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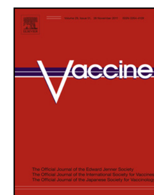

Review

Sexuality and Sexual Health: Constructs and Expressions in the Extended Middle East and North Africa

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ABSTRACT

The extended Middle East and North Africa (EMENA) region is the world region with the second youngest population, where globalization, migration, information technology, and political changes are contributing to the shaping of sexuality and sexual behaviors. Understanding the various sociocultural, demographic and public health dimensions of sexual and reproductive health of young people is fundamental to understanding the pattern of sexual behavior and the burden of sexually transmitted infections (STIs), including human papillomavirus-related diseases. New norms and forms of marriage have emerged to accommodate the changing trends in sexual behavior of premarital and extra-marital sex, as well as reports of increased prevalence of premarital penetrative and non-penetrative sexual behavior. Despite these trends, the burden of sexual illnesses remains low and is estimated at 7% of the general population being infected with curable STIs. Other STIs, such as herpes simplex virus 2, are also prevalent. The existing policies and health systems remain short of promoting youth reproductive and sexual health. Efforts should address establishing national preventive programmes, such as screening for STIs, primary prevention, comprehensive sexuality education, as well as youth-friendly services.

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1. Introduction: sexual health in the region

Extended Middle East and North Africa (EMENA) countries are the group of countries extending from the Atlantic Ocean, West to the borders of India in the East and should be discussed as one entity in this chapter. These include the following 21 countries:

- Middle East: Iraq, Jordan, Lebanon, Syria, and West Bank and Gaza
- Extended Middle East: Afghanistan, Iran, Pakistan, and Turkey
- Gulf States: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, and Yemen
- North Africa: Algeria, Egypt, Libya, Morocco (including Western Sahara), and Tunisia

Over the past 40 years, these countries had made remarkable progress in economic and social developments by improving life expectancy, and reducing maternal and child mortality. However, health indicators have remained non-reassuring, especially in relation to sexual and reproductive health (SRH)—mainly of youth—partly due to government policies addressing less attention to this issue in comparison to other human development issues [1]. The population of youth from the ages 15–24 years living in the Middle East and North Africa (MENA) region alone is estimated to be around 90 million (one in five people), indicating that this region has the second youngest population worldwide [2]. The population of young people is widely affected by varied socioeconomic, educational, cultural, and religious characteristics: globalization, migration, information technology, and political changes are contributing to the shaping of their sexuality and sexual behaviors. This is evident in vast internet use, longer school years, relative delayed age of first marriage and childbearing, widened biosocial gap (sexual puberty to marriage), and prevalence of premarital sexual relations [3]. In the EMENA region, formal strategies to meet young people's needs remain absent, except for few examples, such as the Youth-Peer Education Network (Y-PEER) initiative by the United Nations Fund for Population Activities (UNFPA). This initiative addresses SRH issues of young people and the school curriculum on reproductive health (RH) and gender in Lebanon [4]. This review will attempt to look within the specific EMENA context—based on current available data—to address young people's SRH behaviors and their consequences (mainly in relation to sexual behavior and sexually transmitted infections [STIs]).

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These behaviors remain culturally contested, and a comprehensive understanding of the various sociocultural, demographic and public health dimensions of SRH is fundamental to understand the burden of STIs, including HPV-related diseases. A review of the available studies, though scarce, communications, and non-published work from the EMENA will be undertaken.

2. Sociocultural characteristics shaping sexuality in EMENA

Islam continues to dictate many traditional practices and social habits, including SRH, for the majority of people living in EMENA countries. Islam acknowledges that sexuality should be practiced within a legal binding form of marriage, as a combination of pleasure and responsibility [5]. Any sexual act outside or before marriage is considered to be adultery, *"Zena"*, and is strongly penalized; a jurisdiction that had contributed to development of various sexual behaviors that will influence levels of SRH [5].

Influenced by religious beliefs and tradition and their commitment to international discourses on SRH, EMENA governments have attempted to develop strategies and policies for RH without including SH, mainly after the International Conference on Population and Development, and the Millennium Development Goals declaration in 2000 [6,7]. Overall, policies and strategies addressing youth SRH in relation to research and services are few and fragmented in the region, failing to meet demands related to sexuality and sexual health services [8]. Moreover, issues of forced marriages, "honor killing" (crimes of passion), "virginity testing", marital rape, domestic violence, gender-based violence, female genital mutilation, polygamy, and homophobia are still prevalent in the EMENA region, adding to the burden of SH and STIs [9,10].

At the same time, effects of modernization, globalization and social network venues on Arab and Islamic youth communities continue to be channeled through media where, for example, it is estimated that 95% of young people watch television (30% watch 3 hours a day), with 77 channels available by satellite [11]. The effect the media has on sexual behavior is clearly visible among the Turkish youth population, where media has become their main source of information [12].

In Lebanon, large-scale societal trends were brought about by a multitude of factors; three trends are particularly worth noting. First, singulate mean age at first marriage (SMAM) in Lebanon (32 years for males and 28.8 years for females) has risen to the highest in the Arab region (this region includes EMENA countries without the Extended Middle East ones) and one of the highest in the world [13], thus widening the biosocial gap and increasing vulnerability to varied sexual encounters and risk of STIs. Second, massive emigration occurred during the civil unrest (1975–1990) with an estimated cumulative total of about one-third of the population emigrating during the years of conflict. In a survey of entering university students (mostly unmarried) performed in 1999, it was found that those who had lived abroad for one year or more differed significantly from those who had not with regard to many health behaviors, including having ever had sexual intercourse [14]. Similar societal dynamic can be found in countries like Egypt, Morocco, and others to a certain extent [15]. These relatively liberal behaviors within conservative communities continue to "co-exist" in the EMENA region. An example of this is the secularity of the Turkish government, which provides for an open and free environment for people's behaviors and actions despite 97% of the Turkish population being Muslim [13].

3. Patterns of sexual behavior

3.1. Patterns of marriages

Adolescent marriage continues to exist in the EMENA region, with 12% of females aged 15–19 years married, the highest being in Yemen (26%) and the lowest in Tunisia (1%), reflecting again the diversity of this region. However, it is no longer universal. Adolescent marriage is also prevalent in Egypt, Iraq, Iran, Morocco, and Syria [16,17]. In an ongoing study from Egypt (initiated in 2008) with a nationally representative sample of 15,029 young people aged 10–29 years, 12% of young Egyptian women, aged 15–17 years were engaged, and an additional 2% were already married [18], while for women aged 18–24 years, 38% were married and 14% were engaged [3]. In Turkey, a cross-sectional survey carried in outpatient clinics and included 1007 women aged 14–77 years, of which 11.9% of adolescents between the ages of 15 and 19 years were married and 49.8% of women between 20 and 24 years were married [19] (Table 1). At the same time, rising age of marriage for both sexes is becoming more prevalent due to rising education, improved economic resources, and the influence of globalization [20]. The age at first marriage has increased most markedly in Libya and Tunisia, where today only 1% of young women ages 15–19 years are married. In Tunisia, similar to Lebanon, on average, women marry at age 27 years and men at age 32 years [13]. Early marriages have implications on SRH in relation to divorce, second marriage, and the possibility of added risk of contracting STIs. The prevalence of divorce among those females who were married at an early age (<17 years) is the uppermost among various age categories, and is around 2-fold the level among those married at ages 20 years or older [21].

It is argued that the increased age at first marriage and the increasing tolerance of expressions of sexuality in the face of non-tolerant laws, have propelled new "religious" legislation towards new norms and forms of marriage that are practiced in many EMENA communities, in an attempt to accommodate the changing trends in sexual behavior (premarital and extra-marital sex) within a religiously legitimate context. A good example is the *urfi marriage* (common law) in Egypt and other parts of the region [22]. *Urfi marriage*, usually hidden from families, is considered by many religious and legal institutions to be a pretext for premarital sex [23]. Another example includes temporary marriage *(muta'a)*, legitimate among the Shiia Muslims in Lebanon, Bahrain, Iraq, and Iran, encouraged by some religious people to help young people engage in legitimate sexual relations without social religious disapproval

Table 1
Early marriage patterns in some EMENA countries.

Reference	Country	Year of study	Study Population	Age (yrs)	% married (females aged [yrs])
Population Council, 2010 [3]	Egypt	2006	15,029	10–29	2% (15–17) 12%[a] (15–17) 38% (18–24) 14%[a] (18–24)
Biri A *et al.*, 2007 [19]	Turkey	2003	1,007	14–77	11.9% (15–19) 49.8% (20–24)
Tutelian M *et al.* 2006 [13]	Lebanon	2004	5,532	0–70+	2.5% (15–19) 18.1% (20–24)

[a] Percent engaged.

[24]. In this marriage, the couple specifies the beginning and end of the contract. In Egypt, the so-called “summer marriage” is reported between Egyptian girls who are married off to wealthy tourists from the gulf area in return for a price, but are often divorced at the end of the visit (end of summer). In the Gulf countries, “messyar marriage” *(jawaz al messyar*) is an arrangement in which a man marries without any of the housing and financial responsibility that a conventional Arab marriage generally requires of him [25]. These marriages usually take place in secret and, thus, the extent to which young men and women are having sexual relations outside of conventional marriages is not known. Anecdotal evidence suggests that such relationships, while a minority practice, may well be on the rise, adding to burden of unsafe sex practices and increased risk of STIs in the absence of any SH promotion or services [26–28].

3.2. “Penetrative” sexual behavior

Sexual activity before or outside marriage is sanctioned and penalized in the EMENA region, a fact that makes it difficult to document and research sexual behaviors and STIs. Available studies from the region show that premarital sexual behavior remains low, but is on the rise [29]. One of the earliest studies was conducted in Jordan. This was a survey study in which a national representative sample of 1,046 men and 1,096 women 15–24 years old were interviewed, revealing that 7% of young people reported having premarital sex, while 4% admitted to premarital sex in another national study among general population aged 15–30 years [30]. In Egypt, 26% of males and 3% of females aged 15–30 years reported having sexual intercourse at least once [31], a finding which is quite similar to another study from Lebanon, a country considered to enjoy more liberal values compared to the rest of EMENA countries [14]. In the inventory conducted by UNFPA on university students [32], about 17% of university students in Egypt report ever having sexual intercourse, and this percentage increased with age and male gender. The overall mean age at first intercourse was reported as 17 years for males and 20 years for females. In Lebanon, those reporting having at least one sexual activity varied from 15% in high school students to 24% in a study of entering university students, with a higher proportion of males than females reporting this [14]. More recently, data on youth sexual behavior have come from three EMENA countries (Lebanon, Tunisia, Turkey), depicting a rising trend in premarital sexual behavior compared to older studies. In Lebanon, a cross-sectional study performed in 2004 on 3,200 Lebanese aged 15–49 years, showed that 22.1% have premarital and extramarital sexual relations, 66.6% of them being between 15 and 24 years of age. Of those who reported having sex, 33.3% had their first sexual intercourse between the ages of 15 and 20 years. Moreover, around 40% of those between 15 and 24 years, reported having had sex with non-regular partners. Condom use was low (37%), particularly among those aged 15–24 years having regular and casual sex [33]. A more recent cross-sectional comparative study [34] involving 1,410 unmarried Lebanese students from 15 public and private university departments and campuses across the country found that 73.3% of male students and 21.8% of females reported a previous sexual relationship with vaginal penetration, indicating higher percentages than the previous study. Of those males reporting having sex, 86.1% used condoms (a higher use than that reported in previous studies), while 75.6% of females did not use contraception. In cases where contraception was not used, sex relations were non-penetrative (outercourse). The study also points that most of the subjects would not seek professional help for contraception, despite the presence of available health resources.

In Tunisia, a study of 1,200 unmarried out-of-school youth ages 15–24 years [35] revealed that more than 70% of males reported their friends were having sex outside of marriage, the majority with multiple partners. In relation to their own sexual experience, around 30% of men under the age of 20 years, and more than 60% aged 20 years and above, declared some non-specified sexual activity. These figures were lower for females (just under 10% for females under 20 years and just over 15% for those over 20 years). The average age for sexual debut was between ages 15 and 19 years, as reported by about 75% of the sexually active youth, with around 10% beginning sexual activity before age 15 years. In Turkey, empirical studies of the sexual activities of Turkish students 18 years of age and above, indicate that about half of unmarried male college students report that they have had sexual relations with the opposite sex, whereas the percentage drops to between 4% and 19% for college girls [36,37]. Overall, 66.2% of male and 8.5% of female university students reported having had premarital sexual intercourse [12,38]. No studies on youth sexual behavior were located from Pakistan and Afghanistan.

3.3. Non-penetrative sexual behavior (outercourse)

The religious and sociocultural importance given to virginity in the traditional value system in the EMENA region and its association with honor has surrounded premarital “hymen intactness” by a holy mark. Most females who lost their hymen are obliged to “restore” it before the wedding night or even earlier to “pass” virginity testing [39]. Many young girls discovered to be non-virginal are threatened by shame, family disgrace, and honor killing [40]. In Turkey and other EMENA countries, suspected premarital sex behaviors may oblige females to undergo hymen examinations “virginity testing”, compulsory marriages, or violence against women breaking the “tradition” [12]. As a result, premarital sexual relations are mostly restricted to practices that preserve the hymen in most EMENA countries. These practices include: Outercourse (sexual activity that does not include vaginal sex), anal sex, oral sex, mutual masturbation, and, at times, zoophilia [41].

Outercourse is believed to be the most prevalent sexual act and depending on variation of its practice, individuals may be at more or less risk for contracting certain STIs [42]. Close to 50% of sexually active Lebanese university male students and 60% of females, reported not using contraceptives because it was an outercourse sexual act [34]. It is believed that the majority of those who practice outercourse assume that it carries no risks; nevertheless, 34% of Lebanese university students [34] thought outercourse could cause pregnancy. In Tunisia, close to 5% of the sexually active men volunteered reporting having had experienced homosexual anal sex, although the question was not directly asked [43]. Observations from Obstetrics/Gynecology clinics in Lebanon point towards the prevalence of outercourse among non-married female clients [44].

4. Impact of sexual behavior

4.1. Burden of sexual illnesses

In the MENA region, each year an estimated 7% of the general population is infected with the four leading curable STIs: *Neisseria gonorrhoeea* (NG), *Chlamydia trachomatis* (CT), syphilis, or *Trichomonas vaginalis* (TV) [45]. As for the other STIs, herpes simplex virus 2 (HSV-2) is shown also to be prevalent in the region with varying estimates. In Jordan, one seroepidemiologic study found the prevalence of HSV-2 to be 53% among male university students [46]. Another study in Turkey investigating HSV-2 infections among 130 asymptomatic pregnant women found 63% prevalence among clinic attendees [47] (Table 2).

In an analysis on the prevalence of HPV in the EMENA region done by Seoud M [48], HPV prevalence rates were high, ranging from 0–25% in low-risk women with normal cytology and reaching 88% in those with genital warts and preinvasive and invasive

Table 2
Prevalence of HSV-2 in selected EMENA countries.

Reference	Country	Year of study	Study population	HSV-2 prevalence (%)
Zaki ME and Goda H [61]	Egypt	2007	62[a]	32%
Duran N *et al.* [47]	Turkey	2004	130 pregnant asymptomatic women	63%
Abuharfeil N and Meqdam MM [46]	Jordan	2000	750[b] university students	52.8% (males) 41.5% (females)

HSV-2: Herpes simplex virus-2.
[a] 50 patients with unexplained recurrent spontaneous abortions and 12 healthy pregnant women.
[b] 360 male and 390 female aged 18–24.

Table 3
Estimated HPV prevalence in selected EMENA countries.

Reference	Country	Year of study	Study population	HPV prevalence (%)
Mroueh AM *et al.* [50]	Lebanon	2002	1,026 women aged 18–26	4.9%
Lubbad AM and Al-Hindi AI [51]	Gaza	2007	423 pregnant women aged 16–50 years	13%
Al-Muammar T *et al.* [52]	Saudi Arabia	2007	120 subjects; family medical clinic attendees	31.6%

HPV: Human papillomavirus.

Table 4
STIs prevalence in selected EMENA countries.

Reference	Country	Year of study	Study population	STI prevalence (%)
Madani TA [54]	Saudi Arabia	1995–1999	39,049 STI cases reported to the Ministry Of Health	28.1% (Trichomoniasis); 14.2% (Gonococcal urethritis)
Al-Mutairi N *et al.* [55]	Kuwait	2003–2004	1,096 patients with symptoms suggestive of STDs	4.1% (Chlamydia); 31.5% (Gonorrhea); 23.6% (Nongonococcal urethritis)
Lubbad AM and Al-Hindi AI [51]	Gaza	2007	423 pregnant women aged 16–50 yrs	8.3% (Chlamydia)

STI: Sexually transmitted infection.

lesions. Women in the younger age group (20–24 years) had the higher prevalence rates. In Lebanon, about 2.2% of women in the general population are estimated to harbor cervical HPV infection at a given time [49]. Specific point estimates of HPV infection are variable across the EMENA countries. One study in Lebanon including 1,026 women aged 18–26 found HPV prevalence to be 4.9% [50]. Another estimate from a study among 423 pregnant women in Gaza was 13% [51]. In Saudi Arabia, prevalence of HPV infection was reported to be 31.6% among 120 family medical clinic attendees [52] (Table 3).

In Iran, STI prevalence rates range from 10–54% in men and women, CT being the most prevalent STI in both sexes [53]. In other EMENA countries, however, there are considerable variations in prevalence of aforementioned pathogenic agents. In Saudi Arabia, STI data reported to the Ministry of Health included 39,049 cases and showed prevalence of TV and gonococcal urethritis to be 28.1% and 14.2%, respectively [54]. A study in 2003–2004 in Kuwait investigated 1,096 patients with symptoms suggestive of STIs and found gonorrhea was present in 31.5% of patients, nongonococcal urethritis in 23.6% of patients and CT in 4.1% of patients [55] (Table 4).

The burden of STIs in the EMENA region indicates varied levels of sexual behavior and consequences. In this respect, the vague situation regarding sex work might amplify STI burden for both female sex workers and their clients. For example in Iran, 64% of gonorrhea cases were acquired through contacts with female sex workers, while in Kuwait 77% of clients at STIs clinics reported acquiring their infection from female sex workers [24]. Taking into consideration the cultural and traditional aspects of certain EMENA countries, the marriage-age gap (the worldwide phenomenon of women commonly marrying older men) is particularly pronounced in Arab societies, where one-quarter of recent marriages in Egypt and Lebanon had women at least 10 years younger than their husbands [23], who may thus be exposed to risk of STIs. In the past few years, research has revealed that 4% and 16% of women in Oman and Iran, respectively, were reported to have STIs. Studies in EMENA have found young age to be an important risk factor for STIs among married women. In both studies, women under age 25 years were twice as likely to have an STI as women age 25 years and older, who claimed never to have sex outside marriage [45,56].

Regarding young people and STIs in the EMENA, they are the most vulnerable population and contribute disproportionately to the STI burden in the region. In Lebanon, a study by National AIDS Programme (NAP) revealed that 6.7% of young people were told they have some kind of STI [33]. More than half of known STI cases in Egypt are among young and predominantly single adults. In Morocco, 40% of recorded STI cases are among young people ages 15–29 years. The dominant profile of STI clinic attendees in Tunisia is that of young single men with multiple sexual partners. Most reported STIs among clinic attendees in Kuwait also occurred among those in their 20s [57]. In Iran, 10% of all cases of STIs involve teenagers. In a recent community-based study from Lebanon [58], the presence of any reproductive tract infection (RTI) or STI was 28.8% and 23.5%, respectively.

5. Discussion and conclusion

The EMENA region is experiencing dynamic economic, political, and sociosexual changes that have an impact on all echelons of life, especially youth and youth SRH. Although population-based data remain lacking, the available studies continue to indicate that EMENA is a region of low STI prevalence, but with a rising trend. According to World Health Organization reports [59], the prevalence of STIs went from an estimated 10 million cases in the 1999 report to around 22.5 million cases over 6 years (1999–2005). This trend is observed for both curable and non-curable STIs, and across various age groups, gender, and social categories (students, clinic attendees) living in conservative, stable, and mostly monogamous communities. Regarding causal organisms, TV represents the highest percentage increase, reflecting the world trend (70% of the total increase in curable STIs); CT and NG are also widely prevalent. The prevalence of STIs varies by gender, where TV is more

prevalent in females and CT is more prevalent in males, possibly due to extramarital and more promiscuous sexual behavior of males within the sociocultural context of EMENA communities. The prevalence and rise of non-curable STIs, namely HSV-2 and HPV, are assumed to be linked to the global rise of oral and anal sex practice. In EMENA communities where virginity is highly protected, oral and anal sex practices, in addition to outercourse, are common practice. In this review, the prevalence of STIs, although low, has been shown to be on the rise, resembling global trends in certain situations, reflecting a similarity with the global patterns of sexual behavior of young people, such as, unprotected sex, premarital sex, and multiple partners [58,59]. However, other unique issues in the EMENA region, such as temporary marriages, a pattern which is similar to serial monogamy/polygamy, availability of unregulated sex work, absence of quality services and resources in reproductive and sexual health, and under-reporting and poor notification due to social stigma, are additional STIs risk factors, affecting prevention programmes and treatment strategies. This review is limited by the lack of population-based studies and national statistics on STI prevalence and incidence, in addition to the limitations of the individual studies included in this review. Despite these limitations, the available data reaffirm the importance of promoting youth RSH policies, preventive programmes, such as primary prevention through vaccination, screening for STIs, and school-based comprehensive sexuality education. It is essential that EMENA governments acknowledge the burden of STIs and design the appropriate preventive and screening programmes. Attempts to establish STIs counseling, situation analysis, and resource centers are being undertaken and established in countries like Iran and Lebanon [60].

Disclosed potential conflicts of interest

The author has disclosed no potential conflicts of interest.

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