KNOWLEDGE, ATTIUDES AND PRACTICES SURVEY HEALTHY LIFESTYLES



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This survey assessed current levels of knowledge about HIV among Palestinians, focusing particularly on young people, their attitudes towards people living with HIV, and their practices in protecting themselves from HIV.

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CONTENTS

| Executive Summary | 8 |
|---|----|
| 1. Introduction | 11 |
| 2. Literature review | 12 |
| 2.1 Prevalence and transmission of HIV in the region and in oPt | 12 |
| 2.2 HIV correlated issues in the region and in oPt | 20 |
| 3. Research Methodology | 22 |
| 3.1. Questionnaire Design | 23 |
| 3.2 Sample Design | 24 |
| 3.3. Field work team | 25 |
| 3.4 Training of field workers | 25 |
| 3.5 Data quality assurance | 25 |
| 3.6. Data processing and analysis | 26 |
| 4. Study Findings | 27 |
| 4.1 HIV Knowledge | 27 |
| 4.2. Attitudes towards HIV | |
| 4.3. Practices related to HIV | 42 |
| 5. Summary of comprehensive knowledge, attitudes and practices | 43 |
| 6. HIV correlated issues and healthy lifestyles of young people | 44 |
| 6.1. Injecting Drug Use | 44 |
| 6.2. Marriage Patterns | 46 |
| 7. Sexual reproductive health | 50 |

ACRONYMS

| AIDS: | Acquired immunodeficiency syndrome |
|-------|------------------------------------|
| HIV: | Human immunodeficiency virus |
| HLS: | Healthy living survey |
| IUD: | Intrauterine device |
| KAP: | Knowledge, attitude and practices |
| MENA: | Middle East and North Africa |
| MICS: | Multiple indicator cluster survey |
| MOH: | Ministry of Health |
| oPt: | occupied Palestinian territory |
| PFS: | Palestinian family survey |
| STD: | Sexually-transmitted disease |
| STI: | Sexually-Transmitted Infection |
| WHO: | World Health Organisation |



EXECUTIVE SUMMARY

In the occupied Palestinian territory (oPt), the human immunodeficiency virus (HIV) has infected less than one per cent of the general population. In 2010, there were 66 registered cases of HIV and AIDS among a population of 4.039 million, according to Palestinian MOH. This rate is low compared to other countries, however, there are fears that the number of infections could increase due to lack of information about HIV, cultural taboos in talking about certain issues, and the existence of key populations that are at higher risk of HIV exposure. The Palestinian Ministry of Health has reported "alarming signs of expansion" of the disease in the country (MoH, 2011).

In an effort to learn more about areas where intervention is needed, this report assesses current levels of knowledge about HIV among Palestinians, focusing particularly on young people, their attitudes towards people living with HIV, and their practices in protecting themselves from HIV.

To do so, it takes advantage of previous literature on the subject and two surveys – the Palestinian Family Survey/ Multiple Indicators Cluster Survey 2010 (MICS) and a Healthy Living Survey that complement each other in the age groups and information that they gathered¹.

Following are the report's main findings and a summary of its recommendations:

Knowledge about HIV and its transmission

1. Broadly, Palestinians know of HIV and how it is transmitted. More than 90 per cent of survey respondents, regardless of age, gender or location, knew that HIV is transmitted through sexual encounters, blood and contaminated injections. This is not improvement from a 2006 study, however, that found 95 per cent of single and married females aged 15-49 knew the risk of transmission through injectable drugs, 84 per cent knew about mother-infant transmission and 50 per cent knew about transmission through breastfeeding.

2. Moreover, gaps in comprehensive knowledge about HIV and transmission, as well as misinformation, persist, indicating that better information dissemination is needed.

- Few respondents had comprehensive knowledge, and this was particularly pronounced. Only 7.9 per cent of respondents met UN criteria for comprehensive knowledge and correctly identified that using condoms prevents sexual transmission of HIV; rejected the two misconceptions that HIV is transmitted by mosquitoes and by swimming in a public pool; and who also knew that a healthy-looking person can have HIV
- The protective role of condoms in HIV prevention was not known by an overwhelming majority (64.4 per cent for all surveyed), with youth aged 15-19 far less aware (58 per cent) than their elders aged 20-24 (68.1 per cent) and 25-29 (70 per cent).
- Only 34.8 per cent of all women surveyed knew that they can protect themselves from contracting HIV both by using condoms and having sex solely with one faithful uninfected partner.
- Misinformation about how HIV is transmitted prevails. Forty-eight per cent of respondents (44.4 per cent of women and 51.5 per cent of men aged14-49) thought that mosquitoes can transmit HIV (in 2006, 31.7 per cent of women aged15-49 thought thus). About half of those surveyed thought HIV could be spread by sharing toilet seats, or by kissing or hugging an infected person, 40 per cent thought HIV could be transmitted through public pools, approximately 25 per cent thought HIV could be transmitted by sharking hands, and 15 per cent thought HIV could be spread by sharing a public phone.

¹ Please note that MICS interviewed the following: Women 15-49: irrespective of marital status the questionnaire covered, HIV/ AIDs, General Health Issues and Anemia testing. Number of Women interviewed: 14,785; Youth questionnaire (15-29 years): Covers general characteristics, awareness and perception of family planning, health status, awareness about sexually transmitted diseases and reproduction. Number of Youth Interviewed: 4,405. Healthy Lifestyle Survey

Information sources

Most respondents (91.4 per cent), including youth aged 15-19 (89.9 per cent), reported getting most of their information about HIV from television, and they prefer this, especially in Gaza, where anonymous forms of information were most popular, including television, internet and radio, West Bank/East Jerusalem respondents, on the other hand, favoured receiving information from health providers. The efficacy of the information received on television, however, should be questioned, as the tendency on television to use "AIDS" to refer to both HIV and its manifestation appears to have clouded knowledge among respondents. The second source of information about HIV among youth aged 15-19 was school, where 83.3 per cent said they had learned about HIV.

Negative attitudes towards those living with HIV

Many respondents held negative attitudes towards those living with HIV. Asked about 11 situations and how they would respond to someone infected with HIV, only 14 per cent of respondents in the oPt would go to a restaurant if they knew the owner was living with HIV. Approximately three quarters (74.2 per cent) of respondents would choose to put people living with HIV in quarantine. Almost 65.7 per cent would refuse to share a meal with someone living with HIV.

- These findings were most pronounced among youth aged 15-19 among the age groups surveyed, and among West Bank/East Jerusalem residents, when compared by geography.
- Only 4.1 per cent of female respondents aged 15-49 met UN criteria for measuring positive attitudes towards those living with HIV, i.e. would be willing to care for a family member who became sick with HIV; would buy fresh vegetables from a vendor whom they knew was HIV+; think that a female/male teacher who is HIV+ should be allowed to continue teaching in school; and would not want to keep the HIV+ status of a family member a secret².

Groups at risk

Trends in the region and recent literature on Palestinians indicate that there is particular risk of an HIV outbreak in the oPt related to injected drug users, men having sex with men, and unprotected female sex workers.

Injected drug use is on the rise in the oPt, especially in East Jerusalem. According to the literature, some 40 per cent of drug users in the oPt inject their drugs and sharing of paraphernalia is common (47 per cent).

- This survey found that 89.1 per cent of respondents know that sharing drug paraphernalia can transmit HIV, with less knowledge among youth aged 15-19.
- Moreover, 19.4 per cent of all respondents report knowing someone who takes drugs and 3.1 per cent admit having tried drugs themselves. The lowest percentages for both were found in the youngest age group among women and in Gaza. In East Jerusalem however, almost half of respondents reported knowing someone who takes drugs and double that in the oPt as a whole– admitted ever trying drugs.

While sex between males is criminalized in oPt, many Palestinian men seeking such contact interact with Israeli society, where rates of HIV infection are higher.

Recent data on female sex workers in the oPt indicates that, despite knowing about HIV, most (72 per cent) do not consider themselves vulnerable to infection, nor did their clients (82 per cent) and as such seldom used condoms (36 per cent using them often or sometimes). Seventy per cent of clients also reported having a wife or a girlfriend with whom they also did not use condoms. In fact, condom use among all married Palestinian respondents in the broader surveys was only at 4 per cent, indicating it is used solely as a contraceptive, not to prevent HIV.

Due to social norms, it was not possible to ask questions through the survey about males having sex with males, female sex workers and other risky behaviours considered taboo.

- The survey did ask about polygamy and early marriage, which can contribute to HIV transmission.
- A majority of respondents were able to identify symptoms of a sexually-transmitted infection (STI). However, only 38.7 per cent of 30-49 year-olds reported that polygamy increases susceptibility to STIs and only 24.6 per cent agreed that early marriage increases the probability of contracting an STI.
- Both polygamy and early marriage appear to be on the decline, however, both in accuracy and in how they are perceived by respondents.

1. INTRODUCTION

Aiming at improving HIV programming for adolescents and youth in the occupied Palestinian territory (oPt), this report compiles recently available data on HIV knowledge, attitudes and practices as well as related healthy lifestyle issues. Using secondary data obtained through a literature review, it also analyses data from the Palestinian Family Survey/ Multiple Indicators Cluster Survey 2010 (MICS) of which the youth questionnaire (15-24 year-olds) particularly addressed the questions at stake here. To complement this information, a specific Knowledge, Attitude and Practice (KAP) survey on HIV and healthy lifestyles was conducted in West Bank/East Jerusalem and Gaza surveying the 15- to 49-year-old population.

Since the start of the millennium, international declarations and commitments related to HIV have multiplied³. Many highlight the importance of focusing on young people in order to fight the pandemic and positive results are beginning to show (UNICEF, 2011). However, in too many cases, young people have insufficient information and understanding about HIV. They may not be aware of their vulnerability to it or how best to prevent infections. They also often lack access to the means to protect themselves.

In the oPt, the prevalence of HIV is low (less than 1 per cent in the general population). The challenge, however, for national authorities is to maintain these low rates of HIV infection despite that the Middle East and North Africa region "hosts some of the fastest growing epidemics in the world" (Global Fund oPt, 2011). Moreover, low levels of knowledge on HIV in the Palestinian population, cultural taboos in talking about certain issues, and the existence of key populations that are at higher risk of HIV exposure are elements that could potentially increase the incidence of HIV cases in the future. The Palestinian Ministry of Health likewise reports "alarming signs of expansion" of the disease in the country (MoH, 2011).

The objective of this report is therefore to assess the current levels of knowledge of young people on HIV, their attitudes towards people living with HIV, and their practices when it comes to protecting themselves from HIV. It investigates where they seek information from and which misconceptions they hold about ways of HIV transmission. It analyses other healthy lifestyles issues such as illicit drug use, sexual reproductive health and marriage patterns that have an impact on the HIV epidemic. It uses the older age group of 25-49 year-olds as an element of comparison, attempting to highlight some trends. Comparisons with the situation in neighbouring counties are also sought in order to illuminate the specificities of oPt.

Finally, recommendations are proposed based on the data analysis in order to guide the work of policymakers in their efforts to contain HIV in the country. Only a concerted action, informed by evidence, addressing both the needs of the general population in matters of HIV as well as the specific necessities of key populations at higher risk of HIV exposure will tackle the challenges exposed in this report.

These include the Millennium Development Goals (2000), the United Nations General Assembly Special Sessions on HIV and AIDS (2001), the Political Declaration on Universal Access (2006), the UNICEF campaign Unite for Children, Unite against AIDS (2005) the Political Declaration of the UN High Level Meeting on AIDS (2011).

2. LITERATURE REVIEW

Globally, the status of the HIV pandemic is relatively bleak, with a continuous rise in the population of people living with HIV. According to the Joint United Nations Program on HIV/AIDS (UNAIDS) and World Health Organisation (WHO) AIDS Epidemic Update (2009), approximately 33.4 million people worldwide are living with HIV, of which 31.3 million are adults, 15.7 million are women and 2.1 million are children under the age of 15 years. In addition, AIDS-related deaths in 2008 equalled 2 million, of which 1.7 million were adults. More than 16 million people are estimated to have died from AIDS-related illnesses since the beginning of the epidemic in 1981. Prevalence levels vary greatly, with the highest in Swaziland's adult population with 25.9 per cent of 15-49 year-olds infected (UNAIDS & WHO, 2009).

Of young people ages 15-24, 5 million were estimated to be living with HIV in 2009 (UNICEF, 2011). While there has been a 12 per cent reduction since 2001 when this figure was 5.7 million, in 2009, young people accounted for 41 per cent of new HIV infections⁴ worldwide.

Girls and young women remain far more vulnerable to HIV infection than young men, globally. They account for 60 per cent of all HIV positive young people (UNICEF, 2011). In addition to their innate biological vulnerability, girls are at risk due to social norms that prevent them from refusing sexual advances, negotiating safe sex, denouncing a partner's infidelity, having sex with - or being married off to - older men, having sex in exchange for money or goods due to poverty, and being abused. Worldwide, gender inequities continue to affect women's decision-making and risk-taking behaviour as well as vulnerability to HIV infection, which is often beyond a woman's individual control (UN, 2009).

Ninety-five per cent of people living with HIV are in the developing world where poverty, poor sanitation, lack of access to health services, and low status of women contribute to the continuing spread of the infection.

2.1 Prevalence and transmission of HIV in the region and in oPt

The situation in most countries of the Middle East and North Africa (MENA) is different from the global picture on many levels.

2.1.1 HIV prevalence

In the MENA region, prevalence levels are low. By the end of 2008, adult prevalence was estimated at 0.2 per cent (UNAIDS & WHO, 2009). Some 400,000-530,000 people were considered to be living with HIV (UNAIDS, 2010), with 75,000 new infections having occurred in 2009. The lack of reliable data, however, limits practitioners' understanding of the HIV situation.

The low prevalence of HIV in the region has been credited to the conservative cultural values of traditional Arab society (UNAIDS & WHO, 2009; Olimat & Al-Louzi, 2010). Near universal male circumcision also seemed to have played a protective role in slowing and limiting HIV transmission in MENA in comparison with other regions. Studies have indeed shown that male circumcision provides up to 60 per cent reduction in the risk of HIV infection (UNAIDS, 2008). UNAIDS has therefore recommended since 2007 that male circumcision be scaled up globally (UNAIDS & WHO, 2008).

⁴

Specifically in the oPt, information on the HIV epidemic is scarce. It is reassuring; however, that the level of the HIV epidemic in oPt appears limited. With less than 1 per cent infection in the general population and less than 5 per cent infection among risky groups (EMRO, 2011), the Palestinian situation is consistent with other "low" HIV prevalence countries in the MENA region.

Table 1: Overview of HIV Epidemiological Context in oPt

| General indicators | Data | Year | Source |
|--|--|------|------------|
| Population size | 4,048,403 | 2010 | MoH, 2011 |
| Estimated number of people living with HIV | 14 (reported alive – an additional 4 are reported unknown) | 2010 | MoH, 2011 |
| Estimated HIV prevalence in adult population | 1.5/100,000 | 2009 | EMRO, 2011 |
| Reported new cases of HIV/AIDS (for most recent year of reporting) | 0 | 2010 | MoH, 2011 |

The first HIV cases were registered in oPt in 1988 (MoH, 2011*b*). By 2010, a total number of 66 cases had been registered: 51 were AIDS cases while 15 people were HIV positive. Fifty-five per cent of cases were reported as a consequence of heterosexual intercourse and 10.5 per cent due to combined use of injecting drug and "homosexual/bisexual" relations. Stigma and taboos are however likely to skew the reporting on modes of transmission away from practices that society frowns upon (Global Fund oPt, 2011).



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Distribution of reported cases of AIDS in Palestine 2010 (MoH, 2011*b*)

Table 2: Cumulative HIV & AIDS cases by Gender /District in oPt – 2010 (MoH, 2011b)

| Location | Total number of cases | Gender | |
|-----------|--------------------------|--------|--------|
| | | Male | Female |
| West Bank | 42 | 36 | 6 |
| Gaza | 24 | 18 | 6 |
| TOTAL | 66 | 54 | 12 |

Data disaggregated by gender for the year 2010 provides strong evidence that there is a higher prevalence among males than among females, with a ratio of 4.5:1 infections. In 67 per cent of the cases, the people registered were married. Data also show that women are infected at a younger age than men: more cases among women are registered within the age group of 20-29 as compared with the highest numbers of men, which are in the age group 30-39 (MoH, 2011*b*). Even though these figures can be explained by a higher rate of screening and testing for women within the context of their pregnancies, higher detection is unlikely to fully account for this age difference in the infection registration since only 0.12 per cent of pregnant women are currently tested for HIV (UNAIDS, 2011).

However, the data presented above has a number of limitations. First, it only includes cases registered by the health sector in the oPt and does not count cases diagnosed in Israel or abroad. In addition, Palestinians in East Jerusalem register with and are followed up on by Israeli hospitals (Global Fund oPt, 2011). Secondly, data is often partial: 17 per cent of means of transmission among these cases is unknown; marital status is unknown in 11 per cent of the cases; 4 people are not known as living or dead. Finally, the data, while available for a recent reporting year (2010), does not reflect the current state of the epidemic: people tend to test late and cases registered now were actually infected several years ago (Global Fund oPt, 2011).

2.1.2 Transmission in key populations at higher risk of HIV exposure

HIV is therefore not absent from MENA countries. The general pattern points towards emerging epidemics in key populations at higher risk of HIV exposure including injecting drug users, men who have sex with men, and to a lesser extent female sex workers, with heterogeneity between countries on the relative importance of each of these high-risk groups (Abu-Raddad et al., 2010). Across the region, most HIV infections are occurring in men and in urban areas - and the overall number of reported HIV cases has been increasing in many countries (UNAIDS & WHO, 2008). In some countries of the region, the proportion of HIV positive women is also growing as HIV spreads from (mostly males) injecting drug users and the clients of female sex workers/traffickers to their wives. In Morocco, for example, one third (33 per cent) of women diagnosed with AIDS were married (Ministère de la Santé Maroc, 2007).

Injecting drug users

Nearly one million people are believed to be injecting drug users in the region and high or above average HIV prevalence has been found within this population: 11.8 per cent in Oman, 6.5 per cent in Morocco, 2.9 per cent in Israel, 2.6 per cent in Egypt and 2.6 per cent in Turkey (UNAIDS & WHO, 2009). Iran shelters the highest HIV prevalence in injecting drug users in the region, with almost one in four (23 per cent) male injecting drug users tested at a Teheran drop-in centre found to be HIV-positive (Zamani et al., 2005). Sharing of injecting equipment and/or the use of non-sterile

paraphernalia seems to be common, driving the HIV epidemic and additionally infecting users with hepatitis C.

Injecting drug use and commercial sex, which may overlap significantly, appear to be key factors in HIV transmission in several countries. In various surveys, more than 40 per cent of injecting drug users in Algeria, 36 per cent in Egypt and 33 per cent in Lebanon said that they had either bought or sold sex in the previous month. In most cases, condom use was infrequent. For example, only 14 per cent of injecting drug users in Egypt and 6 per cent of those in Libya said that they had used a condom in the previous 12 months. Similarly, in Morocco, 50 per cent of surveyed male and 70 per cent of surveyed female injecting drug users said that they had multiple sexual partners, yet only one in 10 of the men and one in five of the women said that they had consistently used condoms (Ministère de l'Enseignement Supérieure et de la Recherche Algeria, UNAIDS & UNODC, 2006; Elshimi, Warner-Smith & Aon, 2004; Khoury & Aaraj, 2005 in UNAIDS & WHO, 2008). Risky sexual behaviours were also prevalent in Syria, with 53 per cent of injecting drug users interviewed having engaged in sex work. Among those, 40 per cent had never used a condom, and only 20 per cent had done so consistently (Ministry of Health Syria, UNODC & UNAIDS 2007). Conversely, one in 10 female sex workers surveyed in Syria also reported injecting drugs (Ministry of Health Syria, 2004).

The international literature warns that there is a potential for injecting drug-related HIV outbreaks in the oPt because 40 per cent of all drug users are now injecting their drugs (UNAIDS & WHO, 2008). Latest estimates mention a number of drug users ranging between 46,000 and 55,000 in the West Bank, 40 per cent of which could mean anywhere between 18,400 and 22,000 people (Global Fund oPt, 2011). Even though the largest number of injecting drug users is found in the West Bank, the prevalence is much higher in East Jerusalem, where it could be as high as 2 per cent of the adult population. People report injecting heroin, cocaine, morphine, opium as well as opiate pills crushed and made into a solution (Global Fund oPt, 2011).

The tendency to use non-sterile equipment is high: 47 per cent of injecting drug users reported sharing needles with others and only 36 per cent of them reported attempting to clean or disinfect them before use. Almost 75 per cent of drug addicts in East Jerusalem are labourers working inside Israel (Qirrish, 2010). It is particularly worrisome to know that the HIV prevalence in Israel amongst injecting drug users is as high as 2.9 per cent and that therefore there is increased opportunity for the virus to spread from one population to the other is important when using non-sterile equipment (Global Fund oPt, 2011).

Injecting drug users were found to seldom test for HIV in the West Bank (11 per cent) and Gaza (22 per cent) but the majority in East Jerusalem had tested themselves (69 per cent). They however rarely used condoms, even if knowing their partner injected drugs (Global Fund oPt, 2011).

Available data indicate that in the oPt, drug use starts as early as 17 years of age with the vast majority (almost 80 per cent) of those using drugs aged 18-28 years. Of the total, 87 per cent are men, 87 per cent are single and 70 per cent are from urban areas (Qirrish, 2010). Within the last decade alone, the numbers of East Jerusalem youth drug addicts increased from 1.5 per cent to 2.5 per cent (AlSaleh, 2007).

In terms of injecting drug use, the prison population is also specifically at higher risk of HIV infection. Limited information points toward a higher prevalence in inmate populations than in the general population in the region. In Yemen, the HIV prevalence in prisons is above 10 per cent and in the Islamic Republic of Iran and the Libyan Arab Jamahiriya, high HIV prevalence is reported among drug-using prison inmates (Dolan et al., 2007).

In the oPt, a recent survey within prisons found little evidence of drug use and sexual intercourse among inmates (Global Fund oPt, 2011). Other studies however mention that almost a third of injecting drug users who had been arrested also reported having injected drugs while in prison. There is therefore an absence of reliable figures on the topic.

Men having sex with men

In MENA countries, sex between men is criminalized by law and religion and as such is socially stigmatized and under-researched. Nevertheless, the limited information available suggests that unprotected sex between men is a key factor in at least some of the epidemics in the region. For example, a recent study in Egypt found that 6 per cent of men who have sex with men were HIV positive, as were 9 per cent of their counterparts in a Sudanese study (Ministry of Health Egypt et al., 2006; Elrashied, 2006).

An overlap is also apparent between men having sex with men and commercial sex activities. Almost half (42 per cent) of the Egyptian men and more than half (56 per cent) of the Sudanese men in the above mentioned studies said that they had engaged in commercial sex. Yet condom use during paid sex was infrequent: about one in 10 (9 per cent) of men in the Egyptian study and fewer than half of those in the Sudanese study said that they had used a condom the last time they bought sex (Ministry of Health Egypt et al., 2006; Elrashied, 2006).

National estimates for men having sex with men are unfortunately not available. This absence of data remains worrisome, especially considering that anecdotal evidence suggests that these types of sexual engagements exist, similar to other Arab countries in the region (Global Fund oPt, 2011).

Many gay Palestinian have chosen to go live and work in Israel where they consider themselves less likely to be ostracized. The HIV prevalence amongst men having sex with men in Israel is however increasing more rapidly than before and the number of reported HIV cases among them has more than tripled between 2000 and 2007 (Global Fund oPt, 2011).

Female sex workers

Unprotected paid sex appears to be an important factor in the HIV epidemics throughout the region. HIV prevalence among female sex workers was found notably above the estimated adult national HIV prevalence in Algeria (9 per cent in Tamanrasset⁵ in 2004), and Morocco (2 per cent–3 per cent since 2001), for example (Fares et al., 2004; Ministère de la Santé Maroc, 2007 UNAIDS & WHO, 2008). In Egypt, 6.8 per cent of sex workers acknowledged condom use at least once in 12 months prior to the survey, as did 12 per cent of street boys and 13 per cent of street girls, who are also linked to commercial sex as well as sexual abuse (Shawky, 2009).

In the oPt, the situation of sex workers is under-researched. Recent data collected in the West Bank and East Jerusalem, however, point towards the vast majority of them being coerced into the activity (Global Fund oPt, 2011). Despite knowing about HIV, most of them (72 per cent) did not consider themselves vulnerable to HIV, nor did their clients (82 per cent). They therefore seldom used condoms (36 per cent using them often or sometimes). Seventy per cent of clients also

reported having a wife or a girlfriend with whom they also did not use condoms.

2.1.3 Transmission in the general population

Migrants

Outside of key populations at higher risk of HIV exposure, the epidemics in the Middle East and North Africa appear also to be driven by people in the region contracting HIV while living abroad, often exposing their sexual partners to infection upon their return to their home country (UNAIDS & WHO, 2009). Displacement – voluntary (migration) or coerced (war) – may increase vulnerability to HIV in the region (Obermeyer, 2006).

5

Tamanrasset is a desert touristic town in southern Algeria

This is particularly true in the oPt where, historically, population movement between the oPt and Israel were common. Still today, even with physical barriers, many Palestinians work in Israel – and those who do are usually the youngest and most uneducated. HIV prevalence in Israel is higher than in the oPt. This poses a threat for young people working in Israel and engaging in risky behaviours that put them in danger of HIV infection before coming back to the oPt (Global Fund oPt, 2011).

Young people

Young people's sexual behaviour and whether they increasingly engage in sexual relations before or outside of marriage is little studied. High levels of other sexually transmitted infections in some countries point towards an apparent increase in unprotected extramarital sex (UNAIDS & WHO, 2008). In Iran, more than one in four (28 per cent) male adolescents aged 15–18 years said that they were sexually active, yet more than half had never seen a condom (Mohammadi et al., 2006). But sexual behaviour data concerning the general population in the MENA countries remain rather limited. Existing evidence suggests that sexually risky behaviours are present, but at rather low levels in comparison to other regions. However, levels of sexually risky behaviour appear to be increasing, particularly among youth, though probably not to a level that can support an HIV epidemic in the general population.

Similarly, very little is known of young people's sexual behaviours in the oPt and of any potential trend towards increasingly risky sexual behaviours.

According to the United Nations MDGs report (2009), knowledge of HIV and ways to prevent it is slowly improving globally among young people and the adult population. Comprehensive knowledge is still too low in most countries, however. On average, only about 31 per cent of young men and 19 per cent of young women (aged 15-24) in developing countries have a comprehensive knowledge of HIV, as defined by the UNGASS.

Knowledge

In the majority of the populations of MENA, basic knowledge about HIV is high while the comprehensiveness of this knowledge is inadequate. Conducting a school-based health survey, the Jordanian Ministry of Health found that 97.1 per cent of 8th grade to 10th grade students had heard of HIV/AIDS, 70.6 per cent were taught in their classes about HIV or AIDS, 65.9 per cent knew how to avoid HIV, and 79.6 per cent knew that people can protect themselves from HIV by not having sexual intercourse (AI Qaseer et. al, 2004).

However, a number of findings are worrisome. While, in Egypt for example, 84.4 per cent of ever-married women reported knowing about HIV, only 6.1 per cent of them had comprehensive knowledge of HIV when they were asked more detailed questions about the disease (DHS, 2005). In Jordan, school students reported wrong knowledge on a number of suggested HIV transmission means such as casual interaction with infected people, sharing food and drinks with them or using public toilets (Olimat & Al-Louzi, 2010). Many people in the region do not consider themselves at risk of HIV infection (Abu Raddad, 2010). In Jordan, 82 per cent of general population women reported not being at risk for HIV at all (DHS, 1998). In the Republic of Yemen, 95.1 per cent of secondary school students believed that young people are not susceptible to HIV infection (Gharamah and Baktayan, 2006).

In the oPt, Maqboul and Abu Ayyash (2005) conducted a study investigating Palestinian university students' knowledge about HIV and their attitudes toward AIDS patients. A total of 1,165 male and female students selected from four Palestinian universities in the West Bank/East Jerusalem and Gaza participated in the study. Overall, the results indicated that students had good knowledge in general aspects in relation to HIV, although comprehensive knowledge was lacking.

unicef 17

A year later, Al-Rifai (2006) conducted a national study whereby a total of 1,047 single and married Gaza and West Bank/East Jerusalem females aged 15-49 years participated. The study diagnosed significant information gaps in most addressed issues. Comprehensive knowledge was clearly deficient. For example, almost 99 per cent reported having heard of HIV/AIDS, while only 38.7 per cent did not think that an unmarried adolescent could catch a sexually-transmitted disease (STD) without prior sexual activity and 12.2 per cent did not know if this could happen at all. Almost 9 per cent reported not having heard of STDs. In addition, almost 14 per cent had no idea of how to avoid HIV infection and more than a third (33 per cent) did not know that a healthy looking person could be HIV-infected. As to means of HIV transmission, 95 per cent knew the risk of transmission through injectable drugs, 84 per cent knew about mother-infant transmission (pregnancy and delivery) compared to 50 per cent who knew about breastfeeding transmission. Conversely, having a meal with an HIV-infected person was considered a mean of transmission by 18.6 per cent in addition to 6.4 per cent who did not know if this is true or not. Likewise, more than a third (31.7 per cent) believed that a mosquito bite is a means of transmitting HIV (Al-Rifai, 2006).

Condom knowledge is another protective behaviour of which there is widespread ignorance and some diversity of opinions in the region. Condom knowledge does not necessarily mean condom knowledge as a means of HIV prevention. Parts of the populations in the MENA area have heard of condoms as a birth control method, but are not aware of its use for HIV prevention (Abu-Raddad et al., 2010).

Knowledge of condom use for HIV prevention in oPt was found in 67 per cent of the surveyed Palestinian university students (Maqboul and Abu Ayyash, 2005) and in 40.6 per cent of girls and women in the general population (Al-Rifai, 2006). This is compared to 33 per cent of women in the general population in Jordan (Measure DHS, 2003) and 60 per cent of women in the Egyptian general population (Kabbash et al., 2007) and 49.3 per cent of Egyptian men having sex with men (El-Sayyed, Kabbash, and El-Gueniedy, 2008).

Television is thus far the main source of knowledge on HIV in the Middle East region. The percentage of different populations who identified television as the main source of their HIV knowledge was 98 per cent in Egypt (DHS, 2006), 94 per cent in oPt (Al-Rifai, 2006), 92 per cent in Pakistan (Khan et al., 2005), and 90 per cent in Sudan (SNAP, UNICEF, and UNAIDS, 2005). Conversely, religious leaders/establishments are not a main source of HIV information in the MENA area. In Jordan, only 7.3 per cent or 11.6 per cent (depending on sources) of youth reported religious leaders as a source of information about HIV. Parents were not mentioned as a main source of information, with for instance only 27 per cent of Iranian adolescents reporting parents as a source of information on HIV (Abu-Raddad et al., 2010*b*).

Attitudes

Attitudes toward people living with HIV are generally negative and discriminatory in the region. In Egypt, 99 per cent of women in the general population did not accept all four positive attitudes toward them, including caring for patients with an AIDS-related illness, buying from HIV-positive shopkeepers, allowing HIV-positive women to teach, and being willing to disclose the infection of a family member (DHS, 2006). In the oPt, the A-IRifai (2006) study revealed that a majority (67.3 per cent) of the surveyed girls and women in the general population was reluctant to share a meal with an HIV-infected person. Almost 56 per cent disapproved the stay of an HIV-infected child at school with other children. A majority (60.3 per cent) would not disclose the HIV infection of a family member. Almost 63 per cent would not buy food from an HIV-positive shopkeeper.

Likewise, Maqboul and Abu Ayyash (2005) found that respondents had diverse attitudes toward people living with HIV. Positive attitudes and support were manifested when the respondents viewed the patient as a victim as when contaminated blood transfusion is the route of transmission or when the wife gets the infection from her husband. Nonetheless, this was replaced with

KNOWLEDGE, ATTITUDES AND PRACTICES SURVEY HEALTHY LIFESTYLES

negative attitudes and lack of support in cases where the HIV-positive person gets the disease from injecting drugs or a sexual relationship outside marriage. This shows the strong influence of conservative cultural values that pertain to sexual behaviour in light of the predominant religious and socially-defined moral grounds. According to Al-Rifai (2006), more than 26 per cent of women explained their differential treatment of AIDS victims on the basis of cause of infection being contaminated blood transfusion versus sexual relations outside marriage.

Specifically among health care workers, high rates of negative attitude towards people living with HIV were found. Doctors in Turkey were found to overestimate the risks of infection and to have negative attitudes towards HIV-positive patients, sometimes refusing them treatment or feeling angry for having to treat them if they were infected through risky behaviours (Duyan, Agalar, and Sayek, 2001). The same was found among nurses in both Egypt (Shouman and Fotouh, 1995) and Iran (Askarian et al, 2006). Over half of Kuwaiti physicians would avoid contact with people living with HIV (Fido and Al Kazemi, 2002).

However, there seems to be a growing trend of decreasing discrimination and stigmatization toward people living with HIV. In Morocco, for example, 68 per cent of women in the general population declared that they would care for people living with HIV (Abu Raddad, 2010). In Jordan, the percentages of youth who believed that people living with HIV have the right to keep their illness a secret has increased from 18 per cent in 1994 to 29 per cent in 1999 and to 34.3 per cent in 2005 (Jordan National AIDS Control Programme, 1994, 1999, and 2005). Interestingly, in the Islamic Republic of Iran, positive attitudes towards individuals were found to be directly correlated with higher knowledge about the disease (Mazloomy and Baghianimoghadam, 2008).

Practices

Regarding positive practices for HIV prevention, some progress has been reported in the region in terms of testing. Yemen, for instance, reported an 18-fold increase in the number of people testing for HIV and going through counselling between 2007 and 2008, while Morocco achieved a 24-fold rise between 2001 and 2007 (UNAIDS & WHO, 2009). Overall, the number of people testing for HIV remains low, however, compared to other regions.

Alarmingly, Palestinian studies found that knowledge of available community resources is severely limited. Only 5.2 per cent of women knew about a place in the community where one may undergo confidential HIV testing (Al-Rifai, 2006). There are 37 health facilities (i.e. 5 per cent of all facilities) currently providing HIV testing and counselling (MoH, 2011*b*). More than 15,000 people had been tested for HIV in the 12 months prior to the survey. Men tended to test at a younger age than women: the higher number of men testing for HIV was found in the age group of 15-19 years old while in women, the highest number of testers was found in 25-29 years of age (MoH, 2011*b*). This, however, only represented 4 per cent of all 15-49 year-olds having tested for HIV in the past 12 months.

In terms of condom use, pharmacies are said to be the most accessible place for condoms in the region (Abu-Raddad et al., 2010*b*). However, their high price, partner refusal, the distance of pharmacies, not thinking of condoms as necessary, or fear of imprisonment if caught possessing them (specifically for sex workers and men having sex with men) are all obstacles to their use. In general, it appears that men in the region have a negative attitude towards using condoms. In addition, there exists a gender gap whereby in Iran, for instance, male college students were almost twice as likely as females, 62 per cent versus 39 per cent, to know about condoms as a sexually-transmitted infection prevention method

In the oPt, in addition to pharmacies, condoms are available in clinics as a family planning option and women do not request them in relation to HIV prevention (Spratt, 2000). Even then, condom use remains very low (about 3 per cent).

2.2 HIV correlated issues in the region and in oPt

A number of issues are generally studied in relation to young people's vulnerability to HIV in the region: sexual and reproductive health (knowledge, access to services and prevalence of sexual infection) and marriage patterns in particular in relation to girls.

2.2.1 Sexual and Reproductive Health

It is generally recognized that in the region, sexual health education and health services for young people are rather limited (UNAIDS & WHO, 2008). Cultural taboos around premarital sexual relationships restrict reproductive and sexual health information (DeJong et al., 2007). The result is a young population, married or not, only slightly knowledgeable about sexual transmitted diseases and infections. In Egypt, for instance, only 18 per cent of married women between the ages of 15 and 24 had heard of gonorrhoea, syphilis or chlamydia. Twenty-two per cent of these same women however presented symptoms that could be indicative of a sexually-transmitted infection (STI) (DeJong et al., 2007). In the region, STIs are more common among the young population than among older age groups (twice more common in Oman for example), making it imperative to disseminate the right information to youth (DeJong et al., 2007). But sex education is rare and even if included in the curriculum, it is often skipped by teachers who are too embarrassed to tackle this subject. Often, health centres specializing in sexual reproductive health are seen as targeting pregnant women and mothers only.

2.2.2 Marriage patterns

Internationally, it is recognised that some of the behaviours that put young women at greater risk for HIV infection are early sexual practice, i.e. the still-prevalent early marriage, unprotected sex with multiple concurrent partners (as in polygamous marriage) and violence against women and girls.

Although female and male average ages of marriage are increasing in several countries, early marriage still exists in MENA. In the oPt, with the median age of marriage standing at 18 years for females, 50 per cent of all women are entering into an early marriage (PCBS, 2006). Girls married before the age of 18 face significant risk of contracting HIV (Bruce and Clark, 2004), mostly because their husbands are likely to be much older and therefore more likely to have been exposed to infection (Obermeyer, 2006). The age-sex distribution of HIV in the region confirms that women are infected at a much younger age than men.

Crossing the threshold into marriage greatly intensifies sexual exposure via unprotected sex and when sexual activity starts at an early age, it puts young women at risk. Biologically, girls are particularly vulnerable as their reproductive track is more opened to infection by HIV and STIs (Pathfinder, 2006).

Some of the factors exacerbating women's vulnerability to HIV also include socio-cultural norms and expectation of a woman's 'innocence' that complicate her access to sexual health and HIV information (Obermeyer, 2006). In most countries, married girls report having dropped out of school (where they may have had access to information on how to protect themselves)and not having easy access to reproductive health initiatives or not being targeted by those services (Bruce and Clark, 2004). Married adolescent girls' also find themselves incapable to negotiate safe sex, to persuade their partners to learn their own sero-status, or to say "no" to their husbands when asked for sex (Pathfinder, 2006).

Similarly, in the customary consanguineous marriage (45.4 per cent), power relations and family dynamics put women under heavy and extended family pressure and obligation to preserve the status and power of the extended family where her negotiation space and decision-making power

KNOWLEDGE, ATTITUDES AND PRACTICES SURVEY HEALTHY LIFESTYLES

is minimal. This includes such issues as condom use, pursuing health care when suspecting the husband's infection with STI, or her own personal use of available sexual and reproductive health care services (PCBS, 2008).

Although polygamy is a traditional practice in the MENA area, it appears to be in decline, with estimates of its prevalence ranging between 3 to less than 20 per cent (Abu-Raddad et al, 2010). Polygamy can play a role in spreading the HIV virus, particularly in settings of generalized HIV epidemics such as in sub-Saharan African countries (UNDP, 2008). In MENA, however, where polygamous marriages go hand-in-hand with a closed network constituted of HIV negative individuals, the risk of contracting HIV is low. It is worth noting however, that in some countries, a considerable percentage of people reported premarital or extramarital sex (Abu-Raddad et al, 2010), which in a situation of a more generalized HIV epidemic and polygamous marriages, could lead to disastrous consequences. In Al-Rifai's study on the oPt, the link between multiple sex partners and STD incidence was recognized by more than three quarters (78.3 per cent) of the study respondents, 4.2 per cent who were involved in polygamous marriages.

In terms of violence against women, Al-Rifai (2006) in her study found that, during the 12 months preceding the survey, 5.4 per cent of the married women had forced sex at least once with their husbands, as compared to 27 per cent and 30 per cent reported by Haj Yahya (1999) in two successive national surveys. Similarly, the Palestinian Central Bureau of Statistics (PCBS) (2006) reported 10.9 per cent of women being exposed to sexual violence inflicted upon them by the husband, with 0.4 per cent of these women experiencing this at least three times during the year prior to the survey. These situations hold serious implications for possible STI epidemics, including HIV.

3. RESEARCH METHODOLOGY

In addition to the preceding literature review, this study required quantitative data from a survey conducted for its purpose. However, as the Palestinian Family Survey 2010/MICS 4 (PFS) was already being implemented by the PCBS and in partnership with UNICEF and the United Nations Population Fund (UNFPA), it was agreed to use data produced from the PFS to support this research. An additional questionnaire distributed for this research then addressed aspects that were missing in the PFS questionnaires.

Palestinian Family Survey 2010/MICS 4

The PFS is a national household survey programme conducted in 2010 by the PCBS based on internationally standard demographic health surveys, as well as Multiple Indicator Cluster Surveys (MICS) surveys developed by UNICEF. The PFS was conducted as part of the fourth global round of MICS surveys (MICS4). It provides up-to-date information on the situation of children and women as well as youth and elderly and measures key indicators that allow countries to monitor progress towards the Millennium Development Goals (MDGs) and other internationally-agreed upon commitments. The survey aims to update databases on the situation of children and women while strengthening capacity building for professionals in the implementation of surveys and analysis of their data.

The PFS was conducted for a representative sample of 15,355 households in the oPt. The survey was designed as a multi-stage cluster covering two geographic areas: the West Bank and its 11 governorates (Jenin, Tubas, Tulkarm, Qalqiliya, Nablus, Ramallah and Al-Bireh, Jerusalem, Jericho & Al-Aghwar, Bethlehem, Hebron) and the Gaza Strip and its governorates (Gaza, Khan Yunis, Rafah, Deir El Balah and North Gaza).

The survey employed five sets of questionnaires and the results from two of them were utilized in this research. These were the women's health questionnaires administered to women 15-54 years of age addressing general health aspects and knowledge and attitudes towards HIV/AIDS and youth questionnaires administered to female and male youth addressing access to mass media, health and knowledge of HIV/AIDs, contraceptives and fertility⁶.

Healthy Lifestyles Survey

The questionnaire for the Healthy Lifestyles Survey (hereafter HLS) was developed with key indicators adapted from pertinent resources such as the Demographic Health Survey and from UNICEF's global guidelines, and taking into account programme interventions supported by UNICEF oPt. Two different questionnaires were administered: one for 15- to19-year-olds and one for 20- to 24-year-olds.

Stratified sampling was used to allow selection of groups with characteristics that are relevant to the indicators being measured, such as youth who may be at high risk. This included youth living in marginalized areas, in overcrowded areas, or areas known for high drug abuse. A simple random sample was then chosen from each group at the governorate level. The survey was conducted in 2011.

For more details, please refer to the questionnaires which are available in the Annex.

⁶

3.1. Questionnaire Design

Questionnaire design is one of the most critical components in the research process. The HLS questionnaire was designed to convert the study objectives into measurable indicators that can accurately assess knowledge, attitude, practice and behaviours towards HIV & AIDS. The questionnaire was designed to be clear, unambiguous, and relevant.

The questionnaire was developed in English and then, upon completion, underwent many revisions by various stakeholders, gaining their approval. After the questionnaire was designed, pre-tested, and recomposed to assure a fluid and dynamic interaction with the respondent being interviewed, it was translated from English to Arabic and approved by the UNICEF team. The following elements were part of each questionnaire:

- A Consent Statement was used in every questionnaire informing the respondent of their right to oPt out of the study; the consent statement also illustrates the main objectives of the study and describes the project's privacy policy.
- Basic demographic data concerning the respondents was collected. Such background data included information on education level, gender, age and marital status.

Pilot Study

A pilot study is critical to measuring the effectiveness and correctness of a survey's methodology. On the tactical level, the pilot study is instrumental in identifying all items that may adversely affect the validity of the instruments (due to linguistic and/or conceptual ambiguity). For the HLS pilot, a representative sample of 70 households was chosen from all targeted age groups to conduct the pilot study in the West Bank/East Jerusalem and Gaza. Data collection was conducted in West Bank/East Jerusalem and in Gaza on September 15, 2010. A day prior to the pilot, all targeted localities were visited by district supervisors and starting points were selected.

Prior to conducting the field work, a special training session was held with field workers on how to conduct the survey and giving them background information about the purpose and objectives of the study. The session also emphasized the importance of data quality and accuracy and the team was briefed on proper communication channels, protocols and chain of command

Giving the fact that the questionnaire included culturally sensitive questions, two field workers (one male and one female) were assigned to each location to avoid gender sensitivity during the data collection process. Male fieldworkers interviewed male respondents, and female fieldworkers interviewed female respondents.

The pilot results and findings were then reported to the UNICEF team and the questionnaire was again approved for the final survey.

unicef 23

3.2 Sample Design

The HLS study target group consisted of all Palestinians aged 15-49 years and residing in the oPt (West Bank/East Jerusalem, and the Gaza Strip). The population was divided into three major groups:

- 15-19 years old
- 20-24 years old
- 25-49 years old

A sample of 2,108 male and female Palestinians between the ages of 15-49 years, 822 of them ages 15-19 years, 808 at ages 20-24 years, and 478 at ages 25-49 years was selected. The sample was selected using stratified multistage cluster sampling technique. The probability of selection for each cluster was proportional to the size of the population location of a specific cluster. The sample was based on 125 clusters distributed all over the West Bank/East Jerusalem and Gaza. The type of sampling adopted for this study ensures unbiased estimators for the parameters of interest considered under this study.

To ensure that the sample was representative, the sampling was done using the following stages:

- The sample was stratified by governorate.
- A sample of 124 clusters was selected in different areas of the West Bank/East Jerusalem and Gaza Strip using probability proportional to size.
- 16 households were selected from each cluster.
- Easily identifiable points such as schools, churches, mosques or election centres were marked randomly as the sampling starting point in each cluster. The district supervisor, in close consultation with the field manager, was responsible for selecting SSP.
- To start as near as possible to the starting point, interviewers followed this instruction: interviewer 1 was to walk towards the sun while interviewer 2 was to walk away from the sun.
- Households from each cluster were selected using systematic sampling. Each interviewer had to select the first household on the left hand as the first sample. After that, the interviewer selected every 4th household on the left hand.
- All household members of age 15-49 years who were available at the time of interview were listed on a Kish table matrix.
- A respondent was randomly selected using the list in the Kish table.
- Only one respondent for each household was selected. In each location, two households were selected and two fieldworkers (male and female) were assigned.
- The male fieldworker visited one household and interviewed a male respondent while the female fieldworker visited the other household and interviewed a female respondent.

3.3. Field work team

A group of experienced field supervisors, coordinators and workers were recruited in the field of research and surveys in the various districts to implement the HLS, taking into consideration gender to allow for male and female interviewers in each area.

Fifty fieldworkers and 12 supervisors were assigned to the various governorates.

3.4 Training of field workers

Two orientation workshops were held for the fieldworkers and supervisors, one in the West Bank/ East Jerusalem for field workers there, and the other for fieldworkers in Gaza.

The training sessions each included a comprehensive explanation of the aims and objectives of the study. As the trainees went over the questionnaire, the different terminologies and indicators were discussed. Field workers were told the importance of not jeopardizing the quality of data collection and the need for continuous communication and coordination with area field supervisors for proper feedback in order to solve any possible obstacles, and to find solutions rather than disrupt the fieldwork.

3.5 Data quality assurance

As part of the quality assurance cycle; unannounced field visits, audits by data collection supervisors and district supervisors were carried out, to ensure data accuracy and integrity. In addition, the data collection supervisors and district supervisors selected respondents and discussed with them the field workers' treatment and professionalism. Follow-up meetings were held to discuss the questionnaire and respondents' reaction to the questionnaire. Finally, during the data collection process, field researchers were asked to submit a daily report with the number of completed questionnaires, feedback regarding the questionnaires, and problems in the field, if any.

Questionnaires and collected data went through several stages of examination and checking to assure quality control. This process included the following:

- Reviewing the questionnaires in the field: It was the responsibility of the field supervisors and area coordinators to examine and review a random selection of the collected questionnaires before they were sent to the main office.
- Reviewing the questionnaires at the office: All questionnaires that arrived at the central office were examined by the coding team to assure the rationality and honesty of the answers.
- Coding the questionnaires: After the questionnaires were reviewed, they were coded according to a pre-designed codebook, in order to be entered into a computer system.
- Examining data upon data entry: Using the special data entry programme, checks and balances were carried out to ensure data integrity.
- Data cleaning: After all questionnaires were entered, initial frequency tables were applied to the variables and examined to try to detect any data errors or outliers. If an error was detected, the whole questionnaire was re-entered.
- Integrity of the data: After the above steps were completed, 10 per cent of the data was reentered, and the results compared to what was entered previously as a method of checking for any errors. If any differences are noted, the questionnaires are re-entered.

unicef 25

3.6. Data processing and analysis

Data Entry

Data entry was carried out using the Access 2007 database. This programme features the following characteristics:

- Possibility of working in Arabic on the computer screen
- Limiting data entry errors to the minimum
- Ease of presenting data for the various sections of the questionnaire
- Ability of checking the rational sequence in the questionnaire data
- Ability to conduct internal data checking
- User-friendliness

Data Cleaning

Stat-transfer software was used to transform the data from Access format to the format of the statistical software SPSS. Data cleaning is an essential step before data analysis; this was done by cross-validation of results through various cross-tabulation.

Data Analysis

The statistical software SPSS was used for data analysis and the production of frequency tables and cross-tabulations of the main variables in the study. The analysis included tabulating the data by gender of respondent, geographical location (West Bank/East Jerusalem and Gaza Strip) for each targeted age group.

4. STUDY FINDINGS

4.1 HIV Knowledge

A significant percentage (69 per cent) of respondents in the oPt, as surveyed by the PFS and HLS, acknowledged that their level of knowledge about HIV is either low or very low. Among 15-19 yearolds, more than three quarters (75.6 per cent) said their knowledge is low or very low. When tested with actual questions, however, levels of actual knowledge were more nuanced and ranged from excellent to mediocre.

4.1.1. Knowledge about HIV and AIDS

Whereas throughout the world, literature strives to use the terms "HIV" or "AIDS" independently of each other to clearly mark the difference between the virus and the syndrome it sometimes triggers (UNAIDS, 2011*b*), in the oPt among survey respondents this distinction was not very clear.

Among Palestinian youth, based on the PFS, the vast majority of respondents (99.6 per cent) report having heard of either HIV or AIDS (99.4 per cent of those aged 15-19 years old to 99.7 per cent for both the 20-24 and 25-29 years-old). Gender differences were negligible across all age groups as to whether or not respondents had heard of HIV or AIDS.⁷

Based on the HLS, when respondents were asked to distinguish between HIV and AIDS; one finds that more people had heard of "AIDS" than "HIV".

Of those asked to identify "what is HIV?", only around half (46.1 per cent) of 15-49 year-olds in the oPt know what HIV is. As such, the youngest age group appears to be the least knowledgeable. Overall, 20 per cent of the general population describes HIV as the virus that leads to AIDS, and around a quarter define it as the disease of immune deficiency. In addition, 10 per cent define it as a disease that is transmitted through sexual contact and blood.



Figure 1: The responses to "what is HIV" by age groups

7

PCBS, Palestinian Family Survey/ Multiple Indicator Cluster Survey 4, 2010.

On the other hand, of those who have heard of HIV or AIDS, the vast majority of respondents report being able to answer "what is AIDS" (85 per cent), even though some of their subsequent answers clearly show confusion with HIV. The most frequent answer was "a disease transmitted through sexual activities" followed by "a contagious disease", "a dangerous disease without cure" and the disease of "immune deficiency".



Figure 2: The responses to "what is AIDS" by age group

The answers illustrate the confusion between HIV and AIDS that prevails in the oPt. This is likely due to the fact that the Arabic media uses "AIDS" to refer to HIV/AIDS while HIV is mainly used by professionals in the medical field. Articles and awareness-raising television series produced in the Arab world that have reached the oPt convey messages about the disease, especially to young people, that have popularized the term "AIDS" rather than "HIV" (Syria-Aleppo, 2011; Amman-Jordan, 2011). Even if only half of respondents report knowing about the term "HIV", analysis of findings about modes of transmission (see below) shows that the majority of respondents actually do know about the virus.

4.1.2. Knowledge of HIV transmission

Knowledge among respondents about how HIV is actually transmitted is high. As Figure 3 below indicates, the percentage of respondents to both surveys who knew that HIV is transmitted through sexual encounters, blood and contaminated injections was at or above 90 per cent, regardless of age, gender or location (West Bank/East Jerusalem and Gaza). In the PFS/MICS 4 survey, the percentage of females (15-49) who were able to identify the risk of HIV transmission from mother to child was lower than the above-mentioned rates, standing at 87.6 per cent, and females who identified the risk of HIV transmission via breastfeeding was even lower at 55.7 per cent.

KNOWLEDGE, ATTITUDES AND PRACTICES SURVEY HEALTHY LIFESTYLES



Figure 3: Percentage of people with correct knowledge of HIV transmission, by gender and age group

The figure above draws from data from both surveys, identifying gender and age groups. This rough comparison shows no statistically relevant variations between different age groups and genders. Nor, while not depicted here, were there statistically important differences between responses in West Bank/East Jerusalem versus Gaza.

In addition, almost three quarters (73.4 per cent) of 15-49 year-olds surveyed by the HLS and PFS were aware of the fact that a healthy-looking person can be HIV-positive (Figure 4), a finding that seems nearly unchanged since 2006 (see literature review). When respondents were broken down by age, young girls (15-19) were the group least aware that a healthy-looking person can be living with HIV, reflecting a lack of knowledge most prevalent among youth. Those most aware of this fact (at 77.1 per cent) were females aged 20-24 years. Overall, a significant proportion of the population surveyed did not know of the risk of acquiring the infection through symptomless carriers of HIV who seem to be healthy.



Figure 4: Percentage of respondents with correct belief that "healthy looking persons can be living with HIV" by gender and age group

4.1.3. Knowledge of prevention of HIV transmission

Approximately 90 per cent of 15-49 year-olds surveyed knew that there are ways one can minimize the risks of HIV infection when asked "Is there any way that a person can minimize the risk of HIV infection?", a finding that seems unchanged since 2006 (see literature review). Males (91 per cent) seemed to be slightly more knowledgeable that there are ways to prevent HIV than females (89 per cent). Whereas there wasn't significant differences between knowledge among youth between West Bank and those living in Gaza with 89 and 90 per cent respectively. (90 per cent). Similarly negligible differences are present between the different age groups, with 89 per cent among those 15-19, around 91per cent for 20-24 and 89 per cent for the oldest 25-29.

The protective role of condoms in HIV prevention was not known by an overwhelming majority. Roughly two-thirds (64.4 per cent) of youth aged 15-29 stated their awareness of this mode of protection, which was similar to the levels of awareness among Palestinian students in 2005 (see literature review). As Figure 5 shows, approximately half (58 per cent) of youth aged 15-19 knew this information compared to 68.1 per cent and 70 per cent of the 20-24 and 25-29 year age groups, respectively. It was also evident that males of the younger group were more knowledgeable (70.2 per cent) about condoms as protection than females (45.6 per cent), suggesting information is not reaching all equally.

KNOWLEDGE, ATTITUDES AND PRACTICES SURVEY HEALTHY LIFESTYLES



Figure 5: Awareness level of the protective role of using condoms by age and gender

On the other hand, all groups surveyed showed high awareness (more than 90 per cent) of the protective role of HIV testing before marriage in spreading the disease.

Effective individual protection proceeds from knowing all the methods of protecting against HIV infection; surveyed respondents had important gaps in knowledge. For example, only 34.8 per cent of all women surveyed knew that people can protect themselves from contracting HIV both by using condoms and having sex solely with one faithful uninfected partner⁸. Data shows no marked differences in this finding between Gaza and the West Bank/East Jerusalem. This was a very low percentage of the population that had enough knowledge to effectively protect themselves against HIV infection. This data only existed for women and youth and not for men.

4.1.4. Misconceptions about HIV

Misconceptions about modes of HIV transmission are as important as correct ones. For example, the belief that HIV is transmitted through mosquito bites can diminish motivation to adopt safe protective behaviour during sexual encounters. In addition, misconceptions such as the belief that one can be infected by sharing a meal with someone who is HIV-positive will reinforce the stigma faced by people living with HIV.

As Figure 6 shows, around 57 per cent of those surveyed correctly identified that HIV cannot be transmitted through "mosquito or other insect" bites. The belief by 48 per cent of people (44.4 per cent of women and 51.5 per cent of men 14-49) that mosquitoes do transmit HIV was slightly improved from findings in 2006 (31.7 per cent of women 15-49; see literature review).

By the same token, about 50 per cent of those surveyed knew that HIV cannot be transmitted by "sharing toilet seats with an infected person" or by "kissing and hugging an infected person". Sixty per cent were aware that HIV cannot be transmitted by "swimming in public pools" or by "sharing a meal with a person living with HIV". Moreover, approximately 75 per cent of the respondents were familiar with the fact that HIV cannot be transmitted by "shaking hands with an infected person" and 85 per cent were aware that HIV cannot be transmitted by "sharing a public phone".



Figure 6: Percentage of respondents who had correct information about common misconceptions of HIV transmission (i.e. gave a negative answer to an incorrect mode of transmission) by age groups

No statistically valid differences were found when comparing the answers of males and females or West Bank/East Jerusalem respondents to Gaza respondents, except for among East Jerusalem residents who appear less knowledgeable about common misperceptions than in the rest of the oPt.

Except for the belief that mosquitoes transmit HIV, a majority of those surveyed were able to identify that the other above-mentioned situations of sharing a meal, shaking hands, etc. are safe and that the fear of HIV transmission in those cases would be a misconception. Still, there is substantial room for improvement in correcting misconceptions held by the minority.

In trying to identify individuals who in a comprehensive manner hold no incorrect beliefs about HIV, only 22 per cent of women aged 15-29 years correctly rejected the two misconceptions about HIV being transmitted by mosquitoes and by swimming pool water, *and* knew that a healthy-looking person can have HIV⁹. The data shows no marked differences in this finding between Gaza and the West Bank/East Jerusalem. As such, it can be said that not even a quarter of the population holds no misconceptions about HIV. This data only exists for women however and not for men or youth.

9

4.1.5. Summary of HIV knowledge findings

To summarize, Table 3 shows various knowledge statements ranked by the most prevalent correct information expressed by all respondents to the least prevalent.

Table 3: Prevalence of correct knowledge for HIV transmission and prevention among respondents of 15-49 years old

| No | HIV Knowledge Statement | % among 15-49 years old | % among 15-29 years old |
|----|--|-------------------------------|-------------------------------|
| 1 | HIV can be transmitted through contaminated syringes | 96.6 | 85.2 |
| 2 | HIV can be transmitted by blood or blood product transfusion | 96.1 | 94.2 |
| 3 | HIV is a sexually transmitted disease | 95.4 | 88.7 |
| 4 | HIV testing before marriage decreases the spread of the disease | 94.1 | 91.5 |
| 5 | A pregnant woman can transmit HIV to her foetus | 88.9 | 83.21 |
| 6 | HIV cannot be transmitted by sharing a public telephone | 83.7 | 83.6 |
| 7 | HIV cannot be transmitted through shaking hands | 77.4 | 75.7 |
| 8 | Healthy-looking individuals can be living with HIV | 73.4 | 73.2 |
| 9 | People can protect themselves from contracting HIV by using condoms | 65.2 | 64.4 |
| 10 | HIV cannot be transmitted by sharing a meal with a person living with HIV | 63.8 | 62.42 |
| 11 | HIV can be transmitted to a child through breastfeeding | 61.9 | 52.93 |
| 12 | HIV cannot be transmitted by swimming in a public pool | 59.1 | 57.2 |
| 13 | HIV cannot be transmitted by using a public toilet | 51.5 | 49.8 |
| 14 | HIV cannot be transmitted through kissing/hugging a person living with HIV | 51.3 | 46.1 |
| 15 | HIV cannot be transmitted through mosquito or other insect bites | 42.8 | 57.9 |

Table 3 shows a wide range of percentages of respondents expressing the correct knowledge about HIV. With the lowest indicator 46 per cent of respondents aged 15-29 stated correctly that through kissing/hugging a person cannot transmit HIV. As this finding indicates, young people were systematically less knowledgeable than the overall population – except about transmission through breastfeeding. They were particularly less knowledgeable when it comes to protecting against HIV transmission by using a condom.

When trying to assess respondents' comprehensive knowledge, the percentage of respondents who could correctly identify that using condoms prevents sexual transmission of HIV and rejected the two misconceptions that HIV is transmitted by mosquitoes and by swimming in a public pool, and who also knew that a healthy-looking person can have HIV¹³ was very low, at 7.9 per cent. In other words, the proportion of respondents who have overall knowledge about all the ways HIV is or isn't transmitted is very low.

10 This number represents only females 15-49

11 This number represents only females 15-49

12 This number represents only females 15-49

13 UNGASS indicator

This is particularly low when one compared with the finding that, on average, only about 31 per cent of young men and 19 per cent of young women (both ages 15-24) in developing countries have a comprehensive knowledge of HIV (as defined by the UNGASS; see literature review). When compared regionally, however, findings in the oPt are not so different from those in Egypt, for example, where only 6.1 per cent of ever-married women had comprehensive knowledge of HIV transmission (see literature review).

Among young people in the oPt, specifically, the percentage of respondents who answered the above-mentioned 15 questions correctly stands at a low 2.2 per cent. Likewise, 41.8 per cent answered at least 12 questions correctly¹⁴ and 69.9 per cent answered at least 10 answers correctly.¹⁵.

There appears to be a correlation between knowledge about HIV transmission and levels of education: the more education had by respondents, the more correct knowledge they displayed. For example, 79.3 per cent of people with a bachelor's degree or greater education had a high level of knowledge (defined as answering correctly 10 to 14 knowledge questions). This correlation is not very strong, however: of the respondents with high levels of knowledge, 37.3 per cent had finished elementary school or less, 44.9 per cent had a secondary school diploma, and 17.8 per cent had a bachelor's degree or more.

In conclusion, all respondents, regardless of age or location, demonstrated a lack of comprehensive knowledge about HIV transmission.

4.1.6. Information about HIV

Respondents said that their main source of information about HIV was television. Only 43.8 per cent of all respondents reported ever reading an article on HIV and only 19.9 per cent had ever attended a seminar on HIV.





Cumulative percentage of those answering correctly 15, 14, 13 and 12 questions

Cumulative percentage of those answering correctly 15, 14, 13, 12, 11 and 10 questions

14

15

The main source of information on HIV that respondents reported was television with 91.4 per cent stating that they received information on HIV from TV.

Among 15-19 year-olds, learning about HIV from television as a main source of information was followed by hearing about it at school (83.3 per cent) and from peers/relatives (50.9 per cent). Similar findings apply for older respondents (20-24) and (25-29). This was also reflected at level of West Bank/East Jerusalem residents were the main source of information about HIV Television (91 per cent), School (79 per cent), and relatives (60 per cent). The Palestinian Family survey showed that male respondents receive much more information than females from television (98. per cent versus 93 per cent) this was complemented by the Healthy lifestyle survey finding where men receive much more information from the internet than women (35.9 per cent versus 17.4 per cent) indicating that men have more access to mass media.

Respondents said that they most preferred receiving information about HIV from television, then the internet, and finally from health providers. Gaza residents, as compared with West Bank/East Jerusalem respondents, greatly favoured receiving information from television (61.3 per cent versus 42.7 per cent), internet (32.2 per cent versus 21.5 per cent) and radio (13.4 per cent versus 9.1 per cent). Notably, these are all media that afford anonymity. West Bank/East Jerusalem respondents, on the other hand, favoured more than Gaza respondents receiving information from health providers (23.6 per cent versus 15.9 per cent).. After television, 15-19 year-olds preferred receiving information from health providers.

| Actual source First two preferred sources | Actual source First two preferred sources |
|---|---|
| 15-19 age group | 15-19 age group |
| TV (89.9%) | 1. TV |
| School (83.3%) | 2. School |
| Health professionals (44.5%) | |
| 20-24 age group | 20-24 age group |
| School (78.7%) | 1. TV |
| TV (92.1%)Peers/relatives (54.3%) | 2. Schools |
| 25-29 age group | 25-29 age group |
| TV (92.9.6%) | 1. TV |
| Schools (63.6%) | 2. Schools |
| Peers/relatives (54.1%) | |

Table 4: Comparison between actual and preferred sources of information on HIV

In East Jerusalem, more 15-19 year-olds received HIV information from health providers than did their peers in the rest of the oPt but fewer respondents in that age group received information from parents than in other regions. Also unique to East Jerusalem was that respondents (age 15-49) said their main sources of information about HIV were the internet, printed materials and health providers, in that order.

Generally, it is clear that television plays an important role in disseminating information about HIV. As noted earlier, however, the quality of this information appears to be in question, and health providers should work to make sure information disseminated is accurate.

Seventy per cent of 15-19 year-olds surveyed reported receiving HIV information at school, without notable differences in gender or location. A much lower percentage of respondents of that age group (34.4 per cent) is satisfied with HIV teaching at schools, while a similar percentage thinks the school curriculum includes enough material related to HIV.

The extent to which people are open to discussing issues related to HIV, either with peers or with family, is also important in gauging awareness. Overall, regardless of age, respondents said they are more open to discussing HIV issues with peers than with family as indicated in Figure 8 below. This may be a result of social conservatism (see literature review). In the youngest age group, this percentage drops to 36.6 per cent. Even fewer respondents said that they discussed HIV with family: between 21.5 per cent and 13.7 per cent, depending on the age group. It can be extrapolated that the younger on is, the less he or she discusses HIV-related issues at all.



Figure 8: Having discussed HIV related issues with peers and family by age group (%)

Within the three age groups, differences can be seen by gender and location as to whom respondents discussed HIV-related issues with. Figures 9 and 10 below clearly show that females are inclined to discuss HIV-related matters with their families much more than males do – but still talk more to their peers than with families. As far as men are concerned, they discuss HIV with their peers much more than with families; among 15-19 year-olds, discussing HIV with peers is more than five times more common than discussing it with family.

Gaza respondents were more reticent about discussing HIV at all – with peers or family – than their West Bank/East Jerusalem counterparts. In East Jerusalem, however, female respondents were less likely to discuss HIV with their families than were respondents in the rest of the oPt. In fact, all of East Jerusalem respondents, regardless of age or gender spoke with peers and family less than the rest of the oPt.

KNOWLEDGE, ATTITUDES AND PRACTICES SURVEY HEALTHY LIFESTYLES



Figure 9: Having discussed HIV related issues with peers by age, gender & region (%)





Respondents reported that the topics that were most discussed related to HIV included: means of transmission, causes of the disease methods of protection and the link between infection and frowned upon social behaviours Female respondents reported discussing this last topic more than male respondents.

unicef 37

4.2. Attitudes towards HIV

Negative attitudes towards people living with HIV are mainly responsible for the stigma and discrimination they suffer from.

4.2.1. Attitudes towards people living with HIV

As shown below in Table 5, only 14 per cent of respondents in oPt would go to a restaurant if they knew the owner was living with HIV. Around three quarters (74.2 per cent) of respondents would choose to put people living with HIV in quarantine. Almost 65.7 per cent would refuse to share a meal with someone living with HIV. These findings appear to demonstrate high levels of negative attitudes towards people living with HIV in the oPt.

In addition, approximately two-thirds (66.4) of all respondents wanted the HIV infection of a family member or a close friend to remain a secret. Only one-third of respondents thought that an HIV infected teacher should be allowed to continue teaching in school, would host an individual living with HIV at home, or would not mind for a family member to keep a friendship with someone living with HIV.

| Negative Attitude Statement | % of 15-49 years old | % of 15-24 years old |
|--|-------------------------|-------------------------|
| Would not go to a restaurant if knew that the owner is living with HIV | 85.7 | 85.8 |
| Not willing to share a meal with a person living with HIV ¹⁶ | 65.7 | |
| Individuals living with HIV should be quarantined | 74.2 | 74.5 |
| A female / male teacher living with HIV should not be allowed to continue teaching $^{\rm 17}$ | 64.7 | |
| Will not host an individual living with HIV at home | 70.8 | 67.7 |
| Do mind for a member of the family to be friend with an individual living with HIV | 69.6 | 66.8 |
| Not willing to work in an institution that tends to individuals living with HIV | 55.3 | 53.8 |
| Will not volunteer in an institution that tends to people living with HIV | 51.4 | 49.5 |
| Want to remain secret if a family member becomes infected with HIV | 49.3 | 66.4 |
| An individual living with HIV cannot go to school and earn a degree | 46.3 | 46.3 |
| Will not maintain friendship if a friend become infected with HIV | 37.6 | 37.1 |

Table 5: Prevalence of negative attitudes towards people living with HIV in descending order

The logic behind such attitudes, when compared with each other in converse, is seemingly contradictory.:

- 53.7 per cent of respondents think people living with HIV should be allowed to go to school but only 28.9 per cent think they should be allowed to teach
- 62.4 per cent of respondents think they would maintain a friendship with an HIV-positive friend but only 30.4 per cent would allow a family member to do the same

16 Indicator reflected for females only. PCSB, Palestinian Family Survey 2010

17 Indicator reflected for females only. PCSB, Palestinian Family Survey 2010

KNOWLEDGE, ATTITUDES AND PRACTICES SURVEY HEALTHY LIFESTYLES

• 50.7 per cent of respondents would not keep it a secret if a family member became HIV-positive, therefore allowing the news to come out, but 75 per cent think that others should be quarantined if living with HIV

On closer investigation, it seems that scenarios involving food trigger strong negative attitudes (if, for example, the owner of a restaurant was HIV-positive or sharing a meal with an HIV-positive person). It also appears that scenarios where greater distance exists between the subject and the HIV-positive person trigger less negative attitudes (for example, if respondent would volunteer in an institution tending to HIV-positive people – 48.6 per cent - versus hosting an HIV-positive person at home – 29.2 per cent). It may also be that attitudes are less negative when the person being HIV-positive is already a friend or a relative versus a stranger (for example, being willing to maintain a friendship with an HIV-positive person – 30.4 per cent - versus going to a restaurant whose owner is HIV-positive – 24.3 per cent). This logic, however, does not explain all of the seeming contradictions.

Figure 11: Respondents' negative attitudes toward people living with HIV by age group (%): percentage of NEGATIVE attitudes



Gaza respondents appear to have lower rates of negative attitudes than West Bank/East Jerusalem respondents about those living with HIV. For each question, West Bank respondents were more likely to answer with negative attitudes, except the desire to quarantine HIV positive people. Women also seemed to hold negative attitudes more frequently than men (in 22 cases, women hold more negative attitudes than men and in 13 cases, men hold more negative attitudes than women).

As shown in Figure 11 above, the youngest respondents (ages 15-19) consistently appeared more likely to hold negative attitudes than older age groups, with one exception: they are more likely to accept an HIV-positive teacher. This is particularly interesting since they are in school being taught directly, whereas the answers of respondents in the other age groups would most likely refer to a teacher being HIV-positive in their children's school. The 20-24 year-olds surveyed consistently

appeared to be the age group most accepting of people living with HIV in all other scenarios.

As shown above, people's attitudes were not necessarily logical, raising questions about the link between knowledge and attitudes. When investigating the correlation between knowledge and attitudes, it was found that the lower the level of knowledge respondents had, the more negative attitudes they reported. This correlation is not very strong, however: respondents with positive attitudes necessarily had a high level of knowledge about HIV but people with a high level of knowledge did not necessarily have positive attitudes. Hence, 77.6 per cent of all respondents with high levels of positive attitudes towards those living with HIV (defined as answering positively 8 to 11 attitude questions) also had a high level of knowledge (defined as answering correctly 10 to 14 knowledge questions). And 75 per cent of all respondents with a low level of knowledge (answering correctly 0 to 4 questions) had low levels of positive attitudes (answering 0 to 4 knowledge questions correctly). Still, of respondents with high levels of knowledge, 43 per cent held low levels of positive attitudes, 42 per cent had medium levels of positive attitudes and 14.9 per cent had high levels of positive attitudes.

Knowledge is not always adequate in changing attitudes. Indeed, even if people know HIV is not transmitted by sharing a meal, they are not willing to do so. In this survey, 71.6 per cent of respondents with the awareness that HIV cannot be transmitted by sharing a meal were still not willing to do it.

Examining who among respondents by age group held none of the studied negative attitudes, only 1 per cent of young people aged 15-19 – both boys and girls – met the criteria. Easing the criteria to at least nine positive attitudes¹⁸, 6.2 per cent of the youngest age group were included.

When looking for individuals who would be willing to care for a family member who became sick with HIV; 2) would buy fresh vegetables from a vendor whom they knew was HIV+; 3) think that a female/male teacher who is HIV+ should be allowed to continue teaching in school; and 4) would not want to keep the HIV+ status of a family member a secret¹⁹, only 4.1 per cent^a of all women surveyed were found to meet the criteria. This means that more than 95 per cent of Palestinian women hold at least one negative and discriminatory attitude towards people living with HIV. These very poor attitudes towards HIV-positive people stigmatize them in Palestinian society. This is consistent with other countries in the region: in Egypt for example, 99 per cent of women surveyed (only women were surveyed) rejected all four positive attitudes as well.

4.2.2. Knowing people living with HIV

It is interesting to note that, when asked if they know anyone living with HIV, between 1.6 per cent and 2.3 per cent of respondents answered positively

This seems like a high number, considering that the Ministry of Health itself reports only 14 people living with HIV in the oPt (see literature review). This leads us to believe either that:

- They might all know the same persons
- They might know someone who is HIV-positive but not in/from the oPt
- They think they know someone who is HIV-positive but who isn't
- They might be referring to public figures, actors, singers, etc. who publically declared their status in the oPt or abroad.

Nevertheless, there remains merit in the fact that respondents said they know someone with HIV, as this provides a personal connection.

unicef 41

¹⁸ Cumulative percentage of those answering positively to 11, 10 and 9 attitude questions

¹⁹ UNGASS indicator

^a PCBS, Palestinian Family Survey/ MICS 2010 data

When asked how they treat people living with HIV whom they know, only 13 per cent of respondents answered "normally". The rest of the respondents, 87 per cent, report treating HIV positive acquaintances with either fear, caution, or by not dealing with them at all.

Figure 12: Question: If you know someone living with HIV, how do you deal with him/her?

When investigating the correlation between negative attitudes towards those living with HIV and the way respondents approach people living with HIV, it was found that the more respondents have negative attitudes, the more they do not deal with HIV-positive people at all. On the other hand, the more respondents reported positive attitudes, the more they treat people living with HIV with caution. Hence, 50 per cent of respondents with low levels of positive attitudes (defined as answering positively to 0 to 3 attitude statements) do not deal with HIV-positive people at all, whereas 0 per cent of respondents with high levels of positive attitudes (defined as answering positively to 8 to 11 attitude statements) do not deal with HIV-positive people at all.

In conclusion, Palestinians' attitudes towards people living with HIV are extremely poor.

4.3. Practices related to HIV

Palestinian behaviours and beliefs on sensitive matters such as sex and risky sexual behaviours cannot be easily investigated due to strong societal resistance to open discussion about such matters. Sex before or outside of marriage is not considered acceptable and every year "honour killings" end the lives of young women suspected of having a relationship without being married. Men having sex with men is also a practice forbidden by Islam and national laws. Practices as to how respondents protect themselves from HIV in the event of risky sexual behaviours are simply not known, therefore.

Most respondents (83.9 per cent) said they were willing to get tested for HIV. However, few actually have done so. The older the population group, the higher the tendency is to agree to HIV testing. Still, even among the eldest group surveyed, those who have been tested comprise only 5.6 per cent, the majority of which is made up of West Bank/East Jerusalem males. Approximately two-thirds of tested individuals said that the reason they were tested was at the request of some agency/ institution/party, and one-third said they had given blood. The remainder of tested respondents had done so voluntarily. Only in very few cases was the decision to do the test triggered by concerns over an HIV positive test result for close people or concern over feeling sick.

While giving blood, two-thirds to three-quarters of respondents reported having verified syringe sterility before use.

Condom use, another main protective practice, was only studied in relation to family planning and is therefore reported on below in the Sexual and Reproductive health section.

5. SUMMARY OF COMPREHENSIVE KNOWLEDGE, ATTITUDES AND PRACTICES

The United Nations General Assembly Special Session (UNGASS) on HIV/AIDS established in 2001 a series of indicators to measure the comprehensive knowledge, attitudes and practices of people towards HIV. They are made of an aggregate of several indicators, which when combined, can measure the number of individuals who answered correctly to several questions on HIV. The results, already mentioned in the above sections, are summarized in the table 5 below.

| Indicator | Definition | Results (15-49 women) |
|--|--|--------------------------|
| Accepting at- titudes towards those living with HIV | The percentage of female respondents aged 15-49 who expressed accepting attitudes towards people with HIV. The accepting attitude includes all four-component questions: 1) Would be willing to care for a family member who became sick with HIV 2) would buy fresh vegetables from a vendor whom they knew was HIV+ 3) female / male teacher who is HIV+ should be allowed to continue teaching in school; 4) would not want to keep the HIV+ status of a family member a secret | 4.46% |
| Knowledge of HIV prevention methods | The percentage of female respondents aged 15-49 who, in response to a prompted question, say that people can protect themselves from contracting HIV by using condoms and having sex only with one faithful uninfected partner | 34.87% |
| No incorrect be- liefs about HIV The percentage of respondents aged 15-49 who, in re- sponse to a prompted question, correctly rejected the two misconceptions about HIV being transmitted by mosquitoes and by swimming in a public pool, and also knew that a healthy-looking person can have HIV | | 19.7% |
| Comprehensive correct knowledge about HIV The percentage of respondents aged 15-49 who, in re- sponse to a prompted question, correctly identified that using condoms and having sex only with one faithful uninfected partner prevent sexual transmission of HIV and rejected the two misconceptions that HIV can be transmit- ted by mosquitoes and by swimming in a public pool, and who know that a healthy-looking person can have HIV | | 7.98% |
| Comprehensive correct knowledge among young people (age 15-24) about HIV | The percentage of respondents aged 15-24 who, in re- sponse to a prompted question, correctly identified that using condoms prevent sexual transmission of HIV and re- jected the two misconceptions that HIV can be transmitted by mosquitoes and by swimming in a public pool, and who know that a healthy-looking person can have HIV | 7.2% |

Table 6: Summary of UNGASS indicators on comprehensive knowledge and attitudes ^{21 22 23}

PCBS, Palestinian Family Survey/ MICS 2010 data PCBS, Palestinian Family Survey/ MICS 2010 data PCBS, Palestinian Family Survey/ MICS 2010 data

6. HIV CORRELATED ISSUES AND HEALTHY LIFESTYLES OF YOUNG PEOPLE

Respondents' attitudes towards a number of risky behaviours and lifestyle issues that could influence vulnerability to HIV and affect well-being are analysed here. Of particular importance to young people's health and HIV transmission are the injection of drugs, reproductive health issues and marriage patterns.

6.1. Injecting Drug Use

Injecting drug use is a well-documented means of HIV transmission and anecdotal evidence points towards an increasing prevalence of injecting drug use in the oPt, especially among young people (see literature review).

Almost all respondents in oPt (95.3 per cent) report being aware of drugs' negative impact on health. They are mostly familiar with heroin followed by cocaine. Interestingly, marijuana is the least known illegal drug in all geographical areas except East Jerusalem, where it is the most well-known drug. Older respondents knew more about drugs than younger respondents. When examined by gender and location, no other significant differences or trends were observed.



Figure 12: Knowledge of selected drugs used by age group

Means of drug administration are known to respondents to various degrees. It is reported that in oPt, heroin, cocaine and opium/opiate drugs are administered by injection (see literature review).

| | Opium | Heroin | Cocaine | Marijuana |
|------------|-------|--------|---------|-----------|
| Injection | 16.6% | 27.7 % | 22.1% | 5.4% |
| Smoking | 20.9% | 4.3% | 9.3% | 57.9% |
| Sniffing | 23.9% | 46.2% | 42.7% | 10.4% |
| Oral | 5.4% | 2.2% | 2.9% | 6.6% |
| Don't know | 32.5% | 18.7% | 21.6% | 19.4% |

Table 13: Identification of the route of administration of different drugs (%)

Women and residents of the West Bank/East Jerusalem answered "I Don't Know" more frequently than men and Gaza residents.

The four most common reasons given for taking drugs in the order that they were chosen are: peer pressure, family breakdown, homelessness and depression, except in East Jerusalem where respondents mentioned "experimenting" as a leading reason for taking drugs. Of all the reasons given in this open-ended question (peer pressure, family breakdown, homelessness, depression, involvement in crime, experimenting, poor healthcare, low income), older age groups are systematically more inclined to say that these are reasons for taking drugs while adolescents consistently consider them no reasons for taking drugs. Women respondents were more likely than men to report that reasons for taking drugs are family breakdown and low income. Gaza respondents were more likely that respondents in the West Bank/East Jerusalem to think that depression, low income and poor healthcare are reasons for taking drugs.

Moreover, 19.4 per cent of all respondents report knowing someone who takes drugs and 3.1 per cent admit having tried drugs themselves. The lowest percentages for both were found in the youngest age group, among women and in Gaza. In East Jerusalem however, almost half of respondents reported knowing someone who takes drugs and double that in the oPt as a whole - admitted ever trying drugs.

Overall, 89.1 per cent of people recognized that sharing drug injection equipment can transmit HIV. However, 14 per cent of 15-19 years old did not know that sharing injection paraphernalia can transmit HIV. Even more distressingly, there was a significant correlation between respondents who said they have tried drugs and those demonstrating a lack of knowledge about the risk of acquiring HIV through injection.

6.2. Marriage patterns

In general, those surveyed aged 15-19 (94.5 per cent) and 20-24 (67.2 per cent) were single at the time of the poll, while the majority of those aged 25-49 were married (83.9 per cent).

Figure 14: Marriage situation by age group (%)



6.2.1. Early marriage

In looking at marriage by age group, 5.4 per cent of the 15-19 year-olds surveyed were already married (10.4 per cent of 15-19 girls and 0.2 per cent of same aged boys). This means that girls are marrying before the age of 20 at a rate 50 times that of boys – also indicating that they are marrying men older than themselves.



Figure 15: Age at first marriage in % for both sexes

KNOWLEDGE, ATTITUDES AND PRACTICES SURVEY HEALTHY LIFESTYLES

Overall, the median age of marriage for all respondents was 21. Among only girls, however, it was 19 years old (as compared to age 18 in 2006 when the last Palestinian Family Survey/ MICS was conducted - see literature review) – and 24 years old for boys. No notable differences were observed between respondents residing in the West Bank/East Jerusalem and Gaza.

| | West Bank/East Jerusalem | Gaza |
|-------------------------------------|-----------------------------|------|
| Girls' median age at first marriage | 19 | 19 |
| Median number of living children | 4 | 4 |
| Median number of pregnancies | 5 | 5 |
| Median age at first pregnancy | 20 | 19 |

Table 14: Comparison of West Bank/East Jerusalem and Gaza for girls on marriage, children and pregnancies

Respondents were asked what they believed to be the best age of marriage for girls and boys. All age groups believed the ideal age to be 20 for females compared to 25 for males, I.e. one year older than the findings of this survey. Women are more likely to believe that a younger age is best for marriage, for both girls and boys. There are no marked differences in ideal marriage age discernible between Gaza and West Bank/East Jerusalem.

Early marriage – defined as marriage before the age of 18 – is in decline in the oPt. It currently stands at 10.2 per cent of the 15-49 population. The differences in the prevalence of early marriage between Gaza and West Bank/East Jerusalem are not statistically significant. It is however, more prevalent in women than in men: 19.4 per cent versus 1.4 per cent. For girls, the prevalence lower since it is highest (27.0 per cent) among the 25-49 year-olds and as low as 13.8 per cent then 6.4 per cent among the younger population group (15-19 years).



Figure 16: The prevalence of early marriage among girls in the three age groups for girls

Perceptions differ from the above definition of early marriage. This implies that girls getting married between 16.3 and 18 are not considered to be entering an early marriage but a normal one. Even though very few people consider 16.3 as the ideal age to get married, it is considered a normal age to marry.

In the oPt, the law allows girls to marry at 15 and boys to marry at 16 except in Gaza where the legal marriage age is 18. In addition, 4.9 per cent of respondents aged 15-19 and 8.6 per cent of

unicef 47

respondents aged 25-49 declared their support for early marriage for males and females, (here the tendency was stronger in West Bank/East Jerusalem than in Gaza – 8.2 per cent versus 5.7 per cent). Moreover, almost three times more women than men support early marriage (10.6 per cent versus 3.9 per cent). With 6.3 per cent of all respondents expressing support for early marriage, it means however that 93.7 per cent do not.

6.2.2. Polygamy and consanguinity

Of all the respondents, 3.9 per cent of women reported that their husbands are married to more than one wife (see Figure 15 below). This does not appear to be a decline since the prevalence of polygamy among 20-24 year-olds is higher than their elders, respondents 25-49 years old. Statistically significant differences were not observed between rates of polygamy among respondents in the West Bank/East Jerusalem and Gaza.

Seventeen per cent of respondents said that they support polygamy while the vast majority do not. Most of the respondents supporting polygamy are male, in all age groups, making up 24 per cent of supporters, while most females (90.1 per cent) do not support it. It appears that older respondents were more likely to support polygamy than younger ones (see Figure 16 below).

A majority of respondents (60 per cent) would prefer to marry non-relatives rather than relatives, although 21 per cent thought that either was fine. More males than females said that they preferred marriage between relatives. There was no marked difference in attitudes towards marriage between family and non-relatives between respondents in Gaza and those in the West Bank/East Jerusalem. Moreover, results showed that the older respondents were, the less did they see an importance difference in marrying a relative versus someone outside of the family.

Currently, the prevalence of consanguinity stands at 39.8 per cent among all respondents, without marked differences between men and women or residents of the West Bank/East Jerusalem and Gaza. It seems to be decreasing over time as prevalence is higher in older age groups (40.1 per cent in 25-49 year-olds) compared to younger ones (31.8 per cent in 15-19).

6.2.3. Summary



Figure 15: Current prevalence in marriage patterns by age group (%)

Figure 15: Support of selected marriage patterns by age group (%)



Findings on polygamy, consanguinity and early marriages show that a small percentage of the Palestinian population is actually currently engaged in early and polygamous marriages, while consanguineous marriages are more common. Support for these marriage patterns is, however, higher than the current prevalence, especially in the youngest age group. Still, the lower levels of support for polygamy, consanguinity and early marriage among young people seem to indicate that support for these practices is in decline.

unicef 49

7. SEXUAL REPRODUCTIVE HEALTH

7.1. Sexual reproductive health

7.1.1. Use of contraceptives

The majority of respondents using family planning practices are understandably those in the 25-49 age group, inasmuch as they are more commonly married and of child-bearing age. Of the married individuals in each age group, 14.6 per cent, 36.6 per cent and 56.8 per cent (of 15-19, 20-24 and 25-49 years-of-age respectively), reported having ever used a contraceptive method or tried in any way to avoid getting pregnant. The low prevalence of family planning use among the youngest age group could be due to young couples wanting to have children early in their marriage. The use of family planning methods was more prevalent in the West Bank/East Jerusalem than in Gaza. Among 15-19 year-olds in each region, on those in the West Bank/East Jerusalem had ever used a form of contraceptive.



Figure 16: Use of a family planning method at any time by age group, gender and region (%)

Contraceptive pills were reported as the most frequent method used among 15-19 year-olds, followed by condoms and periodic abstinence (see Figure 18). Among the 25-49 age group, the Intrauterine device "IUD" is the most prevalent method of birth control, followed by pills, condoms, withdrawal and periodic abstinence, in that order. This finding could be explained by the risk of infertility due to infection associated with IUDs; young people still without children may decline to take this risk.

Condoms were reported in use by only four per cent of married people, across all age groups. This percentage appears low in contrast with the previously-discussed finding that 64.4 per cent of respondents know of the protective role of condoms, thus suggesting that condoms are used in practice solely for their contraceptive role.



Figure 17: Family planning method used at any time among the married by age group

7.1.2. Sexual Transmitted Infections

Only three-quarters of those aged 30-49 years have ever heard of STIs, with no marked regional or gender differences, except in East Jerusalem where women in particular seem very knowledgeable. On gender-specific symptoms of STIs, knowledge varies.

Genital itching and irritation is identified as a possible STI symptom in women by 75 per cent of respondents, followed by unusual vaginal discharge (68.8 per cent) (see Figure 19 below).

Figure 18: Knowledge of STI symptoms in females by gender and region (%)



Asked to identify symptoms of STIs among males, respondents most frequently named genital itching (72.2 per cent) followed by unusual discharge from penis (66.2 per cent) and pain on passing urine (63. 9 per cent).



Figure 19: Knowledge of STI symptoms in males by gender and region (%)

In general, it appears that females have better knowledge about both male and female STI symptoms. This may be the outcome of the gendered design and implementation of relevant awareness and health education programs targeting females in the community and at clinics, leaving males outside

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children

of the scope of such programs. Gaza residents also demonstrated a better knowledge of STI symptoms.

These symptoms were reported as quite widely experienced. Nearly one-quarter (24.9 per cent) of respondents admitted having experienced burning and pain during urination as well as abdominal pain (21.8 per cent) and genital secretions (18.8 per cent) that may have been symptoms for STIs during the 12 months preceding the survey. Women and Gaza residents reported a higher incidence of symptoms than did males and West Bank/Jerusalem residents. This may, however, be due to these groups' higher levels of awareness and knowledge of symptoms and associated health risks. Moreover, this data should be interpreted with caution considering the sensitivity of the subject and the potential for underreporting.

The most common answer when respondents were asked what they did about an STI was to visit a specialist (52 per cent) including a gynaecologist/dermatologist/urologist. Visiting a general practitioner (48.7 per cent) was the next course of action, followed by visiting a pharmacist (16 per cent) or taking non-prescription drugs (18 per cent). As many as 7.3 per cent of respondents reported taking no actions to treat their symptoms.

As can be seen in figure 24 below, gender differences are minimal in regards to taking no action and visiting a doctor but diverge considerably concerning visiting a specialist, a pharmacist, taking a non-prescription drug and seeking a friend's advice. It appears that men resort to their friends and to pharmacists more than females who prefer to go to specialists.



Figure 20: Actions taken against selected STIs symptoms by gender of respondent (%)

Only 38.7 per cent of 30-49 year-olds reported that polygamy increases susceptibility to STIs and only 24.6 per cent think that early marriage increases the probability of contracting an STI. In both cases, females are more knowledgeable than males, but there is marked difference between the views of West Bank/East Jerusalem and Gaza respondents.



BIBLIOGRAPHY

- Abulrahman, B.; Saeed, A. A.; Abdalla, A. M.; A. Kabba and Raat, H (2007). Smoking cessation attempts and their outcome among adolescents who ever smoked in Tabouk Area, Saudi Arabia. Middle East Journal of Family Medicine, vol5, n.8.
- Abu-Raddad, L. J.; Akala, F. A.; Semini, I; Riedner G; Wilson, D. and Tawil, O. (2010*b*). Characterizing the HIV/AIDS epidemic in the Middle East and North Africa – Chapter 8: Condom Knowledge and Use and HIV/AIDS Knowledge and Attitudes. World Bank
- Abu-Raddad, L. J.; Hilmi, N.; Mumtaz, G.; Benkirane, M.; Akala, F. A.; Riedner, G.; Tawil, O.; Wilson, D. (2010). Epidemiology of HIV infection in the Middle East and North Africa. AIDS. 24, p S5–S23.
- Al Qaseer, B.; Al Atoum, H.; Batarseh, S.; Al Jawhari, N. (2004). The Global School-based Student Health Survey. MoH Jordan, CDC and WHO. Amman: Jordan.
- AlRifai, A. (2006). Knowledge of Palestinian Girls & Women about HIV&AIDS: Behavioral Policy-Oriented Approach for Health Promotion. PFPPA and UNIFEM. Jerusalem.
- AlSaleh, J. (2007) PCBS & Ministry of Interior Affairs. The Phenomenon of Drug Abuse in the Palestinian Territory: Current Situation. Unpublished Report. Ramallah: Palestine.
- Amanjordan. Official warns of rise in the number of people with "AIDS" in Lebanon/ مسؤول يحذر من /http://www.amanjordan.org/a-news/wmview.php?ArtID=12149 ارتفاع عدد المصابين بـمرض «الايدز» في لبنان
- Askarian, M., Z. Hashemi, P. Jaafari, and O. Assadian (2006). Knowledge about HIV Infection and Attitude of Nursing Staff toward Patients with AIDS in Iran. Infection Control Hospital Epidemiology 27: Pp. 48–53.
- Bruce, J. and Clark, S. (2004). The implications of early marriage for HIV/AIDS policy. UNFPA & Population Council Brief.
- DeJong, J.; Shepard, B.; Roudi-Fahimi, F. and Ashford, L/ (2007). Young people's sexual and reproductive health in the Middle East and North Africa. Population Reference Bureau. Washington: USA
- DHS (2006) Egypt: Demographic and Health Survey 2005. Cairo.
- Duyan, V., F. Agalar, and I. Sayek. 2001. Surgeons' Attitudes toward HIV&AIDS in Turkey. AIDS Care 13: 243–50.
- Elrashied, S. (2006). Prevalence, knowledge and related risky sexual behaviors of HIV&AIDS among receptive men who have sex with men (MSM) in Khartoum State, Sudan, 2005. Abstract TUPE0509. XVI International AIDS Conference. 13–18 August. Toronto.
- El-Sayyed, N., I. A. Kabbash, and M. El-Gueniedy (2008). Knowledge, Attitude and Practices of Egyptian Industrial and Tourist Workers towards HIV&AIDS. East Mediterr Health J 14: 1126–35.
- EMRO (2011). http://www.emro.who.int/asd/hivsituation_countryprofiles.htm
- Fido, A., and R. Al Kazemi (2002). "Survey of HIV&AIDS Knowledge and Attitudes of Kuwaiti Family Physicians." Family Practice 19: Pp.682–84.
- Gharamah, F. A., and N. A. Baktayan. 2006. "Exploring HIV&AIDS Knowledge and Attitudes of Secondary School Students (10th & 11th grade) in Al-Tahreer District, Sana'a City. Yemen.
- Global Fund oPt (2011). HIV/AIDS Situation Analysis in the occupied Palestinian territories. Unpublished
- Haj Yahya, M. (1999). Battered Women in the West Bank and Gaza Strip: Findings from two National Surveys. Bisan Center for Research and Development. Ramallah: Palestine.
- Jordan National AIDS Control Programme (1994). Report on the National KABP Survey on



HIV&AIDS among Jordanian Youth. NAP Jordan.

- Kabbash, I. A., N. M. El-Sayed, A. N. Al-Nawawy, I. K. Shady, and M. S. Abou Zeid (2007). Condom Use among Males (15–49 Years) in Lower Egypt: Knowledge, Attitudes and Patterns of Use." East Mediterr Health J 13: Pp.1405–16.
- Khan, S. J., Q. Anjum, N. U. Khan, and F. G. Nabi (2005). Awareness about Common Diseases in Selected Female College Students of Karachi." J Pak Med Assoc 55: Pp. 195–98.
- Maqboul, E. & Abu Ayyash, W. (2005). Assessment of Palestinian student's knowledge about HIV&AIDS and their Attitudes toward the AIDS Patients. PFPPA. Jerusalem: Palestine.
- Mazloomy, S. S., and M. H. Baghianimoghadam. 2008. Knowledge and Attitude about HIV&AIDS of Schoolteachers in Yazd, Islamic Republic of Iran. East Mediterr Health J 14: 292–97.
- Measure DHS (2003). Jordan: Demographic and Health Survey 2002. Amman.
- Measure DHS. 1998. Jordan: Demographic and Health Survey 1997.
- Ministry of Health Egypt et al. (2006). HIV&AIDS biological and behavioral surveillance survey: summary report; Egypt 2006. Cairo, National AIDS Programme.
- Ministry of Health Sudan (2006). Sudan 2005 ANC sentinel results. Ministry of Health. Khartoum.
- Ministry of Health Syria (2004). HIV&AIDS female sex workers KABP in Syria. National AID Programme. Damascus: Syria.
- Ministry of Health Syria, UNODC, UNAIDS (2007). Assessment on drug use and HIV in Syria. Draft Report. July. Damascus: Syria.
- MoH (Palestinian Ministry of Health) (2011). Health Annual Report Palestine 2010
- MoH (Palestinian Ministry of Health) (2011*b*). Annual aids stats 2010. Unpublished
- Mohammadi, M. R., K.; Mohammad, F. K.; Farahani, S.; Alikhani, M.; Zare, F. R.; Tehrani, A.; Ramezankhani, and F. Alaeddini (2006). Reproductive Knowledge, Attitudes and Behavior among Adolescent Males in Tehran, Iran. International Family Planning Perspectives, 32(1): Pp. 35–44.
- NAP Jordan (1999). Report on the National KABP Survey on HIV/ AIDS among Jordanian Youth.
- NAP Jordan (2004). Report on the National KABP Survey on HIV/ AIDS among Jordanian Youth.
- NAP Jordan (2005). Report on the National KABP Survey on HIV&AIDS among Jordanian Youth.
- New:
- Obermeyer, C. M. (2006). HIV in the Middle East. BJM, vol.333
- Olimat, H.S. & Al-Louzi, S.H. (2010). A National Study on the Knowledge and Awareness of Jordanian High School Students toward HIV&AIDS. European Journal of Social Sciences –14 (3). Pp 427-441.
- Pathfinder International (2006). Report on consequences of early marriage in Amhara Region. Addis Ababa: Ethiopia
- PCBS (2006). Domestic Violence Survey: Main Findings. Ramallah: Palestine.
- PCBS (2008). Woman and Man in Palestine: Issues and Statistics- Analytical report number 3 (Arabic). Ramallah: Palestine.
- PCBS (2010). Palestinian Family Survey Final Report (Arabic). Ramallah, Palestine.
- Qirrish, M.K. (2010). Afat Taati Al Mukhaddirat Fi AlQuds Almuhtallah Wa Falasteen. Report in Arabic. Al Quds University. Jerusalem: Palestine. Accessed online at: http://www.cac.alquds.

edu/ar/jerusalem/jerusalem-news/1813-2010-10-13-08-18-30.html on 20 October 2010.

- Shouman, A. E., and A. A. Fotouh (1995). The Impact of Health Education on the Knowledge and Attitude of Egyptian Nurses towards Occupational HIV Infection. J Egypt Public Health Assoc 70: Pp. 25–35.
- SNAP (Sudan National AIDS Programme), UNICEF, and UNAIDS (2005). Baseline Study on Knowledge, Attitudes, and Practices on Sexual Behaviors and HIV&AIDS Prevention amongst Young People in Selected States in Sudan." HIV&AIDS KAPB Report. Projects and Research Department (AFROCENTER Group).
- Spratt, K. (2000). HIV/AIDS and sexually transmitted infections (STIs) in the West Bank and Gaza. USAID. http://pdf.usaid.gov/pdf_docs/Pnacj992.pdf
- Syria-aleppo. A new Syrian series: 'Red Line' exposes the fragility of the Syrian society/ مسلسل سوري /http://www.syria-aleppo.com/news/2226.html
- Tavoosi, A., A. Zaferani, A. Enzevaei, P. Tajik, and Z. Ahmadinezhad (2004). Knowledge and Attitude towards HIV&AIDS among Iranian Students." BMC Public Health 4: 17.
- UNAIDS & WHO (2008). Middle East and North Africa: AIDS epidemic update Regional Summary, 07. Geneva: Switzerland.
- UNAIDS & WHO (2009). AIDS Epidemic Update.
- UNAIDS (2008). Report on the Global AIDS Epidemic, UNAIDS, Geneva
- UNAIDS (2010). Global fact sheet Middle East and North Africa. http://www.unaids.org/documents/20101123_FS_mena_em_en.pdf
- UNAIDS (2011). Monitoring and reporting on the health sector response to HIV/AIDS. oPt. Unpublished
- UNAIDS (2011b). UNAIDS's Terminology Guidelines. http://www.unaids.org/en/media/unaids/ contentassets/documents/document/2011/jc1336_unaids_terminology_guide_en.pdf
- UNDP (2008), Swaziland Human Development Report HIV and AIDS and culture. March 2007
- UNICEF (2009). HIV prevention with young people: The key to tackling the epidemic. Accessed Online at: http://www.thebody.com/content/world/art51703.html on 11 November 2010.
- UNICEF (2011). Opportunity in Crisis Preventing HIV from early adolescence to young adulthood. NY: USA
- United Nations (2009). The Millennium Development Goals Report. New York: USA
- UNODC (2007). The phenomenon of drug abuse in the Palestinian Territory, current situation report, 2006. Vienna.
- WHO (2006). Gender and Health in the Eastern Mediterranean Region: Conceptual and Operational Advocacy. Regional Office for the Eastern Mediterranean.
- World Bank (2010). Characterizing the HIV&AIDS Epidemic in the Middle East and North Africa: Time for Strategic Action. Washington DC: USA.
- Zamani, S. M.; Kihara, M. M.; Gouya, M.; Vazirian, B.; Nassirimanesh, M.; Ono-Kihara, S. M.; Ravari, A.; Safaie, and S. Ichikawa. (2006). High prevalence of HIV infection associated with incarceration among community-based drug users in Tehran, Iran. Journal of Acquired Immune Deficiency Syndromes, 42(3): Pp. 342–346.
- Zamani, S.; M. Kihara, M. M.; Gouya, M.; Vazirian, M.; Ono-Kihara, E. M.; Razzaghi, and S. Ichikawa. (2005). Prevalence of and factors associated with HIV-1 infection among drug users visiting treatment centers in Tehran, Iran. AIDS, 19: Pp. 709–16.

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