# Most at Risk Adolescence (MARA 13-19yrs) in Occupied Palestinian

Sumaya Sayej RN PHD, Mohammad Qtait RN, MSN Nursing Department, Faculty of Health Professions, Al-Quds University, Palestine Sumaya Sayej RN PHD Mohammad Qtait RN, MSN

#### Abstract

The World Health Organization (WHO) defines adolescents as "people aged 10 to 19 years". Adolescence is increasingly recognized as a life period that poses specific challenges and a time of vulnerability and risks. There are many vulnerability and risk factors for adolescent boys and girls that make them susceptible to be engaged in HIV risk behavior and/or unable to protect themselves from exploitation that can lead to HIV infection. Adolescents who engage in these behaviors are called "most-at-risk adolescents- MARA" (Homans, 2007).

The study objective was to provide information and evidence on the level of risk behaviors among young people aged (13-19) years who are most at risk of HIV infection in the OPT To achieve this goal, 6 measurable objectives were set through quantitative. The study design : Quantitative approach . Study results the sociodemographic profile and living conditions for MARA were obtained from a sample of 149 adolescents; 71.8% males and 28.2% female. The participants' age ranged from (14-19) years with an average of 17.9 years with 67.8% for the ages 18-19 years old. Place of residence and social status; the study participants were from all regions; 13.4% from Gaza and 86.6% from West Bank (23.5% from Jerusalem, 34.2% from middle region, 22.1% from north region and 6.8% from south region of West Bank). Education and school attendance; the data of 16% with no education and 26.6% elementary level of education" coupled with almost half of the older adolescents (only 22% out of the 40% who are 19 years). Employment of work; congruent with what is being indicated about, their low level education, 65% of targeted adolescents are working; 41.6% work full time job and 23.5% worked sometime. Exposure to unusual experiences during work; 53% of workers have been exposed to unusual practices regardless of their work place; 30% were given cigarettes, 22.8% given money, 5.3% given drugs and 2.7% taken for a drive. The household's income in Shekel for all family members have ranged from (300-8000), the adolescents' source of spending during last month was mainly; 60.4% from their own employment and 26.8% from family support and very few got from different sources where 2.7% received from social affairs and 1.4% from other sources. Drug users; the MARA mean age to start drug use was 15.8 years, they utilize different kinds of drugs with the majority 76.5% smoked marijuana, 55% inhaled glue and other toxic substance and 34% used a variety of drug pills with more male users than female users on all items as indicated by their mean scores.

Keywords: Most at Risk Adolescence (MARA 13-19yrs), Palestinian.

#### Introduction

The World Health Organization (WHO) defines adolescents as "people aged 10 to 19 years". Adolescence is increasingly recognized as a life period that poses specific challenges and a time of vulnerability and risks. Adolescents are undergoing many psychological and physical changes and are subject to increased peer pressure and prone to greater experimentation (Russel, 2005). With greater freedom and independence, behavioral patterns emerge and experimentation begins where some start to learn and develop, some others start experiment with behaviors that are potentially harmful to them. There are many vulnerability and risk factors for adolescent boys and girls that make them susceptible to be engaged in HIV risk (UNICEF, Research Report on Most-at-Risk Adolescents, 2009) The behaviors that place adolescent most at risk of HIV infected partner and performing multiple unprotected sexual acts with HIV-infected partners, a behavior that is often linked with selling sex or transactional sex (UNICEF, 2009). Transactional sex is the situation of adolescents in which they see no alternative but to exchange sex for money to live, for goods (including drugs) or for better living conditions. Adolescents who engage in these behaviors are called "most-at-risk adolescents- MARA" (Homans, 2007).

According to national Research on HIV and AIDS draft report in OPT (2011), the oPt is a low prevalence country of HIV transmission bordering several other low prevalence countries (Israel, Jordan, and Egypt) in the Middle East and North Africa region. During the implementation of the first phase of the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) project in oPt, several research studies were conducted between 2009 and 2012 through several UN agencies and in partnership with governmental and NGOs to help the country understand more about the epidemic situation, in terms of risk and vulnerability, the circumstances and challenges that need to be addressed to keep HIV from spreading.

# 1. Study Background and Significance

Many adolescents grow up in circumstances and environments that make them suffer from the negative impact of the political instability and the socioeconomic constraints that affect their families and their communities. In addition to lack of policy and legislation regarding health care and social services that address adolescents need are all factors that may contribute to unhealthy development and vulnerability to be exposed to risk factors such as; smoking, use of drugs, alcohol drinking and easy exploitation by others.

The economic development is reflected in poverty rate among individuals in OPT where data revealed that 12.9% were suffering from deep poverty in 2010 according to consumption patterns (7.8% in the West Bank and 21.1% in Gaza Strip). PCBS data estimate an overall poverty rate is an average of 13% points higher for households with children than for those without children. The results of labor force survey revealed that the labor force participation rate in the 1<sup>st</sup> quarter of 2013 was 43.4% of the total labor force for persons aged 15 years and above (45.0% in the West Bank and 40.5% in Gaza strip).

he poor child defined by PCBS, (2011) is the child who belongs to a poor household (whose income is below the national poverty line). Studies indicate that household head's job loss significantly increases the probability of child labor, where the effect can be as large as 64% on the probability of working for 16 years old boys (Households in Conflict Network-HiCN).

Although the legal age for workers in Palestine was recently increased from 14 to 16 years, but this change has not been materialized on the ground when 4% of children aged 10-17 years working in 2011 (6% in the West Bank and 2% in the Gaza strip; 8% for boys and 1% for girls). According to the Risk Behavior Assessment of Palestinian Workers in Israel (2010), there was more than 61 thousand workers in Israel with majority are young and uneducated; 99% were male workers, 74% were never married, 50% were educated for less than 9 years of study and 41% their study ranged between 10-12 years. Regarding types of business practiced by these workers, 53% in construction sector and the rest worked either vocational or low menial jobs. More than 21% were young people aged 15-24 years, 32% aged of 25-34 years, and 30% aged 35-44 years.

It is noteworthy too that workers in Palestine are not receiving decent work principles which imply safe work conditions and protection for workers where the evidence suggests that employers in oPt do not adhere satisfactorily to work safety requirements as outlined in the Labor Law (UN Development Assistance Framework in Palestine 2012 draft). Adolescents and young people particularly vulnerable to physical, psychological and sexual exploitation by others with the fact that distinguishes them from the most-at-risk adults is that young people will usually have little power or 'agency, either individually or collectively, to advocate for themselves and each other.

Within this realm, the majority of workers in Israel are young and uneducated, and thus focusing on this group of people being classified by the Palestinian Ministry of Health as one of the five most vulnerable groups to STIs including AIDS. Furthermore, the report commented on the circumstance these "young people" work make them vulnerable to risk factors such as drug use and contracting AIDS.

According to the Ministry of Health, the first HIV case in the occupied Palestinian territories was diagnosed in 1988. To date, there are 14 people living with HIV and 13 people are under antiretroviral therapy (ART). The majority of these cases are infections that have been contracted more than five years ago and are attributed to heterosexual transmission. Increasing rates of HIV are reported among injecting drug users and migrant workers in Israel (Štulhofer, 2010, P. 11). The statistics do not include the HIV and AIDS cases reported in East Jerusalem, estimated to amount to 18 cumulative cases, which are notified to and followed up by the hospitals in Israel (Štulhofer, 2010

The PCBS with MOH and UNFPA (2011) youth needs (15-24 years old) survey of youth friendly health services in the West Bank indicated that; youth have lots of free un-invested time, which leads to harmful health and social practices and the most prominent was smoking and drug addiction, etc, followed by psychological problems and non-communicable chronic diseases. The same study indicated there is a gap between health knowledge and practices, and that one fifth of the youth who needed medical services did not seek it and half of the surveyed youth thought that the available health services did not meet their needs.

#### 2. The study goal and objectives

Provision of information and evidence on the level of risk behaviors among young people aged (13-19) who are most at risk of HIV infection as classified by GFTAM; workers in Israel, sex workers and their clients, prisoners and injecting drug users (IDUs) for future interventions. In order to achieve this goal, the following research objectives and hypotheses are set

#### 2.1 Study Objectives:

1. To identify socio- demographic characteristics of MARA and their families and what are the factors which contribute to increase their risk to HIV and STIs including education, work and work environment

- 2. To assess adolescent's high-risk behaviors in terms of availability, extent and mechanisms utilized for drug use, Injecting drug use, sexual behavior and prison experiences
- 3. To understand MARA behavioral determinants in terms of Knowledge and attitude toward transmission of STIs and HIV and the practices toward testing and seeking services.
- 4. To assess MARA knowledge of availability and accessibility to STIs and HIV services within their communities
- 5. To statistically identify the relationship between selected socio-demographic characteristics (place of residence, sex, education and work place) and risk factors (drug use, IDU, sexual behaviors, HIV behavioral determinants and use of services)

#### 2.2 Study hypotheses

- 1. There is a significant relationship found at a level of ≥ 0.05 between gender and drug use, injecting drug use, HIV behavioral determinants, prison and police experience and accessibility of MARA to information and services
- 2. There is a significant relationship found at a level of  $\ge 0.05$  between place of residence and drug use, injecting drug use, HIV behavioral determinants, prison and police experience and accessibility of MARA to information and services
- 3. There is a significant relationship found at a level of  $\ge 0.05$  between Education Level and drug use, injecting drug use, HIV behavioral determinants, prison and police experience and accessibility of MARA to information and services
- 4. There is a significant relationship found at a level of ≥ 0.5 between work in Jerusalem/Israel and drug use, injecting drug use, HIV behavioral determinants, prison and police experience and accessibility of MARA to information and services

# 3. The study design

This exploratory correlational study has utilized purposive convenient sampling approach that targeted 149 MARA aged (13-19) from all Palestinian regions (West Bank including Jerusalem and Gaza Strip). Quantitative and qualitative methods for data collection was done to complement the information obtained about the study concepts. For the quantitative method, a structured questionnaire was developed based on other studies done in the area of MARA and MARP to collect numerical data, also there was some open ended questions to explore MARA insights of the issues to be studied. The data was collected after its reliability obtained and validity approved. The second part was an in-depth interview with relevant decision makers and key stakeholders representing INGOs, NGOs, governmental organizations, and CBOs working with young people issues.

Prior to data collection, ethical issues were taken into consideration, an informed consent was given to each participant signed by the researcher supported by a formal letter signed by PFPPA management describing the purpose of the study and asking for permission to conduct the study which was sought on voluntary basis. Yet, accessing the required number of MARA was extremely difficult and problematic as many refused to participate and many others wanted to fill the questionnaire by themselves which resulted in filling some of them incorrectly and thus were discarded. The quantitative data results were compiled into tables and their interpretation presented into narrative style

# 3.1 Study Tools

# **Development of the study question**

The questionnaire developed was based on the study objectives and study concepts. Many of the questionnaire items were taken and modified from the national surveys done in this area, particularly the national UNODC-AWRAD (2012) for the drug use items and the UNICEF- MARA baseline study in Ukraine (2008). The questionnaire included 6 major parts; 1) socio-demographic characteristics, 2) drug use, IDU and prison experiences, 3) sexual behaviors, 4) HIV behavioral determinants, 5) accessibility of MARA to information and services and 6) four open ended questions allowed the participants to have an in-depth insight for reasons that adolescent may get at risk of having HIV and for services needed.

#### The questionnaire validity and reliability

The content validity was established when experts in research, health and social studies. Pilot testing was established by having 9 questionnaires filled by MARA girls and boys. According to comments from all, the researcher made the changes required where rewording, adding or deleting some items was needed in order to clarify the questionnaire for the participants. Also it measured the time required to complete the questionnaire where it ranged from 40-60minutes.

The questionnaire was tested for Cronbach coefficient alpha reliability through SPSS analysis to assess

the internal consistency of the questionnaire items where the coefficient alpha established for this tool was (=0.78).

# 3.2 Sampling

#### Participant's selection and sampling approach for quantitative data

Accessibility to MARA was a very difficult task and not easy to reach because of cultural, religious and legal barriers that inhibit activities including identifying the targeted adolescents. Therefore, a combination of purposive and convenience sampling approach was used to select the sample with representation of male and female young people from different localities in West Bank and Gaza Strip. The data was collected from the target groups during individual interviews using structured questionnaires that elicited quantitative data and some open ended questions. A snoWest Bank all non-probability sampling method was used, which consists of interviewing people whom were recommended by some stakeholders and then, what was recommended by previous participants.

#### Accessibility and Ethical Consideration

Gaining access to MARA was sought on voluntary basis. The data collectors went directly to the accessible sites, individuals and galleries, explained the purpose of the study and ensured participants for anonymity and confidentially, they further explained that results and conclusions made through information obtained will be used for the research purposes only. Consent of respondents was sought prior to individual interviews and assurances of anonymity were provided. A letter of agreement was signed by the researcher supported by a formal letter signed by the PFPPA management describing the purpose of the study and asking for permission to conduct the study was another ethical safeguard

#### 4. Results

#### 4.1 Socio-demographic Data

**4.1.1 Gender, Identity and age of the sample population (Table 1)**: 149 boys and girls adolescents were accessed and involved in the study; 71.8% males and 28.2% males, 59.6% of adolescents carry the Palestinian identity card and 40.4% carry the Israeli identity card noting that some of them are living in WEST BANK areas like Bethany and Shufaat. The adolescent age ranged from (14-19) years with an average of 17.9 years; 40.3% were 19 years old, 27.5% for18 years, 15.4% for 15 years and one for 14 years old. Noting that the younger the adolescents the less they were represented in this study.

	Gender		Identity Card		Age			
	No.	%		No.	%	Years	No.	%
Males	107	71.8	Palestinian	89	59.6	19	60	40.3
Females	42	28.2	Israeli	60	40.4	18	41	27.5
						17	23	15.4
						14-16	18	12.2
						Missing	7	4.7
Total	149	100	Total	149	100	Total	149	100.0

#### Table 1: Gender, Identity and age of the sample population

**4.1.2 Region and place of residence (Table 2)**; the study participants were recruited from all OPT; regions; 13.4% from GS and 86.6% from WEST BANK distributed as; 23.5% for Jerusalem, 34.2% from middle region of WEST BANK, 22.1% from north region of W B 6.8% from south region of WEST BANK. The majority 86% live within their family homes and only 10.7% live outside home.

Table 2: Region and Place of residence									
F	Region of residence	Place of residence							
	No. %				No.	%			
J	lerusalem	35	23.5	In home	128	85.9			
Ν	Middle region of West Bank	51	34.2	Out of home	16	10.7			
Ν	North region of West Bank	33	22.1						
S	South region of West Bank	10	6.8						
C	Gaza strip	20	13.4						
Ν	Missing			Missing	5	3.4			
Г	Fotal	149	100	Total	149	100.0			

**4.1.3 Marital and social status (Tables 3);** 85.9% of the study participants are single, and about 11% were married at early age; of those, 4.7% still married and 6% were divorced and these percentages were among girls only. Noting a divorce rate higher than marriage rate is an indicator that the younger they get married the higher rate to get divorce. There was 3.4% who are in a steady relationship where such kind of relationship is strange for the conservative Palestinian culture.

#### Table 3: Marital status

us		
Marital status	No.	%
Single	128	85.9
Married	7	4.7
Divorced	9	6.0
In a steady relationship	5	3.4
Total	149	100

**4.1.4 Years of education and school attendance (table 4)**; 35.5% of boys and girls studied some secondary/secondary classes, 26.2% studied at elementary /primary level, followed by 22.2% studied some college/university classes and 16% have no formal education. No education and low level of education of the target group is one of the risk indicators found when there is around 40% are 19 years old and 22.2% only studied some secondary/college classes

Only 25.5% attended most of school days, 42.3% were absent most of the school days and 20.8% were absent for 10-20 days indicating the participants' poor attendance and thus achievement as in their low education achievement

#### Table 4: Years of education and school attendance

Years of education	No.	%	school attendance	No.	%
No formal education	24	16.1	Attended most of school days	38	25.5
Elementary/Primary	39	26.2	absent for 10-20 days	31	20.8
Some secondary/secondary	53	35.5	absent most of the school days	63	42.3
Some college/university	33	22.2	Missing answers (not in school)	17	11.4
Total	149	100	Total	149	100.0

**4.1.5 The work status, work type and household income (table 5);** 65% of participants are working; 41.6% work full time job and 23.5% worked sometime. For the type of work; 10% were self-employed (family business; shop, farm etc...) and 56.4% worked different low wages jobs as laborers and in private sector.

# Table 5: Work status and Work type

Work status	No.	%	Work type	No.	%
Full time	62	41.6	Self employed/family business	15	10.1
Some times	35	23.5	Private sector/ Laborers etc	84	56.4
Missing	52	34.9	Missing	49	32.9
Total	149	100	Total	149	100

**4.1.6 Work in Israel/Jerusalem and nature of Work (table 6);** around 35% of adolescents have worked or been working in Israel / Jerusalem. They worked in different places; 14.1% in Hotels/ restaurants including 1 person who worked in night clubs, 4% in factories, 6.7% in construction and 14.1% in different unstable- jobs. The given figures above indicates low level of education and high level of labor with menial jobs allowing for vulnerable adolescents of poverty, humiliation, coercion, and disconnection from family and community to be exposed to injuries, engage risk behaviors and be indifferent. These results also coincide with the Risk Behavior Assessment of Palestinian Workers in Israel (2010) in terms of low education and work circumstances. Therefore, the attention of stakeholders regarding this matter should be captured where preventive and protective measures are applied and followed on.

Work in Israel/W	est Jerusal	em	Nature of work in Israel					
	No.	%		No.	%			
Yes	52	34.9	Hotels/ restaurants	21	14.1			
Sometimes			Constructions	10	6.7			
No	90	61.1	Factories	6	4			
			Others /specify-	21	14.1			
Missing	7	4.7	Missing	91	61.1			
Total	149	100	Total	149	100			

#### Table 6: Work in Israel / Jerusalem and Nature of Work

**4.1.7 Adolescents' exposure to unusual practices during work (table 7);** of the 65% (97 working adolescents), 53% have been exposed to unusual Practices. Around 30% were given cigarettes, 22.8% given money, 5.3% given drugs and 2.7% taken for a drive. Persons exhibited the unusual practices toward adolescents during work were as follows; 24.2% work colleague, 18% their employers, 13.4% their employer friends and the least 3.3% was for strangers or others.

#### Table 7: Adolescents' exposure to unusual practices during work; Kind of practices and by whom

Kind of practices and by whom											
Exposure of all	workers	to unusual	kind of unusual	prac	ctices	Persons exhibited	un	usual			
Practices During work			during work			practices					
	No.	%		No.	%		No.	%			
Yes	79	53	Been given gifts or money	34	22.8	Your employer	28	18.8			
No	18	12.1	Been given cigarettes	44	29.5	The employer friends	20	13.4			
			Been given drug	6	5.4	Work colleagues	36	24.2			
			Taken for a drive	4	2.7	Strangers/others	5	3.3			
Missing	52	34.9	Missing	59	39.6	Missing	60	40.3			
Total	149	100	Total	149	100	Total	149	100			

The households income in Shekel for all family members have ranged from (300-8000) with an average of 3610.40 for the households; around 14% income ranged from (300-2000) only, 18.9% income ranged from (2001-3000), 12.8% of income ranged for (3001-4000), 22% of income ranged for (4001-6000), and 1.3% of income ranged for (6001-8000) and there was one person with 16000 NIS indicating a variation of economic status among MARA families. On the contrary 32.2% of participants did not respond to this question.

The adolescents' source spending during last month was as such; 60.4% from their own employment and 26.8% from family support. Very few got from different sources; 2.7% from social affairs, 2.7% from something else (friends) and 1.4% from other sources.

<b>Range of HH income in NIS</b>			Source of income during the last month					
NIS	No.	%		%				
300 - 1000	10	6.8	My employment	90	60.4			
1001 - 2000	9	7.8	Family support	40	26.8			
2001 - 3000	28	18.9	Social affairs institutions	4	2.7			
3001 - 4000	19	12.8	Friends /selling drugs	2	1.4			
4001 - 6000	31	22.2	Something else	4	2.7			
Missing	49	32.2	Missing	9	6			
Total	149	100	Total	149	100			

# 4.2 Adolescents Drug Use

This section will present the prevalence, types of drugs, and mechanisms used by non-injecting and injecting drug users within the targeted MARA group

# 4.2.1 MARA non-injecting drug use

**The non-injecting users (table 9);** the data indicated that MARA started to use drugs at an average age of 15.8 years, utilizing different kinds of drugs and 70.5% utilizing alcohol. The majority 76.5% smoked marijuana, 55% inhaled glue and other toxic substance like hashish and heroin, 34% used a variety of drug pills including ecstasy. There is around 44% of the targeted MARAs are IDUs; among them 22.1% are at extreme risk using non-injecting and injecting drugs and 21.5% use injecting drugs only with a greater number for male adolescents as presented with their means

# Table 9: Adolescents drug use

		Yes		No		Mean		
		No.	%	No.	%	Males	Females	
1	Have you ever used alcohol?	105	70.5	40	26.8	1.18	1.54	
2	Have you ever inhaled glue or any other toxic solution or	82	55.0	62	41.6	1.38	1.58	
	substance							
3	Have you ever smoked marijuana?	114	76.5	32	21.5	1.14	1.41	
4	Have you ever used non injecting drugs?	82	55	61	40.9	1.36	1.62	
5	Have you ever used tablets, ecstasy, trip and/o other	51	34.2	91	61.1	1.60	1.75	
	substances/drugs?							
6	Have you ever injected yourself by drugs?	32	21.5	110	73.8	1.70	1.97	
7	Do you do both (inject and non-inject)?	33	22.1	102	68.5	1.60	1.76	

# 4.3 MARA Practices of IDU

In general the responses were minimal, out of the 44% IDUs, around half of the participants responded to the IDU mechanisms and practices for its use. Since this part of the questionnaire items are difficult to organize in

one table, so each item is discussed separately. To identify participants' practices when injecting themselves; first question "when was the last time you injected", 18.1% responded, and the range varied from one day to one year. The second question was "the last time you used drugs were you alone or with other drug users?" 23.5% responded; 10.7% were alone, 10.8% were with other drug users and 2% with their partners. The third question was "who injects you with drugs most of the times?" 20.1% responded; 13.4% by their own self, 4% with other drug user and 2% with sexual partner. The forth question was "where did you use drugs–place", 16.1% at home, 2.0% in dealers' house and 2% with other IDUs users. There were 2 questions on the use needles/syringes, only 12.7% of the IDUs used sterile needles/ syringes and 11.4% have tried to clean or disinfect the needle/syringe they used reflecting MARA lack of knowledge and carelessness about the consequences of use and misuse when injecting their drugs. The above mentioned indicators require special attention by stakeholders to reduce the risk of IDUs by setting strategies that control, decrease and educate about these matters to avoid contracting STIs/HIV.

#### 4.4 MARA Sexual Behaviors

This section will present the Sexual Practices among MARA in general, and specific questions for each of the boys and girls related

**MARA Sexual behaviors for Both Sexes;** although 86% of the participants are single, 78% had sexual intercourse by the age of 19 and the average age was 15.6 years. Regarding number of partners; 47.7% did have regular partners, of those; 40% had one partner, 20% two partners, 9.4% 3 partners and 2% for 4 or more partners. In comparison with Štulhofer (2010) HIV Bio-Behavioral Survey among IDU in the East Jerusalem found that Participants' mean age at first sexual intercourse was 18.24 years and the majority of IDUs were sexually active at the time of the survey and with more than one sexual partner in the past year with an average of four sexual partners.

Sexual experience and initiation of risk was clear in the results when out of the 78% experienced sexual intercourse at some point during their lives; 42.3% had sex under the influence of drugs and 26.3% were forced to have sex by a male partner (boys and girls). The question "Have you ever received a reward for sex?" 26.2% reported they received a reward for sex offered mostly from their employers and work colleagues. This means some targeted MARAs are "selling sex" as an alternative way to have some kind of material /sexual satisfaction or as young people can be exploited easily because of a little power or 'agency they have to protect themselves. In contrast, 26.3% reported yes, for the question "Have you ever been forced by a male to have sex with him in the last year?" indicating another form of vulnerability to risk of STIs/HIV through abuse and force, a matter that should be given a priority by the stakeholders for all these ill-practices.

These participants were asked "Have you ever filed a complaint about this person who forces you" it was only 8.1% who did vs. 17.4% who asked for help from others and the people they asked mostly were friends, some girls asked older sister and/or work colleague

#### Table (10) MARA Sexual behaviors

Statements	Yes		No	Mean	
	No.	%	No.	%	
1. Have you had sexual intercourse so far	116	78	29	19.5	1.20
2. Have you ever had sex under the influence of drugs?	63	42.3	69	46.3	1.52
3. Have you ever been forced by a male to have sex with him in the last	39	26.2	93	62.4	1.74
year?					
4. Have you ever received a reward for sex?	39	26.2	85	57.0	1.71
5. Have you ever filed a complaint about this person who force you	12	8.1	110	73.8	1.90
6. Did you ever seek help from others regarding this matter	26	17.4	96	64.4	1.82
7. Have you used condoms with a male or female sex partner in the last	68	45.9	30	20.1	1.92
year					
8. Did you have a regular partner	71	47.7	55	36.9	1.44

Regarding condom use; around 46% have used condom and 20% did not use; for those used, it was not consistent neither regular as indicated in their responses to the statement (not in the table) "How often did you use condoms with a male or female sex partner in the last year?" 24.8% used once a month, 13.4% used 2-4 times a month, 4% used once a week indicating a low use of condom where these adolescents will be subjected to STIs and HIV. Out of 78% (116 MARA) who practice sex, only 44% responded to the question "where do you get condoms from", 27.5% got it from pharmacy/shop, 12.1% from friends, 3.4% from family and only two got it from outreach worker. Condom availability and use is a key intervention as a preventive measure to combat STIs /AIDS.

# 4.5 MARA Boys sexual behaviors

This part presents the boys sexual practices (table 11); 14.8% (22 boys out of 107 boys) have practiced anal intercourse with a boy/man at average age of 14.6 years for the first time. For the question "How many male sex partners have you had during the last year?" 11.4% (17 boys) answered this question; 8.7% had one male partner, 1.3% had two partners and 1.3% had more than two partners. Furthermore, 16.8% (25 boys) reported having female sex partners; 8.1% had one female partner, 4.7% had two partners, and the other 2.6% had 3 or more.

Table (11) boys Sexual behaviors												
BOYs No.= 107												
Have you	ı ever had	How old v	vere you when you had	How many male sex How many fema								
anal intere	anal intercourse with anal intercourse with a boy/man			partners ha	ive you had	partners di	d you have					
a boy/man	a boy/man? for the first time?			during the l	ast year?	in the last year?						
22 boys re	sponded	22 boys responded		17 boys res	ponded	25 boys res	sponded					
Yes	%	Age	Average	No. of	Average	No. of	Average					
	range		partners		partners							
22	14.8	11-18	14.6	1-5	1.47	1-6	1.5					

#### 4.6 MARA Girls Sexual and reproductive health Practices

To add value on the study variables, the girls were asked specific questions related to their sexual and reproductive health issue including pregnancy and abortions that could lead to further risk factors among them and that may concern the stakeholders too. The girls sexual practices (table, 12) indicated; 40.7% girls (17 out of 42 girls) reported being pregnant during their lives with a range of 1-3 pregnancy; 19% (8 girls) have children with a range of 1-3 children. Further question on abortion to identify other SRH problems facing these young girls was; 23.8% had the experience of abortion that ranged from 1-3 times, with 6 of them were having unsafe abortion; 5 aborted themselves and 1 by traditional practices

#### Table (12) Girls Sexual Practices

	GIRL No. = 42						
Have you	ever been	How many times	you been	Do	you have	How many child	ren do you
pregnant?		pregnant		childre	n	have	
yes	%	Range of pregnancy	Average	Yes	%	No. of children	Range
17	40.7	1-3	1.5	8	19	11	1-2
Have you abortion	ever had an	How many times ha an abortion	ve you had		•	portion, where did y	you receive
-	ever had an %	3	ve you had Average		•	oortion, where did y Aborted myself	you receive Others/
abortion		an abortion	-	the serv	vices?		

#### 4.7HIV Behavioral Determinants and Use of Services

MARA Knowledge of, attitude and behaviors toward transmission of STIs/HIV and seeking behaviors toward testing and services

#### 4.8 MARA Knowledge about Transmission of STIs HIV

It is noteworthy that most targeted adolescents have answered this part of the questionnaire (table 13) with relatively good responses for the positive statements; 66.4% agreed that having sex with one faithful, uninfected partner reduce the risk of STIs and HIV transmission, 69.1% agreed that correct and consistent (regular) use of condoms reduce the risk of STIs/HIV transmission and 72.5% agreed that using clean, unused needle/syringe for injecting drugs reduce the risk of HIV transmission. Although they have good knowledge regarding these two last important preventive measures (condoms and clean syringes), their practices on doing so were very minimal as presented earlier, where this knowledge need to be interpreted by doing to avoid the risk of having HIV infection.

# Table (13) MARA Knowledge about Transmission of STIs HIV

	Statement	Yes		No		Do	on't know	
	Statement	No.	%	No.	%	No.	%	Mean
1	Can having sex with one faithful, uninfected partner reduce the risk of STIs/ HIV transmission?	99	66.4	9	6.0	35	23.5	1.55
2	Can correct and consistent use of condoms reduce the risk of STIs/HIV transmission?	103	69.1	7	4.7	33	22.1	1.51
3	Can a healthy-looking person have HIV?	60	40.3	41	27.5	41	27.5	1.87
4	Can a person get HIV from mosquito bites?	31	20.8	63	42.3	49	32.9	2.13
5	Can a person get HIV from drinking from the same glass with somebody who is infected?	33	22.1	57	38.3	53	35.6	2.14
6	Can a person get HIV by sharing the toilet, swimming pool with somebody who is infected?	35	23.5	56	37.6	52	34.9	2.12
7	Using clean, unused needle/syringe for injecting drugs reduce the risk of HIV transmission?	108	72.5	6	4.0	29	19.5	1.45

Other responses regarding HIV transmission has varied as such; 23.5% agreed, 37.6% disagreed and 35% did not know for sharing toilet, 22% agreed, 38.3% disagreed and 35.6% did not for sharing a drinking glass and Lastly 20.8% agreed, 42.3% disagreed and 32.9% did not know if a person can get HIV from mosquito bites.

# 4.9 MARA attitude about Transmission of STIs HIV

MARA attitudes regarding living with a friend with HIV (table 14) were mostly to the negative side when; 72.5% disagreed to hug them, 70.5% disagreed to use the same toilet, 64.4% to be with them in the same room, 57.7% disagreed to eat with them a meal on the same table, and to less extent 40.3% disagreed to work with them. MARAs' knowledge and attitude responses are very critical to stakeholders to launch awareness programs regarding these matters.

#### Table 14: MARA attitudes about Transmission of HIV

		-				
If	you knew that a friend of yours that is living with	Yes		No		
HI	V, would you do the following with them?	No.	%	No.	%	Mean
1	Eat with them a meal on the same table?	56	37.6	86	57.7	1.61
2	Use the same toilet?	37	24.8	105	70.5	1.74
3	Be in the same room with them?	45	30.2	96	64.4	1.68
4	Give them a hug?	34	22.8	108	72.5	1.76
5	Working with them?	77	51.7	65	43.6	1.46

#### MARA perception of and practices toward STIs and HIV Testing

MARA perception to the risk of getting infected with HIV was identified in this statement "Thinking about the risk of getting infected with HIV, how much you think you are exposed to this risk?" 67.8% said "I am not exposed to it" 15.4% said "the risk is small", 6.7% said "The risk is moderate" and 4.7% believed that "The risk is substantial".

MARA were asked for their experience of having STIs and HIV symptoms at some point during their lives (table 14); 23.4% admitted of having genital sores, ulcers and unusual genital discharges, 3.4% were diagnosed with hepatitis B and 1.3% were diagnosed with hepatitis C. Furthermore, 4% (6 persons) have tested for HIV, of those (2 persons) 1.3% reported that their HIV test was positive vs. (4 persons) 2.7% was negative. Unfortunately, these positive testing adolescents either to HIV or hepatitis could not be known because of the anonymous data. These results very much coincide with the UNODC-AWRAD study (2011) that indicated; 6% of drug users were diagnosed with a sexually transmitted disease at some point in their lives, 11% reported ever being diagnosed with hepatitis B and 11% with hepatitis C.

#### Table 15: MARA perception and practices of STIs and HIV Testing

Sta	Statements			No	
		No.	%	No.	%
1	Have you ever been informed of having positive hepatitis B?	5	3.4	137	91.9
2	Have you ever been informed of having positive hepatitis C?	2	1.3	134	89.9
3	Have you ever been tested for HIV?	6	4	131	87.9
4	Do you know your result of your HIV Testing?	2 positive	1.3	143	96
		4 negative	2.7		
5	Have you ever had genital sores, ulcers or unusual genital	35	23.4	109	73.2
	discharges?				

# 4.10 MARA seeking services if got STIs problems

Although there was 23.4% (35) adolescents who admitted having STIs symptoms, their seeking behaviors has varied and were very minimal as indicated in table (15). The highest range was for 7.4% went to private vs. 3.4% to government facilities, 7.4% treated themselves, 6% Asked outreach workers for advice, 5.4% stopped having sex, 4.7% bought drugs from pharmacy for self-treatment, around 5% did nothing and 2% did not know where to go. This means awareness and education on these matters in terms of prevention and intervention is very essential and education about available services and how to access them within their communities is more important in this case.

# Table 16: MARA seeking services if got STIs problems

	Statement	Yes		No	
		No.	%	No.	%
	Have you ever had genital sores, ulcers or unusual genital	35	23.4	104	69.6
	discharges; of those				
1	Went to private health care facility for diagnosis and treatment	11	7.4	24	16.1
3	Went to government health care facility for diagnosis & treatment	5	3.4	23	15.4
4	Went to a pharmacy to buy drugs for self-treatment	7	4.7	20	13.4
5	Went to a traditional healer for diagnostics and treatment	-	-	18	12.1
6	Treated myself at home	11	7.4	13	8.7
7	Stopped having sex	8	5.4	13	8.7
8	Asked outreach workers for advice	9	6.0	14	9.4
9	Went to an anonymous counseling/testing site	-	-	15	10.1
10	Called a helpline	2	1.3		
11	Did nothing	7	4.7	-	-
12	Others (asked friends, asked my sister)	3	2	9	6.0
13	Did not know where to go	3	2	-	-

# 4.11 REASONS FOR AND EXPERIENCES OF MARA WITH POLICE AND PRISON

# 4.11.1 MARA experiences with police and prison

The responses of targeted MARA in table (16) regarding their experiences with police and prison was astonishing when; 43% have been stopped or harassed by the police, 40% have been in a pre-trial detention centers, 21% have been in a special room for children in a police department, and to very much less level 9% have been in a Juvenile penitentiary facility

#### Table 17: Experiences of MARA with police and prison

	Statement	Yes No			
		No.	%	No.	%
1	Have you ever been stopped or harassed by the police?	64	43.0	59	39.6
2	Have you ever been in a pre-trial detention centre?	58	38.9	60	40.3
3	Have you ever been in a shelter or protection facility for minors?	16	10.7	98	65.8
4	Have you ever been in a Juvenile penitentiary facility?	14	9.4	97	65.1
5	Have you ever been in a special room for children in a police	21	14.1	90	60.4
	department?				

4.11.2 Reasons for MARA arrest

To understand why these adolescents arrested (table 17), around half 47% of the participants responded to these questions and the reasons were varied but the majority 22% was for drug use, followed 8.1% was for Suspicious behavior, 4.7% for Theft/robbery, 4% causing bodily harm, 2 for drug storage, 1.3% for drinking alcohol in public and 1.3% during a police raid.

	Statement	Yes	
		No.	%
	What was the reason for your arrest?	70	47
1	Drug use	33	22.1
3	Drug storage	3	2.0
4	Drug sale	5	3.4
5	Suspicious behavior	12	8.1
6	Theft/robbery	7	4.7
7	Causing bodily harm	6	4.0
8	Drinking alcohol in public	2	1.3
9	Detained during a police raid	2	1.3

# Table 18: Reason for MARA arrest

# 4.11.3 MARA behavior during the prison period

To understand MARA behavior while in the prison, out of the 47% being in prison 22.8% used drugs, 6.7% injected drugs and 7.4% shared needles if injected drugs

Table 19: During your prison time or detention center

	Statement	Yes		No	
		No.	%	No.	%
1	Have you used drugs	31	22.8	44	29.5
3	Have you injected drugs	10	6.7	60	40.3
4	Did you share needles if injected drugs	11	7.4	59	39.6

#### 4.12 ACCESSIBILITY OF MARA TO INFORMATION AND SERVICES

This section presents the target groups' accessibility to HIV and Drug use information; 94% of the participants responded to this question.

#### 4.12.1 MARA accessibility to information

The statements in Table (19) identified MARA accessibility to information within their communities; 38.3% received Information on HIV, around 40% received information on condoms use, 27.5% received information on clean needles and syringes, 26.2% received information on bleach (disinfectants), 20.1% received information on voluntary HIV counseling and testing, and the least was16.1% received information on sexual rights

# Table 20: during the last year, have you ever received?

	Statement	Yes No		No	No	
		No.	%	No.	%	
1	Information on HIV	57	38.3	82	55.0	
2	Information on condoms use	59	39.6	81	54.4	
3	Information on clean needles and syringes	41	27.5	93	62.4	
4	Information on bleach (disinfectants)	39	26.2	96	64.4	
5	Information on voluntary HIV counseling and testing	30	20.1	105	70.5	
6	Information on sexual rights	24	16.1	111	74.5	

4.12.2 MARA knowledge of availability and accessibility to STIs and HIV services within their communities

#### MARA knowledge of the available related services

The following statements identified MARA knowledge of the available STIs and HIV related services within their communities. Around 93% of the participants responded to this question and most of their answers were for "don't know" variable as indicated in table (20) except for the 73% yes response on the availability of condom.

		Yes		No		Don't know	
		No.	%	No.	%	No.	%
1	HIV voluntary counseling and testing?	56	37.6	9	6.0	71	47.7
2	Treatment for tuberculosis	50	33	16	10.7	73	49.5
3	Prevention of HIV mother to child transmission treatment (PMTCT)	31	20.8	26	17.4	81	54.4
5	Antiretroviral Therapy (ARV) for HIV	54	36.2	28	18.8	57	38.3
6	Sexual and reproductive health	68	45.6	14	9.4	55	36.9
7	Condoms	109	73.2	3	2.0	27	18.1
8	Needles and syringes for injecting drug users	69	46.3	13	8.7	56	37.6
9	Testing for hepatitis C and B	54	36.2	17	11.4	66	44.3
10	Hepatitis B vaccination	52	34.9	16	10.7	69	46.3
11	Treatment for hepatitis C	42	28.2	19	12.8	76	51.0
12	Drug treatment (other than methadone / buprenorphine)	53	35.6	11	7.4	73	49.0

MARA accessibility to the available related services

Around 55% of MARA responded to this question and most of their answers were for "NO" variable as indicated in table (21). Such findings whether at knowledge level, service availability and MARA awareness to access these services need to be identified for stakeholders in order to exert more efforts on these issues which deems very necessary for the well being of adolescents and their future

	-	-
Table 22: MARA	accessibility to th	he available related services

	Statement	Yes	No	No		I don't know about	
		No.	%	No.	%	No.	%
1	Government medical services	16	10.7	69	46.3	2	1.3
2	Government social services	2	1.3	74	49.7	2	1.3
3	Centers for Social Services	3	2.0	71	47.7	3	2.0
4	Youth-friendly clinic	1	.7	71	47.7	5	3.4
5	Non-governmental organization	15	10.1	71	47.7	1	.7
6	Faith-based organization	3	2	73	49.0	2	1.3
7	Drug rehabilitation centre	6	4.0	68	45.6	2	1.3
8	Psychosocial rehabilitation centre	14	9.4	63	42.3	1	.7
9	Shelter for minors	7	4.7	72	48.3	2	1.3

#### **4.13 THE HYPOTHESES**

This part presents analytical analysis comparing selected socio-demographic data with selected risk factors. The Analytical statistics utilized ANOVA to test differences between the means (groups or variables) of selected socio-demographic characteristics and risk factors. There are 4 hypotheses tested the relationship between selected independent variables (gender, area of

#### Hypothesis (1)

There is a statistical significant relationship at a level of  $\geq 0.5$  between gender and drug use, injecting drug use, HIV behavioral determinants, prison and police experience and accessibility of MARA to information and services

- The data indicated there is a statistically significant relationship of Gender and Drug Use variables at a level of  $\geq 0.000$  where it was dominant for males as indicated by their mean of 1.43 for the responses obtained from both males and females.
- There is a statistically significant relationship of Gender and Sexual Practices Variables at a level of ≥ 0.000 where it was dominant for females as indicated by their mean of 1.44 for the responses obtained from both males and females.
- Also there is a statistically significant relationship of Gender and Police and Prison variables at a level of ≥ .024 where it was dominant for males as indicated by the mean of 1.69 for the responses obtained from both males and females.
- There was NO statistically significant relationship found at a level of  $\geq 0.5$  found between gender and injecting drug users, HIV behavioral determinants and use of services and the accessibility of MARA to information and services

# Hypothesis (2)

There is a statistical significant relationship at a level of  $\geq 0.5$  between place of residence and drug use, injecting drug use, HIV behavioral determinants, prison and police experience and accessibility of MARA to information

and service

- The data indicated there is a statistically significant relationship of Place of Residence And Drug Use at a level of  $\geq 0.000$  where it was dominant for those living in Jerusalem as indicated by the mean of 1.42 followed by middle region with a mean of 1.44 for the responses among other areas
- Also there is a statistically significant relationship of Place of Residence and Accessibility to information and services at a level of ≥ .024 where it seems all areas have a similar needs for accessibility, information and services regarding risk factors affecting MARA
- There was NO significant relationship found at a level of 0.5 found between place of residence variables and drug uses, injecting drug users, sexual practices and HIV behavioral determinants.

#### Hypothesis (3)

There is a statistical significant relationship at a level of  $\geq 0.5$  between Education Level and drug use, injecting drug use, HIV behavioral determinants, prison and police experience and accessibility of MARA to information and services

- The data indicated there is a statistically significant relationship of Education Level and Drug Use variables at a level of  $\geq 0.000$  where it was dominant for those having Elementary/Primary education as indicated by the mean of 1.34 followed by No formal education with a mean of 1.40 for the responses among other educational levels
- Also there is a statistically significant relationship of Education Level and Sexual Practices at a level of ≥ .034 where it was dominant for those with some secondary education as indicated by the mean of 1.52 among other educational levels, it is noteworthy, that those with some college/university education were more aware of HIV behavioral determinants and use of services as indicated by the low non-significant score of .068 and the mean of 1.68
- There is NO significant relationship found at a level of ≥ 0.5 found between Education Level variables and injecting drug users, HIV behavioral determinants and the accessibility of MARA to information and services

# Hypothesis 4

There is a statistical significant relationship at a level of  $\geq 0.5$  between work in Jerusalem/Israel and drug use, injecting drug use, HIV behavioral determinants, prison and police experience and accessibility of MARA to information and services

- There is a significant relationship found at a level of ≥ 0.5 found between work in Jerusalem/Israel and drug users, injecting drug users, HIV behavioral determinants and use of services and the accessibility of MARA to information and services
- The data indicated there is a statistically significant relationship of Work in Jerusalem/Israel and Drug Use variables at a level of  $\ge 0.000$  where it was dominant for yes answer as indicated by the mean of 1.35
- Also there is a statistically significant relationship of Work in Jerusalem/Israel and Police and Prison at a level of  $\geq$  .006 where it was dominant for yes answer as indicated by the mean of 1.55
- There is NO significant relationship found at a level of ≥ 0.5 found between work in Jerusalem/Israel variables and injecting drug users, sexual practices among MARA, HIV behavioral determinants, the accessibility of MARA to information and service

#### Summary

The overall results for MARA are similar to local Palestinian studies done with MARP but it added value in terms of understanding this specific age group and the determining factors that lead adolescents to be at risk. The profile of MARA was similar to MARP, they are more economically and socially disadvantaged than the general population, but MARA are more subjected to harassment and manipulation particularly those who are working; being young and have little agency or control over their selves. An important indicator that jeopardizes adolescents to be at risk as been indicated by MARA and stakeholders subjective data was their families parenting styles and family dynamics (either these families do not care or are too rigid and aggressive – no dialogue among family members) and considered a determinant factor to cause early marriage of girls, school dropout and child labor which ultimately reflected on their children and adolescents future.

#### Summary

The socio-demographic profile and living conditions for MARA were obtained from a sample of 149 adolescents; 71.8% males and 28.2% female. Around 60% carry the Palestinian identity cards and 40% carry the Israeli identity cards. The participants' age ranged from (14-19) years with an average of 17.9 years with 67.8% for the ages 18-19 years old, noting that the younger the adolescents the less they were found to be represented in this study.

Place of residence and social status; the study participants were from all regions; 13.4% from Gaza and

86.6% from West Bank (23.5% from Jerusalem, 34.2% from middle region, 22.1% from north region and 6.8% from south region of WB) with the majority 86% live within their family homes and only 10.7% live outside home. Despite their young age the results indicated that 4.7% of targeted girls were married and 6% were divorced vs. all boys were single. Such findings are extremely annoying to young people and adding more social problems such early marriage and its consequence the divorce at this early age that make them vulnerable to be at risk. Another 3.4% are having steady relationship with a partner outside marriage where such unpredictable finding is another concern and deserve the attention for stakeholders to look at.

Education and school attendance; the data of 16% with no education and 26.6% elementary level of education' coupled with almost half of the older adolescents (only 22% out of the 40% who are 19 years) studied some secondary/college classes with minimal school attendance for the majority (only 25.5% attended most of school days) are indicators of low education profile that increase their vulnerability to be involved in labor at an early age.

Employment and place of work; congruent with what is being indicated about, their low level education, 65% of targeted adolescents are working; 41.6% work full time job and 23.5% worked sometime. Out of those working 35% has been working in Israel/West Jerusalem and in different places; 14.1% in Hotels/ restaurants/night clubs, 4% in factories, 6.7% in construction and 14.1% in different unstable job which ultimately will expose them to unusual experiences at this early age.

Exposure to unusual experiences during work; 53% of workers have been exposed to unusual practices regardless of their work place; 30% were given cigarettes, 22.8% given money, 5.3% given drugs and 2.7% taken for a drive. The people who exhibited these unusual practices toward adolescents during work were; 24.2% from work colleague, 18% from their employers, 13.4% from employer friends and the least 3.3% was for strangers. Such practices are very much guiding adolescents to risk behaviors in terms of drug use and sexual behaviors that ultimately will lead to STIs and HIV infections.

The households income in Shekel for all family members have ranged from (300-8000) with an average of 3610 NIS and the adolescents' source of spending during last month was mainly; 60.4% from their own employment and 26.8% from family support and very few got from different sources where 2.7% received from social affairs and 1.4% from other sources

**To achieve the second objective;** MARA risk behaviors in terms of prevalence, extent and mechanisms utilized for drug use, Injecting drug use, sexual behaviors and prison experiences

Drug users; the MARA mean age to start drug use was 15.8 years, they utilize different kinds of drugs with the majority 76.5% smoked marijuana, 55% inhaled glue and other toxic substance and 34% used a variety of drug pills with more male users than female users on all items as indicated by their mean scores. In addition, there was 70.5% used alcohol in their lifetime. It is noteworthy that participants were given the chance to respond to more than one choice if applicable

The prevalence of IDUs is alarming with 44% of participants use injecting drugs; 22.1% are at extreme risk using both non-injecting and injecting drugs and 21.5% use injecting drugs only with greater number for males. Despite the responses toward practices of IDU were minimal; yet it revealed more exposure to risk factors when only 12.7% of the IDUs used sterile needle and syringe and 11.4% have tried to clean or disinfect the needle/syringe they used. For company and place; 16.1% were at home with others, 2.0% were in dealers' house and 2% with other IDUs users houses.

Sexual behaviors; the questions were limited to the last 12 months; 78% of adolescents by the age of 19 years claimed that they had sexual intercourse experience. Of those, around 48% reported to have regular partners; 40% had one partner, 20% two partners and 9.4% had 3 partners. Sexual abuse was evident when 42.3% were practicing sex under the influence of drugs and 26.3% were forced by a male partner to have sex with, this male was mostly from family members. Selling sex (for money or drugs and other things) was reported by 26.2% who received a reward for sex that was offered mostly from their employer and work colleagues. Very few young people filed a complaint about the person who forced them for having sex with, it was only 8.1% out of 26.3% being forced, while 17.4% asked for help from others regarding this matter which was mostly friends, and some girls asked older sister and work colleague

Use of condoms; out of 78%, around 46% have used condoms with variation in frequency of use. Of those, 27.5% got it from pharmacy/shop, 12.1% from friends, 3.4% from family and only 2% got it from outreach workers indicating the low use of condom and the need for awareness and services in this area where these adolescents will be subjected to STIs and HIV.

MARA boys sexual practices; 14.8% (22 boys out of 107 boys) has practiced anal intercourse with a boy/man at average age of 14.6 years for the first time; 8.7% had one male partner, 1.3% had two partners and 1.3% had more than two partners. Furthermore, 16.8% (25 boys) reported having female sex partners; 8.1% had one female partner, 4.7% had two partners, and the other 2.6% had 3 or more. These astonishing results regarding drug use, unprotected sexual intercourse and outside marriage sex might be more common than is currently assumed within this social context of the conservative Palestinian culture.

MARA Girls Sexual practices; the questions mostly reflected issues on SRH matters where 40.7% (17 girls out of 42) reported being pregnant during their lives with a range of 1-3 pregnancy; of those, 19% have children with a range of 1-3 children, 23.8% had the experience of abortion that ranged from 1-3 times, with 2.5% had unsafe abortion manifested by; (5 girls aborted themselves and 1 by traditional daya). Such numbers add other factors that lead young women to have additional risks that affect their health and social well-being.

MARA experiences with police and prison; 43% have been stopped or harassed by the police, 40% have been in a pre-trial detention centers, 21% have been in a special room for children in a police department, and to very much less level 9% have been in a Juvenile penitentiary facility. The reasons for arrest among participants was; 22% for drug use, 8.1% for suspicious behavior, 4.7% for Theft/robbery, 4% causing bodily harm, 2 for drug storage, 1.3% for drinking alcohol in public and 1.3% during a police raid. Even with the strict supervision by the Palestinian police within these facilities, there was 22.8% of those used drugs and 6.7% injected drugs and 7.4% shared needles within the detention facilities.

**To achieve the third objective;** MARA Knowledge of, attitude and behaviors toward transmission of STIs and HIV and seeking behaviors toward testing and services.

Participants knowledge about Transmission of STIs and HIV; more than two third of the participants had correct knowledge regarding the positive statements on STIs and HIV transmission; 66.4% agreed that having sex with one faithful and uninfected partner, 69.1% agreed that correct and consistent (regular) use of condoms and 72.5% agreed that using clean, unused needle/syringe for injecting drugs are factors that reduce the risk of HIV transmission. Their knowledge of sharing toilet, sharing a drinking glass and mosquito bites to transmit HIV, received scattered responses with the most "do not know" response indicating the need for further awareness and education on these matters

Participants attitudes toward living with a friend with HIV were mostly to the negative side when; 72.5% disagreed to hug them, 70.5% disagreed to use the same toilet, 64.4% refused to be with them in the same room, 57.7% disagreed to eat with them a meal on the same table, and to less degree 40.3% disagreed to work with them.

Furthermore, MARA perception to the risk of getting infected with HIV were very minimal with the majority believe they are not exposed to the disease vs. 4.7% believed that "The risk is substantial". Around 23% admitted of having other STIs symptoms (genital sores, ulcers and unusual genital discharges). Yet, their seeking behaviors for this matter were very minimal and varied; 7.4% went to private vs. 3.4% to government facilities, 7.4% treated themselves, 6% asked outreach workers for advice, 5.4% stopped having sex, 4.7% bought drugs from pharmacy for self-treatment, around 5% did nothing and 2% did not know where to go.

At last, participants' experience of testing for STIs and HIV indicated; 4% (6 persons) have tested for HIV, of those 1.3% (2 persons) reported that their HIV test was positive vs. 2.7% (4 persons) was negative. Also 3.4% (5 persons) were diagnosed with hepatitis B and 1.3% (2 persons) with hepatitis C. Unfortunately, these positive testing adolescents either to HIV or hepatitis could not be known because of the anonymous data. The finding on STIs and HIV knowledge, attitudes and practices is critical, and comprehensive educational programs regarding these matters is very much essential for such young people to live in dignity and to ensure their development and wellbeing.

To achieve the fourth objective; MARA knowledge of availability and accessibility to STIs and HIV information and services within their communities

MARA accessibility to information: 40% received information on condoms use, 38.3% on HIV, 20.1% on voluntary HIV counseling and testing, and 16.1% on sexual rights. Regarding ID use; 27.5% received information on clean needles and syringes and 26.2% received information on disinfectants use. Such figures indicates the need for launching programs that promote MARAs' knowledge and awareness to reduce their exposure to the risk of HIV infection

MARA knowledge of and accessibility to STIs and HIV services within their communities; 73% of participants know about the availability of condom, 46.3% about needles and syringes, 37.6% about HIV counseling and testing (VCT), while all other items related to drug use and STIs services were mostly for the "don't know" response. Furthermore, they were asked if they accessed health and social services; 10.7% accessed government medical services, 10.1% accessed NGOs services and 9.4% accessed psychosocial rehabilitation centers. Social, health, youth-friendly clinics, faith-based organizations and other services were either not known to them neither available in their communities as indicated by their very minimal and varied responses from 0.7-4%. Such findings whether at knowledge, availability and/or accessibility level need to be identified for stakeholders to exert more efforts on these matters which deems very necessary for the treatment and rehabilitation of MARA

To achieve the 5<sup>th</sup> objective; 4 hypotheses were tested for statistical significant difference at a level of  $\ge 0.5$  to compare selected independent socio-demographic variables (gender, place of residence, education level and work experience) with risk behaviors as dependent variables (drug use, injecting drug use, HIV behavioral determinants, police and prison and use of services). The results that indicated a significant relationship only are

presented in this summary;

- Gender and risk factors; the results indicated a significant relationship between boys and drug use, boys and experience with police and prison more than girls, and a significant relationship between girls and engagement in sexual behaviors more than boys
- Place of residence and risk factors; the results indicated a significant relationship between Jerusalem and drug use, and a similar significance for drug use and the middle region of WB. Also, there was a significant need for accessibility, information and services regarding risk factors among all areas of residence
- Education Level and risk factors; the results indicated a significant relationship between those with elementary/primary education and drug use, and a similar significant relationship between those with secondary education and sexual behaviors
- Work in Jerusalem/Israel and risk factors; the results indicated a significant relationship between those who Work in Jerusalem/Israel and Drug Use and a significant relationship between those who Work in Jerusalem/Israel and the experience with police and prison more than other

#### Recommendations

- A National committee supervised by MOH and include partners from MOE, PCBS, Ministry of Youth, Faith based organizations, and Local communities to lead actions in setting national policies and strategies that commit donors and partners toward these strategies
- There should be regular meetings among partners' institutions and funders (for example, every 3- 4 months) to discuss matters related to this committee work, to follow on assigned work for each and to benefit from each other experiences
- More budget allocated for young people health and development is needed for; making preventive plans, awareness raising activities, capacity planning for providers of care, and monitoring and follow up plans regarding these activities
- A comprehensive National study on risk behaviors among young people and adolescents to get an accurate data in order to plan for the appropriate solutions
- Raising awareness and information of MARA for the available health services within communities in order to promote their utilization of these services and this could be done directly and indirectly (through media)
- Building the capacity of designated professionals, religious people, peer educators and any other related organizations within local communities to provide guidance and teach about healthy families approach, in order to reduce family problems which found to be a very critical component for adolescents to be engaged in risk behaviors
- To recruit peer leaders who could be active in providing STI/HIV/AIDS preventive information and services including sterile syringes/needles for IDUs and even condoms to adolescents workers particularly once they are in Israel.

#### References

Bermudez, L.G., Exploring the Dynamics and Vulnerabilities of HIV Transmission amongst Sex Workers in the Palestinian Context. 2011, UN Women; The Palestinian National AIDS Commission, GFATM.

- Crossman, A. (2013) Education for sociology. http://sociology.about.com/bio/Ashley-Crossman-38827.htm (accessed May 15th.)
- GFATM (2012) Compilation of Operations Research on HIV and AIDS in the Occupied Palestinian Territories Funded by a grant from GFATM and in support from UNAIDS MENA RS
- GFATM-PCBS-MOH (2010) Risk Behavior Assessment of Palestinian Workers in Israel
- Homans, H., "Manual on Programming to Prevent HIV in Most-at-risk Adolescents" (draft), UNICEF Regional Office for Central and Eastern Europe and the Commonwealth of Independent States, Geneva, November 2007.
- http://www.human.cornell.edu/hd/Outreach extension/risky-decision-making-in-adolescents.cfm
- Marian Preda, Doru Buzducea, Vlad Grigoraş, Florin Lazăr, (2009) Research Report on Most-at-Risk Adolescents. UNICEF. http://www.hicn.org/papers/wp74.pdf/ accessed March 22<sup>nd</sup> 2014
- Massad, S. et, al (2012). A Qualitative study on Perceptions of Drug Use and Sexual Behaviors of Adolescents in The West Bank, Occupied Palestinian Territory:
- Palestinian Central Bureau of Statistics –PCBS on the Eve of International Population Day, 11/7/2012, PCBS press release. Figures based on estimates prepared by PCBS according to the results of the Population, Housing and Establishment census of 2007.
- Regional Report on the Near East (June 30, 2013). Council of the European Union Report- 116912/EU XXIV. GP Eingelangtam 07/06/13,

Robert M., Keith S., Tobi S. and Douglas H. (2005) Review of Sampling Hard-to-Reach and Hidden Populations for HIV Surveillance. AIDS 2005, vol. 19 (suppl. 2):S67–S72 2005 Lippincott Williams & Wilkins

Russel, V. (2005). ABC of Adolescence–clinical review. **BMJ** VOLUME 330 Downloaded from bmj.com on 13 January 2009

- Štulhofer, A., (2010) HIV Bio-Behavioral Survey among Injecting Drug Users in the East Jerusalem Governorate
- The International Peace and Cooperation repot (IPCC, 2009) Jerusalem the old city; The Urban Fabric and Geopolitical Implications; Center Publication XVII: Jerusalem,
- UNAIDS and UNICEF, (2006) HIV and AIDS Terminology Guide and Glossary for English-Arabic Users. http://www.unicef.org/egypt/HIV\_Glossary.pdf accessed Dec. 2013
- UNICEF (2010) an assessment based on the Convention on the Rights of the Child. The Situation of Palestinian Children in the Occupied Palestinian Territory, Jordan, Syria and Lebanon
- UNICEF APSSC and UNICEF Lao PDR (2011) Scaling Up the Response for Children; A Rapid Assessment Most-At-Risk Adolescents and Young People to HIV in Lao PDR
- United Nations Development Assistance Framework in the occupied Palestinian territory (2012) Comprehensive Analysis (DRAFT)
- UNODC and AWRAD (2011) Situation Assessment of Drug Use and HIV among Drug Users in the West Bank and Gaza Strip
- Wargo, E., (2014) Adolescents and Risk: Helping Young People Make Better Choices College of Human Ecology, Cornell University.