

Investigation of Knowledge, Attitudes and Beliefs of Health Students Regarding AIDS

**Marianna Diomidous, MD RN PhD Lecturer of Epidemiology-Public Health¹,
Dimitris Zikos, RN PhD¹,
Ephrosyni Tzimogianni MSc¹**

I. Laboratory of Epidemiology, Faculty of Nursing-Public Health Sector,
National and Kapodistrian University of Athens

SUMMARY

Aim: the current study is focused on the investigation of the level of knowledge, attitudes and beliefs of healthcare students regarding AIDS. It is also making an attempt to clarify the role of the health authorities keen to provide protective measures and preventive strategies to tackle the AIDS epidemic. Due to their previous education and clinical experience, the selected sample is regarded to be more sensitized towards the HIV infected carriers and patients than the general population.

Methods: The study sample is comprised of 200 healthcare students, randomly assigned according to the study design. A questionnaire with opened and closed questions has been used for the study. The questionnaire is comprised of a range of questions on demographic data, on knowledge acquisition, on the sexual preferences, beliefs and practices and attitudes of the sample on AIDS.

Results: the data analysis indicated that the level of knowledge, attitudes and beliefs of the healthcare students is quite sufficient regarding the methods of the virus transmission, the natural history and the social consequences of the disease. Insufficient knowledge is recorded regarding the clinical and laboratory findings as well as the therapeutic treatment of the disease. Almost all the sample admitted to have adopted a healthy sexual behavior; due to the risk of contracting the disease in an adverse case and the majority responded positively regarding the use of condoms. It is rather encouraging to mention that a high percentage of the sample would be willing to have an HIV carrier/patient in their home or in their friendly social environment; meanwhile, they would be rather unhappy and reluctant to treat an AIDS patient in their ward.

Conclusions: according to the findings of the research, there is an imperative need to adopt new preventive measures for combating the AIDS epidemic. Targeted education campaigns to the general population, to high risk groups as well as to health personnel are of paramount importance for safeguarding the expansion of the disease.

Key words: AIDS, HIV, knowledge, attitudes, beliefs, healthcare students

Introduction

Epidemiology

The HIV infection is regarded as the number one threat for public health worldwide. Based on WHO data for 2006, there has been 39,5 million HIV POSITIVE CARRIERS, from which 37,2 million were over 21 years old, and 2,5 million were under 15 years old (WHO, 2006). In Greece, it has been noted a progressively increasing number of AIDS victims during the last years. Precisely, according to KEELPNO data, there have been recorded 410 male and 82 female HIV positive carriers the last ten months of 2008. During the same period, it has been noted 48 and 7 cases of AIDS respectively. The predominant method of

transmission of the HIV virus was the one between homosexuals (51,3%). Meanwhile, the virus transmission between heterosexuals amounted to 13,3%. The age group mostly at risk founded to be the one between 30-34 years old (19,9%) for male, and for female the one between 25 and 29 years old (22,5%) (KEELPNO, 2006). It is also interesting to mention that one out of three cases between males and one out of two between females proved to have an unspecified mode of the virus transmission. The total number of HIV positive carriers in Greece, is more than 8000, with a male percentage of 79,9% and a predominant method of transmission the sexual act with other males

(46,3%).

From the onset of the AIDS epidemic until the recent years, the disease was found to be gradually increasing both for male and female population. From the year 2000 until the year 2002, the number of new AIDS case was decreasing. Unfortunately, from the year 2002 and on, the number of HIV victims is continuously rising.

Meanwhile there was an increasing trend of the epidemic, both for men and women. In contrast from the year 2000 the number of HIV positive carriers and patients started to gradually decrease until 2002. From that point though it has been noted a continuous increase in the number of HIV positive cases until the present time (KEELPNO 2006)

In the midst of the nineties the proportion of homosexuals in the totality of HIV positive carriers and patients amounted to a rather subtle decrease, using in reported coming years and becoming stable at the dawn of the decade, remaining the principal group affected by the HIV virus. In contrast the heterosexual transmission in the general population during the years (Dardaesis, 2005), (Tsantes, 2005) The immigrants coming from the sub-Saharan area and Central and East Europe are the most common cases included in this high risk group (Nikolopoulos 2005). In any case, the percentage of HIV positive users remains in relatively low rates in Greece in comparison with other European countries (KEELPNO 2006) Scientists report that the rather increase in the numbers of HIV positive carriers and patients in our country is due to a change in sexual behavior, focusing on the fact of exchanging multiple sexual partners as well as on the fact of not taking any precautions during the sexual act. This problem is furthermore complicated by the fact of the increasing number of immigrants living in Greece coming from countries with not well organized healthcare systems.

In a worldwide scale the number of HIV positive carriers from the year 2008 amount to 39,5 million people from 70% are male. From this percentage the 38,3% are male homosexual, and 46,7% are heterosexuals pertaining in the high risk group of the general population. The majority of the HIV positive diagnosed cases concerns young adults in the age of 35 of age and older.

Knowledge, Attitudes and Beliefs of AIDS in Greece.

There are quite a few research studies regarding the investigation of knowledge, attitudes and beliefs regarding AIDS. In Greece during the first years of the epidemic it has been noted racism against HIV positive carriers and patients. During the year 1993-4 it has been undertaken a research study to investigate students' knowledge and attitudes towards the disease from Grigoriadou et al. The selected sample for this study amounted to 720 students at the age group of 18-24- years old working at OAEΔ (Hellenic Organization of Job Offering). The results of the study unfortunately indicated a kind of racism towards HIV positive carriers and patients. Precisely percentage of

24,8% reported the need to classify the identity of the individuals willing to be examined for the existence of the HIV virus meanwhile a percentage of 27,1% mentioned that HIV positive carriers and patients should be isolated for not spreading the disease and 15,1% reported to be totally not interested for the AIDS victims.

To the positive side of the results, it has to be noted that a high percentage of 94,5% thinks that a state specific policy has to be established to protect HIV positive carriers and patients, meanwhile, a similarly high percentage of 81% feels sympathetic for these people. Similar were also the results of a study undertaken three years after the above mentioned study by Meracou et al in 2002. The selected sample for this study was 702 students pertaining to the age group of 15-20 years old studying in 15 Educational and Technological Institutions residing at the wider Athens area, during the year 1997. The results of this study indicated that a high percentage of 89,65% believes that HIV positive carriers and patients are a threat for the society as a whole, meanwhile a percentage of 31,75% would feel absolutely embarrassed if it would be notified to be an HIV positive carrier. Apart of that a relatively high percentage (76,5%) reported that it would still socialize with HIV positive carriers and patients, if needed. A related study has also been undertaken by Sapountzi-Krepia in two departments of the Technological Educational Institution (TEI) of Athens in 2000. The sample selected comprised of the students of the Public Health pertaining at the age group of 18-30 years old. The results of the study indicated an unwillingness to provide care to HIV positive carriers and patients. Precisely, a percentage of 44,58% accepted to provide care to HIV positive carriers and patients, if that would be necessary, meanwhile a percentage of 53,3% refused to answer or reported vaguely in terms of reacting positively to provide care to AIDS victims. In relation to gender a percentage of 63,64% reported positively accepting to providing care to HIV positive carriers and patients, meanwhile female students in a percentage of 47,48% reported similar reactions. This is a fact that requires further investigation. Regarding the attitudes of healthcare students HIV positive carriers or patients a percentage of 76,6% reported positive attitudes, meanwhile a percentage of 21% suggested to continue their studies under special conditions. A percentage of 58,86% reported that it would discontinue any sexual relationships if he/she would be notified that his/her boyfriend/girlfriend is an HIV positive carrier, meanwhile the 34,1% reported not to be able to answer this question. Finally, regarding the provision of care to HIV positive carriers and patients, female students reported to be more willing to give assistance to those people than their male counterparts. It is also interesting to mention the attitudes of some groups of immigrants as they were investigated by Kampoura-Nifli et al (2000). Especially, during the period of December 1999 to April 2000 it has been designed and implemented an epidemiological study of a selected sample of 100 Albanian women and 100 women of Bulgarian origin at the age

group of 17-48 years old. A 59,5% reported to be uninterested for the HIV positive carriers and patients and 27% mentioned that in case they would find out that their sexual partner is an HIV positive carrier, they would abandon him/her.

Additionally, in a relatively recent research study by Katsiardanis et al. (2006) in a representative sample of the population at the age group of 10-65 years old, it is clear that there is a differentiation of attitudes of the general population towards the AIDS victims. Precisely, the 80% of the sample firmly believes that the AIDS patients should be living normally in the society as a whole and should not be kept apart. Meanwhile, a 10% of the sample mentioned that if an HIV positive child carrier, or a child AIDS patient is studying in a school with their own child would transfer their own child study at the same school with the diseased one. Another 10% of the sample reported unable to answer the questions.

The attitudes for the AIDS disease are influenced by the level of relative knowledge. The level of knowledge has been a theme of investigation between the research community. In the above mentioned research study, which was implemented in 13 Educational Technological Institutions in Athens (Merakou, 2002), it has been found that the relative knowledge regarding the disease was adequate. In fact the 72% of the questions regarding the knowledge on AIDS has been answered correctly, even if only the 43,15% of the students reported to have acquired a sufficient amount of knowledge on AIDS. Regarding the sexual behavior is quite sad the fact that a 30% of the sample (especially the male participants) is worried about being infected by the HIV virus due to unsafe sexual behavior in the past, meanwhile the 41,9% of the male sample reported to have multiple casual sexual relationships. The use of condoms has been mentioned to be common among male students in a high percentage of 80% and for female students in a percentage of 56,7%. Interesting is also to mention a 64,8% of female students didn't have any sexual relationships yet. The parameters found to be related to the level of knowledge of the disease are the age group, the gender, the school achievement in terms of good grades and the religiosity. Regarding the attitudes of the sexual behaviour of the immigrant women in the above mentioned study of Kampoura-Nifli (2000), the sexual life of these women was reported to be intense, monogamous, with the use of condoms only to prevent undesirable pregnancy and usually careless to contact sexually transmitted diseases.

Similar research studies focusing in the general population have been implemented by Kampouraki et al. (2006), in the recent years. The sample has been selected from the visitors of the "Helexpo for Health" exhibition in 2006, and groups of schools for which a seminar has been organized for AIDS. They have disseminated 171 questionnaires to participants at the age group of 16-41 years old. The results of the study were rather not encouraging, since a 19,23% mentioned that very rarely

uses a condom for protection during the sexual intercourse. The denial to use a condom has been justified by the existence of a stable relationship. The absolute use of a condom at all times during the sexual intercourse has been reported by a percentage of 63,6% of the students who completed their studies in secondary education. An additional percentage of 71,4% of youngsters under the age of 18 reported also, that they always use condoms during their sexual intercourse. It is also interesting to mention that the level of knowledge regarding the sexually transmitted diseases is quite low for participants under the age of 18, meanwhile, the age group of 26-35 years old has the highest level of knowledge regarding the sexually transmitted diseases.

Similar results have been found in the research study of Katsiardanis (2006) in a representative sample of people at the age group of 10-65 years old regarding the methods of transmission of the disease. Precisely, a percentage of 15% is not aware that the virus can be transmitted vertically from an infected mother to the child; meanwhile a percentage of 30% believes that the virus can be transmitted via the insects. The same percentage (15%) is not aware that the virus can be transmitted by a common toothbrush.

A similar research study has also been conducted by Detoraki et al (2006). During the study, there have been disseminated 600 questionnaires with close-ended questions, anonymously to 300 participants at the age groups of 26-55 years old and 300 questionnaires of TEI A at the age groups of 18-25 years old. The highest percentage of the response rate were students (18-25 years old), meanwhile the general population group of 26-55 years old were only 30,5%. More students than the general population reported to be knowledgeable about the disease ($p < 0,05$). Students use condoms in a higher percentage (58,8%) than the general population (48,8%) during their sexual intercourse, at all times. The sample mentioned that generally is not interested to learn about the methods of transmission of the HIV virus, neither about the methods of protection (general population 89%, students 72%). Meanwhile a higher percentage of students (45,2%) rather than the general population (35,1%) reported to be willing to learn more about the new Elisa and the Western blot test to detect the HIV virus. The sense of the risk of contacting the disease is rather low for the general population; meanwhile the students feel a higher risk of contacting the virus if they don't use the appropriate precaution measures. A 72,5% reported to have been in contact with health education material and the percentage of the general population regarding the same issue amounts to 64,1%. Both students and the general population reported that the health education strategies so far adopted by the state are rather insufficient and must be reformed and focused according to the needs of the general population and the high risk groups. A high percentage of both students and the general population of the city of Patras proved to be not interested to learn more about AIDS, with a higher trend among the general

population than among the students. This fact indicates a lack of systematic efforts from the part of the health authorities to impart knowledge regarding the AIDS disease.

A similar research study has also been conducted by Botsi (2006) the people calling the hotline "LAIS" during the time period of Summer 2004-Summer 2006. The sample comprised of a number of 376 individuals who during the above mentioned period used the hotline. 189 people called the hotline to ask simple information and 187 called to report a possible contamination by a sexually transmitted disease. The 187 individuals mentioned that they would have possibly contacted the sexually transmitted disease through a sexual intercourse. A 37% mentioned that it did not use a condom during the sexual act. The combination of the age group and the method of transmission of the virus indicated high percentages of contamination by the HIV virus especially for people over 29 years old. Meanwhile, the 8% of the people who called the hotline and had a sexual intercourse with an HIV positive carrier didn't use a condom and a 3% of the people who called the hotline and had an anal intercourse with an HIV positive carrier, did not also use a condom.

Finally, a research study on AIDS has been conducted by Anastasiou et al. There have been disseminated 100 questionnaires to Physicians, nurses and related health

personnel, as well as to family members and relatives of children coming to outpatient clinics or children being hospitalized for AIDS, belonging at the age group of 10-65 years olds. Unfortunately, it has been found that even nowadays there is a low level of knowledge regarding AIDS in certain categories of health personnel. Especially, there is a lack of knowledge regarding the prevalence of AIDS and the methods of transmission of the disease. This fact is closely related ($p=0,05$) to the low educational level of certain categories of health personnel. A high percentage (2 out of 3 participants of the study) is confused concerning the contamination of the virus and lethal consequences of the disease regarding the HIV virus as more contagious than the Hepatitis B virus (61%). A percentage of 95% reported as the principal method of transmission the sexual act, meanwhile a 94% answered correctly the question on the detection of the virus in the biological excretions (blood, urine, sudor, pus etc).

To conclude, the investigation of all the above mentioned research studies, there is a general lack of knowledge, either in the population at large or in high risk groups, or even in students and healthcare personnel. This is due to insufficient health education campaigns and health prevention strategies regarding AIDS, adopted by the health authorities.

Scope of the Study

The present study is focused on the investigation of the level of knowledge, attitudes and beliefs of the healthcare students of the University of Athens. This study is keen to analyse the parameters that have an impact on the disease and the role of the health authorities in preventing the

spread of the disease. The study used as a representative sample healthcare students, a fact that is of particular interest, because this group of individuals due to their knowledge and experience based on their clinical practice are expected to be more sensitized regarding the disease.

Methods

The study has been conducted with the use of questionnaires. The structure of the questionnaire comprises of four subsections. The first section focuses on demographic data. Precisely the questions included in that section inquire on the gender, age, family status, own educational level, parents' educational level and location of residence. The second section is comprised of a number of questions and the participants are called upon to evaluate their level of knowledge regarding the disease. The third section focuses on questions regarding the sexual behavior of the participants.

The fourth section focuses on questions regarding the attitudes towards HIV positive carriers and patients. Precisely, the questions are focused on investigating the role of the family and friends in accepting HIV positive carriers and patients. Finally, the fifth section refers to the attitudes regarding the role of the health authorities to prevent the spread of the epidemic.

The questionnaire was given to 200 undergraduate and graduate students of the University of Athens. The statistical analysis has been performed with the use of the Statistical Package SPSS version 13.

Results

The average age of the sample is 22 years (18-42 years, $sd=4$). The 79% of the sample ($N=158$) are female and the 21% ($N=42$) male. Regarding the place of origin of the sample, 27,1% is from Athens and its suburbs ($N=52$), the 7,3% from Thessaloniki ($N=14$), the 3,1% from Patras ($N=6$), the 34,4% from other smaller cities ($N=66$), the 17,7% from provincial non urban region ($N=34$) and finally the 10,4% ($N=20$) outside Greece. Regarding the father's profession, the 15,5% are civil servants ($N=30$), 13,4% private employees ($N=26$),

29,9% have private enterprises ($N=58$), 8,2% farmers ($N=16$), 6,2% are physicians/healthcare professionals ($N=12$), 9,3% tutors ($N=18$), 3,1% military officers ($N=6$), 4,1% labor workers ($N=8$). The majority of the sample mothers are housewives (43,8%, $N=84$), the 8,3% of the cases are civil servants ($N=16$), 13,5% ($N=26$) are private employees, the 10,4% ($N=20$) have free enterprises, the 8,3% ($N=16$) are physicians/related health personnel, the 7,3% ($N=14$) are tutors, the 2,1% ($N=4$) are labor worker and the 6,3% ($N=12$)

are pensionates. In regard to the family status of the sample, the 98% are single and 2% are married, a fact that is expected, due to the young age of sample. Regarding the family status of the sample parents, the 89,8% (N=176) are married, 6,1% (N=12) are divorced and 4,1% (N=8) are widows. With regard to the father's educational level, 21,4% have completed elementary education (N=42), the 7,1% have completed secondary education (N=14), the 27,6% have completed Lyceum-TEE (N=54), the 11,2% have completed the tertiary education (N=22) and 32,7% (N=64) are University graduates. Finally, regarding the mother's educational level, the 14,1% have completed the elementary education (N=28), the 15,2% have completed secondary education (N=30), the 36,4% have completed Lyceum-TEE (N=72), the 13,1% have completed the tertiary education (N=26) and 21,2% (N=42) are University graduates.

Knowledge on AIDS

Regarding the self-education of the knowledge on AIDS the results of the study indicated that 5,1% (N=20) mentioned to be poorly informed as far as the methods of transmission

are concerned, the 52% (N=104) mentioned to be sufficiently informed on AIDS and the 42,9% mentioned to be thoroughly informed on AIDS. Meanwhile none of the students reported ignorance on the methods of transmission of the disease.

Regarding the knowledge of the clinical symptoms of the disease, a relatively high percentage (30,3, N=60) reported to be poorly informed, meanwhile the 49,5% (N=98) and the 20,2(N=40) reported sufficiently and thoroughly informed respectively.

Similarly, for the laboratory findings it has been found that more than half of the sample is poorly or never informed. Precisely, 11,1% reported never informed (N=22), (46,5%) poorly informed (N=92), 37,4% sufficiently informed (N=74), meanwhile only 5,1%(N=10) reported thoroughly informed.

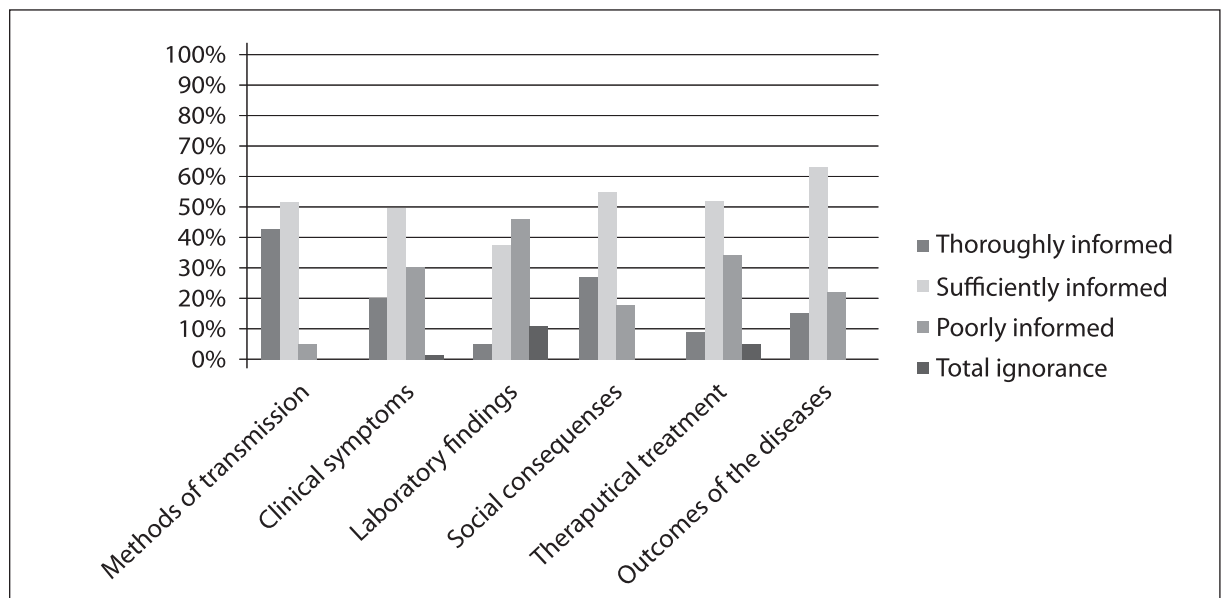
Regarding the level of knowledge on the social consequences of the disease, the 27% reported thoroughly informed (N=54), the 55% (N=36) reported poorly informed.

As far as the therapeutical treatment of the disease is

Table1: Self-evaluation on the level of knowledge of AIDS

Field of knowledge (self evaluation)	Thoroughly informed	Sufficiently informed	Poorly informed	Total ignorance
Methods of transmission	42,9% (N=76)	52% (N=104)	5,1% (N=20)	-
Clinical symptoms	20,2% (N=40)	49,5% (N=98)	30,3% (N=60)	1% (N=2)
Laboratory findings	5,1% (N=10)	37,4% (N=74)	46,5% (N=92)	11,1% (N=22)
Social Consequences	27% (N=54)	55% (N=110)	18% (N=36)	-
Therapeutical Treatment	9% (N=18)	52% (N=104)	34% (N=68)	5% (N=10)
Outcomes of the disease	15% (N=30)	63% (N=126)	22% (N=44)	-

Figure 1: self evaluation on the level of knowledge on AIDS



concerned the 5% (N=10) of the sample reported to be never informed, the 34% (N=68) reported to be poorly informed, the 52%(N=104) reported sufficiently informed and finally the 9%(N=18) reported thoroughly informed.

The last question of this section is concerning with the self-evaluation of the students regarding the level of knowledge on the outcome of the disease. The 22% of the students reported to be poorly informed (N=126), the 15% reported to be thoroughly informed (N=30), meanwhile none of the students reported ignorance on the subject.

Attitudes

Regarding the use of a condom during the sexual act, the 74,2% reported a continuous usage (n=144), 21,6% reported to sometimes use condoms (n=42) meanwhile a percentage of 4,2% reported to use a condom rarely or none of the times during the sexual intercourse (n=8). Only 10 participants mentioned to use other measures of protection, especially contraceptives (n=6), as well as interrupted sexual intercourse (n=4). Regarding the number of sexual partners during the last year, the 19,2% reported not to have any sexual partner at all, the 66,7% to have two sexual partners (n=132), the 10,1% three to five sexual partners (n=20), and 4% to have over five (n=8).

Regarding the acceptance of an HIV positive carrier in the family, the 41% (n=82) reported that they would definitely accept such an individual at home, the 49% (n=98) reported that they would rather try to accept such a person in the family, the 8% (n=16) reported that they would only in some cases accept such an individual in their home environment, and only four participants reported that they would never accept such a person in the family. As far as it concerns the acceptance of an AIDS patient in the family, the 39,4% (n=78) reported that they would definitely accept such a person in their home environment, the 41,4% (n=82), reported that they would rather accept such a patient in the family, the 14,1% (n=28) reported that they would rather accept such a person in the family environment and 5,1% (n=10) reported negatively.

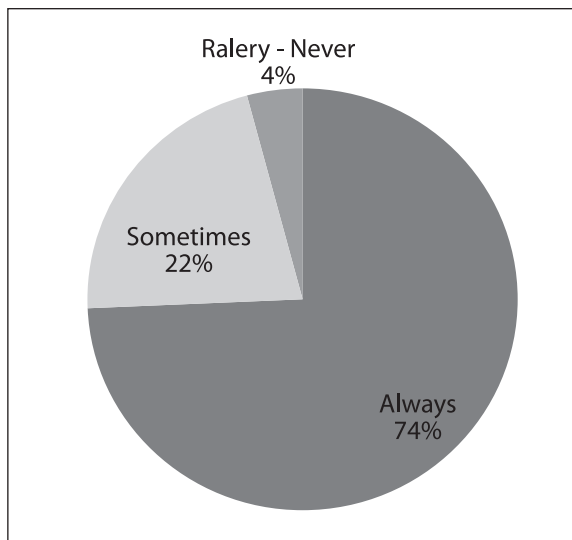
As far as it concerns the acceptance of an HIV positive carrier in a friendly social environment, the 34% (n=68) reported that they would definitely accept such a person, the 55% (n=110) mentioned that they would rather accept such an individual and the 10% (n=20) reported rather not. Finally, only two participants in the study reported negatively.

Regarding the acceptance of an AIDS patient in a friendly social environment, the 29,9% (n=58) reported that they

Discussion

The health students, participants of the study, seem to be adequately informed on the methods of transmission of the AIDS virus, meanwhile, a rather small percentage (5,1%) seems to be poorly informed on the subject matter: In contrast, regarding the knowledge on the clinical symptoms of the disease, only one to five participants reported to be thoroughly informed, with the majority of the sample to be sufficiently informed, meanwhile, one to three reported to

Figure 2: frequency of a condom use



would definitely accept an AIDS patient. The 48,5% (n=94) reported that they would rather accept such a person, the 18,6% (n=36) reported rather not and finally the 3,1% (n=6) reported negatively.

Interesting, proved also to be the results to the question of the provision of care to an AIDS patient, based on a positive or negative choice of the participants. The 33% (n=66) reported that they would definitely provide care to an AIDS patient, the 47% (n=94) reported rather positively, the 16% (n=32) reported rather negatively. Meanwhile, 4% (n=8) of the participants reported absolutely negatively.

Fascinating are also the results to the question regarding the beliefs of the students as far as the role and the policies adopted by the state to prevent the spread of the disease are concerned. More than 80% reported that the strategies implemented so far for the AIDS prevention proved to be insufficient. Precisely, 20,4% reported that the strategies adopted by the state proved to be inadequate, the 18,3% reported that the policies implemented by the health authorities isolate outside the society the HIV positive carriers and patients, the 16,1% mentioned that the role adopted by the state to combat the AIDS epidemic is rather insufficient, meanwhile the 19,4% reported that the overall strategies implemented so far by the state had a rather negative impact regarding the adoption of protective measures against the AIDS disease.

be poorly informed. Even higher is the percentage of the participants who reports poorly informed about the laboratory findings of the disease, with almost half of the sample to report totally uninformed on the subject matter:

Regarding the social consequences of AIDS, four out of five participants report to be sufficiently or even thoroughly informed on the multiple social consequences of the disease, meanwhile, regarding the therapeutical treatment of the

disease, two out of five participants self evaluates their level of knowledge as quite low on the subject matter. To the question on the level of knowledge regarding the outcome of the disease, one out of five participants reports to be either poorly informed or totally uninformed.

As far as it concerns the sexual preferences of the sample, three to four participants reported to use a condom in a common base during the sexual intercourse, meanwhile only 4% reported to never use a condom during the sexual act. These percentages are actually quite high in relation to other research studies which have been conducted in the past in Greece. Precisely, in a similar study conducted by Detoraki et al., the participants of the study used a condom in a percentage of 58,8% only. As far as it concerns the attitudes of the participants in the study towards the HIV positive carriers indicated that almost the whole sample (9 out of ten participants) would accept such individuals in their home environment. Lower is their percentage of acceptance of an AIDS patient in a home environment (80,8%). Similar are the results regarding the acceptance of an HIV positive carrier and patient in a friendly social environment. Identical proved to be also the results found in other research studies conducted in Greece with young participants, not pertaining in a special group, such as health students, meanwhile, in another study, a respective percentage of parents (10%) would change the school of their child if an HIV positive child or patient would attend the same school.

Worrying is also the fact that only one out of three participants would definitively provide care to an AIDS patient in a hospital in case he or she has the choice to

accept or deny the provision of such care. Unfortunately, this fact indicates the existence of a hidden racism towards AIDS carriers and patients. Presumably, this low percentage may be linked to the fear of transmission of the HIV virus through needle piercing, but it would be rather useful to further investigate these aberrant behaviors of the participants.

Regarding the attitudes of the students towards the role of the health authorities to the provision of HIV carriers and patients, more that 80% reported insufficient strategies adopted by the state. Overall, the role of the health authorities is mentioned to be inadequate and insufficient, leading to a further isolation of the HIV positive carriers and patients. The same results on the subject matter have been found in a study of both the general population and students of the Technological Educational Institution of Patras.

Finally, summarizing the knowledge, attitudes, and beliefs of the health students in Greece, it has been proved that the majority of the sample is quite sufficiently informed regarding the methods of transmission of the virus, the outcome and the social consequences of the disease, but is rather insufficient regarding the therapeutical treatment, the clinical symptoms and the laboratory findings of the disease. Almost all the participants reported a health sexual life and a common use of condoms.

In conclusion, the majority of the participants of the study would accept HIV positive carriers and patients in their family and friendly social environment, meanwhile a very high percentage of the sample also reported that they would unwillingly provide care to HIV positive carriers and patients if they had the choice to do so.

References

- Anastasiou A, Katsiardianis K, Katsiardani KP et.al. (2006) Knowledge for Epidemiological transmission and prevention from the HIV virus, Annotation of Answers of Representative Sample. 18th Pan-Hellenic Congress AIDS, Athens 24-26 November 2006:1.
- Grigoriadou A, Ntoytos I, Tyrodimos et al. (1995) Attitude of students of Organization for the Occupation of the Workforce (OAED) towards HIV positive carriers and patients. Hellenic Archives of AIDS. 3 (2): 146-150 .
- Dardabasis Th. (2005). Epidemiologic Analysis of HIV Infection. Data from Greece, the European and International World. 17th Pan-Hellenic Congress AIDS: 46
- Detorakis I, Bapsaboloy A, Georgiadi P et al. (2006) Knowledge and behaviors of adults and students of ATEI of the city of Patras towards the detection of the AIDS virus through the Elisa test. 18th Pan-Hellenic Congress AIDS, Athens 24-26 November 2006:106.
- Kampoyra-Nifli E, Nifli AF, Philippos-Kybeloy F et. al. (2000) Immigrants: Knowledge, attitudes and behaviors for AIDS and the other sexually transmitted diseases. Hellenic Archives of AIDS 8 (4): 291-297.
- Kampoyrakis K, Chorianopoyloy H, Syrgkani H et al. (2006) Estimate of attitudes and knowledge of general population and students concerning the sexually transmitted diseases and AIDS. 18th Pan-Hellenic Congress AIDS, Athens 24-26 November 2006:104.
- Katsiardanis K, Blachaki-Tabeli E, Katsiardani KP et. al. (2006) Knowledge and Behavior and Prejudice against AIDS. Representative sample of population answers in questions. 18th Pan-Hellenic Congress AIDS, Athens 24-26 November 2006:106
- Center for Infectious Diseases Control, Bulletin of Epidemiologic Monitoring of HIV/AIDS Infection in Greece (2006). Available from <http://www.keelpno.gr>
- Mpotsi H, Koitsoympos F, Kampoyrakis K et al. (2006) Telephone hotline "LAIS": Data of Program of Intervention/Prevention of the Sexually Transmitted Diseases and HIV/AIDS. 18th Pan-Hellenic Congress AIDS, Athens 24-26 November 2006:58
- Nikolopoulos G, Tsiara H, Long E et al. (2005) Epidemiologic data of HIV infection in Greece among immigrant population (1984-2005). 17th Pan-Hellenic Congress AIDS: 67
- Sapoytzi-Krepia D, Roypa-Daribaki Z, Dimitriadoy A et al. (2000). Attitudes and intentions of behavior towards HIV positive carriers and AIDS patients of students of TEI Athens. Hellenic Archives of AIDS 8 (1): 21-29.
- Joint United Nations Program on HIV/AIDS (2006). WHO Library Cataloguing-in-Publication Data.
- Merakou K, Costopoulos Ch, Marcopoulou J et al. (2002) Knowledge, attitudes and behaviour after 15 years of HIV/AIDS prevention in schools. European Journal of Public Health 12:90 - 93.
- Tsantes A, Nikolopoulos G, Masgala A et al. (2005) HIV Assessing the secular trends in the transmission of HIV in Greece. Sex Transm Infect 81:230 - 232.