# KNOWLEDGE, ATTITUDE, BELIEFS, AND PRACTICE OF THE LEBANESE POPULATION CONCERNING AIDS

Designed, Implemented and Reported By

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#### KABP POPULATION SURVEY IN LEBANON - 2004

#### **EXECUTIVE SUMMARY**

Prevention of human immunodeficiency virus (HIV) infection requires a thorough understanding, not only of the modes of viral transmission, but also of the population at risk, and the established guidelines to avoid high-risk exposures.

Abstinence is the only absolute way of preventing sexual acquisition of HIV infection, however, the assurance that both partners have remained "faithful" is sometimes difficult to confirm. For most sexually active individuals, it should be assumed that the partner is seropositive until demonstrated otherwise. In situations in which a decision to engage in sexual activity has been made and the HIV status of the partner in unknown or in doubt, safe sexual practices should be implemented. Condom use is the most effective means of preventing HIV infection among individuals. Achieving prevention through education has widely been acknowledged as holding the greatest promise for halting the spread of the disease. Since 1990, in Lebanon, great efforts have been deployed along this line, both by Government and Non-Government Organizations.

After a decade and a half of extensive work, The WHO-EMRO and the National AIDS Programme sponsored this study to assess the prevention efforts, particularly those aimed at reducing the transmission of the HIV virus through sexual intercourse, by using a selected core set of relevant indicators.

A sample of 3200 respondents, age 15-49, was included in the study performed between January 2004 and July 2004. This sample covered all the Lebanese regions, religious groups, sects, age groups, and educational levels (which could also reflect social classes). The population included could be characterized as being relatively young: 32.5% (N=1040 out of 3200) were less than 25 years and 88.5% (N=2832 out of 3200) were less than 44 years.

With respect to illiteracy, only 4.0% (N=127 out of 3200) did not attend any school and only 7.1% (227 out of 3200) of the population could not read a newspaper or a letter. The total population was well exposed to media in 1996, and this exposure has decreased over the years except for the radio that increased. The exposure to health programs in the media has also decreased more in newspapers and magazines than with radios, and remained slightly less with respect to TV, and health program.

Most of the population 81.7% (2615 out of 3200) lived in their community since birth or for more than 21 years. 23.7% (760) of the respondents were married interviewees. Females got married at an earlier age than males. 35.6% (272 out of 764) of women got married before 20 years while only 5% (N=45 out of 901) males got married during the same period. Males were reporting sexual activity at an earlier age. Marriage rates were more in the rural areas and among Muslims and less among highly educated respondents and among Christians. In general, the respondents had good education, 96% (N=3073 out of 3200) have spent at least 5 years in school. In addition, the 2 lower age groups, the most active sexually, had the highest rates of university and secondary levels of education. This point was very relevant to enhance

prevention of HIV/AIDS knowing that knowledge, beliefs, attitudes and practices were positively affected by such a parameter.

Data showed that about 2/3 (2138) of the population reported as sexually active during the time of the study. Among this sexually active population, 30.8% (473 out of 1535) reported sexual activity outside marriage, 13.0% (N=278 out of 2138) of men reported having regular partners other than spouse and 19.4% (N=54 out of 278) of them had multiple regular partners other than spouse. They had a high frequency of sexual intercourse 61.8% (N=641 out of 1038) within the last week or month, and only 25.0% (N=259 out of 1038) used condoms in their last sexual intercourse. Males experienced sexual intercourse relatively early in life and got married relatively late. This could be an important factor for risky sexual behavior. This category was associated more with young age groups, university graduates in urban areas and alcohol drinking.

Of the sexually active respondents 16.8% (N=360 out of 2138) had sex with non-regular partners. Some of these partners were met for the first time 26.4% (N=95 out of 360), and some 31.4% (N=113 out of 360) gave or received money or gifts. The frequency of such sexual practices was high 44.7% (N=161 out of 360) within the last week or month. Casual and commercial sex was predominantly among young males, urban, in particular Beirut and Mount Lebanon (ML) and low educated people. However, 71.7% (N=258 out of 360) of them have used a condom in the casual sexual encounter. The main reasons for the others not using condoms were either because they did not like condoms 45.3% (N=43 out of 95) or were sure of partners. Availability and accessibility of condoms constituted only a moderate factor in hindering its use 15.8% (N=15 out of 95). Such a behavior of sex without condoms correlated more with males, young age groups, urbans, high mobility, and high education levels. The condoms were purchased mostly from the pharmacy 76.7% (N=198 out of 258) or from partners 12.0% (N=31 out of 258). On the other hand, 84.1% (N=2692 out of 3200) of the respondents have heard of condoms, this showed a regression from the 1996 study whereby the rate was 95.1%. In this study, there was no change in the percentage of people admitting that the use of condom was a protective measure against sexually transmitted diseases; In 1996 the rate was 88.6% while in 2004 it was 87.3% (N=2743 out of 3142). On the other hand, 79.9% (N=2558 out of 3200) of the total population had seen a condom and 74.9% (N=2398 out of 3200) knew an outlet to get it; such an outlet was mostly the pharmacy 74.9% (N=2398 out of 3200). In contrast to 1996, 90.1% knew where to get a condom and it was mostly the pharmacy too. However, only 15.3% (N=490 out of 3200), vs. 32.5% (489) in 1996 survey, of the total population admitted to have used it. Those who used condoms were mostly from the South and least from the North. They were more in the 2 young age groups, and mostly among university graduates and least among low education.

Only 1.0% (N=1 out of 95) mentioned the cost of the condom as a barrier for its utilization. Therefore, a great progress was achieved with respect to condoms in general regarding knowledge, availability and use.

The rate of self-reported STD's in men, over the last year, was 9.1% (N=121 out of 1323). About 19% (N=23 out of 121) of them had recurrent episodes (2, 3 or 4 times during the last year). They correlated more with no schooling upper age groups and urban life. The majority of the patients 34.8% (N=57 out of 164) sought a professional advice, while other approaches

were also considered. Some of the 21.3% (N=35 out of 164) sought the advice of a friend, 20.1% (N=33 out of 164) bought a drug from the pharmacy without a prescription, 14.0% (N=23 out of 164) did noting, 9.7% (N=16 out of 164) sought advice of a traditional healer. These non - professional practices could be dangerous, especially when coupled to their inconsistent behavior towards their partners. However, the majority practiced preventive measures by refraining from sex 76.9% (N=120 out of 156) or using condoms 19.2% (N=30 out of 156).

The knowledge about HIV/AIDS has also progressed since the 1996 study. Awareness became universal, however the percentage of people endorsing appropriate and effective protection measures from HIV/AIDS regressed from an average of 93% in 1996 to 86.9% in 2004. In addition, the perception of personal responsibility to protect oneself from HIV/AIDS transmission has increased between the two studies. Actually, 94.1% believed in this important personal role in 1996, this rate increased to 98% (N=3142 out of 3200) in 2004.

On the other hand, some people endorsed irrelevant "protective' methods. Such misconceptions and lack of correct information related in particular, to avoiding public toilet, being bitten by mosquitoes, sharing food with an HIV/AIDS patient, or touching patients with AIDS. Such misconceptions could possibly lead to attitudes and practices of discrimination against HIV/AIDS people. However, an improvement was noted in the status of knowledge about these issues. This progress was directly linked to better educational levels and young age. On the other hand, many people 21.9% (N=689 out of 3142) still believed that HIV/AIDS persons showed always symptoms. This issue should be addressed in future educational campaigns. It was, however, linked to low educational levels, to the periphery, to the female sex and rural living.

Furthermore, the HIV/AIDS disease has influenced the lifestyles of only 24.1% (N=758 out of 3142) of the sample population. Slightly more people reported changes in their sexual behavior during the past year, about 19% more than the rate of the previous study in 1996, 20.3%. However, the perception of risk of catching HIV was low in this study: 13.7% (N=395+35 out of 3142) as compared to 19.3% in 1996. Such a low perception was linked more to female sex. This low level of risk perception was also linked to more self-awareness and more knowledge about the disease resulting in more confidence in personal protection against HIV/AIDS, which rated as high as 86.9%.

Most of the population 72.3% (N=1872 out of 3142) expressed positive attitudes towards the HIV/AIDS persons and were willing to take care of a family member with HIV/AIDS. Those that were not willing were males of low education. In addition, 69.2% (N=2173 out of 3142) agreed to keep HIV/AIDS people in their factories and offices and be allowed to continue their work. Furthermore, 74.1% (N=2329 out of 3142) wanted the proper medical treatment for the HIV/AIDS patients. On the other hand, 29.1% (N=914 out of 3142), compared to 13.6% in 1996 study, agreed to keep HIV positivity as a secret.

In conclusion, and after a thorough look at the calculated indicators, it was evident that the knowledge of the population about preventive practices against HIV/AIDS has regressed since 1996 but its actual rate is good compared to very good in 1996 study. In addition, the overall rates of misconceptions increased. Condoms were more available in the country and

accessible. They were found in all regions but with few lacunae in the periphery. In general, no complaints of accessibility or cost were reported. However, the rate of condom use is still relatively low and should be stressed in the future targeting, in particular, those having non-regular sexual partners. The indicator on non-regular sexual partners was 16.9% compared to 22.4%. This represents a important dimension in terms of potential HIV transmission particularly when coupled with more than 30% lack of condom use. The percentage of persons' self-reporting symptoms suggestive of STD needs to be confirmed by an STD prevalence study.

Finally the perception of risk, attitudes and behaviors of people towards HIV/AIDS patients regressed from 1996, more work is needed to introduce positive changes in the lifestyle, and adoption of safer sexual behavior.

In brief, the study showed that future work in the prevention of HIV transmission in Lebanon should make use of the recommendations previously stated in 1996 survey that were:

- 1- Repeat essential AIDS prevention messages to increase and maintain knowledge of HIV, its transmission, and prevention.
- 2- Address misconceptions of transmission via casual contact with HIV/AIDS persons.
- 3- Address the issue of HIV infection transmission from asymptomatic HIV positive people.
- 4- Promote sexual behavior change through:
  - a- Further promotion of safer sexual practices
  - b- Further reduction in number of sexual partners
  - c- Increase condom use by promoting more positive attitudes about condom use.
  - d- Dealing optimally with STD's
- 5- Increase preventive activities in the periphery and remote areas,

#### **Facilitating Factors:**

- 1- Embed AIDS information into broader contexts.
- 2- Take into consideration specificities and sensitivities of all target groups.
- 3- Provide creative rewards and enticements for groups, organizations, or individuals involved in AIDS education.
- 4- Promote integration into and acceptance by the community of HIV affected persons.
- 5- Build-up a network for outreach to high-risk populations.
- 6- Train peer volunteers.
- 7- Create a forum for open discussion on pending issues.
- 8- Foster flexibility of approaches in content, format, schedule, process, and delivery system to suit target populations skills, needs, interests, and scheduling demands.

It is believed that the above could form elements of an integrative plan to develop comprehensive prevention efforts involving governmental and non governmental agencies, all in coordination with the National AIDS Control Program.

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# **CHAPTER ONE**

# 1- INTRODUCTION

- 1.1 Concept and Need for this Study
- 1.2 HIV/AIDS in Lebanon
- 1.3 Objectives of the Study

#### 1 INTRODUCTION

### 1.1 Concept and need for the study:

The first cluster of cases of AIDS was described in 1981. The causative agent, HIV was described in 1983, and a blood test to detect HIV to reduce the risk of transmission by blood products was developed in 1985.

Two decades after the first recognition of the acquired immunodeficiency syndrome (AIDS) in the United States, the disease has become epidemic in every country of the world. Initially, it was reported as a disease primarily among homosexual men, but heterosexual transmission is becoming the leading mode of transmission and the primary mode of disease acquisition in the United States, in many African countries, and countries of the East Mediterranean Region including Lebanon. It became evident that AIDS is caused by an infectious agent transmitted through sexual activities, parenterally through blood transfusions and injecting drug use, and perinatally from mother to infant. There is no evidence that HIV can be transmitted by casual contact or by an arthropod vector.

HIV infection is a sexually transmitted disease (STD). Like other STDs, HIV spreads bidirectionally and appears to be transmitted from male to female and female to male with roughly the same efficiency.

More than twenty years after the discovery of HIV, it is recognized that HIV disseminated rapidly throughout the world, causing a massive epidemic and becoming one of the leading causes of death worldwide.

HIV has profoundly changed medical practice, contemporary society, and public health initiatives worldwide. HIV infection and AIDS constitute a global health crisis of unprecedented magnitude raising ethical concerns and affecting macro and microeconomics. The development gains of three decades have been reversed in many resource-limited settings in the world, with an economic decline of 10 to 40%, health system chaos, political instability, a rapidly increasing number of orphans, and an immense humanitarian concern.

In addition, AIDS constitutes a substantial threat to human security not in terms of armed conflict, but rather in the fundamental conditions necessary for people to lead safe, productive lives, AIDS is the only disease to receive attention at a special session of the United Nations (June 25-27, 2001).

# 1.2 Global Statistics<sup>1</sup>

Since the beginning of the epidemic in 1981 till the end of 2002, HIV has infected approximately 67 million people, of these individuals, more than 25 million people had already died from AIDS (about 3.1 million deaths in 2002 alone, including 610000 children), ranking it as one of the leading causes of death throughout the world, the remaining 42 million adults and children were living with HIV infection or AIDS worldwide. However, the annual number of new infections with HIV eclipsed 5 million per year, as calculated by the Joint United Nations Program on HIV/AIDS (UNAIDS).

More than 16,000 HIV infections were acquired daily, 95% in developing countries. Of these new infections, about 2000 occurred in children younger than 14 years of age, and about

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<sup>&</sup>lt;sup>1</sup> Goldman Lee and Ausiello Dennis, Cecil textbook of medicine, 22nd Ed., Saunders, 2004

14,000 occurred in adults; almost 50% were women, and about 50% were between 15 and 24 years old. The major mode of transmission was heterosexual transmission, although infections continue to spread at high rates among men who have sex with men (MSM).

Injecting drug use remains the second leading mode of transmission responsible for rapid spread of HIV throughout Asia, Eastern Europe, and in other developed countries of the world.

By the end of 2002, more than 16 million children had been orphaned by the premature death of their parents from AIDS, and one report suggests that this number may exceed 40 million in sub-Saharan Africa alone by the year 2010.

#### 1.3 HIV / AIDS in Lebanon

#### 1.3.1 Local Statistics

The HIV epidemic was introduced to Lebanon, with the first reported AIDS case in 1984. Since then, the number of cases has been slowly but steadily increasing to reach, by Dec. 2002 a total of 697 HIV/AIDS cases and by July 2004, a total of 765 reported cases. Although a significant number of reported cases is linked to travel and migration to endemic areas (around 45.36% of the cases), local spread has become a reality over the past two decades (around 54.64% of the cases).

The most frequent mode of transmission is sexual (77.25%), mainly heterosexual (52.7%). Homosexual and bisexual transmission, they account for 15.68% of the cases. However, around 25% of the sexually transmitted reported cases are unspecified types of sexual behavior, the fact which raises the question of how many of the 31.64% (those who have an unknown transmission route) acquired the disease through the most stigmatized sexual practice, i.e. homosexual practice. On the other hand, the vertical transmission (mother to child) of the disease accounts for about 2.75% of all cases declared.

Blood Safety is relatively well controlled in the country. No new cases of HIV infections through blood transfused in Lebanon have been reported since 1993. The vast majority of the blood transfusion borne infections (actually around 5.75% of all cases) was acquired in the early years of the spread of the epidemic, with most of the patients receiving multiple transfusions prepared or donated outside Lebanon.

It is important to note that the higher number of cases is in the age group 31-40 years old, with a ratio of men/women of 8.5/1. However, the majority of the new cases that are being reported to the National AIDS Programme are increasingly at the stage of disease rather than asymptomatic. This trend indicates that cases are likely to have acquired the infection at younger ages, yet, have not tested for HIV until they have had symptoms. Moreover, an increasing trend is noticed within the youth population (age 15-29) of new reported HIV and AIDS cases compared to a horizontal trend in the other age groups.

Data dating back to 1996, where an assessment study on knowledge, attitudes, beliefs and practices (KABP) of the general population of Lebanon, showed a universal awareness about HIV/AIDS (95.5%). This awareness was not reflected in the practices:

62.8%	had their first sexual intercourse prior to the age of 20 years,
32.1%	had multiple sexual partners,

had casual sex and

36% have ever paid money for sex.

This study showed also that only around 32% have ever used a condom while 90.1% identified the possible source of condoms. This low rate of condom use seemed to have continued over the past years where a market survey of condoms showed that in 1999 only 2.5 million condoms were sold on the Lebanese market. On the other hand, with respect to attitudes towards HIV/AIDS patients, around 28% of the sample were not willing to take care of a family member with HIV/AIDS.

The results of this 1996 study had a considerable effect on the priorities, objectives and designs of activities undertaken by NAP, where more emphasis has been, ever since, put on behavior and attitude change rather than on basic HIV/AIDS awareness or information dissemination.

After almost 8 years from the implementation of this study, and after having implemented a number of activities intended to limit the spread of the HIV/AIDS epidemic in Lebanon, evaluating the impact of interventions implemented by the National AIDS Control Program is regarded as a priority in order to sustain successes and to improve weaknesses. Moreover, the need for a better understanding of the current situation with respect to HIV/AIDS transmission risks, and the need to assess the effect of the efforts paid constitute a strategic measure to allow a better response to prevent the spread of the epidemic and to ensure a more effective national resource allocation.

Performing an evaluation study, where indicators comparable to those measured during the above mentioned KABP study are re-assessed, can be useful in studying the trends of change in risky practices as influenced by the NAP interventions. Thus, establishing basis to improve performance to limit the spread of the HIV/AIDS pandemic and to alleviate its impact on individuals, families and societies.

# 1.3.2 Previous studies performed:

In Lebanon, a number of behavioral research projects on HIV/AIDS were performed, they included:

- 1.3.2.1 A national field study targeting the general public-knowledge, attitudes, beliefs and practices (KABP) was carried out in 1991.
- 1.3.2.2 A national study targeting clinical laboratory technicians their knowledge, attitudes and practices, particularly safety precautions, performed in 1992.

- 1.3.2.3 A national study targeting nurses KABP in relation to HIV/AIDS patients, also completed in 1992
- 1.3.2.4 A fourth study targeting the KABP of high school students concerning HIV/AIDS, conducted in 1993.
- 1.3.2.5 A special study targeting out-of-school youth and HIV/AIDS, using the focus group as an instrument, implemented in 1994.
- 1.3.2.6 Another special study targeting Military school members (trainees and trainers) and HIV/AIDS, performed in 1995.
- 1.3.2.7 A 2<sup>nd</sup> national field study targeting the general public-knowledge, attitudes, beliefs and practices (KABP) was carried out in 1996. This study has a special relevance to this evaluation particularly in comparing some of the results of both studies
- 1.3.2.8 A national study targeting clinical laboratory technicians their knowledge, attitudes and practices, particularly safety precautions, performed in 2003.

# 1.4 Objectives of the study:

#### 1.4.1 General objective:

To reassess HIV/AIDS prevention efforts on the behavior of the target populations, particularly those addressed to change the sexual behavior that entails risk of HIV transmission, in addition to those addressed to change the attitude toward people affected by HIV/AIDS.

#### 1.4.2 Specific objectives:

After 8 years of the second KABP, a National General Public re-assessment of prevention efforts was in order to evaluate what was done and to orient and assist in determining new directions in the planning, monitoring and implementation processes. The aim of the evaluation task is to:

- 1.4.2.1 Assess the level of knowledge of the modes of transmission of HIV among the general population
- 1.4.2.2 Assess the level of knowledge of preventive practices related to HIV/AIDS in the general population
- 1.4.2.3 Assess the prevalence of sexual risk behavior among the general population
- 1.4.2.4 Determine the incidence of reported STD symptoms in the general population
- 1.4.2.5 Compare the level of change in behavior with respect to the KABP done in 1996.

# 1.4.3 Expected results, relevance and potential contribution of the project to the relevant National AIDS Program

The study strives to give a clear description of the Lebanese population in relation to knowledge about HIV/AIDS, the prevalence of the different risky sexual practices (multiple partners, commercial sex and condom use) and the prevalent attitudes toward people living with HIV/AIDS.

Such data will assist the planning process and consequently the allocation of funds

#### The prevention indicators (PI's) to be derived from this study were namely:

PI 1 : Knowledge of preventive practices

PI 2 : Condom availability / accessibility (Peripheral level)

PI 3 : Reported non - regular sexual partners

PI 4 : Reported condom use with non- regular sexual partner

PI 5 : Reported STD incidence in men.

Comparing the results of this study with the results of the national KABP undertaken in 1996 is useful to depict the effectiveness of the NAP interventions in relation to HIV/AIDS prevention, as well as to identify areas of weakness where NAP could put more effort. In addition, the results of the study will identify areas of strength and of success on which the NAP can build future interventions.

# **CHAPTER TWO**

# 2 DATA AND METHODOLOGY

- 2.1 Sample design
- 2.2 Survey instruments and data collection
- 2.3 Variables and Measurements

#### 2 DATA AND METHODOLOGY

### 2.1 Sample design

This cross sectional study was conducted on a national representative sample of 3200 of the general Lebanese population who are at a sexually active age (15-49)

The study adapted and adopted the protocol for repeated survey of the general population described in the "Evaluation of a national AIDS program: a methods package" developed by UNAIDS and WHO (UNAIDS/99.7E), May 1999. (Annex 1) Direct interviews with subjects of a randomly selected sample, representative of the Lebanese general population aged 15 – 49, was conducted for data collection by trained interviewers.

The data collected was analyzed and compared with the results of the KABP conducted by the NAP in 1996.

#### 2.1.1 Sample size

Considering that the aim of the survey is to measure a change in the indicator, by 10% or more, with 90% confidence limits of (+ or -) 5%, ideally, and (+ or -) 10%, at most. Using Altman's nomogram for sample size calculations yields a sample size **3200** for a power between 70 and 80 and a standardized difference of 10 and a significant level of 0.1

### 2.1.2 Sampling technique

The design is a stratified, cluster sample. The country is first stratified by Governorates (Mohafazats) and districts level in order to select the primary sampling unit (PSU).

In fact, all the governorates (Mohafazats) were included in the study and were represented by samples that corresponded to their respective population densities. (National Household Survey 1996). It is important to note that the following five governorates used in the study: Beirut, Mount Lebanon, North Lebanon, South Lebanon and the Bekaa.

The voting district in each governorate was considered as the sampling framework. All cities in the district as well as randomly selected villages entered the study. With a rough balance between urban and rural areas

Once the PSU's were identified, they were subdivided into clusters, then a systematic random sampling of households was selected for interviewing

## 2.1.3 Sampling units and sampling frames

The recommended sampling strategy consisted of the following steps: select areas. list all households within selected areas, select households from the lists, and finally interview eligible individuals from selected households

#### 2.1.3.1 Area stage

A census enumeration districts (EDs) showed the population size in each area.

Areas were roughly uniform in size and they were classified by region.

The capital of the casa was considered as urban strata and the peripheries were considered as rural strata in the sampling frame.

#### 2.1.3.2 Household stage

The interviewers started from the central square of the selected area sampling units and they selected every other house according to an interval .A listing of the households was carried out in each selected area in the first stage (Annex 2).

#### 2.1.3.3 Individual stage

All persons of either sex aged 15-49 were included whether they were usual residents of the household or having spent the night before the interview in the household. Regular household members who are temporarily away from home were included as household members

#### 2.1.3.4 Sample Size distribution at governorates (Mohafazats) level

Mohafazat	Pop distribution (%)*	Sample Size per Mohafaza
Beirut	13.1	418
Bekaa	12.8	413
Mount Lebanon	36.8	1174
North Lebanon	21.6	693
South Lebanon (+ Nabatiyeh)	15.7 (9.1+6.6)	502
	100.0	3200

 $<sup>\</sup>ensuremath{^*}$  population distribution according to governorates 1996

## 2.2 Survey Instrument and Data Collection:

#### 2.2.1 Questionnaire content and design

The core questionnaire was adopted and adapted from the World Health Organization's Global Programme on AIDS (GPA) methodology package» (Annex 1). It consisted of two parts:

- the household schedule (Part A) and
- the individual questionnaire for men and women aged 15 49 years (Part B).

<u>Part A:</u> The purpose of part A was to identify all persons eligible for the individual interview (Part B). Part A listed all persons in the household, including temporary visitors. All men and women aged 15-49 who slept in the household during the previous night were eligible of Part B.

**Part B**: The individual questionnaire was divided into the following 8 sections:

- 1. Identification and demographic data Q 101 Q 106
- 2. Background characteristics including source of information on health issues and media (20 questions). Q 201 Q 212
- 3. Marriage and regular partners (10 questions) Q 301 Q 312
- 4. Non-regular commercial sex (8 questions) Q 401 Q 408
- 5. Condoms (5 questions) *Q 501 Q 506*
- 6. Sexually transmitted diseases and health issues, divided into 2 parts: (9 questions)

One part for men only and the second part for women only Q 601 - Q 612

- 7. Knowledge of AIDS (3 questions) Q 701 Q 703 (The 702 is being divided into 9 components)
- 8. Risk perception, behavior change, and attitudes to persons with HIV/AIDS (8 questions) Q 801 Q 808

The questionnaire contained a total of 63 questions, plus six filters and a few additional entries. However, no respondent was asked all the questions. The average time taken by each questionnaire to complete was 20 to 25 minutes. The questionnaire was used as a verbatim instrument. It was carefully adapted to local circumstances by pretesting, and translated into the local language, the Arabic.

### 2,2,2 Data Collection:

The sample consisted of 3200 persons between the age 15 to 49 years. They were 1876 males and 1324 females. 1217 households were visited all over the country in the 5 governorates.

Two interviewers with the guidance of a supervisor, and the assistance of a driver in rural areas, visited each of the households. This arrangement helped to avoid problems because most address systems were rather lacking, populations were rather mobile, and large numbers of people with the same name were encountered in the same village. Repeated callbacks were made by the interviewers. Interviewers were instructed and supervised to make a minimum of 3 visits at different times of the day before abandoning any interviewee. Structures that are not dwellings or permanently

vacant were omitted. Most of the interviews were carried out on weekends to accommodate atypical lifestyles.

#### 2.2.3 Training of Field Staff and Collection of Data:

A 3-day training workshop was carried out for selected and experienced 22 interviewers and 5 supervisors. The proceedings and contents of the workshop were reported in the Annex 3.

The interviewers worked in teams and most of the times in pairs, one male and one female in addition to the supervisor. Most of the times male respondents were interviewed by men and female respondents by women.

## 2.2.4 Facilitating Factors:

- 1.Most of the interviewers were in the health field. The majority were nurses and some were university graduates in public health or medical field.
- 2. Most of the interviewers knew each other; this made it easy to get couples to work together.
- 3.Interviewers worked in regions that were well acquainted with its geography and its demography.
- 4. The supervisors were public health experienced staff.

#### 2.2.5 General Comments:

The average number of respondents per household was 2.2 (3200/1486), it varies from 3.6 to 1.2 according to governorates. This overall rate of response per household was considered better than the 1.41 reported in KABP 1996. This increased rate may be due to the increased awareness and perceived risk of the problem among the population. In addition Most of the population were familiar with the name NAP and it seems that they were willing to cooperate in limiting the expansion of this disease.

In some areas, there was a relatively low number of respondents per household, this could be due to the following:

The houses were visited during the days, even week ends, whereby males go out for work, and most of them away from home for the whole week to cities for work.

Many families were young and they did not have eligible children at home. This was documented from the relatively higher numbers of young age groups in the sample and the higher percentage of marriages in the young age group between 25-35 years.

In many cases, after one person in the family answered the questions and discovered them very sensitive and touch on very personal issues, the rest of the family apologized for not continuing the exercise.

It was estimated, by supervisors and interviewers, that between 15% in the cities and capital and up to 25% in the periphery refused to participate in the study despite the anonymous nature of the exercise.

#### 2.3 Variables and Measurements:

#### 2.3.1 The variables:

The variables included urban versus rural, and the capital versus the peripheral locations. They also included sex, age, level of education, ethnicity, alcohol drinking, source of information on health issues and on AIDS, condom availability and accessibility, risky behaviors and sexual activity with regular and non-regular sex partners. Risk perception as well as attitudes towards HIV/AIDS persons were also included.

#### 2.3.2 Data Management. Analysis and Measurements:

In the field, there were checks on sample completeness and on completeness and consistency of questionnaires. Sample coverage was documented on a control sheet. At headquarters, the sample completeness for each area was checked as well as the completeness and consistency of answers. The data were cleaned and coded to be ready for entry into the computer. Data entry and analysis were carried out by a professional computer engineer, contracted for this task, using the SPSS (11.0) software program

Analysis of the data was carried out and it constituted the basis for this report.

Table 2-1 Regional variations of respondents per household

Region	Respondents / Household		
Beirut	418/337	1.2	
Mount Lebanon	1174/565	2.1	
North	693/302	2.3	
South	502/138	3.6	
Bekaa	413/144	2.9	
Country average	3200/1486	2.2	

# **CHAPTER THREE**

# 3 SAMPLE CHARACTERISTICS

- 3.1 Distribution and sex-age structure
- 3.2 Religion and Ethnicity
- 3.3 Marital Status
- 3.4 Educational status of the population
- 3.5 The respondents and alcohol
- 3.6 Mobility of the population- Duration of residence

#### 3 SAMPLE CHARACTERISTICS:

## 3.1 Distribution and sex - age structure:

The sample consisted of 3200 respondents I interviewees covering all regions of Lebanon according to their respective population densities. There were 58.6% (N=1876) males and the rest 41.4% (N=1324) females leading to an overall male to female sex ratio equal to 1.4 (table 3-1). This sex ratio was maintained, in all governorates, within a range of 1+/- 6, except for the South Lebanon, whereby more males were included in the study 70.9% (N=356) vs. 29.1% (N=146).

Some of the factors that could have contributed to this wide range in the South Lebanon could be the fact that most men go out to work all day and they come back very late in the evening and they would not allow their wives to receive strangers while they are away from home. Another factor was that, men once they have answered the questions and discovered the sensitivity of the issues, they would not allow other members, especially women, to participate.

On the other hand, when urban and rural areas were compared, they showed that 51.1% (N=1636) were urban and 48.9% (N=1564) rural, a picture that reflects to a great extent the commonly accepted Lebanese reality. The overall sex ratio was maintained similar in these categories (table 3-2). However, there were 58% (N=949) urban males and 42.0% (N=687) females, a ratio of M to F= 1.4, and 59.3% (N=927) rural males and 40.7% (N=637) rural females leading to a ratio of M to F = 1.5.

A similar M to F sex ratio close to 1.4 was obtained among the different age groups (table 3-3). The ratio in the young age group (15-24) and (25-34) was 1.3 and 1.5 respectively. In the middle age group (35 - 44) the ratio was 1.2, and in the old age group (45-49) 2.4.

In addition, the overall M to F ratio was also maintained close to 1.4 +/-0.3, when Christian and Muslim religions were compared (table 3-4). The Christian males were 26.4% (N=496) and females 33.1% (N=438) leading to a ratio of 1.1. While, there were 37.3% (N=699) Muslim males and 31.6% (N=418) females, a ratio of 1.7. Such good ratios reflected a better representativeness of the sample.

The data showed that the respondents had more of a young age profile consistent with the overall generally known characteristic of a young Lebanese population. Actually, 64.5% (N=2064) of the respondents were between 15 and 34 years, divided into 32,5% (N=1040) in the young age group (15-24) and 32.0% (N=1024) in the middle young age group (25-34). Respondents between 35 - 44 years formed 24 % (n=768) while those between (45-49) formed only 11.5% (N=368) of the sample (table 3-5). This was a predominantly young population sample very appropriate to represent the Lebanese population and relevant to the topic of this study. The distribution of various age groups in the different regions looked to be somehow uniform (table 3-5). However, the young age group was highest in Mount Lebanon 45.9% (N=477), and lowest in the North 8.1% (N=84). The middle young age group was the lowest in Beirut 10.6% (N=109) and the highest in Mount Lebanon 39.1% (N=400) but the average in

the rest of the regions was around 16.8% +/-0.6. On the other hand, the highest rates of old people (45-49) were in the North 31.5% (N=116) and Mount Lebanon 26.4% (N=97),

In addition, the distribution of the various age groups between urban and rural was not pretty uniform. The rates were relatively higher in urban areas for the younger age groups they inversely shift and became higher in rural areas for the older age groups. Probably young age groups come to urban areas for education and work in companies others.

The young age group (15-29) was 56% (N=917) urban and 47.7% (N=747) rural. The middle young age group (30-34) rates almost equal 12.9% (N=212) and 12% (N=188) in urban, and rural respectively while the other age group rates (35-44) were 20.1% (N=330) urban and 28% (N=438) rural (table 3-16).

A comparable picture was also encountered among the different educational levels, except in the non-school and primary education categories whereby respondents were predominantly in the old age category, 24.4% and 24.2%, respectively (table 3-13).

## 3.2 Religion and Ethnicity:

In Lebanon, it was generally accepted that the number of Christians was close or a little less than the number of Muslims. The sample of interviewees reflected this reality. There were 29.2% (N=934) Christians and 34.9% (N=1117) Muslims (table 3-4). The rest 35.9%(N=1149) did not state their religion. In addition, the different groups or sects, within each religion, were grossly distributed in the different regions in conformity with what was being commonly recognized by official as well as non-official sources as specific concentration localities. The study showed that the Christians were mostly concentrated in Mount Lebanon (ML) 45.4% (N424) seconded by the North 37.8% (N=353) and Beirut 11.5% (N=107). The lowest rates of Christians were in the Bekaa 0.5% (N=5) and the South 4.8% (N=45).

On the other hand, the Muslims were living mostly in the South 32.6% (N=364), seconded by the North 27.2% (N=304), and Mount Lebanon 25.2% (N=281). However a valid distribution could not be inferred because 35.9% (N=1149) did not state their religion. In Mount Lebanon, for example, 39.9% did not state their religion while this rate reached 75.5% in the Bekaa, and 56.9% in Beirut. In addition the displaced people from the South Lebanon are concentrated in what is commonly known as South Beirut suburbs, this area is administratively considered as Mount Lebanon and its population is mainly Muslims that is why probably the rate of Muslims in mount Lebanon has increased. However, this kind of distribution may be considered as reflecting, to some extent, what was commonly accepted as a demographic fact and supported the proper representativeness of the sample. When the two religions were compared with respect to rural and urban living, they showed similar distributions that were very close to the country average of 54% (N=604) of Muslims reside in urban areas vs. 46% (513%) in rural while 49.5% (N=462) of Christians reside in urban vs. 50.5% (N=472) in rural.

However, with respect to age groups, the sample included nearly similar Muslims' age groups as Christians, (table 3-6A)

As for comparing religion and education, the non-schooling category was more in Christians . There were 5.5% (N=55/934) Christians and 2.2% (N=25/1117) Muslims. However, there were relatively more Christians with university education 28.5% (N=266) compared to 17.3% (N=193) Muslims. On the other hand, there were more Muslims in the categories of primary education 17.8% (N=199) vs. 8.6% (N=80), and complementary education 32.1% (N=358) than Christians 20.8% (N=194), (table 3-6).

The respondents who did not state their religion (others) 35.9% (N=1149) were among all educational levels but mostly among university 35.2% (N=404) and secondary levels 24.7% (N=284).

A closer look at the various sects within each religion would depict the following:

As far as the Christian sects were concerned, the sample reflected one more time the commonly accepted facts of their relative ratios. The maronites constituted the majority among the Christians 53% (N=495), seconded by the greck orthodox sect 34.7% (N=324), and then the greck catholic 8% (N=75103). The other sects like coptes, protestants or other, constituted less than 4.3% (N=40) of the sample.

In addition, the regional distribution of the various Christian sects correlated with the actual official distribution as evidenced by the government election lists put out lately. Certain sects were known to be concentrated in some locations more than in others. For example, the maronites were everywhere but more in Mount Lebanon 63.8% (N=316/495) and the North 20.8% (N=103). The greck orthodox were more in the North 73.4% (N=238) and the least in the South 1.2% (N=4), and the greck Catholics were more in Mount Lebanon 53.3% (N=40/75), the South 18.6% (N=14), Beirut 12% (N=9), and the North 16% (N=12).

2- As far as the Muslim sects were concerned, the sample again reflected facts that were commonly accepted regarding the distribution and ratios of the various sects. There were 56.0% (N=626) shiites, 31.3% (N=350) Sunnites, 12.3% (N=138) did not state their sects. Those who did state their sects were more urban living in Mount Lebanon mainly south suburb of Beirut and the south and more educated. The shiites were everywhere but concentrated mostly in Beirut 48.4% (N'136), the South 30.2% (N'85) and the Bekaa 17.8% (N=50) and the lowest rates were in Mount Lebanon 7% (N=2) and the North 2.8% (N=8). The sunnites, again as expected, were found everywhere but concentrated more in the North 62.6% (219/350), Beirut 10.3% (N=36), the South 9.7% (N=34), Mount Lebanon 9.4% (N=33). The lowest rate was in the Bekaa 8% (N=28)

A thorough evaluation of the composition, distribution, and ratios of the various religious groups in the sample has given more support to its appropriate representativeness and its proper reflection of the actual demography of the Lebanese society.

## 3.3 Marital Status (N=3200):

More than the three fourth of the respondents 76.3% (N= 2440 out of 3200) were not married. The rate of males, among the non-married respondents, was much higher than the rates of females 56.3% (N=1373 out of 2440) against 43.7% (N=1067 out of 2440). However, the rates between married and non-married females were significantly different, 80.6% (N=1067 out of 1324) were married against 19.4% (N=257 out of 1324) non-married (table 3-7).

The distribution of the married respondents in the various regions was not close to the country average of 23.75% +/-3.1 (N=760), except for Beirut and the Bekaa 22% and 20.8%, respectively, while the rate was the highest 38.8% in the South (N= 195/502). The rural people had more tendency to get married than urban 25.8% (N=403 out of 1564) against 21.8% (N= 357 out of 1636).

As depicted in table 3-8, 40.9% (N=997 out of 2440) were in the young age group 15-24 years. The regional distribution of non-married respondents showed that the rates in the North 55.4% (N= 384/693), the Bekaa 28.3% (117/413) and Mount Lebanon 21.6% (N=254/1174). The low rates of non-marriage were in Beirut 19.6% (N=82/418), and the least in the South 13.5% (N=68/502). The rate of marriage was relatively little less in urban 47% (N=357/760) than in rural 53% (N403/760) areas. The rate of marriage correlated inversely with the educational levels. The higher level of education the lower was the rate of marriage, as shown in table 3-9. The highest rates were among respondents having primary level 36.4% (N=125/343) or non-schooling and complementary 29.1% (N=37/127) and 30.2% (N=240 out of 795), and lowest rates were among students 0.3% (N=1 out of 286) or university graduates 21% (N=181/863). Such rates were significantly different between the 2 religions, Christians 17.6% (N=165 out of 934) and 36% (N=402 out of 1117) Muslims.

The data also showed that 88.4% of the population (N=1471 out of 1664) got married before the age of 30 while 40.3% of the population (N=670 out of 1664) got married between age 20 and 24 years (table3-10B). However, there was a shift of at least 5 years between the dates of marriage between males and females, females got married earlier than males. As shown in table 3-10B, 80.9% (N=618 out of 764) of females got married before the age of 25 in comparison to only 42% (N=378 out of 900) males, during the same period. In addition, most of the females 44.1% (N=337 out of 764) got married between the age of 20-24 years while most of the males 40.8% (N= 367 out of 900) got married between 25-29 years of age. Early marriages, i.e. less than 15 years, occurred solely to females in 1.2% (N=9 out of 764) and mostly in Mount Lebanon 55.5% (N=5 out of 9) and the north (3 out of 9) among those with mostly complementary 66.6% (N=6 out of 9) or primary education 22.2% (n=2 out of 9), (table 3-11). They were 66.6% Muslims and 33.3% Christians.

For those early married between 15 to 19 years 19% (N=317 out of 1664), they were mostly females 85.8% (N=272 out of 317). Such early marriages occurred mostly in the North 23.1% (N=143 out of 618), followed by Beirut 22.8% (N=40 out of 175) (N=52 out of 317), the Bekaa 21.2 % (N=43 out of 203)) and the South 14.9% (N=39 out of 262). The lower rate was in Mount Lebanon 13.5% (N=52 out of 407) . It correlated more with low levels of education complementary or primary and was the least among university graduates. It was also present

slightly more among Christians 13.6% (N=127 out of 934) than Muslims 12.3% (N=137 out of 1117). The marriages between 20 and 24 years of age were 40.3% (N=670 out of 1664) of the total, the highest percentage. However, they were no difference between males 49.7% (N=333 out of 670) and females 50.3% (N=337 out of 670). The rate was the highest in the North 50.8% (N=314 out of 618) followed by Mount Lebanon 36.4% (N=148 out of 407), the Bekaa 36.4% (N=74 out of 203) and Beirut 34% (N=60 out of 175). The lowest was in the South 28.2% (N=74 out of 262). The highest rates of marriage were encountered among complementary level 35.1% (N=235 out of 670) followed by secondary and university level 28.2% (N=189 out of 670) and 18.7% (N=125 out of 670) respectively, and the lowest rates among students and non-schooled respondents 1% and 3% respectively (N=7/670 and 20/670) table 11, The marriage at this early age was slightly more in Christians 46.3% (N=241 out of 520) than in Muslims 37.8% (N=258 out of 682).

In general, there was no difference between Christians and Muslims for the age of early marriage variable. Those who got married between age 25-34 were mostly males 78.2% (N=485 out of 620) and 21.8% (N=135 out of 620) females. They were mostly from the South 55% (N=144 out of 262), Mount Lebanon 44.7% (N=182 out of 407), Beirut 37.7% (N=66 out of 175), the Bekaa 37.9% (N=77 out of 203) and the least from the North 24% (N=151 out of 618). They were mostly with high education (table3-11) and slightly more Christians 36.9% (N=192 out of 520) than Muslims 34.2% (N=233 out of 682).

## 3.4 Educational Status of the Population (N 3200):

In general, the respondents seemed to have a good education. The great majority of respondents 96% (N=3073) have spent at least five years in school.

The non-school category constituted only 4% (N=127 out of 3200) and was relatively non-significant. It was equally distributed in the rural as well as urban areas. As depicted in table3-12, more than a quarter of the respondents 27% (N=863 out of 3200) were university graduates. The highest percentage of university graduates was in Mount Lebanon 43.7% (N=377 out of 863), Beirut 19.2% (N=166 out of 863), followed by the Bekaa 12.7% (N=110 out of 863), the South 12.4% (N=107) and the North 11.9% (N=107). The number of respondents with secondary education was relatively high 24.6% (N=786 out of 3200).

Among the respondents, 8.9% (N=286 out of 3200) were still students, distributed among the various regions in a range between 4.0% (N=8) and 16.9% (>4=30). The lowest rate was in the Bekaa 4.9% (N=14 out of 286), seconded by the North 5.2% (N=15 out of 286), and the highest was in Mount Lebanon 45.5% (N=130 out of 286) followed by the South 29.7% (N=85 out of 286). Respondents with complementary education were 24.8% (N=795 out of 3200) of the population. The lowest percentage was in Beirut 7.5% (N=60 out of 795) and the Bekaa 14.3% (N=114 out of 795) and the South 17.2% (N=137 out of 795). People with only primary education were the lowest in Beirut 6.3% (N=8 out of 127) and the North 7.9% (N=10 out of 127). Consequently 85.3% (N=2730) of the respondents had an education level higher than primary. Only 7.1% (N=227 out of 3200) could not read a letter or a newspaper. Those with primary education or no education and could not read were almost as many females as males 49.8% (N114 out of 227) vs. 50.2% (N=113 out of 227) with slight difference between

rural 52% (N118 out of 227) and urban 48% (N=109out of 227) living, and the least being in Beirut 3.1% (N=13 out of 418), the Bekaa 3.9% (N=16 out of 413), as compared to the South 6.3% (N=34 out of 502), the North 7.5% (N=52 out of 693), Mount Lebanon 9.5% (N=112 out of 1174) table 3-12).

There was no significant difference between Christians 39.2% (N=89 out of 227) and Muslims 32.6% (N=74 out of 227). However, 28.2 % (N=64 out of 227) were among people who did not state their religion.

As shown in table 3-13 the young age group, between 15 and 24 years constituted 32.5% (N=1040) of the population, whereby about 94.4% (N=982 out of 1040) were either still students 24.6% (N=256), university graduates 27.7% (N=288), or completed their secondary schooling22.8% (N=237)., or finished complementary school 19.3% (N=201)

As far as the middle age group 25-39, this population constituted 32% (N=1401). As expected, only 2.1% (N=30 out of 1401) were still students. The majority 83.4% (N=1169) finished either complementary schooling 26.1% (N=366), secondary schooling 26.0% (N=365) or even graduated from universities 31.3% (N=438).

On the other hand, the age group 40-49 years, constitute 23.7% of the population (N=759) had relatively the highest percentage 45.8% (N=157 out of 343) that completed only primary education, the lowest rate among university education 15.9% (N= 137 out of 863), and the highest non-schooled respondents 41.7% (N=53 out of 127).

The non-schooling rates were more in males 7.2% (N=67 out of 1876) than in females 5.4% (N=60 out of 1324). However, it was evident that there were more male students that were still in schools 18.2% (N=170 out of 1876) as compared to female students 10.4% (N=116 out of 1324). The same trend applied to university graduates, there were more males 53.1% (N=496) than females 32.9% (N=367) as well as to complementary education where male 52.2% (N=488) and females 27.5% (N=307) and secondary 50.4% (N=471 out of 1876) and 28.2% (N=315 out of 1324) for males and females respectively. The difference between the two sexes with respect to primary education was not very significant.

# 3.5 The respondents and Alcohol:

This optional question was kept in the questionnaire; the data showed that:

2.3% (N=72 out of 3200) of the population drink every day, and

16.7% (N=535 out of 3200) drink at least once a week, or

17.5% (N=561 out of 3200) drink less often. However, the majority

61.2% (N=1952 out of 3200) said that they never drunk alcohol, and

2.3% (N=73 out of 3200) did not answer this question.

61.2% of the respondents (N=1959 out of 3200) never drunk alcohol. They were as much males as females 50.9% (N=998 out of 1959) and 49.1% (N=961 out of 1959) respectively

living more in urban areas 64.6% (N=1057 out of 1636) than rural 57.7% (N=902 out of 1564) and found in all regions, particularly in Beirut 69.8% (N=292 out of 418), the South 66.3% (N=333 out of 502) and the Bekaa 60.5% (N=250 out of 413) Mount Lebanon 60% (N=705 out of 1174) and the North 54.7% (N=379 out of 693). Table 3-15.

Age was an important factor, the young age group 15-24 drinks 13.7% (N=143 out of 1040), 25-34 drinks 18.6% (N=191 out of 1024), the age group 35-44 drinks more 21.9% (N=168 out of 768) and the old age group drinks the most 28.5% (N=105 out of 368), that is the drinking rates were directly proportional to age. The rate of non-drinkers was the highest among primary educational level 70% (N=240 out of 343), complementary level 64.1 % (N=510 out of 795), students 64.7% (N=185 out of 286), non-schooled respondents 60.6% (N=77 out of 127) and the lowest among university graduates 57.3% (N=495 out of 863).

The non- drinkers were mostly among Muslims 80.9% (N=904 out of 1117) and less among Christians 36.3% (N=339 out of 934).

On the other hand, the daily alcohol drinkers constituted only 2.3% (N=72 out of 3200) of the respondents. They were predominantly among males 84.7% (N=61 out of 72) and 15.3% (N=11 out of 72) females. They were mostly living in urban areas 2.9% (N=48 out of 1636) than in rural 1.5% (N=24 out of 1564), and Beirut had the highest rate 3.6% (N=15 out of 418) seconded by Mount Lebanon 3.15% (N=37 out of 1174), and the North 2.7% (N=11 out of 413). Daily drinkers were found more among old age people 4.9% (N=18 out of 368, followed by 25-34 age group 2.7% (N=28 out of 1024). There were the lowest among complementary level 1.6% (N=13 out of 795), but the highest rate 6.7% (N=6 out of 89) was among non-schooled respondents, followed by primary 2.3% (N=8 out of 343) and complementary education 1.6% (N=13 out of 795). Educated people had similar rates, secondary 2.1% (N=17 out of 786) and university graduates 2.1% (N=18 out of 863). They were predominantly more Christians 3.3% (N=31 out of 934) than Muslims 1.2% (N=13 out of 1117).

In addition, those who drink at least once a week, followed a similar pattern to those who drink daily except that they were more among educated people 17.5% (N=151 out of 863) among university graduates, and 22.3% (N=175 out of 786) among secondary educated people while it is 14% (N=112 out of 795) among complementary educated and 13.9% (N=48 out of 343) primary educated people.

The respondents who drink less often than once a week 17.5% (N=561 out of 3200) followed a pattern similar to once weekly drinkers with respect to sex, residence, age, and religion. However this category was more among well-educated respondents.

# 3.6 Mobility of the Population-Duration of Residence in the Same Locality:

The data showed that there was a limited mobility of the Lebanese population, only 1.3% (N=42) have lived less than 1 year in their village, town, or city, and 17% (N=543) lived 10 years or less

14.5% (N=464) lived more than 21 years, and 67.2% (N=2151) lived since birth, greatest category

07.2% (N=2131) lived since offth, greatest category

Therefore, 98.7% (N=3158) of the population were living for more than a year in their localities. The mobility was, in general, to the urban community coming from rural areas.

This mobility was the highest in the South 45.8% (N=230 out of 502) as compared to other areas like the Bekaa 16% (N=66 out of 413), Mount Lebanon 15.6% (N=183 out of 1174), and Beirut 13.4% (N=56 out of 418). The least mobility was observed in the North 5.5% (38 out of 693).

Furthermore, the mobility was more for the male population 21.2% (N=398 out of 1876) as compared to the female 13.2% (N=175 out of 1324) within the one year. However, the young age groups 20-29, 20.8% (N= 263 out of 1261) moved more, females probably got married and followed their husbands or like males continue their university education

# **CHAPTER FOUR**

## 4 MEDIA AND INFORMATION ON HEALTH

- 4.1 Frequency of reading newspapers
- 4.2 Readers of health corner
- 4.3 Frequency of listening to radio
- 4.4 Time the population listen to radio
- 4.5 Listen to health programs on radio
- 4.6 Watching TV
- **4.7** Watching health Programs
- 4.8 Primary Source of health information

#### 4 MEDIA AND INFORMATION ON HEALTH:

This section was enlarged, more questions were added. The inclusion of more detailed questions on mass media exposure was considered of special relevance for future educational campaigns. The optional item on alcohol consumption was kept since alcohol consumption is not uncommon or illegal in a polyethnic society like the Lebanese. In particular, it was included because of the assumption that opportunities and inclination for sex with non-regular partners could arise in the context of drinking.

# 4.1 The frequency of reading a newspaper in the last 4 weeks (N3200):

The data showed that those who can read a newspaper constituted 93% (N=2973 out of 3200) and were distributed as follows:

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20% (N=594) read everyday
33.5% (N=995) read weekly, and
20% (N=591) read less often, on the other hand,
24% (N=717) never read a newspaper.
2.5% (N=76) not stated
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About one fifth of the respondents read newspapers every day 20% (N=594 out of 2973). They were predominantly more males 23.3% (N=411 out of 1762) than females 15.1% (N=183 out of 1211). They were more urban 22.3% (N=341 out of 1527) than rural 17.5% (N=253 out of 1446), found in all regions with a slight preference to Beirut and the North (table 4-1). The rate of daily readers increased with age; 32.5% (N=102 out of 314) in the 45-49 age group and 26.2% (N=179 out of 682) in the 35-44 age group, 18.9% (N=182 out of 964) in the 25-34 age group and 12.9% (N=131 out of 1013) in the 15-24 age group. They were more Christians 25.4% (N=215 out of 847) vs. 15.4% (N= 160 out of 1041) Muslims with the highest rate among university graduates 32.9 % (N=284 out of 862) and the lowest among primary education 4.2 % (N=10 out of 237), seconded by complementary level 10.4 % (N=83 out of 795), (table 4-1 A).

About one third of the respondents read newspapers weekly 33.5% (N=995 out of 2973). They were slightly more females 34.8% (N=422 out of 1211) than males 32.5% (N=573 out of 1762) and more rural 38.3% (N=554 out of 1446) than urban 28.9% (N=441 out of 1527). The highest rates were in the Bekaa 41.2% (N=163 out of 396) and the North 39.7% (N=254 out of 640), and the lowest in the South 24.1% (N=113 out of 469). The rates were higher, among the (25-34) age group and the (35-44) age group with mostly similar rates 35.9 (N=346 out of 964) and 36.6% (N=250 out of 682) respectively, than the 15-24 age group 29.4% (N=346 out of 964) and the 45-49 age group 32% (N=101 out of 314). They were more Christians 33.9% (N=287 out of 847) than Muslims 28.7% (N=299 out of 1041). In general, the rates were high among educated people (complementary, secondary and university levels) and rotated around the average of 37.1% (N=907 out of 2443).

The respondents who read less often constituted 20% (N=591 out of 2973) almost equally divided among males and females 20.5% (N=361 out of 1762) and 19% (N=230 out of 1211) respectively they were more rural 22.5% (N=326 out of 1446) than urban 17.3% (N=215 out of 1527). They lived in all regions , the South had a higher rate 27.7% (N=130 out of 469), and Beirut had the lowest rate 10.6% (N=43 out of 406) , the North 22.3% (N=143 out of 640), the Bekaa 21.7% (N=86 out of 396) and Mount Lebanon 17.8% (N=189 out of 1062). They were more muslims 25.7% (N=268 out of 1041) than Christians 16.5% (N=140 out of 847). Age group did not seem to affect this category. However, the lowest rate was found among university graduates 13.4% (N=116 out of 862) and the highest among those with primary education 32.5% (N=77 out of 237).

On the other hand, about one quarter of the respondents 24% (N=717 out of 2973) never read a newspaper. They were more among females 28.6% (N=346 out of 1211) than males 21% (N=371 out of 1762), they were more in urban 29% (N=444 out of 1527) than in rural 18.9% (N=273 out of 1446) and lived in all regions ,the higher in the South 36.6% (N=153 out of 469), Mount Lebanon 28.8% (N=306 out of 1062) ,Beirut 24.9% (N=101 out of 406) and the Bekaa 21.7% (N=86 out of 396), and the lowest rate was in the North 11.1% (N=71 out of 640). The young age group15-24 and 25-34 had higher rates 33.5% (N= 343 out of 1013) and 20% (N=193 out of 964), respectively, while the middle age group 35-44 had 18.9% (N=129 out of 682) and the old age group 45-49 had lower rates 16.6% (N= 52 out of 314). They were slightly more muslims 28.5% (N=297 out of 1041) than christians 22.5% (N=191 out of 847). With respect to education, the highest rates were among people with primary education 54.8% (N=130 out of 237) and students 38.9% (N=114 out of 293), and the lowest rates were among university graduates 13.2% (N=114 out of 862).

# 4.2 Readers of the health corner in the newspapers or magazines:

The data depicted that 32.5% (N=966 out of 2973) of those who could read a newspaper were reading the health corner.

Those respondents that read the health corner amounted to one third of the population. There were no difference in respect to sex with an average of 32.5% for males and females (N=571 out of 1762) and (N=395 out of 1211) respectively. They were relatively more urban 35.9% (N=548 out of 1527) than rural 28.9% (N=418 out of 1446). They lived more in Beirut 47.8% (N=194 out of 406), in the South 32.6% (N=153 out of 2973), in the Bekaa 31.1% (N=123 out of 396), and in Mount Lebanon 31% (N=329 out of 1062). The lowest rate was in the North 26.1% (N=167 out of 640) (table 4-2).

They belonged almost equally to all age groups with a slightly higher rate among the middle age category; 35-44 age group 38.4% (N=262 out of 682) seconded by 45-49 age group 37.9% (119 out of 314). They were more Christians 34.5% (N=292 out of 847) than Muslims 26.4% (N=275 out of 1041). Respondents with high education read more the health corner. University graduates had the highest rate 53.2% (N=459 out of 862) and those with primary education 6.3% (N=15 out of 237) or still students 19.1% (N=56 out of 293) had the lowest rates, (table 4-2 A).

On the other hand, respondents that did not read the health corner in newspapers were 47,3% (N=665 out of 1407) and had different trend compared to the readers, namely: more among males, more rural, lived more in the North and Mount Lebanon, less among the middle age group, more among Christians, and had relatively low education.

### 4.3 Frequency of listening to the radio during the past 4 weeks

About 42.3% (N=1355 out of 3200) of the population listened to the radio without much difference between sex; 43.6% (818 out of 1876) for males and 40.6% (N=537 out of 1324) for women or a preference for age groups (table 4-3 A). However, they were more in rural 48.8% (N=764 out of 1564) than in urban 36.1% (N=591 out of 1636). The highest rates were almost equal among those living in Mount Lebanon 50% (N=529 out of 1174), the North 50% (N=343 out of 693) and in the Bekaa 49.6% (N=205 out of 413), and the lowest among those living in the South 20% (N=102 out of 502). Beirut was close to country average 42% (N=176 out of 418).

24.5% (N=783 out of 3200) listened to radio once a week. They were slightly more females 26.9% (N=356 out of 1324) than males 22.8% (N=427 out of 1876), more rural 28.6% (N=448 out of 1564) than urban 20.5% (N=335 out of 1636). They showed some preference for 35-44 age groups 28.6% (N=220 out of 768), while the other groups were similar to the population average 24.6% +/-0.2 (table 4-3 A). For the levels of education they showed some preference for lower levels of education; Primary28.9% (N=99 out of 343) and complementary 27.4% (N=218 out of 795), the lowest rate was among non schooling population 17.5% (N=21 out of 120) the others level were close to the population average 24.5% +/- 2. However, they were relatively less in Beirut 16.7% (N=70 out of 418) vs. the North 38.4% (N=266 out of 693) or the Bekaa 25.9% (N=107 out of 413), the South 21.3% (N=107 out of 502) and Mount Lebanon 19.8% (N=233 out of 1174).

About 20.5% (N=657 out of 3200) of the population never listened to radios. They were more females 22.9% (N=303 out of 1324) than males 18.9% (N=354 out of 1876) and more from Beirut 37.8% (N=158 out of 418) seconded by the South 32.7% (N=164 out of 502) vs. Mount Lebanon 22.0% (N=259 out of 1174), the Bekaa 12.8% (N=53 out of 413) or the North 3.3% (N=23 out of 693). They were more among the urban 30.5% (N=499 out of 1636) than rural 10.0% (N=158 out of 1564). There was no preference for age groups among non-radio listeners, (table 4-3).

Concerning the religion, they were more Muslims 25.1% (N=281 out of 1117) than Christians 14.3% (N=134 out of 934). They were less among the highly educated respondents university graduates were 19.4% (N=167 out of 863) vs. 28.3% (N=34 out of 120) for non-schooled, (table 4-4).12.6% (N=405 out of 3200) listened less often. There was no preference for age groups (table4-3 A).

Therefore, 66.8% (N= 2138 out of 3200) of the population listened regularly to the radio either daily or weekly. They were almost the same rates among males 66.4% (N=1245 out of 1876) and females 67.4 (N=893 out of 1324), found in all regions, the higher rates were in the North

88.4% (N=609 out of 693), seconded by the Bekaa 75.5% (N=312 out of 413), Mount Lebanon 69.8% (N=762 out of 1174) and Beirut 58.7% (N=246 out of 418), the least rate was in the South 41.3% (N=209 out of 413). Consequently, only minor differences existed between the various age group or levels of education concerning this issue (table 4-4 A).

### 4.4 Time the population listen to radio (N=2543):

39.5% (N=1005 out of 2543) listen in the morning, more females 24.1% (N=613 out of 2543) listen in the afternoon, slightly more males 8.3% (N=211 out of 2543) listen in the evening, slightly more males 8.3% (N=211 out of 2543) listen before sleeping, slightly more males 19.8% (N=503 out of 2543) listen in other times, more males

The 19.8%, i.e. "the other times" consisted of a long list that has been regrouped as follows

All day	13.1%	(N=66 out of 503)
While driving	13.5%	(N=68  out of  503)
No specific time	73.4%	(N=369 out of 503)
TOTAL	100%	

Refer to tables 4-5 to 4-9, of all listeners 39.5% (N=1005 out of 2543) listened to the radio in the morning, before noon. They were more among females 43.3% (N=442 out of 1021) than males 37.0% (N=563 out of 1522), and more rural 43.4% (N=610 out of 1406) than urban 34.7% (N= 395 out of 1137). They lived in all regions. However, the North had the highest rate 69.1% (N=463 out of 670) seconded by the South 42.0% (N= 142 out of 338), and the lowest in the Bekaa 16.7% (N=60 out of 360) (table 4-7). They belonged more to the 2 upper age groups 45-49 and 35-44 with 62.0% (N=176 out of 284) and 57.9% (N=363 out of 627) respectively, and much less so in the 2 young age groups 25-34 and 15-24 with 35.3% (N=290 out of 822) and 21.7% (N=176 out of 810). They were almost as much Muslims 48.6% (N=406 out of 836) as Christians 48.9% (N=391 out of 800). The rates were inversely related to the levels of education, higher rates were among respondents having low-level education: Primary education 50% (N=133 out of 266) compared to university education 31.3% (N=218 out of 696), (table 4-8)

Although the female listeners were more than male listeners in the morning, these rates were reversed in all the other periods. The male listeners were more at all other periods as shown in table 4-5; the rates for both sexes were highest in the morning and decreased during the rest of the day.

Age was also a factor in affecting the rate of listening to radio. The young age group listened to radio at all periods in a somewhat constant rate +/- 6%, that is between 27.2% and 33.2% of the young age group sample. On the other hand, the rate in the two other age groups was the highest in the morning and decreased as time went by during the day. Most people listened to the radio in the morning. In the afternoon, the rate of listeners in the young age group stayed high.

In all regions except the Bekaa, the rate of radio listeners was the highest in the morning and decreased during the rest of the day. However, the highest morning rate was in the North 69.1% (N=463 out of 670), seconded by the South 42.0% (N=142 out of 338), Beirut 31.2% (N=81 out of 260) and Mount Lebanon 28.3% (N=259 out of 915), the lowest rate was in the Bekaa 16.7% (N=60 out of 360).

In the afternoon, the rates were all high, with the highest being in the Bekaa 28.6% (N= 103 out of 360) and the lowest in the North 19.6% (N=131 out of 670).

In the evening, there rates were lower than those in the afternoon with the highest being in Mount Lebanon 12.1% (N=111 out of 915) and Beirut 11.9% (N=31 out of 260) and the lowest in the South 4.1% (N=14 out of 338) and the North 4.5% (N=30 out of 670) while the Bekaa was 6.9% (N=25 out of 360).

Before sleeping the highest rates were in Beirut 13.8% (N=36 out of 260), the Bekaa 13.1% (N=47 out of 360) and Mount Lebanon 12.9% (118 out of 915) while the lowest rates were in the North 0.6% (N=4 out of 670) and the South 1.8% (N=6 out of 338).

As evidenced in table 4-8, listening to radio in the morning was indirectly related to the levels of education: Primary education 50% (N=133 out of 1005) compared to 31.3% (N=218 out of 1005) with university education, excluding students who could be at school during the morning.

Listening to the radio in the evening was more for non-schooling people and students with 14% (N=12 out of 211) and 12.2% (N= 27 out of 221) respectively compared to university education 9.5% (N=66 out of 696).

Listening to the radio before sleeping followed the opposite pattern compared to the evening. That is more with educated respondents. In other words, the non-schooled, primary, complementary and secondary educated respondents listened more to radio in morning while the rates of students and university educated respondents increased in the evenings and before sleeping.

As shown in table 4-9, there was no difference between Muslims compared to Christian for listening to radio during the day 48.6% (N=406 out of 836) and 48.9% (N=391 out of 800); more Christians listened in the evenings and before sleeping 17.6% (N=141 out of 800) compared to Muslims 9.3% (N=78 out of 836).

# 4.5 Listen to health programs on the radio (N=2543):

Refer to tables 4-5 and 4-6, tables 4-10 A and 4-11; 31.3% (N=796 out of 2543) of the respondents who listened to the radio, listened to health programs. They were present more among females 36.7% (N=375 out of 1021) than males 27.7% (N=421 out of 1522). They lived more in Beirut 45.38% (N=118 out of 260), seconded by the North 33.4% (N=224 out of 670), Mount Lebanon 31.5% (N=288 out of 915), the South 31.4% (N=106 out of 338), and the least were in the Bekaa 16.7% (N=60 out of 360).

There were more in urban areas 35.2% (N=400 out of 1137) than in rural 28.1% (N=396 out of 1406). Listening to health programs was not affected by the age groups .The (35-44) age group had the highest rate 37% (N=232 out of 627), 25-34 and 45-49 age groups had similar rates 33.9% (N=279 out of 822) and 33.8% (N=96 out of 284). They were more among Christians 37.5% (N=300 out of 800) than Muslims 30.1% (N=252 out of 836). Students had the lowest rate 17.6% (N=39 out of 221), followed by the primary educated level 18.8% (N=50 out of 266), while university graduates had the highest rates 41.5% (N= 289 out of 696). Non-schooling people had a rate of 36.0% (N=31 out of 86), the other educational levels had relatively high rates, complementary 25.8 (N=163 out of 631), and secondary 34.8% (N=224 out of 643). Therefore, education, in general, was not a crucial factor in affecting the rates of listeners to health programs.

In conclusion, the rates of male listeners to the radio were more than females at all times, except the morning, table (4-5). The young age group listened to radio at all periods at a somewhat constant rate while older people listened more in the morning (table 4-6). In addition, in all regions, the rate of radio listeners was the highest in the morning except for the Bekaa (table 4-7). Listeners to radios in the morning were less educated than those of the afternoon or late at night (table 4-8). Christians listened more in the evenings while there was no difference during the day (table 4-9). The lowest rates of health programs listeners were in Bekaa 14.5% (N=60 out of 413), compared to Beirut 45.4% (table 4-10). Such listeners belonged more university graduates, (table 4-11).

### 4.6 Watching Television (N=3124):

The data showed that, in Lebanon, 97.6% (N=3124 out of 3200) of the respondents watched TV and only 2.4% (N=76 out of 3200) never watched TV.

The rate of TV watchers was more among males 58.7% (N=1834 out of 3124) than females 41.3% (N=1290 out of 3124), equally urban and rural 50.2% (N=1567 out of 3124) and 49.8% (N=1557 out of 3124). They lived in all regions the highest rate was in Mount Lebanon 36.2% (N=1130 out of 3124) followed by the North 22.2% (N=692 out of 3124) with the lowest was in Beirut 12.9% (N=403 out of 3124) followed by the Bekaa 13.1% (N=410 out of 3124). More than the half of the population belonged to the 2 young age groups with an average of 32.0% for each group . They were slightly more Muslims than Christians and associated more with educational levels.

Out of the 97.6% (N=3124 out of 3200) who watched TV;
7.2% (N=224 out of 3124) watched TV in the morning.
18.2% (N=568 out of 3124) watched TV in the afternoon
30.8% (N=961 out of 3124) watched TV in the evening
24.4% (N=762 out of 3124) watched TV before sleeping
19.5% (N=609 out of 3124) watched TV other times

The 19.5% (N=609 out of 3124) other options were as follows:

70.8% (N=431 out of 609) all times 19.2% (N=117 out of 609) at free times 10.0% (N=61 out of 609) late at night

As seen in table 4-12, watching TV in the morning was more among females 14.3% (N=184 out of 1290) than males 2.2% (N=40 out of 1834), while in the afternoon it was more in males 19.0% (N=348 out of 1834) than in females 17.1% (N=220 out of 1290), and so were in the evenings 33.9% (N622 out of 1834) vs. 26.3% (N=339 out of 961) and before sleeping 28.8% (N=528 out of 1834) vs. 18.1% (N=234 out of 1290). However, those watching TV at other times were more among females 24.3% (N=313 out of 1290) than males 16.1% (N=296 out of 1834), (table 4-12).

The lowest rates of TV watchers were in the morning. As the day goes by, the rate increased to a climax early in the evening 30.8% (N=961 out of 3124), then dropped to 24.4% (N=762 out of 3124) before sleeping.

Therefore, watching TV during the day was more among females table (4-12). The highest rates of watchers were in the evenings or late before sleeping and these were mostly males. No major differences were encountered among regions (table 4-13).

- -The morning TV watchers were more in the North 23.3% (N=161 out of 692) and the least in the Bekaa 1.7% (N=7 out of 410), (table 4-13).
- In the afternoon, more watchers were in the North 37.3% (N=258 out of 692) and the least were in the Bekaa 8.8% (N=36 out of 410) and Beirut 9.7% (N=39 out of 403) (table 4-13)
- In the evening, the rates were high everywhere except in the North.
- Before sleeping, the rates were also high in the Bekaa 39.5% (N=162 out of 410) and Mount Lebanon 30.3% (N=342 out of 1130), and the lowest rate was in Beirut 16.6% (N=67 out of 403).

In general, no major differences were encountered among regions.

The morning TV watching rates increased with increasing age reaching a climax at 35-44 age group 12.2% (N=92 out of 757) then decreases in older groups. In the afternoon, the rates were close between the 2 higher age groups, however, the rate was lower in the 25-34 age group 12.9% (N=129 out of 1003). In the evening, the rates were high in all age groups; however, the highest was in the 25-34 age group 33.5% (N=336 out of 1003). Before sleeping watchers decreased with the 2 higher age groups: for 35-44age group it was 18.2% (N=138 out of 757), for 45-49 it was 16.5% (N=60 out of 363) compared to the 2 young age groups, table (4-14).

On the other hand, more rural watched TV in the mornings and afternoons while more urban watched TV during the nights, (table 4-15).

The educational levels affected the time and the rates of TV watchers. University graduates had the lowest rates in the mornings 3.0% (N=25 out of 835), low rates in the afternoons

14.9% (N=124 out of 835), the highest rate in the evenings 35.6% (N=297 out of 835), and high rates also before sleeping 29.9% (N=250 out of 835). Students behaved in a way similar to university graduates, (table 4-16). Non-schooled respondents had the highest rate of the evenings 40.9% (N=45 out of 110) and before sleeping 30% (N=33 out of 110), the lowest in the morning 3.6% (N=4 out of 110) . The other levels behaved much the same way; rates were low in the morning, increased towards the evening and dropped before sleeping.

Religions made some difference too with respect to time and rates of TV watching. Christians watched TV during the day more than Muslims, while Muslims watched more TV in the evenings, (table 4-17).

## 4.7 watching health programs on TV (N=3124)

More than half the respondents 54.4% (N=1700 out of 3124) watched health programs on TV, while 45.6% (N=1424 out of 3124) did not.

It was reported that more females 64.9% (N=859 out of 1324) watched health programs than males 44.8% (N=841 out of 1875). Watching health programs was more among rural people 54.7% (N=855 out of 1563) compared to urban 51.6% (N=845 out of 1636). They were similarly found in all age groups, however, the rate increased with age; 43.3% (N=434 out of 1001) in 15-24 age groups, 55.2% (N= 554 out of 1003) in 25-34 age group, and 64.7% (N= 490 out of 757) in the 35-44 age group and 61.1% (N=222 out of 363). Religion did not affect the rate of watching health programs. The rates were similar for Muslims 56.2% (N=620 out of 1103) and for Christians 55.8% (N=503 out of 902). Educated people seemed to watch more health programs; university graduates had the highest rate 61.4% (N=513 out of 835)followed by secondary level people 59.7% (N=463 out of 775) and complementary level people 52.9% (N=416 out of 787). However, students 39% (N=110 out of 282) and primary educated people 43.3% (145 out of 335) had the lowest rates, (table 4-18).

Those interested in TV health programs were more in Beirut 67% (N=270 out of 403), the North 63.2% (N=437 out of 692) and the South 58.5% (N=286 out of 489) as compared to Mount-Lebanon 47 % (N=531 out of 1130) or the Bekaa42.9% (N=176 out of 410), (tables 4-13).

# 4.8 Primary source of health information (N=3200):

The respondents identified their primary source of health information as:

16.3% (N=522 out of 3200) from magazines,

4.5% (N=144 out of 3200) from radio,

33.6% (N=1075 out of 3200) from television, and

45.6% (N=1459 out of 3200) other sources.

In general, in all the above categories, there were no significant differences between rural and urban, Christians or Muslims. However, most respondents 45.6% (N= 1459 out of 3200) found health information in other sources than the ones above mentioned. These other sources included the following (N=1459 out of 3200):

Doctors and health personnel 69.5% (N= 1014 out of 1459)

Friends 5.7% (N=83 out of 1459)
Family members 11.0% (N=160 out of 1459)
Not specified 13.8% (N=202 out of 1459)
Teachers and schools, Media ads, Army, Books & brochures, and Others

Therefore, doctors and health personnel were considered as very important sources of health information. It was less so for friends, family, teachers or media ads.

As shown in (table 4-19), females, in general, counted more than males on all mentioned sources, while males depended more on other sources: 51.9% (N= 974 out of 1876) vs. 36.6% (N=485 out of 1324). Radios were the least used 4.5% (N=144 out of 3200), seconded by magazines 16.3% (N= 522 out of 3200), and then TV's 33.6% (N=1075 out of 3200).

Beirut had the highest rates in TV and Newspaper as primary sources of health information but the lowest in other sources. It seems they depended more on doctors and health personnel in general. On the other hand, the Bekaa had its lowest rate in the radio 2.7% (N=11 out of 413), and the highest from TV 34.6% (N=143 out of 413). The South had the highest rates for the other sources 55.4% (N=278 out of 502) and the lowest for TV 22.9% (N= 115 out of 502), (table 4-20).

All age groups depended more on TV's and magazines and TV's with an average of 33.6% (N=1075 out of 3200) and 16.3% (N= 522 out of 3200) respectively than on radios with an average of 4.5% (N=144 out of 3200), (table 4-2 1).

The magazines were, mostly, used by the educated people. The rate increased directly with increase in the levels of education: primary 3.5% (N=12 out of 343) vs. university 26.9% (N=232 out of 863). The radio, as a source of health information, was not affected, significantly, by the levels of education neither was the TV or other sources. However, the non-schooled depended more on other sources 60.6% (N=20out of33). Therefore, health personnel and TV were the primary sources of information on health, followed by magazines and then the radio, (table 4-22).

# **CHAPTER FIVE**

### 5 REGULAR PARTNERSHIPS

- 5.1 Marital status and polygamy
- 5.2 Sexual activity among non-married respondents
- 5.3 Presence of a regular partner apart from spouse
- 5.4 Number of regular partners (current spouses are not included)
- 5.5 Spouse or regular partner has sex with anyone else
- 5.6 Last occasion of sexual intercourse within a marriage or regular partnership
- 5.7 Use of condom in the last sexual intercourse

### 5 REGULAR PARTNERSHIPS:

This section gives information on the marital and other sexual relationships of the respondents. the major purpose of this section and the next was to measure sexual risk behavior for each respondent; Refer to tables 5-1 to 5-5.

### 5.1 Marital status and polygamy:

### 5.1.1 Marital status (overview):

As discussed earlier (section 3-3), 52.0% (N=1665 out of 3200) of the respondents have ever been married, (table 5-1). There were relatively more married females in the sample 57.7% (N=764 out of 1324) than males 48.0% (N=901 out of 1876), a significant difference of 9.7%. We have also seen that females got married at an earlier age than males. Actually, 35.6% (N=272 out of 764) females got married before the age of 20 years as compared to 5.0% (N=45 out of 901) males of the same age. In addition, more females 44.1% (N=337 out of 764) than males 37% (N=333 out of 900) got married before the age of 25 years.

On the other hand, some respondents were married but no more 54.3% (N=905 out of 1665). They were more among females 56.0% (N=507 out of 905), more rural 57.8% (N=552 out of 955) than urban 49.7% (N= 353 out of 710). They were in all age groups but with more prevalence among the young age group 15-24 with a rate of 61.9% (N=70 out of 113) compared to 52.9% (N=286 out of 541) in the 25-34 age group, or 55.8% (N=371 out of 665) in the 35-44 age group, or to 51.4% (N=178 out of 346) in the 45-49 age group. They existed more among respondents from Mount Lebanon 62.4% (N=254 out of 407) and the North 62.1% (N=384 out of 618), followed by the Bekaa 57.6% (N= 117 out of 203), Beirut 46.9% (N=82 out of 175) and the South 25.9% (N=68 out of 262). This aspect is found more with educated people compared to Primary or non-schooling people 80.4 (N=726 out of 905) vs. 18.9% (N=171 out of 905) respectively. They were more among Christians 68.2% (N=355 out of 520) vs.41% (N=280 out of 682) among Muslims.

## 5.1.2 Polygamy:

The total number of married people interviewed was 1665;out of them 905 were no more married at the time of the study. That is the actual number of married people was 1665- 905 =760.

This group of respondents showed that:

88.1% (N=670 out of 760) had one wife/husband, and 0.8% (N=6 out of 760) had two

1.3% (N=10 out of 760) had three, 0.9% (N=7 out of 760) had four,

8.8% (N=67 out of 760) did not state any answer,

Therefore, 3% (N=23 out of 760) said they were polygamous and 88.1% (N=670 out of 760) were not.

Those who were polygamous were mostly in the Bekaa 19.8% (N=17 out of 86), followed by the South 2.0% (N=4 out of 195) then the North 0.4% (N=1 out of 234) and Mount Lebanon 0.4% (N=1 out of 259). On the other hand, no polygamous was reported in Beirut They were more males 3.8% (N=19 out of 503) than females 1.5% (N=4 out of 257), and more rural 4.5% (N=18 out of 403) than urban 1.4% (N=5 out of 357). They were mostly in the older age category 5.3% (N=9 out of 168), followed by 3.1% (N=8 out of 255) in the 25-34 age category.

The polygamy correlated somehow with low-level education, (table 5-3), and Muslim respondents, (table 5-4).

## 5.2 Sexual activity among non married respondents (N=473):

30,8% (N=473 out of 1535) reported sexual activity and were not married, (table 5-1). If we couple them with those ever married 52.0% (N=1665 out of 3200), we get a population of sexually active people equal to 1665+473=2138. In other terms, there were 2138 sexually active people in the 3200 population, i.e. 66.8%.

Those reporting sexual activity, and were not married, were predominantly more males 89.2% (N=422 out of 473) than females 10.8% (N=51 out of 473). This sexually active group was slightly more urban 29.1% (N=292 out of 1002) than rural 15.9% (N=181 out of 1136).

They were distributed predominantly in the South 59.2% (N=142 out of 240), followed by Beirut 26.7% (N=65 out of 243), Mount Lebanon 25.5% (N=196 out of 767), the Bekaa 24.8% (N=52 out of 210) and least in the North 24% (N=18 out of 75). Therefore this sexual activity outside marriage was in all regions, however, it was significantly more in the South. They belonged predominantly to the young age groups 15-24 and 25-34 with 47.5% (N=225 out of 473) and 43.8% (N=207 out of 473). There was a direct correlation with levels of education Such a sexual activity existed more among respondents with high education levels like university 28.1% (N=133 out of 473) or secondary levels 26.8% (N=127 out of 473), (table 5-3).

On the other hand, such sexual activities were more among Muslims 40.6% (N=192 out of 473) than Christians 25.6% (N=121 out of 473) However, It is to be taken into consideration, that 33.8% (N=160 out of 473) did not stated religion, (table 5-4).

## 5.3 Presence of a regular partner apart from spouse (N=2138):

This question was asked to those who have ever had sexual relationship. The definition of "regular" was about a year or more. 13.0% (N=278 out of 2138) had a regular partner. They were predominantly males: 87.8% (N=244 out of 278) vs. 12.2% (34 out of 278) females. They were more urban 15.7% (N=157 out of 1002) than rural 10.6% (N=121 out of 1136). The regional distribution showed that they were predominantly in the South 24.7% (N=100

out of 404) followed by Mount 17.2% (N=104 out of 603) and Beirut 15% (N=36 out of 240) as compared to the Bekaa 6.7% (N=17 out of 255) and the North 3.3 (N=21 out of 636).

Those who reported to have partners were predominantly from the 15 out of 24 young age group 25.7% (N=87 out of 338), and the 25-34 age group 15.8% (N=118 out of 748) as compared to 4.6% (N=16 out of 351) in the upper age group 45-49. The majority were still students 38.5% (N=35 out of 91) or university graduates 15% (N=77 out of 508). The majority drinks alcohol everyday 23.7% (N=14 out of 59), once a week 16.5% (N=74 out of 448) or less often 15.5% (N=62 out of 399), and only 10.5% were not of drinkers. The majority were Muslims 15% (N=132 out of 874) rather than Christians 11.2% (N=72 out of 641), refer to tables 5-1 to 5-5 and P9 to P11).

### **5.4** Number of regular partners (current spouses are not included)

278 persons out of the 2138 sexually active reported having regular partners other than spouse, they were distributed as follows:

```
80.6% (N=224 out of 278) reported to have one reported to have two reported to have two reported to have three reported to have four 1.1% (N=3 out of 278) five or more, .
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The great majority of respondents in this category were males 87.8% (N=244 out of 278) vs. females 12.2% (N=34 out of 278). The majority belonged to the 25-34 age group 42.4% (N=118 out of 278) and young 31.3% (N=87 out of 278) age groups.

There was no significant difference between urban and rural 56.5% (N=157 out of 278) and 43.5% (N=121 out of 278). The regional distribution showed that Mount Lebanon and the South as the place with the highest percentage 37.4% (N=104 out of 278) and 36% (N=100 out of 278) respectively. The rest varied between 12.9% (N=36 out of 278) in Beirut and 6.1% (N=17 out of 278) in the Bekaa.

Therefore, Mount Lebanon as well as the South had the highest rates. The presence of multiple regular partners correlated with high levels of education. Actually, complementary and secondary levels of education had the highest percentages levels 5.7% (N=16 out of 278) each, followed by university graduates 4.7% (N=13 out of 278). However, Non schooling and primary schooling had the lowest 0% and 0.7% (N=2 out of 278) respectively (table 5-3). They were more Muslims 7.9% (N=22 out of 278) as compared to Christians 3.9% (N=11 out of 278). It was also more among alcohol drinkers 13.3% (N=37 out of 278) than non drinkers 6.1% (N=17 out of 278) and slightly more among mobile 10.1% (N=28 out of 278) rather than non mobile respondents, (table 5-5).

On the other hand, it is **important** to note that those reporting one partner were relatively more among females 94.1% (N=32 out of 34) compared to males 78.7% (N=192 out of 244) while those reporting three and above were solely males 16.1% (N=27 out of 168).

### 5.5 Spouse or regular partner has sex with anyone else:

The aim of this question was to find out if any spouse (s) or regular sexual partner(s) of the respondents believed that their partner was having sex with someone else. It is not relevant if the polygamous husband of a female respondent is having sex only with his other wives. (Perception of faithfulness of the partner).

18.9% (N=196 out of 1038) of the respondents (760 now married + 278 regular partners = 1038) did not state any answer while,

3.2% (N=33 out of 1038) thought that their regular partner has sex with someone else 69.6% (N=723 out of 1038) said no, and

8.3% (N=86 out of 1038) did not know.

The "yes" respondents were more urban 4.1% (N=21 out of 514) than rural 2.3% (N=12 out of 524). Their regional distribution showed that the highest percentage was in Beirut 4.6% (N=6 out of 129), followed by the South 3.7% (N=11 out of 294)and the lowest in the North 2.3% (N=6 out of 255), The Bekaa 2.9% (N=3 out of 103) and Mount Lebanon 2.7% (N=7 out of 257)

The "yes" people were significantly more males than females: 3.5% (N=26 out of 747) vs. 2.4% (N=7 out of 291). They were mostly in the students category, 23.7% (N=9 out of 38) and in all levels of education at low rates ranging from 1.3% to 2.4%. They were slightly more Christians 2.9% (N=9 out of 641) than Muslims 2.4% (N=13 out of 534). They belonged mostly to the youngest age category 12.3% (N=16 out of 130), 5 times more than the average of the others age category: (25-34) 2.1% (N=8 out of 373); 35-44 1.1% (N=4 out of 351); 45-49 age group 2.7% (N=5 out of 184). They were relatively more mobile 5.3% (N=1 1 out of 206) vs. 1.8% (N=40 out of 570), and more with alcohol drinkers 2.4% (N=22 out of 906)., (table 5-1 to 5-5).

# 5.6 Last occasion of sexual intercourse within a marriage or regular partnership (N=1038)

This question aimed at detecting the frequency of sexual activity total of 1038 responded to this question distributed as such:

 $\begin{array}{lll} 61.8\% & (N=641) & \text{had sex within the last week} \\ 16.5\% & (N=171) & \text{within the last 4 weeks} \\ 2.9\% & (N=30) & \text{within the last 12 months, and} \\ 0.8\% & (N=8) & \text{longer ago.} \\ 18.1\% & (N=188) & \text{did not state an answer.} \end{array}$ 

Those stating sexual intercourse within the last 7 days were more males 69.2% (N=517 out of 747) than females 42.6% (N=124 out of 291), and almost equally distributed between rural 61.4% (N= 322out of 524) and urban 62.1% (N= 319 out of 514). They belonged mostly to the 35-44 and 25-34 age groups, 67.8% (N= 238 out of 351) and 64.3% (N= 240 out of 373) respectively. There were no major differences with different educational levels, but their percentages increased with increased level of education, so is for religions where Muslims

63.7% (N=340 out of 534) vs. Christians 60% (N=142 out of 237) but higher with mobility 67.6(N=188 out of 278) compared to 59.6 (N=453 out of 760), and slightly higher with once a week drinkers 68.4% (N=145out of 212) than daily drinkers of alcohol 64.1% (N=25 out of 39). This category was most available in Beirut 75.8% (N=97 out of 128) and the least in Mount Lebanon 51% (N=131 out of 257).

The respondents having sex with a regular partner during the last 4 weeks were more males 85.4% (N=146 out of 171) than females 8.6% (N=25 out of 171). They were mostly from the Bekaa 26.2% (N=27 out of 103) and Mount Lebanon 20.2% (N=52 out of 257), the South 17.3% (N=51 out of 295), Beirut 14.1 (N=18 out of 128) and the least in the North 9% (N=23 out of 255). They were slightly more in rural 17.5% (N=92 out of 524) than urban 15.4% (N=79 out of 514) and were found in all age groups but mostly in 45-49 and 15-24 age groups 28.3% (N=52 out of 184) and 26.1% (N=34 out of 130) respectively. The others age groups had almost the same percentage with an average around 11.75% +/- 0.25. There were no major differences with different educational levels. There were more Christians in this category 19% (N=45 out of 237) than Muslims 14.2% (N= 76 out of 534). Mobility did seem to be an affecting parameter 19% (N=53 out of 278) vs. non mobile 15.5 (N=118 out of 760). They were slightly more with alcohol drinking could be 19.2 (N=86 out of 447) vs. 14.4% (84 out of 581) among those who never drink, (table 5-5).

### 5.7 Use of condom in the last sexual intercourse (N=1038):

25.0% (N=259 out of 1038) used condoms in their last sexual intercourses

1.3% (N=14 out of 1038) did not remember and

18.0% (N=187 out of 1038) did not answer this question. The rest

55.7% (N=578 out of 1038) did not use condoms in the last sexual intercourses, (refer to tables 5-1 to 5-5).

Those that have used the condom were predominantly males 30.0% (N224 out of 747) compared to 12% (N=35 out of 291) females. They lived slightly more in urban areas 28.4% (N=146 out of 514) than rural 21.6% (N=113 out of 524). They were mostly in Mount Lebanon 35.4% (N30 out of 101) followed by the South 30.8% (N=91 out of 295) and Beirut 25.8% (N=33 out of 128) then the North 13% (N=33 out of 255), the least was in the Bekaa 10.7% (N=11 out of 103).

Most of the users belonged to the young age group 34.6% (N=45 out of 130), much less in the 2 middle age groups 25-34 and 35-44with an average of 25% (N=93 out of 373) and (N=88 out of 351) respectively, and the least in the old age group 17.9% (N=33 out of 184) (table 5-7). The users were more in the students category 33.7% (N=14 out of 36) and university graduates 33.7% (N=87 out of 258) followed by secondary level 27.2% (N=67 out of 246) and complementary level 22.1% (N=68 out of 308), the lowest users were among non schooling and primary educated people 7.3% (N=3 out of 43) and 13.6% (N=20 out of 147) respectively. The users were more Christians 30.4% (N=72 out of 237) than Muslims 22.7% (N=121 out of 534).

On the other hand, 55.7% (N=578 out of 1038) of the respondents did not use condoms. They were more males 61.7% (N=461 out of 747) than females 40.2% (N=117 out of 291). They were the least in Mount Lebanon 39.7% (N=102 out of 257) and the most in the Bekaa 70.9% (N=73 out of 103). The other regions varied between 64% (N=83 out of 128) in Beirut, 61.6% (N=157 out of 255) in the North and 55.2% (N=163 out of 295) in the South. The non-users belonged more to the upper 2 age groups but mostly in the old age group 67.4% (N=124 out of 184). They were associated more with low and medium educational levels but not with university levels or students. They were slightly more Muslims 56.7% (N=303 out of 534) than Christians 52% (N=123 out of 237), without any relation to alcohol drinking or mobility.

Those that did not answer 18% (N=187 out of 1038) were predominantly rural 19.1% (N=100 out of 524) compared to urban 16.9% (N=87 out of 514). They were in all regions but mostly in the North 24.3% (N=62 out of 255) and Mount Lebanon 23.3% (N=60 out of 257) and the least in Beirut 5.5% (N=7 out of 128). They were almost 6 times females 45.7% to 7.2% males. They were in all age groups but more in the 2 upper age groups. They also were in all educational levels but the least among students. They were slightly more represented in Muslims religions 19.3% (N=103 out of 534) than in Christians 16% (N=38 out of 237).

### 5.8 Age at the first ever experience of sexual intercourse (N=2138);

The collected data showed that 2138 persons had reported sexual activity: the respondents had their first sexual experience as follows:

```
0.0% (N=1) at 10 years or less
1.7% (N=36) between 11 to 14 years
33.3% (N=711) between 15 to 20 years
7.9% (N=169) between 21 to 25 years
2.5% (N=54) at 26 years or more
54.6% (N=1167) did not answer
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Only one person had reported to have the first sexual intercourse at age 10. He was a male living in the South in the rural area.

Those that had sex between 11 to 14 years were also predominantly males 2.6% (N=34 out of 1324) compared to 0.2% (N=2 out of 815) females. They were more urban 2.4% (N=24 out of 1002) than rural 1.0% (N=12 out of 1136), and lived predominantly in Beirut 3.75% (N=9 out of 240) followed by Mount Lebanon 2.6% (N=16 out of 603) or in the South 2.2% (N=9 out of 404) and to a lesser extent in the North 0.0% (N=0) and in the Bekaa 0.8% (N=2 out of 255). They were in the youngest age group 3.25% (N=11 out of 338) as compared to 2.7% (N=20 out of 748) or 0.6% (N=4 out of 701) in the next two 25-34 and 35-44 age groups respectively. Its frequency increased with increasing educational level reaching 2.4% (N=12 out of 508) in university graduates. However, the students account for the most 4.4% (N=4 out of 91). It correlated with, religion Muslims 2.1% (N=18 out of 874) vs. Christians 1.1% (N=7 out of 641), mobility 3% (N= 13 out of 423) vs.1.34% (N=23 out of 1715) and alcohol drinking, in particular, daily drinking 10.2% (N=6out of 59).

Those that had sex for the first time between 15-25 years, were more males 55.8% (N=739 out of 1323 than females 17.3% (N=141 out of 815).

Those that had sex between 16-20 years were more males than females 46.1% (N=610 out of 1323) compared to 12.4% (N=101 out of 815), living more in urban 40.7% (N=408 out of 1002) than in rural 26.7% (N=303 out of 1136). On the other hand, those that had sex between 21-25 years were predominantly males 9.7% (N=129 out of 1323) compared to 4.9% (N=40 out of 815) females, they were almost equally divided between rural and urban and lived more in the South 16.1% (N=65 out of 404) and Beirut 13.4% (N=32 out of 240) and the least in the North 4.6% (N=29 out of 636).

Those that had sex at 26 years and more were slightly more males 2.8% (N=37 out of 1323) than females 2.1% (N=17 out of 815), slightly more urban 3.2% (N=32 out 1002) compared to 2% (N=22 out of 1136) rural, and lived mostly in all regions. They were the most in Beirut 6.2% (N=15 out of 240). Therefore females experienced sex for the first time at a later age than males. In addition, those that lived in urban areas experienced sex earlier than people of the same age living in rural areas

Furthermore, those that lived in Beirut experienced sex for the first time at an earlier age than elsewhere in the periphery.

Those that did not answer this question amounted to 54.6% (N=1167 out of 2138). They were in all regions, but more so in the North 79.2 (N=504 out of 636), and the Bekaa 63.5% (N=162 out of 255). They lived more in rural 62.4% (N=709 out of 1136) than urban 45.7% (458 out of 1002), They belonged to the two upper age groups without any significant correlation to educational levels, drinking or mobility. However, the refusal was mostly from females 80.4% (N=655 o815) compared to 38.7% (N=512 out of 1323) males. It was found more among Christians 65.7% (N=421 out of 641) than Muslims 48.3% (N=422 out of 874)

# **CHAPTER SIX**

### **6** SEX WITH NON-REGULAR PARTNERS AND COMMERCIAL SEX

- 6.1 Sex with non-regular partners in the last 12 months
- 6.2 Number of casual sex partners in the last 12 months
- 6.3 Last occasion of casual sex
- 6.4 Payment of any kind for the last casual sex
- 6.5 The casual partner (someone met before / for the first time)
- 6.6 The use of condoms in the last sexual intercourse with non-regular partners
- 6.7 Main reason for not using a condom
- 6.8 Source of condom

# 6 SEX WITH NON-REGULAR PARTNERS AND COMMERCIAL SEX:

This section is about casual sexual relationships and the use of condoms for most recent intercourse with such partners; Refer to tables 6-1 to 6-11.

### 6.1 Sex with non-regular partners in the last 12 months:

Of the sexually active respondents (N=2138);

16.8% (N=360) had such relationships, the rest

83.2% (N=1778) had not.

Those that had casual sex were predominantly males 24.5% (N=324 out of 1323) compared to 4.4% (N=36 out of 815) females (table 6-11). They were living mostly in urban areas 21,5% (N=216 out of 1002) compared to 12.7% (N=144 out of 1136) rural, and localized mostly in the South 35.6% (N=144 out of 404), seconded by Beirut 21.7% (N=52 out of 240), and followed by Mount Lebanon 19.6% (N=118 out of 603), the Bekaa 12.5% (N=32 out of 255) and the North 2.2% (N=14 out of 622), (tables 6-1 and 6-7). They were mostly present in the youngest age group 37.9% (N=128 out of 338), the upper middle age group 20.3% (N=152 out of 748), and the lower middle age groups 8.6% (N=60 out of 701) and only 5.7% (N=20 out of 351) in the upper age group, (tables 6-2 and 6-8). Such a behavior corresponded mostly with students 56% (N=51 out of 91), university education 19.7% (N=100 out of 508), and secondary education 19.1% (N=108 out of 566), and was the lowest among respondents with primary education 6.5% (N=19 out of 290), and non-schooling 5.1% (N=4 out of 78) (table 6-3 and 6-9). They were more Muslims 19.9% (N=174 out of 874) than Christians 11.8% (N=76 out of 641), (table 6-10). They had high mobility 35% (N=150 out of 423) vs. 12.2% (N=210 out of 1715) and correlated with the drinking of alcohol, in particular the daily drinkers 39% (N=23 out of 59).

# 6.2 Number of casual sex partners in the last 12 months:

This question related to sex with casual partners, apart from spouse or regular partner. The data showed a wide spectrum. Those who admitted having a casual partner amounted to 360, and were distributed as follows:

```
33.9% (N=122) had one
23.6% (N=85) had two
13.9% (N=50) had three
8.1% (N=29) had four
14.7% (N=53) had five or more
5.8% (N=21) did not answer this question.
```

Those having casual sex were predominantly males 90.0% (N=324 out of 360) compared to 10.0% (N=36 out of 360) females. Only two females stated five or more partners compared to

51 males, and 7 and 4 females mentioned two and three sex partners compared to 78 and 46 males respectively. As evidenced , 83.2% (N=1778 out of 2138) of the sexually active did not practice casual sex. They were predominantly females 95.6% (N=779 out of 815) rather than males 75.5% (N=999 out of 1323). The rate of women admitting casual sex was very low 4.4% (N=36 out of 815) statistically not significant.

Those respondents with multiple extra marital partners were found in every region, The South had the highest rate 40% (N=144 out of 360) seconded by Mount Lebanon 32.8% (N=118 out of 360), and Beirut 14.4% (N=52 out of 360), then the Bekaa 8.9% (N=32 out of 360), and lastly the North 3.9% (N=14 out of 360). They were more urban 60% (N=216outof 360) than rural 40% (N=144 out of 360), and belonged mostly to the 25-34 age group 42.2% (N=152 out of 360) seconded by 15-24 age group 35.5% (N=128 out of 360), 16.7% (N=60 out of 360) and the least was found in the oldest age group 5.5% (N=20 out of 360). They correlated well with educational levels. The highest rate was among secondary education 30% (N=108 out of 360), seconded by university graduates respondents with 27,8% (N=100 out of 360), then complementary21.7% (N=78 out of 360) and primary 5.3% (N=19 out of 360). The least being with non schooled respondents 1.1% (N=4 out of 360). They were more Muslims 48.3% (N=174 out of 360) than Christians 21.1% (N=76 out of 360), and correlated more with alcohol drinking 59.7% (N=215 out of 360).

#### 6.3 Last occasion of casual sex:

360 respondents among the 2138 sexually active had admitted having casual sex; of those who had casual sex (N=360):

21.4%	(N=77) had casual sex within the last 7 days
44.7%	(N=161) had casual sex within the last 4 weeks
30.6%	(N=110) had casual sex longer ago
3.3%	(N=12) only did not answer this question.

Those who had casual sex within the last 7 days were predominantly males 84.4% (N=65 out of 77) than females 15.6% (N=12 out of 77), (table 6-11). They were living slightly more in rural areas 23% (N=33 out of 144), and distributed in all regions with more preference to the North 35.7% (N=5 out of 14), to the Bekaa 32.2% (N=10 out of 32), and to a lesser extent in Mount Lebanon 20.3% (N=24 out of 118) and the South 20.1% (N=29 out of 144) and less in Beirut 17% (N=9 out of 52), (tables 6-7 and 6-10). Those respondents with frequent casual sex belong mostly to the two lower age groups 33.8% (N=26 out of 77) and 48.0% (N=37 out of 77) respectively while only 7.8% (N=6 out of 77), in the upper age group, 45-49 years, (tables 6-2 and 6-8). They correlated well with the higher levels of education. They were the least among student and complementary education respondents 17.6% (N=9 out of 51) and 11.5% (N=9 out of 78) respectively and 25% (N25 out of 100) having a university education, (tables 6-3 and 6-9). They were mostly Muslims 46.7% (N=36 out of 77), (table 6-10), the majority drink alcohol 67.5% (N=52 out of 77).

Those who had casual sex within the last 4 weeks had to some extent a similar profile and affected similarly by the some of the same parameters. They lived in all regions, but more in

the Bekaa 50% ( 16 out of 32). They were equally distributed between rural and urban, they were again mostly in the lower age groups 37.3% (N=60 out of 161) and 40.4% (N=65 out of 161).

Those who had sex longer than 4 weeks were also predominantly males 93.6% (N=103 out of 110), relatively more rural than urban 37.1% (N=39 out of 144) compared to 32.9% (N=71 out of 216). They were distributed in all regions but with a predominance in Beirut 38.5% (N=20 out of 52), Mount Lebanon 33.9% (N=40 out of 118), the South 30% (N=43 out of 144), and the Bekaa 18.7% (N=6 out of 32). The lowest rate was in the North 7.0% (N=1 out of 14). They were again mostly in the lower age groups 34.5% (N=38 out of 110) and 40.1% (N=45 out of 110), and found almost equally in respondents with all levels of education, in both religions, but mostly among non drinkers 56.6% (N=37 out of 360).

### 6.4 Payment of any kind for the last casual sex (N=360):

360 respondents among 2138 sexually active admitted having casual partners.

About one third of them 31.4% (N= 113 out of 360) agreed that they gave or received money or gifts in exchange of sex. They constituted 3.5% of the total respondents (N=3200) and 5.3% of the sexually active respondents (N=2138). They were predominantly 93.8% (N=106 out of 113) males and 6.2% (N=7 out of 113) females. Actually the number of females reporting casual sex was less than 5% of those admitting casual sex 4.4% (N=36 out of 360), and one fifth this number reported receiving or giving gifts for casual sex. The number is low and could be computed as 0.5% (N=7 out of 1324) of the female population in the sample. It is not significant.

Those exchanging money or gifts for sex were relatively more rural 36.8% (N=53 out of 144) than urban 27.8% (N=60 out of 216) and relatively more from the upper age group 55.0% (N=11 out of 20) as compared to 37.5% (N=57 out of 152) in the 25-34 age group, 28.3% (N=17 out of 60) in the 35-44 age group and 37.5% (N=57 out of 152) in the younger age group 15-24. They were found in all regions but the least in the South 20% (N=7 out of 14) and the most in the Bekaa 65.6% (N=21 out of 32). They were the most among respondents with primary education 47.4% (N=9 out of 19) and the least among students 17.6% (N=9 out of 51) or university graduates with 28% (N=28 out of 100).

They were mostly Christians 40.8% (N=31 out of 76) and alcohol drinkers 68.9% (N=80 out of 215). Mobility was not an affecting parameter, (tables 6-7 to 6-11).

# 6.5 The casual partner is someone met before or for the first time:

The respondents who admitted having casual sex were 360. 70.5% (N=251) reported that the partners were known from before, and only 26.4% (N=95 out of 360) reported that the partners were known for the first time while 3.1% (N=11 out of 360) did not answer.

The respondents admitting casual sex with someone for the first time were predominantly males 92.6% (N=88 out of 95), refer to tables (6-7 to 6-11).

They were mostly urban 65.3% (N=62 out of 95) vs. rural 34.7% (N=33 out of 95). They were present in all governorates but mostly in Beirut 36.5% (N=19 out of 52), Mount Lebanon 28.8% (N=34 out of 118), the Bekaa 28.1% (N=9 out of 32), and less so in the South 21.5% (N=31 out of 144) or the North 14.3% (N=2 out of 14). They belonged to all age groups, however, the numbers were the most in the oldest age group 35% (N=7 out of 20) and the least in the youngest age groups 22.6% (N=29 out of 128). The high frequencies were encountered among those with primary education 36.8% (N=7 out of 19) or complementary 29.5% (N=23 out of 78). Religion and mobility did not seem to be important factors in this issue but alcohol was , actually, 33% (N=71 out of 215) were alcohol drinkers compared to 16.3% (N=23 out of 141) non alcohol drinkers.

# 6.6 The use of condoms in the last sexual intercourse with non-regular partners:

360 respondents admitted having casual sex. Their use of condoms varied as follows:

71.7% (N=258 out of 360) have used a condom in their last sexual intercourse with non-regular sexual partners

26.4% (N=95 out of 360) did not use a condom, and

1.9% (N=7 out of 360) did not answer this question.

Those who have used the condom were both males 72.2% (N=234 out of 324) and females 66.7% (N=24 out of 36), they lived in urban 72.7% (N=157 out 216) as well as in rural areas 70.1% (N101 out of 144). They were present in all mohafazats with preference in Mount Lebanon 79.7% (N=94 out of 118), Beirut 73.1% (N=38 out of 52) and the North 71.4% (N=10 out of 14). The least was in the South 67.4% (N=97 out of 144) and the Bekaa 59.4% (N=19 out of 32), (table 6-4). They were mostly in the 35-44 age group 83.3% (N=50 out of 60) and 25-34 age group 76.3% (N=116 out of 152) (table 6-5). They were mostly Christians 63.1% (N=94 out of 149), (table 6-10). They belonged more to the mobile category 74.7% (N=112 out of 150) and to the drinking category 76.3% (N=164 out of 215). However, most of the users were non-schooling respondents 100% (N=4 out of 4) followed by primary educated 78.9% (N=15 out of 19), secondary education 74.1% (N=80 out of 108); complementary 73.1% (N=57 out of 78), university graduates 72% (N=72 out of 100), and students 58.8% (N30 out of 51) (tables 6-6 and 6-9).

# 6.7 Main reason for not using a condom in the last sexual intercourse with non-regular partners:

Among those who reported casual sex (N=360) 95 stated that they did not use a condom The 26.4% (N=95 out of 360) that did not use a condom mentioned the following reasons:

15.8% (N=15 out of 95) said it was not available

10.5% (N=10 out of 95) the partner objected

1.0% (N=1 out of 95) too expensive

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45.3% (N=43 out of 95) did not like them
9.5% (N=9 out of 95) other reasons (like sure of partner, virgin partner, forgot to use it, etc)
17.9% (N=17 out of 95) did not mention a reason
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The majority 45.3% (N=43 out of 95) did not like using a condom. They were mostly males 86.0% (N=37 out of 43) and distributed in all regions to variable extents. The highest rate of dislikeness was in the Bekaa 84.6% (N=11 out of 13) and in Beirut 75% (N=9 out of 12) It was around the one third in Mount Lebanon and the South and 0% in the North

They were in all age groups, and mostly in the upper two young age group. They were found mostly with high educational levels, university graduates 66.7% (N=18 out of 27) and secondary level 48% (N=13 out of 27). They were more Christians 41.7% (N=5 out of 12) than Muslims 38.2% (N=21 out of 55) one third do not drink Mobility was not an affecting factor

The respondents who said condoms were not available were more urban than rural 19.6% (N= 11 out of 56) compared to 10.2% (N=4 out of 39) and solely males. They were distributed to various governorates mostly to the South 23.2% (N=10 out of 43), Mount Lebanon 16.6% (N=4 out of 24) and to Beirut 8.3% (N=1 out of 12). They belonged solely to the two young age group; 12.2% (N=6 out of 49) to the 15-24 age group and 24.2% (N=8 out of 33). They were associated to educated respondents. They were more Christians than Muslims 50% (N=6 out of 12) and 9.1% (N=5 out of 55). They were more mobile 25% (N=9 out of 36) compared to non mobile 10.2% (N=6 out of 59)

The number of people who objected to the use of condoms was 10.5% (N=10 out of 95); 8 out of 86 males and 2 out of 9 females. However the numbers here were not significant for any conclusion.

#### 6.8 Source of condoms:

The pharmacy was the source of condoms for 76.7% (N=198 out of 258) of the respondents who used condoms with non-regular partners in their last sexual intercourse. It was made available as follows:

```
12.0% (N=31 out of 258) from the partner
1.2% (N=3 out of 258) from a shop
1.9% (N=5 out of 258) from the bar or hotel
1.2% (N=3 out of 258) from a clinic or hospital
7.7% (N=20 out of 258) from other places like friends
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Those who got condoms from the partner were predominantly in the South 45.2% (N=14 out of 31), Mount Lebanon 29% (N=9 out of 31) and Beirut 19.3% (N=6 out of 31). 41.2% (N=10 out of 24) of females were in this category. They were mostly urban 17.2% (N=27 out of 157) out of 118) compared to rural 4% (N=4 out of 101). They belonged mostly to the young age groups 15.4% (N=12 out of 78) for 15-24 age group and 10.3 % (N=12 out of 116) for the 25-

34 age group. Most of them were highly educated, university graduates, students or with secondary education.

The bars and hotels that provided condoms were in the Bekaa, Beirut, Mount Lebanon but the percentage was low 1.9% (N=5 out of 258).

People who got condoms from the pharmacies were mostly males 80% (N=187 out of 234), equally distributed between rural and urban and found in all regions with the lowest rate in the South 66% (N=64 out of 97). They correlated with high levels of education but not with mobility.

# **CHAPTER SEVEN**

# 7 CONDOMS

- 7.1 Ever used a condom
- 7.2 Ever heard of condoms
- 7.3 Ever seen a condom
- 7.4 Source of condoms
- 7.5 Places where one can obtain condoms

### 7 Condoms:

This section measures knowledge of condoms, their use and knowledge of places where they can be obtained.

#### 7.1 Ever used a condom:

About 15.3% (N=490 out of 3200) of the total population had ever used condoms. These respondents, that have used condoms, constituted 22.9% (N=490 out of 2138) of the sexually active population. They were males in their great majority 87.1% (N=427 out of 490), and constituted 22.8% (N=427 out of 1876) of the male population in the sample. They belonged more to the urban than to rural and living 61.8% (N=303 out of 490) and 38.2% (N=187 out of 490) and were present in all regions with the most in the South 40.1% (N=162 out of 404) and the least in the North 6.3% (N=40 out of 636), (table 7-1). They were present in all age groups but relatively more in the younger two age groups, 36.7% (N=124 out of 338) in the 15-24 age group, 27.3% (N=204 out of 748) in the 25-34 age group, and the least in the 45-49 old age group 15.1%(N=53 out of 351), (table 7-2). They were almost equally distributed in all educational levels with the most among students 42.9% (N=39 out of 91) and university graduates 30.3% (N=154 out of 508) and the least among primary education 11.7% (N=34 out of 290), (table 7-3). There were more Muslims than Christians using condoms: 19.2% (N=214 out of 1117) compared to 13.5% (N=126 out of 934), (table 7-8).

Those who have not used a condom 84.7% (N=2710 out of 3200) were mostly females 95.2% (N=1261 out of 1324), almost distributed in all regions the most are in the North 94.2% (N=653 out of 693) and the least are in Beirut 59.9% (N=242 out of 404). Non-users were found in all age groups but mostly in the youngest age groups 15-24 years 88.1% (N=916 out of 1040) and predominantly primary educated 90.1% (N=309 out of 343). The majority of non users were Christians 86.1% (N=808 out of 934) compared to Muslims 80.8% (N=903 out of 1117).

### 7.2 Ever heard of condoms:

15.9% (N=508 out of 3200) of the respondents did not hear of condoms, (refer to table 7-1 to 7-8).

They were predominantly females 86.0% (N=437 out of 508) and constituted 33% (N=437 out of 1324) of the female population. They were present to various extents in the different regions, the highest rate was in the North 40% (N=277 out of 693), seconded by the Bekaa 22.8% (N=94 out of 413), Mount Lebanon 7.4% (N=87 out of 1174), Beirut 6% (N=25 out of 418) and the least being in the South 5% (N=25 out of 502). They lived more in rural areas 21.2% (N=332 out of 1564) compared to urban 10.75% (N=176 out of 1636). They were relatively more in the 35-44 age group 21.2% (N=163 out of 768) and the least was in the oldest age group 11.1% (N=41 out of 368) the two young age group 15-24 and 25-34 regroup 14.5% (N=151 out of 1040) and 14.9% (N=153 out of 1024) respectively. They correlated with low levels of education; the most with primary education 24.8% (N=85 out of 343) and the least among university graduate 8.9% (N=77 out of 863). They were almost equal between Muslims 17.8% (N=199 out of 1117) and Christians 17.3% (N=162 out of 934).

### 7.3 Ever seen a condom:

79.9% (N=2558 out of 3200) of the respondents have seen a condom 20.1% (N=642 out of 3200) said they did not, (refer to tables 7-5 to 7-8)

Those who have seen condoms were more males 61.9% (N=1584 out of 2558) and constituted 84.4% (N=1584 out of 1876) of the total male population. They were slightly more urban than rural: 81.7% (N=1337 out of 1636) compared to 78.1% (N=1221 out of 1564). They were present in all regions with more preference in the North 94.1% (N=652 out of 693), in the South 87.1% (N=437 out of 502) and Beirut 80.1% (N=335 out of 418), (table 7-5). They were in high numbers among the 35-44 age group 90.2% (N=693 out of 768) seconded by the upper age group 88.0% (N=324 out of 368) and the least in the young age groups 71.1% (N=740 out of 1040), (table 7-6).

Those who have seen condoms were equally in all educational levels. However, the highest percentage was among the primary educated respondents 86.3% (N=296 out of 343) and the lowest among non-schooled respondents 68.5% (N=19 out of 33), (table 7-7). They were not affected by religion.

Those who did not see a condom were significantly more females than males 54.4% (N=350 out of 642) and constituted 26.4% (N=350 out of 1324) of the female population. They were more rural 21.9% (N=343 out of 1564) than urban 18.3% (N=299 out of 1636) respectively. They lived more in the periphery, in the Bekaa 39.7% (N=164 out of 413), in Mount Lebanon 24.6 (N=289 out of 1174), and in Beirut 19.8% (N=83 out of 418). The lowest rates were in the North 5.9% (N=41 out of 693) and the South 12.9% (N=65 out of 502). They were mostly in the young age group 28.8% (N=300 out of 1040) and it was affected by neither the education nor the religion.

#### 7.4 Source of condoms:

74.9% (N=2398 out of 3200) of the respondents knew where to get a condom 7.6% (N=242 out of 3200) did not know, and only 17.5% (N=560out of 3200) did not answer the question, (refer to tables 7-5 to 7-8).

Those that did not know the source of condoms were more females 56.2% (N=123 out of 242) and constituted 7.9% (N=123 out of 1564) of the total female respondents while a similarly 7.3% (N=119 out of 1636) of the male respondents did not know a place to get a condom. Such people were mostly at the periphery, 15.0% (N=62 out of 413) of respondents in the Bekaa, 10% (N=42 out of 418) of respondents Beirut and 9% (N=45 out of 502) in the South. The least numbers were in the North 1.4% (N10 out of 693) and Mount Lebanon 7.1% (N=83 out of 1174), (table 7-5). Their rate was higher among the urban respondents 80.9% (N=1323 out of 1636) compared to 68.7% (N=1075 out of 1564) urban. Such respondents had the

highest rates among the youngest age group respondents 10.4% (N=108 out of 1040). The lowest rate was among respondents in the middle age group 3.6% (N=28 out of 768).

As far as education levels were concerned, this lack of knowledge correlated well with low education. The highest rates were still student 14.3% (N= 42 out of 293), and non schooled respondents 10.% (N=12 out of 120) seconded by primary education 8.2% (N=28 out of 343). The lowest rates were among complementary education graduates 5.4% (N=43 out of 795), (table 7-7).

### 7.5 Places where one can obtain condoms:

About 89% (N=2398 out of 2692) of those who had heard of condom knew where to get a condom.

74.9% (N=2398) agreed that they can get condoms from a pharmacy, and

24.9% (N=798) agreed on bars and hotels,

24.6% (N=787) agreed on hospitals and clinics,.

19.2% (N=613) agreed on family planning centers,

43.4% (N=476) agreed on the shops,

Data showed that many people knew more than one place to get a condom. However how quickly they could get a condom?

# **CHAPTER EIGHT**

## 8 STD's AND HEALTH ISSUES

- 8.1 Episodes of urethritis in the last 12months
- 8.2 Episodes of genital's sores in the last 12months
- 8.3 Dealing with the last STD episode
- 8.4 Telling partner about this episode
- 8.5 Preventive or curative measures towards the partner
- 8.6 List of Measures
- 8.7 Giving birth to a child in the last pregnancy
- 8.8 Examination of vagina

### 8 STDS AND HEALTH ISSUES:

These questions were asked only to men. This section collects information on the self-reported incidence of sexually transmitted diseases among men (Q602-Q609). The three questions that follow were restricted to women; they focused on antenatal medical consultations and the practice of vaginal examination.

# 8 1 Episodes of pain during urination or discharge from the penis in the last 12 months

The number of male respondents was 1323. These men were sexually active. 9.1% (N= 121 out of 1323) of the male population reported to have such symptoms 90.9% (N=1202 out of 1323) did not experience the above symptoms

Of those who reported STD's 19% (N=23 out of 121) experienced recurrent episodes 2, 3 or 4 times during the year. In general, those reporting positive symptoms were almost equally distributed between urban 8.4% (N=53 out of 634) and rural 9.9% (N=68 out of 689). In other words, those that reported no episodes of STD's were relatively similar among the rural and the urban. The respondents reporting STDs were mostly found in the South 15.7% (N=48 out of 305) out of the population of the South, and 39.7% (N=48 out of 121) out of total reported cases. The numbers in the periphery were relatively low 7.8% (N=30 out of 384) in Mount Lebanon, 7.2% (N=23 out of 318) in the North, and 6.2% (N=11 out of 176) in the Bekaa, and 6.4% (N=9 out of 140) in Beirut, (table 8.1). Actually, 11.4% (N=29 out of 254) of the males in the old age group (45-49) reported positive for STD'S, also 11.4% (N=44 out of 385) in the 35-44 age group, and the least among young males 6.7% (N=15 out of 225), (table 8-2).

As shown in table 8-3, the positive STD's reported did correlate to some extent with a low level of education. They were higher and almost similar among complementary 12.7% (N=48 out of 377), primary 11.1% (N=17 out of 153) and non-schooling 11.6% (N=3 out of 29) while the rates were lower among university educated 7.7% (N=25 out of 325), and students 7.5% (N=5 out of 67), and even lower with secondary 5.9% (N=21 out of 385). The positive respondents were more among the Muslim males 13.1% (N=76 out of 579) than Christian males 5.8% (N=21 out of 359).

## 8.2 Episodes of sores in the genitalia in the last 12 months:

The presence of sores in the genitalia was reported in 3.2% (N=43 out of 1323). The highest rate was in the South 6.9% (N=21 out of 305), followed by Mount Lebanon 3.9% (N=15 out of 384), then the Bekaa 1.7% (N=3 out of 176), The North 1.3% (N=4 out of 1.3%). No cases of sores in the genitalia had been reported in Beirut. Multiple episodes of sores were reported in Mount Lebanon, the South and the Bekaa but the highest numbers were in the Bekaa 100% (N=3 out of 3) followed by Mount Lebanon 40% (N=7 out of 15). The positive respondents were similarly distributed among urban 3.3% (N=21 out of 634) and rural 3.2% (N=22 out of 689). They were relatively more among the youngest age group (15-24) 4.9% (N=11 out of 225). There were more respondents among non schooled 6.9% (N=2 out of 29), followed by

complementary levels 4.8% (N=18 out of 377). They were present also in other educational levels secondary, university, and primary, but the numbers were lower and not of significance: 3% (N=11 out of 358), 2.5% (N=8 out of 325), 2.0% (N=3 out of 153) respectively. The respondents among students were the least 1.5% (N=1 out of 67).

The respondents were more than three times Muslims than Christians 4.1% (N=24 out of 579) compared to 1.1% (N=4 out of 359). About one third of the STD patients reported recurrent episodes 32.5% (N=14 out of 43).

### 8.3 Dealing with the last STD episode:

The respondents with history suggestive of STDs were 164 (121+43);(Q602+Q603):

21.3% (N=35 out of 164) sought advice of a *friend or relative* (table 8-4). They were more at the periphery (South), more urban, in the young age group, more Christians, and less educated. 20.7% (N=25 out of 164) used *medicine available at home*. They were more in the periphery (South), more rural, in the young age groups, and more Muslims.

9.7% (N=16 out of 164) sought advice from a *traditional healer*. They were more rural, in the periphery (South), and more in the (35-44) age group, and more Muslims. The other parameters did not make much of a difference.

34.7% (N=57 out of 164) sought <u>advice from a clinic, a hospital or a health worker</u>. They were found in all regions but less more in the South, less in the (35-44) age group, more among educated people, and more Muslims.

34.7% (N=57out of 164) <u>bought medicine from a clinic, hospital or a health worker</u>. They were the least in the North and the most in the South and Mount Lebanon. They were more in the younger and older age groups, more educated and more Muslims.

20.1% (N=33 out of 164) <u>bought medicine from a pharmacy or shop without consulting a medical person</u>. They were more in the periphery (the South) but urban. They belonged to the upper two age groups (35-44) and (45-49), educated people, and more Christians.

16.6% (N=23 out of 164) <u>did nothing</u>. They were more in the South, more urban, young age groups (15-24) and (25-34), educated, and mostly Muslims.

Therefore, the majority (34.7%) sought professional advice and bought drugs to deal with the situation (34.7%). However, 16.6% did nothing or almost nothing and 21.3% sought the advice of a friend or relative.

In conclusion, many people have used more than one method to deal with such a case.

# 8.4 Telling partner (spouse or regular partner) about this episode:

The number of those who reported a history suggestive of STD's was 164.

27.4% (N=45 out of 164) told their partners. Most of them lived in the periphery and told their partners: 57% (N=8 out of 14) in the Bekaa, 33.3% (N=3 out of 9) in Beirut, 29% (N=20 out of 69) in the South, 26.7% (N=12 out of 45) in Mount Lebanon, but much less so in the North 7.4% (N=2 out of 27). They were relatively more among the urban respondents 80% (N=22

out of 74), they belonged to all age groups, and seemed not to be affected by education. They were more Muslims 32% (N=32 out of 100) compared to 16% (N=4 out of 25) Christians.

### 8.5 Preventive or curative measures towards the partner:

About one third 32.3% (N=53 out of 164) responded positively to this question and 33% (N=54 out of 164) did not want to answer. Those responding positively were more urban 29.7% (N=22 out of 74) than rural 25.5% (N=23 out of 90) and belonged to all age groups but more to the oldest age groups. Preventive measures towards the partner were taken more with the non-educated people. They were slightly more among Christians 32% (N=8 out of 25) compared to 30% (N=30 out of 100) among Muslims.

### 8.6 Measures taken towards the partner:

156 respondents out of 164 had taken measures toward the partner. They were distributed as such:

19.2% (N=30) used condoms

76.9% (N=120) refrained from sexual intercourse, and

3.8% (N=6) advised partners to have medical consultation.

5.1% (N=8) did not answer that question

Those that have used condoms 19.2% (N=30 out of 156) were mostly in Beirut 55% (N=5 out of 9) they lived more in urban 20.3% (N=15 out of 74) vs. 16.7% (N=15 out of 90) rural, among the young age group 30.8% (N=8 out of 26), and had secondary and university education, in both religions.

Those that have refrained from intercourse 76.9% (N=120 out of 156) were more rural in most regions, in all age groups and in all levels of education and in both religions.

Those who advised partners for medical consultation were 3.8% (N=6 out of 156) in Mount Lebanon, the South and the Bekaa , they were more urban, more in the oldest age groups, relatively had good education and were in both religions.

Those that have taken other measures were few in number and not significant.

## 8.7 Giving birth to a child in the last 2 years (N= 106):

This question was addressed to married women only.

In the last two years 40.8% (N=106 out of 260) of the married women that is 13.9% (N=106 out of 764) of the sexually active women delivered a child . Those that have delivered a child in the last two years were found in all regions and mostly in Mount Lebanon 46.2% (N=24 out of 52) seconded by the North 42.7% (N=44 out of 103), The South 40% (N=22 out of 55) and the Bekaa 38.5% (N=5 out of 13) and the least was found in Beirut 29.7% (N=11 out of 37). They were slightly more among rural respondents 42% (N=55 out of 131) vs. 39.5% (N=51 out of 129) urban respondents. They correspond to 71% (N=22 out of 31) of the youngest age group and to 59% (N=59 out of 100) in the 25-34 age group and 22% (N=22 out of 100) in the

35-44 age group. This was not affected by the level of education. They were mostly Muslims 45.9% (N=61 out of 133) compared to 30% (N=21 out of 70) Christians.

### 8.8 Seeing a health worker during the last pregnancy:

During the last pregnancy 92.4% (N=98 out of 106) reported to have seen a health worker. They were almost equally divided between urban and rural and between the two lower age groups . The 7.5% (N=7 out of 90) that did not see a health worker were found in the South 18.2% (N=4 out of 22), the North 6.8% (N=3 out of 44) and Mount Lebanon 4.3% (N=1 out of 23). The level of education does not seem to affect this behavior. They belonged almost equally to both religions.

### 8.9 Examination of vagina:

Those that have seen a health professional 92.4% (N=98 out of 106) reported that 98% (N=96 out of 98) have had a vaginal exam and 30.1% (N=2 out of 98) said did not have a vaginal exam. Those 2 respondents who did not have a vaginal exam were in Mount Lebanon, they belonged to 25-34 age group, they were of university level and did not mention their religion. The others were found in all regions with 100% in Beirut and the Bekaa followed by the North 93.2% (N=41 out of 44), Mount Lebanon 87.5% (N=21 out of 24) and the South 81.8% (N=18 out of 22). They were almost equally divided between urban and rural. They belonged to all age group except the oldest age group. They were present in all levels of education. They were equally found among Muslims 90.2% (N=55 out of 61) and Christians 90.4% (N=19 out of 21).

# **CHAPTER NINE**

- **9 KNOWLEDGE OF AIDS:** 
  - 9.1 Have heard of HIV/AIDS
  - 9.2 Protection against HIV/AIDS
    - **A-** Protection
    - **B-** Misconceptions
  - 9.3 Symptoms of HIV positive persons

### 9 KNOWLEDGE OF AIDS:

This section measured the indicator of knowledge of preventive practices. Respondents, who endorsed at least two main preventive practices, staying faithful to one partner and using condoms during sexual intercourse, were classified as having effective knowledge of preventive methods.

#### 9. 1 Have heard of a disease called HIV/AIDS:

98.2% (N=3142 out of 3200) of the respondents have heard about HIV/AIDS. This could be considered as universal awareness. Only 1.8% (N=58 out of 3200) did not hear about HIV/AIDS. Those who did not hear about AIDS were more females than males 2.2% (N=29 out of 1324) vs. 1.5% (N=29 out of 1876) , and more urban 2.4% (N=40 out of 1636) than rural 1.1% (N=18 out of 1564) and they lived more in the South 3.6% (N=18 out of 502) followed by the Bekaa 2.7% (N= 11 out of 413) and Mount Lebanon 2% (N=24 out of 1174) The other regions had low number and their percentages were 0.5% and below . They were from all age groups and mostly non schooled and Christians.

## 9.2 Protection against HIV/AIDS:

#### A- Protection:

98.2% (N=3142 out of 3200) of those who have heard about HIV/AIDS, thought they could protect themselves from HIV/AIDS by:

- 1- 87.4% (N= 2747 out of 3142) staying faithful to one partner
- 2- 87.3% (N=2743 out of 3142) using condoms during sexual intercourse
- 3- 86.0% (N=2702 out of 3142) making sure any injection they get is done with a clean needle.

As depicted from the data in table 9-1, the rate of knowledge of protective measures 1,2,3 mentioned above was good. The rest were misconceptions.

Those who believed that they could not protect themselves 4.0%(N=127 out of 3142) or did not know 3.6%(N=113 out of 3142) amounted to 7.6% (N=240 out of 3142). They were slightly more females than males 9.3% (N= 120 out of 1295) compared to 6.5% (N= 120 out of 1847). They were more among rural 10.8% (N=167 out of 1546) compared to 4.7% (N=74 out of 1596) urban, found mostly in The North 19.8% (N=137 out of 690) compared to 7.5% (N=30 out of 402) in the Bekaa, and 4.5% (N=52 out of 1150) in Mount Lebanon. It was much lower in Beirut 2.9% (N=12 out of 416) and the South 1.8% (N=9 out of 484). The highest percentage was among respondents in the oldest age group 12.4% (N=45 out of 362), 35-44 age group with compared to 10.7% (N=81 out of 758) in the 35-44 age group, or 6% (N=61 out of 1011) in the young age group and 5.2% (N=53 out of 1011) the 25-34 age group.

As far as the levels of education, the lowest percentage was among university levels 4.7% (N=40 out of 854) and students 5.6% (N=16 out of 285). The highest levels were almost similar among the other educational levels ranging from 8.7% to 9.8% without any particular

trend. They were more among Christians 14.9% (N=137 out of 917) compared to 4.9% (N=54 out of 1100) Muslims.

Those who did not mention faithfulness to one partner as a means of protection against HIV/AIDS transmission 8.1% (N=256 out of 3142), were as well males 8.1% (N=150 out of 1847) as females 8.2% (N=106 out of 1295). They were as well among rural 8.1% (N=125 out of 1546) as urban 8.2% (N=131 out of 1596). The least were in Beirut 2.6% (N=11 out of 416) and the most in the North 14.3% (N=99 out of 690) and relatively high levels in all the rest of the periphery. They belonged to all age groups and it was more among Christian 13.2% (N=121 out of 917) than Muslims 7% (N=77 out of 1101). There was no relation between the respondents level of education and their answer.

Those who did not mention or did not know that condoms could protect against HIV/AIDS were 12.6% (N=397 out of 3142). They were slightly more among rural 13.1% (N=202 out of 1546) than urban 12.3% (N=195 out of 1596). They were the least in Beirut 7.7% (N=32 out of 416),the South 8.3% (N=40 out of 484) and mount Lebanon 8.3% (N=96 out of 1150) and the highest in the North 28.1% (N=194 out of 690) seconded by the Bekaa 9.2% (N=37 out of 401). This lack of knowledge was more among females 16.6% (N=215 out of 1295) than males 9.8% (N=182 out of 1847) and belonged more to the old age group 19.3% (N=70 out of 362) and they had low levels of education (table 9-3). They were more Christians 22.2% (N=204 out of 917) than Muslims 9.4% (N=104 out of 1101).

Those who did not mention or did not know that the use of clean needles for injection could prevent transmission of HIV/AIDS were only 13.9% (N=437 out of 3142). They were more among females 16.2% (N=210 out of 1295) than males 12.3% (N= 227 out of 1847), more among rural 16.5% (N=256 out of 1546) than among urban 11.3% (N= 181 out of 1596). The highest numbers of such respondents were in the North 26.4% (N= 182 out of 690) seconded in the South 20.7% (N=100 out of 484) and the lowest numbers were in Beirut 3.6% (N=15 out of 416), the Bekaa 5.7% (N=23 out of 402) and Mount Lebanon 10.2% (N= 117 out of 1150). In addition, they were mostly among the older age group respondents 20.2% (N=153 out of 758) for the 35-44 age group and 19.6% (N=71 out of 362) compared to 10.2% (N=103 out of 1011) for the 25-34 age group and 10.9% (N=110 out of 1011) for the youngest age group. They were also related to education, the lowest rates were among the highly educated respondents. They were more among Christians 21.3% (N=195 out of 917) as compared to Muslims 16.4% (N=181 out of 1101).

### **B-** Misconceptions

On the other hand, some have endorsed invalid protective methods, which indicated misconceptions, lack of correct information and origins of possible discrimination against AIDS sufferers. The answers were as follows (see table 9-1):

	<b>True</b>	Do r	ot know	<b>Category of question for protection</b>
<b>%</b>	n	%	n	
8.1	255	8.0	251	by having a good diet
20.3	638	11.5	362	by avoiding sharing food with an HIV/AIDS
				person
32.7	1029	13.7	431	by avoiding public toilets
13.7	431	14.5	456	by avoiding touching a person who has AIDS
27.3	859	25.7	808	by avoiding being bitten by mosquitoes or insects.

With respect to diet being a protective device against HIV/AIDS, those who answered yes or did not know amounted to 16.1% (N=506 out of 3142). These respondents were slightly more females 17.1% (N=221 out of 1295) than males 15.4% (N=285 out of 1847), more among rural 20.4% (N=315 out of 1546) than urban 12% (N=192 out of 1596), the least being in Beirut 7% (N=29 out of 416) and Mount Lebanon 7.6% (N=87 out of 1150). The other 3 regions had percentages between 16.9% (N=68 out of 402) in the Bekaa, 26.6% (N=129 out of 484) in the South, and 28.2% (N=194 out of 690) in the North. They were mostly among the old age group 26.2% (N=95 out of 362) as compared to 21.2% (N=161 out of 758) in the 35-44 age group or and 12.7% (N=129 out of 1011) in the 15-24 age group and 12% (N=121 out of 1011) in the 25-34 age group. Again, the rates were more among the low education respondents and slightly more among Muslims 21.6% (N=238 out of 1100) vs. 18% (N=167 out of 917). (Tables;9-4, 9-5, 9-9, to 9-15).

With respect to avoiding public toilets to protect from HIV/AIDS transmission, those who agreed and those who did not know formed 46.3% (N=1456 out of 3142).

It is a quite significant percentage. It was more among females 50.4% (N=653 out of 1295) than males 43.5% (N=803 out of 1847), more among rural 48.2% (N=746 out of 1546) than urban 44.5% (N=710 out of 1596). This misconception is the least prevailing in Mount Lebanon 31.4% (N=361 out of 1150), seconded by the Bekaa 35.8% (N=144 out of 402). It was between 48.8% and 64.6% in the other regions. The younger the age, the lower was the rate of this misconception

In addition, the higher the level of education the lower was the rate of misconception. Such a misconception was present more among Muslims 58.6% (N=645 out of 1101) than Christians 48.5% (N=445 out of 917), (tables 9-4, 9-5, 9-9, to 9-15).

As far as avoid sharing food with a person who has HIV/AIDS as a means of protection against AIDS, the rate of this misconception amounted to 31.8% (N=998 out of 3142) if the "yes" and "don't know' were added. This misconception was more among males 34.1% (N=630 out of 1847) than females 28.4% (N=368 out of 1295), and more among rural 34.4%

(N=532 out of 1546) than urban 29.2% (N=466 out of 1596). Such respondents were the least in Beirut 9.4% (N=39 out of 416) followed by Mount Lebanon 23.2% (N=267 out of 1150) and the most in the South 78.5% (N=380 out of 484), the Bekaa 32.8% (N=132 out of 402), the North 26.1% (N=180 out of 690) and Mount Lebanon 23.2% (N=267 out of 1150).

They were mostly in the old age group 39.2% (N=142 out of 362), less in the 35-44 age group 32.3% (N=245 out of 758),less also in the 25-34 age group 30.5% (N=308 out of 1011) and the least in the youngest age group 29.9% (N=303 out of 1011). They were more among Muslims 50.1% (N=552 out of 1101) than among Christians 21.6% (N= 198 out of 917). Again, the rate of this misconception was related to education. The higher the education, the lower was the rate of misconception; 42.9% (N=143 out of 333) in primary educational level, and 19.2% (N=164 out of 854) in university graduates, (tables 9-9 to 9-13).

Respondents who thought they could, or "did not know" to protect themselves from HIV/AIDS by avoiding touching a person who has AIDS 28.2% (N= 885 out of 3142) were slightly more among males 28.5% (N=527 out of 1847) than females 27.6% (N=358 out of 1295). They were more rural 29.8% (N=461 out 1546) than urban 26.6% (N=424 out of 1596). They lived in the lowest numbers in Mount Lebanon 21.6% (N=248 out of 1150) than in Beirut 22.6% (N=94 out of 416). The highest rates of misconception were in the South 46.3% (N=224 out of 484), seconded by the Bekaa 36.1% (N=145 out of 402) and the North 25.2% (N=174 out of 690). The rate was the highest among the old age group 33.4% (N=121 out of 362) and the lowest among the two young age group15-24 and 25-34 with 26.6% (N=269 out of 1011) and 26.1% (N=264 out of 1011), and they were more among Muslims 34.6% (N=381 out of 1101) than Christians 21.8% (N=200 out of 917). The rates of such a misconception correlated well with educational levels, the higher the education. The lower the rate, (tables 9-6 and 9-9 to 9-13).

Regarding the misconception of protection from HIV/ADS by avoiding being bitten by mosquitoes or similar insects, the rate was quite significant, particularly, if the yes and "do not know" were added 52.9% (N=1664 out of 3142). They were more among female respondents 56.2% (N=728 out of 1295) compared to 50.7% (N=936 out of 1847), slightly more urban 53.2% (N=850 out of 1596) compared to 52.6% (N=814 out of 1546) rural. They were living slightly more in the periphery, in the North 60.6% (N=418 out of 690), in the South 57.4% (N=278 out of 484), in Beirut 54.8% (N=228 out of 416), Mount Lebanon 49.6% (N=569out of 1150) and the lowest rates were in the Bekaa 42.5% (N=171 out of 402). The lowest rates of misconceptions were among the 25-34 age group 47.3% (N=478 out of 1011), and the highest in the old age group 59.4% (N=215 out of 362), (table 9-7).

They belonged slightly more to the Christian religion 61.1% (N=560 out of 917) compared to 55.8% (N=615 out of 1101) Muslims. The low rates correlated with high education levels (table 9-8). The highest rates were among the primary level 67.9% (N=226 out of 333), followed by the non-schooling 59.4% (N=63 out of 106) and the lowest among university educated 43.8% (N=374 out of 854), (tables 9-8 to 9-13).

# 9.3 A person infected with HIV shows always symptoms or can look perfectly healthy

21.9% (N=689 out of 3142) thought that an HIV positive person shows always symptoms 48.0% (N=1509out of 3142) agreed that an HIV person can look healthy and 30.1% (N=942 out of 3142) did not know did not answer

About 51.9% (N=1631 out of 3142) were not aware of the fact or did not know that HIV positive person could look healthy. Such a misconception and lack of knowledge were slightly more among males 52.7% (N=973 out of 1847) than females 50.8% (N=658 out of 1295) and more rural 60.7% (N=939 out of 1546) than urban 43.3% (N=692 out of 1596). Such respondents were the least in Beirut 32.4% (N=135 out of 416) and Mount Lebanon 47.3% (N=544 out of 1150). They were the most in the North 68.1% (N=470 out of 690), in the Bekaa 56.7% (N=228 out of 402) and the South 52.5% (N=254 out of 484), (table 9-14). Again the rates of such a misconception were directly related to age, the older the people the higher was the rate, namely the youngest age group 47.8% (N=483 out of 1011), the 25-34 age group 50.6% (512 out of 1011), the 35-44 age group 56.7% (N=430 out of 758), and the old age group 56.9% (N=206 out of 362). There were more Muslims 58.7% (N=646 out of 1101) than Christians 45.6% (N=418 out of 917). In line with other misconceptions, the highest rate is in non or low level educated respondents and the lowest rates among university graduates, (table 9-15). In general, misconceptions were among males as well as females, more in the periphery, North, South and Bekaa. They were less in young age groups and less with higheducated people.

# **CHAPTER TEN**

### 10- RISK PERCEPTION, BEHAVIOR AND ATTITUDES

- 10.1 Knowledge of a friend, relative or colleague with HIV/AIDS
- 10.2 Chances of catching HIV
- 10.3 Personal changes in sexual behavior
- 10.4 Time starting to make changes
- 10.5 Willing to take care of a family member with AIDS
- 10.6 Declaration of HIV positivity
- 10.7 HIV/AIDS people and the work place
- 10.8 Health care for AIDS people

### 10- RISK PERCEPTION, BEHAVIOR AND ATTITUDES:

HIV infection and AIDS have already influenced people's lives and behavior. This section contains eight questions concerning risk perception, behavior change and attitudes to persons with HIV/AIDS. These questions provide the behavioral information, highlighting the accurate perception of risk, and avoiding discrimination. In all sections refer to tables 10-1 to 10-5.

### 10.1 Has any relative, friend or colleague ever had HIV/AIDS:

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6.8% (N=213 out of 3142) had a relative, a friend or a colleague with HIV/AIDS 82.8% (N=2603 out of 3142) did not have, 10.3% (N=325 out of 3142) were not sure, and 0.03% (N=1 out of 3142) did not answer
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Therefore, 6.8% (N=213 out of 3142) had a relative, a friend or a colleague with HIV/AIDS and this is a relatively significant percentage. Those people who said "yes" were almost equally represented among males 6.2% (N=114 out of 1847) and females 7.6% (N=99 out of 1295). They were mostly rural 7.9% (N=124 out of 1546) than urban 5.6% (N=89 out of 1596), and mostly found in the North 15.6% (N=108 out of 691), the South 6.2% (N=30 out of 484) and Mount Lebanon 5% (N=58 out of 1150). The lowest rates were in the Bekaa 1.2% (N=5 out of 401) and the Beirut 2.9% (N=12 out of 416). They were in all age groups but relatively more in the old age group 10.5% (N=38 out of 362) and belong more to the Christians population 13.8% (N=127 out of 917) than to Muslims population 4.7% (N=52 out of 1100), without any direct correlation with specific educational levels.

Those that were "not sure" 5.2% (325 out of 3142) showed a similar pattern of distribution. They were almost equally represented among males and females, rural and urban, and mostly found in the Bekaa 28.7% (N=115 out of 401), and Mount Lebanon 13.7% (N=158 out of 1150). The lowest rates were in the South 2.5% (N=12 out of 484) and the North 3.0% (N=21 out of 691). They were in all age groups but relatively more in the young age group and belong more to the Christians population without any direct correlation with any specific educational level.

## 10.2 Chances that you might catch HIV- Risk perception:

The data showed that:

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67.5% (N=2122 out of 3142) perceived no chance of catching HIV, while
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12.6% (N=395 out of 3142) perceived a moderate chance, and

1.1% (N=35 out of 3142) felt they have a good chance, and

18.6% (N=583 out of 1496) did not know.

0.2% (N=7 out of 3142) did not answer,

Those who perceived no chance of catching HIV were more among females 72.1% (N=934out of 1295) than males 64.3% (N= 1188 out of 1847). They were living mostly in the North

81.6% (N=563 out of 690) and Beirut 79.8% (N=332 out of 416). The perception of no risk was less in Mount Lebanon 65% (N=748 out of 1150), in the Bekaa 54.5% (N=219 out of 402), and the least in the South 53.7% (N=260 out of 484). They lived slightly more in rural 68.4% (N=1058 out of 1546) than urban areas 66.7% (N=1064 out of 1596). They were in all age groups but relatively more in 35-44 age group 73.5% (N=557 out of 758) and 45-49 age group 72.9% (N=264 out of 362). The rates decreased with increased level of education. However, they were more among Muslims 70% (N=772 out of 1101) than Christians 65.4% (N=600 out of 917).

Those who perceived a moderate chance 12.6% (N=395 out of 3142) of catching HIV were slightly more males 13.7% (N=253 out of 1847) compared to 11.0% (N=142 out of 1295) females. They were living more in the South 18.0% (N=87 out of 484), the North 15.7% (N=108 out of 690), Mount Lebanon and Beirut had the same percentage 12.3% (N=142 out of 1150) and (N=51 out of 416). The least was in the Bekaa 1.7% (N=7 out of 402). They were more urban 14.7% (N=235 out of 1596) than rural 10.3% (N=160 out of 1546) and were found in all age groups without any preference. They were also relatively more among highly educated people. e.g. university graduates 16.7% (N=143 out of 854) compared to 5.4% (N=18 out of 333).people with primary education. They were almost twice as many Christians 22.1% (N=203 out of 917) as Muslims 10.9% (N=120 out of 1101).

Those that perceived a good chance were only 1.1% (N=35 out of 3142) and showed a similar pattern of distribution as those of moderate chance.

However, the population of «do not know» is quite significant 18.6% (N=583 out of 3142). They were more males 20.6% (N=381 out of 1847) than females 15.6% (N=202 out of 1295). They were found in all regions with the highest rates in the Bekaa 42.8% (N=172 out of 402) and the South 25.6% (N=124 out of 484), and the lowest rates in the North 2.3% (N=16 out of 690) and Beirut 6.5% (N=27 out of 416). They were more rural 20.5% (N=317 out of 1546) than urban 16.7% (N=266 out of 1596) and found in all age groups, predominantly in the young age group. There was no clear correlation with educational levels and there were more Muslims 18.3% (N=202 out of 1101) than Christians 10.3% (N=94 out of 917).

### 10.3 Personal changes in sexual behavior to prevent HIV/AIDS:

24.1% (N= 758 out of 3142) of the respondents made personal changes in their sexual behavior, while 75.7% (N=2380 out of 3142) did not change their sexual behavior, and 0.1% (N=4 out of 3142) did not answer.

Those who made personal changes in their sexual behavior were predominantly among the males 27.1% (N=501 out of 1847) compared to 19.8% (N= 257 out of 1295) females, slightly more rural 26.7% (N= 413 out of 1546) than urban 21.6 (N=345 out of 1596), and living more in the periphery: 45.7% (N=315 out of 690) in the North, 30.6% (N=148 out of 484) in the South, 17.9% (N=206 out of 1150) in Mount Lebanon and 14.7% (N=61 out 416) in Beirut. The respondents who made the least changes were in the Bekaa 7.0% (N=28 out of 402). They were found among all age groups particularly the (35-44) age group. The least group to make

personal changes in their sexual behavior were among (15-24) age group. There were more Christians 37.2% (N=342 out of 917) than Muslims 26.6% (N=293 out of 1101) and did not correlate with any educational level, (table 10-6).

### 10.4 Time starting to make changes to prevent HIV/AIDS:

Of those who made changes (n=758):

20.2% (N=153 out of 758) said they started making the changes within the last 12 months, while

79.8% (N=605 out of 758) started long time ago, and

Those who started changes in the last 12 months were more among females 24.4% (N= 63 out of 258) than males 18% (N= 90 out of 500), and more among rural 22.6% (N=93 out of 411) than urban 17.3% (N=60 out of 347). There was no correlation of the time starting the changes with either their living region or with their age groups. They were relatively more among Christians 25.8% (N=89 out of 345) than Muslims 16.1% (N=47 out of 292) and there was no correlation with the level of education, (tables 10-6 and 10-7).

Those respondents that have started making changes long ago (more than one year) 79.8% (N=605 out of 758), were slightly more males 82% (N=410 out of 500) than females 75.6% (N=195 out of 258) and more among urban 82.7% (N=287 out of 347) than rural 77.4% (N=318 out of 411) Those respondent had almost similar rates across all region i.e. same trend to those who introduced recent changes. They had opposite trend to that of recent changes with respect to religion. They were more Muslims 83.9% (N=245 out of 292) than Christians 74.2% (N=256 out of 345) and the education level was not an important factor in this instance.

## 10.5 Willing to take care of a family member with AIDS

The majority of the respondents 72.3% (N=1872 out of 3142) were willing to take care of a family member having AIDS, while 20.0% (N=628 out of 3142) were not willing, and 20.3% (N=639 out of 3142) did not know.

Those who were willing were more among females 65.8% (N=852 out of 1295) than males 55.2% (N=1020 out of 1847), more rural 66.1% (N=1022 out of 1546) than urban 53.3% (N=850 out of 1596), and present in all regions to variable extents. The highest rate was in the North 76.4% (N=527 out of 690), and the lowest in the South 22.7% (N=110 out of 484) and Mount Lebanon 55.2% (N=635 out of 1150). The rest of the regions were close to the average of 73.3% (N=600 out of 818). These respondents were almost equally present among all age groups and both religions. Education level was not an important factor in this instance.

On the other hand, those who were not willing to care had the opposite trend, slightly more males, more among urban and found the least in Beirut 9.6% (N=40 out of 416) and the Bekaa 10.4% (N=42 out of 402), and the most in the South 41.1% (N=199 out of 484). The rest, Mount Lebanon and the North were close to average 19% +/- 1 (N=347 out of 1840).

Those respondents who did not know 20.3% (N=639out of 3142), were slightly more among males 20.7% (N=382 out of 1847) than females 19.8% (N=257 out of 1295), more among urbans, found equally well in all regions with the North having the lowest rate, 3.5% (N=24 out of 690). They were predominantly between the two lower age groups, twice as many. They were also equally present between both religions with the highest percentage among students 36.5% (N=104 out of 285) and non schooled respondents 20.7% (N=22 out of 106), (tables 10-1 to 10-5).

### 10.6 Declaration of HIV positivity by the infected person:

29.1% (N=914 out of 3142) of the respondents agreed that HIV/AIDS patients are entitled to keep this fact as a secret, while

61.6% (N=1937 out of 3142) said that the patient should not keep the HIV positivity a secret and

9.2% (N=288 out of 3142) did not know.

Those who said that the HIV positivity should not be disclosed and be kept as a secret account for 29.1% (N=914 out of 3142) of the respondents they were found in all regions with the lowest percentage in the Bekaa 12.2% (N=49 out of 402), the highest in the North 52.0% (N=359 out of 690) followed by the South 38.0% (N=184 out of 484), Mount Lebanon 21.3% (N=245 out of 1150) and Beirut 18.5% (N=77 out of 416). They were slightly more females 30.5% (N=395 out of 1295) than males 28.1% (N=519 out of 1847). For the first two young age groups the rates were lower as compared to the two older age groups but not a real significant difference. The religion and the education did not influence the respondent answer.

On the other hand, those respondents who wanted positivity for HIV to be revealed were 61.6% (N=1937 out of 3142). They were almost equally found in all regions with the lowest percentage in the North 44.9% (N=310 out of 690), the highest in Beirut 76% (N=316 out of 416) and the Bekaa 74.1% (N=298 out of 402) and the rest of the regions were around the average. They were slightly more males 62.5% (N=1154 out of 1847) than females 60.5% (N=783 out of 1295). The lower the age group the higher was the rate but not a real significant difference. They were slightly more Christians and correlating with educational levels. Educated people wanted the status to be disclosed.

Those respondents that did not know 9.2% (N=288 out of 3142) were almost equally distributed between males and females. They were more urban 10.3% (N=165 out of 1596) than rural 8.0 (N=123 out of 1546) and lived in all region, the most were in Mount Lebanon and the Bekaa 13.1% (N=151 out of 1150) and 13.2% (N=53 out of 402) respectively, and the least in the North 3.0 % (N=21 out of 690) and Beirut 5.5% (N=23 out of 416). They belonged to all age groups without any significant difference. They were almost equally distributed among Christians and Muslims. This lack of knowledge correlated with low levels of education, (tables 10-1 to 10-5).

### 10.7 HIV/AIDS people and the work place:

The respondents in their majority 69.2% (N= 2173 out of 3142) agreed that persons with HIV who work with other people in factories and offices should be allowed to continue their work, while

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19.9% (N=625 out of 3142) did not agree, and 10.9% (N=341 out of 3142) did not know.
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Those respondents who did not agree were more among males 24.6% (N=455 out of 1847) than females 13.1% (N=170 out of 1295), slightly more urban 21.4% (N=341 out of 1596) than rural 18.4% (N=284 out of 1546). They were living mostly in the South 53.1% (N=257 out of 484) seconded by the Bekaa 19.2% (N=77 out of 402) and Mount Lebanon 16.4% (N=189 out of 1150). The least was in Beirut 8.7% (N=36 out of 416) and the North 9.6% (N=66 out of 690). The periphery, in general, had the highest rates. Only the old age was a factor in influencing the negative attitude, the old age group had the highest rate 21.3% while the others age group were close to the average of 19.8% (table 10-8).

These respondents were more among Muslims 34.2% (N=376 out of 1101) than Christians 9.7% (N=89 out of 917) and had in general low education levels. The highest rates of denial were among respondents with complementary education 25.7% (N=202 out of 787) and primary education 23.4% (N=78 out of 333), and the lowest rate was among university graduates 13.3% (N=114 out of 854), (table 10-9).

The rate of acceptance of a positive attitude was good 69.2% (N=2173 out of 3142) and those who did agree were more females, living in all regions, belonging to all age groups and to all educational levels.

## 10.8 Health care for AIDS People:

The respondents in their majority 74.1% (N=2329 out of 3142) agreed that persons with AIDS should receive the same or even more health care than other seriously ill persons, while

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13.5% (N= 425 out of 3142) said it should be less, and 12.2% (N=382 out of 3142) did not know.
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Those respondents in favor of same or more health care to be offered to seriously ill persons were slightly more among males 75.4% (N= 1393 out of 1847) than females 72.3% (N=936 out of 1295), slightly more urban and lived almost equally in all regions; Beirut 76.2% (N=317 out of 416), Mount Lebanon 78.1% (N=898 out of 1150), the South 77.5% (N=375 out of 484) or the North 72.9% (N=503 out of 690), except for the Bekaa where the rate is lower to the average 58.7% (N=236 out of 402). They were almost equally found in all age groups, slightly more Christians 79.3% (N=727 out of 917) than Muslims 74.7% (N=822 out of 1101) without any good correlation with educational levels.

On the other hand, those respondents who said that less care is needed for HIV/AIDS patients 13.5% (N=425 out of 3142) were slightly more females, more rural 14.2% (N=220 out of 1546) than urban 12.8% (N=205 out of 1596), living more in the periphery with 18.1% (N=125 out of 690) in the North, 15.9% (N=64 out of 402) in the Bekaa, while it was 12.7% (N=53 out of 416) in Beirut, 11.8% (N=57 out of 484) in the South, and 11.0% (N=126 out of 1150) in Mount Lebanon.

They were present in all age groups, the highest was among the 35-44 age group 17.0% (N=129 out of 758). The others age groups were close to the population average. There were more Muslims 16.0% (N=176 out of 1101) than Christians 9.7% (N=89 out of 917). Students had the lowest rate 7.0% (N20 out of 285) followed by University. Graduates 12.5% (N=107 out of 854).

The majority of respondents were in favor of more health care to HIV/AIDS patients compared to chronic or malignant diseases like cancer. They were in both sexes, rural as well as urban, living more in Beirut and Mount Lebanon, found in all age groups, and more among Christians.

# **CHAPTER ELEVEN**

### 11 LIST OF PREVENTION INDICATORS

# 11 LIST OF PREVENTION INDICATORS (PI)

#### PI 1: KNOWLEDGE OF PREVENTIVE PRACTICES

= No of people citing at least two acceptable ways of protection from HIV infection

Total No. of people aged 15-49 surveyed

= 2743 / 3200 = 0.857

### PI 3; CONDOM AVAILABILITY (PERIPHERAL LEVEL)

= No of people who can acquire a condom Population aged 15-49 years surveyed

= 2333 / 3200 = 0.729 72.9%

#### PI 4: REPORTED NON-REGULAR SEXUAL PARTNERS

Sexual partnership take many forms. Regular partnerships are defined solely in terms of duration. Any sexual relationships that lasts for at least 12 months is classified as regular. All other sexual relationships are classified as non-regular

No. of people aged 15-49 who report having had at least one sex partner other than a regular sex partner(s) in the last 12 months

Total No. of people aged 15-49 who report having been sexually active in the last 12 months

**361 / 2138** = **0.169** = **16.9%** 

This sample classification based on duration represents an important dimension of sexual relationships in term of potential HIV transmission or presence of risks for transmission

### P1 5: REPORTED CONDOM USE WITH NON-REGULAR SEX PARTNER

The purpose of PI5 is to estimate condom use among the most recent sexual intercourse with a non regular partner

No. of people aged 15-49 reporting the use of a condom during the most recent act of sexual intercourse with a non-regular sex partner

Total no. of people aged 15-49 reporting sexual intercourse with a non-regular sex partner in the last 12 months

$$257/361 = 0.71 = 71\%$$

About 71% of the population used condom with non regular sexual partners. Whether this is of fear of HIV/STD or for avoiding pregnancy needs to be determined

### P1 9: REPORTED STD INCIDENCE, MEN

No. of reported episodes of STD's in men aged 15-49 in the last 12 months No. of men aged 15-49 surveyed

8.1% of men reported symptoms suggestive of STD's

# **CHAPTER TWELVE**

# 12- DISCUSSION

### 12- DISCUSSION

### Section 1:Population characteristics / sample validity

Despite the lack of an established sampling framework for the country at large, and the lack of a listing of the households for the survey from earlier studies, it is believed that the sample in the study is representative of the Lebanese population at large for the following reasons:

### a) Sampling:

- The sample was taken from all mohafazats in proportions commensurate with commonly accepted and known population proportions.
- > The voting district in each mohafazat was chosen as a sampling framework and all districts were covered.
- ➤ All cities in the mohafazats were included in the sampling process.
- Random selection of villages from each district and mohafazat was adopted.
- > Random sampling of households per selected area was adopted.

### b) Sample characteristics:

The followings are in support of the national representativeness of the sample in the implemented survey:

- ➤ The projected sample size of 3200 respondents was reached i.e. 3200.
- The sample sex distribution was 58.6% (N=1876) males and 41.4% (N=1324) females and a mean sex ratio of 1.42, The sex ratio was maintained 1 in Beirut and North Lebanon while in Mount Lebanon, The Bekaa and South Lebanon the male respondents was higher in number than females (table 3-1).
- ➤ The sex ratio was maintained close to 1.1 among Christians while it was 1.7 among Muslims (tables 3-4). That is Muslim men were more accessible than Muslim women
- ➤ The proportion of urban and rural areas was very close to 1 Urban /Rural (1636/1564)=1.0 while male /female respondents within Urban and Rural areas was 1.4 and 1.5 respectively, (table 3-2).
- Furthermore, the relative distribution of religions, Christians and Muslims, as well as the proportions and distribution of their various respective sects in each category, compared to what is commonly known in the country, speak for a good representativeness of the sample for the whole population.
- ➤ The population pyramid shape and its broad base speak for a young and representative sample of the population, (Fig. 1).

However, it was clear since the pre-testing stage that we were dealing with a very sensitive issue and that we were exploring the very intimate personal life of the respondents. The above was reflected on the low number of respondents per household (2.2 person), in general, as a country average (table 2-1).

### c) Demographic data and other population characteristics:

The sample represents well a relatively young population, 88.5% were less than 44 years (Fig. 1 and tables 3-3 and 3-5). Such a population was considered as excellent for the study on HIV/AIDS, It is the population where HIV/AIDS is affecting most, according to national and international reported data. Actually, the distribution of various age groups in the different regions looked to be uniform, (table 3-5). In addition, the sample included as well Muslims and Christians with respect to age groups, (table 3-6A).

In their greatest majority 96% (N=3073 out of 3200), the people have attended schools. However, 10.7% (N=343 out of 3200) attended only primary schools. For the analysis of the results, people with complementary level and above were considered as educated and those with primary or no schooling as low education and this amounted to about 14.7% of the sample. Such a percentage was considered reasonable if compared to the illiteracy rate often reported for Lebanon, i.e. about 10-15%, and mostly present in the old age category (tables 3-6, 3-12, 3-13 and 3-14). These percentages were similar to those found in the 1996 survey.

On the other hand, a lower percentage of people 7.1% (N=227 out of 3200) reported that they could not read. Therefore, almost the third of those in the low education or no education categories could read. This is helpful for assistance in future educational campaigns (table 3-6 and 3-12 to 3-14).

More than three fourth of the respondents were not married 76.3% (N=2440 out of 3200). The distribution of the married people in the various regions was not uniform. The rate of marriage was the highest in the South. The non married were more males 56.3% (1373 out of 2440),(table 3-7) more in the two low age groups (table 3-8) and more in urban areas. Earlier marriages were reported more among young females (table 3-10B). The higher the level of education the lower was the rate of marriage (table 3-9 and 3-11).

The majority of the respondents 61.2% (N=1952 out of 3200) do not drink alcohol; only 2.3% (N=72 out of 3200) drink daily and 16.7% (N=200) drink at least once a week. The drinkers were predominantly Christian males, living mostly in Christian sectors, more urban, more in the two older age groups and highest among non schooled population, (table 3-15).

Drinking alcohol, which could be a factor predisposing to uncontrolled and higher risk behaviors, was mostly encountered in the males especially in the upper age range category, directly related to low education and non-schooling in daily drinkers. This was very important especially when it correlated with increase in non-regular sexual partners or casual sex.

Mobility of the population was also taken into consideration as a variable but it did not show any major effect on the parameters affecting risk behaviors, in particular sexual intercourse, except with regular partners, casual sex and condom use. Mobility was about 1.3% in the sample for people living 1 year or less in the community. It was the highest in the South, among young age population 20-29 probably to continue their education or to work, among females because they got married and followed their husband. Such a mobility favored regular sexual partners (other than spouse), casual sex, and disfavored the use of condoms particularly

in the category of university educated people. Most of the population, however, was a stable population whereby 98.7% were living for more than a year in their localities,

In brief, the sample was representative of the population. The respondents represented well the different ethnic groups, regions, and proved to be well educated, mostly young, about two third of them were sexually active. The rate of drinking was low, and so was the mobility of the respondents.

Table 12-3; Comparison of various parameters between 1996 and 2004

Table 12-3; Comparison of var	1996	2004	
Attended school	97.8%	96%%	
Attended only primary school	11.6%	10.7%	
Low education	14%	14.7%	
Could not read	6.3%	7.1%	
Read/low education	50%	33.8%	
Not married respondents	55.8%	76.3%	
Highest % of married in	North	South	
Married vs. region	uniform	not uniform	
Do not drink	66%	61.2%	
Daily drinkers	3.7%	6.1%	
Once per week	13.3%	16.7%	
Mobility	5.3%	1.3%	
Sexually active	63.8%	66.8%	
Married	44.2%	23.7%	
Daily TV	88.2%	81.3%	
Daily radio	63.8%	42.3%	
Daily magazines	27.3%	18.6%	
Health subject read	49.1%	32.5%	
Health subject heard	41.8%	31.3%	
Health subject watched	56.9%	54.4%	
Source of health info TV	39.1%	33.6%	
Paper	27.8%	16.3%	
Radio	12.4%	4.5%	
Female got married <20	44.2%	35.6%	

### Section 2: Media and information on health issues

The media tested were newspapers and magazines, radios and TVs. As shown in table 12-1, the exposure to media varied. The highest daily rates were for TV's 81.3% (N=2600 out of 3200), seconded by radios 42.3% (N=1355 out of 3200), and then newspapers and magazines 18.6% (N=594 out of 3200). However, this order was not maintained when exposure to health programs was considered. Actually, health writings or reports in newspapers and magazines proved to be almost equally read 32.5% (N=966 out of 2973) by the respondents as well as heard on radio 31.3% (N=796 out of 2543), but health programs were mostly watched on TV 54.4% (N=1700 out of 3124), which were also considered as the best primary source on health

information, 33.6% (N=1075 out of 3200) compared to 16.3% (N=522 out of 3200) in newspapers and magazines and the least in the radio 4.5% (N=144 out of 3200).

On the other hand, when these figures were compared with the figures available and obtained from an earlier KABP study in 1996 (table 12-2), there was an overall decrease with respect to newspapers and magazines 32.5% vs. 49.1%, as well as radios 31.3% vs. 41.8%. However, it was important to note that, the rate of people watching health programs on TV's decreased slightly but it was still the highest rate (54.4% vs. 56.9%). Therefore, TV was still the mostly cited primary source of health information.

With respect to various times of watching, the morning watchers were mostly in the North then Beirut and the least in the Bekaa (table 4-13A). Rural population watched TV during the morning more than the urban population, (table 4-15). The young age group watched TV mostly in the evening then late at night, (table 4-14). University graduates and students watched more in the evenings and late at night, and their lowest rates were in the mornings, (table 4-16). Christians were more morning, afternoon and late night watchers while Muslims were more evening's watchers, (table 4-17). Furthermore, females listened, and watched health programs more than males, (tables 4-18, 4-19 and 4-20).

About one third of the people who can read newspapers and magazines were reading the health corner. They were in all age groups but slightly more in the middle age group 35-44 and older age group 45-49, they belong to equally both sexes and lived almost similarly in peripheral regions. The highest rate of readers was among the educated people and the lowest rate was among low educated people and students' categories, (tables 4-1, 4-1A, 4-2, 4-2 A).

About 42.3% of the population listened to radio daily. They were in all regions with the highest rates in the mornings. They were mostly among the low age groups.

The rates were inversely related to the education for the morning listeners, (table 4-8), who are predominantly females in the older age groups (tables 4-5 and 4-6).

The evening listeners were almost the opposite, younger and not affected by the level of education, (table 4-8), with the highest rates in Mount Lebanon and Beirut.

On the other hand, the before sleeping listeners were predominantly in Beirut and Mount Lebanon and the Bekaa, young, equally males and females, highly educated and predominantly Christians, (tables 4-5 to 4-9).

Listening to health programs was more in Beirut, and the least in the Bekaa. The other regions were close to the country average of 31.3%, It was not affected by the population's age groups. However, education was not a factor in promoting or demoting the rate of radio listeners to health programs.

TV was very popular, only 2.4% never watched TV and this was non significant. The rate of TV watchers was more among males; young and middle age groups. They were in all regions, religions and all educational levels. However, the rates of watching changed with respect to time, age of the respondents, their sex, location and educational levels.

However, the rates of watching health programs and consideration of the primary source of health information showed that the Beirut and the North had higher rates than elsewhere, (table 4-13). Education was not crucial, (table 4-18), but females relied more on TV than males for health information, (table 4-19). Males, however, depended more on other sources,

in particular, health personnel. Education did not seem to influence the dependence of the age groups on magazines radios and / or TV's. (Table 4-21).

However, the respondents mentioned other sources than those mentioned before and stressed the role of health personnel among these other sources. Actually, out of 1459 respondents in this category the rates were relatively high everywhere except Beirut probably because medical fees were expensive, they were also high among all age groups and among all educational levels, (table 4-18).

### Section 3: Marriage and regular partnerships

This section concentrated on the sexual behavior of each respondent. More than half of the population 52.0% (N=1665 out of 3200) had ever been married. However less than one fourth of the population are still married 23.7% (N=760 out of 3200). Early marriage was mostly for females and late marriage for males. Most early marriages were correlated with low level of education, rural and living in the periphery. As the age got higher the shift was for more male marriages and higher levels of education especially university education.

A thorough study of the regular partnership status was performed in light of the facts that:

1- only 52.0% of the respondents were ever married and were relatively more females, who got married at an earlier age than males, (table 3-10).

Actually, 35.6% of females got married before the age of 20 years as compared to only 5.0% males.

2- In addition to the fact that sexual activity was experienced early in life, (table 5-6), and 70.5% (N=1323 out of 1876) of the males were sexually active, while only 26.8% (N=503 out of 1876) were married, compared to 61.5% (N=815 out of 1324) sexually active females who were married at a rate of 19.4% (N=257 out of 1324)

Therefore, there is a good portion of sexually active young people mostly males, 24 years or less as well as in other age groups, that were not married and were basically depending on either one regular partner 13% (N=278 out of 2138), multiple partners 19.4% (N=54 out of 278), or casual partners (N=360 out of 2138) as will appear later, (table 5-1).

In the regular partnership 25% (N=259 out of 1038) have used condoms in the last sexual intercourse with regular partners and within a marriage, (table 5-1).

Those that were not married and had the highest rates of sexual activities were in the two extremes of education, low or no education and university graduates. In contrast, the use of condoms was the highest with university education and students, (table 5-3).

Furthermore, the presence of regular partners apart from spouse was the highest among complementary level 24.5% (N=68 out of 278), secondary level 25.2% (N=70 out of 278) and university level respondents 27.7% (N=77 out of 278) who also have a high number of multiple partners , (table 5-3). However the highest rates of condom use was among students 36.8% (N=14 out of 38) and university graduates 33.7% (N=87 out of 258), (table 5-3).

Furthermore the presence of partners especially among males 87.8% (N=244 out of 278) compared to 12.2% (N=34 out of 278) females or multiple partners 19.4% (N=54 out of 278), (table 5-1) of the total who had partners constituted also a significant additive factor, meaning that about one fifth of those males having partners apart from spouse, have multiple partners (tables 5-1). This is an aggravating risk of HIV transmission especially when only 30% (N=244 out of 747) of the males used condoms.

This is quite significant for the females because their perception of faithfulness of their partners was 49.8% (N=145 out of 291), while that of males was very high 77.4% (N=578 out of 747).

In brief, the presence of 30.8% (N=473 out of 1535) who have had sex outside regular marriage i.e. non married, and 13.0% (N=278 out of 2138) have had regular partners apart from spouse, they were mostly males 89.2% (N=422 out of 473) vs. 10.8% (N=51 out of 473) females and 87.8% (N=244 out of 278) males vs. 12.2% (N=34 out of 278) females, respectively, added to the belief among males and females that their partners were faithful (77.4% and 49.8%) and compounded the problems in decreasing the use of condoms or other protective devices.

On the other side, the use of condoms within a marriage or regular partnership in the last intercourse was only 25.0% (N=259 out of 1038).

The problem is then compounded further if we add those who have had sex and not married 30.8% (N= 473 out of 1535), and those who have had regular partners 13.0% (N=278 out of 2138) apart from spouse, whether married or not, especially that some of them had even multiple partners 19% (N=54 out of 278). Facing all this was a high belief of faithfulness 69.7% (N=723 out of 1038) and low percentage of condom use 25.0% (N= 259 out of 1038) of the total sexually active population. Consequently the risk for sexual transmission of HIV could be high.

The use of condoms did not increase with both, non - married and married respondents, and did not correlate directly with rates of sexual activity in low education categories but in contrast it did correlate in the student and university categories (table 5-3).

Concerning age, the young age group respondents who were not married and had sexual activity were 66.6% (N=225 out of 338) but they constituted the category that had the highest rate of condom use 34.6% (N=45 out of 130) and the highest rates of having partners 25.7% (N=87 out of 338), (table 5-2).

A closer look at all four age categories, one would note a clear correlation between the sexual activity of non married respondents, the extra marital sexual activity of the married respondents, presence of one partner or multiple partners, and the use of condoms. The older the age the lower were the rates of the above parameters. However, faithfulness run in the opposite direction, high in old age and low in young age, (table 5-2).

Concerning gender, this parameter showed a complete dominance of the males in having more sex outside marriage: 8.2 times more, one regular partners: 7.2 times more, or multiple partners: 3.6 times more, and in using condoms: 2.5 times. However, it was evident that the ratio of sexual activity, for both non-married and married, were much higher than the ratio of condom use (table 5-1).

There was also some difference with respect to the effect of religion. Muslims had slightly more sex outside regular marriage 22.0% (N=192 out of 874) versus 18.9% (N=121 out of 641) Christians. They also had a higher rate of regular partners 15.1% (N=132 out of 874) versus 11.2% (N=72 out of 641), and a lower rate of condom use as well 22.7% (N=121 out of 534) versus 30.4% (72 out of 237), (table 5-4).

On the other hand, Muslims had polygamy 1% (N=9 out of 874), which Christians do not normally have 8% (2), Both religions had the almost equal rates of multiple sexual partners, (table 5-4).

Once more the rates of sexual activities were higher that the rates of condom use in both religions.

Alcohol correlated with more people having one partner apart from spouse 54% (N=150 out of 278) as compared to non-alcohol 46% (N=128 out of 278), and the rates of condom use followed the same pattern 57.5% (N=149 out of 259) and 42.5% (N=110 out of 259). However, those that did not drink alcohol at all had a higher rate of faithfulness 57.0% (N=412 out of 723) versus 41.8% (302 out of 723), (table 5-5).

Furthermore condom, use in the last sexual intercourse within a marriage or regular partnership 25.0% (N=259 out of 1038) varied among regions. The highest rate was in Mount Lebanon 35.4% (N=30 out 101) seconded by the South 30.8% (N=91 out of 295) and Beirut 25.8% (N=33 out of 128), the lowest rate was in the Bekaa 10.7% (N=11 out of 103) and in the North 13% (N=33 out of 255).

Along with the high frequency of sexual intercourse and the high number of regular sexual partners, only 25.0% declared that they have used condoms in their last sexual intercourse. Most of the condom users were students and university graduates.

All these cumulative factors, of multiple partners, mobility, high frequency of sexual intercourse, low usage of condoms. and alcohol drinking, will be predisposing risk factors for HIV transmission among married couples, especially young and middle age married couples, a problem that should be addressed in the future.

The above problem would be more aggravated especially when the time for first sexual experience is taken into consideration. Actually, 35% experience sexual intercourse before the age of 20 years, However more than the half did not remember the age at the first ever experience of sexual intercourse .

The practice of sex outside marriage was mostly in urban areas and among regular alcohol drinkers in their majority.

Therefore, all parameters that add to the risk of acquiring HIV infection were present to a significant extent especially when the early age of sexual intercourse is considered in addition to multiple partners, low utilization rate of condoms, mobility, drinking alcohol, and high rate of sexual activity.

### Section 4: Non-regular partners and commercial sex

As evidenced in the results, 16.8% (N=360 out of 2138) of the sexually active respondents had non-regular sex partners in the last 12 months. They were predominantly young, urban males, mostly students or having university education. Among 66.1% (N=238out of 360) had 2 or more partners and 33.9% (N=122 out of 360) had one casual partner. They were sexually active, 66.1% (N=238 out of 360) had casual sex within the last month. The parameters that affected such a practice were the same as those that affected regular sexual partners.

Obviously, the males had 9 times more of non-regular partners than females. As shown in (table 6-7), 31.4% (N=113 out of 360) of those involved with non-regular sexual partners agreed that they gave or received money or gifts in exchange of sex and 26.4% (N= 95 out of 360) encountered the sex partner for the first time. Consequently, the risk of HIV transmission has been aggravated in this particular group that was both receiving payment and meeting strangers at the same time.

A thorough look at the data for casual sex would show that South Lebanon had relatively the highest rate of casual sex 35.6% (N=144 out of 404) but relatively low rate of payment for sex 20.1% (N=29 out of 144), less than country average use of condoms 67.4% (N=97 out of 144) and next lower rate of sex with new partners 21.5% (N=31 out of 144), (table 6-7).

A lot of future work is recommended in this region, which should be divided into smaller regions (localities) to probe further details and specificities.

On the other hand, Mount Lebanon had the rate of 19.6% (N=118 out of 603) for casual sex i.e. more than the country average of payment, the highest rate of condom use 79.7% (N=94 out of 118) and the next highest rate of new sex partners 28.8% (N=34 out of 118).

Another extreme would be the Bekaa whereby the rate of casual sex was low 12.5% (N=32 out of 255), the rate of payment high, the use of condoms low, but they had a high rate of sex with strangers 28.1% (N=9 out of 32). Such an issue of sex with strangers and low rate of use of condoms should be addressed.

In the North, however, there was a high rate of payment for a lowest rate of sex 2.2% (N=14 out of 636), an average rate of condom use 71.4% (N= 10 out of 14) but the lowest rate of sex with strangers 14.3% (N=2 out of 14)..

Finally in Beirut, there was relatively the lowest rate of payment 17.3% (N=9 out of 52) for a high casual sex rate, close to Mount Lebanon, but they had the next highest rate of condom use 73.1% (N=38 out of 52), and the highest rate of sex with strangers 36.5% (N=19 out of 52). The overall picture looked good, however, we had to consider the fact that we were dealing with more females in the sample here and with a portion of the respondents who refused to answer about casual sex and condoms, (table 6-7).

Age was a prominent factor in affecting casual sex, (table 6-8). Actually, 37.9% (N=128 out of 338) of the young age group had casual sex and it decreased with increase in age. However, commercial sex and sex with strangers increased with age, but condom use was much less in the young age group 60.9% (N=78 out of 128) compared to 70.1% (N=14 out of 20) in the oldest group or 83.3% (N=50 out of 60) in the 35-44 age group

Education was another important parameter affecting casual sex, (table 6-9). Respondents with high levels of education, students and university graduates, had the highest rate of casual sex. Students had the highest rate of casual sex 56% (N=51 out of 91), but the lowest rate of condom use 58.8% (N=30 out of 51). Education did not seem to affect the prevention technique in casual sex, (table 6-9).

Differences were also shown between the two religions in this respect. The rates of payment and condom use and sex with strangers were much higher among Christians, while, the rate of casual sex was higher among Muslims than in Christians, (table 6-10).

The majority 71.7% (N=258 out of 360) has used a condom in the last sexual intercourse with casual partners. The rest 26.4% (N=62 out of 215) did not use a condom because:

- I- They did not like condoms; they were almost solely males, young and mostly students 45.3%
- 2- Condoms were not available, basically in the Bekaa 23.2% (N=10 out of 43)
- 3- The partner objected, mostly males 10.5% (N=10 out of 95)
- 4- Other reasons like "sure of partner", or "did not think of it" 9.5% (N=9 out of 95)

In conclusion, there was a good percentage of condom use. However more work should be done along this line in favor of changing, basically, the attitude of males to a more favorable one and making condoms more available in the periphery and to students. In addition, some work should be done on the issue of "sure of a casual partner". It is of interest to point out that no one mentioned the cost of condoms as a barrier. In addition, no clear-cut conclusion could be reached for the females because of the small number that used condoms, (table 6-11).

As for the source of the condoms used in the sexual intercourse of casual sex. Therefore, the major source of condoms, in this instance, was the pharmacy and partners and very little from hotels and bars or friends.

### Section 5: Condoms

The data showed that good percentage of the respondents have heard of condoms 84.1% (N=2692 out of 3200). High rates were actually obtained in The South, Beirut and Mount Lebanon, (table 7-5), within a range of 9.5% (N=477 out of 502), 94% (N=393 out of 418) and 92.6% (N=1087 out of 1174) respectively.

However, 40% (N=277 out of 693) of the population in the North as well as 22.8% (N=94 out of 413) of the Bekaa population had not heard of condoms. Such rates were also high in all age groups ranging from 11.1% (N=41 out of 368) in the old age groups, to the 21.2% (N=163 out of 768) in the (35-44) middle age group, without any correlation with age (table 7-6). However higher education was also in favor increasing the rates of people that have heard about condoms. The range was between 91.1% (N= 786 out of 863) in university level respondents to 75.2% (N=258 out of 343) in non-schooled respondents. Religion was not an affecting factor in this question.

On the other hand, the respondents that have seen condoms were 79.9% (N=2558 out of 3200), that is 4.2% less than those who have heard of condoms the difference was 5 times less than that found in 1996 survey (4.2% in 2004 vs. 23.9% in 1996). The North had the highest rate of people who had seen condoms 94.1% (N=652 out of 693) and the lowest rate of people to use it 5.8% (N=40 out of 693), while the South had the second rate of people who had seen condom 87.1% (N=437 out of 502) but the highest rate of people to use it 32.3 (N=162 out of 502), (table7-5).

The educational level did not seem to affect the rate of seeing, hearing and using condoms, (table 7-6), in contrast to 1996 survey where seeing a condom increased with increase in education levels. Religion made a difference, only, in the rate of using condoms. More Muslims than Christians have used condoms: 19.2% (N=214 out of 1117) compared to 13.5% (N=126 out of 934), (table 7-8), while seeing, hearing and knowing the sources were not affected.

The knowledge of a condom source also varied in a similar pattern to seeing or hearing about condoms.

On the other hand, the utilization of condoms was the highest in the South 32.3% (N=162 out of 502) seconded by the Beirut 16.5% (N=69 out of 418) Bekaa 34.3% (N=69outof2Ol) and then Mount Lebanon 15.7% (N=184 out of 1174)

It is worth nothing that the utilization rate of condom did not follow the same trend of hearing seeing and knowing the source. Some more work should be invested in understanding other possible parameters in particular education, sex and religion.

In brief, there is a decreasing pattern of rates going from hearing about condoms 84.1% (N=508 out of 3200), seeing a condom 79.9% (N=2558 out of 3200), knowledge of its outlets 74.9% (N=2398 out of 3200), and lastly using a condom 15.3% (N=490 out of 3200). Comparing these with the 1996 survey we noticed a decrease in percentage of all parameters except for that of seeing a condom.

Table 12-1B: Comparison parameters between 1996 and 2004 (2)

	1996	2004
hearing about condoms	95.1% (1430/1504)	84.1% (508/3200)
seeing a condom	71.2% (1071/1504)	79.9% (2558/3200)
knowledge of its outlets	90.1% (1355/1504)	74.9% (2398/3200)
lastly using a condom	32.5% (489/1504)	15.3% (490/3200)

In general, the high rates of knowledge and utilization of condoms as well as their possible outlets, correlated well with urban life, male sex, young and middle aged, as well as high levels of education and Christian religion.

Calculation of condoms projected for the people with risky sexual behavior and having non-regular partners (casual sex), revealed that 360 persons admitted having casual sex, that is 16.8% of the sexually active population surveyed.

Complaints were not heard about availability and accessibility possibly because of low demand and low utilization rates. More condoms need to be acquired at central level and

outlets of distribution widened and varied, particularly at the periphery, the Bekaa and the North.

In conclusion, despite the fact that 87.3% (N=2743 out of 3142) of the population knew that condoms could protect from HIV/AIDS, only small percentages have used condoms in the different occasions, (table D-3).

### Section 6: Sexually transmitted diseases and health issues

World wide, the problem of AIDS was, further, complicated by the STD's. The data showed that the self-reported episodes of STD's in the last 12 months amounted to 9.1% (N=121out of 1323) in the men population, a significant increase compared to 1996 survey where the number of self reported STD's was 5.6% (N=42 out of 760). About 19% (N=23 out of 121) of them have experienced recurrent episodes during the year. They were almost equally distributed between rural 9.9% (N=68 out of 689) and urban 8.4% (N=53 out of 634). A higher number of such episodes was reported in the upper two age group category, (table 8-2). The incidence decreased with increase in education, (table 8-3). People had the option to answer many alternatives they followed in dealing with STD's. As shown in table 8-4, the great majority seeked treatment from professional places and professional people 34.8% (N=57out of 164) and 14.0% (N=23 out of 164) did nothing. On the other hand, 21.3% (N=35/164) sought the advice of a friend or a relative and this could be worse sometimes than doing nothing. More work should be deployed to encourage all STD's to seek professional help.

Comparing these data with that of 1996 survey, we noticed increased reporting rate and decreased recurrent episodes. This could be a sign of increased awareness and improved management since less would get advice of a friend or did nothing. However, getting a professional advice was less in contrast to getting medicine without professional advice that increased. This could reflect the situation of low accessibility or particularly back seeking behavior of the actual population

Table 12-1 C: Comparison of STD's database between 1996 and 2004

	1996	2004
Self-reported episodes of STD's	5.6% (42/760)	9.1% (121/1323)
Recurrent episode	50% (20/42)	19% (23/121)
Seek professional treatment	78.5 (33/42)	34.8% (57/164)
Did nothing	16.6% (7/42)	14.0% (23/164)
Advice of a friend	47.6% (20/42)	21.3% (35/164)
Get medicine without consultation	16.6% (7/42)	20.1% (33/164)
Told their partner	59.5% (25/42)	27.4% (45/164)
Took preventive measures	73.8% (31/42)	32.3% (53/164)
Among	High educated	low educated
Refrain from sexual intercourse	74.2% (23/31)	76.9% (120/156)
Advise partner for med. Consultation	22.6 (7/31)	3.8% (6/156)
Using condoms	41.9% (13/31)	19.2% (30/156)

However, the attitude of the patients towards their partners varied a lot, 27.4% (N=45 out of 164) told their partners and 32.3%(N=53 out of 164) took preventive or curative measures towards the partner such an attitude correlated well with low education level, (table 8-5). These measures were mostly to refrain from sexual intercourse in 76.9% (N=120 out of 156) of the cases, while advised partner for medical consultation in 3.8% (N=6 out of 156) of the cases.

However, 19.2% (N=30 out of 156) used condoms in their sexual relations. Such measures correlated with better education, young age groups, urban living and in both religions. More work should be deployed on the STD's and particularly more education about this issue. What aggravated this risky behavior was the presence of relatively many recurrent episodes 19% (N=23 out of 121). There were also many respondents who have multiple non-regular sex partners, and condom was only partly used as a protective measure. A lot of work should be invested in this area to explore more the details of the various types of STDs and their respective incidence.

On the other hand, 13.9% (N=106 out of 764) of the sexually active women participating in the study delivered a child in the last two years. 92.4% (N=98 out of 106) of them have seen a health worker. This was an excellent coverage, since 98% (N=96 out of 98) reported to have had an exam of the vagina.

The above practice reflected on the quality of medical follow-up and services during pregnancy, presented as such could be considered as adequate and STD's in women could be revealed in these cases.

### Section 7: Knowledge of AIDS

The awareness about HIV/AIDS could be considered as universal 98.2% (N=3142 out of 3200). The 1.8% (N=58 out of 3200) people who were not aware of HIV/AIDS, were non-schooled persons, more females than males 2.2% vs. 1.5%, they lived more in urban areas and more in the South seconded by the Bekaa. The people in the sample had an acceptable knowledge of protection practices but were less than the knowledge encountered in the 1996 survey. Although 98.2 % of the people believed that one could protect oneself from HIV/AIDS, they did have misconceptions about the protection means. This was very important and stressed the personal role and responsibility of the individual in protecting oneself.

If the results of the 1996 and 2004 studies were compared, (table D-l), one would see directly a decrease in the 3 parameters: Awareness, knowledge of ways for protection and belief in personal protection.

In addition, faithfulness to one partner, use of clean needles and syringes or using condoms as means of protection from HIV/AIDS were known to the majority but not to the all respondents (87.4%, 86.0% and 87.3% respectively). Although they had a good rate of knowledge, the population who did not mention appropriate preventive measures ranged from 12.6% to faithfulness,12.7% for condom use , to 14% to the usage of clean needle for injection . This indicated that a certain level of misconceptions was still prevailing in the population, This

could lead to negative attitudes towards the HIV/AIDS patients and this would indicate a lack in knowledge that should be worked in future campaigns.

<b>Table 12-3</b>	Appropria	te Pract	ices varia	tion				
Appropriate practice not endorsed		Sex	Area	Least found in	Most found in	Age Group	Religion	Education
Faithfulness	12.6	∂ = ₽	$\mathbf{R} = \mathbf{U}$	Beirut	North	all	Christian	No relation
Condom use	12.7	♀>♂	R > U	Beirut	North	45-49	Christian	Low education
Clean needle usage	14	♀>♂	R > U	Beirut	North	35-49	Christian	Low education
○ (females)								

 $\cup$  (females)  $\cup C$  (males)  $\cup R$  (rural)  $\cup U$  (urban)

On the other hand, one would see that the highest rate of misconceptions was to avoid public toilets 32.7 % (N=1029 out of 3142). This percentage was not far away from the 38.7% found in 1996 survey

The next highest misconception was related to protection by avoiding mosquitoes, a misconception that is very common 27.3% (N=859 out of 3142) and if the "do not know" were added, it would amount to 53.0% (N=1667 out of 3142). It was worth to mention that this misconception was not changed in percentage from what was found in the 1996 survey (27.7%) followed by sharing food with an HIV/AIDS person 20.3% (N=638 out of 3142). Such misconceptions and/ or invalid protective methods, indicated lack of information and possible origins of discrimination against HIV/AIDS sufferers, (table 9-1). However, when comparing rates between the 1996 and the 2004 studies (table D-2), one would easily note the clear regression made in this category, indicating more work is being needed.

A thorough look into the misconceptions for protection would show that despite the fact that people believed highly that they could protect themselves 98.2% (N=3142 out of 3200), and this rate was high in all regions between 80.1% (N=553 out of 690) and 98.1% (N=475 out of 484), the misconceptions about the ways and means of protection varied. In general, misconceptions were less in Beirut and Mount Lebanon as compared to the rest of the periphery, (table 9-9).

In addition, the belief in self-protection decreased with increase in age. The highest rate was among respondents in the young age category 96.9% (N=403 out of 416) and the lowest rate was among the old age category 87.6% (N=317 out of 362). The different rates of various misconceptions followed a similar pattern. They were the least among the 25-34 age group and the most among the old age group.

Both males and females believed to a similar extent that they could protect themselves. However, the rates were slightly higher in females than males (table 9-12). A difference was

also noted between the two religions with Muslims having slightly more misconceptions than Christians, (table 9-1 1).

On the other hand, education played an important role in increasing the belief in self-protection and at the same time decreasing the rates in all misconceptions cited, (table 9-13). Such misconceptions were, in general, mostly linked more to low educational levels to the upper age group, and sometimes more to female sex and Muslim religion.

Another lacuna in knowledge and misconceptions was also noted regarding the 21.9% (N=689 out of 3142), who thought that an HIV person shows always symptoms. The rate could become more significant if the "did not know" were added. It would reach 51.9% (N=1631 out of 3142). This was linked basically more to low level of education and upper age groups.

# Section 8: HIV/AIDS affected the beliefs, attitudes, and life style of people

Data showed that 6.8% (N=213 out of 3142) of the population knew a relative, a friend, or a colleague with HIV/AIDS. However, 67.5% (N=2122 out of 3142) of the population perceived no risk of catching HIV and 12.6% (N=395 out of 3142) perceived a moderate chance. Only 1.1% (N=35 out of3142) felt they have a good chance of acquiring the infection. Such a low rate of perception of personal risk could have been at the basis of many risky behaviors and lifestyles adopted by a significant proportion of respondents like casual sex, lack of use of condoms, having multiple partners and so on

Such a low rate of personal risk perception coupled to the high rate of belief in self-protection 95% did not, as expected, lead to significant behavioral changes. Actually, only 24.1% (N=758 out of 3142) reported to have made behavioral changes in the last year. This was a reflection of the respondents' own perception of low vulnerability to infection. It seemed that such vulnerability was conceived in not more than 13.7% of the population, which were basically well educated young and well aware of the ways of protection against the disease.

On the other hand, this perception of lack of vulnerability with the majority of the respondents was reflected in the positive attitude and behavior and in a high rate of willingness 72.3% (1872 out of 3142) to take care of a family member with AIDS. The accurate perception of risk should be heightened. This will reflect positively in following the well know protection measures.

On the other hand, another majority 69.2% (N=2173 out of 3142) showed a positive attitude towards HIV/AIDS people. They agreed that the HIV/AIDS persons should be allowed to continue their work and not to discriminate against them in the workplace.

Even a higher percentage 74.1% (N=2329 out of 3142) showed a further positive attitude and sympathy and understanding for the HIV/AIDS patients. They agreed that they should receive all the health care needed, the same or more health care than other seriously ill persons. Such positive attitudes were affected neither by the respondents' education nor by their rural or urban living.

In contradistinction, only 29.1% (N=914 out of 3142), believed that HIV positivity should not be revealed. This attitude reflected probably the perception of false protection from HIV transmission and possible means leading to discrimination and intrusion into the privacy of the HIV/AIDS people.

A thorough look into the various issues related to attitudes, belief, and practices showed that the perception of being more protected was more among females. This was probably a reason for less changes in sexual behavior than males: 19.8% (N=257 out of 1295) compared to 27.1% (N=501 out of 1847), and in more willingness to care for a family member or a friend with AIDS: 65.8% (N=852 out of 1295) compared to 55.2% (N=1020 out of 1847), (table 10-1).

Those having a friend or a relative with HIV/AIDS were mostly in the North 15.6% (N=108 out of 691) followed by the South 6.2% (N=30 out of 484) and Mount Lebanon 5% (N=58 out of 1150). Changes in sexual behavior were above country average everywhere except in Beirut and Mount Lebanon. In addition, caring for an AIDS patient was the highest in the North 76.4% (N=527 out of 690) and the lowest in the rest of the periphery. Not all regions wanted to disclose HIV positivity and but all wanted sero-positive people to continue to work and get all the health care needed, (table 10-2).

On the other hand, the young age group was in favor of perception of a higher risk to catch HIV and did more changes in the last 12 months, (tables 10-3 and 10-7), and middle age groups did changes more than 1 year ago.

Education, however, was effective in providing more perception of risk to catch HIV, in introducing more changes in sexual behavior and in asking less HIV positive people not to keep HIV positivity confidential. They also supported more the idea of HIV positive people to continue to work, (table 10-4).

Finally, religion showed only small differences. Muslims had a higher perception of security than Christians 70% (N=772 out of 1101) compared to 65.4% (N=600 out of 917), and introduced less changes in their sexual behavior: 26.6% (N=293 out of 1101) compared to 37.2% (N=342 out of 917), (table 10-5).

# **CHAPTER THIRTEEN**

# 13- CONCLUSION AND RECOMMENDATIONS

### 13- CONCLUSION AND RECOMMENDATIONS

This survey showed that the Lebanese people still depended like in 1996, on the mass media be it newspapers and magazines, radios, or TV. For a large amount of its health information, TV's being the most efficient followed by newspapers, magazines and then radios.

Awareness became almost universal in 2004; it was 98.2% (N=3142 out of 3200). The Prevention Indicator 1, dealing with knowledge of preventive practices, was equal to 85.7%, a good rate but less than the 1996 rate which was equal to 94.9%. However, on the average 38.3% (N=1226 out of 3200) endorsed some inappropriate practices for prevention indicating a certain level of misconceptions. Such misconceptions had increased when compared to the 1996 survey. However, such inappropriate and invalid practices endorsed should be tackled in the future campaigns. In addition, some work should be deployed to clarify another important misconception stressing the fact that HIV/AIDS persons do not always show symptoms. Such misconceptions decreased with young age and higher education. They could form the basis of negative attitudes and discrimination against HIV/AIDS patients. The population had low perception of personal risk. Actually, only one quarter of the population introduced behavioral changes in their lifestyle during the past year. This perception of low vulnerability was more in females and was probably reflected in very positive attitudes towards the HIV/AIDS patients be it to care for them, not to discriminate against them at work place or to provide them with the optimal health care. The only negative point in this context was the request of the majority of respondents to reveal their HIV status and not to keep it confidential. This issue, of confidentiality, still raising debates, needs to be addressed in future campaigns.

On the other hand, a good percentage of the people were sexually active 66.8% (N=2138 out of 3200). Males, in general, got married at later ages than females but were sexually active at a relatively low age (10- 13 years), 52.3% (N=1665 out of 3200) were ever married, 54.3% (N=905 out of 1665) of those ever married were not married any more, 3.0% (N=23 out of 760) were polygamous and 8.6% (N=65 out of 760) of the married people reported to have regular partners and sometime many. Such an issue was greatly associated with urban life, drinking alcohol, mobility and middle age groups, however, it is worth to mention that 33.7% (N=256 out of 760) did not answer this question, raising the suspicion that the 8.6% could be higher. This multiple partnership could be aggravated by the high rate of belief in faithfulness. Facing such a situation, only 16.8% (N=128 out of 760) married people used condoms in their last sexual intercourse.

As for the non-regular partners and commercial sex, 16.8% (N=360 out of 2138), compared to 22.4% in 1996 survey, of the sexually active respondents had non-regular partners, sometimes multiple partners. Obviously, the males had 9 times more non - regular partners than females. 31.4% received or gave money or gifts and 26.4% (N=95 out of 360) were known for the first time, as compared to 29.8% in the 1996 survey.

Although 16.8% (N=360 out of 2138) of the sexually active people were at risk of HIV infection, 71.7% (N=258 out of 360), compared to 69.3% in 1996 survey) used condoms in such relations, the rest did not like to use condoms. Such an attitude to the use of condoms could be tackled in future activities addressing more the young males population and making

condoms more available at the periphery. In addition, the issue of « sure of partner» should be well explained.

The prevention indicators related to condoms showed that they were available and accessible (PI 3) =72.9% but to less extent as compared to 90. 1%, 1996 survey. However, there is no doubt about the availability of condoms in the market that we face everyday anytime and anywhere (pharmacies, supermarket, Gas-station) but the total number of condoms available in the market constituted only a small fraction of the projected needs taking into consideration the projected needs for the sexually active population fraction.

The problem of AIDS and risky behaviors was aggravated more by the presence of STD's. The self-reported episodes of STD's in men, in one year, were equal to 9.1%(N=121 out of 1323) Dealing with STD, men had a variable range of management approaches, in their majority, they seeked a professional advice. However, a lot of them followed the advice of a friend, or a traditional healer or did nothing. A lot of efforts should be deployed in the direction of proper management of STD since about 19% of them had recurrent episodes during the year. Efforts should also focus on assessing more accurately the prevalence of STD's in the country and the related health seeking behavior of the population, including Partner Notification.

Similar efforts should be oriented towards the promotion of proper protective measures especially the use of condoms since it was not used as the first choice in prevention methods in risky behaviors.

On the women side information on appropriate quality of prenatal care should be addressed and a more comprehensive antenatal and prenatal care should also be made available; however, data available from this study is incomplete and inconclusive.

In all the above, the following factors affected the various parameters leading to risky behaviors: young age groups, male sex, low education, rural living, alcohol drinking and mobility.

To summarize, the following conclusions could be drawn, compared to the 1996 National KABP survey.

- 1- Awareness, initially very good, has improved. However, risk perception should be addressed more in the future campaigns, along with misconceptions.
- 2- Condom was still not widely used. The concept of safer sex behavior needs to be emphasized and prevention means (namely condoms) need to be more promoted and made more accessible. The final aim being a change in behavior, and adopting persistent safer sexual practices.
- 3- STD's seemed to be present in the country, and even almost doubled. However, more studies need to be done to assess the prevalence and type of the STDs, with emphasis on determinants of sexual behavior as well as health seeking behavior in patients with STDs.
- With the diversity of the Lebanese society, and the differences demonstrated in this study, interventions should be more targeted, addressing the particularity of the communities and the groups more specifically, for a better outreach and impact.
- 5- Follow facilitating factors as mentioned in the summary.

# TABLES' SERIES