



WESTERN HEALTH BOARD

*Forming Partnerships for Health  
Bord Sláinte an Iarthair*

***Report of Student Sexually Transmitted  
Infection***

***Risk Awareness & Behaviour Patterns  
in NUI Galway.***

***Department of Public Health***

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## Executive Summary

Sexually Transmitted Infections (STI's) remain one of the greatest global health challenges. The threat of STI's in the Irish population has escalated in recent years. Prevalence of STI's is continuing to increase in the general public despite a firm knowledge of the underlying causes and consequences of STI's among Irish health professionals. Prevalence rates of many STI's are decreasing among older age groups and increasing in the younger age groups. The majority of third level students are aged 18 to 25, which places them in a high-risk category of contracting an STI. This study aimed to assess STI risk awareness and risk behaviour among final year students in NUI Galway. STI prevalence data from the Sexually Transmitted Infections Clinic in the Western Health Board (WHB) identified students as a high-risk group with a significant and continuous increase in cases among this age group.

A questionnaire (Appendix 1) was designed to assess STI risk awareness, risk behaviour patterns among NUI Galway final year students. The questionnaire primarily consisted of a series of closed questions. A series of true and false questions were also asked. Questions were designed to:

- Determine the individuals STI risk awareness,
- Assess if a change in behaviour occurs with increased awareness,
- Assess the effects of alcohol and drugs on behaviour patterns,
- Assess the knowledge of STI treatment services in the student population.

A sample of 320 final year students was asked to complete the questionnaire. This represents 9% of the total population of final year students in NUI Galway. There was a 44% response rate.

Overall the study shows an acute lack of knowledge of relevant issues related to student's sexual health. In general there was a lack of basic knowledge levels among students regarding levels of STI's and specific infections. The lack of awareness of serious STI's such as Chlamydia and AIDS/HIV is worrying due to the serious nature of these infections. Students are unaware of their individual risk of being infected with an STI. While students perceive themselves to be at a low risk of STI infection, their sexual behaviours indicate that the majority of respondents are at a high risk of being infected. This is particularly concerning taking into consideration the high levels of students who reported engaging in risky sexual behaviour and the high levels of students who had never been tested for an STI. Therefore prevalence rates of STI's among students in NUI Galway is likely to be far higher than the WHB figures indicate.

If risk awareness is to be increased, it must feed into a change in risk behaviour patterns. In order to change the risk behaviour of students it will be necessary to increase the basic level of sexual health knowledge among students and empower students to make healthy, informed decisions regarding their own sexual health. The role of alcohol and drug use among students is an obvious influencing factor in risky sexual behaviour. However the study revealed that 34% of students had practiced risky sexual behaviour without using either alcohol or drugs. The main reasons for this was that students believed they were not at risk of being infected with an STI and they 'got carried away'. Therefore along with effective policies on reducing risky sexual behaviour associated with alcohol consumption and drug use, policies must also tackle individual risk awareness perceptions among students. While students are aware of treatment services the use of treatment services must be increased to prevent the unnecessary spreading of these infections.

## **Recommendations**

1. Third level students should be identified as a high-risk group and there is an acute need to increase sexual health promotion strategies in the University.
2. Strategies should focus on the high levels of males engaging in casual relationships.
3. The level and quality of STI information, especially in the Media, needs to be increased and targeted at third level students.
4. Strategies to promote sexual health need to begin at the first level of education and should be continuously built upon throughout each level of education to promote sexual health and prevent the spread of STI's
5. Health services need to review the way in which they are delivering STI information to students in NUI Galway. Important resources for increasing information include:
  - a) University Website
  - b) University Magazine
  - c) National Student STI Screening Day
6. Information should focus on increasing students' individual STI risk awareness, and the increased STI risks associated with alcohol consumption and drug use.
7. It is important to focus information campaigns on the implications of more serious STI's such as HIV/AIDS.
8. It is essential that students have access to condom machines when they require them and that condoms are available to students at an affordable cost.
9. A combination of sexual health promotion initiatives based in the University and the wider community would have a positive effect in empowering students to practice healthy sexual behaviour.
10. The WHB along with NUI Galway should prioritise an urgent review of sexual health need, services, sexual health promotion, and treatment of students, to prevent a crisis in student sexual health in the future.

It is evident that there is scope to improve the knowledge and awareness of STI health issues among students in NUI Galway. This should not only be targeted at third level students however as risky sexual behaviour can often begin at a far earlier stage in an individual's life. Therefore policies on sexual health should begin at the first level of education and feed into a spiral-learning pattern that is built on at each further level of education empowering students to make informed decisions about their sexual health. Health promotion can play a vital role in transferring relevant STI information and modifying the behaviour of students to produce more healthy outcomes.

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# 1. Introduction

## 1.1 Project Rationale

*‘Sexual health is a state of physical, emotional, mental and social well being related to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected and fulfilled’ (WHO, 2003).*

Sexually Transmissible Infections (STI's) are infections that are passed on from person to person during sexual contact. They are broad ranging and can be caused by viruses, bacteria and other microscopic organisms that are present in the blood, semen, body fluids or the pubic areas of the infected person. Most STI's can be cured after diagnosis with treatment, with the exception of AIDS. However it is important to get treatment early as STI's can cause serious and permanent health risks (WHB Health Promotion Unit, 2001). Early treatment will also prevent the spread of infection to other persons. STI's can result in:

- Sterility
- Stillbirth
- Brain disease
- Miscarriage
- Disfigurement
- Blindness
- Cancer
- Death

(WHB Health Promotion Unit, 2001)

## 1.2 Symptoms of STI Infection's

Many STI's have no visible symptoms. Infected people may look and feel perfectly healthy. However some symptoms do indicate an infection:

- Unusual discharge from penis or vagina
- Pain when passing urine
- Unusual sores or blisters in the genital area
- Itching or irritation in the genital area
- Pain during intercourse

(WHB Health Promotion Unit, 2001)

When a symptom is found it should be treated immediately to increase the chance of completely curing the infection without any complications (WHB Health Promotion Unit, 2001). Table 1.1 lists the causes symptoms and treatments of the most common STI's.

**Table 1.1: Common STI's: Cause, Symptoms & Treatment**

<i>Name</i>	<i>Cause</i>	<i>Symptoms</i>	<i>Treatment</i>
<b>AIDS/HIV</b>	Human Immuno Deficiency Virus	Infected people may have no visible symptoms.	No cure. New treatments are available to help control & suppress the virus.
<b>Genital Warts</b>	A virus spread by skin-to-skin contact.	Painless fleshy growth or lumps around the genital area.	A liquid treatment applied regularly or removing the warts by freezing. Annual Smear tests recommended after infection
<b>Gonorrhoea</b>	Bacteria	<b>Women:</b> 80% have no Symptoms. Some may have vaginal discharge, abdominal pain or pain when passing urine. <b>Men:</b> 5-10% have no symptoms. Most have severe pain when passing urine & a discharge from the penis.	Antibiotics clear the infection. Early detection & treatment is necessary.
<b>Hepatitis B</b>	A virus in the liver	Appear within 2-6 weeks after contact. Include poor appetite, nausea, vomiting, headaches, dark coloured urine & light coloured faeces. Chronic carriers may experience no symptoms.	Treatment includes rest & diet. Anti-viral tablets ease symptoms and promote healing.
<b>Herpes</b>	Herpes Simplex (similar to the common cold sore)	Small painful sores & blisters or itching in the genital area. Flu like symptoms, pain or burning sensation when passing urine.	No specific cure. Anti-viral tablets are also used. There are a number of new treatments for chronic hepatitis. Any person at risk may be immunised.
<b>Chlamydia</b>	Bacteria	<b>Women:</b> 80% have no symptoms. Symptoms can include vaginal discharge, abdominal pain, bleeding between periods or after sexual intercourse, a burning sensation when passing urine. <b>Men:</b> 50% have no symptoms, which include discharge from penis when passing urine.	Antibiotics treat this infection. Early treatment is essential to prevent complications e.g. infertility.
<b>Public Lice</b>	Lice living in pubic hair	Severe itching. Eggs (nits) on the pubic hair or underwear.	Treated with special lotions
<b>Syphilis</b>	Bacteria	<b>3 Stages:</b> <ul style="list-style-type: none"> <li>• Sores appear on the genital area within 1 to 13 weeks after infection</li> <li>• 2 to 6 months later a rash may develop with flu like symptoms</li> <li>• damage to heart, brains &amp; vital organs occurs if untreated.</li> </ul>	Antibiotics – early treatment is essential to prevent serious complications.
<b>Trichomoniasis</b>	A small parasite	Often no symptoms in men. Frothy vaginal discharge, itching in the vaginal area & burning feeling during urination in women.	Treated with special tablets.

Source: (WHB Health Promotion Unit, 2001).

### **1.3 Risk of STI Infection**

Any sexually active person is at risk of contracting an STI. There is no immunity to STI's; therefore any person can be infected from a single sexual contact with an infected person. Abstention from any sexual contact with an infected person is the only way to avoid infection. Multiple sexual partners will increase the risk of STI infection (WHB Health Promotion Unit, 2001). Therefore it is advisable for a person to limit their number of sexual partners. Condoms are the only safe protection from STI's. For sexually active people in a 'one faithful partner' relationship, the use of a good quality, new condom will significantly reduce the risk of infection. However, condoms do not offer total protection as they may fail during use (WHB Health Promotion Unit, 2001).

### **1.4 STI Treatment Services**

Most STI's, except HIV/AIDS, are easily treated and cured. The most important aspect of outcome is early treatment. Consultation by a GP or STI clinic is strictly confidential. There are various tests to detect an infection and these will determine the course of action to be taken. Treatment can vary from injections and tablets to lotions or creams, depending on the STI diagnosed. To avoid the further spread of disease it is vital that sexual partners are contacted and advised on treatment options.

### **1.5 STI's, Alcohol & Drugs**

The use of alcohol and drugs is extremely influential in the spread of STI infection (Health Promotion Agency, 2000). Alcohol and other drugs impair judgment and reduce the ability to make 'safe' decisions. Sexual contact while intoxicated with a partner whose sexual history is unknown could have devastating lifelong consequences. Alcohol and drugs also lead to high-risk behaviour such as: sharing needles with an infected person, tattooing and ear piercing with unsterilised equipment. Life threatening diseases including Hepatitis B, Hepatitis C and HIV/AIDS are easily transmitted in this way. Alcohol and drug users are not only at increased risk from STI's but consequently at increased risk of contracting a life threatening STI (Health Promotion Agency, 2000).

### **1.6 The Irish Situation**

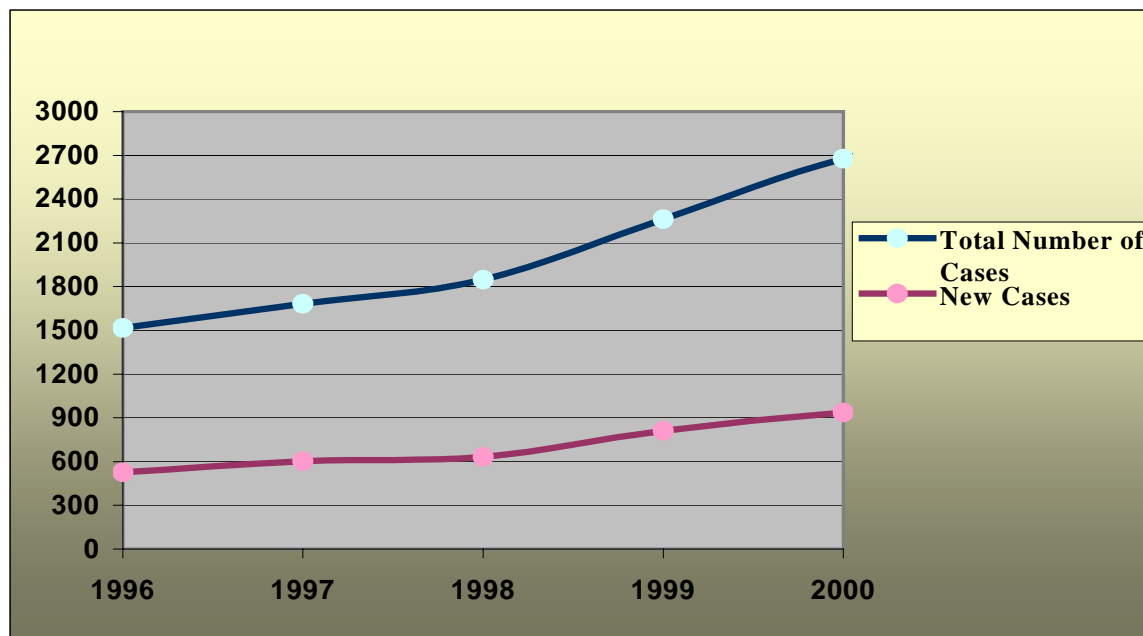
In Ireland notified STI's have increased by 85.5% between 1995 and 2000 (NDSC, 2000). Figures are increasing for each STI. The rising incidence of gonorrhoea and syphilis reported since 1995 across Europe is consistent with an increase in unsafe sex, perhaps reflecting an increase in the risk behaviour associated with the availability of antiretroviral therapy for HIV infection and a loss of impact of the HIV campaigns in the 1980's and 1990's (NDSC, 2001). There is a steady increase of incidence of STI's in homosexual males. The three most commonly notified cases of STI's in 2000 were ano-genital warts, chlamydia and non-specific urethritis. The increased incidence of syphilis is of great concern, especially as it increases the risk of HIV infection. Heterosexual females were more likely to be infected by an STI than any other group in Ireland in 2001 (NDSC 2002)

In 1994 the Minister for Education introduced a proposal to ‘draw up’ educational programmes to provide relationships and sexuality education to both primary and post-primary schools (MacHale, E., 1997). However, there are no such programmes in place in third level institutions. Furthermore there is no coordinated approach to promoting healthy sexual behaviour among third level students and it appears there is little scientific information on sexual behaviour among students in Ireland.

### 1.7 Western Health Board STI Statistics

Statistics show a significant and continuous increase in the numbers of STI cases in the Western Health Board Clinic. This is reflected in national trends (NDSC, 2000). The STI increase in the Western Health Board (WHB) is a reflection of the large proportion of young people in the region with almost 12 % aged between 15-29 years (Central Statistics Office, 1996). It is a highly mobile population, with a large seasonal tourist influx, and large numbers attending 3<sup>rd</sup> level education. It has been reported that the increase in attendance is due to improved acceptability of G.U.M. clinics, changing sexual mores, and the decreased age of sexual intercourse (WHB, 2001). The WHB patients are from all socio-economic groups and in the past 2 years there has been a marked increase in non-nationals attending /using the G.U services (WHB, 2001).

*Figure 1.1 Total No. of Cases and New Cases of STI's Reported in the WHB 1996 - 2000*



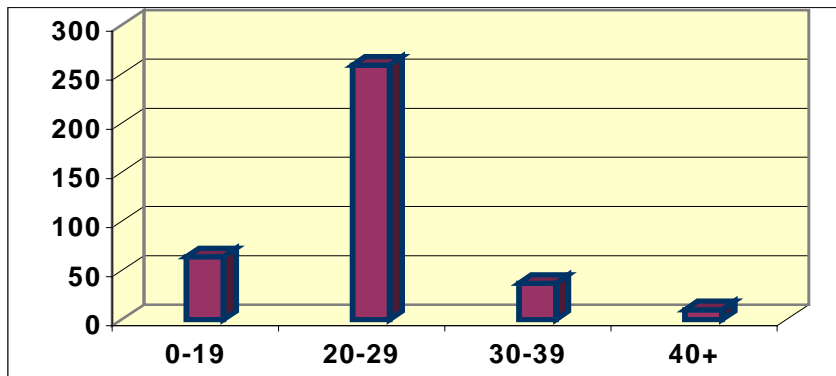
The increased numbers of attendance at the GUM clinic is a cause for concern in view of the long-term morbidity attached to such infections both physically and psychologically. Many young people are taking risks by not protecting themselves; and have a low knowledge in relation to sexual health. Social pressures to be sexually active are prevalent: alcohol appears to be a factor in risk taking. Such young people need sexual health advice, education and require learning negotiating skills in relation to sex and alcohol (WHB, 2001).

Data from trends reported in the GUM Clinic in University College Hospital Galway, raises three main areas of concern:

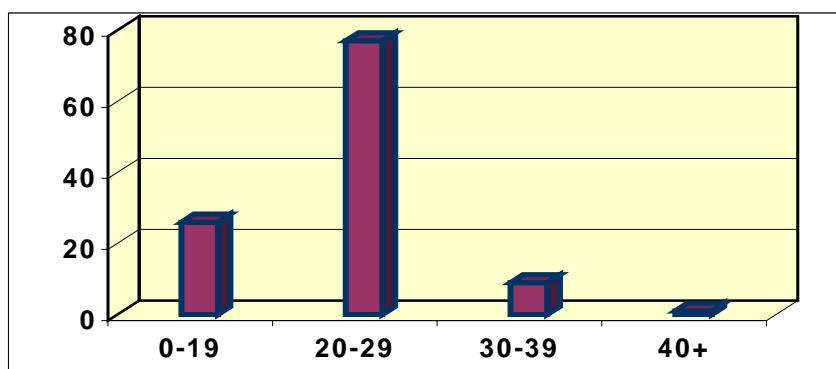
- There has been a substantial increase in S.T.I 's & HIV in the Western Health Board in the past few years.
- Genital Warts & Chlamydia are the most common infections. These may have long-term consequences for women.
- Despite health promotion and education, young people are not protecting themselves and continue putting themselves at risk sexually.

There is a clear age distribution pattern in the prevalence of many of the STI cases presenting for treatment in the GUM Clinic. The 20 -29 year old age group is at a significantly higher risk of being infected with an STI than any other age group.

**Figure 1.2: WHB Age Distribution of Ano-Genital Warts Cases 2000**



**Figure 1.3: WHB Age Distribution of Chlamydia Cases 2000**



## **1.8 Aims & Objectives**

**Aim:** To assess STI risk awareness and STI risk behaviour among final year students in NUI Galway.

### **Objectives:**

1. To analyse current STI prevalence among the student population of NUI Galway.
2. Identify any specific factors of risk in NUI Galway.
3. To assess STI risk awareness and STI risk behaviour among the student population.
4. To assess awareness of STI services and treatment facilities among third level students.

## 2. Methodology

### 2.1 Introduction

The first phase of the research was identifying the prevalence of STI's in the student population. This was difficult as there is no specific data for students. However, the WHB figures gave an indication of the prevalence of STI's in certain age groups and specialists identified students as a high-risk category in the WHB area. Statistics show a significant and continuous increase in the numbers of STI cases among this age group in the Western Health Board Clinic. This is reflected in national trends (NDSC, 2000).

A quantitative study of the student population was conducted to assess student awareness of STI risk and risk behaviour patterns. The questionnaire included questions on risk awareness, risk behaviour and knowledge of treatment services.

The questionnaire (Appendix 1) primarily consisted of a series of closed questions. A series of true and false questions were also asked to ascertain knowledge and awareness of risk. The questions were designed to:

- Determine the individuals STI risk awareness,
- Assess if a change in behaviour occurs with increased awareness,
- Assess the effects of alcohol and drugs on behaviour patterns,
- Assess the knowledge of STI treatment services in the student population.

A short pilot study was carried out on 6 students in 3<sup>rd</sup> year Arts, NUI Galway. The questionnaire was successful and there were no changes made.

### 2.2 Sampling

The study included a sample of final year undergraduate students; as these students fit into the high-risk age group and therefore have an increased risk of being infected with an STI. Also, Final Year students were chosen for the purpose of this study as they have reached the end of the tertiary level of education in Ireland. This study aims to assess their knowledge after they have completed the final level in the Irish Education system and therefore can assess the information gained by these students in relation to STI risk awareness and behaviour. Mature students were excluded from the questionnaire; as proportionally more of this group are above the high-risk age group of 20 to 29 and are at a lower level of risk from STI's.

### 2.3 Questionnaire Administration

Questionnaires were administered randomly to final year undergraduate students and included a proportional number of students from three basic faculties. A breakdown of students registered for 2001/2002 was obtained from the NUI Galway registrar's office. These were then grouped into broad categories: Arts, Science/Medicine and Law/Engineering/Commerce students.

*Table 2.1: Breakdown of Final Year Undergraduate Students in NUI Galway 2001/2002*

<b>Course</b>	<b>Males</b>	<b>Females</b>	<b>Totals</b>
Arts	486	778	1264
Science/ Medicine	567	476	1043
Law/ Engineering/ Commerce	756	428	1184
<b>Total</b>	<b>1809</b>	<b>1682</b>	<b>3491</b>

A proportional number of questionnaires were administered to each category according to gender. Questionnaires were administered inside lecture theatres before the lecture commenced. This involved asking permission from the relevant lecturers in each faculty. Before 'handing out' the questionnaires each class was briefed on its content and potential for informing any future developments in STI campaigns in the University and the Western Health Board. To avoid selection bias, the questionnaire was 'handed out' to every 3<sup>rd</sup> student. A questionnaire collection box was left outside three main lecture theatres in the Arts Concourse for three days after the survey was conducted. This allowed students who did not feel comfortable completing the questionnaire in the University to complete it in private and return it the following day. To get a representative sample size, it was proposed to carry out 320 questionnaires. This represents 9% of the total population. There were 141 questionnaires completed and returned, this meant that the study had a response rate of 44%. The data was analysed using SPSS.

## 3. Survey Results

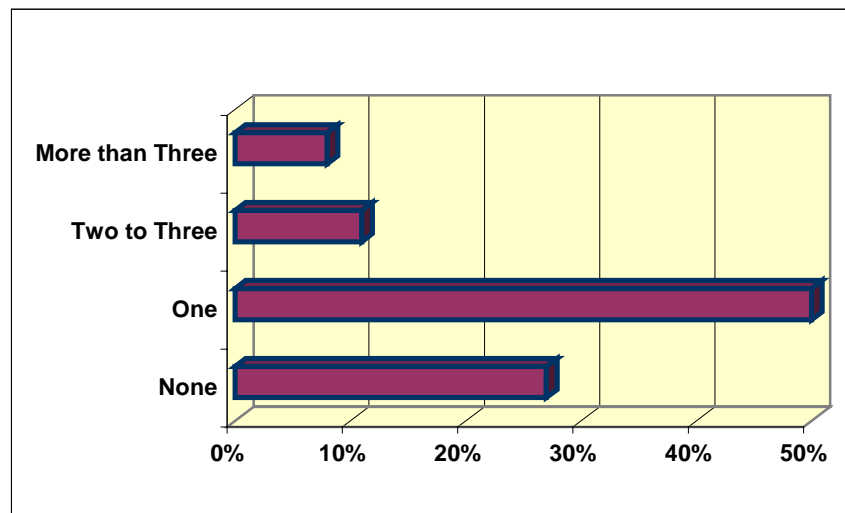
### 3.1 Socio-demographic Profile

Questionnaires were completed by 141 final year students in NUI Galway, of which 91 (65%) were female and 49 (35%) were male. This shows a large under representation of male students in the returned surveys. Over 90% of those surveyed were heterosexual, while the remainder were homosexual, bisexual or unsure. The mean age of the sample of the student population was 20.62 years (sd 2.616). Of those who responded, 95% were aged between 19 and 24 years. This places them in a high-risk category of being infected with an STI. The students were selected according to their course area; this was representative of the general final year population. A break down of the student distribution by course can be seen in table 2.1. of the methodology section.

### 3.2 Relationship Status

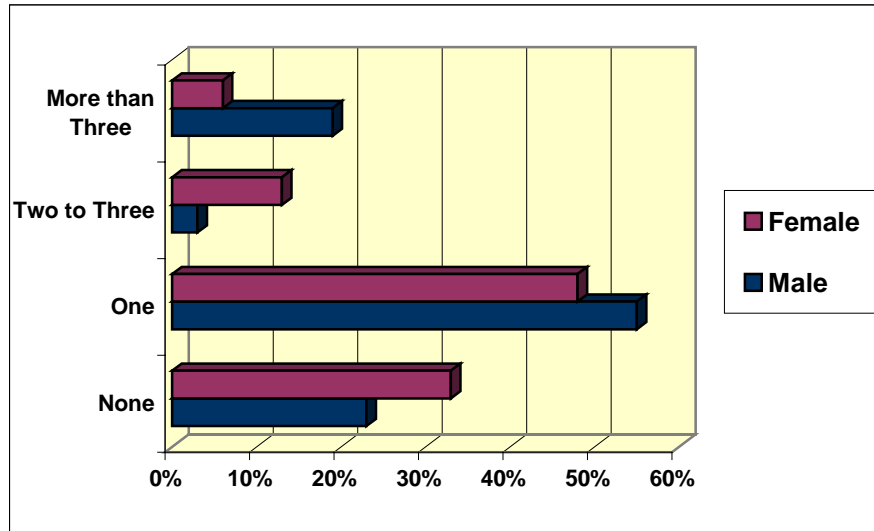
The results showed that 27% of respondents had not had a relationship in the past three months. However, 50% of the sample of students surveyed had one relationship in the past three months, almost 11% had two to three relationships and 9% had more than three relationships in the past three months.

*Figure 3.1: Number of Relationships in the Past 3 Months*



There was a significant gender difference in the numbers of males and female who had relationships in the previous three months. While more females than males had two to three relationships in the previous three months, there were significantly more males (19%) having casual relationships than females (6%).

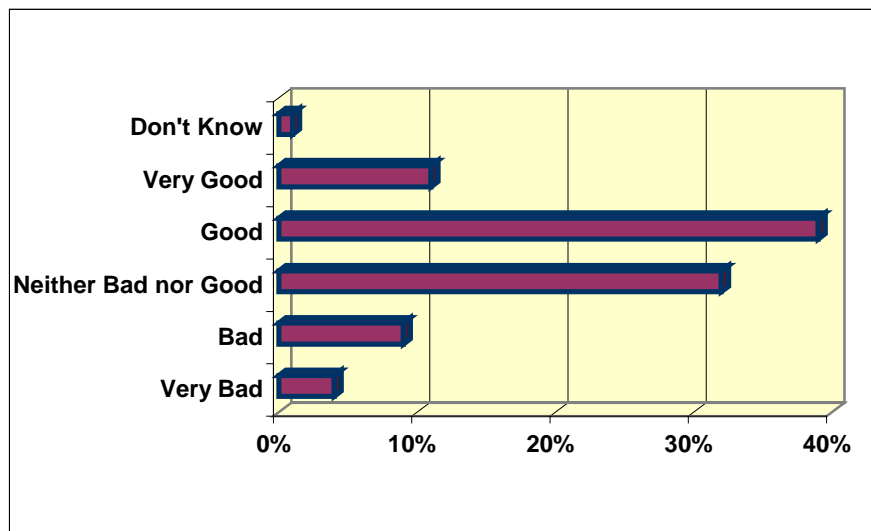
**Figure 3.2** *Number of Relationships in the Previous Three Months by Gender.*



### 3.3 Knowledge/Awareness of STI Health Risk Issues

When students were asked to rate their own knowledge of STI's., over half of the sample population rated their knowledge as good or very good, 33% rated their knowledge of STI's as neither bad nor good and 16% rated their knowledge as bad or very bad.

**Figure 3.3:** *How Students Rate their Individual Knowledge of STI's*



To identify their actual level of knowledge of STI issues in Ireland, students were then asked a series of questions to establish their current knowledge levels of the risk of STI infection in Ireland. These questions related to the most common types of STI's reported in Ireland and included:

- Q.1 Which group in Ireland has the highest prevalence of STI's?
- Q.2 Which type of contraception prevents STI's?
- Q.3 What is the most common STI in Ireland?
- Q.4 What is the least common STI in Ireland?
- Q.5 Which STI has no symptoms and cannot be cured?
- Q.6 Which STI requires early treatment and cannot be cured?

When asked which group in Ireland currently had the highest reported rate of STI infections, only 23% of students surveyed answered correctly. Heterosexual females were more likely than any other group in Ireland to be diagnosed with an STI in 2002 (WHB, 2002). One third of the students surveyed believed that the group with most STI's in Ireland for that year was heterosexual or homosexual males. The results showed that 35% of final year students stated that they did not know which group in Ireland had the highest rate of reported STI infections

**Table 3.1: Group with Highest Prevalence of STI's in Ireland 2002**

Classification	Total %
Heterosexual Male	21
<b>Heterosexual Female</b>	<b>23</b>
Homosexual Male	12
Homosexual Female	1
Bisexual Male	4
Bisexual Female	2
Don't Know	25

When asked which types of contraception prevent STI infection, 82% believed that the condom was effective. Almost 5% of females reported the pill as an effective method of preventing STI infection, 3% believed that withdrawal could also protect against STI infection and one male thought that injectable contraception protects against STI's. Of those surveyed, 10% correctly believed that none of the types of contraception given fully protected against STI's. However condoms are recommended to protect against STI.

**Table 3.2: Reported Types of Contraception that Protect against STI's**

Contraception Type	Male %	Female %	Total %
The contraceptive pill	2	5	3
<b>Condom</b>	<b>82</b>	<b>82</b>	<b>82</b>
Withdrawal	0	4	2
Injectable contraceptives	2	0	1
Don't know	4	0	2
None	10	10	10

Respondents were asked to identify the most common STI in Ireland from a list of six different STI's. A small proportion (9%) correctly identified Genital Warts as the most common STI in Ireland, whereas 41% reported that they did not know. There were significant gender differences in the responses. Of those who answered correctly 92% were female. While 2% of respondents believed that AIDS/HIV was the most common STI in Ireland, it is noteworthy that of the STI choices provided this was in fact the least common.

**Table 3.3: Most Common STI in Ireland**

STI	Total %
Chlamydia	11
Aids/HIV	2
Syphilis	13
<b>Genital Warts</b>	<b>9</b>
Gonorrhea	7
Pubic Lice	14
Don't Know	41

Almost half of respondents did not know which STI was the least common in Ireland and 30% of respondents answered incorrectly. Only 24% answered correctly from the choices provided that AIDS/HIV was the least common STI in Ireland.

**Table 3.4: Least Common STI in Ireland**

STI	Total %
Chlamydia	3
<b>Aids/HIV</b>	<b>24</b>
Syphilis	8
Genital Warts	3
Gonorrhea	5
Pubic Lice	6
Don't Know	46

Over one quarter (27%) of the surveyed population answered correctly that AIDS/HIV is the STI that has no symptoms and cannot be cured. While 46% reported that they did not know the answer and 27% answered incorrectly (Table 3.5)

**Table 3.5: STI with No Symptoms and cannot be Cured**

STI	Total %
Chlamydia	11
<b>Aids/HIV</b>	<b>27</b>
Syphilis	3
Genital Warts	7
Gonorrhea	5
Pubic Lice	1
Don't Know	46

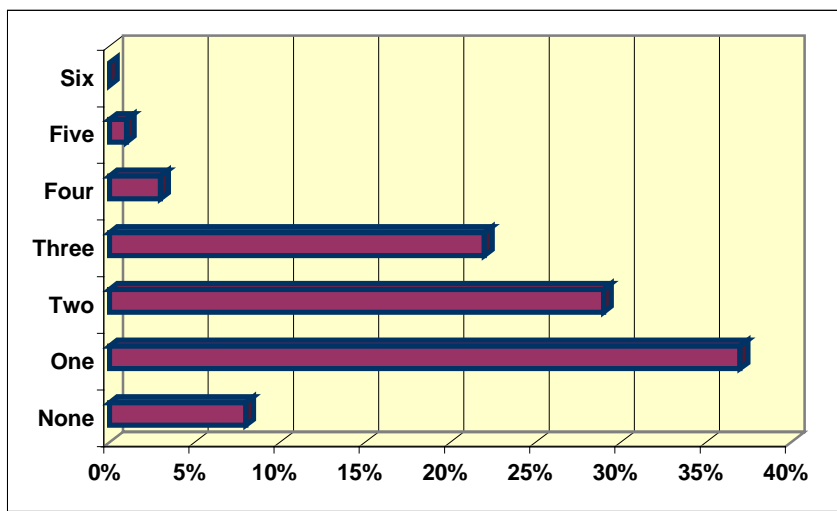
A small proportion (9%) answered correctly that Chlamydia is the STI that requires early treatment to prevent serious complications. With 44% of those surveyed reporting that they did not know and the remainder of those surveyed answered incorrectly.

**Table 3.6: STI Requiring Early Treatment to prevent serious complications**

STI	Total %
Chlamydia	9
Aids/HIV	11
Syphilis	16
Genital Warts	4
Gonorrhoea	4
Pubic Lice	7
Don't Know	44

After analysing the responses to the questions assessing students knowledge of STI's in Ireland, results show that students had an overall low level of knowledge. The results show that none of the students had answered all the six questions correctly. While 4% of students answered more than half of the questions correctly, most (88%) of the students answered between one to three questions correctly (Figure 3.4).

**Figure 3.4: No. of Questions Answered Correctly by the Students**

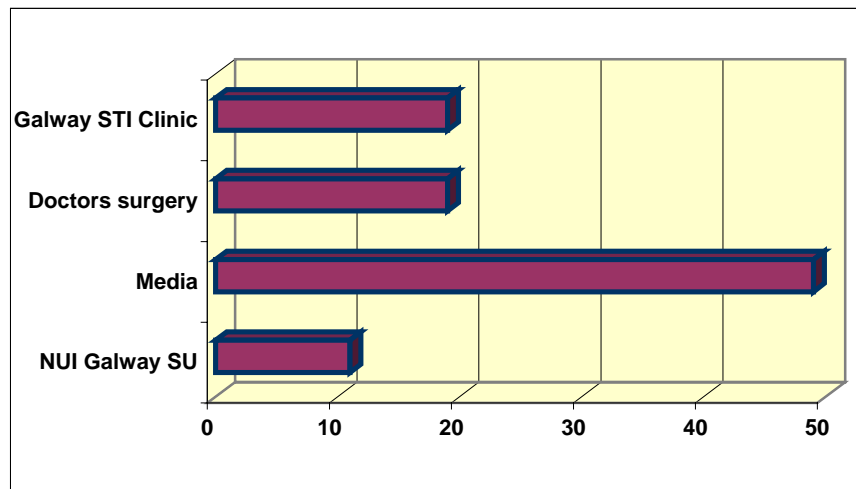


### 3.4 Information on STI's

Students were then asked a series of questions regarding their information on STI related topics. The vast majority reported that they had read information on STI's prior to the survey. However, a large percentage (26%) of those surveyed had never read any information on STI's. The sources of the information were varied and many students had received information from more than one source.

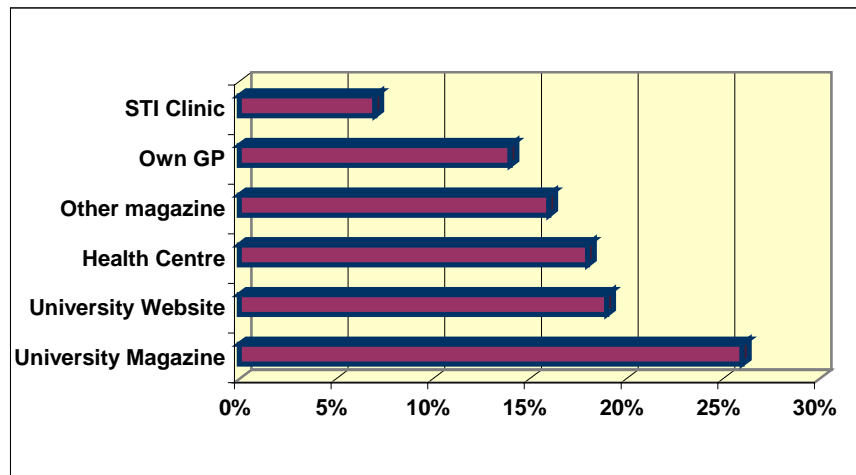
The media was cited as the most popular source of information on this subject. It can be seen from the table that only a small proportion of students received information from formal healthcare services such as the Galway STI clinic or their doctor's surgery. Only 11% had received information for the NUI Galway Students Union.

*Figure 3.5: Sources of Information on STI Issues*



When asked if they would access a university website to gain knowledge on STI's and STI treatment services, the majority of students (65%) surveyed revealed that they would. Other popular options as sources of information included a university magazine and a health centre. An STI clinic was the least popular option for accessing information on STI's (Figure 3.5).

*Figure 3.6: Preferred Source of Information on STI's*



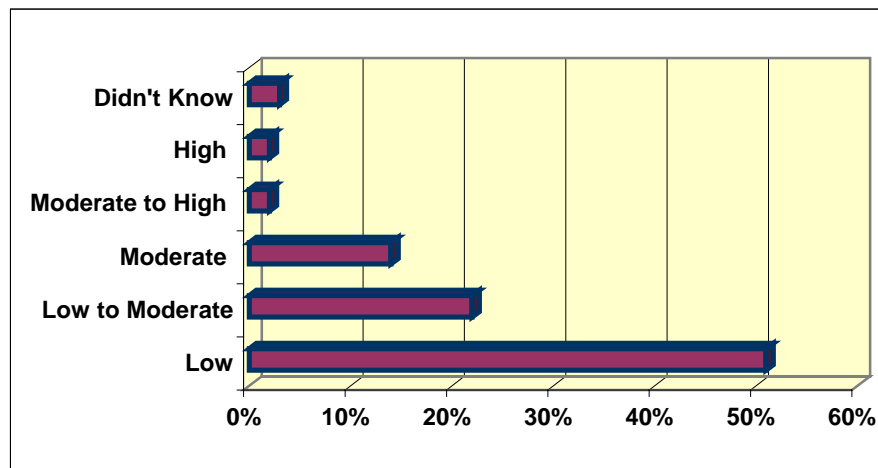
### 3.5 Treatment of STI's

The vast majority of students could identify where they would go for treatment if they thought they had been infected with an STI. However it is noteworthy that a significant number of students (14%) did not know where they should seek treatment if they thought they had been infected by an STI. When asked where they would seek treatment the majority of respondents gave a range of options. The most popular option was the Student Health Clinic in NUI Galway, followed by their own GP and then the STI clinic in Galway. While 14% of students reported that they would prefer to attend an STI clinic not in Galway.

### 3.6 STI Risk Behaviour of Students

Half of the surveyed student's believed that they were at a low risk of being infected with an STI. Some of those who reported themselves to be at low risk cited having a one faithful partner relationship meant that they would not be exposed to infection. While 2% of students rated their individual STI risk as high, it is regarded that all students in this age group are classified as a high-risk group.

*Figure 3.7: Reported Individual Risk of Being Infected with an STI*



Students were then asked to answer a series of questions relating to their own sexual behaviour. These included questions on STI testing and unprotected sexual contact with and without the use of alcohol and drugs.

*Table 3.7: Questions Relating to Sexual Behaviour*

Student's who ....	Yes%	No%	Don't Know%
Met someone who had been tested for an STI	40	34	19
Had been tested for an STI	22	70	8
Had sexual contact without using contraception	49	41	10
Had unprotected sexual contact after consuming alcohol	41	50	9
Had unprotected sexual contact after using drugs	12	76	12
Had unprotected sexual contact without using drugs or alcohol	34	54	10

A large proportion (40%) of the students surveyed had met someone who had been tested for an STI, while 22% of respondents stated that they had previously been tested for an STI. Therefore the majority (70%) of students revealed that they had never been tested for a sexually transmitted infection.

Half of the students reported that they had previously had sex without using any contraception and a small proportion of those surveyed did not know if they had ever had sex without using contraception. While only 42% of students reported always using contraception when having sex. Table 3.8 shows the main reasons identified by students for not using contraception.

**Table 3.8: Reasons for Having Sex without Using Contraception**

<i>Reasons</i>	<i>Total %</i>
Got carried away	26
There was no contraception available	24
They were not at risk	20
Their partner did not want to	11
They were too drunk	11
Their partner was too drunk	7
Didn't know	5
They were too embarrassed	4
They had used drugs	4
Wanted to get pregnant	1
Were pressurised	1
Too Expensive	1

For those who did not practice safe sex the main reasons were that they ‘got carried away’, that there was no contraception available at the time and that they did not perceive themselves at risk of being infected, particularly if they were in one faithful partner relationships. Other important reasons included that their partners did not want to use contraception and also that they were too drunk to use any contraception.

Alcohol appeared to have an influencing role on the students who did not practice safe sex. A large majority (41%) of those who previously had sex without using contraception had done so after consuming alcohol. A smaller proportion of students (12%) reported having engaged in unsafe sex after the use of illegal drugs. Many students (36%) however practice unsafe sex without using either alcohol or drugs.

### 3.7 Knowledge of Individual STI Risk

The vast majority (72%) of students surveyed revealed that they would like to increase their knowledge of STI’s. It can be seen from Table 3.9 that students feel an increase in knowledge regarding STI’s would influence their sexual behaviour.

**Table 3.9: Perceived Influences of Increased Knowledge of STI risk**

<i>Influence</i>	<i>Yes %</i>	<i>No %</i>
Decision to use contraception	82	7
Type of contraception used	81	9
Type of Relationship	70	19
Decision to have sex after alcohol	61	29
Decision to have sex after drugs	57	28
Decision to attend for STI testing	83	6

## 4. Discussion

### 4.1 Relationship Status

The results show that over two thirds of the students were having a relationship at the time of the survey or in the previous three months. Although it was not specified if these were sexual relationships, it does show the potential for over two thirds of the final year student population to be sexually active and highlights the large proportion of students that may be affected by sexual health issues. With the high rate of sexual activity among this group there is an obvious need to target third level students with strategies to promote sexual health and prevent STI's. There were significantly more males (19%) having casual relationships than females (6%). There is a need then to specifically target male students with strategies to reduce the spread of STI's.

### 4.2 Student Knowledge of STI's

There is a significant knowledge gap in final year students in NUI Galway regarding STI's. While half of respondents rated their own knowledge as good, the results show that their overall level of knowledge was very poor. For example 3.5% of the female students surveyed falsely believed that the pill was an effective method of protecting against STI infection.

The questions testing student's STI knowledge were designed to assess a basic level of knowledge. However, many of the respondents answered less than half of the questions correctly and this emphasises the acute lack of knowledge among final year students. In general there was a lack of awareness of levels of STI's and groups that were most at risk of infection. The lack of knowledge of specific infections such as Chlamydia and AIDS/HIV is a serious concern due to the nature of these infections.

This study emphasises the need to increase the ability of students to make informed decisions over their own sexual health behaviours. Evidence suggests that even basic factual knowledge about sexual health cannot be assumed among third level students. A basic level of knowledge is the foundations of healthy sexual behaviours and should therefore be prioritised in any effort to promote sexual health. The study underlines the importance of increasing basic levels of knowledge among students to prevent the spread of STI's and to promote early treatment. It is essential that students are equipped with the relevant sexual health knowledge and skills to practice healthy sexual behaviours before they need to use them. Therefore strategies to promote sexual health need to begin at the first level of education and should be continuously built upon throughout each level of education to promote sexual health and prevent the spread of STI's

### 4.3 Information on STI's

While the majority of students had previously received information on issues related to STI's, there was no one consistent source of information on STI's. The media was the main source of information and few students had received information from the Students Union or health services. Even though students had read information on STI's, their level of knowledge still remained quite poor. This shows a need to increase the level and quality of information from these sources. The preferred sources of information on STI's included the University Magazine and a University website. Both of these sources are accessible by all students and reach a large proportion of the student population, hence they are ideal resources for increasing knowledge levels. Health services need to review the way in which they are delivering STI information to students in NUI Galway as existing information is only reaching a small proportion of students.

#### **4.4 Individual STI Risk Awareness and Behaviour**

When students were asked to assess their own risk of being infected by an STI, the majority of students believed that they were at a low risk of exposure. This is a source of concern as many students feel that they are not at risk of being infected with an STI even though they are in a high-risk category and are engaging in risky sexual behaviour. Analysis of respondent's sexual behaviour highlighted the high level of risky practices that many of the students were engaging in. Half of the respondents reported having sexual contact without using contraception. The lack of available contraception was one of the main reasons given for this. Increasing the availability of contraception is an important way of reducing the levels of risky sexual behaviour and thus the levels of STI's among third level students. Surprisingly, students did not cite the cost of contraception as a contributing factor to this.

It is noteworthy that many students reported avoiding pregnancy as an equally important reason for using contraception as the importance of STI prevention. It is interesting that when asked to identify their own reasons for not using contraception only a small number of students identified the consumption of alcohol as an influencing factor. However, the findings show that alcohol had an influencing effect on those engaging in sexual contact without using contraception. A smaller proportion of students reported having engaged in risky sexual behaviour after the use of illegal drugs, however this is still significant. While the role of alcohol and illegal drugs is an obvious influence on student's risky sexual behaviour, it should also be noted that many students (34%) practice risky sexual behaviour without using either alcohol or drugs.

#### **4.5 STI Testing & Sexual Health Promotion**

A large proportion of students believed that they were not at risk of being infected with an STI when they were engaging in sexual contact even though they were not using contraception. Half of the students surveyed had previously had sexual contact without using contraception. This concern is compounded by the fact that only 22% of respondents had previously been tested for an STI. Therefore the rates of STI infections may be far greater than the WHB figures suggest, as many students may have an STI without being aware of their infection.

Almost all respondents reported that they would like to increase their knowledge of their individual risk of STI infection. Respondents also felt that an increase in their individual risk awareness would have an impact on their risk behaviour. Respondents felt that it would especially affect their decision to use contraception and the type of contraception they would use. It would also make them more likely to attend for STI testing.

At present the focus of STI health care is on cure. Health promotion offers a long-term solution to the serious risks associated with STI's. Increasing student consciousness and information campaigns in the education system are limited options to promoting sexual health among third level students. Sexual health initiatives should also focus on community based initiatives and peer education programmes. A combination of initiatives based in the University and the wider community would have a positive effect in empowering students to practice healthy sexual behaviours.

#### **4.6 STI Treatment Services**

Access to STI treatment services does not seem to be an issue according to the respondents. The majority of students knew where they would seek treatment if they thought they required it. However, with a lack of general knowledge on STI risk, the problem with treatment lies in the student's ability to identify symptoms and seek treatment at an early stage of infection.

## 5. Conclusion & Recommendations

This report has highlighted the acute lack of STI knowledge among final year students in NUI Galway. This lack of knowledge is especially evident when students are asked to assess their individual risk of being exposed to STI's. The large proportion of students who feel that they are not at risk of STI's is reflected in the large numbers of students practicing risky sexual behaviour. This study has identified several issues that need to be prioritised to promote sexual health among NUI Galway students:

1. Third level students should be identified as a high-risk group and sexual health promotion strategies should be increased in the University.
2. Strategies should focus on the high levels of males engaging in casual relationships.
3. The level and quality of STI information, especially in the Media, needs to be increased and targeted at third level students.
4. Strategies to promote sexual health need to begin at the first level of education and should be continuously built upon throughout each level of education to promote sexual health and prevent the spread of STI's
5. Health services need to review the way in which they are delivering STI information to students in NUI Galway. Important resources for increasing information include:
  - a. University Website
  - b. University Magazine
  - c. National Student STI Screening Day
6. Information should focus on increasing students' individual STI risk awareness, and the increased STI risks associated with alcohol consumption and drug use.
7. It is important to focus information campaigns on the implications of more serious STI's such as HIV/AIDS.
8. It is essential that students have access to condom machines when they require them and that condoms are available to students at an affordable cost.
9. A combination of sexual health promotion initiatives based in the University and the wider community would have a positive effect in empowering students to practice healthy sexual behaviours.
10. The WHB along with NUI Galway should prioritise an urgent review of sexual health need, services, sexual health promotion, and treatment of students, to prevent a crisis in student sexual health in the future.

The increase in STI's in Ireland will not only place additional costs on the health services in terms of time and money but will also result in hours of anxiety and potential serious illness for those who are infected. A focus on early prevention through an integrated health service and education system approach could avert serious implications for third level students in future. Policies on sexual health need to begin at the first level of education and feed into a spiral-learning pattern for all students that is carried through and built on at all levels of the educational system in Ireland.

It is important that health professionals recognise that if nothing is done to effectively promote sexual health there will be a further deterioration in the sexual health of students with profound consequences.

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## **Appendix 1.**

# Survey of Student Sexually Transmitted Infection (STI) Risk Awareness & Behaviour Patterns in NUI Galway

DEPARTMENT OF PUBLIC HEALTH, WESTERN HEALTH BOARD

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*February 2003*

Dear participant,

As you may be aware there is a steady increase in sexually transmitted infections (STI's) in Ireland. The majority of third level student's will at some stage in their life be either directly or indirectly affected by sexually transmitted infections. For this reason, this study will assess STI risk awareness and behaviour among a sample of NUI Galway students.

All your views will be treated with **strict confidentiality**. The questionnaire is very important and the results from this study will help to inform any future developments in STI awareness campaigns in the University.

The questionnaire is quite short and will only take up a few moments of your time. Please circle the number that corresponds to your answer in the box provided. Questions on sexual contact are referring to full intercourse/oral sex/anal sex/ and any sexual activities that include close genital contact.

When you have completed the questionnaire **please** return it to the collection box outside the lecture theatre.

Yours sincerely,

*Olga McDauid.*

Please complete the questionnaire by circling the number corresponding to your answer (e.g. 2) and returning it to the box provided outside the lecture theatre.

**[Your views are important and surveys are strictly CONFIDENTIAL]**

Q.1 Are you:

Male	1
Female	2

Q.2 What is your age? \_\_\_\_\_ years.

Q.3 What year of undergraduate course are you in? \_\_\_\_\_ year.

Q.4 How many personal relationships have you had in the past 3 months?

None	One	Two to Three	More than Three
1	2	3	4

Q.5 How would you rate your knowledge of STI's?

Very Bad	Bad	Neither Bad nor Good	Good	Very Good	Don't Know
1	2	3	4	5	6

Q.6 Which of the following groups in Ireland had the most STI infections in 2001?

**[Circle one only]**

Heterosexual		Homosexual		Bisexual		Don't know
Males	Females	Males	Females	Males	Females	7
1	2	3	4	5	6	

Q.7 Which of the following types of contraception protects against STI's?

**[Circle one only]**

The contraceptive pill	Condom	Withdrawal	Injectable contraceptives	Spermicides	Don't know	None
1	2	3	4	5	6	7

Q.8 What STI.....

	Pubic Lice	Gonorrhoea	Chlamydia	Genital Warts	AIDS/HIV	Syphilis	Don't know
Is the most common in Ireland	1	2	3	4	5	6	7
Is the least common in Ireland	1	2	3	4	5	6	7
Have no symptoms & cannot be cured	1	2	3	4	5	6	7
Requires early treatment to prevent serious complications	1	2	3	4	5	6	7

Q.9 Have you ever read information on STI's?

Yes	No	Don't Know
1	2	3

Q.10 If yes, where did you get this information?  
**[Please answer yes or no to each option]**

	Yes	No
NUI Galway clinic	1	2
NUI Galway Students Union	1	2
Media	1	2
Doctor (not NUI Galway)	1	2
Other [List.....]	1	2

Q.11 Do you know where you would go for treatment if you thought you had a STI?

Yes	No	Don't Know
1	2	3

Q.12 If yes, where would you go?  
**[Please answer yes or no to each option]**

	Yes	No
Student health clinic NUI Galway	1	2
Own GP	1	2
STI clinic in Galway	1	2
STI clinic not in Galway	1	2
Other [List.....]	1	2

Q.13 Have you ever.....  
**[Please answer yes or no to each option]**

	Yes	No	Don't know
Met someone who had been tested for a STI	1	2	3
Had sexual contact without using contraception	1	2	3
Been tested for a STI	1	2	3
Had unprotected sexual contact after consuming alcohol	1	2	3
Had unprotected sexual contact after using drugs	1	2	3
Had unprotected sexual contact without using drugs or alcohol	1	2	3
Had sexual contact with someone you knew had a STI	1	2	3

Q.14 If you have ever had sexual contact without using contraception, what were your reasons for doing so? **[Please answer yes or no to each option]**

	Yes	No
Contraception was too expensive	1	2
Was not at risk of getting a STI	1	2
My partner did not want to	1	2
Was too drunk to use contraception	1	2
Partner was too drunk to use contraception	1	2
Had used drugs	1	2
There was no contraception available	1	2
Was too embarrassed	1	2
Got carried away	1	2
Want to get (myself or partner) pregnant	1	2
Was Pressurised	1	2
Other	1	2
Don't know	1	2

Q.15 If you have used contraception, what were your main reasons for using it?

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Q.16 Would you like to increase your knowledge of STI's?

Yes	No	Don't know
1	2	3

Q.17 Do you think that knowing you could be at risk of getting a STI would influence.....[Please answer yes or no to each option]

	Yes	No
Your choice to use contraception	1	2
What type of contraception you use	1	2
What type of relationships you have	1	2
Your decision to have sexual contact after consuming alcohol	1	2
Your decision to have sexual contact after using drugs	1	2
Your decision to go to a clinic if you thought you were infected with a STI	1	2

Q.18 How would you rate your own risk of being infected with a STI?

Low risk	←	Moderate risk	←	High risk	Don't know
1	2	3	4	5	6

Q.19 Where would you feel most comfortable getting information on STI's?  
[Circle one only]

In a university magazine	1
Other magazine/ newspaper	2
In a health centre	3
In a STI clinic	4
From your GP	5
On a web page	6
Other	7

If other, please list \_\_\_\_\_.

Q.20 Would you use a University website to access information on .....

	Yes	No
STI's	1	2
STI treatment services	1	2

Q.21 Are you.....

Heterosexual	Homosexual	Bisexual	Don't Know
1	2	3	4

Q. 22 Further comments or suggestions

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**THANK YOU FOR YOUR ASSISTANCE**