HIV and other sexually transmitted infection research in the Middle East and North Africa: promising progress?

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The mere association of the words sexually transmitted infections (STIs), including HIV/AIDS, and sexuality, to Middle East and North Africa (MENA) in any discussion, social or academic, seems to elicit heated debates and controversy. The MENA region is, in the minds of many, an area where socio-cultural sensitivities surrounding sex and disease still abound. Are there HIV epidemics shrouded behind a wall of denial? Is there a ‘conspiracy of silence’ resulting in a failure to confront a public health scourge?

Lack of data seems to have fuelled this debate, but the reality of the situation is more nuanced. There are probably shreds of truth in the polemics about HIV infection and other STIs in this region, but partial truths often distort reality. This special supplement of Sexually Transmitted Infections provides a critical piece of the solution to this problem: evidence from the field. This evidence suggests a reality that this region should be able to confront and deal with.

The purpose of this special supplement is to showcase the progress of STI research in MENA, and to demonstrate stronger evidence about the HIV epidemic to inform policy and programming. We chose studies that broadened our knowledge in this field, and testified to the feasibility of conducting quality research in this region. To highlight progress, we invited contributors to submit studies dealing with diverse research questions and methodologies. We encouraged novelty and weighed the studies’ potential to impact policy and programming. Our goal was to have a broad representation from the MENA region, but we only achieved partial success. Though eventually the supplement included data from multiple countries in one form or another, the countries with more advanced research capacity contributed more. A few of the invited articles from other countries did not materialise for a variety of reasons. One of the greatest challenges facing research in the MENA region is the paucity of trained investigators. Although this supplement provides evidence that a core group of investigators are actively conducting vital research in the region, the challenge of further expanding the field remains.

MENA, in this supplement, extends from Morocco in the West to Afghanistan and Pakistan in the East (figure 1). It is a diverse region that comprises more than 10% of the World’s 15–49 age group population. Recently, the region has attracted global attention with its youth movements, known as the Arab Spring, that swept through the region and roiled movements, known as the Arab Spring, that swept through the region and roiled decades-old regimes. Regrettably the region has largely failed to benefit from its demographic dividend. There are, however, bright spots. This supplement highlights the outcome of research conducted mostly by young and motivated local investigators, working in challenging conditions.

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Editorial

The results of a remarkable large-scale surveillance project that we hope can inform the approach that should be taken in other MENA countries. The authors measured HIV, syphilis and hepatitis C prevalence among female sex workers (FSWs) in 14 of the 15 states of Sudan using state of the art sampling methods. The study showed how the HIV epidemic was a reality in commercial heterosexual sex networks in Sudan, but that HIV prevalence varied widely from one state to another. This kind of evidence provides strategic data for HIV policy and programming, and emphasises the need to prioritise HIV response and resource allocation based on local epidemiology. The study also highlighted how HIV prevention needs were not being met in this population.

Emmanuel et al.8 then provide the results of Pakistan’s fourth round of second-generation surveillance among at-risk key populations including people who inject drugs (PWID), transgender people, and male and female sex workers. The study highlights how one MENA country has succeeded in establishing an advanced surveillance research. These rounds of mapping and surveillance in Pakistan have managed to establish a detailed description of the epidemic and its evolution throughout the country, a feat that has only been achieved by a handful of countries worldwide. The results of the study provide a stern and sobering warning to other MENA countries: the HIV epidemic is a growing reality that must be countered by an aggressive response. If HIV infection transmission is not controlled in one at-risk population, it can spread.

Along the same lines, a group of brief articles from Iran report the findings of HIV surveillance in four different population groups. In the first of these, Kajehkazemi et al. present the results of the national bio-behavioral survey among PWID.9 The findings affirm that this population group remains the most affected by the HIV epidemic in this country, and still exhibit high levels of risk-taking behaviours despite a roll-out of harm reduction interventions.10 11 In the second article, Navadeh et al.12 present the results of the national bio-behavioral survey among prisoners. Their findings are indicative of the overlapping networks of HIV transmission among PWID and prisoners, which appear to be a concern not only in Iran, but also in other MENA countries.1 It is clear that prisons should be considered as a priority setting for HIV prevention in at least a few MENA countries.13

The study demonstrates the direct links between FSWs and PWID in Iran through which HIV infection can be bridged. Though the study is not conclusive, it suggests the potential for considerable HIV sexual transmission in commercial sex networks, a lesson highlighted in the neighbouring country of Pakistan.8

In the last article from Iran, Alipour et al.14 present the results of a novel study for this region: A national bio-behavioral survey among partners of PWID. The study demonstrates that despite the difficulty in reaching this population, it is an important group to consider when trying to define the complexity of the HIV epidemic in Iran. Though the main factors of HIV transmission in this region are the networks of high-risk populations, a substantial burden of the infection is being borne by spouses who may not fit the typical high-risk description.1 2 The study challenges us to develop appropriate interventions for this vulnerable population, and provides evidence of the importance and feasibility of recruiting spouses of people who engage in high-risk behaviour.

Morocco then contributes two studies to our supplement. In the first one, Johnston et al.15 report the findings of HIV and syphilis surveillance among men who have sex with men (MSM), the most stigmatised of the key at-risk populations in this region. The paper shows the feasibility of conducting scientifically rigorous studies among MSM in at least some parts of MENA, and the importance of working with them given the evidence of emerging HIV epidemics in this population in this region.16

In the second article from Morocco, Mumtaz et al.17 present the first attempt to map HIV transmission and its sources in a MENA country, by conducting an HIV Mode of Transmission Analysis (MoT) modelling study. The findings show how HIV transmission in this country is driven by the sexual and injecting networks of the key populations at risk, and that these vulnerable populations should be the priority of HIV prevention programmes. Importantly, the study demonstrates how Morocco has leveraged the knowledge of the epidemiology of its HIV infections,18 19 to generate an evidence-informed and priority-tailored
The current financial climate may result in stagnating or even diminishing international support for STI research and programme delivery. International development aid should be viewed as a transitional phase focused on capacity building to conduct this type of research and start new surveillance, treatment, and prevention programmes. A guiding experience to this end is the Avahan initiative in India, a large-scale HIV intervention programme focused on the key populations at risk in the six most affected states, and that have demonstrated an impact on the epidemic.21–23 For nearly a decade, the Bill and Melinda Gates Foundation invested close to half a billion dollars to build capacity for HIV and STI programmes through HIV services such as HIV testing, care, and treatment, STI testing and treatment, condom promotion, behavioural change communication, stigma reduction, peer education, community mobilisation, and advocacy.21 21-24 A key aspect of the programme had been the emphasis on scientific research to generate data that can inform HIV policy and programming, and to monitor and evaluate progress and output.22 24 This massive programme was then gradually transitioned to the government of India and other partners, ensuring sustainability for the years to come, beyond development aid and donor funding.25 Such successful model offers a sustainability strategy with ensured country ownership of the programmes. In conclusion, this supplement is a testament to the progress in HIV research in MENA over the last few years. Conducting research on STIs is feasible in this region despite the challenges. Although the trend of progress is encouraging, the scale is still inadequate. The region’s STI research output is far below what is needed, and diverse areas of STI research are still primitive. This progress should be seen as a promising beginning, but one that needs to be actively nurtured and mobilised, and advocacy.21 21–24 A key aspect of the programme had been the emphasis on scientific research to generate data that can inform HIV policy and programming, and to monitor and evaluate progress and output.22 24 This massive programme was then gradually transitioned to the government of India and other partners, ensuring sustainability for the years to come, beyond development aid and donor funding.25 Such successful model offers a sustainability strategy with ensured country ownership of the programmes. 

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