

# Understanding HIV Risk Behaviors among Youth from the Middle East and North Africa (MENA): A Scoping Review

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## BACKGROUND & OBJECTIVES

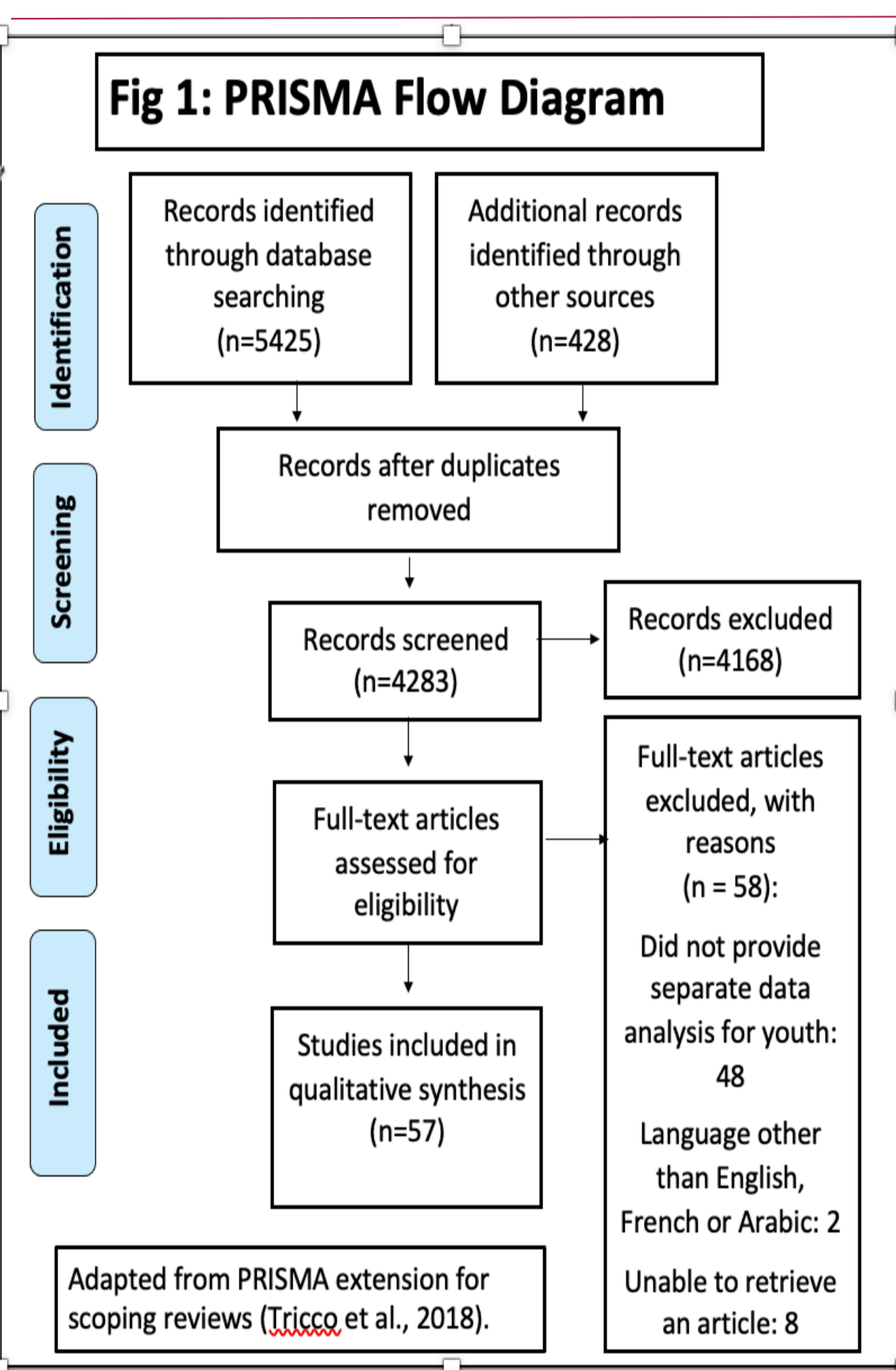
- Young people and adolescents are disproportionately impacted by the HIV epidemic globally, with 1.6 million people between 10 and 19 years of age living with HIV and 190,000 are newly infected (Global & Regional Trends, 2019).
- The Middle East and North Africa region (MENA) is home to 80 million youth and its young adult population make up 10% of the world's population (Gökengin, et al., 2016; UNICEF, 2019)
- Despite having the lowest HIV prevalence in the world (less than 0.1%), **MENA is witnessing a rise in HIV infections which have increased by 31% since 2001 - highest documented increase among all regions in the world** (UNAIDS, 2014).
- No past reviews have synthesized information on risk behaviors of young people specifically.

**Study Objective:** This scoping review seeks to establish epidemiological risk factors and underlying risk context for youth residing in or originating from the MENA region.

## METHODS

- Scoping review is part of the Youth Sexual Health and HIV/STI Prevention in Middle Eastern and North African Communities in Ontario (YSMENA Study).
- Guided by the scoping review methodological framework developed by Arksey & O'Malley (2005), with developed protocol adapted to the Preferred Reporting Items for Systematic Reviews and Meta-analysis Protocols (PRISMA-P) (Tricco et al., 2018).

## RESULTS



Screening 5,853 citations, published between 1990-Dec, 2019 with age groups 16 to 29, resulted in 57 studies included across 18 MENA countries: Algeria, Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates (UAE), and Yemen (See Fig 1).

**'Key populations'** mostly impacted by HIV epidemic in MENA: people who inject drugs (PWIDs), men who have sex with men (MSM), and young sex workers, mostly female sex workers (FSW). **'Bridging populations'** also impacted – to a much lesser extent, including: clients of sex workers, students, prisoners, truck drivers, & street children and are commonly behind transmission of HIV/STIs from high-risk core groups to noncore groups (See Table 1 in Supplementary Handout).

### I. Youth who Inject Drugs (PWID)

- HIV has already established itself among a number of PWID populations in MENA.
- Levels of risky behavior, such as **use of nonsterile injecting equipment, inconsistent condom use and selling/buying sex** have been significant, confirming potential for further HIV spread among PWIDs.

### II. Men who Have Sex with Men (MSM)

**Risky Behavior:** Young MSM engage in risky behaviors including condomless sex, multiple and concurrent sexual partnerships. **HIV Testing:** was variable across countries and samples. **MSM with female partners:** most MSM reported having female sexual partners through spousal and non-spousal relationships. **Overlapping Risk:** concurrent drug & alcohol use before and during sex, transactional sex (See Table 2).

**Table 2. Risky Behaviors Among Men Who Have Sex with Men (MSM) in MENA Region**

Risky Behaviors Among MSM		
Access to HIV testing	Number of sexual partners	Frequency of injection drug use
<b>Lebanon</b>		
79.6% (Wagner et al 2018)	Over the past three months: 2 (Wagner et al 2014)	Ever injected drugs: 1.7% (Heimer et al 2017)
94.5% (Heimer et al 2017)	Over the past year: 20.7 (Heimer et al 2017)	
In the past year: 71% undergone at least one test (Maatouk et al 2016)	Over the past year: 25.3 (Wagner et al 2012)	Over the past year: 73% had at least one nonregular noncommercial sex partner (38% had five or more), and 37% had at least one regular noncommercial sex partner in the last year (1% had five or more) (Mahfoud et al 2010)
75% (Wagner et al 2012)		
22% (Mahfoud et al 2010)		
Ever tested: 81.7% (Ghanem et al 2019)		
Tested in the last six months: 50.9% (Ghanem et al 2019)		
In the past year: 50% (Wagner et al 2015)		
<b>Egypt</b>		
Very few young people undergo HIV testing for fear of facing implications of a positive result and associated social stigma. (Abdel-Tawab et al 2016)	Per week: < 3 among 48.3% of younger persons and among 40.0% of the older ones (El-Sayyed et al 2008)	(2.3% - 4.9%) Alexandria, Luxor & Cairo (FHI/MOHP Egypt 2010)
<b>Libya</b>		
In the past year: 45.6% (Valadez et al 2013)		
<b>Jordan</b>		
38% (Alkaiyat et al 2014)		64.9% (Alkaiyat et al 2019)
<b>Syria</b>		
31.8% (Kobeissi 2014)		

## RESULTS CONTINUED

### III. Young Sex Workers/ Female Sex Workers (FSW)

- Risky Behavior:** unprotected sex was an alarming risk practice. Typically opted not to use condoms with non-client sex partners, to differentiate sex for work versus pleasure.
- HIV Testing:** varied significantly. FSWs tested previously as part of mandatory requirement (obtain work permit and residence).
- Overlapping Risk:** Regarding drug use and ever injecting drugs, results varied widely according to country (See Table 3).

**Table 3. Risky Behaviors Among Sex Workers in MENA Region**

Risky Behaviors Among Sex Workers	
<b>Iran</b>	
<b>Injecting Drugs</b>	A total of 73.8% reported a history of any drug use. Of these, 63.2% were active drug. (Sajadi et al 2013) 60% used drugs and 2.5% used them intravenously (Tehrani et al 2008)
<b>Married</b>	Ever being married: 83.2% (Sajadi et al 2013) Currently married: 35.8% (Sajadi et al 2013)
<b>No. of Clients</b>	In last seven days: 3.1 (Sajadi et al 2013)
<b>Additional Income</b>	36.5% (Sajadi et al 2013)
<b>Egypt</b>	
<b>Injecting Drugs</b>	50% used drugs and 6% injected drugs in the 12 months preceding the survey (FHI/MOH Egypt 2010)
<b>Married</b>	Ever being married: 89% (FHI/MOH Egypt 2010) Currently married: 45.5% (FHI/MOH Egypt 2010)
<b>Syria</b>	
<b>Injecting Drugs</b>	11% used drugs (Kobeissi 2014)
<b>Married</b>	Ever being married: 86% (Kobeissi 2014)
<b>Forced Sex</b>	35.8% (Kobeissi 2014)
<b>No. of Clients</b>	In last seven days: 4.8 (Kobeissi 2014)
<b>Lebanon</b>	
<b>Injecting Drugs</b>	0 (Mahfoud et al 2010)
<b>Married</b>	Ever being married: 60% (Mahfoud et al 2010) Currently married: 10% (Mahfoud et al 2010)
<b>No. of Clients</b>	In last months: 96% had five or more clients (Mahfoud et al 2010) Clients per year for hammer sex workers: 1,015 (median ¼ 1,095) (Aunon et al 2015) Clients per year for escorts: 343 (median ¼ 313) (Aunon et al 2015)
<b>Additional Income</b>	Most of male sex workers from the hammam relied on sex work as their only source of income whereas more than one half of the escorts had another income-generating activity (Aunon et al 2015)
<b>Libya</b>	
<b>Injecting Drugs</b>	2.8% (Valadez et al 2013)
<b>Forced Sex</b>	18.2% (Valadez et al 2013)
<b>Yemen</b>	
<b>Injecting Drugs</b>	The vast majority (96.8%) had ever used drugs while injection was reported by 14.5% (Mirzazadeh et al 2013)
<b>Married</b>	Ever being married: 81.0% (Mirzazadeh et al 2013) Currently married: 28.5% (Mirzazadeh et al 2013)
<b>No. of Clients</b>	In last seven days: 3.4 (Mirzazadeh et al 2013)

### IV. Students, General Population & Others

#### University Students:

- History of high risk behaviors, multi-sex partners, unsafe sex, drug use, alcohol consumption.
- Male students more likely to engage in risky behavior than female counterparts.

#### General Population and Others:

- Included other bridging populations: prisoners, street children, truck drivers, tourist workers, transgender women, conscripts and people of the general population
- Limited understanding of HIV, especially around modes of transmission and high-risk behavior.
- Street children who have sex, most never used a condom at all and most had multiple sex partners.

## CONCLUSIONS

- PWID: Availability, access and increasing awareness** towards harm reduction services are crucial in addressing the high-risk context affecting this key population.
- MSM: low condom use** is very common in this key population. One of the hardest groups to reach due to **homophobia and severe stigmatization** they are usually subjected.
- Sex workers:** not yet well studied and are hard to reach due to the illegal status of their profession and high levels of stigma in MENA.
- University Students & other bridging populations:** Multi-sex partners, unsafe sex, drug use, alcohol consumption and practicing risky behaviors. **Low use of condoms among youth bridging populations** due to peer pressure and inhibition to discuss sex.

**Limitations:** difficulty to generalize findings due to **heterogeneity in risk behaviors and risk contexts. Lack of homogeneity in studies** conducted in MENA, often due to **limited funding resources**, makes it especially hard to locate studies entirely focused on youth. **Scarcity of bio-behavioral surveys** conducted in the region presents a challenge to track long term trends.