

Situation and Response Analysis of HIV and Young People in the Middle East and North Africa

Prepared For: UNAIDS, MENA regional office

Prepared By: Shireen Tawil, MPH
Public Health Consultant

December 14, 2013

Abbreviations and Acronyms

FSWs—female sex workers

IDPs—internally displaced persons

MDGs—Millennium Development Goals

MENA—Middle East and North Africa

MENAHRA—Middle East and North Africa Harm Reduction Association

MSM—men who have sex with men

MSWs—male sex workers

NGO—non-governmental organization

PLHIV—people living with HIV

PWID—people who inject drugs

RANAA—Regional Arab Network Against AIDS

STIs—sexually transmitted infections

UAE—United Arab Emirates

UNAIDS—the Joint United Nations Programme on HIV/AIDS

UNFPA—United Nations Population Fund

VCTs—voluntary counseling and testing centers

I. Introduction

HIV and AIDS and the MENA Region

The global impact of the HIV and AIDS epidemic has spurred its rapid prioritization as one of the most pressing health issues facing the world community. While the epidemiology and social forces affecting its continued proliferation differ between communities and regions, HIV has spread worldwide. In 2012, an estimated 35.3 million people around the world were living with HIV and AIDS and 2.3 million were newly infected with the virus.¹ Of those affected by HIV, young people around the world assume a disproportionate burden of the disease, with 40% of new cases of HIV infection occurring amongst them.² The global response to HIV on community, national, regional, and international levels has resulted in the dramatic decrease of new infections: a 33% drop in new infections since 2001.³ However, despite this significant decrease, new infections still occur at a high rate, and people living with HIV and AIDS (PLHIV) continue to face challenges managing their illness. This is especially true in the Middle East and North Africa (MENA) region, which went *against* the trend of global new infection reduction and saw a 52% *increase* in new infections between 2001 and 2012.⁴

The seismic impact of the HIV epidemic prompted the United Nations to include combating HIV and AIDS as the sixth of eight Millennium Development Goals (MDGs).⁵ To realize this goal, professionals, activists, civil societies, and others from across the world have come together to halt and reverse the spread of HIV/AIDS, and ensure universal access to treatment for those in need.⁶

While the extent of the HIV epidemic is clear in some regions, it is uncertain in others. MENA is one such region, where generally the reported prevalence of HIV and AIDS is relatively low and is feared to be masking an unreported, higher prevalence. The MENA region is home to roughly 340 million people whose average GNI is \$3,453.⁷ Due to the ongoing political upheavals in some MENA countries there are approximately 6 million internally displaced people throughout the region—a 40% increase from 2011—and an additional 14 million international migrants.^{8,9} With respect to the HIV and AIDS epidemic, MENA countries can be categorized into two main groups: those with a generalized epidemic (Djibouti and Somalia) and those with a concentrated or low

¹ UNAIDS (2013a). Ahead of the World AIDS Response Day 2013 UNAIDS Reports Sustained Progress in the AIDS Response.

<http://www.unaids.org/en/resources/presscentre/pressreleaseandstatementarchive/2013/november/20131120report/>.

² GNPPLUS (2012) Young People Living with HIV.

<http://www.gnpplus.net/en/programmes/empowerment/young-people-living-with-hiv>

³ UNAIDS (2013).

⁴ Setayesh, H., Roudi-Fahimi, F., El Feki, S., & Ashford, L. (December 2013). HIV in the MENA Region: Low Prevalence, but not Low Risk. *PRB*.

⁵ UNMDG (2013). UN Millennium Development Goals. <http://www.un.org/millenniumgoals/aids.shtml>

⁶ Ibid

⁷ World Bank (2013). World Bank Regional Data. <http://data.worldbank.org/region/MNA>.

⁸ UNHCR (2013). Internally Displaced People Figures. <http://www.unhcr.org/pages/49c3646c23.html>.

⁹ Abu-Raddad, L.J., Ayodeji Akala, F., Semini, I. Riedner, G. Wilson D., & Tawil, O. 2010a.

Characterizing the HIV/AIDS Epidemic in the Middle East and North Africa: Time for Strategic Action. *The World Bank*. 133.

prevalence of HIV and AIDS (all other MENA countries).¹⁰ Traditionally conservative sexual mores and religious adherence may have played an active role in dissuading populations from engaging in risky behaviors which would put them at risk of contracting HIV. However, evidence is emerging that the protection of these cultural factors may have previously provided is waning, as an estimated 6,000-22,000 young people were newly infected with HIV in 2012.^{11,12} The concurrency of the MENA region's youth bulge, increased globalization, ongoing conflict, mass migration, and a continued conservative approach to sex and reproductive health education and service access poses a threat of convalescing in a perfect storm for the explosion of an HIV and AIDS epidemic among MENA's young people.

Young People in the MENA Region

The MENA region today is home to approximately 90 million young people, i.e. 20% of its population.¹³ This demographic phenomenon presents both a challenge to meeting the unique needs of this population, and also the opportunity to provide the resources young people need to strengthen their development—and in turn the development and future of the region. Young people in the MENA region are facing extraordinary realities. They are coming of age in a time of extreme financial difficulty, in which approximately 20% of MENA's population lives in poverty, with many hovering just above the poverty line and risking falling under it.¹⁴ Regional economic hardship has resulted in 25% of MENA young people being unemployed—the *highest percentage of unemployment among young people worldwide*.¹⁵ The long-term effects of the Arab Spring revolutions remain to be seen, and at present the various countries within the region are experiencing high levels of political instability and conflict. These socio-political and economic realities have resulted in waves of migration throughout the MENA region, increasing young people's risk of contracting HIV.¹⁶ In conjunction with these regional realities, societies around the world are becoming more globalized; the MENA region is no exception. The use of social media is rising rapidly in the MENA region and a high percentage of MENA's young people use the Internet on a daily basis.¹⁷ Young people are increasingly connecting with others inside and outside the region—both through online tools and travel—expanding their worlds beyond the confines of communities and country borders. Borderless communication means that “[t]oday's

¹⁰ Abu-Raddad, L.J., Ayodeji Akala, F., Semini, I. Riedner, G. Wilson D., & Tawil, O. (2010b). HIV/AIDS in MENA: Assessment and Policy Recommendations. *World Bank Quick Notes Series*. November 2010, Number 34. 2.

¹¹ McGirk, Jan. 2008. Religious leaders key in the Middle East's HIV/AIDS fight. *The Lancet*, 372.

¹² UNAIDS (2013b). 2013 Regional Report for the Middle East and North Africa. 23.

¹³ Roudi-Fahimi, Farzaneh and Shereen El Feki. Facts of Life: Youth Sexuality and Reproductive Health in the Middle East and North Africa. *PRB*, June 2011.

¹⁴ Perezniето, P., Marcus, R., & Cullen, E. Children and Social Protection in the Middle East and North Africa. Overseas Development Institute, Project Briefing 64, October 2011. 1.

¹⁵ *Ibid.*

¹⁶ UNDP (2006). Arab Youth Strategizing for the Millennium Development Goals (MDGs). 69.

¹⁷ Asda'a Burston-Marsteller (2013). Our Best Days are Ahead of Us: Arab Youth Survey 2013. 28.

youth must now navigate two worlds—local and global—simultaneously, which they often find in conflict.”¹⁸

Study Purpose

In light of the nebulous impact of the HIV and AIDS epidemic in the MENA region and the growth in its population of young people, this study purports to review, compile and analyze recent information on youth and HIV and AIDS in the MENA region. Based on the evidence, it will provide recommendations to guide future stakeholder programs and strategies.

Study Scope

The study will cover the experiences of MENA region countries as defined by UNAIDS. These countries include Algeria, Bahrain, Djibouti, Egypt, Iraq, The Islamic Republic of Iran, Jordan, Kuwait, Libya, Lebanon, Morocco, Oman, Palestine Occupied Territory, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, the United Arab Emirates, and Yemen.¹⁹ For the purposes of this report the term ‘young people’ will be used to describe people between 15 to 29 years old.

Study Methodology and Study Criteria

To assess existing information on HIV and AIDS and young people in the MENA region, an extensive online search was conducted. It includes examining published scientific studies; grey materials; local, regional and international HIV and AIDS related websites. The online search was conducted using the Google search engine, Google Scholar search engine, Pubmed search engine, BioMed Central search engine, and the Mailman School of Public Health Alumni Library databases. These searches were conducted using the following key words: HIV, AIDS, youth, young people, Arab, Middle East, North Africa, Algeria, Bahrain, Djibouti, Egypt, Iraq, The Islamic Republic of Iran, Jordan, Kuwait, Libya, Lebanon, Morocco, Oman, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, the United Arab Emirates, and Yemen. The research also relied on UNAIDS’s expertise in the field and references provided by them. Personal contacts in the field were also utilized to further bolster research efforts.

II. Findings

Factors Contributing to HIV risk for MENA Young People

Vulnerable and Most-At-Risk Young People

As a cohort, young people are a vulnerable population. Within this cohort, subgroups remain particularly vulnerable to harm. UNFPA identified young people who are most vulnerable as refugees, IDPs, young people with disability, adolescent girls, unemployed young people, young women, early-married girls, poor young people, uneducated young people, out-of-school young people, and migrant young people. It

¹⁸ Saba, H., Kouyoumjian, S., Mumtaz, G., Abu-Raddad, L.J. Characterizing the progress in HIV/AIDS Research in the Middle East and North Africa. *Sexually Transmitted Infections* 2013; 89. iii5.

¹⁹ UNAIDS (2013c). UNAIDS Countries.

<http://www.unaids.org/en/regionscountries/countries/#d.en.52730>

further identifies young people living with HIV and AIDS, sex workers, people who inject drugs, and men who have sex with men as young people with the highest risk for HIV contraction.²⁰ Many of these subset young people-populations may overlap with one another, increasing young peoples' risk.

A lack of protection factors for street children put them at great risk of contracting HIV. Street children are vulnerable, especially girls—who frequently experience sexual violence. Many street children, both boys and girls, sell sex as a means of survival and condom use remains low. This cohort is on a rise throughout the MENA region and due to migration, familial instability, desire for drugs, and poverty.²¹ A 2010 survey of 857 homeless Egyptian young people aged 12-17 found that 62% had used drugs and 93% had experienced abuse and/or harassment, usually by police officers or other young people on the streets. The majority of older teens were sexually active; over half of them had multiple partners and never used condoms. The survey also found that the majority of female participants had been sexually abused.²² Vulnerable populations, such as the group of homeless young people in this study, may be at multiple high risks of infection, as young people subset populations may overlap high-risk groups. Another study conducted in Egypt focused on high-risk behaviors of homeless men who have sex with men (MSM), and found that 65.8% of participants had their first same-sex encounter before the age of 15. At the time of the study, nearly 80% of young participants had both single and multiple sex partners and roughly 70% exclusively had sex with men.²³

Men who have sex with men are at particularly high risk both at spreading HIV within their cohort, but also as a bridge population, infecting non-male intimate partners. Studies have showed that MSM often are not sexually active exclusively with men, but have women partners as well. In Libya, in an HIV knowledge survey, 68.5% of MSM respondents had had sex with a woman in the past, and 53% had done so in the past 6 months. Nearly 40% of respondents cited using risky sex behaviors with both men and women—a contributing factor of which may be the fact that only 12.1% of MSM knew how to use a condom correctly.²⁴ Similarly, a survey in Morocco of high-risk behavior among MSM found that a significant percent of respondents were in a relationship with both a man and a woman.²⁵

The fact that high-risk groups tend to overlap is supported by the findings of the Libya HIV knowledge survey, in which 12% of MSM reported knowing more than 5 people who inject drugs (PWID), 13% of MSM knew more than 5 FSW, 17% of female sex workers (FSW) knew more than 5 MSM, and 13% of FSWs knew more than 5

²⁰ UNFPA (2012). *Young People in Arab States Changing the World for the Better: Strategic Framework for Programming on Young People*. 4.

²¹ Abu-Raddad, L.J., et al. 2010a. 138-140.

²² UNAIDS (2010b). 23.

²³ El-Sayyed, N., Kabbash, I.A., & El-Gueniedy, M. (2008). Risk Behaviours for HIV/AIDS infection among men who have sex with men in Cairo, Egypt. *Eastern Mediterranean Health Journal*, 14(4). 907

²⁴ Valadez, J., Berendes, S., Jeffery, C., Thomson, J., Ben Othman, H., Danon, L., Turki, A. A., Saffialden, R., & Mirzoyan, L. (2013). Filling the Knowledge Gap: Measuring HIV Prevalence and Risk Factors among Men who have Sex with Men in Tripoli, Libya. *PLOS ONE*.

²⁵ Johnston, L. G., Alami, K., El Rhilani, M. H., Karkouri, M., Mellouk, O., Abadie, A., Rafif, N., Ouarsas L., Bennani, A., & El Omari, B. (2013). HIV, syphilis and sexual risk behaviours among men who have sex with men in Agadir and Marrakesh, Morocco. *Sexually Transmitted Infections*, 89. 2

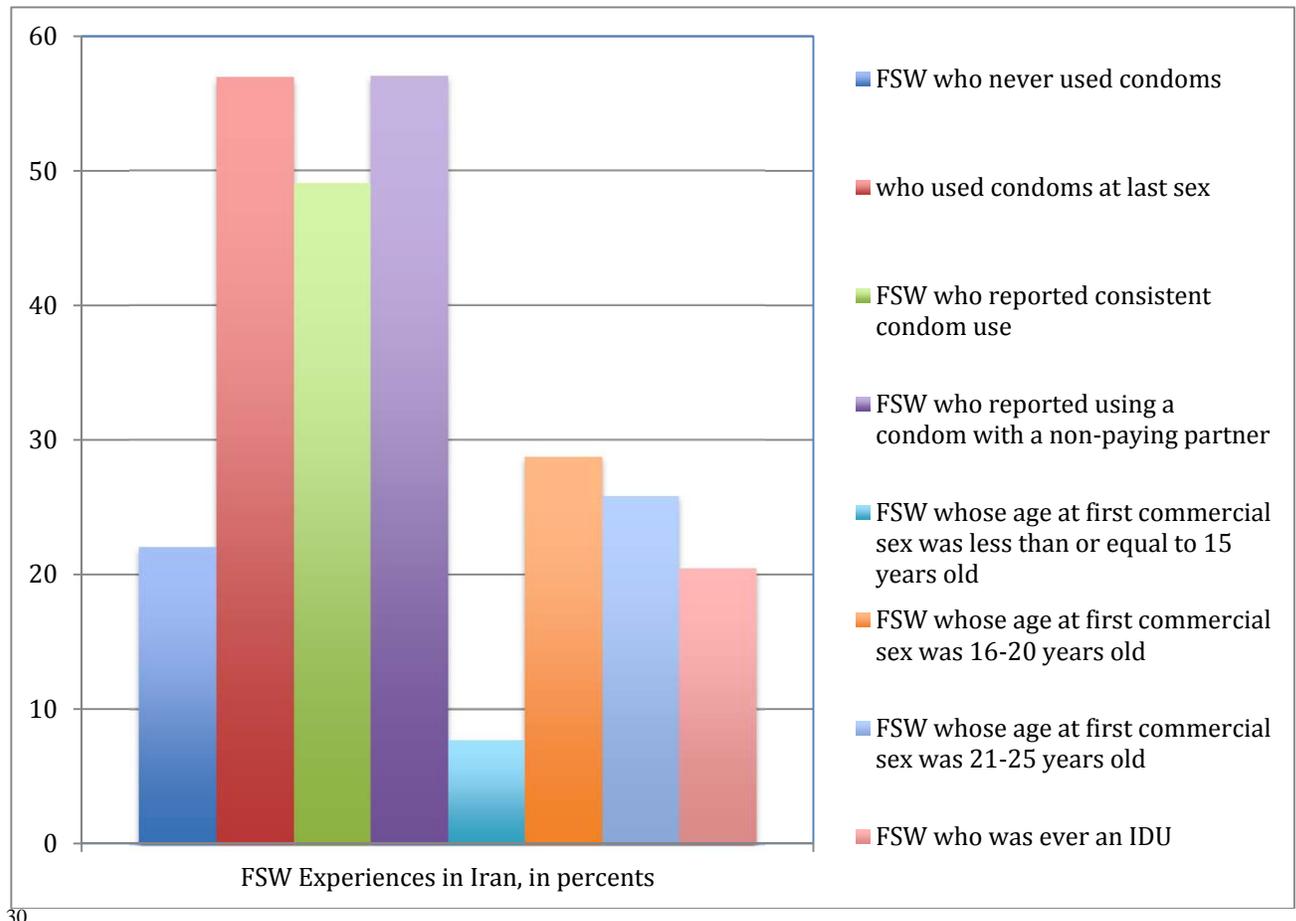
persons PWID.²⁶ Due to the high number of partners, and generally low use of protective measures, commercial sex work also puts young people at risk. While FSW are highlighted for their status as high risk, regional studies have found that transactional sex exists among cohorts other than FSW. Indeed, in the MENA region, male sex workers (MSWs) have a frequency of 20-76%.²⁷ Beyond commercial sex work is the practice of informal transactional sex, which may occur in homosexual and/or heterosexual partnerships. In the Morocco survey, over 60% of respondents reported receiving money and/or goods in exchange for sex in the past 6 months.²⁸ Transactional sex was also reported to occur among young people in Somalia.²⁹ The risk of informal transactional sex should be noted, as those exchanging sex for money or goods may not consider themselves as sex-workers, and may not be reached by programs promoting prevention among sex workers. They fall into a dangerous grey area of young people who are sexually active (possibly with numerous partners) and do not fit the designation of sex-workers, but may be forming unhealthy and risky patterns of behavior from a young age. More research should be done to better understand the motives for and socio-economic factors contributing to informal transactional sex among young people. High numbers of partners and low rates of condom usage place female sex workers at high risk of contracting HIV.

²⁶ Valadez, J. et al., 2013.

²⁷ USAID (2012). Demonstrating Results of the 'Responding to MARPS in the MENA Region' Project using the Most Significant Change Methodology: Regional Report, April-June, 2012. 10

²⁸ Johnston, L.G., et. al, 2013. 2.

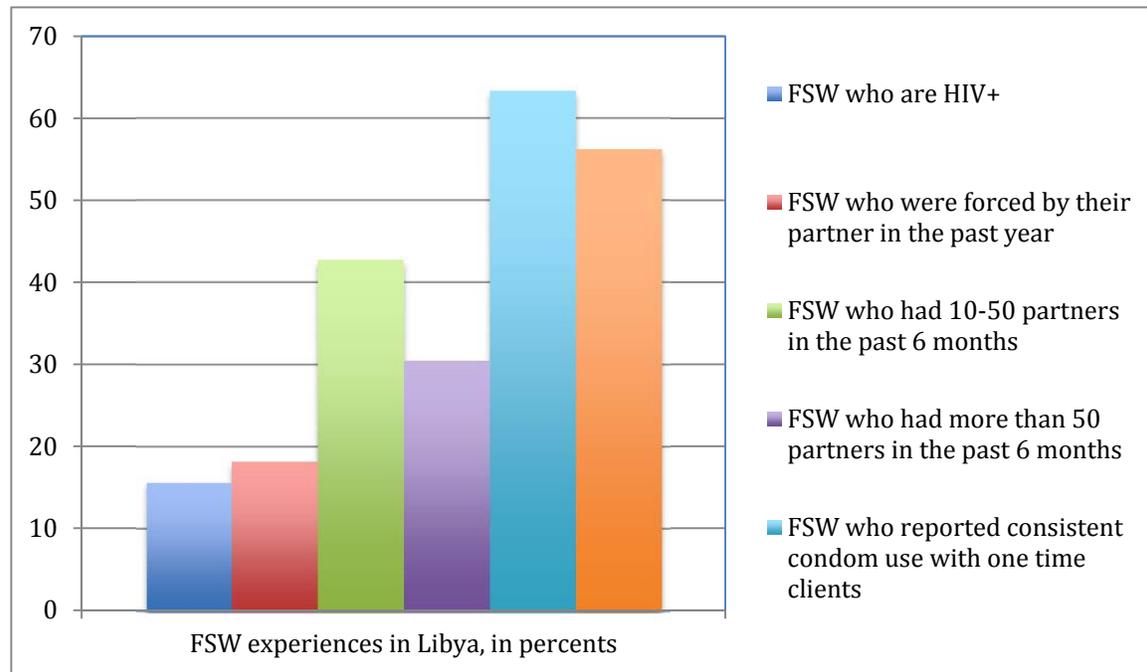
²⁹ IOM (2012). Youth Behavioural Survey Report: Somalia 2012. 27.



Surveyed FSWs show a largely inconsistent use of condoms and an early initiation age for commercial sex work. These factors combine to increase FSWs' risk of contracting STIs, including HIV. A study in Sudan shows a decline in condom use among FSWs, from 45% use at last sex in 2008 to 30.3% use at last sex in 2013; despite the low reported knowledge among Sudanese FSWs and lack of coverage of services, most FSWs surveyed did not believe themselves to be at risk.³¹ Sex workers who do not believe themselves to be at risk for contracting HIV may not seek out health services or information on prevention, possibly leading to an increased risk.

³⁰ Sajadi, L. Mirzazadeh, A., Navadeh, S., Osooli, M., Khajehkazemi, R., Gouya, M. M., Fahimfar, N., Zamani, O., Haghdoost, A. (2013). HIV prevalence and related risk behaviours among female sex workers in Iran: results of the national biobehavioural survey, 2010. *Sexually Transmitted Infections*, 89.

³¹ Elhadi, M., et al., 2013. Integrated bio-behavioural HIV surveillance surveys among female sex workers in Sudan. *Sexually Transmitted Infections*, 89.3-5.



32

Incarcerated populations are also at a high risk of contracting HIV due to risky sex behaviors and limited access to services and resources. A study on HIV prevalence and risky behavior among Iranian prisoners found a disproportionately high prevalence of HIV among prisoners who have ever injected drugs, at 8.1%. Putting this population further at risk, only 4.7% had used a condom at the time of last sex in prison and over half of PWID in prison had shared a needle in the past month.³³ HIV prevalence in prisons is disproportionately high; limited access to clean needles and condoms results in an increased risk for prisoners through the continuation of pre-incarceration risky behaviors in prison.³⁴

Mobile populations, due to their movement across the region, are at high risk of both contracting and spreading HIV. Mobile populations may include migrants, refugees, IDPs, truck drivers, nomads, and military personnel.³⁵ Mobile populations from military bases, workers who pass through the port and transport corridors, and refugees from neighboring countries have contributed to the HIV epidemic in Djibouti.³⁶ Non-regional female migrant workers are recruited at high rates to fill positions of domestic servitude, often without legal or social protection measures in place to protect them from the high

³² Valadez, J., et al., 2013.

³³ Navadeh, S., Mirzazadeh, A., Gouya, M. M., Farnia, M., Alasvand, R., & Haghdoost, A. (2013). HIV prevalence and related risk behaviours among prisoners in Iran: results of the national biobehavioural survey, 2009. *Sexually Transmitted Infections*, 89.

³⁴ Abu-Raddad, L.J., et. al, 2013a.

³⁵ Ibid, 133.

³⁶ Red Crescent Society (2008). Red Crescent Society of Djibouti: Integrated HIV and AIDS Programme, 2008-2010. 4.

levels of exploitation and violence this cohort experiences in the MENA region.³⁷ The impact of HIV on migrants will be discussed further below.

Sexual and Reproductive Health Education

Perhaps the element that most puts young people in the MENA region at risk of contracting HIV is the dearth of accessible, adequate, and effective sexual and reproductive health education and services. While the majority of school students have heard of HIV and AIDS, school based education on HIV and AIDS varies widely across the MENA region.³⁸ This range is shown in the results of the following three chronological surveys from different MENA countries. A 2005 survey found that of 13-15 year old students in Lebanon, 80% had never spoken to a teacher about sexual and/or reproductive health, and only one third knew how to avoid contracting HIV.³⁹ School based interventions seeking to improve students' knowledge and attitude towards HIV through health education have proven to have a positive short-term impact (in the course of research for this study, no knowledge and attitude studies emerged which showed a follow up assessment after a later period of time). A 2008 health education intervention assessing Egyptian medical students' HIV knowledge and attitudes found a positive impact in decreasing stigma and discriminatory attitudes towards PLHIV post-intervention.⁴⁰ These findings have been echoed in studies conducted in Libya, the UAE, and Yemen.^{41,42,43,44} If a short-term health education intervention can significantly improve MENA young people's HIV and AIDS knowledge and attitudes—then sustained educational programs can only have a greater impact.

Science-based sexual and reproductive health education is severely needed among MENA young people, where knowledge about HIV ranges from moderate to frighteningly low. The 2012 Somali Youth Behavioral Survey Report revealed a shockingly low level of HIV and AIDS knowledge and a high level of misinformation among respondents. Only 8.7% of male respondents and 13.4% of female respondents could correctly identify modes of transmission and rejected misconceptions on HIV transmission. Further, 94.8% of male young people and 90.2% of female young people surveyed believe HIV and AIDS to be a punishment from God. The low level of knowledge indicated in the survey results reveals a deep lack of understanding of HIV transmission and that Somali young people are at a greater risk of not knowing how to

³⁷ Abu-Raddad, L.J., et. al, 2013a, 134.

³⁸ Boneberger, A., Ruckinger, S., Guthold, R., Kann, L., & Riley, L., 2012. HIV/AIDS related knowledge among school-going adolescents from the Middle East and North Africa. *Sexual Health*, 9.

³⁹ Roudi-Fahimi, F. & El Feki, S., 2011. 24.

⁴⁰ El-Nawawy, A. N., 2008. The effect of health education on HIV knowledge and attitude of medical students. *The Egyptian Journal of Community Medicine*, 26(3).

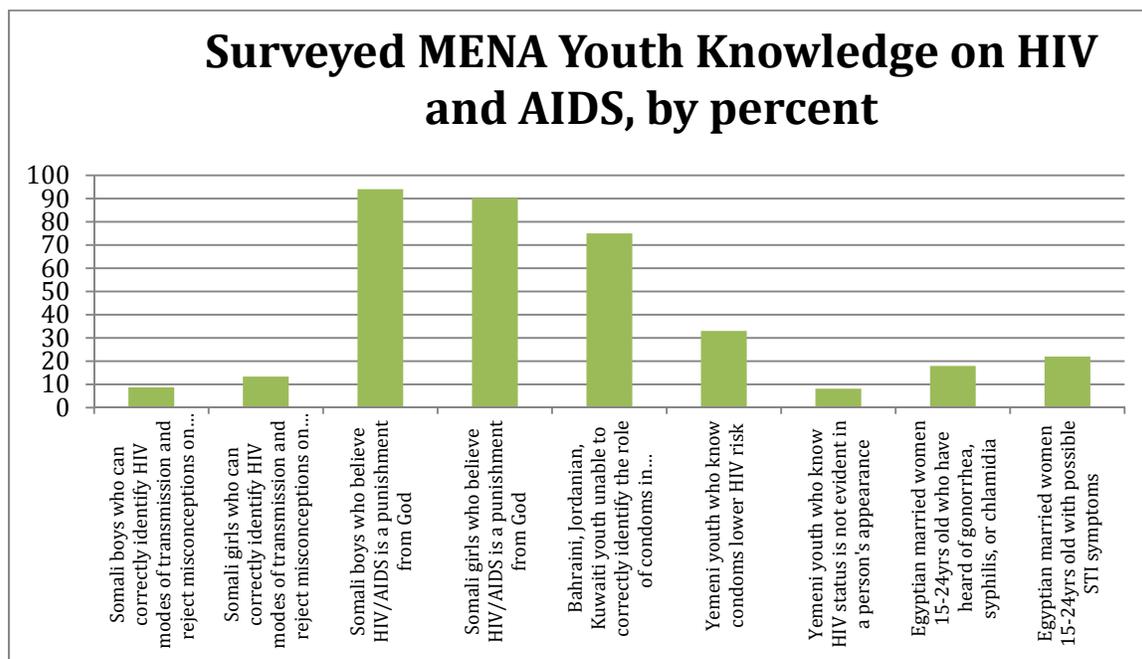
⁴¹ Barss, P., et al. 2009. The Effects of a Rapid Peer-based HIV/AIDS Educational Intervention on Knowledge and Attitudes of High School Students in a High Income Arab Country. *Journal of Acquired Immune Deficiency Syndrome*, 52(1).

⁴² Sugathan, S., and Swaysi, M., 2012. Knowledge about HIV/AIDS among Premedical Students in Misurata, Libya and the Effectiveness of a Health Education Intervention. *Journal of Community Medicine and Health Education*, 2(10).

⁴³ Al-Iryani, B., Basaleem, H., Al-Sakkaf, K., Crutzen, R., Kok, G., & van den Borne, B., 2011. Evaluation of a school-based HIV prevention intervention among Yemeni adolescents. *BMC Public Health*, 11(279).

⁴⁴ Badahdah, A.M., & Sayem, N., 2010. *Eastern Mediterranean Health Journal*, 16(8).

prevent its contraction.⁴⁵ Similarly, a survey of Jordanian, Bahraini, and Kuwaiti young people revealed major misconceptions about the transmission of HIV, in which more than 75% of respondents were unable to correctly identify the role of a condom in minimizing HIV risk.⁴⁶ Similarly, a survey of Yemeni young people found only a third of respondents knew condoms lower HIV risk, and only 8.2% knew that a person's HIV and AIDS status is not evident in their appearance.⁴⁷ The impact of a lack of knowledge about sexual and reproductive health is further seen in the result of a demographic survey for married Egyptian women ages 15-24, in which only 18% had heard of gonorrhea, syphilis, or chlamydia, but of which 22% reported abnormal vaginal discharge, genital ulcers or sores—possible symptoms of STIs. This is all the more dangerous as untreated STIs can increase the risk of HIV transmission.⁴⁸ Algeria, Iran, Morocco, Tunisia, and Bahrain are attempting to empower their young people through knowledge and have implemented human reproductive and health education classes in school curriculum.⁴⁹



VCT Service and Youth-Friendly Health Services

Further preventing MENA young people from taking control over their own health is the vast underuse of voluntary counseling and testing centers (VCT centers).

⁴⁵ IOM, 2012. 20.

⁴⁶ Badahdah, A.M. & Foote, C.E., 2010. Role of shame in the stigmatization of people with human immunodeficiency virus: a survey of female college students in 3 Arab countries. *Eastern Mediterranean Health Journal*, 16(9). 86.

⁴⁷ Badahdah, A.M. & Sayem, N., 2010.

⁴⁸ DeJong, J., Shepard, B., Roudi-Fahimi, F., & Ashford, L., 2007. Young People's Sexual and Reproductive Health in MENA. *PRB*. 2.

⁴⁹ Dejong, et. al., 2007. 3.

Although these centers are available in most cities, they remain widely underused for a number of reasons. VCT centers have expanded nationally throughout MENA region countries but are still limited to major cities, advantaging urban dwellers over rural or those of smaller towns and cities. This lack of proximity may act as a deterrent for general populations, but more so for young people who lack the independence and ability to travel to them. Young people who largely lack information about sexual and reproductive health may not even be aware of a need for information or their risk, and thus might not seek out VCT centers. Lebanon, Morocco and Algeria are exceptional in their efforts to make VCT services more available throughout their countries. Additionally, VCT centers may be underused due to “no or low coverage of HIV prevention programs among most-at-risk groups and vulnerable populations; lack of referrals to VCT centers; concerns that confidentiality may not be maintained; and the negative attitudes of service providers in the VCT centers.”⁵⁰ Youth-friendly sexual and reproductive health centers are rare—most reproductive health centers either serving, or being perceived to serve, married individuals.^{51,52} Indeed, Jordanian young people said “[t]hey were afraid of using the reproductive health services if they are not married because they are not sure about their acceptance by community members.”⁵³ Further, just as for high-risk groups, “social invisibility may be necessary for survival.”⁵⁴ Thus young people are afraid of being identified while seeking the services of VCT centers. Confidentiality and anonymity are key. Jordanian young people expressed a number of problems with the services offered and with the negative attitudes of the service providers.⁵⁵ In light of the inadequacies of the available health service centers, Jordanian young people vocalized a desire and need for counseling and reproductive health services.⁵⁶

Religious Interpretations of Prevention Strategies

Some countries’ interpretation of comprehensive reproductive health education and services as incompatible with religion puts young people at risk of undesirable health outcomes. It also poses a challenge to health workers seeking to promote positive health outcomes in the region. Conservative religious interpretations take issue with and disallow condom distribution and needle exchanges as HIV prevention strategies; to these, HIV prevention strategies must promote what they perceive to be religious and cultural values.^{57,58} However, it is noted that there are competing interpretations of what approaches are (and are not) compatible with religion. The effectiveness of some strategies in reducing HIV transmission that are religiously sanctioned may not be

⁵⁰ Roudi-Fahimi, F., & El Feki, S., 2011, 48.

⁵¹ Khalaf, I., Abu Moghli, F., & Froelicher, E.S., 2009. Youth-friendly reproductive health services in Jordan from the perspective of the youth: a descriptive qualitative study. *Nordic College of Caring Science*.

⁵² Roudi-Fahimi, F., & El Feki, S., 2007, 4.

⁵³ Khalaf, I., et al., 2009, 4.

⁵⁴ UNAIDS 2013b. 25.

⁵⁵ Khalaf et. al., 2009, 5-6.

⁵⁶ Ibid, 4.

⁵⁷ Madani, T., Al-Mazrou, Y.Y., Al-Jeffri, M., & Al Huzaim, N.S., 2004. Epidemiology of the human immunodeficiency virus in Saudi Arabia; 18-year surveillance results and prevention from an Islamic perspective. *BMC Infectious Diseases*, 4(25). 7-8.

⁵⁸ Sultanate of Oman (2012). Country Progress Report: Global AIDS Response Progress Report 2012.

effective.⁵⁹ In the absence of effective prevention strategies that are found to be compatible with various countries' interpretation of religion, young people are at greater risk of not being able to prevent the spread of HIV.

Conflict and Economic Downturn

Across the MENA region, there exists a disparity between countries in their political stability and in their economic prosperity. The political upheavals of the Arab Spring and the ongoing conflicts in other MENA countries have resulted in the economic downturn of several MENA countries and “[t]he spread of HIV is hastened by migrations, conflicts, and economic upheavals that upset social stability.”⁶⁰ In countries experiencing economic hardship, young people have had to delay marriage—the traditional time of sexual initiation.^{61,62,63,64} This delay in marriage may give rise to increased risky sexual behavior.⁶⁵ The confluence of delayed marriage—and ensuing socially unsanctioned sexual behaviors that may be risky—and a lack of strong knowledge of sexual and reproductive health leaves young people unprepared to protect themselves from HIV. A new, obscure trend is that of ‘Urfi’ marriages, whose rise may be related to the delay in permanent-marriage age. ‘Urfi’ marriage is a temporary marriage that is usually secret; its duration, frequency, and reasons are largely unknown—leaving it a possible opportunity for risky sexual behaviors.^{66,67} Research and data on this phenomenon is scarce and needs to be further explored.

Migration is one of the major results of both conflict and economic misfortune and plays an enormous role in the spread of HIV.⁶⁸ Forced migrants, migrant workers, and their spouses are vulnerable populations for contracting and spreading HIV.^{69,70} Many MENA countries have both out-migrant populations and in-migrant populations, as well as urban-rural and urban-urban migration patterns; these populations and their spouses will certainly include young people making migration another factor putting young people at risk of HIV.^{71,72} Additionally, the marginalization of migrants and a lack of services geared towards their needs make them even more vulnerable to HIV.⁷³ An

⁵⁹ Madani, T., et al., 2004.

⁶⁰ McGirk, J., 2008, 279

⁶¹ Roudi-Fahimi, F., & El Feki, S., 2011.

⁶² Alkhasawneh, E., Ismayilova, L., Olimat, H., & El-Bassel, N., 2012. Social and Behavioural HIV/AIDS research in Jordan: A systematic review. *Eastern Mediterranean Health Journal*, 18(5).

⁶³ UNFPA, 2012, 5.

⁶⁴ UNDP, 2006, 72.

⁶⁵ UNFPA, 2012, 6.

⁶⁶ Roudi-Fahimi, F., & El Feki, S., 2007, 5.

⁶⁷ UNFPA, 2012, 6.

⁶⁸ Roudi-Fahimi, F., 2007. Time to Intervene: Preventing the Spread of HIV/AIDS in the Middle East and North Africa. *PRB*. 3.

⁶⁹ Abu-Raddad, L.J., 2010b, 3.

⁷⁰ Shawky, S., Soliman, C., Kassak, K., Oraby, D., El-Khoury, D., Kabore, I., 2009. HIV Surveillance and Epidemic Profile in the Middle East and North Africa. *Journal of Acquired Immune Deficiency Syndrome*, 51(S3).

⁷¹ Remien, R.H., Chowdhury, J., Mokhbat, J.E., Soliman, C., El Adawy, M., El-Sadr, W., 2009. Gender and Care: Access to HIV Testing, Care and Treatment. *Journal of Acquired Immune Deficiency Syndrome*, 51(S3).

⁷² Abu-Raddad, L.J., et al., 2010a.

⁷³ Pereznieto, P., et al., 2011, 1.

additional product of both conflict and migration is the increase in female sex workers, another vulnerable, marginalized population at risk of HIV.⁷⁴

Gender Disparity

Gender plays a strong role in health outcomes in the MENA region, where “gender is the dividing line in knowledge, behavior, and practices.”⁷⁵ Strikingly, MENA was also ranked bottom globally for gender gap.⁷⁶ Traditional gender roles mean that “[w]omen in the MENA region are more vulnerable to HIV infection than men” and have less negotiating power in their relationships,⁷⁷ seen in the nearly 2:1 HIV prevalence ratio between young women and young men.⁷⁸ Further, the large age difference between married men and women—where women can be significantly younger than their husbands—places women at a greater risk, as their husbands may have had previous sexual partners and may be unfaithful during the marriage.⁷⁹ The inequality in negotiating power and sexual experiences put women at significant risk of contracting HIV from their husbands. Among Moroccan women living with HIV and AIDS, one half were infected by their husbands, and in Iran 75% of women living with HIV and AIDS were infected by their husbands—most of who are PWID.⁸⁰ Women in the MENA region are primarily at risk due to their partners’ behaviors. Women’s obstacles to both prevention services/information and treatment services/information is made difficult by obstacles of economic dependence, low literacy, and exposure to sexual coercion and violence—both of which may occur within her marriage. Indeed, one out of five women living with HIV and AIDS in the MENA region was physically assaulted in the last year, the majority of perpetrators being members of their household.⁸¹

Risky Behaviors

Data on injected drug users is scarce in the MENA region, though evidence shows the practice is on the rise. The region’s location makes it “a major source, route, and destination for the global trade in illicit drugs and injecting drug users (IDUs) is a persistent problem in MENA.”⁸² In a rare study of evidence of PWID in Libya, 87% of PWID were found to be HIV positive.⁸³ This study did not look exclusively at young people, and suggests that PWID young people may be an even harder to reach population.⁸⁴ The criminalization of injecting drugs, along with other risky behaviors such as commercial sex work and MSM, may dissuade those who partake in these activities to come forward for prevention education for fear of being identified and facing

⁷⁴ Abu-Raddad, L.J., 2010b, 3.

⁷⁵ Roudi-Fahimi, F., & El Feki, S., 2011, 27.

⁷⁶ Ibid, 14-15.

⁷⁷ Remien, R.H., 2009.

⁷⁸ UNICEF, 2011. Opportunity in Crisis: Preventing HIV from early adolescence to young adulthood. 8.

⁷⁹ Roudi-Fahimi, F., 2007, 4.

⁸⁰ Setayesh, H., et al., 2013.

⁸¹ UNAIDS, 2013b, 44-45.

⁸² Abu-Raddad, L.J., 2010b, 2.

⁸³ Mirzoyan, L., et al., 2013. New Evidence on the HIV Epidemic in Libya: Why Countries Must Implement Prevention Programs Among People who Inject Drugs. *Journal of Acquired Immune Deficiency Syndrome*, 62(5).

⁸⁴ Ibid, 5.

penalties.⁸⁵

While the MENA region is largely influenced by conservative, traditional sexual mores—which have been thought to be a protective factor against HIV—in reality, many young people are engaging in increasingly risky sexual behaviors. In a 2009 survey of 15-24 year old Tunisians, over 70% of young men said that their friends were having sex outside of marriage, and frequently with multiple partners. Further, just under 5% of sexually active male respondents volunteered that they had anal sex with men. This same survey found that more than 10% of female respondents had exchanged money for sex.⁸⁶ A 2008 study of risk behaviors of homeless MSM in Egypt, found that of the nearly 80% young respondents, 70.7% exclusively had sex with men, only 13.8% always used condoms, and 27.6% had never heard of condoms.⁸⁷ Transactional sex was found to occur also among Moroccan and Somali young people.^{88,89}

Unemployment

Economic downturns in the MENA region have left many young people unemployed. Indeed, “MENA youth today are the first generation of young people in recent history that are unlikely to fare better than their parents, despite having higher educational levels than their parents’.”⁹⁰ High rates of unemployment means more spare time for young people to socialize and possibly expose themselves to pressures for risky behaviors—as evidenced by the fact that many PWID are unemployed young people. Additionally, “the lack of engagement in meaningful activities is conducive to risky behavior in MENA.”⁹¹ Lack of opportunities may cause young people to lose hope in their future or create great frustrations for those in need of work—both of which may give rise to risky behaviors.

Challenges to addressing HIV/AIDS among Young People in the MENA region

Surveillance

The MENA region is traditionally conservative and at present experiencing repercussions of political instability. This confluence of socio-political realities presents serious challenges to effectively assessing and addressing HIV prevalence among regional young people. Perhaps one of the root causes of the region’s underestimation of HIV prevalence is its weak surveillance system. Recent studies have pointed to the MENA region’s near absence of effective surveillance systems as an Achilles’ heel for addressing the HIV epidemic.^{92,93,94} While a second generation surveillance has been

⁸⁵ Boutros, S., & Skordis, J., 2010. HIV/AIDS surveillance in Egypt: current status and future challenges. *Eastern Mediterranean Health Journal*, 16(3).

⁸⁶ Roudi-Fahimi, F., & El Feki, S., 2011, 26.

⁸⁷ El-Sayyed, N., et al., 2008, 907-909.

⁸⁸ Kouyoumjian, S.P., et al., 2013. The epidemiology of HIV infection in Morocco: systematic review and data analysis. *International Journal of STD & AIDS* 24(507).

⁸⁹ IOM, 2012.

⁹⁰ Abu-Raddad, L.J., et. al., 2010a, 126.

⁹¹ Ibid, 127-128.

⁹² Shawky, S., et al., 2012.

⁹³ Boutros, S., & Skordis, J., 2010.

⁹⁴ Kouyoumjian, S.P., et al., 2013.

recommended for the region, the majority of MENA governments rely on passive reporting—with active reporting only in place for pregnant women at antenatal clinics.⁹⁵ In MENA, the lack of active—or adequate—surveillance renders “the systems incapable of providing the information necessary to understand the magnitude, dynamics, and the speed of spread of infection to promptly respond to the epidemic status in these countries.”⁹⁶ Weak surveillance systems cause weak baselines and provide actors with an incomplete assessment of HIV prevalence, and the factors contributing to its spread. The World Bank finds that “[g]eneric and routine planning, competing priorities, limited human capital, and lack of monitoring and evaluation impede prevention efforts in the region. At the national level, policies remain inadequate and do not sufficiently engage with the epidemiological evidence.”⁹⁷

Research on Sex Behaviors

Also contributing to an incomplete baseline of knowledge on HIV/AIDS prevalence and proliferating factors is the absence of research on risky behavior among young people. In order for national and regional actors to respond effectively to the risky behaviors that are causing the spread of HIV and AIDS among MENA young people, they must understand what these behaviors are and who is engaging in them. Numerous studies exist on MENA young peoples’ knowledge of and attitude towards HIV and AIDS; however, few of them ask behavioral questions. In its national progress report for HIV and AIDS, the Omani government provides some indicator data on the behavior of young people, but excludes the question regarding sexual intercourse before the age of 15 as “culturally inappropriate”, but then adds that “there is anecdotal evidence from peer informants that first sexual experience before 15 years is not uncommon, especially for young men.”⁹⁸ In effect, the survey writers refuse to inquire about early sexual initiation, but then continue by acknowledging its existence. This sort of dissonance between what governments are willing to research and what they know occurs lays a faulty foundation for understanding the dynamics contributing to the HIV and AIDS epidemic. Further along the report states “no comment” for indicators on number of young people living with HIV and AIDS.⁹⁹ The governments of Tunisia and Algeria have included questions about sexual behavior in their national youth surveys—however these questions remain optional and therefore while giving a glimpse into young people’s behavior, provide an incomplete, and perhaps biased picture.¹⁰⁰ It has been suggested that some countries fear that “establishing an HIV national program to survey risk behaviors among the high risk groups may be perceived as an approval or legitimacy of these behaviors.”¹⁰¹ This worry might also extend to asking young people about their sexual behavior and result in the avoidance of collecting such information.

Political Upheavals

⁹⁵ Shawky, S., et al., 2012.

⁹⁶ Shawky, S., et al., 2012.

⁹⁷ Abu-Raddad, L.J., et. al., 2010b, 4.

⁹⁸ Sultanate of Oman, 2012, 5.

⁹⁹ Ibid.

¹⁰⁰ UNDP, 2006, 81.

¹⁰¹ Shawky, S., et al., 2012.

The MENA region is currently undergoing tremendous changes in leadership, which has caused uncertainty about the future, political instability, and waves of migration—either due to conflict or economic necessity. Indeed, “[t]he recent wave of popular protests in the region has substantially changed the political context for social protection programmes.”¹⁰² The changing and transitional nature of some countries’ governments impacts their ability to prioritize and effectively formulate and enact an adequate HIV and AIDS response. As governments change, heads of ministries may also change, resulting in a lack of consistent political national leadership in the HIV and AIDS response and making it difficult to “sustain efforts and produce results at the regional or national levels.”¹⁰³ Further, a holistic response by MENA governments to HIV and AIDS and young people is thwarted by the government’s institutionalized separation of the two issues. MENA governments generally make their Ministries of Health responsible for their HIV and AIDS response, squarely situating their response in a biomedical, single-sector approach;¹⁰⁴ policies related to young people tend to be fragmented¹⁰⁵ and issues concerning them are again parceled out to one ministry, the Ministry of Youth and Sports.¹⁰⁶ HIV and AIDS’s being relegated to the Ministry of Health discourages a multisectoral response to HIV and AIDS, which is strongly recommended.^{107,108,109}

The solely bio-medical approach to HIV taken by most MENA countries at best fails to capture and at worst ignores the multitude of socio-economic factors contributing to the continued spread of HIV in the region. Sudan and Djibouti’s response to HIV and AIDS exceptionally link different ministries together in their fight against HIV. Sudan’s National Strategy to combat HIV and AIDS includes participation from eight ministries: the Ministry of Health, the Ministry of Interior and Police Forces, the Ministry of Defense, the Ministry of Information and Communication, the Ministry of Youth and Sports, the Ministry of Guidance and Endowment, the Ministry of General Education, and the Ministry of Higher Education; it also included the Sudanese Women’s General Union.¹¹⁰ Similarly, in Djibouti, a World Bank program to strengthen the public sector response to HIV/AIDS included a health education component that involved 11 ministries.¹¹¹ UNFPA has recognized this need for connecting its HIV and AIDS response to socio-economic realities and asserts that “[a]ll strategies must be fully integrated and linked with the pillars of employability and civic engagement for a larger impact.”¹¹²

¹⁰² Perezniето, P., et al., 2011, 3.

¹⁰³ Roudi-Fahimi, F., & El Feki, S., 2011, 21.

¹⁰⁴ Shawky, S., et al., 2012.

¹⁰⁵ Roudi-Fahimi, F., & El Feki, S., 2011, 21.

¹⁰⁶ Roudi-Fahimi, F., & El Feki, S., 2011.

¹⁰⁷ Abu-Raddad, L.J., et. al., 2010b.

¹⁰⁸ Remien, R.H., 2009.

¹⁰⁹ UNFPA, 2012.

¹¹⁰ The Republic of Sudan, 2004. Sudan National Strategic Plan and Sectoral Plans on HIV/AIDS, 2004-2009. 3.

¹¹¹ El-Saharty, S., & Ali, O., 2006. An effective, well-coordinated response to HIV in Djibouti. *World Bank Global HIV/AIDS Program*.

¹¹² UNFPA, 2012, 19.

Migration

The movement of populations poses a challenge to creating longitudinal study designs as well as cultivating long-term, trust-building relationships with higher risk populations. Out-migrants may not know where to find health education resources or services, if they are at all available in their new countries; in-migrants may not be counted in national surveys or included in interventions.

Regional Research

While research on HIV has steadily increased in the MENA region in recent years, it remains inconsistent and spotty. Much research is conducted without the aim of publication in scientific journals, and consequently is not. This leaves a gap in accessible, scientifically sound research on HIV in the MENA region.¹¹³ In the MENA region, country-specific research production on HIV and AIDS does not correlate to countries' economic ability. While the Gulf countries enjoy strong and stable economies, their output of research on HIV and AIDS lags behind those of less economically able MENA region countries. While it is true that less prosperous countries have access to the Global Fund to Fight AIDS, Tuberculosis and Malaria, richer countries do not have the need for outside financial support in producing research.¹¹⁴ Oman's progress report on HIV and AIDS admits that HIV remains a low in government health priorities.¹¹⁵ In contrast, poorer countries such as Egypt, Iran, Sudan, and Yemen produce greater quantities of research. Additionally, research centered on young people tends to focus on older adolescents or older young people—excluding the younger part of the cohort of young people. The region lacks a focus on young people-centered research for key populations at higher risk. While age is always recorded, young people are not the focus of these studies.

Examples of local HIV/AIDS responses

Policy change

Oman's progress report for HIV prevention and response includes data on the rapidly changing sexual behaviors of the Omani population, including key populations at higher risk such as MSM, sex workers, and PWID. It finds that high-risk sex is common among Omani young people, including oral and anal sex among females and sex with domestic workers (nb: 'sex' with domestic workers may verge on or include rape and should be further investigated by human rights and health organizations). The progress report recommends the revision of legislation and policies that hamper HIV prevention, care, and treatment. While acknowledging that many high impact interventions for high-risk groups "remain sensitive in the Omani context", and thus difficult to gain political and financial support, it notes progress in research on the health of MSM and sex workers, and in providing community programs for PWID and MSM.¹¹⁶ The direction of

¹¹³ Saba, H., et al., 2013.

¹¹⁴ Ibid

¹¹⁵ Sultanate of Oman, 2012, 15.

¹¹⁶ Sultanate of Oman, 2012.

the progress report is promising in its expansion to include marginalized groups, although the inclusion of “No Comment” for data on young people’s AIDS prevalence is worrying.¹¹⁷

Life Skills, Education, Access

The Tunisian NGO Association Tunisienne du Planning Familiale implemented a peer education project giving female university students the life skills and knowledge needed to avoid unwanted pregnancies and STI transmission. Through various activities this program reached 6,000 young women and garnered a high level of support and interest from its participants. The evaluation recommended the value of working with male students as well to inform them of reproductive health issues.¹¹⁸

The Ishraq program teaches young girls from rural Egypt to read, succeeding in delaying their marriage age.¹¹⁹ While this program does not specifically promote HIV prevention, improved life skills help girls to better navigate and negotiate their future relationships, and could work as a protective factor against HIV. This supports the recommendation that limiting HIV prevention efforts to a bio-medical model misses out on addressing the socio-economic factors contributing to the spread of HIV.

School-based peer health education interventions have proven to be widely successful across the MENA region. Every report reviewed for this study revealed an increase in knowledge and positive behavior among students—from grade school students to graduate school students—post-intervention.^{120,121,122,123,124,125}

Iran has faced HIV head on with comprehensive responses to the epidemic. It promotes the use of condoms through condom distribution in prisons and widespread condom availability.¹²⁶ Further, acknowledging that PWID are the main source of infection in Iran, the government has implemented programs to distribute clean needles both inside prisons (where there is a high rate of PWID) and to the general public. Early on, Iran recognized the importance of sexual and reproductive health education and starting in the mid-1990s implemented mandatory courses on population and family planning for all university students, which include lessons on condom use to prevent HIV transmission.¹²⁷ It recently began offering a reproductive health course for high school seniors as well.¹²⁸ It also runs mandatory pre-marital counseling for couples about family planning, in which HIV is covered and the couple receives information about locations for family planning services.¹²⁹ In its attempts to promote safe sex, the Iranian

¹¹⁷ Ibid, 5.

¹¹⁸ Roudi-Fahimi, F., & El Feki, S., 2007, 5.

¹¹⁹ Roudi-Fahimi, F., & El Feki, S., 2011, 8.

¹²⁰ Sugathan, S., & Swaysi, M., 2012.

¹²¹ El-Nawawy, A. N., 2008.

¹²² Sugathan, S., & Swaysi, M., 2012.

¹²³ Nasir, E.F., Astrom, A.N., David, J., & Ali, R.W., 2008. HIV and AIDS related knowledge, sources of information and reported need for further education among dental students in Sudan—a cross sectional study. *BMC Public Health* 8(286).

¹²⁴ Barss, P., et al., 2009.

¹²⁵ Al-Iryani, et al., 2011.

¹²⁶ Roudi-Fahimi, F., 2007, 3.

¹²⁷ Roudi-Fahimi, F., & El Feki, S., 2011, 31.

¹²⁸ Roudi-Fahimi, F., 2007, 3.

¹²⁹ Roudi-Fahimi, F., & El Feki, S., 2011, 35.

government has directed its health centers not to inquire into the marital status of young people requesting contraception.¹³⁰

Youth-Friendly Services

In an effort to promote healthy outcomes for their young people, Tunisia and Egypt have implemented youth-friendly services.¹³¹ Tunisia has established health centers for young people, regardless of their marital status, located throughout the country as well as school health clinics.¹³² A Moroccan NGO used young people's input to remodel its clinics to make them more youth-friendly. Trainings were held to bolster staff and ensure youth-friendly approaches, and also to train young people in sexual and reproductive health. The clinics function as centers for discussion, socializing, and life-skills building for young people in Morocco—giving them a safe space to explore topics that are societal taboos. Parents are supportive of the centers, noting that these positive spaces have strengthened their children's outlooks and helped build confidence.¹³³ The psychosocial dynamic of sexual and reproductive health should not be underestimated, especially in a region where many sexual activities are highly stigmatized.

Online resources

Local online resources hold great promise as discreet, online tools for health promotion. The Moroccan site Association Marocaine de la Planification Familiale (www.ampf.org.ma/) proved to be both updated and full of information for visitors. Similarly, an online initiative by the Lebanese University St. Joseph (<http://infosantejeunes.usj.edu.lb/>) provides visitors with a variety of health information, including HIV and AIDS and is up-to-date. The Tunisian Office National de la Famille et de la Population (<http://www.onfp.nat.tn/>) offers a few current links to visitors. These sites have great potential for the MENA region's young people, as Internet use is increasing exponentially across the region.¹³⁴ These sites could be further invested in to incorporate more dynamic features that would keep young people interested in learning about health. Online technology is evolving and developing rapidly, and online information sources could benefit from using some of that technology.

Mobile Services

Morocco has implemented mobile testing centers to increase its national coverage.¹³⁵ In Egypt, in conjunction with their fixed VCT centers, mobile VCT centers have shown to have great success in reaching young people. In a recent evaluation of Egypt's VCT centers, more under-20 year olds visited mobile VCT centers than fixed clinics, although both types of centers received high attendance from young people under-30. Over one third of male VCT visitors went because of a risky sex behavior, and 17% because of injecting drug use. Women's reasons for visiting were also primarily due to a risky sex behavior, followed by a new sex partner and nearly 100% of visitors

¹³⁰ Roudi-Fahimi, F., 2007, 6.

¹³¹ Roudi-Fahimi, F., & El Feki, S., 2011, 49.

¹³² Roudi-Fahimi, F., 2007.

¹³³ IPPF (2012). Voices from Morocco. Changing Lives: Issue 2. 1-2.

¹³⁴ Asda'a Burston-Marsteller, 2013.

¹³⁵ Roudi-Fahimi, F., & El Feki, S., 2011, 48.

intended to tell others about the center.¹³⁶

Hotlines

Anonymous hotlines have proven to be an effective way of disseminating HIV information to the public across the MENA region. Egypt, Lebanon, Jordan, Oman, and North African countries have all implemented hotlines that provide anonymous, confidential HIV and AIDS information and counseling to callers. In a region where HIV is highly stigmatized, this is a valuable resource due to its accessibility and discretion.¹³⁷

MENA Stakeholders

MENA Young People

Young people are engaged in a multitude of HIV prevention programs and efforts across the MENA region. Their participation is invaluable to the success of HIV prevention programs for young people in the MENA region.

| Strengths | Opportunities |
|---|--|
| <ul style="list-style-type: none"> • Peer-to-peer trustworthiness • Knowledge of young people needs and how to communicate with young people • Dynamic | <ul style="list-style-type: none"> • Peer-to-peer education on health, vocational mentorship, preparation for job-seeking • Young people led health movements and networks • Young people's participation in creating online tools for health information communication |
| Weaknesses | Threats |
| <ul style="list-style-type: none"> • Maybe inexperienced • Limited time to invest in projects | <ul style="list-style-type: none"> • Migration • Government bodies may not take young people's input seriously |

MENA Governments

MENA region governments are generally lagging in prioritizing HIV and AIDS effective prevention and outreach programs.

| Strengths | Opportunities |
|--|---|
| <ul style="list-style-type: none"> • Credibility • Access to monetary funds or self sufficient • Knowledge of the population • Duty to protect and care for its citizens | <ul style="list-style-type: none"> • Potential for intra-ministry collaboration • Implement effective surveillance and monitoring system • Identification and mapping of |

¹³⁶ Kabbash, I.A., Hassan, N.M., Al-Nawawy, A.N., Attalla, A.A., & Mekheimer, S.I., 2010. Evaluation of HIV voluntary counseling and testing services in Egypt. Part 1: client satisfaction. *Eastern Mediterranean Health Journal*, 16(5).

¹³⁷ UNDP, 2006, 83.

| | |
|--|---|
| and others within its borders | vulnerable populations <ul style="list-style-type: none"> • Regular nation-wide surveys to establish baselines • Include specific HIV strategy for young people |
| Weaknesses | Threats |
| <ul style="list-style-type: none"> • Reluctance to embrace effective harm reduction strategies • Criminalization of risky behaviors (MSM, PWID, FSW) • Exclusion of migrant, refugee, and other marginalized communities from data collection and protection policies • Policies are not specific to the needs of young people • Policy designs do not include young people's input | <ul style="list-style-type: none"> • Political instability, possible change of governments |

International Organizations

International health organizations have contributed to capacity building and implementation of effective prevention strategies for some MENA countries.¹³⁸ The World Bank's Djibouti HIV prevention strategy sought to strengthen public sector response to HIV and AIDS. It entailed a multisectoral response to HIV to reinforce health education and capacity building for local NGO. The program involved 11 ministries and targeted high-risk groups through condom distribution, health education, and increased support for PLHIV. Training 500 religious, community, and political leaders of HIV, the program saw the growth in VCT attendance and an increase in HIV testing, as well as a significant improvement in young people's knowledge of HIV transmission.¹³⁹

UNFPA's strategic framework for sexual and reproductive health promotion is holistic and comprehensive in its approach. A partnership meeting with young people was conducted to identify the issues most pressing for the population—importantly, UNFPA included vulnerable young people in the planning process, consulting marginalized, high risk, internally displaced, uneducated, and unemployed young people. Through these informational meetings, UNFPA was able to identify a three-pillar approach to positive health outcomes for young people, and the four levels on which these pillars must be implemented. UNFPA concluded that “[w]ith young people in the Arab States experiencing social, economic, sexual and political exclusion at the same time, they cannot become productive members of society.”¹⁴⁰ UNFPA determined that effective programming must equally include promoting employment/livelihood, sexual and reproductive health, and civil engagement. Further, each priority must be approached on the level of policy advice advocacy; data and research; information and education; and

¹³⁸ Saba, H., et. al, 2013.

¹³⁹ El-Saharty, S., & Ali, O., 2006.

¹⁴⁰ UNFPA, 2012, 5.

services.¹⁴¹ UNFPA's programming finds the importance of integrating sexual and reproductive health into advocacy and expanding data and research through the use of online tools, surveys, and mapping out marginalized communities. Additionally, it promotes young people's participation in designing humanitarian response programs—a key point for peer-to-peer humanitarian assistance. It also advocates for peer counseling strategies, peer support and peer mentoring for young people in humanitarian settings.¹⁴² Integral to UNFPA's approach is its inclusion of young people as planners of and active participants in the holistic programs designed for their health improvements.

| | |
|--|--|
| Strengths | Opportunities |
| <ul style="list-style-type: none"> • Financial security • Experience • Well connected internationally • Many resources | <ul style="list-style-type: none"> • Programs can build upon best practices and lessons learned • Strengthening and increasing network |
| Weaknesses | Threats |
| <ul style="list-style-type: none"> • Bureaucracy for decision making • May have top-down approach • May not take into account local knowledge/expertise | <ul style="list-style-type: none"> • May be seen as outside/foreign influence |

Regional Organizations

Y-PEER is a peer educational program initiated by UNFPA, which has regional networks of young people around the world, including from the MENA region. It promotes young people's participation in sexual and reproductive health education, including HIV and AIDS through national youth development strategies; increased access to information, knowledge, and services on sexual and reproductive health; sharing lessons learned across borders and between cultures; standards of practice and improved training resources for peer educators; strengthening the knowledge base of peer educators and trainers of trainers.¹⁴³ This program has created a strong network of peer-educators across the MENA region that, through various educational activities, is able to strengthen local knowledge around sexual and reproductive health and HIV and AIDS issues among regional young people.

| | |
|---|---|
| Strengths | Opportunities |
| <ul style="list-style-type: none"> • Proven experience • Effective education strategies • Young people's participation on all levels • Local/regional | <ul style="list-style-type: none"> • Increase young people's empowerment • Create new approaches to promoting healthy behaviors and knowledge • Strengthen young people's participation throughout countries |
| Weaknesses | Threats |
| <ul style="list-style-type: none"> • Chapters not available in every country | <ul style="list-style-type: none"> • None |

¹⁴¹ Ibid, 11.

¹⁴² Ibid, 20.

¹⁴³ Y-Peer Website (2013) <http://38.121.140.176/web/guest/about-ypeer>

| | |
|---|--|
| <ul style="list-style-type: none"> • May not be able to reach young key populations at higher risk | |
|---|--|

The Regional Arab Network Against AIDS (RANAA) has responded to AIDS in the region by creating a resource base for AIDS activists, educators, and workers across MENA. It has effectively adopted the role of regional hub providing resources for different actors around HIV and AIDS in the MENA region. This is especially important in the absence of effective and adequate monitoring and surveillance systems. Beyond research, it provides members with education and training tools to promote positive health behaviors and HIV prevention in their communities.¹⁴⁴

| Strengths | Opportunities |
|--|--|
| <ul style="list-style-type: none"> • Strong in regional resources and information • Regional | <ul style="list-style-type: none"> • Strengthen regional networks • Strengthen regional resources • Incorporate a young person-centered focus to their work |
| Weaknesses | Threats |
| <ul style="list-style-type: none"> • Not young people-oriented • Not activity oriented | <ul style="list-style-type: none"> • None |

The MENA Harm Reduction Association (MENAHR) includes prevention of HIV and AIDS in their goal of harm reduction across the region. MENAHR is unique in that its harm reduction approach contextualizes HIV and AIDS not in a biomedical model, but as an outcome of risky behaviors such as drug use and from a public health and human rights framework. The organization promotes advocacy and capacity building on the levels of government and civil societies, as well as promoting tolerance and improved coverage of harm reduction services.¹⁴⁵

| Strengths | Opportunities |
|---|--|
| <ul style="list-style-type: none"> • Strong in regional resources and information • Harm Reduction approach • Public Health and Human Rights framework • Regionally known and respected | <ul style="list-style-type: none"> • Strengthen regional networks • Strengthen regional resources • Incorporate a young person-centered focus to their work • Shift HIV discourse away from biomedical model to socio-economic factors |
| Weaknesses | Threats |
| <ul style="list-style-type: none"> • Not young people oriented | <ul style="list-style-type: none"> • None |

Local/National Organizations

¹⁴⁴ RANAA Website (2013) <http://www.ranaa.net/new/index.php>

¹⁴⁵ MENAHR Website (2013) <http://www.menahra.org/en/>

Across the MENA region, multitudes of local and national organizations are working to prevent the spread of HIV and promote young people's health.

| Strengths | Opportunities |
|---|---|
| <ul style="list-style-type: none"> • Local knowledge/expertise • Trust of local community | <ul style="list-style-type: none"> • Capacity building • Build ties and common goals between national/local organizations to avoid duplication of work • Ensure young people's participation |
| Weaknesses | Threats |
| <ul style="list-style-type: none"> • May not be young people oriented • May be funding-insecure | <ul style="list-style-type: none"> • May be subject to political upheavals |

III. Gaps

The MENA region's surveillance systems are found to be inadequate and ineffective. Improving countries' surveillance systems is critical in the fight against the spread of HIV. A country must understand the extent of the epidemic, the factors contributing to its spread, and the populations it affects most in order to design effective programs to combat it.

Perhaps the most glaring and pressing gap in research at the present moment is that on the effect of the political upheavals of the Arab Spring on HIV services, HIV transmission, and HIV prevention. It is of great urgency to understand (with the many changes of government) which services are still in place, which have been changed and how these political changes may impact the socio-economic factors that give rise to risky behaviors and in turn the spread of HIV.

Research on the knowledge, attitudes, and behaviors of marginalized and high-risk communities—especially young people within those communities—is lacking across the MENA region. Understanding the dynamics affecting these populations' relationship with HIV is crucial to preventing the spread of HIV intra-nationally as well as regionally, as these groups may be subject to migration.

Further, MENA countries' national strategic plans on HIV and AIDS largely do not specifically address the needs of their young people. They overlook the special, diverse factors contributing to young people's risks with HIV. Overlooking the needs of young people in general means they also do not strategically plan for HIV experiences with high-risk and vulnerable young people.

Research on the knowledge, attitudes and behaviors among even younger people is scarce. The majority of these studies focus on older high school students, college students, or graduate students. While younger people may not be engaging in risky behavior or sexual relations, understanding their perspectives and experiences is important in painting the clearest picture possible of factors affecting young people and HIV.

Local NGOs appear to focus mostly on awareness raising and educational campaigns, and not research. However, they are in a unique position of holding local

knowledge and trust within the community and could hold an advantage in prioritizing and executing research questions.

IV. Recommendations

Program Recommendations

1. **Use television as a resource for education on HIV.** Young people repeatedly reported that they receive most of their information from TV^{146,147,148} and have cited TV as a potential source of information about youth-friendly services.¹⁴⁹ This is a useful and powerful tool in educating young people about HIV: short informational advertisements about HIV can be passively taken in by young people as they watch their shows—removing the stigma or suspicion they might face if they were to seek out information actively. Additionally, TV reaches a wide audience, including marginalized young people.¹⁵⁰ TV shows have used their popularity before to weave educational messages into their storyline; this might be an option for the MENA region, especially during Ramadan drama series. The potential for promoting health education and information through TV cannot be overemphasized.
2. **Implement school-based sexual and reproductive health education class.** This is critical in light of the high levels of misconceptions around HIV transmission, lack of knowledge, negative attitudes, and risky behaviors report on young people. This must be done with local leadership to ensure a culturally appropriate approach is taken, however the classes should be scientifically based. The majority of Qatari students surveyed indicated that they believe HIV could be discussed in school.¹⁵¹
3. **Promote the production of more comprehensive research on knowledge, attitudes, and behaviors—with a special emphasis on marginalized and high-risk young people.** Capacity building for research teams may be needed to produce research to be published in journals. Published research allows for a greater dissemination of data and information, empowering other researchers and program and policy makers in their work. Capturing the experiences of marginalized and high-risk young people is vital to any country's situational analysis.
4. **Ensure online sites and tools are dynamic and up-to-date.** The Internet is an increasingly useful tool and source of information for young people. Content should be dynamic and attention-keeping. Websites should make an effort to keep their content current and engaging, enticing young people to return to 'check what's new'.
5. **Educate and engage parents and religious leaders.** Religion remains an important cornerstone of young people's lives across the MENA region—however their attendance of religious services may not be regular.¹⁵² Therefore, using religious leaders as educators about HIV and AIDS may not be effective in reaching young

¹⁴⁶ Al-Khenji, A.H., Al-Kuwari, M.G., Al-Khal, A.L., & Al-Thani, A., 2012. University Students' Knowledge and Attitudes towards HIV/AIDS in Qatar. *Middle East Journal of Family Medicine*, 10(5).

¹⁴⁷ Al-Almaie, S.M., 2005. Acquired Immunodeficiency Syndrome (AIDS) Related Knowledge and Attitudes Among Male Students in Alkhobar, Saudi Arabia. *Journal of the Bahrain Medical Society*, 17(1).

¹⁴⁸ UNFPA (2009). Iraq National Youth and Adolescents Survey, 2009.

¹⁴⁹ Khalaf, I., et al., 2009, 9.

¹⁵⁰ Abu-Raddad, L.J., et. al., 2010a, 247.

¹⁵¹ Al-Khenji, A.H., et al., 2012.

¹⁵² Roudi-Fahimi, F., & El Feki, S., 2011, 30.

people directly, but may be an entry point to educating parents and older community members about HIV and working towards positive attitude changes, as these populations play important roles in the lives of young people. MENA young people report their parents to be the most influential figures in their lives¹⁵³ and a positive relationship with parents has been shown to be a protective factor against risky behavior.¹⁵⁴ However, most young people in MENA do not discuss sex with their parents for fear they will assume the children are partaking in “forbidden activities.”¹⁵⁵ Consequently, surveys examining parents’ attitudes towards sexual and reproductive health could prove helpful in understanding their baseline attitudes and concerns over the instruction of sexual and reproductive health. Training courses on how to talk to young people about risky behavior may also be beneficial.

Policy Recommendations

6. **Create young people-focused national and regional strategies.** Governments across the MENA region must create young people-focused national strategies for responding to HIV. Given the role mobile populations play in the spread of HIV across the region, regional cooperation between governments would create a stronger response system both nationally and regionally. A special emphasis must be placed on protecting vulnerable young people and mitigating the risks of high-risk young people.
7. **Implement effective surveillance systems in all MENA countries.** This may require capacity building and political persuasion for reluctant governments. The World Bank urges that

*MENA countries must develop robust surveillance systems to monitor HIV spread among priority populations. Effective and repeated surveillance of priority populations across MENA is key both to knowing conclusively whether HIV spread is indeed limited to priority populations and to detecting emerging epidemics among those groups at an early stage. This surveillance strategy offers a window of opportunity for targeted prevention at an early stage of an epidemic, when halting new infections among priority populations is a less resource-intensive exercise than having to bear the cost in the later stages of massive epidemics among some subpopulation groups.*¹⁵⁶
8. **Strengthen multisectoral responses to HIV.** The current biomedical approach employed by most MENA countries ignores the socio-economic factors contributing to the spread of HIV—allowing these factors to dangerously continue unchecked. Many factors come together to create and promote the risky behaviors that can lead to HIV contraction—a multisectoral response brings diverse efforts and expertise together to promote prevention and enable young people to make healthy choices.
9. **Work towards gender equality.** As gender plays a significant role in opening women up to greater risk of HIV contraction, all efforts to address HIV must be made in tandem with efforts to address gender inequality. All informational materials, promotions, and advocacy must be carried out with the promotion of inclusion, gender equality and gender and sexual diversity—and from a human rights approach.

¹⁵³ Asda’a Burston-Marsteller, 2013, 12.

¹⁵⁴ UNDP, 2006, 71.

¹⁵⁵ Roudi-Fahimi, F., & El Feki, S., 2007, 2.

¹⁵⁶ Abu-Raddad, L.J., et. al., 2010b, 4.

Gender equality may be part of information given in school-based sexual and reproductive health education classes, may feature in advertisements for youth-friendly services, and in written informational materials. Gender equality messages again may be promoted through TV-sources.

10. **Strengthening of health care facilities.** There exists a need to increase coverage of HIV prevention programs among high risk and vulnerable groups, as well as to strengthen the referral system to VCTs. Capacity building and sensitization training for VCT staff may help improve negative attitudes and strengthen their commitment to confidentiality. As mentioned earlier, TV and Internet feature as the main sources of information for young people, and this should be capitalized on for the dissemination of information about VCT services and youth-friendly services. The media can play a crucial role in reaching a wide audience and in protecting young people from being singled out for *seeking* sexual/reproductive health information. Clinics should ensure they are youth-friendly in their model, staff, and accessibility.

V. Conclusions

In a highly gendered culture, at a time of political upheaval and high levels of unemployment and migration, weak surveillance systems, coupled with governmental reluctance to implement reproductive and sexual health classes for its young people leave the MENA region ill prepared to deal with HIV within its countries. Iran and Tunisia are exceptional in their embrace of harm reduction and prevention measures against the spread of HIV. At the time of the publication of studies reviewed for this study, Egypt also had strong HIV prevention programs in place; however, like other countries affected by the Arab Spring and other ongoing conflicts, the status of these HIV programs is unknown. National strategies do not have a clear focus on young people or on marginalized communities—or on marginalized young people. Regional and local organizations present strong opportunities for new collaborations and partnerships, and international organizations present decades of experience and resources for implementing HIV prevention programs.

Rather than turning a blind eye to the realities of high risk behavior within their borders, MENA countries must look to implement the effective programs found across the region—especially in Tunisia and Iran—and modify them to fit their own particular culture, populations, and needs. With dedication, fortitude, and commitment, countries in the MENA region can strengthen their HIV prevention programs and give their young people a healthier future.

Acknowledgements

This report is produced by UNAIDS Regional Support Team for the Middle East and North Africa. We are grateful to the author, Ms. Shireen Tawil, for preparing the report.

References

- Abu-Raddad, L.J., Ayodeji Akala, F., Semini, I. Riedner, G. Wilson D., & Tawil, O., 2010a. Characterizing the HIV/AIDS Epidemic in the Middle East and North Africa: Time for Strategic Action. *The World Bank*.
- Abu-Raddad, L.J., Ayodeji Akala, F., Semini, I. Riedner, G. Wilson D., & Tawil, O. (2010b). HIV/AIDS in MENA: Assessment and Policy Recommendations. *World Bank Quick Notes Series*. November 2010, Number 34.
- Al-Almaie, S.M., 2005. Acquired Immunodeficiency Syndrome (AIDS) Related Knowledge and Attitudes Among Male Students in Alkhobar, Saudi Arabia. *Journal of the Bahrain Medical Society*, 17(1).
- Al-Iryani, B., Basaleem, H., Al-Sakkaf, K., Crutzen, R., Kok, G., & van den Borne, B., 2011. Evaluation of a school-based HIV prevention intervention among Yemeni adolescents. *BMC Public Health*, 11(279).
- Al-Khenji, A.H., Al-Kuwari, M.G., Al-Khal, A.L., & Al-Thani, A., 2012. University Students' Knowledge and Attitudes towards HIV/AIDS in Qatar. *Middle East Journal of Family Medicine*, 10(5).
- Alkhasawneh, E., Ismayilova, L., Olimat, H., & El-Bassel, N., 2012. Social and Behavioural HIV/AIDS research in Jordan: A systematic review. *Eastern Mediterranean Health Journal*, 18(5).
- Alliance Sudan, 2010. South Sudan Country Study.
- Asda'a Burston-Marsteller (2013). Our Best Days are Ahead of Us: Arab Youth Survey 2013.
- Badahdah, A.M. & Foote, C.E., 2010. Role of shame in the stigmatization of people with human immunodeficiency virus: a survey of female college students in 3 Arab countries. *Eastern Mediterranean Health Journal*, 16(9). 86.
- Barss, P., et al. 2009. The Effects of a Rapid Peer-based HIV/AIDS Educational

- Intervention on Knowledge and Attitudes of High School Students in a High Income Arab Country. *Journal of Acquired Immune Deficiency Syndrome*, 52(1).
- Boneberger, A., Ruckinger, S., Guthold, R., Kann, L., & Riley, L., 2012. HIV/AIDS related knowledge among school-going adolescents from the Middle East and North Africa. *Sexual Health*, 9.
- Boutros, S., & Skordis, J., 2010. HIV/AIDS surveillance in Egypt: current status and future challenges. *Eastern Mediterranean Health Journal*, 16(3).
- DeJong, J., Shepard, B., Roudi-Fahimi, F., & Ashford, L., 2007. Young People's Sexual and Reproductive Health in MENA. *PRB*.
- El-Nawawy, A. N., 2008. The effect of health education on HIV knowledge and attitude of medical students. *The Egyptian Journal of Community Medicine*, 26(3).
- El-Saharty, S., & Ali, O., 2006. An effective, well-coordinated response to HIV in Djibouti. *World Bank Global HIV/AIDS Program*.
- El-Sayyed, N., Kabbash, I.A., & El-Gueniedy, M. (2008). Risk Behaviours for HIV/AIDS infection among men who have sex with men in Cairo, Egypt. *Eastern Mediterranean Health Journal*, 14(4).
- Elhadi, M., et al., 2013. Integrated bio-behavioural HIV surveillance surveys among female sex workers in Sudan. *Sexually Transmitted Infections*, 89.
- GNPPLUS (2012) Young People Living with HIV.
<http://www.gnpplus.net/en/programmes/empowerment/young-people-living-with-hiv>
- IOM (2012). Youth Behavioural Survey Report: Somalia 2012.
- Johnston, L. G., Alami, K., El Rhilani, M. H., Karkouri, M., Mellouk, O., Abadie, A., Rafif, N., Ouarsas L., Bennani, A., & El Omari, B. (2013). HIV, syphilis and sexual risk behaviours among men who have sex with men in Agadir and Marrakesh, Morocco. *Sexually Transmitted Infections*, 89.
- Kabbash, I.A., Hassan, N.M., Al-Nawawy, A.N., Attalla, A.A., & Mekheimer, S.I., 2010. Evaluation of HIV voluntary counseling and testing services in Egypt. Part 1: client satisfaction. *Eastern Mediterranean Health Journal*, 16(5).
- Khalaf, I., Abu Moghli, F., & Froelicher, E.S., 2009. Youth-friendly reproductive health services in Jordan from the perspective of the youth: a descriptive qualitative study. *Nordic College of Caring Science*.
- Kouyoumjian, S.P., et al., 2013. The epidemiology of HIV infection in Morocco:

- systematic review and data analysis. *International Journal of STD & AIDS* 24(507).
- Madani, T., Al-Mazrou, Y.Y., Al-Jeffri, M., & Al Huzaim, N.S., 2004. Epidemiology of the human immunodeficiency virus in Saudi Arabia; 18-year surveillance results and prevention from an Islamic perspective. *BMC Infectious Diseases*, 4(25).
- McGirk, Jan. 2008. Religious leaders key in the Middle East's HIV/AIDS fight. *The Lancet*, v.372.
- MENAHRA Website (2013) <http://www.menahra.org/en/>
- Mirzoyan, L., et al., 2013. New Evidence on the HIV Epidemic in Libya: Why Countries Must Implement Prevention Programs Among People who Inject Drugs. *Journal of Acquired Immune Deficiency Syndrome*, 62(5).
- Nasir, E.F., Astrom, A.N., David, J., & Ali, R.W., 2008. HIV and AIDS related knowledge, sources of information and reported need for further education among dental students in Sudan—a cross sectional study. *BMC Public Health* 8(286).
- Navadeh, S., Mirzazadeh, A., Gouya, M. M., Farnia, M., Alasvand, R., & Haghdoost, A. (2013). HIV prevalence and related risk behaviours among prisoners in Iran: results of the national biobehavioural survey, 2009. *Sexually Transmitted Infections*, 89.
- Pereznieto, P., Marcus, R., & Cullen, E. Children and Social Protection in the Middle East and North Africa. Overseas Development Institute, Project Briefing 64, October 2011.
- RANAA Website (2013) <http://www.ranaa.net/new/index.php>
- Red Crescent Society (2008). Red Crescent Society of Djibouti: Integrated HIV and AIDS Programme, 2008-2010.
- Remien, R.H., Chowdhury, J., Mokhbat, J.E., Soliman, C., El Adawy, M., El-Sadr, W., 2009. Gender and Care: Access to HIV Testing, Care and Treatment. *Journal of Acquired Immune Deficiency Syndrome*, 51(S3).
- The Republic of Sudan, 2004. Sudan National Strategic Plan and Sectoral Plans on HIV/AIDS, 2004-2009.
- Roudi-Fahimi, F., 2007. Time to Intervene: Preventing the Spread of HIV/AIDS in the Middle East and North Africa. *PRB*.
- Roudi-Fahimi, F. and El Feki, S., June 2011. Facts of Life: Youth Sexuality and Reproductive Health in the Middle East and North Africa. *PRB*.

- Sajadi, L. Mirzazadeh, A., Navadeh, S., Osooli, M., Khajehkazemi, R., Gouya, M. M., Fahimfar, N., Zamani, O., Haghdoost, A. (2013). HIV prevalence and related risk behaviours among female sex workers in Iran: results of the national biobehavioural survey, 2010. *Sexually Transmitted Infections*, 89.
- Setayesh, H., Roudi-Fahimi, F., El Feki, S., & Ashford, L. (December 2013). HIV in the MENA Region: Low Prevalence, but not Low Risk. *PRB*.
- Shawky, S., Soliman, C., Kassak, K., Oraby, D., El-Khoury, D., Kabore, I., 2009. HIV Surveillance and Epidemic Profile in the Middle East and North Africa. *Journal of Acquired Immune Deficiency Syndrome*, 51(S3).
- Sugathan, S., and Swaysi, M., 2012. Knowledge about HIV/AIDS among Premedical Students in Misurata, Libya and the Effectiveness of a Health Education Intervention. *Journal of Community Medicine and Health Education*, 2(10).
- Sultanate of Oman (2012). Country Progress Report: Global AIDS Response Progress Report 2012.
- USAID (2012). Demonstrating Results of the 'Responding to MARPS in the MENA Region' Project using the Most Significant Change Methodology: Regional Report, April-June, 2012.
- UNAIDS (2013a). Ahead of the World AIDS Response Day 2013 UNAIDS Reports Sustained Progress in the AIDS Response.
<http://www.unaids.org/en/resources/presscentre/pressreleaseandstatementarchive/2013/november/20131120report/>.
- UNAIDS (2013b). 2013 Regional Report for the Middle East and North Africa.
- UNDP (2006). Arab Youth Strategizing for the Millennium Development Goals (MDGs).
- UNFPA (2009). Iraq National Youth and Adolescents Survey, 2009.
- UNFPA (2012). Young People in Arab States Changing the World for the Better: Strategic Framework for Programming on Young People.
- UNHCR (2013). Internally Displaced People Figures.
<http://www.unhcr.org/pages/49c3646c23.html>.
- UNICEF, 2011. Opportunity in Crisis: Preventing HIV from early adolescence to young adulthood.
- UNMDG (2013). UN Millennium Development Goals.
<http://www.un.org/millenniumgoals/aids.shtml>

Valadez, J., Berendes, S., Jeffery, C., Thomson, J., Ben Othman, H., Danon, L., Turki, A. A., Saffialden, R., & Mirzoyan, L. (2013). Filling the Knowledge Gap: Measuring HIV Prevalence and Risk Factors among Men who have Sex with Men in Tripoli, Libya. *PLOS ONE*.

World Bank (2013). World Bank Regional Data. <http://data.worldbank.org/region/MNA>.

Y-Peer Website (2013) <http://38.121.140.176/web/guest/about-ypeer>.