevention methods should be implemented starting in middle school. Additional findings, such as HIV diagnoses and birth rates, will be shared during the presentation.

References:

1. Beltz, Sacks, Moore, & Terzian, (2015). State policy and teen childbearing: A Review of Research Studies. *Journal of Adolescent Health*, 56(2), 130–138.
2. Hogben, Chesson, & Aral (2010). Sexuality education policies and sexually transmitted disease rates in the US. *International Journal of STD and AIDS*, 21(4).
3. Goldfarb, & Liberman (2021). Three decades of research: The case for comprehensive sex education. *Journal of Adolescent Health*, 68(1): 13-27.
4. Lindberg & Maddow-Zimet. (2012) Guttmacher Institute. Consequences of sex education on teen and young adult sexual behaviors and outcomes. *Journal of Adolescent Health*, 41(4): 332-338.
5. State HIV Slide Sets: State of Epidemic 2019. Florida Department of Health: <http://www.floridahealth.gov/diseases-and-conditions/aids/surveillance/epi-slide-sets.html>
6. Florida Community Health Assessment Resource Tool Set (CHARTS). Florida Department of Health: <http://www.flhealthcharts.com/>

P006 - Impact of transport conditions of remote self-sampling of anorectal samples on the detection of Chlamydia/Gonorrhoea

Ms Vicky Cuylaerts, Ms Hilde Smet, Ms Dorien Van den Bossche, Dr. Irith De Baetselier

Online postal self-sampling (OPSS) for the detection of *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoeae* (NG) is gaining global importance. However, prior to the integration of OPSS in routine care, it is crucial to conduct validation studies to examine the potential impact of various transport conditions on the performance characteristics of diagnostic assays. In this study, we aimed to assess the impact of postal transport on the molecular detection of CT/NG in anorectal dry flocced swabs. The selection of dry flocced swabs was motivated by the aim of preventing transport medium leakage during transportation.

Methods

Five types of anorectal samples were simulated by immersing dry swabs (flocswab, Copan Diagnostics) in a diluted stool sample (negative control) and spiked with 10 µL of low (30×10^3 EB/mL)/(7.6×10^4 CFU/mL) or high (30×10^5 EB/mL)/(7.6×10^6 CFU/mL) concentrations of CT and NG, respectively. Per type of anorectal sample, thirteen replicates were made and tested for CT/NG at different time points (baseline, day 4, 7 and 10) and storage temperature conditions (room temperature, 2-8°C, 30°C and fluctuations between 2-30°C). 1.2 mL of PBSd was added to the swabs before testing with the Abbott m2000 RealTime CT/NG assay and in-house confirmation assays.

Results

The different storage conditions did not influence any of the qualitative results. All positive results obtained with the Abbott CT/NG assay were also confirmed by the in-house PCRs. Comparable delta cycle (DC) values were observed for each replicate using the Abbott CT/NG assay, even after 10 days of storage at 30°C. In this assay, low DC values corresponded to samples with a lower bacterial load. The maximum standard deviation between DC values was 1.2SD.

Conclusion

Our findings indicate that the molecular detection of anorectal Chlamydia and Gonorrhoea using dry regular flocced swabs is not affected by various transport conditions. Correct results can be obtained even after a transport duration of 10 days. However, larger studies are required to confirm these findings.

P007 - Factors associated with the uptake of online postal self-sampling for chlamydia testing in England

Dr Alison Howarth, Ms Ana Karina Harb, Dr Oliver Stirrup, Dr Sonja Bloch, Prof Fiona Burns, Prof Andrew Copas, Prof Claudia Estcourt, Dr. Hamish Mohammed, Mr Jonathan O'Sullivan, Ms Anna Tostevin, Dr John Saunders, Dr Jo Gibbs

Aims

Online postal self-sampling (OPSS) for Sexually Transmitted Infections (STIs) has been scaled up in England since 2015. There is little national-level evidence on the factors associated with the uptake of OPSS. This is needed to ensure equitable access to sexual healthcare for all.

Methods

We analysed chlamydia testing data from two pseudonymised national STI surveillance systems in England: GUMCAD (specialist sexual health services) and CTAD (all other sexual health services). A descriptive analysis of 16,817,594 chlamydia tests (01 January 2015-31 December 2019) was conducted. Chi-square was used to examine differences in proportions.

Results

The number of chlamydia tests overall (online and in-person) remained fairly static over time (2015: 3,483,488 to 2019: 3,476,875) but the proportion of online testing increased from 3% of tests in 2015 to 16% in 2019 ($p < 0.0001$).

The overall number of positive diagnoses increased over time (2015: 202,033 to 2019: 228,781 while test positivity among online testing decreased (2015: 7.7% to 2019: 6.3%) and positivity among in-person testing increased (2015: 5.8% to 2019: 6.7%).

Compared to women, tests in men were more likely to take place in sexual health services (66% vs 36%) and less likely to take place in general practice (9% vs 33%). Online testing made up 9% of tests by men and 8% of tests by women (all $p < 0.0001$).

Among 15–19 year olds, 8% of all testing was online compared to 14% among 20-24 year olds, then uptake of online testing decreased with increasing age. For those living in the most deprived areas, 6% of testing was online compared to 9-10% for those in less deprived areas. Among people of mixed ethnic background, 13% of testing was online compared to those of white ethnicity: 11%; black ethnicity: 9%; and Asian ethnicity: 6% (all $p < 0.0001$).

Conclusions

Our findings provide important data on the early implementation of online testing at a national level. While the number of chlamydia tests remained relatively constant from 2015 to 2019, the proportion of online testing increased while uptake varied according to background characteristics. Further research to explore the cost-effectiveness and contribution of OPSS to equitable sexual healthcare is in progress.

P008 - Chlamydia contacts: To treat or to test?

Dr Alice Parsloe, Dr Sarah Barrett, Dr Alice MacNeill, Dr Robin Bendix-Hickman

Chlamydia Trachomatis (CT) is the commonest sexually transmitted infection (STI) in England and infections can be asymptomatic. National Guidance via BASHH and NICE suggest sexual contacts of chlamydia cases should be treated empirically. However, emergence of antimicrobial resistance is concerning. During the 2020 COVID pandemic, our service, Umbrella, located in Birmingham, UK, began offering empirical treatment to symptomatic contacts and testing to asymptomatic contacts. This service evaluation was to assess staff compliance to this new policy and had a secondary aim to observe the population of asymptomatic contacts of CT who subsequently tested positive.

Methods

Patients recorded as a contact of chlamydia (code PNC) between 1st February 2022 and 30th April 2022 were identified. A retrospective case note review was undertaken, and patients were excluded if they were a contact of pelvic inflammatory disease (PNCP), epididymo-orchitis (PNCE) incorrectly coded partner notification based on history, home test kit or alternative test with result available at appointment. Patients were classed as "symptomatic" or "asymptomatic" according to the BASHH guideline symptom list. Demographic data, empirical treatment, NAAT result and follow up results were recorded. This was then analysed using Excel.

Results

Of 294 true CT contacts, mean age was 25.9 years, and 34% (N=100) were female, with 77% (N=194) were male. 92% had an identified risk factor for CT (multiple sexual partners, under 25 years old, men who have sex with men). Almost half (46.7%) of symptomatic contacts were positive for CT. Of these, 7.4% were not treated empirically, however all positive cases were treated within 30 days. Almost half (48.8%) of asymptomatic contacts were positive for CT, and 40.7% of these were not treated empirically with antibiotics. 3 patients had no record of being treated.

Conclusion

We found that 4/10 asymptomatic contacts were positive for chlamydia. These were not treated empirically on presentation to sexual health services, possibly increasing risk of transmission and long term implications. Further work is required to determine whether empirical treatment is preferred over a "test and treat" strategy.

P009 - Prevalence and Co-infection Rates of Sexually Transmitted Infections from an Austrian Cohort

Katharina Schwarz, Lisa Werderitsch, Miriam Kyska, Angelika Stary

Background: Chlamydia trachomatis (CT) and Neisseria gonorrhoeae (NG) are the 2 most common notifiable conditions. Despite emerging interest in Trichomonas vaginalis (TV) and Mycoplasma genitalium (MG), true prevalence rates are unknown as many medical centers do not routinely test for these pathogens. Here we assessed the overall STI prevalence detection across different sample types as well as the co-infection rates for CT, NG, TV and MG.

Methods: Specimens were collected and tested with the Alinity m STI assay (Abbott Molecular Inc, Des Plaines, IL, USA) between February 10, 2021 and February 11, 2023. Positive results were confirmed by the Aptima Assays (Hologic, USA). Overall positivity and co-infection rates were determined based on the number of positive results for each analyte and the total number of results performed.

Results: During the Feb 10/2021 to Feb 11/2023 evaluation period, positivity rate for CT (6.5% to 5.6%), NG (3.8% to 2.9%) and TV (1.7% to 1.1%) decreased while positivity rate for MG increased slightly (3.9% to 4.1%). The overall positivity during the above period for CT specimens was 6.0% (3,219/50,114), NG specimens was 3.3% (1,771/51,582), TV specimens was 1.4% (731/52,569) and MG specimens was 4.0% (2,2120/51,152). <1.0% of all CT positives, NG positives, TV positives and MG positives had a co-infection with one other pathogen.

Conclusion: Number studies have demonstrated that STI are on the rise globally, this study demonstrated that the prevalence rates in this cohort decreased during the study period. Also, the co-infection rates in this cohort were low and this could be attributed to the study population or the use of contraceptives for both males and females which have been shown to reduce transmission of STIs. Furthermore, the decrease was also influenced by several lockdowns in Austria due to the covid- infection.

P010 - STI treatment via post: A positive movement for patients and staff.

Dr Adam Tyler, Dr Sally Kidsley

A large rural health board 5,780km², servicing a population of approximately 385,615 people provides unique challenges for delivery of sexual health services. Scattered across 3 counties, 7 small community sexual health clinics, with 3.5 WTE doctors & nursing team deliver approximately 25,000 appointments per year. Trying to provide effective timely contraceptive provision, STI testing and treatment, in addition to abortion care, and menopause care has been a challenging.

Methods

With the advent of an all-Wales Test and Post Scheme for STI testing, and with a need to adapt due to COVID restrictions we have developed a robust treatment postal service for contraceptives, STI treatments, and Abortion medication. All medication is posted using tracked registered mail.

Results

Over the first three months of 2023 we performed 2691 in-house tests. This is in addition to any tests requested through the All-Wales Test and Post scheme. Excluding those requiring Intra-muscular antibiotics, all treatments were posted out to patients' homes, or made ready to collect from clinic without an appointment. This has provided improved patient satisfaction, reduced time from testing to treatment, and reduced the need for face-to-face appointments.

The small additional cost of using registered post to deliver treatment is negligible when considering the cost savings in clinician time, clinic capacity and increased face-to-face provision for those requiring it.

Conclusion

A small medical workforce, and large rural geography reducing patient travel times, costs, whilst optimizing patient choice and clinic availability is essential. We fully advocate the use of postal treatment to improve patient experience and particularly for those socially disadvantaged patients who are harder to reach due to transport/financial implications.

P011 - Reducing Inequities to Access to Sexual Health Clinics in a Rural Setting.

Dr Adam Tyler, Dr Sally Kidsley

When the Covid pandemic arrived, the Sexual Health service had to adapt dramatically and rapidly. Prior to Covid the service ran walk in clinics, whereby patients would arrive and wait to be seen for their sexual health needs. During Covid, the service used technology to change the way patients accessed the service. The use of video and telephone consultations increased, and were used as the first point of contact, after the patient had phoned the central phone line. Medications were posted out using registered postal services. Only patients that required to be examined were seen face to face

Methods

Data was collected from the year preceding Covid [2019] and compared with data from 2021. This looked at how patients accessed services and the numbers of patients that accessed the service in those periods of time.

Results

Hywel Dda University Health Board covers 3 counties of rural South West Wales; a quarter of the land area of Wales and has a population of 385000.

In 2019 96% of patients were seen face to face in walk in clinics, and the service had 23000 attendances. In 2021, 46% of patients were seen face to face and 54% of patients either had a telephone or video consultation. The service had 25000 attendances in 2021. Approx 3000 packages of medications were also posted out during 2021, whilst none was sent in 2019. These included approximately 900-1000 abortion medication packs

Conclusion

To access clinics patients used to have to travel large distances to access sexual health services. The increased use of technology means that patients can access services remotely reducing inequities in access to residents of Hywel Dda

P012 - Macrolide- and fluoroquinolone resistance detection in *Mycoplasma genitalium* and *Neisseria gonorrhoeae* using the Seegene instrument

Dr. Irith De Baetselier, Ms Hilde Smet, Chris Kenyon, Ms Dorien Van den Bossche

Antimicrobial resistance poses a significant challenge for the treatment of *Neisseria gonorrhoeae* (NG) and *Mycoplasma genitalium* (MG) infections. The increasing prevalence of macrolide resistance in MG necessitates the use of resistance-guided treatment to avoid excessive usage of moxifloxacin, the second-line therapy for MG. With macrolide resistance in NG reaching 33% in Belgium and ciprofloxacin resistance reaching over 50% in many European countries, it may become crucial to employ resistance-guided treatment to preserve the efficacy of ceftriaxone, currently used as first line therapy. We evaluated MG and NG drug resistance detection assays from Seegene.

Methods

The Seegene STARlet instrument was employed for sample extraction. The Allplex MG & AziR (detection of resistance associated associations – RAMs at position 2058/2059 in 23S rRNA) and Allplex MG & MoxiR assays (detection of RAMs leading to alterations in ParC at position 83/87) were evaluated using frozen left-over samples (n=72) that were also subjected to Sanger sequencing. Additionally, we assessed the Allplex NG & DR assay, which detects macrolide and fluoroquinolone resistance (A2059G and C2611T mutations in t23S rRNA and S91F in GyrA respectively), using 24 clinical samples with corresponding phenotypic susceptibility results (13 ciprofloxacin-resistant and 10 azithromycin-resistant).

Results

Out of the 72 samples, 7 yielded uninterpretable results due to failure to detect MG (4/72) or invalid results (3/72), resulting in 65 samples with interpretable results. Among these, 6 samples were incorrectly classified as susceptible to macrolides (sensitivity 84.2% 95%CI: 68.8-94.0%) while only one sample had a missed detection of fluoroquinolone resistance (sensitivity 95% 95%CI: 75.1-99.9%). The Allplex NG & DR assay exhibited excellent performance in predicting ciprofloxacin resistance (sensitivity 100%), but showed suboptimal sensitivity for azithromycin resistance, with only one resistant sample detected out of 10.

Conclusion

Resistance-guided therapy may slow down the further emergence of antimicrobial resistance. The Seegene-assays demonstrated promising results in detecting fluoroquinolone-resistance in both NG&MG. However, its performance in detecting azithromycin-resistance was suboptimal, which may be explained by low bacterial load of MG and presence of other RAMs leading to macrolide-resistance in NG.

P013 - Mycoplasma genitalium antimicrobial resistance: a descriptive monocentric report.

Medical Doctor Emanuele Drappero, Doctor Marco Tutone, Medical Doctor Paola Sales, Medical Doctor Gabriella Gregori, Medical Doctor Valeria Ghisetti, Medical Doctor Daniele Agosta, Medical Doctor Sergio Del Monte, Medical Doctor Anna Maria Lucchini

Mycoplasma genitalium infection represents 10–35% of non-chlamydial non-gonococcal and 40% of persistent or recurrent urethritis in men. In women it is associated with cervicitis and pelvic inflammatory disease (PID) in 10–25%. The tests of choice for detection of M. genitalium in clinical specimens are nucleic acid amplification tests (NAATs).

M. genitalium has relatively limited susceptibility to antibiotic agents: main active agents are azithromycin and some fluoroquinolones. Mycoplasmas are largely susceptible to tetracyclines, but M. genitalium is an exception.

Antibiotics resistance is an issue that should not be underestimated and should be investigated at diagnosis.

Methods

At the Sexual Health Clinic in Torino (Ce.Mu.S.S.), screening tests usually performed include serological tests for HIV, HAV, HBV, HCV and Syphilis and PCRs for chlamydia and gonorrhoea on different biological samples. M. genitalium is not a routine test.

From November 2021 to July 2023, 129 patients with suggestive symptoms tested positive for M. genitalium with specific NAAT tests; at the same time an antimicrobial resistance test was requested. Macrolide-susceptibility and a bacterial genetic study were performed. From April 2023 (and on stocked samples where possible), fluoroquinolones-susceptibility was carried out.

Results

110 male (85.27%) and 19 female (14.72%) patients tested positive. Median age was 32.4. Overall 149 samples were positive: 97 (65.1%) first void urines, 8 (5.37%) urethral swabs, 24 (16.11%) anal swabs, 21 (14.09%) vaginal swabs. 1 case tested positive at multiple sites and 20 cases were positive test of cure.

58 (38.93%) samples were macrolide-susceptible, 19 (12.75%) were indeterminate (not amplified). 72 (48.32%) showed resistance.

On 33 samples fluoroquinolone-susceptibility test was available: 17 (51.51%) resulted negative, 10 (30.31%) were indeterminate (not amplified), 6 (18.18%) showed resistance.

6 (4.03%) patients showed resistance to both classes of antibiotics.

Conclusion

M. genitalium detection is often delayed because specific tests are not performed as first-line screening according to international guidelines.

Infection prevalence and resistant strains frequency would be helpful to identify appropriate empirical therapies.

Resistance assessment should be always performed: clinical-worsening, healing-lag and resistance-onset might be avoided with targeted antibiotic therapy.

P014 - Urethral infections caused by *Mycoplasma genitalium*: epidemiological characteristics and clinical and microbiological response to treatment

Mrs Natalia Vega, Dr Irene Fuertes, Dr Josep Riera, Dr Alba Català, Mrs Vanessa Guilera, Dr Ana González, Dr Jordi Bosch, Dr Nicolas de Loredó, Dr Guillermo Del Carlo, Dr David García, Dr Francisco Montoya, Dr José L Blanco

Mycoplasma genitalium (MG) is an established cause of sexually transmitted urethritis.

The evidence concerning treatment of MG has rapidly changed over the past few years.

The benefit of screening and treating asymptomatic infections is uncertain due to high resistance rates to first-line (macrolides) and second-line (quinolones) treatments

Our objectives were:

To describe the epidemiological characteristics and coinfections of patients with urethral MG infection attending our center.

To evaluate the clinical response to the different lines of treatment of symptomatic MG urethral infections in patients attending our centre.

To evaluate the microbiological response to different lines of antibiotics.

Methods

This is a single-centre retrospective study, focusing on MG-induced urethral infections diagnosed from January 2020 to December 2021.

The samples included in the study were analysed using the Multiplex real-time polymerase chain reaction Allplex[®] STI Essential Assay Q (Seegene).

Urethritis episodes caused by MG and confirmed by PCR test from urethral swab or FVU were included in the study, unless they corresponded to cisgender women, transgender men or individuals under 16.

Epidemiological characteristics, clinical features, treatment, and follow-up were recorded.

Results

Out of the 238 studied episodes, 81.1% had previous history of sexually transmitted infections (STI). From all episodes, 52.5% were asymptomatic and received treatment in a significantly lower proportion than symptomatic ones [95.2% vs. 52.8% ($p < 0.001$)].

Lack of microbiological response rates were 54.5% for the extended azithromycin regimen and 10.7% for moxifloxacin. Spontaneous clearance rate among untreated episodes was 54.5%. Cure or clearance rate was 65.1% for HIV positive patients vs. 78.4% for HIV negative ones ($p = 0.041$), and 63.0% in chemsex users vs. 80.6% in non-chemsex users ($p = 0.017$).

Conclusion

Lack of microbiological response to first- and second-line therapies is elevated in this population. We observed a high rate of spontaneous clearance in untreated episodes and significantly higher cure or clearance rates in HIV-negative patients and non-chemsex users.

P015 - Prevalence of *Trichomonas vaginalis* and co-infection with genital mycoplasmas in female patients in Vienna.

Msc. Ina Hoxha, Mag. Dr. Iwona Lesiak-Markowicz, Angelika Stary, Mag. Dr. Ursula Fürnkranz

Trichomonas vaginalis causes trichomoniasis, the most recurrent sexually transmitted infection (STI) worldwide. Genital mycoplasmas are known as sexually transmitted agents, frequently isolated from the female genital tract. Symbiosis between *Mycoplasma* species and *T. vaginalis* have been described and linked to numerous reproductive morbidities.

Methods

In the Outpatients Centre for Infectious Venero-dermatological Diseases (OCD) in Vienna, patients are routinely screened for STIs. The main aim of this two-phase retrospective study was to assess the prevalence of *T. vaginalis* and genital *Mycoplasma* species in swab specimens obtained from female patients attending the OCD. In total, 582 samples from female patients and an additional 20 *T. vaginalis* cultured isolates were analysed by culture, molecular and microscopic methods.

Results

T. vaginalis was detected in 4 (0.7%) of the collected samples. Additionally, 178 (30%) distinct *Mycoplasma* species including *Mycoplasma hominis*, *Ureaplasma* species and *M. genitalium* were found. The 16S rDNA sequence of the recently newly described species, *Candidatus Mycoplasma girerdii* was obtained for the first time in Austria, in a sample also positive for *T. vaginalis*. Molecular analyses of the cultivated *T. vaginalis* strains confirmed the symbiotic relationship with *M. hominis* in two out of 20 samples. The presence of *Ca. M. girerdii* was confirmed only directly in vaginal discharge and not in pure cultures of the parasite *T. vaginalis*.

Conclusion

Altogether, this study demonstrates the high presence genital *Mycoplasma* infections in women of reproductive age, detected by new diagnostic assays, thus enabling better screening of patients. Moreover, the symbiosis between *T. vaginalis* and *M. hominis* was confirmed.

P016 - The Challenges of delivering an effective MPOX vaccination programme in rural west Wales.

Dr Adam Tyler, Sr Kate Gard, Dr Sally Kidsley

In May 2022 a sudden and rapid emerging MPOX outbreak so soon after a COVID pandemic naturally sparked alarm across the globe. There have been around 87,929 cases reported worldwide, and 146 deaths. The UK has had 3753 confirmed cases; 48 cases in Wales. There have been no UK deaths related to MPOX. The MVA MPOX vaccine requires very careful storage at sub-zero temperatures, once open each vial must be used within an hour. With such restrictive requirements delivering the vaccine programme across a large rural health board covering a quarter of the land mass of Wales was challenging.

Methods

A Single central vaccination site was selected with a core small group of nursing/medical staff to provide the MPOX vaccination clinics. This site was as central a location as possible to minimise impact on patients travel.

Results

Only 2 patients within our Health Board developed MPOX during the outbreak. Less than a third of all eligible patients responded to an invitation for vaccination. All who attended received 2 doses at least 28 days apart. Limiting vaccination access to one site, however, did not seem to deter patients from seeking out or accessing the vaccine. Despite this, our uptake for the vaccine has been quite slow, with only small numbers coming forward. This may be due to low case numbers in our area (only 2 cases), or perhaps the perceived low risk of serious illness.

Conclusion

With the Pride Festival season about to restart, and MPOX cases doubling in the UK in the last 3 weeks, all eyes will be closely monitoring the case rates again, and what effect the vaccination programme may have had.

P017 - The status of HCV testing among HIV-positive refugees from Ukraine - Five Times Ninety project.

Professor Justyna Kowalska, Sergii Antoniak, Dr Olena Samsonova, Dr Carlo Bieńkowski, Dr Agata Skrzat-Klapaczyńska, Dr Dominik Bursa

Five Times Ninety project investigates linkage to care and retention in care among war refugees living with HIV who are displaced from Ukraine to Poland. Here we analyse the status of HCV testing and access to DAA treatment.

Methods

Ukrainian refugees living with HIV who registered to HIV Out-Patient's Clinic in Warsaw were followed according to "Standardized protocol for clinical management and medical data sharing for PLHIV among refugees from Ukraine" developed by WHO/CHIP, EACS, ECEE and ECDC. Each patient signed informed request for medical data transfer addressed to Public Health Center Ministry of Health Ukraine. Data were received back on the standardized form.

Five Times Ninety project is founded by Western-Eastern European Partnership Initiative on HIV, Viral Hepatitis and TB (WEEPI).

Results

Of 152 (98.7%) of 154 patients who signed request between 05 March 2022 and 18 April 2023 were linked with Public Health Center database. Of these 96 (63.1%) were male, mean age 41 (range 18-69), year of HIV diagnosis ranged from 1999 to 2022. In terms of HCV screening 98 (64.5%) were tested for anti-HCV antibodies in Ukraine and 145 (95.4%) in Poland. Of those not tested in Ukraine 14 (25.9%) were anti-HCV positive and 4 confirmed as HCV RNA positive. All received DAA treatment.

Conclusion

Routine HCV screening for war refugees displaced from Ukraine is a necessity. Access to DAA treatment in Poland shows no restraints and full acceptance from Ukrainian patients should be expected.

P018 - Herpes simplex virus viral shedding in patients diagnosed of Monkeypox

Serena Giacalone, DR stefano ramoni, Dr Marco Cusini

Since May 2022, an outbreak of more than 30000 cases of human monkeypox (MP) has been documented in non-endemic countries, especially in men that have sex with men (MSM), prompting the World Health Organisation to declare MP an “evolving threat of moderate public health concern”. MP is a smallpox-like self-limiting disease with symptoms lasting two-four weeks, there are no data available whether concurrent sexually transmitted infections (STIs) can contribute to its spreading or alter its clinical expression. In a review of 528 patients with MP from Thornhill et al, Herpes Simplex Virus (HSV) was found in 1% of the cases

Methods

Herein, we report ten individuals tested both for MP and HSV1-2 at the STIs outpatient service of our Dermatology Unit in Milan to analyse the phenomenon of herpetic viral shedding in MP infected patients. All patients declared having had unprotected sexual encounters in the preceding three months. In our clinic diagnostic work up to confirm MP included both pharyngeal, vesico-pustular fluid swabs and lesional HSV1-2 swab (real-time polymerase chain reaction) to rule out differential diagnoses

Results

In all patients monkeypox infection was confirmed: in eight subjects viral DNA was detected both on pharyngeal and cutaneous swab, while in the other two it was found only in vesico-pustular fluid. Moreover, HSV-1 was revealed in three of the ten skin lesional swab performed. Since history was unremarkable for acute herpetic outbreak and none of them displayed on examination skin lesions suggestive of herpetic infection, we hypothesized viral shedding occurred.

Conclusion

The acknowledgement of a possible association between MP and HSV could reduce herpetic transmission during sexual contact. Until our findings could be further accredited by new observations, physicians should research HSV1-2 in all MP suspicion cases in order to reduce the risk of HSV transmission to uninfected partners

P019 - Chronic abacterial prostatitis associated with herpesviruses

Mikhail Gomborg, Vladimir Kovalyk, Prof.Dr. Alla Kushch, PhD Kirill Yurlov

Chronic abacterial prostatitis remains a little studied disease with often unsatisfactory treatment outcomes. The search for etiological agents of the disease is an important problem, solving which would allow for targeted treatment.

Methods

287 men with chronic abacterial prostatitis (chronic pelvic pain syndrome 3A) were observed. In every case the leucocyte level in prostatic secretions was over 10 (per HPF) but the bacteriological study was negative. The control group consisted of 52 healthy men. We studied biological samples from the urethra, prostatic secretion and ejaculate for different human herpes viruses (HHV): herpes simplex viruses (HSV 1 and 2), Epstein-Barr virus (EBV), cytomegalovirus (CMV) and human herpes virus-6 (HHV-6) using the real-time polymerase chain reaction.

Results

In 103 out of 287 (35.8%) of the study subjects we detected HHV DNA: EBV – 7,3%, CMV- 10,8%, HHV-6 – 17,8%. There were no any case when HSV-1,2 was found in the study group. In the control group there were no positive tests for any HHV. Out of 103 HHV positive men herpesviruses were discovered in the urethra, prostatic secretion, and ejaculate in 41.7%, 72,8% and in 70,8% cases, respectively.

Conclusion

In over 1/3 of men with chronic abacterial prostatitis we detected EBV, CMV and HHV-6 in urogenital samples. Further studies to determine the etiological role of these viruses in chronic abacterial prostatitis are needed.

P020 - Sexually transmitted infection (STI) home testing kit: Views and experiences of non-returnee service-users

Dr Anita Hughes, Dr Annalise Weckesser, Mrs Gemma Williams, Professor Jonathan Ross

Background: While the acceptability of sexually transmitted infections (STI) home test kits has been well established, return rates remain less than optimal, particularly from disadvantaged groups.

Barriers from the perspective of service-users who have not returned kits is under-researched.

Aims: To explore service-users' experiences of self-administered STI home test kits, perspectives on barriers to return, and views on improving the service and return rates.

Methods: Qualitative, semi-structured telephone interviews were conducted with patients who had self-initiated/requested a STI home kit and not returned within three months (kit expiration date).

Interviews were conducted between November 2021 and December 2022, audio-recorded, transcribed verbatim and analysed thematically using NVivo 12. Recruitment was via advertisement by a free National Health Service sexual health service provider in the West Midlands, England.

Results: A total of 34 (male =21, female =11, non-binary = 2) (White = 19, Black = 7, Mixed-race = 6, Asian = 1, Middle Eastern =1) participants were interviewed. Four themes were identified: Accessing & Ordering the Kit, Experience Using the Kit, Reasons for Non-return, and Views on Service Improvement.

The process for ordering the kit was viewed positively and self-administering most samples (e.g. oral, vaginal, urine) were reported to be straightforward. The main barrier to return was completing the blood sample, followed by delays in receiving the kit/receiving incomplete kits, and service-user related issues (forgetting, no longer needing a kit, etc.). Some participants had previously used the service, yet still highlighted challenges using provided blood sampling equipment and obtaining the amount of blood required. Some participants reported a preference for in-person clinic testing based on their experiences. Participants recommendations for service improvement centred on hybrid approaches to home vs in-person testing (e.g. introduction of chat feature, support line).

Conclusion: Previous research on reasons for non-return are based on interventions with participants offered self-test kits to complete for the purpose of a study. To our knowledge, this is the first qualitative study to explore barriers from the perspective of those who have not returned self-initiated/requested kits. Results provide service-user insights for improving service and return rates from participants viewed as challenging to engage.

P021 - Performance evaluation of Alinity m HSV 1 & 2 / VZV Assay

Dr Rupinder Kular, Heather Alexander, Adam Seraphin, Shihai Huang, Jeffrey Wuitschick

Human herpes viruses cause a variety of illnesses depending on the anatomical site where the infection initiates. HSV-1 is transmitted mainly through oral-to-oral contact and HSV-2 is mainly sexually transmitted. VZV lesions are primarily localized to specific anatomical areas but can also spread to other areas including genital. HSV and VZV lesions are very similar phenotypically, thus disseminated HSV and VZV may be clinically indistinguishable. The Alinity m HSV 1 & 2 / VZV assay is a multiplex real time PCR assay designed to detect and differentiate HSV-1, HSV-2 and VZV on a high throughput automated Alinity m System.

Methods

The HSV 1 & 2 / VZV assay is executed automatically on the Alinity m System and consists of DNA extraction from specimens, PCR assembly, amplification/detection, and result calculation and reporting. The Alinity m HSV 1 & 2 / VZV assay was evaluated for key assay attributes such as limit of detection, interference from potential cross-reacting microorganisms and potential interfering substances. Assay precision was assessed by testing a 4-member panel twice each day for 5 days on 3 instruments by 3 operators totaling a minimum of 90 replicates per panel member.

Results

Limit of Detection for HSV-1, HSV-2 and VZV was 5.90 TCID₅₀/mL, 2.07 TCID₅₀/ml and 0.055 TCID₅₀/mL respectively. No cross-reactivity or microbial interference was observed for 55 off-panel microbes or with on-panel viruses. No interference was observed with 24 potential interfering substances commonly encountered in lesion swab specimens. HSV-1, HSV-2 or VZV present at high concentration did not interfere with the detection of the other targets at low levels. The assay demonstrated a within-laboratory SD of ≤ 0.32 CN, ≤ 0.40 CN and ≤ 0.39 CN at \geq LoD levels for HSV-1, HSV-2 and VZV respectively.

Conclusion

The Alinity m HSV 1 & 2 / VZV assay detects and distinguishes HSV-1, HSV-2 and VZV from cutaneous and mucocutaneous lesion swab specimens collected from symptomatic patients. These results demonstrate the analytical performance of Alinity m HSV 1 & 2 / VZV assay.

P022 - Herpes suppressive therapy and Bariatric Surgery

Miss Naomi Riddett, Ms Kimberly Olasoji, Raj Patel

Bariatric surgery is increasingly seen as a definitive treatment for the epidemic of obesity and its related healthcare impacts. This case report in which we discuss the loss of control of herpes recurrences with aciclovir suppression post surgery (and its remedy) highlights the problems of the commonest type of bariatric surgery performed in the UK (the Roux on Y procedure) and the complications that can arise in delivering HSV suppressive therapy post surgery. The Roux on Y procedure makes the stomach smaller and attaches this directly to the ileum (thus bypassing the duodenum). Aciclovir which is only partially soluble in an acid rich environment is at best only partially absorbed (demonstrating a saturation kinetic) predominantly in the first few centimetres of the duodenum. The case emphasises that considerations of the size of tablets, solubility of active ingredients in an altered environment, and site of absorption may all play a part when assessing the suitability of therapies post surgery. The successful restoration of control with different antivirals (2nd line) shows that knowledge of their different characteristics can be utilized to achieve effective herpes suppression in these circumstances.

P023 - Atypical Genital Ulcerations: are Molecular Diagnostic techniques a useful diagnostic tool?

Dr Matthew Valentino, Dr Katya Muscat, Donia Gamoudi, Dr Graziella Zahra, Dr Alexandra Gauci, Valeska Padovese

Introduction

Genital ulcers can be caused by infectious and non-infectious agents and are a common presentation in clinics. They often pose diagnostic challenges in view of the myriad of possible aetiologies, the similarities in clinical presentation and biopsy results may be inconclusive. They can be difficult to manage because of the painful and distressing nature, their late presentation and related stigma.

Aim and Objectives

We present six cases of unusual genital ulcers in patients who have attended the Genito-Urinary Clinic (GUC) at Mater Dei Hospital in Malta with the aim of discussing the utility of using molecular diagnostics techniques in the differential diagnosis of Genital Ulcer Disease with atypical presentation.

Methods

Clinical cases of genital ulcer disease (GUD) were chosen for the atypical presentation among others who attended the GUC between June 2022 and June 2023. Patients were tested using real time PCR (single assays) for Epstein-Barr Virus (EBV), Cytomegalovirus (CMV), Herpes Simplex Virus (HSV), Varicella Zoster Virus (VZV), Mpox (Monkeypox Virus), and a Multiplex real time PCR for *Treponema pallidum*, *Chlamydia trachomatis*, *Neisseria gonorrhoea*, *Trichomonas vaginalis*, *Mycoplasma genitalium*, at the Molecular Diagnostics-Infectious Diseases in the Pathology Department of Mater Dei Hospital.

Results

The authors present six cases and discuss differential diagnosis.

Conclusion

We recommend the use of molecular diagnostics techniques as a useful tool for the diagnosis of atypical genital ulcerations when clinical diagnosis is challenging.

P024 - Sexual Transmitted Infection among LGBTQ+ community members in Lebanon, between Knowledge and Stigma

William Abou Shahla

Due to many social and political discrimination regarding the LGBTQ+ community in Lebanon, and the criminalization of the grouping of this population by law, individuals are concerned. There's an apparent fear of disclosing one's sexual orientation leading to hindered access to HIV/STI services. NGOs are putting efforts to support the community and provide awareness regarding sexual health. However, such efforts are challenged by limited resources, especially after the devastating economic crisis. This study will focus on assessing the knowledge about STIs, evaluating access to testing, and acknowledging the effect of the stigma associated with HIV in the Lebanese LGBTQ+ population.

Methods

In this observational, cross-sectional study, a total of 500 individuals will be recruited during their visits to NGOs concerned about sexual and general health checks. A survey based on the SSKAPP (skin and sexually transmitted infections, knowledge attitude, and practice) for migrants will be utilized for this study. The survey will be filled out individually and anonymously in the clinic in the presence of the physician in charge. The survey contains information about sociodemographic characteristics, sexual orientation, knowledge about STIs, current and past sexual history, testing frequency, and a testimonial section about the stigma facing HIV-positive patients

Results

Although NGOs provide rapid tests for major STIs, healthcare professionals prioritize clinical diagnosis and empiric management. This is due to the lack of resources. The preliminary results of 50 surveys from those who identified as LGBTQ+ show that the majority come from low socioeconomic status, low education level, and encountered at least one STI during the past 12 months. The majority had more than 10 sexual partners during the last year and condoms were sometimes or never used. HIV-positive patients had difficulties being accepted by their surrounding groups and were verbally abused by society and at their workplace.

Conclusion

The LGBTQ+ community in Lebanon faces stigma, which keeps them from getting tested for STIs or seeking medical help. To control the spread of infections, we can update guidelines, launch awareness campaigns, offer more testing opportunities, and use advanced tools to diagnose a wider range of STIs.

P025 - HIV Pre-exposure prophylaxis (PrEP) in the North East of Scotland: does uptake reflect local epidemiology?

Dr Daniela Brawley

PrEP has been prescribed in Scotland free since 2017, initially based on eligibility criteria (figure 1) however recently with guidance recommending a wider offer to increase uptake and achieve HIV transmission elimination. PrEP provision in the North East of Scotland, a combination of urban and rural communities as well as island populations, was assessed over the life of the programme, encompassing the impact of Covid19 pandemic, and the recent widening access guidance. This was compared to demographics of people living with HIV (PLWHIV) to assess whether the programme provides equitable access to everyone who would benefit from this prevention modality.

Methods

Annual PrEP prescription data from 2017 till 2022 was accessed from the National Sexual Health database (NaSH). Demographics including age, gender, ethnicity, Scottish Index of Multiple Deprivation (SIMD) and eligibility criteria was assessed, where available, for each year of the programme. The demographics of PLWHIV newly diagnosed from 2017- 2022 was accessed from the local HIV database. Age, gender, ethnicity, transmission mode and SIMD data was reviewed and compared to the demographics of individuals prescribed PrEP.

Results

Individuals prescribed PrEP increased from 42 (2017) to 367 (2022) (figure2). Median age 28-30yrs. Gender was overwhelmingly male- <3% female and <1% transgender/non binary. Sexuality was not uniformly documented however eligibility was mostly for gay, bisexual and other men who have sex with men (GBMSM) with recent rectal STI/unprotected anal intercourse. 2022 showed an increase in "other clinician" category (figure3). Ethnicity was 72%-85% white British. Access for most deprived reduced over time (figure4). PLWHIV were 13% female, median age 39, 35% heterosexual transmission and 45% white British. In 2022, 38% individuals lived in the two most deprived quintiles.

Conclusion

PrEP provision has increased, with evidence of prescribing beyond "eligibility criteria", however PLWHIV are more likely to be older, female, have an ethnicity other than white British and be living in deprivation. HIV transmission elimination can only be achieved if PrEP provision is available for all who would benefit.

P026 - Factors Associated with Condomless Anal Sex among Chinese Men Who Have Sex with Men

Edmond Pui Hang Choi, Ms Kitty Wai Ying Choi, Dr Pui Hing Chau, Eric Chow

The use of smartphone dating applications (apps) has become increasingly popular among men who have sex with men (MSM) as an avenue for seeking romantic and sexual connections. A systematic review has shown that individuals using these apps tend to exhibit a higher prevalence of gonorrhoea and chlamydia infections compared to non-users. In light of these findings, this study delves into a secondary data analysis of baseline data gathered from a randomized controlled trial (RCT), aiming to identify factors that contribute to the occurrence of condomless anal sex among Chinese MSM.

Methods

The data for this study was derived from the baseline information of a RCT that aimed to evaluate the effectiveness of an interactive web-based intervention in enhancing sexual health among dating app users. The eligibility criteria for participants included: (i) identification as MSM, (ii) cisgender male, (iii) aged 18 or above, (iv) active dating app user, (v) HIV-negative, (vi) sexually active, and (vii) ability to read and understand Chinese. The primary outcome of interest was condomless anal sex in the last 3 months. A multiple logistic regression analysis was employed to investigate factors associated with this outcome.

Results

We analyzed data from 480 MSM and found that approximately 40% of participants reported engaging in condomless anal sex in the last 3 months. Several factors were associated with a higher likelihood of engaging in condomless anal sex, including taking pre-exposure prophylaxis (PrEP) (adjusted odds ratio [aOR]: 7.33), engaging in chemsex in the last 3 months (aOR: 3.68), participating in group sex in the last 3 months (aOR: 2.41), and being in a relationship (aOR: 2.09). Furthermore, MSM who had greater condom use self-efficacy, were less likely to engage in condomless anal sex (aOR: 0.90).

Conclusion

The findings of this study have important implications for the development of targeted interventions and educational programs aimed at promoting safer sexual practices among MSM. Specifically, efforts to promote consistent condom use among individuals who take PrEP and those who engage in chemsex and group sex are needed.

P027 - Dating App Experiences and Sexual Behavior Among Hong Kong MSM: A Qualitative Study

Edmond Pui Hang Choi, Ms Kitty Wai Ying Choi, Dr Pui Hing Chau, Eric Chow

The use of dating applications (apps) has become an increasingly common social phenomenon. Numerous quantitative studies have explored factors associated with dating app usage and its impacts on sexual health. However, little research has been conducted on how men who have sex with men (MSM) in Hong Kong utilize dating apps to arrange sexual encounters. The present study aimed to describe the experiences of HIV-negative MSM in using dating apps, the sexual activities arranged through these apps, and their overall experiences in coordinating sexual encounters via dating apps.

Methods

This qualitative study involved conducting individual interviews with participants recruited through various local non-governmental organizations. The inclusion criteria for the study were as follows: (i) MSM; (ii) cis-male; (iii) aged 18 years or older; (iv) currently using dating apps; (v) self-reported HIV-negative; and 6) sexually active. The interview data were transcribed verbatim from the recordings. Data analysis was carried out using Braun and Clarke's thematic analysis approach.

Results

In total, 31 participants were included in the analysis. Factors associated with matching on apps included sex roles, HIV serostatus, and the availability of a meetup venue. A diverse range of sexual encounters were facilitated through these apps. Condoms were generally used for HIV prevention, except among younger, inexperienced individuals or during chemsex. The participants in our sample expressed significant interest in non-penetrative sexual behaviors. After being exposed to the risk of infections, searching for post-exposure prophylaxis methods and/or sexual health screenings was common. Experiencing sexually abusive encounters led to changes in sex-searching habits and decreased trust in forming relationships.

Conclusion

The study identified various factors influencing matching on dating apps among MSM in Hong Kong and highlighted the diverse nature of sexual encounters facilitated through these platforms. These insights can be valuable in developing targeted interventions and educational programs to promote safer sexual practices among MSM using dating apps.

P029 - HIV prevalence among MSM with STI, Italy, 1991-2021

Marco Cusini, dr Maria Cristina Salfa, [Barbara Suligoj](#)

To estimate HIV prevalence among men who have sex with men (MSM) diagnosed with a sexually transmitted infection (STI) and assess socio-demographic and behavioral characteristics of HIV-positive MSM.

Methods

Methods: A retrospective study was conducted using data obtained from the Italian Sentinel STI Surveillance System, between 1991 and 2021. Socio-demographic, behavioral and clinical data were collected; all individuals were offered HIV testing. To assess independent associations between study variables and HIV positivity, a multivariate analysis was conducted including variables that showed a statistical significant association (crude odds ratio, cOR) at the univariate analysis. For the multivariate analysis, data for the last six years (2016-2021) are reported separately to provide a detailed description of more recent data. The analysis was performed using IBM SPSS Statistics 28.

Results

Between 1991 and 2021, 23,257 MSM diagnosed with a STI underwent HIV testing (83.1% of all MSM who were diagnosed with a STI). The overall HIV prevalence was 23.9%. An overall decreasing trend in HIV prevalence was observed from 28.0% in 1991 to 10.7% in 2008, followed by an increase until 2014 (31.2%), and afterwards remaining approximately stable (around 27.0%). HIV prevalence was 59.9% for individuals with Lymphogranuloma venereum, 31.8% for genital herpes, 30.8% for latent syphilis, 27.0% for primary or secondary syphilis, and 21.1% for genital warts. Among HIV-positive MSM (N. 5,562), 21.6% were unaware of being HIV-positive.

Conclusion

In Italy, approximately one out of four MSM with an STI was HIV positive. The high prevalence observed among MSM with STI (four-fold compared to that of heterosexuals with STI), suggests that MSM need in-depth counseling focused at increasing awareness of behaviors at risk for acquiring HIV and STI.

P030 - Pilot SMART Trial of Motivational Enhancement Interventions to Increase Pre-Exposure Prophylaxis Use in Sexual Minority

Leah Ewart, Dr. Christian Grov, Rachel Verhagen, Dr. Jennifer Manuel, Michael Viamonte, Samantha Dilworth, Omar Valentin, Dr. Emily Cherenack, Sidney Carr, Dr. Susanne Doblecki-Lewis, Dr. Inbal Nahum-Shani, Dr. Adam Carrico

Introduction: Although pre-exposure prophylaxis (PrEP) could substantially mitigate HIV risk, sexual minority men (SMM) who use stimulants commonly experience difficulties with engaging in PrEP clinical services. Motivational interviewing (MI) and contingency management (CM) reduce substance use and condomless anal sex in this population, but interventions require adaptation to promote engagement along the PrEP care continuum.

Description: PRISM is a pilot sequential multiple assignment randomized trial (SMART) testing the feasibility, acceptability, and preliminary effectiveness of distinct combinations of telehealth MI and CM in 70 SMM who use stimulants that are not currently taking PrEP. A national US sample was recruited via social networking applications to complete a baseline assessment and mail-in HIV testing. Those with non-reactive HIV results are randomized to either: 1) a 2-session MI intervention focusing on PrEP use and concomitant stimulant use or condomless anal sex; or 2) a CM intervention with incentives for evidence of PrEP clinical evaluation by a medical provider (\$50) and filling a PrEP prescription (\$50). At the 3-month follow-up, participants not on PrEP are again randomized to either: 1) Switch to a second-stage intervention (i.e., MI+CM or CM+MI); or 2) Continue with assessments only. Outcomes for both responders and non-responders are reassessed at a 6-months.

Lessons Learned: Implementation of this pilot SMART underscores challenges in reaching SMM who use stimulants to optimize HIV prevention efforts; one in ten (104/1,060) eligible participants enrolled. 85 completed mail-in HIV testing. We delivered 5 preliminary HIV-positive results, including post-test counseling as well as referrals to confirmatory testing. For those randomized, telehealth was widely feasible and acceptable with high rates of engagement in the MI and CM interventions. Across the first-stage and second-stage intervention periods, we successfully delivered 75 of 78 MI sessions (96%) and 100% randomized to CM received overviews of available financial incentives.

Recommendations: Developing and refining a flexible, participant-centered approach is crucial to support engagement of potentially eligible participants through. Use of telehealth can expand reach and potential public health impact of interventions. Further research is needed to determine the effectiveness of telehealth MI and CM for supporting PrEP use in SMM who use stimulants.

P031 - Modifying causes of glomerular filtration in pre-exposure prophylaxis for HIV user ,first year follow-up experience

Sr Guillermo Federico Del Carlo, sr Juan Ambrosioni, mrs Montserrat Laguno, sr David Garcia Hernandez, Dr Nicolas De Loreda, sr Francisco Jose Montoya

Pre-exposure prophylaxis against the HIV(PrEP) is an effective and safe strategy. The authorised combination as emtricitabine and tenofovir diproxil fumarate (FTC/TDF)The use of daily PrEP has shown to be a measure with excellent oral tolerance. Multiple studies indicate that TDF is associated with a possible reversible decrease in kidney function. Also PrEP has shown to be safe when it comes to interactions with other drugs. Other causes for the decrease of the GFR could be drugs or substances (alcohol, non-steroidal anti-inflammatory drugs (NSAIDs), creatinine among others) that share a renal excretion route which could be the cause for its decreased kidney function.

Methods

Descriptive retrospective single-centre study of PrEP users at baseline consultation to observe and identify the concomitant use of PrEP with other drugs, alcohol, recreational substances and nutritional supplements and which of these are associated with change in renal filtration in daily use.

Results

337 individuals were included: 98% were cis-gender men; with a median age of 36 years old.

63 % have university education. During the follow ups we detected that 31% of the subjects use protein supplements and other variables were associated with significant changes in kidney functions: NSAIDs, amino acids, alcohol and antihypertensive, alcohol and substances.

Conclusion

A high use of protein supplements has been detected as well as other factors that alter kidney function. PrEP user profile has a dynamic behaviour because its habits and various treatments change over it. Consequently, it is important to keep continuous supervision of the renal function for the safety of our patients.

P032 - ALINITY M MPXV - A NEW QUALITATIVE REALTIME PCR FOR MPOX VIRUS

Dr. Robert Ehret, Malik Prentice, Dr. Martin Obermeier

Timely testing of monkeypox (MPOX) virus is important for patient care, contact tracing, and decreasing transmission. The new Alinity m MPXV Research Use Only (RUO) assay developed for direct qualitative detection of MPXV DNA in clinical specimens was evaluated by comparison with a MPOX/Ortho-pox Virus in-house assay (LDT) established with start of the global outbreak in summer 2022.

Methods

Residual archived swab samples tested with the LDT in 2022 were selected (100 negatives, 300 positives) and were diluted 1:10 to obtain sufficient material for parallel testing of specimens with the Alinity m MPXV RUO test (Abbott Molecular) and the LDT (extraction: Nimbus, Seegene, primers/probes: TibMolbiol; PCR: Cfx96, Bio-Rad) to estimate the correlation between both tests. Assay linearity was assessed with a dilutional series of cell-culture supernatant (INSTAND e.V., Germany) quantified by digital PCR, with concentrations ranging from 500,000 to 160copies/mL and tested at 10 replicates each. Detection limits of both tests (95% hit-rates) were determined by Probit analysis.s.

Results

All samples initially negative for MPOX were confirmed as negative with both tests. 95.3% (286/300) of the diluted positive samples were reported positive with both tests. Samples that were not positively confirmed had Ct values of >37 cycles upon initial testing of undiluted material. The correlation between results was very high (R^2 0.96). The mean difference in Ct-values determined by Bland-Altman analysis was 0.54 cycles, with the lower Ct-values for the Alinity m MPXV RUO assay. The dilution series demonstrated linearity for both assays. Probit analyses showed 95% hit-rates of 293 and 446 copies/mL for the Alinity and LDT, respectively.

Conclusion

In our comparative analysis, the Alinity m MPXV RUO assay showed very high specificity and sensitivity with a lower detection limit of 293copies/mL at a 95% hit rate. Continuous random access and stat capabilities of the Alinity m system allowed for improving turn-around-time in comparison to the batch-based in-house assay.

P033 - Proctitis in patients with MPOX infection: a single-center analysis of 284 cases

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Mpox is a viral zoonotic infection mostly associated with animals in Central and Western Africa. In 2022, an outbreak occurred outside of Africa, leading to community-sustained transmission and multi-country spread. Traditionally, mpox presented with rashes on the face, palms, and soles of feet, along with fever and other general symptoms. However, the 2022 outbreak revealed atypical presentations, including mucositis and proctitis. This study aims to describe our experience with mpox patients exhibiting proctitis.

Methods

We conducted an observational study between 01 June and 31 August 2022, on patients with mpox at a reference tertiary center in Barcelona, Spain. A descriptive analysis on mpox with proctitis was performed, focusing on its characteristics, symptoms, diagnosis, and outcomes.

Results

In our cohort of 775 patients with mpox, 284 (36.6%) patients presented with proctitis (97.2% MSM and 47.2% were HIV positive, most of them well controlled). 3.5% individuals required admission for pain control or complications associated with proctitis, no one died. The most frequent systemic symptoms were fever, asthenia, lymphadenopathy, headache, myalgia and odynophagia. Most patients (91.2%) had proctalgia but other proctitis symptoms were rectal discharge, anal pruritus, tenesmus, rectal bleeding and constipation. Only 69.4% patients had perianal lesions. Screening for other STIs was performed in 120 patients, of whom 36.6% patients were infected with one or multiple STIs.

Conclusion

Mpox virus should be included in the differential diagnosis of proctitis in an appropriate epidemiological context.

P034 - Comparative study of anal canal biopsies by two forceps types in individuals with HIV infection

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In people living with HIV (PLWH), anal canal cancer (ACC) has an incidence forty times that of the general population. ACC is causally related to oncogenic high-risk human papillomavirus (HR-HPV) infection. Detecting and treating high-grade dysplastic lesions (HSIL) caused by HR-HPV in the anal canal (AC) using high-resolution anoscopies (HRA) reduces progression to ACC. The aim of this study is to evaluate diagnostic sensitivity of AC cytology and biopsy and to demonstrate non-inferiority of diagnostic effectiveness and no increase in intensity and duration of pain or other complications following biopsy by endoscopic forceps (EF) compared to Baby Tischler forceps (BTF).

Methods

Retrospective observational single-centre study of PLWH who were biopsied in the AAC prevention programme of the Hospital Clínic of Barcelona between January 2021 and December 2022. The analysed variables were: sociodemographic characteristics, effectiveness of AC cytologies and biopsies (validity for histopathology), tolerability [measured by Visual Analogue Scale (VAS)], comparing both forceps, biopsy location (anterior AC or other locations), presence of anal disorders (haemorrhoids, proctitis or fissures) and post-biopsy complications (pain, bleeding, infection, and constipation). Data were collected from case records and the electronic medical record. All participants signed informed consent.

Results

In 244 patients [mean age=46.1 years (SD=10.1); 93.4% men], 363 biopsies were performed [222 (61.2%) using EF; 141 (38.8%) using BTF]. Valid samples: 211/242 (87.2%) cytologies and 346/363 (95.3%) biopsies [with no differences between forceps ($p=0.168$)]. HSIL diagnoses: 13.3% of cytologies and 38.5% of biopsies. Tolerability was similar ($p=0.112$) comparing PE (medianVAS=1; IQR=0-3.5) vs. PBT (medianVAS=0; IQR=0-3); but significant (more painful) ($p=0.017$) when biopsying the anterior AC (medianVAS=2; IQR=0-4) vs. other locations (medianVAS=0; IQR=0-0.25). No significant differences were observed in post-biopsy complications ($p=0.338$): 80 patients (32.8%) reported pain; 60 (24.6%) bleeding. Patients with concurrent proctitis had more post-biopsy pain ($p=0.038$).

Conclusion

HRA-biopsy showed greater anal-HSIL diagnostic sensitivity than cytology. EF and BTF were non-inferior regarding effectiveness/safety/tolerability. Pain was significantly greater when biopsying the anterior part of the AC and in patients with concomitant proctitis, regardless of the instrument. HRA practitioners should be reassured in the use of either forceps type.

P035 - Understanding Reach, Effectiveness, Adoption, Implementation, Maintenance of home-based sexual healthcare outside a clinic; Realist Review

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Background. Home-based sexual health care, including testing HIV and sexually transmitted infections (STI), is increasingly implemented. Home-based care lowers barriers to enter sexual healthcare. This review aims to identify which elements of home-based sexual health care work for which key populations, under which circumstances and why in terms of reach, effectiveness, adoption, implementation, and maintenance.

Methods. A realist review was conducted which included at least a self-managed HIV testing component. The search assessed databases PubMed, Embase, Cochrane Register of Controlled Trials and PsycInfo. Global peer-reviewed published quantitative and qualitative literature published from February 2012 to February 2023 were examined. Following the RE-AIM framework, we systematically assessed (R) reach of key populations, (E) effectiveness of the intervention, and (AIM) effects on adoption, implementation, and maintenance in current sexual health care.

Results. Of 730 unique identified records, 92 studies were selected for extraction. Of these studies, 60% reported actual interventions, 40% described acceptability and intention to use an intervention. Most studies were among men who have sex with men (MSM). Home-based sexual health care was highly acceptable throughout key populations such as MSM, sex workers and young people. Effectiveness in most studies was (perceived) increased HIV testing. Adoption of the intervention by care providers was acceptable, under premise that linkage to care was available. Included studies showed inadequate results of fidelity. Maintenance of home-based sexual health care should be considered complementary to clinic-based care.

Conclusions. Current review assessed the acceptability of interventions for key populations with home-based sexual health care. Results were largely restricted to reach and effectiveness of interventions. Perspectives on adoption and fidelity yielded limited results. There is a great variety in reporting and analytic approaches to evaluate home-based sexual health care programs. Accordingly, more comparative research is needed to examine success factors of home-based sexual health care.

P036 - How many do not attend follow-up HIV testing after initiating PrEP?

Nadi Gupta, Dr Ruwani Jayaweera

PrEP is a highly effective HIV prevention strategy. That said, PrEP efficacy is not absolute, and the British Association of Sexual Health and HIV PrEP national guidance recommends 3-monthly HIV testing. Patients are carefully counselled on the risk of acquiring HIV and remaining on dual therapy and the need to attend for HIV testing every 3 months. However, there is still a risk of patients not accessing follow-up care and monitoring on a three monthly basis. The aim of this audit was to ascertain how many patients who initiate PrEP do not attend follow-up HIV testing at 3 months.

Methods

A retrospective case note review was undertaken of 40 consecutive patients who initiated PrEP at a Sexual Health Clinic between 1/8/2021 to 31/07/2022. The local service procedure recommends that the 3-month follow-up HIV test and STI screen is conducted face to face in the clinic. Data was collected on demographics, whether event based or daily dosing, amount dispensed and continuation rates after 3 months.

Results

39/40 (98%) who received PrEP were eligible, in accordance with BASHH guidance. 38/40 were MSM (condomless anal sex). 2/40 had HIV positive partners, one of whom was ineligible as their partner had an undetectable viral load.

Of the 40 patients, 28 (70%) attended follow-up in 3 months for STI screen including HIV test. Of the 28 (70%) who attended follow-up HIV testing at 3-months, no HIV seroconversions occurred. 6 tested positive for rectal chlamydia and/or gonorrhoea. Of the remaining 12 that did not attend the 3 month HIV test, 7 re-attended 6-12 months later and 5 remain lost to follow-up.

Conclusion

The majority re-attended at 3 months for HIV testing which is reassuring. However, 5 patients have not re-attended to date. Our work highlights how crucial it is for clinicians to place more emphasis from the outset that follow-up HIV testing is essential, even if they decide to discontinue PrEP.

P037 - They still refused to run those tests

Ms Rochelle Hamilton, Professor Yvonne Wells, Assoc Prof Peter Higgs

Women account for approximately half of people living with HIV globally but remain underrepresented in research. Women and men living with HIV have very different experiences in their journey to diagnosis and when living with HIV. The disparities begin when attending routine sexual health assessments in primary care. This research sought to explore the experience of cis-gendered women living with HIV, and the barriers they faced in HIV testing and support.

Methods

Maximum variation sampling was employed when recruiting participants. Semi-structured interviews explored the women's HIV journey pre and post-diagnosis. NVivo 12 coding software assisted in data management, and deductive and inductive analysis were used to identify themes.

Results

Nine cis-gendered women who had been living with HIV for between two and 19 years participated in semi-structured interviews in 2021. Themes describing the stages the women's HIV journey took them were identified. Many of the women had reported difficulty accessing HIV testing, and none reported that an HIV test was undertaken during what they understood as routine screening. The diagnosis provoked a diverse range of feelings, including betrayal, anger, fear, and a sense of imminent death. Social and health services and family support were not always available or received.

Conclusion

Our data suggests there is considerable room for improvement in the experience of sexual health screening and testing for women in regional settings. Improvement needs to begin at the primary care level with upskilling in sexual history taking and requires a review in under and post-graduate training.

P038 - MSM sex worker access to HIV prevention services amidst COVID-19 in France, Russia, and Turkey

Dr. Kristopher Jackson, Dr. Tadhg Sullivan, Sean Howell, Alex Garner, Dr. Glenn-Milo Santos

At the height of the COVID-19 pandemic, interruptions to preventative healthcare and sexual health services, were commonplace. Reports suggest men who have sex with men (MSM) experienced reduced access to HIV testing and HIV pre-exposure prophylaxis (PrEP) during the pandemic. MSM sex workers (MSMSW) may be disproportionately impacted by COVID-19 interruptions due to intersecting stigmas associated with both homosexuality and sex work. The objective of this study is to examine the association self-identification as an MSMSW and perceived access to condoms/lubricant and PrEP among MSM in three socio-politically diverse nations where MSMSW is illegal: France, Russia, and Turkey.

Methods

We conducted a secondary analysis of the COVID-19 disparities survey among MSM survey respondents (N=17,250). MSM were recruited between October-November 2020 via Hornet, an MSM-oriented geosocial networking application. Approximately 38% of respondents were in France (n=1269), Russia (n=3882), or Turkey (n=3141). We performed logistic regression to assess the relationship between sociodemographic factors (including MSMSW status) and perceived access to condoms/lubricants; multinomial regression was performed to assess the relationship between sociodemographic factors and active PrEP use versus never using PrEP or discontinuing PrEP.

Results

MSMSW comprised 6.5% (n=83) of the sample in France and 7.4% (n=287) and 5.9% (n=185) of the sample in Russia and Turkey, respectively. MSMSW status was associated with a reduction in perceived access to condoms/lubricant among respondents in Russia (p=.001) and France (p<.001), but not Turkey. In France, MSMSW status was associated with reduced perceived access to condoms/lubricants (Odds Ratio=0.39, p=0.003). A greater proportion of MSMSW reported PrEP access amidst COVID-19 in France (p=.007) and Turkey (p=.02). In France, SW were less likely to report never using PrEP (Relative Risk Ratio = 0.40, p=.005) compared to non-MSMSW.

Conclusion

COVID-19 exacerbated pre-existing inequities in HIV prevention among populations experiencing intersecting stigmas, such as MSMSW. We present insights for improving HIV prevention access during an international public health crisis and emphasize the need for continuous prevention measures during public health emergencies to protect vulnerable populations, such as MSM sex workers.

P039 - HIV infection presenting with pruritus.

Md Aleksandra Kobusiewicz, MD Matthew Valentino, MD Daniel Micallef, MD Michael Boffa

HIV infection does not usually present with pruritus as the only symptom. On the other hand, pruritus may occur in later stages of HIV infection due to various factors. The exact pathogenesis of pruritus in this cohort of patients is not fully understood and may be due to various factors such as immune and skin barrier dysfunction, opportunistic infections, dermatological conditions, antiretroviral drug side effects, systemic disorders and psychological factors.

Methods

We present two cases of 28- and 24-year-old men with acute-onset severe generalised pruritus. Skin examination revealed several excoriations but there were no signs of cutaneous infections, infestations or inflammatory disorders. No other systemic symptoms were reported. Baseline blood tests done prior to referral to Dermatology including full blood count, renal profile, liver profile, inflammatory markers and thyroid function tests were normal.

Results

Both patients tested positive for HIV. One of the patients had had a negative HIV antibody test 3 months previously, indicating recent seroconversion, whereas the other patient had no previous tests and was suspected to have had an acute HIV infection. Patients were referred to the infectious disease specialists and further blood tests were obtained, including viral loads (4230 copies/ml and >10,000,000 copies/ml) and CD4 counts (464 and 230 respectively). Both were started on anti-retroviral treatment and were followed-up at the HIV clinic. Pruritus resolved shortly after initiation of antiretroviral therapy, suggesting that the pruritus was directly related to HIV infection.

Conclusion

These cases indicate that pruritus may be the first symptom of HIV infection. HIV testing should therefore be considered in cases of pruritus of unknown origin, particularly when there are risk factors in the history.

P040 - Skin Lesions: Mirror Images of HIV

Skin Lesions: Mirror Images of HIV Pille Konno

In the case of HIV, there may be skin rashes that lead us to the diagnosis. HIV-positive patients may unknowingly visit various specialists before they become aware of their diagnosis. Indicator disease might be the first manifestation of HIV disease.

Methods

There are digital medical records in Estonia, and now the family doctor receives a notification if his patient has HIV indicator diseases (Diagnostic match 1.0).

Results

Data from 2014 to 2015 on new HIV infections showed that 82% of them had used health services in the two years prior to being diagnosed with HIV (the average number of visits was nine). Only 16% of them had been tested for HIV at least once. At the same time, only 5% had been tested for HIV indicator conditions.

Conclusion

Test for HIV in people who have had multiple casual partners and unprotected intercourse or have already been diagnosed with some STD. Test for HIV on people you notice HIV indicator diseases.

P041 - Modes and reasons for HIV testing in Central Eastern Europe: Go Holistic Go Beyond project

Professor Justyna Kowalska, Prof Deniz Gokengin, Prof Nina Yancheva-Petrova, Dr Sergii Antoniuk, Dr Lubomir Sojak, Dr Velimir Saveski, Dr David Jilich, Dr Botond Lakatos, Dr Agata Skrzat-Klapaczyńska, Prof. Cristiana Oprea, Dr Dominik Bursa

HIV testing remains an important tool in combating HIV epidemic. It prevents late diagnosis benefiting the individual and HIV transmission benefiting the population. Go Holistic Go Beyond project was initiated by the group of experts who are active HIV physicians and who developed an anonymous survey. Here we investigate the change in mode and reasons for HIV testing in nine countries from Central and Eastern Europe.

Methods

The survey included 7 open-ended and 19 closed questions, was translated into national languages and built on Survey Monkey. Data were exported on 1st June 2023. At that time there were 703 respondents: 174 (24.7%) from Poland, 127 (18.1%) Turkey, 84 (11.9%) Bulgaria, 83 (11.8%) Ukraine, 71 (10.1%) Slovakia, 61 (8.7%) North Macedonia, 44 (6.3%) Czechia, 38 (5.5%) Hungary and 21 (3.0%) Romania. Responses on where and why respondents tested for HIV were compared among three groups: people living with HIV who tested ≤ 5 , 6-10 and >10 years ago. The Chi-Square test was used for group comparison.

Results

524 (74.7%) respondents were male, 368 (52.2%) <40 years old, 571 (81.6%), 476 (68.6%) identified as MSM; 278 (39.7%) were tested positive for HIV ≤ 5 years ago, 203 (29.0%) 6-10 years ago, and 219 (31.3%) >10 years ago. The mode of testing was: medical facilities/private laboratories (428, 61.1% [68.0%, 62.6%, 54.7%]), blood donation (149, 21.3% [21.5,24.1,19.1]), anonymous/voluntary testing (81, 11.6% [5.0%,8.4%,19.1%]) and self-testing (42, 6.0% [5.5%, 4.9%, 7.2%]), $p < 0.0001$. The reasons for HIV testing were risky behavior (341, 49.3% [44.9%,50.5%,51.8%]), pregnancy (179, 25.4% [25.2%,25.0%,27.0%]), doctor's referral (144, 20.8% [20.2%,21.5%,20.8%]) and partner tested HIV positive (28, 4.0% [9.6%,3.0%,0.4%]), $p < 0.0001$.

Conclusion

People living with HIV were mainly tested in medical facilities and less likely in voluntary testing facilities, most commonly due to risky behaviors. Self-testing remains underutilized, which does not improve with time. Almost all female respondents were tested due to pregnancy, which indicates significant gap in behavioral testing among women.

P042 - Characteristics of Patients Diagnosed with Monkeypox in EU and non-EU countries - ECEE Network Group

Dr Irina Ianache, Dr Agata Skrzat-Klapaczyńska, Dr Ivana Gmizic, Dr Milan Zlamal, Dr Velida Mulabdic, Dr Eva Nagy, Dr Vanja Romih Pintar, Dr Zofia Bartovska, Dr Goran Stefanovic, Prof Tiberiu Holban, Dr Lidija Lavadinovic, Dr Nino Rukhadze, Prof. Antonija Verhaz, Professor Justyna Kowalska, Prof. Cristiana Oprea

Isolation and effective contact tracing, as well as vaccination for Mpox are important strategic pillars to control Mpox outbreaks. However the access to this prevention methods might vary between European union (EU) and non-EU countries (non-EU). Therefore the aim of this study was to compare socio-demographical characteristics, clinical presentation and outcomes in patients diagnosed with monkeypox (Mpox) stratified for EU and non-EU countries.

Methods

This is a retrospective survey study on patients diagnosed by RT-PCR from oropharyngeal swab, skin lesions and other body fluids with Mpox between April and November 2022. eCFR was built on SurveyMonkey platform and distributed by key opinion leaders in 24 countries from Central and Eastern Europe. In total 154 Mpox cases were submitted: 104 from EU and 50 from non-EU countries. Their characteristics and outcomes were compared with all statistical analyses performed using SPSS vs 20.0.

Results

153 (99.3%) patients were male, with median age 35 (IQR 30, 39) years, 142 (92.2%) MSM and 75 (48.7%) HIV-positive. Patients from EU had more high-risk behaviors: MSM ($p < 0.0001$), multiple sexual partners ($p = 0.025$), chemsex ($p = 0.008$), group sex ($p = 0.005$) and history of sexually transmitted infections (STIs) ($p < 0.0001$). They were also more likely to have HIV ($p = 0.042$) and to be hospitalized ($p = 0.003$).

Non-EU patients had more often generalised symptoms: chills ($p = 0.012$), facial skin lesions ($p = 0.043$). Outcome was favourable for all patients, including 4 with severe forms and prolonged evolution. Antiviral treatment was used only in EU (2 tecovirimat and 1 cidofovir).

Conclusion

The majority of cases were diagnosed in young MSM with high-risk behaviours and a history of STI. People from non-EU countries were less likely to be involved in high-risk behaviours and more likely to have more generalized symptoms (chills and facial skin lesions).

P043 - Refugee youth perspectives on HIV testing in a Ugandan humanitarian setting: Implications for HIV prevention

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Introduction: Refugees experience structural and social drivers of HIV alongside constrained access to HIV services. Limited attention, however, has focused on experiences of the HIV prevention cascade among refugee youth and how these experiences shape HIV testing engagement. We explored perspectives and recommendations regarding HIV testing with refugee youth in Bidi Bidi refugee settlement, Uganda.

Methods: This community-based study in Bidi Bidi refugee settlement involved four focus groups (FG) with refugee youth, 2 with ages 16-19 (women: n=1 FG; men; n=1 FG) and 2 with ages 20-24 (women: n=1 FG; men; n=1 FG). We conducted thematic analysis informed by the HIV prevention cascade dimensions (motivation, access, effective use).

Results: Focus group participants (n=40; n=16 ages 16-19, n=24 ages 20-24; 20 men, 20 women) were largely from South Sudan (83%). While most reported a lifetime HIV test (83%), three-quarters (78%) had not tested in the past year. FG findings spanned HIV prevention cascade dimensions. Narratives regarding motivation barriers for HIV testing included: a) knowledge (low treatment literacy; fear of death following an HIV-positive test; need for practical information regarding how to use HIV self-test (HIV-ST) kits); b) risk perception (HIV transmission misinformation); c) consequences of use (shame; anticipated stigma); and d) social norms (gender and age related norms). Themes regarding HIV testing access included a) availability (e.g., HIV testing kit and ART stock-outs); b) easy access (community outreach was preferred over visiting health centres; literacy and language barriers to HIV-ST usage); c) acceptable provision (HIV-ST was perceived to overcome privacy/confidentiality concerns in refugee clinics); and d) affordability (HIV-ST was preferred over clinic-based testing to reduce travel costs). Regarding effective use for HIV testing, youth narratives highlighted a) skills required to access confirmatory testing and ART; b) self-efficacy, including feeling empowered to manage one's health and future following HIV testing, and c) mixed findings regarding partner HIV testing, with some believing partner testing could lead to support while others reported it could lead to blame, separation and/or violence.

Conclusions: Findings provide unique insight into gaps in the HIV prevention cascade regarding refugee youth HIV testing engagement in Bidi Bidi refugee settlement.

P044 - Mind the gap? Alignment of national HIV PrEP guidelines to WHO recommendations for EECA

Mr Pietro Vinti, Dr Ioannis Mameletzis, Ms Aisuluu Balotbaeva, Dr Nikolay Lunchenkov

PrEP coverage for key populations as part of the HIV response varies across countries of Eastern Europe and Central Asia (EECA). The World Health Organization (WHO) has been updating its recommendations on PrEP service delivery based on emerging implementation evidence in order to support countries in optimizing provision and uptake, which may result in gaps in national guidelines incorporating those WHO updates. WHO also recommends for STI services to be integrated into PrEP programmes.

Methods

Current national HIV PrEP guidelines adopted between 2020 and 2023 in the EECA region were reviewed to assess adoption of WHO recommendations on oral tenofovir-based PrEP, the dapivirine (DPV) vaginal ring, and long-acting injectable cabotegravir (CAB-LA). The countries of interest for this policy analysis included Armenia, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Ukraine, and Uzbekistan. This analysis was conducted within SoS_project 2.0, a regional grant by the Global Fund.

Results

Using as a reference the latest WHO recommendations on differentiated service delivery (DSD) and simplification for prescribing and dispensing PrEP, our policy analysis of national guidelines highlighted areas where certain features of PrEP service delivery are misaligned. Such features include community-based models of initiating people on PrEP, and innovative approaches e.g. telehealth and HIV self-testing. For STI management, molecular testing is recommended in the majority of guidelines; however, not a single country guidelines recommended HAV or HPV vaccination to people on PrEP, suggestive of missed opportunities for these immunisations.

Conclusion

EECA countries should consider further enabling policies that allow for community-based service delivery of PrEP, as indicated by Georgia's national protocol. Global evidence is demonstrating that community-based organizations, when supported by national health authorities, are critical vehicles for efficient PrEP delivery, integration of STI services, and fostering coverage to populations.

P045 - MRSA abscesses in relation to Mpox

Dr Gemma Martin-ezquerro, Dr Sandra Esteban

It is well known that men who have sex with men (MSM) are at an increased risk for community associated methicillin resistant Staphylococcus aureus (CA-MRSA) transmission and infection. CA-MRSA is a specific type of bacteria resistant to certain antibiotics which limits treatment options. CA-MRSA can manifest as skin multiple painful abscesses or reinfect previous ulcers. Its intrinsic virulence factors can cause severe illness.

Methods

We reviewed isolation of skin MRSA during the months from May to December, of the years 2021 and 2022, Clinical characteristics of the patients were reviewed, and previous Mpox infection recorded.

Results

In 2021, 70 skin cultures were positive for MRSA, of those 8 were CA-MRSA. In 2022, 85 MRSA isolation, of those 15 were CA-MRSA. 7 patients had been diagnosed of Mpox infection in the previous month. All patients discarded skin abscesses, not always in the same localization of Mpox lesions, or reinfection of skin Mpox ulcers.

Conclusion

Patients who suffered from Mpox are at an increased risk for MRSA skin infections. When considering antibiotics in patients at risk for MRSA, knowledge of the resistance pattern at a local level should be taken into account

P046 - PEP and PREP: provision and uptake among homeless injecting drug users during a HIV outbreak

Michelle McIntyre, Dr Suzanne Todd, Mrs Susan Semple, Dr Gillian Armstrong

An outbreak of HIV among homeless people who inject drugs (PWID) in Belfast, started in August 2020. Previously, injecting drug use accounted for 0-5 cases annually in Northern Ireland. Multiple factors contributed to the outbreak: the Covid pandemic, a change in needle and syringe exchange services (NSES), and reduced heroin supply, which resulted in a shift to injecting cocaine. Response to the outbreak included raising awareness, establishing community HIV outreach clinics and fostering links between stakeholders. Starting and maintaining treatment in HIV positive patients and educating sero-negative patients in risk reduction became the focus of the outbreak management.

Methods

Those injecting, and at high risk of HIV, were invited to an incentivised outbreak educational talk. They received advice on risk reduction strategies – safe needle practice, testing, PEP and PREP. In June 2021, regular outreach clinics were established across two sites, delivering HIV care to positive patients and risk assessing those negative and at high risk of acquiring HIV. Sero-negative patients were educated on risk reduction strategies and assessed on a case by case basis for starting PEP (tenofovir disoproxil fumarate/emtricitabine and raltegravir) with the aim of transitioning to PREP (tenofovir disoproxil fumarate/emtricitabine).

Results

We describe patient response to PEP and PREP discussions, including acceptability, uptake and adherence in the initial 6-month period of outreach (19 clinics). 84 attended, 63% HIV negative, 37% HIV positive. PEP and PREP were discussed with all seronegative patients. 25% were prescribed PEP; 46% single episode, 54% >1 episode (range 2-4). 31% reported partial adherence, 54% reported good adherence (<2 missed pills/wk), 31% were adherent for at least 2 months. 15% transitioned to PREP. 15% were lost to follow up. 69% reported both sexual and injecting drug risk. There were no HIV sero-conversions within this period.

Conclusion

Early awareness-raising of HIV and all prevention strategies, was paramount in this outbreak. A low barrier approach was required to engage this vulnerable and chaotic cohort. Information on PEP was enthusiastically received but uptake and adherence varied. Regular risk reduction advice and adherence support with PEP is essential

P047 - Chemsex practices in PrEP users in a hospital-based sexual health programme

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The intentional use of drugs for prolonged sexual activity (chemsex) among gay, bisexual and other men that have sex with men (GBMSM) and in general in the LGBTIQ+ community is an emerging practice in our setting. It is associated with negative consequences in health such as an increased risk of sexually transmitted infections (STIs) and HIV. The aim of this study is to describe the profile and practices of chemsex and its relation to STIs in the cohort of pre-exposure prophylaxis (PrEP) users followed at the HIV Unit of the Hospital Clínic of Barcelona.

Methods

Retrospective descriptive study of users included in the PrEP programme from November 2019 to November 2022. A total of 1400 individuals were evaluated, who signed an informed consent form for research purposes. The following variables were analyzed: sociodemographic baseline characteristics, type of substances and routes of consumption, combinations in polydrug use (≥ 2 substances), high risk sexual practices, and the incidence of bacterial STIs, such as Chlamydia trachomatis (CT) and Neisseria gonorrhoeae (NG) in chemsex users versus recreational drug users. Data were collected from case reports and self-completed surveys and stored in a electronic case report data (eCDR).

Results

Fifty-eight percent reported substance use; 84% of them practised chemsex. The most common profile of chemsex users was: cisgender men (95%), aged 35 (+/-9SD), Spanish (44%), higher education (66%). In the comparative study, chemsex users (compared to recreational users) significantly had higher use of GHB/GLB (37%vs.10%), methamphetamines (18%vs.1%), mephedrone (21%vs.6%), and vasodilators (74%vs.51%); inhaled (76%vs.62%) and rectal (10%vs.0%) routes; polydrug consumption (53%vs.26%); group sex (68%vs.31%); and less sober sex (66%vs.93%). Furthermore, chemsex practices were associated with a higher risk of CT and NG in any location (26%vs.13%), and the presence of pharyngeal NG (15%vs.7%) and rectal NG (8%vs.2%).

Conclusion

Chemsex is a practice with a high prevalence among PrEP users in our cohort. Considering their vulnerability profile and the high incidence of STIs, we believe that a comprehensive and holistic approach by a multidisciplinary team with sufficient knowledge about different substances, risk management, and prevention is essential.

P048 - PrEP in Bosnia and Herzegovina from 2016 until today

Dr Velida Mulabdic, ID specialist, HIV clinician Jasna Topalovic-Cetkovic, Md Ahmed Velic

Bosnia and Herzegovina is among the first in Europe that started using PrEP in 2016. The PrEP program was maintained until the middle of 2021. The main study objective is to highlight the effectiveness of PrEP. The access to PrEP in Bosnia and Herzegovina has been limited from the second half of 2021 until today. A lack of medicines and poor government policies regarding the prevention of HIV infection are, unfortunately, ubiquitous in our country today and significantly affect the quality of life of our clients.

Methods

This retrospective observational study included 26 clients who received PrEP through our Center for Voluntary Confidential Counseling and Testing (VCCT) for HIV and other sexual transmitted diseases (STIs) at the Clinic for Infectious Diseases, Clinical Center of the University of Sarajevo, in the period from February 2016 to April 2021.

Based on medical histories, data on age, gender, and sexual orientation were processed using descriptive statistics methods. The research was conducted according to the principles of the Helsinki Declaration.

Results

Among a total of 26 clients, 22 were men (84.6%), and 4 were women (15.4%). All men were from the MSM population, while the women included in the study were women who have sex exclusively with men. Six clients (23.1%), 4 of whom were women, had an HIV positive partner. Only one experienced seroconversion, with poor adherence.

Conclusion

The results speak precisely in favor of the effectiveness of PrEP. Unfortunately, PrEP has not been available in Bosnia and Herzegovina since the middle of 2021. It is regretful that today we have HIV positive patients who used PrEP when it was available.

P049 - PrEP in Bosnia and Herzegovina from 2016 until today

Dr Velida Mulabdic, ID specialist, HIV clinician Jasna Topalovic-Cetkovic, Md Ahmed Velic

Bosnia and Herzegovina is among the first European countries to start using PrEP in 2016 among key populations. The PrEP program was maintained until the middle of 2021. The main study objective is to highlight the effectiveness of PrEP. Access to PrEP in Bosnia and Herzegovina has been limited from the second half of 2021 until today. A lack of medicines and poor government policies regarding the prevention of HIV infection are, unfortunately, ubiquitous in our country today and significantly affect the quality of life of our clients.

Methods

This retrospective observational study included 26 clients who received PrEP through our Center for Voluntary Confidential Counseling and Testing (VCCT) for HIV and other sexually transmitted diseases (STIs) at the Clinic for Infectious Diseases, Clinical Center of the University of Sarajevo, in the period from February 2016 to April 2021. Based on medical histories, data on age, gender, and sexual orientation were processed using descriptive statistics methods. The research was conducted according to the principles of the Helsinki Declaration.

Results

Among a total of 26 clients, 22 were men (84.6%), and 4 were women (15.4%). All men were from the MSM population, while the women included in the study were women who have sex exclusively with men. Six clients (23.1%), 4 of whom were women, had an HIV positive partner. Only one client experienced seroconversion due to poor adherence.

Conclusion

The results of our study speak precisely in favor of the effectiveness of PrEP. Unfortunately, PrEP has not been available in Bosnia and Herzegovina since the middle of 2021. Sadly, today we have HIV positive patients who used PrEP when it was available in our country.

P050 - Sexual Health on the move: providing sexual health services with the local Homeless transformation Team.

Dr Melissa Perry, Miss Michelle Doyle, Miss Cate Greer, Dr John White

People who experience homelessness (PWEH) are at increased risk of infections including viral hepatitis, HIV and STIs. Our local service in Northern Ireland (NI) initiated a 'Homelessness Transformation Project' in 2019 following an identified need for more accessible services for PWEH. In 2021 there were approximately 300 PWEH in the Derry/Londonderry area; by 2023 having the highest rate of new PWEH. NI's capital city Belfast has observed a recent significant outbreak of HIV acquired by injection drug use among PWEH. We therefore identified an additional need to improve the Sexual Health & Reproductive health outcomes of PWEH in Derry.

Methods

To assess a new service set up to improve access and engagement with PWEH and to provide HIV/BBV/STI testing and contraceptive services via an outreach bus staffed with nurse practitioners. The PWEH Outreach Service uses a Wellcome Trust-funded clinical minibus, staffed by a Nurse practitioner from the Homeless transformation project and a sexual health nurse. The project was set up as a quality improvement project with a focus on service user engagement. The bus aims to run once weekly and specimens collected are transferred back to the sexual health clinic and processed in our regional laboratory.

Results

Since September 2022 a total of 241 PWEH have engaged with the service, 151 had STI/BBV testing. Positivity rates have been low although infections identified have been among those at high risk of onward transmission and poor health outcomes. New cases of Chlamydia, Gonorrhoea and hepatitis C have been detected and linked to care; no new HIV cases have been detected. Several GBMSM have benefited from screening, vaccination and discussion about HIV PrEP. Emergency contraception was provided via sexual health services; high unmet contraceptive needs exist. Valuable links have been forged with SRH services to provide expedited appointments for LARC.

Conclusion

This service is addressing health inequity by providing care in a more user directed format; reducing stigma and removing barriers to access our services. Prevention interventions may enhance supportive housing and stabilization efforts. Ongoing funding and increased clinical support are essential to achieve a sustainable and acceptable model of care.

P051 - PrEP for HIV prevention outside a formal healthcare setting: The case of Greece

Dr Konstantinos Protopapas, Dr Nikolaos Kalesis

Pre-exposure prophylaxis (PrEP) is an evidence-based intervention aimed at reducing the number of new HIV infections. It involves administering antiretroviral drugs as a primary prevention measure and since its initial approval in 2012, PrEP has been proven effective and safe.

The implementation of PrEP varies across different countries' healthcare systems. In countries where PrEP is not available through official healthcare channels, many people obtain PrEP through alternative means, such as online sources. In this study, we present the situation in Greece by examining data from a cohort of clients who presented at a private practice with inquiries regarding PrEP.

Methods

From 1/9/2022, until 31/5/2023, a total of 91 clients visited the practice to undergo necessary laboratory testing for PrEP. 21/91 expressed their desire to start receiving PrEP. Among these, 2 were diagnosed with an HIV-infection and referred to an HIV unit. 13 clients initiated PrEP and are currently undergoing routine monitoring. Unfortunately, there is no available data regarding the remaining clients.

70/91 were already receiving PrEP. Two of them had initiated PrEP during their stay abroad where PrEP is integrated into the healthcare system, while the remaining 68 patients had obtained PrEP through internet services outside the healthcare system.

Results

Among the 70 clients receiving PrEP, 59 are still adhering to the treatment (16 following an on-demand regimen) and 3 have discontinued (no available data for 8 clients).

In total, 72 out of the initial 91 patients are being closely monitored. 20/91 underwent vaccination for HAV, HBV and HPV. Throughout the study period, 42/91 were diagnosed with an STI. (Specifically, 27: syphilis, 10: urethritis (gonococcal and non-gonococcal), 6: proctitis, and 2: MPOX). It is worth noting that among the 72 clients who were receiving PrEP through routes outside the healthcare system and undergoing regular follow-ups and testing, no new cases of HIV were diagnosed.

Conclusion

PrEP has transformed the landscape of HIV prevention, standing as one of the most significant success stories in modern medicine. Our results highlight the necessity for its formal implementation in Greece. Vigilant monitoring of PrEP users is of utmost importance since unmonitored self-administration of PrEP can pose risks.

P052 - PrEP2U: a novel community partnership HIV pre-exposure prophylaxis clinic

Daniel Richardson, Dr Jim Frem, Dr Annie Russell, Mx Kayleigh Nichols, Mx Leonardo Buonsenno, Mx Marc Tweed, Dr Mary Darking, Dr Jennifer Whetham

Poster

Broadening the access to HIV-PrEP and reaching out to groups who are not currently accessing HIV-PrEP from traditional settings can prevent HIV transmission. In Brighton, the local sexual health clinic works in partnership with a non-government organisation, the Terrence Higgins Trust, to deliver a community based HIV-PrEP service (PrEP2U).³ We target seldom seen groups including the trans-gender and gender non-conforming communities and using social media communications and signposting from local sex-on-premises venues, and from the Terrence Higgins Trust sexual health community drop-in service.

Methods

We reviewed the electronic notes of patients attending PrEP2U between August and December 2022 collecting data on demographics and previous HIV-PrEP use. We compared the PrEP2U attendees with our local sexual health clinic attendees in the same time period. In tandem, a text message with an anonymous electronic survey was sent to PrEP2U users following their appointment.

Results

82 individuals attended PrEP2U and had a median age of 38 years (IQR=30-49), 66 (80%) identified as cis-male, 5(6%) cis-female, 5(6%) transfeminine, 5(6%) trans-masculine, and 4(5%) non-binary. 31(38%) were non-UK born and 66(80%) had not used HIV-PrEP previously. Compared to clinic attendees, there were significantly more: cis-female ($p<0.04$), trans-feminine ($p<0.02$), non-binary people ($p<0.02$), people who were non-UK born ($p<0.01$) and people who had not used HIV-PrEP previously ($p<0.01$) attending the PrEP2U clinic. Overall, 30 (37%) PrEP2U users responded to our survey and respondents would recommend the clinic to friends (5/5, 5-5) and would use the service again (5/5, 5-5).

Conclusion

Our community partnership (PrEP2U) is serving cis-female, trans and non-binary people, non UK born and people who haven't accessed PrEP before. More work is needed to both broaden the access to HIV-PrEP using community partners to support seldom heard and neglected populations, and to innovate to streamline person centred pathways.

P053 - Epidemiological, clinical and risk factors of mpox infection in patients living with HIV

Dr. Josep Riera Monroig, Dr Alba Català, Gisela Petiti, David García-Hernández, Dr Nicolás de Loredo, Dr Guillermo Del Carlo, Vanesa Guilera, Dr Francisco Montoya, Enrique Maldonado, Ana González-Cordón, Mikel Sanz, Dr José Luis Blanco, Dr Irene Fuertes

The 2022 mpox infection outbreak affected mainly MSM. These patients presented with papules and pseudopustules in the inoculation area, mainly genitalia and face, followed by a polymorphous rash and associated with fever and asthenia. In contrast with endemic form, the main route of transmission was close contact, especially sexual contact. Up to 40% of mpox infection occurred in people living with HIV infection (PLWHIV). The aim of this study was to describe the epidemiological and clinical characteristics of patients with mpox infection and to determine the differences between mpox infection in PLWHIV and those without HIV.

Methods

A prospective single-center study was conducted in patients with high-suspicion/confirmation of mpox infection. Those who agreed to participate signed informed consent and completed a questionnaire that included epidemiological aspects, sexual practices and symptoms. Past history such as HIV infection, CD4+ lymphocyte count, CD4+ nadir, clinical and hospitalization characteristics were collected from the clinical records. A descriptive statistical analysis and comparison between groups was performed.

Results

775 patients were included, 98.2% male, 97.8% MSM. Of those, 40.3% were PLWHIV, with a mean CD4+ lymphocyte count of 769 [341] cells/[L]. Seven patients had less than 200 CD4+ cells/[L]. PLWHIV reported more often chemsex use than those without HIV (35.3% vs 25.1%, $p=0.009$). PLWHIV presented more frequently lesions in the perianal area (44.2% vs. 20.2%, $p<0.001$) and in the thorax (29.2% vs. 19.9% $p=0.003$), and proctitis as a complication (40.4% vs. 31.3%, $p=0.012$). Nine patients had ocular involvement as a severe complication. PLWHIV and a CD4 cell count lower than 350 cells/[L] did not have more aggressive lesions.

Conclusion

Mpox infection presents as a self-limited condition with similar morbidity and mortality in PLWH on antiretroviral therapy with good immunovirological control. A higher prevalence of chemsex was observed in PLWHIV, along with an increased frequency of perianal involvement and proctitis. There was no higher rate of severe complications in PLWHIV.

P054 - Unusual presentation between serological and HIV viral load in PrEP users in Barcelona, Spain

Mrs Beatriz Rodriguez Ponga, Mrs Gema Fernandez Rivas, Mrs Victoria González Soler, Mr Ángel Rivero, Mrs Águeda Hernández, Mr Pere-Joan Cardona

The human immunodeficiency virus (HIV) continues to be a major global public health issue. Usual HIV diagnosis is based in serological confirmatory test reports, but it exists a window period during the acute acquisition where viral load plays an important role over the last few years. Pre-Exposure Prophylaxis (PrEP) has been implemented as a high effective HIV barrier. HIV acquisition is rarely if PrEP is correctly taken. Diagnosis of HIV while taking PrEP is difficult and poorly objectified due to a slowest immunologic response, lower viral load and a slower and poorer antibody apparition and positive results in serological assays.

Methods

We report two men clients who have sex with men receiving PrEP. HIV assays were taken in Clinical Microbiology Laboratory in Badalona, Catalonia, Spain. Serogical tests with HIV1/2 antibody by the enzyme-linked immunoabsorbent assay (Liaison, Diasorin, Italy), using Geenius (Bio-Rad, USA) as confirmatory tests. Due to discordance, viral load was mandatory using the mAlinity HIV-1 assay (Abbot, USA).

Results

Client A and client B had both positive antibody results by the enzyme-linked immunoabsorbent assay (ELISA, Liaison-XL, Diasorin, Italy). The serological confirmatory test (Geenius, Bio-Rad, USA) was indeterminate. Three months later we recollected a serum example for repeated testing. The result of HIV-1 antibody was still positive, with the same confirmatory and viral load undetectable (mAlinity, Abbott, USA). Finally, a third sample was requested and serological results were negative. Our two cases assays begin with a positive antibody test unconfirmed by HIV viral load. PrEP was interrupted to avoid masking HIV and to prevent the emergence of resistance to antiretrovirals.

Conclusion

Our final approach in unconfirmed tests in PrEP users who are highly exposed without completing all the disease process. They could present immunological response to HIV appearing as false positive tests. Further investigations must be conducted to understand immunologic response, and to develop more tests that could discard false positive.

P055 - Introducing EZI-PrEP: a randomized, controlled, non-inferiority trial on online-mediated PrEP care and 6-monthly monitoring

Marije Groot Bruinderink, dr. Anders Boyd, Dr. Liza Coyer, Sophie Boers, Jean-Marie Brand, Dr. Allard Feddes, Dr. Hannelore Gotz, Vita Jongen, Joey Woudstra, Koernraad Vermey, prof. dr. Maria Prins, dr. Elske Hoornenborg, Prof. dr. Frenk van Harreveld, Udi Davidovich, Maarten Schim Van Der Loeff

HIV pre-exposure prophylaxis (PrEP) is effective in preventing HIV. Mandatory in-clinic visits and their 3-monthly frequency may form barriers for PrEP initiation and continuation. The primary aim of the EZI-PrEP study is to assess whether online-mediated PrEP care is non-inferior to routine in-clinic PrEP care, and whether 6-monthly monitoring is non-inferior to standard 3-monthly monitoring.

Methods

We developed an online-mediated PrEP service, accessed through a smartphone app, consisting of online-mediated testing requests for HIV/STI/HCV and renal function, video consultations, online co-payment for tablets and home delivery or pick-up of PrEP tablets. We implemented an open-label, randomized controlled, non-inferiority trial in four Public Health Services (GGD) throughout the Netherlands. Participants are assigned to one of four arms: in-clinic 3-monthly (routine care), in-clinic 6-monthly, online 3-monthly, or online 6-monthly monitoring. Study participants are MSM and transgender and gender-diverse persons, ≥ 18 years. Follow-up time is 18 months per participant. The primary outcome is defined as the number of days

Results

with an unprotected (i.e. no condoms and no PrEP) anal sex act with casual partners as a proxy for HIV risk, assessed by self-reports from a diary in smartphone app. Enrolment occurred from September 2021 through July 2022. Of the 469 included participants, 400 were already using PrEP and 69 (re-)started their PrEP use at study inclusion. Sixty-percent chose daily and 40% chose event-driven PrEP. As of 1 January 2023, 416 persons (89%) were still participating in the study; total follow-up time was of 127,923 days with 92,131 daily diary submissions (72%). Trial results are expected in spring 2024.

Conclusion

Results of the EZI-PrEP trial are expected in second quarter of 2024. We will be able to demonstrate whether online-mediated PrEP care and 6-monthly monitoring are non-inferior to routine PrEP care. If demonstrated, these modalities may be implemented in routine care and lower barriers of initiating and continuing PrEP use.

P056 - Problematic substance use among MSM in Amsterdam in the context of the COVID-19 pandemic

Msc Maaïke Soors d' Ancona, Udi Davidovich, MSc Sophie Campman, Dr. Amy Matser, dr. Anders Boyd

Background:

Higher frequency of substance use has been observed among men who have sex with men (MSM), part of which is associated with mental health problems. National COVID-19 restrictions have likely affected mental and social health, which could potentially contribute to changes in substance use. We therefore assessed the frequency and determinants of transitioning between unproblematic and problematic substance use among Amsterdam MSM before, during and after the COVID-19 pandemic.

Methods:

We included participants of the Amsterdam Cohort Studies who completed ≥ 2 questionnaires between 2017 and mid-2023. Problematic alcohol and drug use was assessed using the Alcohol Use Disorder Identification Test-Consumption (AUDIT-C) and Drug Use Disorders Identification Test (DUDIT), respectively. Transition intensities (TI) between unproblematic and problematic use were estimated using multistate Markov models. Multivariable Hazard ratios (HRs) were estimated by including time period (i.e., before, during and after COVID-19 restrictions) and other covariates to the model.

Results:

Of 667 MSM, 510 (76.5%) and 281 (42.1%) exhibited problematic AUDIT-C and DUDIT scores, respectively, at least once during follow-up. During a median follow-up of 4.9 years (IQR=3.4-5.3), there were 148 transitions to problematic drug use (TI=0.09/PY, 95%CI=0.08-0.11) and 152 to unproblematic use (TI=0.24/PY, 95%CI=0.21-0.29). In multivariable analysis, decreases in TI to problematic drug use occurred during COVID-19 restrictions period (HR=0.51, 95%CI=0.28-0.95), but not after restrictions (HR=0.99, 95%CI=0.55-1.76), compared to pre-lockdown. Higher loneliness was associated with less frequent transitions to unproblematic drug use, and generalized anxiety disorder with frequent transitions between drug use states.

During follow-up, there were 128 transitions to problematic alcohol use (TI=0.15/PY, 95%CI=0.13-0.18) and 170 to unproblematic alcohol use (TI=0.11/PY, 95%CI=0.10-0.13). COVID-19 period was not associated with TI from unproblematic to problematic alcohol use and the reverse. Higher loneliness was associated with more frequent transitions to problematic use, and depression with more frequent transitions to unproblematic use.

Conclusions:

COVID-19 restrictions did not substantially affect substance use of Amsterdam MSM, though age, mental health and social factors emerged as significant determinants of progression to and from problematic drug and alcohol use. These findings underscore the need to promote the social and mental well-being of this population.

P057 - High levels of unmet sexual health needs and sexual violence among people-experiencing-homelessness in London

Dr Nina Vora, Mr Ridthwan Adigun, Ms Dee Menezes, Mr Julian Surey, Prof Al Story, Binta Sultan

Socially marginalised populations have poor access to care and poor health outcomes with widening health inequalities. Few datasets exist to inform us about the sexual and reproductive health needs of these populations. During the COVID pandemic, people experiencing homelessness (PEH) were temporarily accommodated in hotels in London. This afforded a rare opportunity to carry out a comprehensive health needs assessment for this under-served population. The COVID-19 Homeless Rapid Integrated Screening Protocol (CHRISP) captured data on primary care registration, physical health, mental health, and social care needs. Using this data, this abstract focuses on the sexual health and safety needs of PEH.

Methods

The CHRISP assessment tool was co-produced with people with lived experience of homelessness and a range of expert health, housing and social care professionals. More than 30 clinicians undertook these assessments during pre-arranged telephone appointments (with interpreters where required). A core team undertook in-person assessments, verified medical information and provided clinical follow up. Data were collected on demographics, housing, health status, safety and assault, behavioural risks for sexually transmitted infections and bloodborne viruses, contraception need and healthcare usage. Descriptive analysis was undertaken using STATA.

Results

1254 assessments (214 female, 1028 male, 12 trans/non-binary) were carried out at 19 venues between May and November 2020.

11.2% (139/1242) reported being a victim of sexual assault (ever) whilst homeless (22.9% women (49/214), 8.8% men (90/1028)). 15.2% of women (178/210) and 3.4% of men (33/972) had ever exchanged sex for money, accommodation, food or drugs. Conversely, only 8.6% (104/1203) reported ever injecting drugs (6.7% women 14/209 and 9.1% men, 90/994). Only 55% of women (47/85) and 73.3% of men (258/352) who were sexually active in the last 3 months, using any form of contraception, with only 1 person using HIV pre-exposure prophylaxis.

Conclusion

Findings from this large dataset show that PEH have significant unmet sexual health needs, with high levels of experience of violence and sex work. Sexual and reproductive health services need to urgently adapt models of care to meet the needs of socially marginalised populations in order to improve health equity.

P058 - Risky sexual behaviour among MSM HIV PrEP users in the Maltese islands

Dr Norman Galea, Dr Katya Muscat, Donia Gamoudi, Dr Alexandra Gauci Farrugia, Dr Roderick Bugeja, Valeska Padovese

Despite all the progress made in terms of availability of effective treatment against HIV over the years, in 2021 there were 38.4 million people living with it world-wide. There is evidence that men who have sex with men (MSM) who use pre-exposure prophylaxis (PrEP) tend to have riskier sexual behaviours due to risk compensation. A low perceived risk of HIV infection on the other hand could become a barrier to initiate PrEP in the future. The aim of this study was to assess risky sexual behaviours and risk perception among MSM who live in the Maltese islands.

Methods

A cross-sectional study was carried out on MSM who were older than 18 years of age and were not HIV-positive. A convenience sampling technique was used to collect data, and various LGBTIQ nongovernmental organisations and a Genitourinary Clinic helped to distribute a link of the online anonymous questionnaire among their members and patients respectively. The study period was between February and July 2022, and the replies were downloaded from Google Forms for statistical analysis. Descriptive statistics were carried out along with significance testing using chi square and Fisher's exact test to assess if there were any relationships between categorical variables.

Results

Of the 199 MSM who participated in this study, a minority used PrEP at some point in their life (31.8%; n=63), with the vast majority reporting an STI diagnosis at some point during use (85.7%; n=54; $p<0.001$). Condom use during last intercourse was lower among current PrEP users (15.6%; n=10 vs 53.8%; n=63; $p<0.001$), and more of these MSM had multiple sexual partners (94.2%; n=49 vs 68.3%; n=56; $p<0.001$). On the other hand, more MSM who did not use PrEP felt that they had a low risk of being infected with HIV (88.5%; n=108 vs 68.8%; $p=0.010$).

Conclusion

PrEP users seem to have risk compensation behaviour, putting them at risk to become infected with an STI, highlighting the importance of patient education and regular follow-up. Non-PrEP users had a low perceived risk of HIV infection, which could be a barrier to PrEP initiation and increasing HIV transmission.

P059 - Knowledge and Attitudes towards HIV Pre-exposure prophylaxis use among men who have sex with men

Dr Norman Galea, Dr Katya Muscat, Donia Gamoudi, Dr Alexandra Gauci Farrugia, Dr Roderick Bugeja, Valeska Padovese

Latest surveillance reports by the European Centre for Disease Prevention and Control (ECDC), show that in 2021 Malta recorded the fourth highest HIV rate in the European Union/European Economic Area (EU/EAA), with an incidence rate of 8.7 per 100,000, making it a public health issue of concern. Men who have sex with men (MSM) are at substantial risk of HIV infection, and pre-exposure prophylaxis (PrEP) is a useful tool to prevent HIV acquisition. This study assessed awareness, knowledge, and attitudes related to PrEP use.

Methods

This is a cross-sectional study carried out in Malta over a 7-month period, between January and July 2022. Survey data were collected by inviting MSM to fill an online survey on a voluntary basis. Minors (below-18), people with linguistic barriers, those unable to access the internet, and people living with HIV (PLWH) were excluded. Convenience and snowballing sampling methods were used, to help recruit participants in this study. According to sample size estimates, at least 171 participants were required. This figure was determined using a 95% confidence interval and a population proportion of 0.5 (margin of error: 7.5%).

Results

A total of 221 replies were submitted, out of which 199 respondents met the eligibility criteria. The median age was 39 years (range: 19 to 67 years), and most participants were Maltese (68.3%; n=136), having completed higher education (77.3%; n=154), and having no major financial difficulties (92.9%; n=185). PrEP awareness was at 92.9% (n=185), however full knowledge about PrEP dosing regimens was at 48.1% (n=89). Most of those who never used PrEP thought that it would meet their HIV prevention needs (55%; n=60; p=0.084), and would be interested in starting it. (67.9%; n=74; p=0.005).

Conclusion

PrEP awareness among MSM in Malta is high, while knowledge about PrEP is low. Respondents who were not on PrEP also showed interest in this method of HIV prevention, reinforcing the need for educational health promotion campaigns targeting this population considered to be at increased risk of HIV infection.

P060 - PEP2PrEP: an effective HIV risk-reduction strategy

Dr Holly Thompson, Dr Courtney Taylor, Dr Lucy Turner, [Dr Gary Whitlock](#)

From January 2021, individuals attending a sexual health service in London, UK who receive HIV post-exposure prophylaxis following sexual exposure (PEPSE) are offered quick-start opt-out PrEP with a 1-month supply to take immediately following completion of PEP, PEP2PrEP: a risk reduction strategy for individuals with ongoing risk of HIV acquisition.

We present the uptake of PrEP in GBMSM and transwomen attending our service for PEP and follow-up in the subsequent 12 month period.

Methods

We performed a case note review of PEPSE recipients at our service from 1st to 31st March 2022, collecting demographics, characteristics of the PEP risk, previous PrEP use and follow-up consultations up to 31st March 2023.

Results

155 GBMSM and 2 transwoman received PEPSE during March 2022. Median age was 30 y (IQR: 25-37 y). Primary PEPSE indication was condomless anal intercourse: receptive (134, 85.4%) and insertive (23; 14.6%). During the encounter, 16 (10.2%) used chems, 37 (21.1%) had sex with more than one individual. 68 (43.3%) PEPSE recipients stated previous PrEP use. The most common reasons for not using PrEP was having no supply (22, 32.4%).

112 (71.3%) subsequently started PrEP: 75 (47.8%) immediately. Of the 75 immediate PEP2PrEP, 43 (57.3%) reattended for a subsequent PrEP consultation in the following 12 months.

Conclusion

Uptake of PrEP in PEPSE recipients is high with a majority reattending for PrEP in the subsequent year, although efforts to increase retention in PrEP care are required for those with ongoing risk of HIV acquisition.

P061 - Hypersensitivity with FTC/TDF PrEP: A challenge to find alternative PrEP in England

Dr Michael Ewens, Dr Fiona Windebank, Ms Emma Wrench, Dr Khine Phyu, Dr Amy Evans

A 31-year-old gay cis-male presented to our complex PrEP service following widespread urticaria 3-hours after initial dose of 200/245mg FTC/TDF, affecting his face, torso and limbs; sparing his mucous membranes with no evidence of wheeze/angioedema. He had an URTI-like illness, with negative influenza & bacterial throat swabs, and positive COVID PCR. Eosinophils/LFTs were normal. He was hepatitis A&B immune and had completed HPV & Mpox vaccinations. His sexual health screen was negative. Due to his high HIV acquisition risk (UPAI), we wanted to ensure he could tolerate an appropriate PrEP/PEPSE regimen or NRTI backbone should he seroconvert.

Methods

HIV Ag/Ab & PCR tests were negative 3 weeks after the last UPAI, reducing the risk of giving monotherapy NRTI to the patient, who was at risk of HIV seroconversion. We observed oral challenges to the separate components of FTC/TDF in the immunology day-case unit. Week 1, day 1 we observed administration of 10% 200mg FTC followed by a full dose if well tolerated after 30 minutes. The patient then completed 3 consecutive unobserved days full dose FTC at home. In week 2, the same approach was taken for 245mg TDF but was discontinued on day 2.

Results

The 200mg FTC challenge was well tolerated. The 10% & 100% 245mg TDF day 1 challenge was initially well tolerated, with no hypersensitivity reaction 30 minutes post each dose. The patient noticed a pruritic, widespread urticarial rash 15 hours post full dose day 1 245mg TDF, predominantly affecting his torso. The TDF was stopped as a delayed hypersensitivity reaction to tenofovir disoproxil was confirmed clinically, with a viral cause on this occasion unlikely. Antihistamines were recommended. Observed oral challenge to 200/25mg FTC/TAF has been arranged to see if a similar reaction occurs.

Conclusion

Delayed hypersensitivity reactions to FTC/TDF are uncommon, with no published cross-reactivity data with FTC/TAF. We hope to report the patient's FTC/TAF oral challenge, as a suitable NHS-commissioned PrEP agent within England (Cabotegravir available compassionate-scheme only). Oral challenge could be a helpful approach if hypersensitivity to dual NRTI agents in PLWHIV.

P062 - The fading of the mpox outbreak among MSM in the Netherlands: a mathematical modeling study

Dr Maria Xiridou, Dr Fuminari Miura, Dr Philippe Adam, Dr Eline Op de Coul, Prof John de Wit, Prof Jacco Wallinga

A rapid increase in number of mpox cases was observed among men who have sex with men (MSM) in the Netherlands in June 2022. The number of mpox cases started declining in the beginning of July 2022, about two weeks before the start of a national mpox vaccination programme for those at risk to get infected with monkeypox virus. We investigated whether the decline in mpox can be attributed to infection-induced immunity or adaptations in the behaviour of MSM.

Methods

We developed a transmission model that was fitted to numbers of mpox cases in the Netherlands until 25 July 2022, when the mpox vaccination programme was initiated. We accounted for possible adaptations in the behaviour of MSM in response to the outbreak: MSM possibly reduced their number of casual partners or they started earlier with refraining from sexual contacts when they had mpox symptoms or diagnosis. The level of these adaptations was obtained from the model via the fitting process.

Results

Without behavioural adaptations, the peak in modelled mpox cases matched observations, but the decline was less steep than observed. From the model, we calculated that 57% of MSM with the highest level of sexual activity had been infected when the vaccination programme started. With behavioural adaptations in July 2022, we estimated, from the model, a 10-23% decline in numbers of casual partners and a halving of the number of days mpox cases are infectious and not yet refraining from sexual contacts. Counterfactual model scenarios revealed that the outbreak could have waned by November 2022 even without the vaccination programme.

Conclusion

The limited duration of the mpox outbreak in the Netherlands can be attributed to infection-induced immunity among MSM with very high levels of sexual activity. The decline was accelerated by behavioural adaptations. Immunity among those most sexually active is the key to diminishing the risk of resurgence of mpox.

P063 - A new option for the treatment of condyloma acuminatum in the male urethra

Dr. Zhangyu Bu, Dr. Tingkai Xiang, Dr. Zhikai Lei

Condyloma acuminatum (CA) is a sexually transmitted disease with a high recurrence rate due to the rapid replication of human papillomavirus (HPV) and its subtle immune escape mechanism, which makes the diagnosis and treatment of CA in the male urethra particularly difficult. This study aims to evaluate the efficacy of comprehensive treatments for male urethral CA after accurate localization of warts under ultrasound guidance.

Methods

The study included 15 men with intraurethral CA. Before treatment, the urethra was examined by ultrasonography and HPV-PCR. After examination of the invisible urethral warts, wart curettage (penetrating operation with a special stainless steel medical curettage tool) combined with ALA-PDT was used for treatment. The ultrasound and HPV load were reviewed 1 week after treatment, and again at 1, 3, and 6 months after treatment.

Results

All patients achieved satisfactory results 1 week after the last treatment. The viral load of human papilloma was significantly reduced or turned negative, ultrasound imaging exploration showed no neoplasm in the urethra, and no obvious intraoperative or postoperative complications were observed. The side effects in patients included a mild burning or tingling sensation confined to the treated area. After a 6 month follow-up period, only 2 patient relapsed.

Conclusion

The combined diagnosis and treatment of CA in the male urethra under the guidance of multi-mode ultrasound imaging is an effective, economical, safe, and well-tolerated treatment method.

P064 - Direct detection of HPV from self-collected vaginal swabs using Truenat HPV-HR for cervical cancer screening

Jason Cantera, Dr Veronika Glukhova, Rafael Rivera, Dr Rose Buchmann, Dr Jamie Purcell

In 2020, approximately 604,000 women are diagnosed, and 342,000 women died from cervical cancer globally. Nearly 90% of new cases and deaths occur in low- and middle-income countries (LMICs), due in part to challenges in implementing effective screening programs. The best approach to improve global cancer screening efforts is through HPV testing. However, currently available DNA-based tests for HPV remain too complex and costly for effective implementation into LMICs and medically underserved settings. To support the development of additional high-performance molecular screening options for high-risk HPV, we evaluated the baseline performance of a rapid real time-PCR based Truenat HPV-HR. Varying concentrations of HPV DNAs were transferred in transport medium, extracted with Trueprep Auto sample prep device, and the eluted DNA was assessed using Truenat HPV-HR in a 6- μ L total reaction volume on the Truelab Quattro as per manufacturer's instruction. The reported assay linearity, reproducibility, and limits of detection were confirmed. To simplify the workflow, lower assay cost, and reduce turn-around time, we proved direct detection of target from self-collected vaginal swabs and evaluated its impact on the analytical performance of the assay. Analysis of extracts from contrived swabs spiked with varying concentrations of HPV18 virus-like particles showed positive detection down to 1000-10000 copies/mL, with $R^2 = 0.9642$. Our preliminary results suggest that the test is sensitive and able to distinguish HPV16/31 and HPV18/45 and could be a useful tool for detection of HPV in settings with minimal facilities. The study also proved that direct target detection from swab extract is possible. Specimen collection is currently underway, and the self-collected vaginal swabs will be used to evaluate the diagnostic accuracy of this approach, towards the development of a scalable, cost-effective HPV screening test, a critical and necessary step toward global elimination of cervical cancer.

P065 - Enhancing Access to STI Screening and Counseling Services: Outpatient Clinic Initiative in Cagliari

Dr Giovanni Deriu, Dr. Alessia Frau, Dr. Natalia Aste, Prof. Caterina Ferreli, Prof. Laura Atzori

The Dermatology Unit at University of Cagliari includes an outpatient clinic for Sexually Transmitted Infections (STIs), offering screening, counseling, lab tests, and treatments. However, access is restricted by the requirement of a primary care referral and centralized reservation system, hindering timely care. To address this, starting May 2022, the clinic introduced a twice a week referral-free outpatient clinic, free of charge, specifically for STI screening and counseling. This study aims to determine if this new service has improved monthly diagnosis rates, taking care of vulnerable populations facing healthcare barriers, limited resources, lack of information, and STI stigma.

Methods

This retrospective observational study examines all cases diagnosed with STIs between January 1, 2020, and May 31, 2023. The study utilizes demographic data and STI test results from the national database of the Italian National Health Institution. It aims to analyze trends in STI positivity over a 41-month period, before and after the implementation of the outpatient STI service starting on May 1, 2022. To assess the expected increase in total diagnoses resulting from the abovementioned service, descriptive statistics and a one-tailed T Student test was used to compare the average number of diagnoses before and after its introduction.

Results

The implementation of the outpatient STIs initiative led to an 82.5% increase in monthly STI diagnoses. Among the total new diagnoses (197), 29.4% were patients under 30, showing a slight decrease compared to the previous period of time (34.2%). HPV remained the most diagnosed STI, with 67.3% of positive cases before and 73.6% after the service introduction. A one-tailed T Student test was used to compare means: the observed t-statistic of -6.15 indicated a significant difference between the means (mean-PRE: 8.25 patients/month, mean-POST: 15.07 patients/month). The p-value (<0.00005) was significantly lower than the critical value of 1.70.

Conclusion

In just over a year, our service addressed unmet care demands by reaching a wider population, leading to increased diagnoses of general STIs, particularly HPV-related cases. Our study underscores the promising potential of early STI recognition and care through the implementation of free outpatient services for check-ups and consultations.

P066 - Anal Human Papillomavirus and Dysplasia among HIV-Positive Solid Organ Transplant Recipients: a Cross Sectional Study

Dr Irene Fuertes, Dr Iván Chivite, Dr David García, Dr Ross Cranston, Dr Nicolás de Loredó, Dr Emilia Sánchez, Mrs Gemma Olmeda, Dr José L Blanco

Iatrogenic immunosuppression in solid-organ transplant recipients (SOT) is associated with a increase in the risk of developing a malignant tumor. Immunosuppression is a well-recognized risk factor for persistent anal HPV infection and squamous intraepithelial lesions, the precursor lesion to invasive cancer.

Individuals with HIV infection, particularly men who have sex with men, and women are the groups at highest risk of developing ASCC.

The objectives of this study were to assess the prevalence of anal high risk-HPV, anal cytological and histological abnormalities, and to investigate the association between these parameters and the individuals' sociodemographic characteristics.

Methods

This was a single-center, cross-sectional study, based on a large transplant center in a tertiary healthcare center in Barcelona, Spain performed between 2017-2019.

Adult male and female HIV-positive transplant recipients had anal cytology and hr-HPV DNA testing, and high-resolution anoscopy +/- biopsy if either test was positive.

Data on demographics, alcohol use and smoking status, sexually transmitted infections (STI) other than HIV, viral-immunological HIV status, HPV associated anogenital disease, sexual orientation and previous receptive anal intercourse (RAI) were collected. Antiretroviral therapy, immunosuppressive medication, previous rejection episodes, and previous malignancies were also recorded.

Results

Twenty-five (53%) transplant recipients of 47 eligible individuals agreed to participate in this study. Twelve (48%) patients had abnormal anal cytology and 12 (48%) had detectable hr-HPV DNA. Six (50%) individuals with abnormal cytology had high-grade squamous intraepithelial lesion/s on biopsy. Abnormal anal cytology was significantly associated with hr-HPV infection [p = 0.004] and any previous history of HPV associated disease [p = 0.037]. Anal HSIL on biopsy was associated with receptive anal intercourse [p = 0.048] and previous history of any HPV associated disease [p = 0.055]. Anal hr-HPV infection was associated with anal sex [p = 0.043].

Conclusion

HPV associated anal dysplasia is highly prevalent in HIV-positive organ transplant recipients.

Screening should be considered for these patients, especially in those who engage in receptive anal intercourse and have a history of HPV associated disease.

P067 - GENITAL HUMAN PAPILLOMAVIRUS INFECTION AMONG VULNERABLE WOMEN IN ROME, ITALY: THE DOROTHY PROJECT

Genital Human Papillomavirus Infection Among Vulnerable Women In Rome, Italy: The Dorothy Project Eugenia Giuliani, Dr. Mauro Calandra, Dr. Francesca Rollo, Dr. Alessandra Latini, Dr. Maria Benevolo, Dr. Enrico Vizza, Dr. Edoardo Pescarmona, Dr. Alessandra Sammali, Prof. Aldo Morrone, Dr. Maria Gabriella Donà

Data on genital HPV infection in vulnerable populations, such as migrant and homeless women, are scant. Indeed, these women suffer from reduced access to health services, as those for STI screening and prevention as well as those for secondary prevention of cervical carcinoma, which is the HPV-associated neoplasm with the highest incidence worldwide. The study aimed to acquire information about prevalence and predictors of genital HPV infection in fragile women. Additionally, the level of knowledge about HPV infection and prophylactic vaccination was investigated.

Methods

Women were enrolled at the center for homeless people (Binario95) located at the main train station and in the Polyambulatory located under the colonnade of San Peter's square in Rome, Italy, between April 2022 and June 2023. They underwent to: i) an interview aimed to collect socio-demographic, behavioural and anamnestic data, and ii) a gynaecological examination during which a cervico-vaginal sample was collected in PreservCyt (Hologic). High-risk HPV (HR-HPV) test was performed by the Xpert-HPV (Cepheid).

Results

Overall, 111 women were enrolled (median age: 43 years, IQR: 33-50): thirty-six were European (32.4%) and 75 non-European (67.6%). They reported having a median of 3 lifetime sexual partners. Five women (4.5%) had had ano-genital warts in the past. Of the 104 women who consented to cervico-vaginal sampling, 16 (15.4%) tested positive for HR-HPVs. Of the 105 women participating in the survey, 62 (59.0%) had heard of HPV, of whom 47 (75.8%) knew that HPV is sexually transmitted. Overall, 17/105 women (16.2%) had heard of the HPV vaccine and 44 (42.0%) declared to be willing to be vaccinated.

Conclusion

HR-HPV prevalence seems to be higher among women of the DOROTHY project than Italian women, although a larger sample size is required to obtain robust estimates and to assess the predictors of HPV infection. Knowledge on HPV and availability of a prophylactic HPV vaccine should be improved through educational interventions.

P068 - Assessment of high-risk HPV infection among MSMs in Morocco

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Human Papilloma Viruses (HPVs) are small, highly resistant DNA viruses that infect the skin or mucosal epithelia. They cause sexually transmitted infections through mucocutaneous contact. In 90% of cases, HPV infections are asymptomatic and quickly become undetectable in the tissue. Key populations vulnerable to HIV infection are most at risk of HPV, namely female sex workers and men who have sex with men (MSM).

This study, the first of its kind in Morocco, aims to characterize the high-risk HPV types, to identify the risk factors associated with HPV infection, and to ascertain the prevalence of HPV among Moroccan MSM.

Methods

A bio-behavioral survey was conducted among 91 MSM over 18 years of age, recruited using the RDS (Respondent-Driven Sampling) protocol at two sites: Fes and Marrakech. Anal swabs were collected for HPV DNA testing and assessment of high-risk HPV (16–18 and other HR HPV) by real-time PCR (GeneXpert system). Socio-demographic and behavioral data were collected from formally consenting participants prior to the collection of biological specimens. Statistical analysis was performed with the RDSAT tool.

Results

The overall weighted prevalence of HPV infection was established at 20.1%, with a disparity between the two sites: The Marrakech and Fez samples had an HPV-HR prevalence of 40.33% and 10.06%, respectively. The HPV16 genotype proportion was 55% of all detected cases, while HPV18 represented only 9%. The other HPV-HR types were estimated at 36%.

The risk behavior assessment showed mainly the non-use of condoms, in a proportion that is close to 60% in the Marrakech site and 54.1% in the Fez site. In addition to the multiplicity of partners among 54.1% of respondents from the two sites,

Conclusion

Our study confirms the high-risk prevalence of HPV among Moroccan MSMs. Such a prevalence correlates with their risky behaviors. Further assessments on a larger sample and a prospective follow-up of positive cases, should make it possible to generate evidence to establish a prevention policy based on awareness, education and vaccination

P069 - SURGICAL TREATMENT OF CONDYLOMA ACUMINATA

Dr Vesna Pljakoska, dr natasha Teovska Mitrevska

Anogenital warts are a significant public health problem with global incidence estimates of 160–289 cases per 100,000 people.

Although Europe-wide data are lacking, estimates of annual incidence in several European countries range from 0.13% to 0.16% of the general population.

In most cases, the infection is asymptomatic and visible genital lesions develop only in a minority of those infected.

Anogenital warts are by definition benign lesions that do not pose a risk of neoplastic changes. However, premalignant (vulvar, anal, and penile intraepithelial neoplasia) or malignant lesions may coexist or develop into wart lesions or, rarely, be misdiagnosed as warts.

Methods

We present case reports of the patients treated with CO2 laser for condylomata acuminata.

Results

Clinical suspicion of a neoplastic change should be raised by bleeding or an atypical appearance including ulceration or palpable dermal infiltration.

Relapses occur after all different types of treatment. Recurrence rates, including new lesions on previously treated locations or new sites, are often 20-30%.

All local treatments are associated with local skin reactions including itching, burning, erosions and pain

Conclusion

Our experience with CO2 -laser treatment is that intraoperative bleeding is minimal, even during the treatment of large lesions. Postoperative discomfort is moderate, even when there are lesions around the anus.

P071 - Introducing EZI-PrEP: a randomized, controlled, non-inferiority trial on online-mediated PrEP care and 6-monthly monitoring

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HIV pre-exposure prophylaxis (PrEP) is effective in preventing HIV. Mandatory in-clinic visits and their 3-monthly frequency may form barriers for PrEP initiation and continuation. The primary aim of the EZI-PrEP study is to assess whether online-mediated PrEP care is non-inferior to routine in-clinic PrEP care, and whether 6-monthly monitoring is non-inferior to standard 3-monthly monitoring.

Methods

We developed an online-mediated PrEP service, accessed through a smartphone app, consisting of online-mediated testing requests for HIV/STI/HCV and renal function, video consultations, online co-payment for tablets and home delivery or pick-up of PrEP tablets. We implemented an open-label, randomized controlled, non-inferiority trial in four Public Health Services (GGD) throughout the Netherlands. Participants are assigned to one of four arms: in-clinic 3-monthly (routine care), in-clinic 6-monthly, online 3-monthly, or online 6-monthly monitoring. Study participants are MSM and transgender and gender-diverse persons, ≥ 18 years and eligible for PrEP care. Required sample size is 442 allowing for 20% loss-to-follow-up. Follow-up time is 18 months per participant. Participants can opt for daily or event-driven PrEP and switch between regimens during follow-up. The primary outcome is defined as the number of days with an unprotected (i.e. no condoms and no PrEP) anal sex act with a casual partner as a proxy for HIV risk, which is measured through self-reports from a daily diary in the smartphone app.

Results

Enrolment started in September 2021 and was completed by July 2022. Of the 469 included participants, 400 were already using PrEP and 69 (re-)started their PrEP use at study inclusion. Sixty-percent chose daily and 40% chose event-driven PrEP. As of 1 January 2023, 416 persons (89%) were still participating in the study; total follow-up time was of 127,923 days with 92,131 daily diary submissions (72%). Trial results are expected in spring 2024.

Conclusion

Results of the EZI-PrEP trial are expected in the second quarter of 2024. We will be able to demonstrate whether online-mediated PrEP care and 6-monthly monitoring are non-inferior to routine PrEP care. If demonstrated, these modalities may be implemented in routine care and lower barriers of initiating and continuing PrEP use.

P072 - Addressing the inequalities in cervical smear testing in the sexual health outreach cohort in Glasgow.

Dr Eleanor Shone, Dr Alexandra Maxwell, Dr Janine Simpson, Ms Natasha Walker

Cervical cancer disproportionately affects people from lower socio-economic groups. In Glasgow, sexual health outreach provides care for those who may struggle to use mainstream services, people for whom smear testing is vital, but often difficult to obtain for multiple reasons.

HPV self-sampling is a less invasive option. Shown to be effective, more acceptable and accessible for people with a cervix who may find routine smears unacceptable. It involves a vulvovaginal swab, similar to a sexual health NAAT. In Glasgow, HPV self-sampling has limited availability. Could liberalizing access in Glasgow outreach clinics improve uptake of screening within this vulnerable population?

Methods

All outreach attendances for the period 1/7/22-1/9/22 were reviewed. In this time period, 66 individuals were eligible for smears (people with a cervix aged 25-64). Data were collected on smear status, whether an updated test was offered, the reason if not performed, previous smear results, HIV status and whether a vulvovaginal NAAT had been done within a year. Service users were classed as 'up to date' if they were within 6 months since their smear was due and the smear was completed when seen. Outreach data were compared with 2021 Public Health Scotland data.

Results

Age range was 25-55 (all female-cisgender). 16.7%(11/66) are living with HIV, of note, 63.6% had disclosed previous sexual trauma/abuse. 43.9%(29/66) had up to date smears (69% in the general population). The remainder were overdue by a median of 20 months. Of those who had had a smear previously, 40%(24/60) were abnormal.

83.3%(35/42) of those due were offered a smear. 16.7%(7/42) were not offered due to clinically inappropriate setting. 48.6% declined, of which 60% had had a previous abnormal smear.

100%(7/7) of those not offered and 35.3%(6/17) of those declining had had a vulvovaginal swab done in the last year.

Conclusion

Reduced smear uptake is multifactorial and possibly linked with higher incidence of trauma. This was addressed by delivering teaching on trauma informed care. Higher rates of HIV and previous abnormal smears suggest greater risk for those defaulting smears. Self sampling, if more widely available, could help to reduce health inequalities.

P073 - MUCOCUTANEOUS AND ORAL LESIONS ASSOCIATED WITH HPV, TREATMENT WITH ERBIUM YAG LASER

Dr Natasa Teovska Mitrevska, Dr Vesna Pljakoska

Anogenital warts are benign proliferative lesions found on the epithelium of any part of the genitalia, anus, or perianal area and may also involve the inguinal or pubic regions. They are caused by human papillomavirus (HPV) genotypes 6 and 11 in >95% of cases. All treatment modalities have advantages and limitations, and all are associated with a significant risk of wart recurrence.

Typical warts appear as papular lesions 1-5 mm in diameter. They can be flat or pedunculated, solitary or multiple. Multiple warts can form larger plaques, especially in the immunosuppressed or if left untreated.

Methods

We present case reports treated with Erbium Yag laser.

Results

The choice of therapy depends on the location, morphology and extent of the warts and patient preference and requires discussion between the doctor and the patient.

Conclusion

Er:YAG laser removal of EGW is a simple, quick and safe procedure, particularly suitable for large volume EGW or those that are located in anatomical sites difficult to access by other techniques.

P074 - Improving access to and consistency of care of Vulval Dermatoses in rural Wales

Dr Adam Tyler, Dr Roopam Goel

Vulval skin disorders have often been an overlooked, under resourced and fragmented area of women's health. Services are often disparate with poor understanding within primary care, some patients seen under dermatology or gynaecology and others within sexual health clinics. Inconsistent approaches and management of these often-complex conditions results in poor patient experience and varying degrees of treatment success. Our rural Health board covering a quarter of the landmass of Wales consists of 4 acute hospital sites and very many small community SRH clinics. Patients with vulval problems have historically been seen across all these sites with inconsistent approaches and management.

Methods

With an identified need, and a growing patient backlog post COVID we initiated a Vulval dermatoses Clinic specifically for these women to improve outcomes. This was a joint venture between Sexual Health and Gynaecology thereby allowing for division of benign disease, and those higher risk.

Results

All patients referred into secondary care with vulval skin problems are now placed directly into the two vulval clinics, the high risk, and benign vulval dermatoses clinics. These clinics are delivered consistently by two doctors, a consultant gynaecologist, and a sexual health specialist. Patients are provided excellent continuity of care, and individualised care plans with strong encouragement of self-management.

VQLI scores are consistently 10 points lower with subsequent visits, fewer unnecessary biopsies are performed, and patient satisfaction is high. This good practice introduction of a specialist vulval clinic has made a meaningful difference to patients.

Conclusion

Significant educational intervention and reassurance for our primary care colleagues to identify and appropriately manage these conditions is now needed. To strengthen the Vulval Service further the training of a specialist nurse practitioner for vulval care is proposed, and consideration of a wider Vulval MDT network across Wales is required.

P075 - Exploring moonlight enzyme, glutamate racemase, of *Neisseria gonorrhoeae* as a therapeutic target

Ms. Sujata Adhana, Prof. Bishwajit Kundu, Prof. Uma Chaudhry

Neisseria gonorrhoeae (NG), a notorious superbug known for causing gonorrhea, has been designated as a high-priority threat by the WHO. The emergence of drug-resistant strains of NG necessitates the identification of novel treatment targets. We hypothesized that the moonlighting protein Glutamate Racemase (GR) of NG (NgGR) would be a promising novel target based on the extensive evidence we present here. In bacterial cells, GR converts D-glutamate to L-glutamate as its primary job. The creation of peptidoglycan precursors, vital building blocks of the bacterial cell wall. In addition, GR is shown to sequester DNA gyrase protein when exposed to ciprofloxacin (work is underway to establish GR moonlight function). This protein's dual purpose draws attention because it can be employed as a unique drug target. In the lack of structural data for NgGR, we used homology modeling to produce a high-quality structural model [preferred regions (93.9%), ERRAT plot (95.6%), and Verify3D (97.72%)]. The model was used to explore putative NgGR inhibitors with AutoDock Vina. The three compounds Agarocybyne C (M1), Ficifuranone A (M2), and Nitrofurazone (M3) that bind the most firmly were chosen and then further put through molecular dynamics (MD) simulations. The strong binding affinity of -68 kcal/mol for the GR-M3 complex was determined by examining the parameters such as the free energy landscapes, RMSD, RMSF, SASA, intramolecular hydrogen bonds, and MM-PBSA calculations. The IC₅₀ value for compound M3 against NG culture was found to be 58 μM. A number of B-cell epitopes were also discovered in the NgGR utilizing ABCPred-2.0 and BepiPred-2.0. Within the NgGR sequence, we found a common continuous B-cell binding site stretch of amino acids, N'TTVNSNAYARAIHRDNPDTLVR-C'. The epitope's capacity to bind MHC class I and class II molecules was further examined using ProPred I and II. The discovery of several MHC-binding alleles suggests potential T-cell epitope features. The evidence gathered so far establishes the groundwork for designating NgGR as a major target molecule in the mitigation of gonorrheal infections.

P076 - Evaluation of an in-house real-time PCR assay for detection of *Neisseria gonorrhoeae* from anal specimens

Mm Rokaya Aitlhaj-mhand, Mm Aicha Qasmaoui, Mr Reda Charof, Mm Hanaa Abdelmoumen, Mm Amina Hançali, Mr Hicham Oumzil

Background

Laboratory diagnosis of gonococcal infection is based on direct detection of the pathogen in clinical specimens. In previously, culture was the "gold standard" for the identification of *N. gonorrhoeae* and this remains the only diagnostic method available in some settings as it is a low-cost method. However, due to the limitations of culture, nucleic acid amplification tests (NAATs) are now the preferred tests for the detection of *N. gonorrhoeae*.

In Morocco, microscopy and, in certain circumstances, culture are used to make the first laboratory diagnosis of gonorrhea. However, for routine gonorrhea diagnosis, no NAAT has been developed.

Objectif: The purpose of this study is to develop and evaluate a sensitive and specific in-house real-time PCR assay for the detection of *Neisseria gonorrhoeae* DNA.

Methods and Results

Samples from 245 patients were tested by real time pcr targeting por A pseudogene. The performance characteristics (sensitivity, specificity, positive predictive value (PPV), and negative predictive value (NPV)) of the in-house real-time PCR assay were evaluated in comparison to GeneXpert assay.

The in-house real-time PCR assay showed a high sensitivity and specificity. The PPV and NPV for *N. gonorrhoeae* detection were 100% and 97.28%, respectively.

Conclusion Because of its high specificity and sensitivity, the in-house real-time PCR assay that targets the porA pseudogene appears to be a routine technique for the detection of *N. gonorrhoeae* in clinical specimens.

P077 - Incidence of pharyngeal gonorrhoea at PrEP consultation of a tertiary hospital during 2021 and 2022.

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Neisseria gonorrhoeae (NG) is one of the most common sexually transmitted infections (STIs). Its incidence has increased globally/locally.

Resistance to antibiotics is a major public health problem.

Pharyngeal gonorrhoea (PG) is asymptomatic in most cases and the oropharynx is a common reservoir. Condomless oral sex is a common practice.

Pre-Exposure Prophylaxis (PrEP) is an effective biomedical intervention and chemsex practice is frequent among PrEP-users.

Objectives: To determine/compare the incidence of PG in the PrEP cohort of our hospital in 2021 and 2022. To identify possible associated risk/protective factors.

Hypothesis: The incidence of PG is increasing and is higher in chemsex-users.

Methods

Descriptive retrospective single-centre study which included adults with high risk of STIs/HIV, screened between 2021 and 2022 at the PrEP consultation of Hospital Clínic of Barcelona. Candidates were evaluated according to inclusion/exclusion criteria, and people who agreed to join the programme signed an informed consent form for the use of data for research purposes. Socio-demographic/epidemiological/behavioural and clinical aspects were evaluated as well as STIs and the use of substances. Data were collected from case reports and self-completed surveys and stored in an electronic case report data (eCDR) implemented in the REDCap system (Research Electronic Data Capture) hosted at Hospital Clínic.

Results

1396 individuals included: 96% cis-gender-men; median age of 35 y/o. Twenty-four percent had Chlamydia trachomatis (CT)/NG and NG was the most frequent STI (68%). Fifty eight percent admitted use of substances and 84% of them practised chemsex. PG cumulative Incidence in 2021 was 13% and 15% in 2022. Incidence rate ratio showed no difference between both periods ($p=0.2584$). Younger age, PCR CT/NG+ result (any location), group sex, use of substances, chemsex, drugs (ketamine/methamphetamines/mephedrone/amphetamines/MDMA/poppers), polyconsumption, rectal route of administration and attending chills were associated with a higher probability of PG. Cleaning sex toys had a protective effect.

Conclusion

PG is the most common infection between PrEP users of our unit. The profile of individuals and the high rate of asymptomatic STIs detected justify the implementation of a multidisciplinary team that could provide not only holistic care for their sexual health but also community health activities.

P078 - *Neisseria gonorrhoeae*: antimicrobial resistance and co-infections in patients in Vienna, Austria from 2015 to 2022

Mag. Dr. Ursula Fürnkranz, Mag.rer.nat. Maria Haller, Bsc Katharina Schwarz, MD Claudia Heller-Vitouch, MD Gudrun Heidler, MD Tamara Gagic, Angelika Stary

Gonococcal strains resistant to recommended antibiotics are an increasing global problem. In the current study we monitored the drug susceptibilities of *Neisseria gonorrhoeae* to ceftriaxone, cefixime, azithromycin, benzylpenicillin, tetracycline and ciprofloxacin as well as co-infections with other sexually transmitted diseases from 2015 to 2022.

Methods

Resistance of gonococcal isolates collected from cervix, urethra, pharynx, and rectum were tested using the Etest®; minimal inhibitory concentrations (MICs) were interpreted according to the EUCAST guidelines. Co-infections were documented as they were detected using the appropriate diagnostic methods.

Results

2848 isolates of *N. gonorrhoeae* (2500 from men, 348 from women; 41 pharyngeal, 149 rectal, 2658 genital isolates, respectively) were investigated. No ceftriaxone resistant isolate was detected. Cefixime resistance peaked in 2016/2017 (12%) and declined afterwards with zero resistant isolates in 2020, but rising again thereafter. Resistance to azithromycin increased from 1% in 2015 to 15% in 2022. Less than 1% of the isolates showed concurrent resistances to cefixime and azithromycin. Isolates susceptible to all included drugs decreased from 29% in 2015 to 0.03% in 2022. Most frequently observed co-infections were *Chlamydia trachomatis* (14%) and *Mycoplasma genitalium* (3.1%).

Conclusion

A high fluctuation in resistance rates to the azithromycin and cefixime was observed, especially during the first two years of the COVID-19 pandemic (2020 and 2021). *C. trachomatis* was the most frequent co-infection.

P079 - STI panel on Vivalytic automate: comparative study with Panther, Panther Fusion and Rotorgene automates .

Dr Sophie Gibaud Papin, Dr Lise Crémet, Dr Anne Moreau Klein, Dr Marion Patoureau, Dr Patrick Blanco, Dr Stéphane Corvec

Vivalytic (BOSCH) is a fully automated platform developed for cartridge-based Molecular Diagnostic testing. It uses a biochip detection system based on chemiluminescent signal. The STI panel (RANDOX) allows simultaneous detection of 10 microorganisms involved in sexual transmitted infections (STI), (HSV1, HSV2, *C. trachomatis* (CT), *H. ducreyi*, *M. genitalium* (MG), *M. hominis*, *N. gonorrhoeae* (NG), *T. pallidum*, *U. urealyticum*, *T. vaginalis*).

Methods

In this study, 64 selected samples (25 vaginal swabs, 6 endocol swabs, 12 urines, 21 vesicles and ulcerations) were tested on the Vivalytic platform : 40/64 samples were comparatively tested for CT/NG and 22/64 for MG, on the automated platform Panther/Panther Fusion (HOLOGIC®). 29/64 samples were comparatively tested for HSV1/HSV2 with an in-house PCR on the thermocycler Rotorgene.

Results

41/64 were positive for at least one target. Multidetected was observed in 14/41 with maximum of 4 positive targets (CT, NG, *M. hominis* and *U. urealyticum* in a PV). The most common target detected was *M. hominis* (14/41). 5/29 HSV1/HSV2 positive with the in-house PCR, were negative with STI panel. For 40 CT/NG compared samples, including 12 CT positive and 4 NG positive on Panther, 5/40 CT gave discordant result (positive on Panther/negative on Vivalytic). No discordance observed for the 22 MG (4 positive and 18 negative with Panther). False negative results due to freeze-thaw cycles or swab heterogeneity.

Conclusion

Vivalytic system is very easy to use, STI kit allows results in 2h20 for main pathogens involved in STI. There is limited evidence supporting role for *H. hominis* and *U. urealyticum*) in causing disease. This study is still running to complete preliminary results with a larger number of samples.

P080 - Mental Health and Sexually Transmitted Infections in STI clinic

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The incidence of sexually transmitted infections (STIs) and the practice of chemsex have increased in recent years. Mental health problems could be a predisposing factor. We aimed to describe the characteristics of people attending the STI clinic at Hospital Clínic between July and December 2022 and evaluate the relationship between mental health problems, incidence of STI and chemsex practice.

Methods

People attending the STI clinic at Hospital Clínic, Barcelona, Spain, between July and December 2022 were invited to fill-in a self-completed electronic questionnaire with epidemiological data, sexual practices, and mental health data. Goldberg questionnaire was used to identify people with new-onset mental health problems. Additional clinical and microbiological results were collected from the medical records. A descriptive analysis and a logistic regression analysis were performed to evaluate potential relationship between new-onset mental health problems, incidence of STIs, and chemsex.

Results

Seventy users were included, with a median age of 34 years, 90% identified themselves as men and 93% had sex with men. Fifty-four were symptomatic and 28% practised chemsex, 67% presented positive microbiological results (*N.gonorrhoeae* (29%), *C.trachomatis* (21%) and syphilis (11%)). No statistically significant differences were detected between users who presented new-onset mental health problems (38%) compared to those who did not, regarding positive microbiological result (Odds Ratio (OR)=0.74, 95% CI= [0.25-2.18], $p=0.586$) and chemsex practice (OR=2.07, 95% CI= [0.64-6.64], $p=0.223$). A tendency to more frequent group sex was observed (OR=2.67, 95% CI= [0.93-7.67], $p=0.069$).

Conclusion

We did not find statistically significant relationships between mental health variables, presence of STIs and chemsex, probably due to the small sample size. Larger studies could provide more insight into the interaction between mental health and the risk of STI.

P081 - Ceasing Test of Cure for Gonorrhoea- Evidence supporting a pilot study in Edinburgh, Scotland

Dr Katie Humphries, Dr Jackie Patterson, Dr Sally Wielding

Gonorrhoea rates have reached record levels in Scotland. Our centre is managing 250% more cases than 6 years ago. This is impacting resources. The increase is not related to increased testing (which hasn't reached 2019 levels). Nor resistance, first line treatment is ceftriaxone and there has been no documented ceftriaxone resistance since 2018.

Test of cure (ToC) for Gonorrhoea has been recommended for all cases since 2011. We wanted to explore if stopping this in our centre was feasible to free up resource for testing and treating and if this would be anticipated to have any negative patient impact.

Methods

Before changing policy, we audited how our ToC was performing. 100 records were randomly selected from our national database who had a recorded Gonorrhoea diagnosis and received treatment between January to December 2022. We recorded infection site, treatment given, if ToC conducted and when, results of this. We also looked if the patient was receiving PrEP and therefore engaged in the obligatory 3 monthly sexual health testing.

Results

100 patients included in report. 93 identified as male, 84 MSM 7 females. 72 patients were engaged in PrEP regular testing. 93 treated with ceftriaxone. 80 had ToC completed. 63 had a negative ToC. 12 had a positive result, 11 /12 were clinically suspected to have re-infection and had retreatment, 1 was tested too early. 5 results were reported indeterminate all related to assay sensitivity. 16/17 had a subsequent negative test. All those with positive ToC's were engaged in 3 monthly testing. All positive cultures were fully sensitive to ceftriaxone. Estimation of cost of each individual ToC started from £42.

Conclusion

Despite concerns regarding under female representation and high reinfection rates. We felt the high level of engagement in regular testing and lack of ceftriaxone resistance supports ceasing routine ToC for the majority of patients. Outcomes will all be re audited in September along with a cost-effectiveness analysis.

P082 - Assessing novel partner antimicrobials to protect ceftriaxone against gonococcal resistance using microbroth dilution checkerboard technique.

Mr. Saïd Abdellati, Dr. Sheeba Santhini Manoharan-Basil, Ms. Zina Gestels, Dr. Yuliia Baranchyk, Dr. Irith De Baetselier, Ms Dorien Van den Bossche, Chris Kenyon

Emerging ceftriaxone (CRO) resistance in *Neisseria gonorrhoeae* (Ng) threatens current treatment regimens. We assessed the effectiveness of novel and older partner drugs as single and combination therapy for CRO-resistant and susceptible Ng.

Methods

Microbroth dilution checkerboard technique was used to determine the synergistic minimal inhibitory concentration of a panel of CRO-resistant (WHO X,Y,Z) and CRO-susceptible (WHO L,N,P) *Neisseria gonorrhoeae* reference strains. Several clinically relevant combinations of the antimicrobials were tested (ceftriaxone, doxycycline, azithromycin, zoliflodacin, fosfomycin, pristinamycin, ramoplanin and NAI-107). NAI-107 is a lantibiotic which we have recently shown to be highly effective against Ng in a *Galleria mellonella* model. Inocula were prepared in GC-broth with a density of 10^6 CFU/ml. All determinations were conducted in duplicate. The fractional inhibitory concentration (FIC) index was used to define the combined effectiveness of the antimicrobial combinations.

Results

All the combinations showed either indifferent or an additive effect. The addition of the second antimicrobial resulted in a maximum decline of 1 two-fold MIC of the primary antimicrobial. The additive effect was more pronounced in the following combinations: azithromycin/fosfomycin, ceftriaxone/NAI-107, doxycycline/pristinamycin, pristinamycin/NAI-107 and doxycycline/ramoplanin. Whilst breakpoints are not available for most of the antimicrobials tested, the MICs for zoliflodacin, NAI-107, pristinamycin and ramoplanin were low for the 3 CRO resistant strains.

Conclusion

All combinations showed evidence of an additive or indifference effect. The low MICs of zoliflodacin, NAI-107, pristinamycin and ramoplanin for the 3 CRO resistant strains suggest that these antimicrobials could be used as partner drugs with ceftriaxone to prevent the further emergence of ceftriaxone resistance.

P083 - Examining the interplay of socioeconomic deprivation, region of residence, and ethnicity in gonorrhoea diagnoses, England.

Ms Natasha Ratna, Ubah Daahir, Dr. Hamish Mohammed

In England, gonorrhoea diagnosis rates are disproportionately higher among people of black or mixed ethnicities, communities which are more likely to reside in socioeconomically deprived areas than people of white British ethnicity. The ethnic disparities in gonorrhoea are less well understood at a sub-national level. We used the most up to date Census and STI surveillance data to assess the variation in risk of gonorrhoea by ethnicity among people attending sexual health services (SHS) in England while taking into account the effect of deprivation and region of residence.

Methods

All gonorrhoea diagnoses at SHS in England in 2022 were obtained from the GUMCAD STI Surveillance system, a pseudonymised, individual-level dataset of all SHS attendances. Ethnicity was defined using Census categories. Socioeconomic deprivation (SED) was defined using quintiles of the Index of Multiple Deprivation, a measure of area-level deprivation. Census 2021 data by ethnicity and residence were used to calculate diagnosis rates per 100,000 population. Incidence rate ratios (IRRs) for gonorrhoea were derived using Poisson regression with and without adjustment for SED and region. Given evidence of significant interaction between region and ethnicity, the results of region-stratified models are presented.

Results

The overall gonorrhoea diagnosis rate in England was 146.1 per 100,000 population in 2022; by region, the highest rate was in London (383.4), by ethnicity, it was highest among black Caribbean (bC) people (473.3). Compared to people of white British (wB) ethnicity, the unadjusted IRR[95%CI] was also highest for the bC ethnic group (4.76[4.59-4.95]). There was some attenuation of these associations after adjustment for SED, but the ethnic group with the highest IRR in five regions were black Caribbean (3.16[2.58-3.86] to 5.97[3.21-11.11]), while in two regions they were in mixed white and black Caribbean people (3.32[2.77-3.98] to 4.35[3.62-5.23]).

Conclusion

Ethnic disparities in gonorrhoea in England are partially explained by SED. While there are large ethnic disparities in all regions of England, the communities at highest risk vary regionally. Tailored, culturally-competent interventions are required to reduce ethnic inequalities in gonorrhoea.

P084 - Minimum inhibitory concentrations of *Neisseria gonorrhoeae* strains in MSM: partners within versus within/outside the Netherlands.

Md, Phd-candidate Buhari Teker, Vita Jongen, dr. Anders Boyd, Dr. Alje van Dam, Maarten Schim Van Der Loeff, Prof. dr. Henry J.C. de Vries

Background: Increasing antimicrobial resistant (AMR) *Neisseria gonorrhoeae* (Ng) is a global public health concern. International travel combined with sex may contribute to dissemination of AMR Ng strains. To assess the role of importation of AMR Ng strains, we compared the minimum inhibitory concentration (MIC) of five antibiotics in Ng strains between patients with exclusively Dutch sexual contacts and those with both Dutch and international sexual contacts.

Methods: In 2013-2019, we recorded travel-related sexual behaviour of men who have sex with men (MSM) diagnosed with Ng (and their partners) at the Centre for Sexual Health of Amsterdam. We categorised patients as having either (1) exclusively sex partners residing in the Netherlands ('Dutch only'), or (2) at least one partner residing outside of the Netherlands. We recorded the country of origin of partners of patients with at least one non-Dutch partner and categorized those by World Bank and EuroVoc regions. Participants reporting sexual partners from multiple regions were excluded. MICs were assessed by E-tests at the Public Health Laboratory and expressed as mg/L. We analysed the difference in mean natural log of MIC between the two categories using linear or Cragg Hurdle regression for each of the following antibiotics: azithromycin, ceftriaxone, cefotaxime, cefixime, and ciprofloxacin.

Results: For 3,367 MSM, we found higher mean log MIC for ceftriaxone and cefotaxime in patients with partner(s) from Western Europe (excluding the Netherlands), compared to 'Dutch only' MSM ($\beta 0.19$, 95%CI=0.08-2.89; $\beta 0.21$, 95%CI=0.09-0.32, respectively). For cefixime, we found higher mean log MIC in MSM with partner(s) from Southern Europe compared to 'Dutch only' MSM ($\beta 0.10$, 95%CI=0.0-0.18).

The mean log MIC of cefotaxime in MSM with partner(s) from Latin America & Caribbean (LAC) was higher than in 'Dutch only' MSM ($\beta 0.20$, 95%CI=0.02-0.39); and the mean log MIC of ciprofloxacin was lower in MSM with sexual partners from Sub-Saharan Africa ($\beta -1.79$, 95%CI -2.84 to -0.74).

Conclusions: For three cephalosporine antibiotics, we found significantly higher MICs in isolates of patients with partner(s) from Europe and LAC. Surveillance of AMR is crucial for timely and effective public health interventions to potentially mitigate the emergence and ongoing transmission of AMR Ng strains.

P085 - SHIFT: Improving Sexual Health in the 45s and over

Dr Dr Mun-yeung Tung, Mr Stephen Grice, Dr Ian Tyndall, On Behalf of the SHIFT collaborative partnership

A new approach to supporting the sexual health of older people is necessary.

Sexual Health In the over ForTy-fives (SHIFT) is an Interreg 2 Seas funded project implemented between 2020 - 2023 which aims to improve the sexual health and wellbeing of people aged 45 and over.

Through working with this older population, SHIFT developed tools (The SHIFT Model) to facilitate increased awareness, understanding and better engagement with sexual health and wellbeing in older people, and would this increase attendance to a sexual health clinic.

Methods

Through quantitative surveys and community focus groups, we found there were minimal resources in relation to sexual health and wellbeing for older people, combined with limited awareness and understanding about the relevance and importance of this subject to wider health and wellbeing.

The SHIFT Model was created to provide tools and resources that would support individuals, communities, and harder-to-reach communities, and help them to gain knowledge, learn skills and adopt behaviours that will be important in achieving better sexual health and wellbeing.

Results

Four key recurring themes were identified from our qualitative research which significantly impact how older people feel about their own sexual health and wellbeing: Knowledge; Awareness; Access & Stigma.

Following the development & availability of SHIFT resources, we assessed the attendance to a sexual health service in Kent, UK one of the SHIFT project partners

New and Rebook patients

01/01/2021 – 31/12/2021 Attendances 3614

01/01/2022 – 31/12/2022 Attendances 5514

A small but increasing numbers of STIs were detected

New and Rebook patients

	2021	2022
Chlamydia	15	21
Gonorrhoea	13	31
Early Syphilis	6	10
New HIV	3	5

Conclusion

With the availability and use of more targeted resources, this facilitates individuals to undertake better self-assessment and subsequent improvement in knowledge and the decision to access

services, or not. The increase in attendances shows there is a definite need for clinical services for this age group.

P086 - Doxy-PEP – expected efficacy in gonococcal urethritis prevention according to local *N. gonorrhoeae* antibiotic resistance

Doctor Marco Tutone, Doctor Anna Lucchini, Doctor Paola Sales, Doctor Valeria Ghisetti, Doctor Simonetta Del Re, Doctor Alessia Di Vincenzo, Doctor Emanuele Drappero, Doctor Caterina Quarta

PrEP, PEP and TASP strategies have documented efficacy in preventing HIV transmission, whereas evidence on these strategies efficacy in preventing other STIs transmission is lacking. Discordant data emerge from the literature, particularly concerning Doxypep efficacy in preventing NG urethritis. An open label randomized substudy of the ANRS IPERGAY trial from J.M. Molina et Al. states that no change was observed in the occurrence of a new episode of gonorrhoea with doxycycline prophylaxis. An open-label, randomized study from A. F. Leutkemeyer et Al. found a relative risks of 0.45 (95% CI, 0.32 to 0.65) for NG urethritis in Doxypep cohort.

Methods

Specimens for NG culture and antibiotic susceptibility testing are collected from all the patients who access our clinic with signs and symptoms of purulent urethritis, proctitis, vulvovaginitis and pharyngitis. From 23/11/22 to 15/05/23 67 microbial cultures showed growth of *N. gonorrhoeae*. Culture media used was Chocolate agar PolyViteX VCAT3 (Biomerieux); pathogen identification method was MALDI-TOF. Susceptibility of NG isolates to cephalosporins, fluoroquinolones and tetracyclines was tested with the gradient diffusion (GD) method (Etest), results were interpreted according to the EUCAST clinical breakpoint tables V. 13.1.

Results

Out of 67 cultures with bacterial growth and identification of *N. gonorrhoeae*, 4.5% (3/67) of the isolates showed sensitivity to tetracycline, while 95.5% (64/67) were resistant. Of note, no isolates showed resistance to ceftriaxone.

Conclusion

Doxypep effectiveness in GU prevention is uncertain; evidences discordance may derive from local resistance patterns. Doxycycline resistance is higher in Molina et Al. cohort than in Leutkemeyer et Al one. Our cohort NG's resistance prevalence resembles the French one, leading us to expect inefficacy of Doxypep in NG urethritis prevention.

P087 - High background level of reduced susceptible phenotype to extended-spectrum cephalosporins in oropharyngeal *Neisseria* species

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Over the past century, antimicrobial resistance (AMR) has emerged for essentially all antibiotics (AB) that have been introduced to treat *Neisseria gonorrhoeae* (NG). Meanwhile, AMR determinants are known to exist in the commensal *Neisseria* population. *Neisseria* species are ubiquitously and abundantly present in all humans and are more often subjected to AB for a broader range of indications than gonorrhoea. Given the natural competence of NG and its shared niche with commensal *Neisseria* in the oropharynx, AMR surveillance in commensals has been suggested as a way of gaining insight in AMR emergence in NG.

Methods

Ninety-two unique *Neisseria* isolates representing 6 species were cultured from 16 oropharyngeal samples (6 NG culture-positive ESwabs® and 10 rinse samples from healthy subjects). Each isolate was analyzed with respect to their phenotypic susceptibility to beta-lactam antibiotics, in particular extended-spectrum cephalosporins (ESCs), in conjunction with sequencing of the *penA* gene (penicillin-binding protein 2).

Results

Decreased susceptibility (DS) or resistance to ESCs was observed in 48/92 *Neisseria* strains (52%) and two extensive drug resistant (XDR) *Neisseria subflava* isolates were identified in NG positive swabs (penicillin, cefixime, ceftriaxone, ciprofloxacin and azithromycin resistant). Segments of NG mosaic *penA* were recognized in *penA* alleles obtained from commensal *Neisseria* in each oropharyngeal sample. DNA uptake sequences (DUS) were confirmed in the adjacent regions of the *penA* gene in all *Neisseria* species.

Conclusion

Despite the high background level of decreased susceptibility to ESCs in oropharyngeal *Neisseria*, ceftriaxone resistant NG has not yet been detected in the Netherlands. The ample availability of mosaic *penA* sequence blocks, their reduced susceptibility to ESCs and the shared niche with NG raises questions on the long-term implications

P088 - The Utility of CSF Examination in Asymptomatic Patients with Latent Indeterminate Syphilis.

Emily Avitan-Hersh

Background: Infection of the central nervous system (CNS) can occur at any age of syphilis. The utility of CSF examination during latent syphilis infection is not well determined.

Aim: Our study aimed to elucidate the utility of CSF examination in asymptomatic patients with latent indeterminate syphilis.

Methods: We analyzed clinical data and CSF results from all cases of patients above 18 years of age who were diagnosed with syphilis between the years 2000-2020 and underwent CSF examination in the Dermatology Department at Rambam hospital.

Results: Ninety-three adult patients were diagnosed with asymptomatic latent indeterminate syphilis, 85 of them underwent lumbar puncture procedure (54 males and 31 females). Among those, 29 (34%) had an abnormal CSF examination. Normal physical examination did not predict normal CSF results; among the 72 patients with normal physical examination, 32% had abnormal CSF examination. Of patients with abnormal CT scan, 80% had an abnormal CSF profile, but this subgroup included only 5 patients. Additionally, higher rates of abnormal CSF were found when blood VDRL titers were $\geq 1:16$ ($p < 0.001$). Patients with HIV also had a higher rate of abnormal CSF examination compared to non-HIV patients (56.3% versus 23.5%, respectively, $p = 0.014$). Males were found to have higher rates of abnormal CSF examination than women (46.3% versus 12.9% , respectively, $p = 0.002$).

Conclusion: Higher risk of abnormal lumbar puncture examination in asymptomatic latent indeterminate syphilis patients was found when serum VDRL titer was $\geq 1:16$, HIV status was positive, and in men. Further studies to identify patients at risk for neurosyphilis is in need.

P089 - Low prevalence of STIs in African people living in Milan.

Marco Cusini, dr Stefano Ramoni, dr Domenico Simeoli, dr Stefano Buffon, prof Angelo Valerio Marzano

The STI Centre of IRCCS Policlinico of Milan is the oldest and the largest STI Centre in Milan. It is a free access enter with few bureaucratic requirements and is open also to not registered foreigners. All patients can have free consultations, diagnosis and treatment for STIs. The prevalence of foreign people in our centre is about 20% of all attendees. We analysed the prevalence of the main STIs according to the nationalities of the subjects

Methods

From our data base we analysed the nationality and the diagnosis of STIs during the year 2022. All diagnoses were confirmed diagnosis.

Results

During 2022, at the STI Centre of Milan, over a total amount of 8153 consultations, 216 patients were diagnosed with recent syphilis, 216 with gonorrhoea, 77 with chlamydia and 175 with genital warts. Surprisingly, only a limited number of infections were diagnosed in African people; in particular 7 cases of gonorrhoea (7/216; 3,2%), 4 of chlamydia (4/77; 5,2%), 15 of genital warts (15/175; 8,5%) and no cases of syphilis. . Moreover, no STIs were diagnosed in people coming from sub-saharian Africa.

Conclusion

Despite our centre, being open and free for all, we see a surprising low number of patients from Sub Saharan Africa and no one of them had an STI. This may indicate the presence of additional barriers that prevent these patients from visiting our center,

P090 - Analysis of 122 syphilis cases with the assessment of prognostic factors of serocure after treatment

Ph D Justyna Czarny, Damian Kadylak

Since the 2000s, there has been a continuous increase in syphilis infection in Europe. According to international guidelines, patients with syphilis should have a full STI assessment, however, the scale of comorbidity is unknown in Poland. Treatment of syphilis requires post-treatment serological monitoring, but sometimes patients do not achieve an adequate serological response within the timeframes defined by guidelines. Interestingly, in some individuals, serocure is observed as early as 1-3 months after the treatment. The aims of the study were the objective analysis of the population with syphilis and to evaluate and to identify the predictors of proper treatment response.

Methods

A retrospective cohort study of 122 patients with syphilis was conducted, who were treated between 2021 and 2023 in the Department of Dermatology, Venereology and Allergology, Gdańsk Medical University.

Serocure was defined as more than 4x fold decrease or negative VDRL test during follow-up period.

The significance level of the statistical tests in this analysis was set at $\alpha = 0.05$.

The independence of the categorical variables was tested using Pearson's chi-square test and Fisher's exact test. W.

Analyses were performed with the R statistical language (version 4.1.1; R Core Team, 2021) on Windows 10 Pro 64 bit (build 19045).

Results

The results of a study of N=122 patients with syphilis incidence were analyzed.

The data show a significantly higher percentage of STIs coexisting with syphilis in the group of patients younger than 31 years, patients with HIV (68.2%) and in the group of MSM (86%).

There were no significant differences in the percentages of serologic improvement in 6 months, VDRL titers by first-time infection and reinfection syphilis and primary/secondary and latent syphilis types.

The distribution of VDRL test at baseline result titers is not significantly different between the groups of patients with and without HIV infection.

Conclusion

Full evaluation for other STIs is essential in patients with syphilis due to the susceptibility to acquiring other STIs.

HIV infection, young age and the MSM population are risk factors for multimorbidity of STI.

HIV infection, symptomatic course of syphilis are not predictors of post-treatment serologic recovery or baseline VDRL.

P091 - Genital Ulcer...who can help?!

Dr. Meera Aladawi, Dr. Sara Al Janahi, Dr. Dimitre Dimitrov

We present the case of a 20-year-old, paraplegic male referred to us for a non-healing scrotal ulcer. Examination revealed well-defined, erosions and ulcers with maceration and yellow-green discharge. Wound cultures were positive for staphylococcus aureus and candida. Antibiotics and antifungal agents were prescribed, with appropriate wound dressings. However, there was only minimal improvement. Differential diagnoses were infectious etiologies (STIs, candidiasis), erosive genital lichen planus, Behcet's disease, cutaneous Crohn's disease, or cutaneous malignancies. Obtaining a history was challenging, with no clear account of the duration or symptoms.

We present this case to stress the importance of a multi-disciplinary approach and share impressive results.

Methods

The patient often deflected when asked about details. This, along with the unexplainable non-healing nature, made us consider that the ulcerations may have been self-inflicted. However, we were cautious about approaching this topic and spent a few months building a rapport.

Results

Once he partly admitted to manipulating the skin, he agreed to a visit with a psychiatrist and was started on anti-depressants, resulting in dramatic improvement and subsequent healing of the wounds.

Conclusion

We present this case to stress the importance of a multi-disciplinary approach in managing such cases. We also aim to highlight the need to recognize patients who would benefit from psychiatric intervention and advise prompt referral. Finally, we hope to present this case with impressive results.

P092 - Rapid increase in syphilis diagnoses in the largest STI center in Rome, Italy, in 2023

Dr. Maria Gabriella Dona¹, Dr. Christof Stingone, Dr. Massimo Giuliani, Dr. Eugenia Giuliani, Dr. Laura Gianserra, Dr. Fulvia Pimpinelli, Dr. Lavinia Alei, Dr. Alessandra Latini

Syphilis and gonorrhea are robust biological indicators of recent risky sexual behavior, and the increase in their incidence is associated with changes in sexual behavior toward unsafe sexual practices. A significant increase in syphilis incidence has been recorded in recent years in core communities such as MSM, also related to the use of pre-exposure prophylaxis (PrEP) to prevent HIV. We aimed to investigate possible changes in syphilis and gonorrhea trends at the largest STI Center in Rome, Italy.

Methods

All syphilis and gonorrhea diagnoses (pharyngeal, rectal and urethral infections) from September 2022 to March 2023 were retrieved from the computerized archive of the STI Center of the S. Gallicano Dermatological Institute (Rome, Italy). All cases of primary, secondary, and recent latent (< 1 year since infection) syphilis were identified as recent syphilis (RS). Data were recorded by month of diagnosis. Both HIV-positive and HIV-negative individuals were included in the study.

Results

A total of 123 syphilis diagnoses were recorded over the study period. Of them, 104 cases represented RS (84.6%). HIV-infected patients accounted for 38/123 (30.9%) and 34/104 (32.7%) cases, respectively. While the number of cases was stable until January 2023, a dramatic increase was observed in February, when a peak was reached: 36 total diagnoses, of which 31 RS. The large majority of diagnoses were observed in MSM (111/123 syphilis cases, 90.2%; 97/104 RS cases, 93.3%). Diagnoses of gonococcal disease remained stable over the entire observation period (n=46; average of 6 cases/month).

Conclusion

The dramatic increase in syphilis diagnoses during the first quarter of 2023 suggested an outbreak in the MSM roman community. Further efforts focused on these high-risk males are still needed to improve access to screening and reduce syphilis transmission, e.g., through rapid tests in the context of POC settings.

P093 - “Epidemiology of Early Syphilis pre- and during Covid-19 pandemic in a referral center in Athens”

Miss Krystallia Fouseki, Vasileios Paparizos, Dr John Lakoumentas, Ourania Kotsafti, Anastassios Giannoukos, George Emmanouil, Zoe Kripouri, Irene Stefanaki, Sofia Papanikou, Evangelos Daskalakis, Varvara Vasalou, Eleni Paparizou, R Kapranou, Stamatis Gregoriou, Anna Tagka, Alexander Stratigos, Prof Electra Nicolaidou

Syphilis is a sexually transmitted infection with major public health implications. The outbreak of the COVID-19 pandemic has had a profound impact on healthcare systems and disease patterns globally. Observational data revealed a concerning trend of a significant increase in new diagnoses of early syphilis during the pandemic, suggesting a possible association with the implementation of lockdown measures. This study aims to examine the trends in cases of early syphilis, pre- and during the COVID-19 pandemic, in a tertiary referral center in Athens, Greece.

Methods

Data were collected retrospectively from the Sexual Transmitted Infections Unit and the HIV Unit of “Andreas Syggros” Hospital, a tertiary referral center in Athens, Greece, over a four-year period from March 2018 to February 2022. The study period was divided into the pre-COVID-19 period (2 years before COVID-19), and the COVID-19 period (2 years during the pandemic). The analysis included factors such as gender, age, sexual orientation, educational level, nationality, number of sexual partners and syphilis stage. They were associated with the period variable with Pearson’s chi squared test of independence.

Results

Over the four-year period, there were 1.351 confirmed cases of early syphilis. During the pre-COVID-19 period, 515 diagnoses were recorded, 90.87% men (n=468) and 9.13% women (n=47). Whereas, during COVID-19 period, there were 836 diagnoses, of which 93.18% were men (n=779) and 6.82% were women (n=57). Pre-COVID-19 patient distribution based on sexual orientation was: MSM 66.02%, heterosexual men 24.85%, and women 9.13%, while during the pandemic the distribution was: MSM 73.09%, heterosexual men 19.86%, women 6.82%, and 0.24% had unknown orientation. The difference was statistically significant ($p=0.025$), attributed to increased MSM and decreased heterosexual men and women during the pandemic.

Conclusion

There was a notable increase in early syphilis cases in MSM during the COVID-19 pandemic, compared to the pre-COVID-19 period. These results indicate the importance of effective preventive measures, especially in this population.

P094 - Epidemiological status of syphilis post Covid-19 at a tertiary reference STD centre in North India

Dr. Abhay Goyal, Dr. Pragyan Panda, Dr. Abhishek Lachyan, Dr. Niti Khunger

Complexities in syphilis diagnosis continue to challenge clinicians. Being a curable STI, proper screening and timely treatment can not only prevent its transmission and further complications but also lessen the occurrence of congenital syphilis. The VDRL (venereal disease research laboratory) test is simple, affordable, helpful in mass screening, monitoring therapeutic response, and helping in the presumptive diagnosis of syphilis. The current study aims to provide a status report on the epidemiological profile of syphilis in the post-COVID era at an Apex STI centre.

Methods

A retrospective study, conducted at an Apex centre, of the VDRL tests reported from January to December 2022 on samples received from various departments in the centre.

Results

A total of 9696 samples were received at the Apex Centre with a reactive VDRL test of 3.03%. The male and female ratio of the participants was 0.25:1. The test was reactive in 70.7% male, 28.2% females and 1.02% of transgenders. Amongst this, 10.2% were antenatal cases; 68.7% attended STD clinics, 1.02% were from other departments catered by the apex centre, and 20% were from the peripheral primary health centre.

Conclusion

Syphilis is still widespread, especially in high-risk young and adult populations visiting STI clinics. Effective COVID-19 control measures had a significant, albeit brief, influence on the STD epidemic in India. Many regions, including North America, Western Europe, India, China, and Australia, have seen a re-emergence of syphilis.

P095 - Syphilitic Hepatitis in a primo-secondary syphilis patient: A case report

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Syphilis is a multi-systemic disease caused by spirochete *Treponema pallidum*. Liver is one of the organs that can be affected but the incidence of acute hepatitis is rare. Congenital syphilitic hepatitis is more commonly reported in the literature as it is easily recognized for its typical clinical features, while acquired syphilitic hepatitis in adults is rarely reported. Herein we present a clinical case of syphilitic hepatitis in a primo-secondary syphilitic patient that resolved following successful treatment of syphilis. Therefore, syphilis should be included in the differential diagnosis of acute hepatitis in young sexually active patients.

Methods

A 31-year-old lady presented to our hospital with 5-week- history of non-pruritic rash mainly affecting the upper body. She reported no other constitutional symptoms. Her past medical history was unremarkable, and she was on no regular medications. She has no known drug allergies, and she drinks no alcohol.

Clinical examination revealed multiple erythematous and nonconfluent maculopapular lesions on the upper body, a painless small, ulcerated plaque on soft palate and cervical lymphadenopathy. There was no organomegaly.

Blood tests showed an ALT of 727 U/L, an AST of 280 U/L, a GGT of 151 U/L and a normal TBIL.

Results

The patient was treated with weekly intramuscular benzathine benzylpenicillin 2,400,000 U for a total of three doses. One week post-treatment, the rash was completely resolved and the liver function started to improve significantly.

The abnormal liver enzyme levels, exclusion of other causes of liver diseases and the improvement of liver enzyme levels following appropriate treatment supported the diagnosis of syphilitic hepatitis.

Conclusion

Clinical examination shows findings of primo-secondary syphilis in our patient while the laboratory findings with high titer of VDRL support the diagnosis of secondary syphilis.

Acute hepatitis is an uncommon rare manifestation in the context of syphilis, a common disease

P096 - Risk factors associated with syphilis reinfection rates in adults

Dr Anastasia Koutalopoulou, Dr Marina Papageorgiou, Dr Maria Goula

Syphilis is a sexually transmitted infection (STI) that is highly contagious but is an easily treatable disease when is diagnosed timely.

During pandemic period of Covid-19, treating Covid-19 was prioritised. There has been many reports in the literature regarding the new cases of syphilis and syphilis re infection rates during the pandemic. We conducted this study to identify whether the syphilis re infection rates increased or decreased during pandemic in our hospital. In addition, we identified the risk factors associated with syphilis re infection in adults.

Methods

Patients' data were collected from STD clinic in General Hospital of Thessaloniki 'Ippokrateio' - Venereal and Skin Diseases Hospital. Two periods were chosen from 01/04/2018 to 31/03/2020 and from 01/04/2020 to 31/03/2022 in order to compare the reinfection cases of syphilis during the pre-COVID19 period and during the first two years of COVID-19 pandemic.

For the comparison of proportions chi-square and Fisher's exact tests were used. Statistical significance was set at $p < 0.05$ and analyses were conducted using SPSS statistical software (version 26.0).

Results

One hundred sixty-one episodes of syphilis were identified in 161 adult patients. Twenty two patients (13.7%) presented from 01/04/2018 to 31/03/2020 with syphilis re infection. As associated factors were identified male gender (100%), HIV co-infection 40.9% (N=9), homosexual orientation (77.3%). Regarding the number of partners 27.3% (N=6) of men declare 10-20 different partners per semester and 9.1% (N=2) of men declare >20 different partners per semester.

One hundred eighty-four episodes of syphilis were identified in 194 adult patients. Twenty two patients (11.4%) presented from 01/04/2020 to 31/03 /2022 with syphilis re infection. The same associated factors were noted.

Conclusion

Reduction of syphilis cases has been reported in the literature for several countries worldwide during Covid-19 period. However our study indicates that in our hospital there was a rise in new cases of syphilis while the re infection rates remained pretty much static ($p > 0.05$).

P097 - Clavi syphilitici- a challenging diagnosis

Dr Pedro Matos, Dr Barbara Granja, Dr Filomena Azevedo, Carmen Lisboa

Syphilis is on rise. Its incidence has returned to levels not seen in more than 20 years in developed countries.

Syphilis has protean clinical manifestations that can mimic other diseases. Its versatile presentations can challenge the most experienced clinician.

Methods

We described the case of a patient in his 60s who was referred to our department for warty lesions on the palms and soles, unresponsive to keratolytic treatment.

Results

The polymerase chain reaction was positive for *Treponema pallidum* in the skin lesion sample. A positive Venereal Disease Research Laboratory test (VDRL) and a reactive *Treponema pallidum* particle agglutination assay were obtained. Screening for other sexually transmitted infections was performed. Patient was treated with a single intramuscular dose of benzathine penicillin (2,400,000 U) with rapid regression of palmoplantar lesions.

Conclusion

In the literature, there are few reports of palmoplantar hyperkeratotic lesions of secondary syphilis that can mimic and be confused with punctate palmoplantar keratoderma, psoriasis or even with viral warts or calluses, classically known as clavi syphilitici.

P098 - Performance a rapid serological test for diagnosis of yaws in patients with suspicious skin ulcers

Susana Muñoz, Clara Suñer, Lucy N. John, Wendy Houinei, Maria Ubals, Dan Ouchi, Andrea Alemany, Adrià Mendoza, Cristina Galvan Casas, Michael Marks, Oriol Mitjà, Martí Vall

Yaws is a neglected tropical disease caused by *Treponema pallidum* subsp. *pertenue* (TPE) which leads to cutaneous ulcers predominantly in children living in remote communities. The Chembio DPP (Dual Path Platform) Syphilis Screen & Confirm kit is a point-of-care serologic test that can be used to confirm yaws as a cause of tropical ulcers. We evaluated the capacity of the DPP test to detect patients with cutaneous ulcers that tested PCR positive for TPE.

The objective was to assess the ability of qualitative (naked eye) and quantitative (reader) measurements of DPP to identify active yaws in tropical ulcers.

Methods

: We used data from a community trial of patients with skin ulcers suggestive of yaws, conducted in Namatanai (Papua New Guinea) during 2018 and 2019. Ulcer PCR results for TPE were compared with serologic results of the DPP test T line (i.e., treponemal antigen), NT line (i.e., non-treponemal antigen), or both lines. The DPP was evaluated by qualitative measurement, read at naked eye, and by quantitative measurement, using the DPP reader. The analysis using the reader was replicated for different sub-groups of individuals.

Results

We tested samples from 995 suspicious skin ulcers by using DPP and PCR. Overall, 287 (28.8%) samples had a positive TPE PCR result. DPP reader results were available for 828 of the ulcers, of which 247 had a positive PCR result. The highest sensitivity of DPP to detect TPE-PCR positive cases by naked eye was observed using the NT line (84%), while the highest specificity was observed using a combination of T and NT lines (68.6%). Using the values from the reader, the combination of $T \geq 1$ and $NT \geq 28$ provided a sensitivity of 75.7% and a specificity of 77.6%.

Conclusion

DPP test can provide 84% sensitivity for detecting TPE PCR-positive ulcers with the naked eye when using the NT line. The reader didn't increase sensitivity. DPP test showed a high capacity to identify active yaws in TPE PCR-confirmed ulcers. This is suitable for qualitative identifying ongoing transmission of yaws during last phases of eradication.

P099 - STI/HIV burden and healthcare engagement of migrant and Western-born female sex workers in the Netherlands

Charlotte Peters, Dr. Ymke Evers, Dr. Karlijn Kampman, Dr. Marie-José Theunissen-Lamers, Drs. Mark Van de Elshout, Nicole Dukers-Muijers, Prof. Dr. Christian Hoebe

Background: European studies suggest that migrant female sex workers (FSW) compared to non-migrant FSW are more at risk of sexually transmitted infections (STI), but less at risk of HIV. Studies remain inconclusive on the impact of migration on engagement in sexual healthcare.

This study aimed to assess demographics, STI/HIV burden and engagement in sexual healthcare of first-generation migrant (FGM) and second-generation migrant (SGM) FSW versus Western-born FSW.

Methods: An uniquely large number of coded STI clinic consultations ($n=27532$) from 11363 individual FSW attending any Dutch STI clinic between 2016-2021 were included. FGM is defined as born outside of central/western Europe/North America/Oceania and SGM as having at least one parent born outside of central/western Europe/North America/Oceania. A Chi-squared test compared STI diagnosis (chlamydia/gonorrhoea/infectious syphilis/infectious hepatitis B/HIV) in the first consultation among FSW groups. Incidence of a first repeat consultation was compared between migration groups using Cox proportional hazard regression, adjusting for age and urbanity of STI clinic region.

Results: FGM FSW ($n=5085$) were mostly born in Eastern Europe (50.5%), Latin America (27.2%) and Asia (9.9%). SGM FSW ($n=1309$) mostly originated from Suriname/Netherlands Antilles (36.3%), North Africa (25.7%) and Asia (15.5%).

Among the FGM, SGM and Western-born FSW respectively 11.4%, 15.2% and 13.3% ($p<0.001$) was diagnosed with any STI, 0.5%, 0.2% and 0.1% ($p<0.001$) with infectious syphilis, 0.8%, 0.2% and 0.0% ($p<0.001$) with infectious hepatitis B and 0.2%, 0.0% and 0.1% ($p=0.020$) with HIV in the first consultation.

Overall, incidence of first repeat tests per 100 person-years was 17.3 (95%CI:16.6-18.0) among FGM, 21.0 (95%CI:19.4-22.8) among SGM and 25.8 (95%CI:24.8-26.9) among Western-born FSW. FGM FSW have a hazard ratio of 0.73 (0.69–0.77, $p<0.001$) and SGM FSW a hazard ratio of 0.89 (0.81–0.97, $p<0.05$) of having a first repeat consultation at any time compared to Western-born FSW.

Conclusion: FGM and SGM FSW compared to Western-born FSW have a comparable burden of any STI and have a higher burden of infectious syphilis, infectious hepatitis B and HIV. Moreover, FGM and SGM FSW are less likely to have a repeat STI test consultation. Efforts of sexual healthcare services should focus on getting migrant FSW in care to decrease the burden of severe STI.

P100 - Extensive ulceration of syphilitic etiology on the penis unresponsive to treatment with penicillin antibiotics

Mudr. Přemysl Procházka, MUDr. Hana Zákoucká, MUDr. David Šmajš, RNDr. Eliška Vrbová

This abstract describes a case of atypically large *ulcus durum* that was completely unresponsive to treatment with penicillin antibiotics. During the course of treatment, a positive PCR *Treponema pallidum* was repeatedly found, and macrolide antibiotics had also no effect despite the exclusion of resistance. The patient was clinically cured with Doxyhexal per os.

Methods

A patient presented with a large ulcer on the penis. STI tests resulted in serological confirmation of syphilis primaria and detection of *Treponema pallidum* in ulcer swab. Treatment with PNC was without effect and the ulcer persisted, therefore azithromycin was administered, again with no effect. After the Doxyhexal treatment the ulcer healed with a scar, repeated ulcer swabs were negative for PCR *Treponema pallidum*, and serologic tests dynamics were typical. Due to an unusual clinical picture development during PNC treatment we performed multilocus and whole genom sequencing, with no evidence of macrolide resistance. The whole genom analysis is still on-going.

Results

38 days after risky sex – PCR *Treponema pallidum* positive, serological examination: VDRL positive, Anti-IgG borderline, anti-IgM positive
7 days after PNC treatment ulcer swab positive PCR *Treponema pallidum*, concurrent nasopharyngeal swab negative PCR *Treponema pallidum*

12 days of treatment with Azithromycin, ulcer swab PCR *Treponema pallidum* negative, still without healing

7 days of treatment with Doxyhexal, ulcer swab PCR *Treponema pallidum* negative, healing of the ulcer is undoubtfull, but still not completed

129 days after risky contact and 35 days of Doxyhexal treatment, the ulcer is healed almost completely, serological examination: VDRL negative, anti-IgG strong positivity, anti-IgM borderline.

Conclusion

A patient with syphilis primaria, which did not respond to treatment with penicillin or macrolide antibiotics, despite the exclusion of macrolide resistance. Further he was treated with acyclovir, also without effect. Only long treatment with Doxyhexal resulted in slow healing of the ulceration, which however healed with a sunken retracted scar.

P101 - SYPHILIS; AN OBSTETRIC WARNING: THE DEVELOPING TREPIDATION OVER RISING CASES OF TREPONEMA PALLIDUM

Dr Adam Tyler, Dr Harriet Lomas, Dr Sally Kidsley

The late 15th century saw the emergence of syphilis, which caused a staggering public health burden for nearly 4 decades. In the 1940s, the causative agent, *Treponema pallidum*, was identified. The use of penicillin coupled with implementation of public health measures, including antenatal screening, saw cases fall sharply over the succeeding years. Since then congenital syphilis had become a whisper in obstetrics as cases were nearly eliminated. This however has not lasted, as over the past 5 years syphilis cases in male and female populations have risen, resulting in unnecessary cases of neonatal syphilis.

Methods

Following rising rates of syphilis and a neonatal case locally we are exploring any trends within our local community in order to address this rising public health concern. We want to improve knowledge of syphilis with our patients and staff, specifically our maternity teams.

We reviewed the electronic patient records of all syphilis cases presenting to the SRH service in Hywel Dda between January 2016 and January 2022.

Results

Our data shows a rise in Syphilis cases from 2016 with a steep increase in the period following widespread PrEP introduction in 2018. We found a decrease in cases in 2020, which may be contributed to the COVID pandemic. Most cases present in MSM (Men Sex Men), however positive cases in the female population are rising and we have had a case of undiagnosed antenatal syphilis resulting in neonatal syphilis.

Conclusion

Cases of syphilis & congenital syphilis are on the rise. Increased awareness in Maternity Services teams is essential to limit adverse impact on expectant mothers and babies. Integrated training for Maternity and Sexual Health Teams could help improve identification, intervention and improved outcomes for these cases.

P102 - Acute syphilitic aortitis, an unusual observation.

MUDr. Hana Zákoucká, RNDr. Eliška Vrbová, MUDr. David Šmajš

Clear increase of syphilis during last two decades in the Czech Republic is still on-going. Even if it is most visible in the group of men having sex with men (MSM), we can also see distinct increase of syphilis in other population groups. During last twenty years more than two thirds of notified cases are recent infections. This is the reason, probably, why we can find complicated acute infections more frequently. We reported the case (one of six indentified in the Czech Republic during last 6 years) of acute syphilitic aortitis.

Methods

Since 2016 we saw six cases of acute syphilitic aortitis. Our patient was 43 years old man presented with neurological symptomatology on neurological in-patient clinic. Stroke was confirmed and hudge founding on aorta was recognized too. Vital cardiosurgery intervention was offered to him, but he refused. After 3 days he was admitted to intensive care unit (ICU) for heart failure and after next 4 days he died.

Serological testing was performed repeatedly. We tested non-treponemal antibodies by VDRL-micro, treponemal IgG and IgM antibodies.

PCR testing of *Treponema pallidum* was performed from whole blood and from aortic wall necropsy.

Results

Both serological testing were positive and highly active with VDRL-micro positivity in titre 1:128, treponemal IgG antibodies tested by TP-PA, TPHA a FTA-ABS IgG and treponemal IgM positivity. PCR testing was positive from the aortic necropsy. We used multiplex test Seegene Allplex Genital Ulcer.

DNA isolate was send to whole genom sequencing.

Conclusion

Since 2000 due to rising numbers of cases of recent syphilis we can see also a very rare acute syphilitic aortitis. Even if standard clinical and laboratory testing is able to recognize endangered patients, PCR test is the only way, who to identify characteristic attributes of pathogen.

P103 - Congenital syphilis in Switzerland: a national retrospective study

Dr Chloe Alberto

Congenital syphilis (CS) is a rare complication of syphilis. Vertical transmission may occur at any time of pregnancy. Its incidence has been increasing worldwide. CS notification has been used for years in Switzerland but do not provide details on mothers or new-born. We assessed the estimated prevalence of CS in Switzerland, and aimed to identify maternal risk factors associated with syphilis in pregnancy as well as children outcome.

Methods

A multicentric retrospective study was conducted in all University hospitals recruiting cases from 2012 to 2021. #

Pregnant women screened positive for syphilis (TPHA/TPPA ≥ 80) and new-borns exposed to *T. pallidum* in utero and/or congenitally infected and with a positive syphilis serology at birth, were enrolled. Data were collected in medical patients records.

Results

A total of 147 pregnant women and 102 children were included.

A history of treated syphilis was known for 46,3% of the mothers corresponding to serologic scar. The other half (53,7%) was identified by the screening during pregnancy. Diagnosis of syphilis was made at the first trimester in 53,7%, second trimester in 28,6%, and 3rd trimester in 12,9% of cases.

Only 2 babies were diagnosed with congenital syphilis as defined by the European guidelines. Their mothers were diagnosed late in the pregnancy during the 3rd trimester.

Maternal risk profiles were a foreign origin (93,2% of mothers), lack of healthcare insurance (24,5%), no occupation (37,4%), drug use (4,8%), co-infection with other sexually transmitted infections (23,8%) and a late first antenatal consultation.

Children exposed in utero to syphilis had a higher preterm delivery rate (18,7% against 6,4% in Switzerland in 2021).

Conclusion

CS remains rare in Switzerland. However, we showed a maternal risk profile that warrant an active prevention. A specialized multidisciplinary follow up is needed to improve surveillance and healthcare in this vulnerable population.