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HEALTH RISK BEHAVIOURS OF HIGH SCHOOL LEARNERS AND THEIR PERCEPTIONS OF PREVENTIVE SERVICES OFFERED BY GENERAL PRACTITIONERS

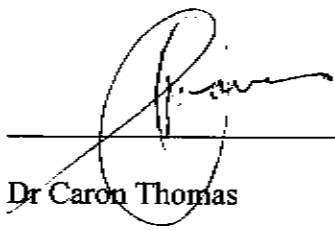
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A research report submitted to the Faculty of Health Sciences, the University of the Witwatersrand, Johannesburg, in partial fulfillment of the requirements for the degree of Master of Family Medicine.

Johannesburg 2007

Declaration

I, Caron Thomas, declare that this research report is my own work. It is being submitted for the degree of Master of Family Medicine in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any other degree or examination, at this or any other university.



Dr Caron Thomas

20 day of November 2007.

Dedicated to my sons,

Mihir and Prashil.

Abstract

A descriptive study was done involving 1139 senior high school learners from 18 co-educational public schools in Johannesburg during the first three school terms of 2002. A self- administered questionnaire was used to ascertain senior high school learners self reported involvement in health risk behaviours and their perceptions of their usage and their general practitioner's provision of preventive services to address these health risk behaviours.

In the study sample, there were 59% female learners, 53% of learners from 14 to 17 years old and learners with predominantly low income scores.

The profile of health risk behaviours revealed a high prevalence of tobacco use (39%), alcohol use (65%), drug use (15%) and sexual activity (57%) amongst adolescents from economically disadvantaged backgrounds. The predominant pattern of substance use (tobacco, alcohol and drugs) was the experimental pattern of having tried these substances. The majority of sexually active adolescents were practicing unsafe sex. Learners reported being involved in more than one health risk behaviour to varying extents with alcohol use and sexual activity (44%), tobacco and alcohol use (36%), and tobacco use and sexual activity (26%), ranking in the top three co-existing health risk behaviours. Learner's self-perceived health risk for the complications of health risk behaviours was lower with sexual activity as compared to that of substance use.

24% of adolescents attending public schools had a general practitioner in the private sector and of these 70% had medical aid cover. 83% of the doctors reported on were male, 45% were younger than 40 years, 41% were the learner's doctor for more than five years and

92% were the family doctor. 80% of learners had visited their doctor within the past 6 months, 60% had consulted on their own at least once and 86% had consulted with their parent or guardian.

49% of learners felt that the most important reason why they chose to go their doctor was for the services they provided, 27% for their doctor's personality and qualities, 12% for the way the doctor's surgery works (the system) and 11% because of where their doctor is situated.

Small percentages of learners who had a general practitioner and denied being involved in health risk behaviours, reported having received primary prevention: 28% for sexual activity, 24% for drug use, 23% for alcohol use, and 19% for tobacco use.

Learners involved in health risk behaviours, reported that their doctor was aware of the health risk behaviour in a small percentage of cases: 40% with sexual activity, 18% with alcohol use, 18% with tobacco use and 11% with drug use. 'Uncovering' of the health risk behaviour usually occurred through direct questioning in the majority of cases: 49% with sexual activity, 48% with tobacco use, 47% with alcohol use and 33% with drug use.

Secondary prevention, in terms of discussions with the doctor about ways in which to stop the health risk behaviour and ways to screen for possible complications of the health risk behaviour, occurred to varying degrees: 100% for drug use, 92% for sexual activity, 76% for tobacco use and 50% for alcohol use. Learners reported using services from their general practitioner relating to the management of the health risk behaviour to varying

degrees: 86% for sexual activity, 67% for drug use, 32% for tobacco use and 25% for alcohol use.

The research shows the profile of health risk behaviours among older high school learners from economically disadvantaged backgrounds and also highlights how these adolescents access the private sector for preventive services.

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DEFINITIONS

Adolescence: The World Health Organization defines adolescence as all people between the ages of 10 and 19. In this study, older adolescents include all learners from 14 to 21 years old at the time of completing the questionnaire

ABBREVIATIONS

AIDS: Acquired Immune Deficiency Syndrome

AMA: American Medicine Association

ATOD: This is an American acronym for alcohol, tobacco and other drug use. South African studies use the term substance abuse to include these health risk behaviours

CDC: Centres for Disease Control and Prevention

CHRS: Committee for Research on Human Subjects

GAPS: This stands for "Guidelines for Adolescent Preventive Services"

GDE: Gauteng Department of Education

HIV: Human Immuno-deficiency Virus

NTSU: Local term for sniffed tobacco (snuff)

PHC: Primary Health Care

SPHR: Self – Perceived Health Risk

STD: Sexually Transmitted Diseases

YRB: Youth Risk Behaviour

YRBSS: Youth Risk Behaviour Surveillance System

CHAPTER 1: INTRODUCTION

1.1 Background

Adolescence[1] spans nearly a decade in which young people may initiate health risk behaviours like unsafe sexual practices and alcohol, tobacco and other drug use (ATOD use). One of the earlier studies by Flischer in Cape Peninsula high school learners revealed a high prevalence of a wide range of health risk behaviours[2]. The first South African National Youth Risk Behaviour survey in 2002[3], confirms that these findings are still a valid concern for present day policy makers. Most adolescent mortality and morbidity, attributable to such health risk behaviours, are preventable. Managing the negative health consequences of these health risk behaviours is costly. Furthermore, intervening at this level will not reduce the number of young people initiating these health risk behaviours. The emphasis of adolescent health care needs to be shifted towards the provision of improved preventive services to address adolescent health risk behaviours. Primary prevention targets young people who have not initiated health risk behaviours and thus require a service that provides relevant information and education to maintain abstinence. Secondary prevention targets young people who have already initiated health risk behaviours and now require a service that will provide not only the means to minimize the complications of such health risk behaviours but also the means to effect behaviour change.

Adolescents engaged in health risk behaviours, have a wide range of resources available that have the potential to steer them towards behaviour change. Such resources are the media, schools, social and religious groups, and medical preventive services. In the last 10 years the South African Government has adopted many laws and policies that show a

commitment to promoting the health and well being of young people[3]. Most of the social and development programs are either school based or have been implemented in the government hospitals and clinics.

The general practitioner in the private health care setting has thus far been overlooked as a resource to complement and reinforce the preventive efforts in the other sectors. General practice is community based, thus providing a potentially powerful and cost effective health resource for our youth[4]. It provides easier general access to all adolescents (even those out of school), more flexible access hours and a greater potential to provide a comprehensive preventive service. General practice provides an opportunity for one-to-one counseling with the adolescent's preferred provider, physical examinations by a doctor and optimal conditions for privacy and confidentiality. Furthermore general practice can serve as a referral point to obtain free or low cost services provided by the state hospitals and clinics.

The extent to which adolescents engaged in health risk behaviours utilize the general practice resource may depend on the acceptability of their general practitioner's service, in terms of content (the services offered) and delivery (provider, site and system characteristics)[5]. Once adolescents engaged in health risk behaviours have sought help from the general practice resource, behaviour change is only possible if the health risk behaviour is 'uncovered' and responded to in an appropriate way. Uncovering can occur by 'self-reporting' where young people report health risk behaviours to their doctor without their doctor having to elicit this information. Uncovering can also be 'doctor-initiated' where information about health risk behaviours is volunteered either by direct questioning or indirectly by means of a questionnaire. When health risk behaviours have been

uncovered, the general practitioner must respond in an appropriate way by screening for co-morbidity, providing relevant education and information, immunizing at risk individuals and providing the means to effect behaviour change Another pre-requisite for behaviour change in adolescents is their risk perception (self – perceived health risk)[6]. There are many guidelines available for general practitioners to provide optimal preventive services for adolescents like those provided by the American Medical Association's, Guidelines for the provision of Adolescent Preventive Services (GAPS) [7].

Overseas guidelines recommend that all adolescents have an annual, confidential preventive service visit, during which primary care physicians screen, educate and counsel adolescents on a number of biomedical, emotional and socio-behavioural issues[7]. In South Africa national guidelines for the delivery of adolescent preventive services in the primary health care setting are not available. Preventive services occur when adolescents present for routine medical care. Overseas research indicates that screening rates for health risk behaviours improves when national guidelines have been applied but not to recommended levels[8]. This highlights the fact that other pre-requisites are necessary to improve screening rates.

The research aims to provide a profile of health risk behaviours and describe older adolescent's usage and their general practitioner's provision of preventive services to address these health risk behaviours. Only those health risk behaviours that are especially "sensitive" issues for adolescents will be assessed, namely unsafe sex practices and alcohol, tobacco and other drug use. The research is in a setting where national guidelines and a designated annual preventive visit do not exist. The research explores the way in which young people in public schools are attending primary health care facilities

specifically in the private sector (and not the customary attendance at government clinics and hospitals). An overview of this interaction between learners with the least resources and private general practitioners with ample resources has the potential to emphasize the specific challenges all medical services are faced with when attempting to optimize preventive service delivery to young people. It is important to note that even young people from better economic circumstances may still have poor resources due to the fact that they may not have access to funds to see their general practitioner without informing their parents about their visit. Furthermore, formally enlisting primary health care workers in the private sector may become a necessary component in future government initiatives to improve the quality of adolescent health needs in the face of an overburdened public health system. The aforementioned reasons and the feasibility of researching learner's utilization of both private and public preventive services, is the motivation to select only the general practitioner in private practice for study. Specific factors like self – perceived health risks, the utilization of their general practitioner's service, the 'uncovering' of health risk behaviours and the way in which the general practitioner responds were examined. Optimal preventive service provision is based on the AMA GAPS recommendations[7].

1.2 Aim

To provide a profile of health risk behaviours among older adolescents and describe their usage and their general practitioners provision of preventive services to address these health risk behaviours.

1.3 Objectives

The primary objectives are:

1. To determine the pattern of learner's health risk behaviours, the presence of co-existing health risk behaviours and learner's self - perceived health risk.
2. To determine learner's utilization of the general practitioner's service in terms of content (types of services) and delivery (doctor, site and system characteristics), and learner's consulting patterns.
3. To determine the extent to which general practitioners deal with health risk behaviours in terms of primary prevention to maintain abstinence, the uncovering of health risk behaviours and secondary preventive efforts for sexual activity and ATOD use.

The secondary objectives are:

4. To determine the demographics of the high school learners in terms of age, gender and occupation of parents or guardians (as a possible indicator of economic status).
5. To determine the demographics of the general practitioner that the learner usually consults in terms of perceived age and gender.

In summary, general practitioners in private practice see adolescents from economically disadvantaged backgrounds to varying extents. These consultations often relate to the complications of adolescent health risk behaviours and frequently occur after failure to access the overburdened primary health care services provided by government clinics and hospitals. An understanding of the dynamics involved when young people from poorer backgrounds access the general practice resource may provide valuable insight for future strategies to optimize preventive health services especially for those most vulnerable to the complications of unhealthy lifestyle choices.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

General practitioners do not usually seek out young people to actively promote their health probably because they are generally perceived to be physically healthy and do not attend frequently. This age group, however, initiates health risk behaviours that are not only linked to the leading causes of death but also have the potential to affect their future health. With adolescents the 'inverse care law' applies with those most in need being least likely to seek help[9]. In South Africa the mortality data indicate that many of the child deaths that are occurring are preventable. In the 10 to 14 age group road traffic accidents is the leading cause of death, with homicide / violence and suicide featuring in the top causes[10 11]. Contributing factors are alcohol and other drug use. Unsafe sexual practices during adolescence, increases the risk of HIV/AIDS in adolescence and adulthood[12]. Tobacco use initiated during adolescence, has the potential to cause heart disease, stroke, chronic lung disease and cancer[13]. Even though the interest lies in adolescent sexual health, many of the health risk behaviours often co-exist[14]. It therefore makes sense to deal with the health of young people in a more holistic way. Other countries have attempted to deal with the health of their youth by developing national guidelines that can be applied in the primary health care setting. Dealing with the adverse health complications of adolescent health risk behaviours at the tertiary prevention level is costly, and will ultimately not reduce the burden of disease. So the emphasis must be at a primary and secondary prevention level. Primary prevention can potentially reduce the number of young people initiating health risk behaviours. Secondary prevention can identify those at risk and through the appropriate screening, education and counselling reduce the morbidity and mortality associated with adolescent health risk behaviours.

2.2 Assessing Adolescent Health Risk Behaviours

In South Africa, many studies have confirmed the high percentages of adolescents involved in health risk behaviours[2]. These studies, however, emphasized specific health risk behaviours and were based in specific geographical areas, therefore making it questionable whether the data are applicable to all young people in South Africa. In America, the Center for Disease Control and Prevention has developed the Youth Risk Behaviour Surveillance that provides vital information on a wide range of health risk behaviours among young people on a national level, to more effectively target and improve adolescent health programs[15]. This 2 yearly survey has been successfully conducted since 1991. In South Africa our First National Youth Risk Behaviour Survey[3] that provides provincial and national data and is comprehensive in terms of surveying a range of health risk behaviours, was conducted in 2002 and subsequently in 2005. It is planned to repeat this survey every 3 years.

A large local study of 7340 high school learners in the Cape Peninsula revealed that a wide range of health risk behaviours is prevalent amongst our youth[2]. The study was done in 1992 in coeducational public schools with a normal curriculum (not with a specialized curriculum like Arts and Drama schools). Historically, there were 3 education departments (depending on the race of the learners) at this time. Grades 8 to 12 from sixteen schools took part in the study. A self- administered questionnaire was completed during a normal (30 to 45 minutes) school period. The questionnaire covered sexual behaviour, substance abuse and violent and suicidal behaviour. This study provided a profile of a wider range of adolescent health risk behaviours unlike the previous studies that looked at specific health risk behaviours. This study allowed us to compare our data with international levels for specific health risk behaviours. Subsequent studies could indicate trends with the various

health risk behaviours. Acquiring prevalence data of a wide range of health risk behaviours is a necessary first step in designing effective interventions. This study also showed an association between various forms of health risk behaviours like alcohol consumption, smoking and unsafe sexual practices. Other studies[14] have shown an association between various forms of health enhancing or preserving behaviours like physical exercise, the use of seat belts and healthy eating habits. These observations make a lifestyle approach to adolescent health problems necessary.

The Cape Peninsula study[2] showed that 18,1% of learners indicated that they smoked at least one cigarette a day and 41,2% had smoked previously. 53,2% reported ever using alcohol. 7,5% had smoked cannabis and 0,5% reported a lifetime use of injected drugs and 17,4% indicated a previous episode of heterosexual intercourse.

Despite this study providing us with valuable data relating to the prevalence of health risk behaviours amongst our youth, there were limitations. This was a cross-sectional study providing no insight into any longitudinal aspects of adolescent health risk behaviours. This aspect is particularly relevant in adolescent health risk behaviours because they are typically experimental and transient. It was not broad based covering only one geographical location. Other limitations were the possibility of under- or over- reporting, the exclusion of important groups like absentees and school drop-outs, and those attending specialized schools (like Arts and Drama schools and single gender schools), special schools for learners with special needs (like the visual and hearing impaired), and private schools.

In 2002 the Department of Health in partnership with the Department of Education conducted the first broad-based and comprehensive national survey relating to adolescent health risk behaviours[3]. The survey was broad-based to include 10 699 learners from 23 schools from each of the nine provinces in South Africa. It covered the prevalence of a wide range of health risk behaviours namely: intentional and unintentional injuries, violence and traffic safety, suicide-related behaviours, behaviours related to substance abuse (alcohol, tobacco and other drugs), sexual behaviour, nutrition and dietary behaviours, physical activity and hygiene related behaviours. Such a survey can provide us with objective data, both at a provincial and a national level, which can define important health problems amongst our youth, assist health policy decisions and determine the priorities when implementing specific health programs.

The study sample comprised of secondary school learners from grades 8 to 11 attending government public schools. Data collection through a self-administered questionnaire occurred between August and October of 2002. 31% reported ever smoking, 49 % reported ever consuming alcohol, 13% ever using cannabis and 41% had had sex. When comparing these figures to results 10 years ago in the Cape Peninsula study, the risk profile is deteriorating (of note that one study is regional while the other is national). When comparing the 1992 Cape Peninsula results to the Western Cape figures of the 2002 Youth Risk Behaviour survey, this still holds true, with tobacco use increasing from 41 to 51%, alcohol use from 53 to 63%, cannabis use from 7,5 to 19,6% and sexual activity from 17 to 38%.

The First National South African Youth Risk Behaviour Survey is a landmark study because it has established a baseline for future studies and analysis of trends of risk

behaviours amongst our youth. It is however, still school-based thus excluding important subgroups like absentees, school-leavers and those attending other secondary education institutes. Despite schooling being compulsory between the ages of 7 and 15 in South Africa, the behavioural profiles may be reflecting a healthy learner effect because premature school leaving may be high. The adolescent behavioural profiles in community based studies in primary health care facilities like government clinics and general practices may reveal higher incidences of risk behaviours.

In the United States, the CDC's Youth Risk Behaviour Survey, [15] provides data on a national level as well as data for each state. In 1991 70% of learners reported ever smoking as compared to 63,9% ten years later in 2001. Alcohol use decreased from 81% to 78,2%, cannabis use increased from 31,3% to 42,4% and sexual activity decreased from 54,1% to 45,6% over this decade. Such data available for each state assists decision-making in school-based intervention programs.

Risk perception is a necessary, but not the only, pre-requisite for behaviour change[6]. Overseas studies show that adolescents engage in more risk taking than adults not due to age differences in risk perception but rather to age differences in psychosocial factors that influence self-control. Adolescence is a vulnerable period because there is a disjunction between novelty and sensation seeking and the development of self-regulatory competence. This disjunction is biologically driven, normative and unlikely to be remedied through education.[16] Studies show that even though adolescents have knowledge about the potential health risks of their behaviours, they do not translate this into behaviour change.[17] This suggests that young people will only be capable of behaviour change as they get older and self regulatory mechanisms kick in, and perhaps

the best way of dealing with the problem is to focus on addressing the harm associated with risk taking behaviours.

2.3 Assessing Adolescent Preventive Services in the Health Care Setting

Intervention programs to deal with adolescent health risk behaviours are predominantly school-based because schools are the easiest way to access young people. The South African Schools Act of 1996 makes schooling compulsory for all 7 to 15 year old[18]. Schools provide an ideal venue for research, health education and health promotion interventions and assessment of these interventions. It is also true that adolescents involved in health risk behaviours have poor school attendance thus reducing the potential benefit from school-based interventions. School leavers, who may have the highest prevalence of health risk behaviours and their complications, need to access resources other than school programs. Reducing the health risk behaviours of adolescents is a challenge that is best accomplished with the support of other preventive services. Other community based primary health care facilities that service all young people, not only school attendees, need to complement the efforts of the school based interventions. In South Africa, these community-based primary health care facilities are predominantly made up of government clinics and private general practices.

The health risk profiles in these community-based settings may differ significantly because they not only serve school attendees, but also those who have left school as a result of the consequences of health-risk behaviours. In these settings primary prevention in terms of health education to maintain abstinence from health risk behaviours can reinforce the efforts in schools. Secondary prevention which targets young people who have already initiated health risk behaviours, now require in addition to school-based efforts, an intervention in the health care setting. Such a service must provide not only the means to

minimize the complications of health risk behaviours but also the means to effect behaviour change.

In South Africa, the youth from economically disadvantaged backgrounds utilize the government clinics because they are affordable. The ideal conditions for a young person seeking a comprehensive preventive care visit are not always met in this setting. General practitioners are seeing young people from poorer backgrounds to varying extents.

In South Africa, the government clinics and private practices run independently, of each other. The primary health care physician working in the clinic and the general practitioner working in his private rooms have organized their preventive services independently, of each other. There are no national guidelines specific for the South African context to follow. At present adolescent preventive services are delivered when young people present for acute medical problems.

Assessing adolescent preventative service delivery by general practitioners in the health care setting is difficult. Firstly, adolescent preventative services are predominantly school based in terms life skills programs being incorporated into the normal school curriculum. Secondly, young people from disadvantaged backgrounds are using government clinics to a large extent because of affordability and thirdly the absence of national guidelines being applied in a designated visit.

Research relating to the evaluation of adolescent preventive service delivery in the health sector is sparse. Studies focus on the public sector (predominantly government clinics) and focus on specific health risk behaviours.

In the United States, Health Maintenance Organizations tend to the preventive needs of all young people irrespective of their financial status. Here primary health care physicians, provide a single service where guidelines can be used for optimal preventive care. The American medical Association's Guidelines for Adolescent Preventive Services, is being applied in preventive health service delivery for young people[7]. This occurs in a series on annual health visits between the ages of 11 and 21. Research in this setting is aimed at comparing preventive service delivering in health maintenance organizations that are using the guidelines and those who do not. Longitudinal studies in particular health maintenance organization can compare preventive service delivery over time and uncover specific problem areas that need improvement.

In a survey mailed between September 1996 and April 1997[8] to all pediatricians practicing in a California group-model health maintenance organization, doctors were asked about their screening and education practices on 34 recommended services and the actions taken with adolescent patients who have engaged in a health risk behaviour. The study showed that these doctors provided preventive services to adolescent patients at rates below recommendations but at rates greater than physicians in other practice settings. It also highlighted the need to improve areas that contribute most to adolescent mortality and to improve preventive service delivery to those who screen positive for health risk behaviours.

Young people have fewer resources to access for their health needs than adults. We have to go beyond just providing more services for young people. The way in which young people utilize the health service depends on how acceptable the service is to them. Striving to make health services 'adolescent friendly' has made research in the preferences of young people in the health care setting an important undertaking. Overseas studies show that

adolescents have specific needs that differ from adults accessing preventive services. These specific needs relate to provider characteristics (doctor personality and qualities), the type of services required and the programmatic characteristics (the system). An American study shows[5], that young people are aware of the factors contributing to their decisions to seek care. It highlighted that provider characteristics are of greater importance than site or system characteristics. The study also showed that young people are concerned with disease transmission in the health care setting. Another American study showed that urban adolescents are most concerned with being respected and treated well by their primary care provider. They also wanted to be listened to, their problems taken seriously and to be treated with dignity and respect[19]. In South Africa there is a paucity of data on the specific needs and circumstances of young people when accessing preventive services in the private sector. NAFCI, the National Adolescent Friendly Clinic Initiative, is a joint initiative between "Lovelife" and the National Department of Health[20]. It is a program that has been developed to improve the quality of adolescent health care at the government clinic level. For many reasons, young people find it difficult to access information and services from government clinics. This problem is being addressed by encouraging clinics to seek NAFCI accreditation which aims to transform existing clinics through various stages of clinic self-appraisal, the clinic improvement process and external clinic assessments to achieve either a Silver Star award (at least 60% of the NAFCI criteria) or a Gold Star award (more than 90% of the criteria achieved). At present, many clinics are at various stages of this transformation process. As yet, the private sector has not been involved in this transformation process. The possibility exists for the inclusion of private general practitioners, who also service young people from economically disadvantaged backgrounds, to apply for NAFCI accreditation. Perhaps these initiatives in the South

African setting will spur on extensive research relating to young people's specific needs in the health care setting.

CHAPTER 3: METHOD

3.1 Study Design

A cross-sectional descriptive study.

3.2 Study Population

The study population consisted of senior high school learners, (grades 10, 11 and 12) attending secondary public co-educational schools with an ordinary curriculum (that is without any special curriculum like Arts, Drama, or a Technical curriculum) in Johannesburg. These inclusion criteria are based on the fact that these learners represent the majority of learners attending late secondary school[18].

The learners were mainly from the lower and middle socio-economic groups. The population is in an urban setting, with learners coming from residential suburbs as well as informal housing settlements. The majority of the learners were Black but Whites, Indians and Coloureds were also represented. Racial data was not specifically sought. The research was conducted over the first three school terms of 2002.

3.3 Study Sample

Using the 2001 listing of schools published by the Gauteng Department of Education (GDE)[21], all schools that were eligible to take part in the study were selected. An eligible school is a government secondary co-educational school with an ordinary curriculum. In 2002, Johannesburg schools were designated into four educational districts, a system which is now not used. In Johannesburg, 124 schools were eligible to take part in the study, (27 in Johannesburg North, 17 in Johannesburg East, 18 in Johannesburg West and 62 in Johannesburg South). To achieve a sample size of 1000 learners, 4 schools from Johannesburg North, 3 schools from Johannesburg East, 3 schools from Johannesburg West and 8 schools from Johannesburg South were randomly selected (a total of 18

schools). The sample size of 1000 is based on a 0,4 utilization rate of the general practice resource at an accuracy of at least 0,065 for each district. The sample size of 1000 from four districts is based on an estimate of the proportion of learners who have general practitioners. Within the four educational districts, with an expected proportion of learners with general practitioners to be 0,4 the two-sided 95% confidence interval for each of these proportions will extend no further than 0,065 from the observed proportion. Thus with 95% confidence we can estimate the proportion to an accuracy within 0,065. Figure 3.1 shows the details of the sampling process for schools to participate in the research.

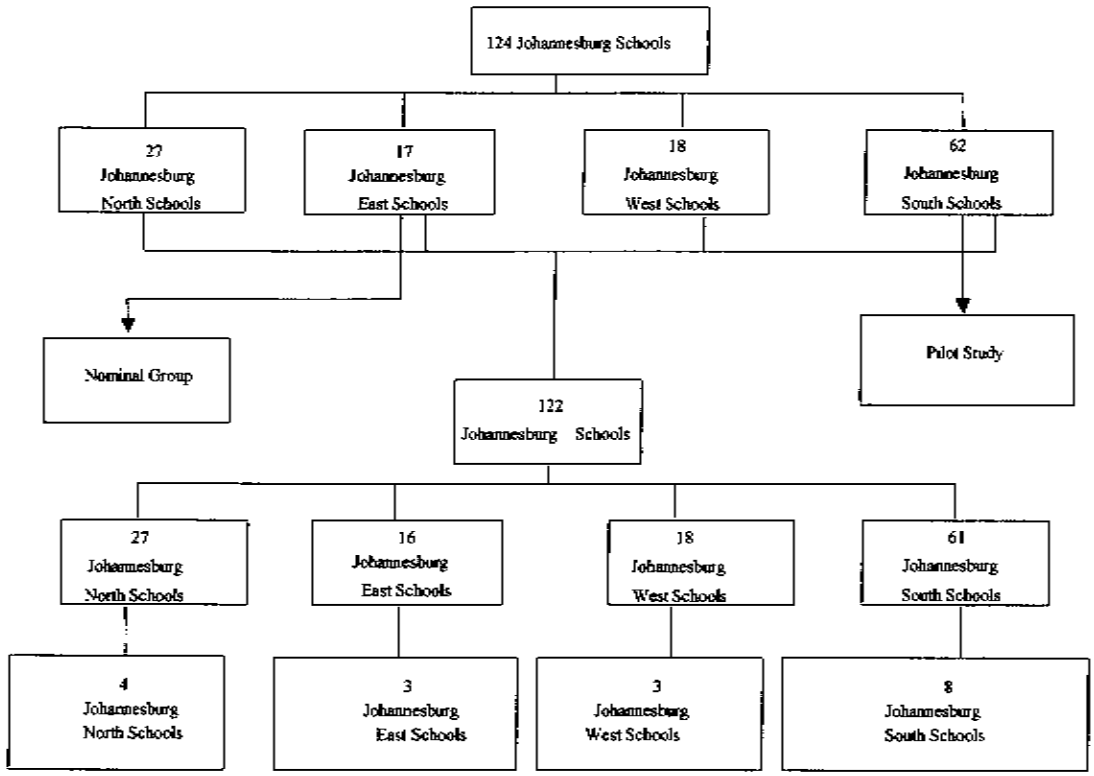


Figure 3.1: Sampling Process for Schools

Of the 124 schools eligible, 2 schools were selected, the first to take part in the nominal group discussion and the second to take part in the pilot study. These two schools were excluded from the final sampling process.

Of the 122 remaining schools, a proportional number of schools for each educational district were randomly selected. The study sample was chosen in this way to try to achieve proportional representation by each educational district in Johannesburg, with fair representation of each school in each district and with a representative proportion of male and female learners.

The principal of the school was contacted by telephone or by registered mail. The principal was then faxed or mailed a letter of invitation (**Appendix 1**) to take part in the study, a permission letter from the GDE (**Appendix 2**) and a letter from the CRHS (**Appendix 3**). If the principal agreed to the school taking part in the study, a contact person at the school provided information regarding the number of classes in grades 10 to 12. The number of classes in each grade varied from one school to another, but this information was sought for the sole purpose of randomly selecting just one class from each grade. No record of the number of classes in each grade was retained. One class from each grade was randomly selected. Only the class lists of the randomly selected classes were obtained. Information regarding the other classes that were not selected was not specifically sought. The researcher and research assistant addressed each of these classes to provide a broad outline of their role in the research. Each learner, 21 years and younger, was given an information letter and consent form (**Appendix 4**) with instructions on how to fill them out. Those learners who were 18 years and older could sign the consent forms themselves. The consent forms were collected within 2 weeks and a research day appointment was made for each class.

3.4 Research Tools

3.4.1 The Nominal Group Discussion

The first school that was randomly selected and agreed to take part in the research assisted in the nominal group discussion. The nominal group technique[22] is a consensus method to assess unanimity on an issue. It is a highly structured meeting to gather information from relevant experts (high school learners) about a given issue. The researcher facilitated this nominal group discussion consisting of 11 learners a proportional number from each of the grades selected to take part. The nominal group discussion focused on defining the criteria for an optimal preventive service by general practitioners in addressing health risk behaviours. Each participant was provided with a Nominal Group Information Leaflet (**Appendix 5**) outlining the information needed. The information gathered in this nominal group discussion confirmed that the GAPS recommendations for the delivery of preventive services in the primary care setting were applicable to the study group. The nominal group discussion also provided insight into the way in which the final research questionnaire had to be structured and worded to make it easily understandable for high school learners.

3.4.2 The Pilot Study

The second school that agreed to take part in the research assisted in completing the pilot study questionnaire (**Appendix 6**). The pilot study indicated the number of learners that are likely to obtain consent and present to complete the research questionnaire. It highlighted the problem areas with obtaining consent. It also highlighted difficulties when administering the questionnaires in terms of the layout and phrasing of the questions. Of note was the omission of the written instructions to learners to a more informal verbal format that allowed more time to complete the questionnaire.

3.4.3 The Research Questionnaire

Learners in each class filled out a self- administered questionnaire in 54 separate sessions with both the researcher and the research assistant being available at each session to deal with any problems. In most cases the research was conducted in classrooms, with the exception of a few larger classes where the research was conducted in the school hall, library or laboratory. In all cases examination circumstances were simulated for uniformity.

The self-administered research questionnaire (**Appendix 7**) was designed to meet the objectives outlined previously. It was in everyday language, in a format familiar to learners. It consisted of six sections.

In Section A, the first five questions dealt with obtaining the demographic data of the learners. An exit point allowed only those learners who have a general practitioner in the private sector to continue with the rest of the questions in Section A and B.

Sections C to F dealt with each of the health risk behaviours in turn. In the study sample, only a proportion of the learners were involved in health risk behaviours and of these only a proportion had general practitioners. All learners had to answer the first few questions of each of these sections which dealt with the pattern of the health risk behaviour and the self - perceived health risk. The remaining questions in Sections C to F were only for those learners who have general practitioners. They dealt with the uncovering of the health risk behaviour, discussions with their doctor about the health risk behaviour and the services used at their doctor's rooms.

The demographic details of the learner and the general practitioner were sought in order to describe the learners who took part in the study and the doctors about whom learners were reporting.

The nominal group discussion assisted in formulating the criteria that adolescents consider when choosing their general practitioner. Learners were given the opportunity to describe any other criteria not listed in the questionnaire. To facilitate analysis, these questions were divided into doctor services, doctor personality and qualities and the way the surgery works (system). The only open -ended question in the research questionnaire was related to assessing what changes, if any, learners would like their doctor to make that will make them visit more easily.

Health risk behaviour patterns were assessed using some of the parameters used in the CDC 's health risk behaviour survey[15]. Learners were asked about type and frequency of use to ascertain a profile of the health risk behaviours. The reporting of health risk behaviours refers to having ever been involved in health risk behaviours, either current or past.

The questionnaire also dealt with assessing the self-perceived health risk which previous research has indicated is a necessary but not sufficient ingredient in behaviour change. Learners were asked to report firstly, if they felt that a particular, health risk behaviour "may be dangerous to their health" and secondly, if the health risk behaviour "has already made them unhealthy."

The 'uncovering' of health risk behaviours by a preventive service is mandatory to initiate secondary preventive measures. The way in which the 'uncovering' occurs, that is by 'self-reporting' without the doctors influence or 'doctor initiated' by direct questioning or indirectly in a questionnaire is therefore necessary to ascertain. Learners were asked if their doctor knows about the health risk behaviour and how the doctor found out about it.

The American Medical Association's (AMA) Guidelines for Adolescent Preventive Services (GAPS)[7] was used to specify the content of preventive services. It was also used to assess general practitioner's response to health risk behaviours. Those learners involved in a particular health risk behaviour were asked to report if particular topics related to the health risk behaviour were discussed with their doctor and if they used particular services related to the health risk behaviour from at their doctor's rooms.

Seventeen schools used the original English questionnaire. The questionnaire had to be translated into Afrikaans (**Appendix 8**) at the request of one Afrikaans-medium school that also usually writes their matriculation examination in Afrikaans. None of the other schools requested the Afrikaans version or any other translation. The Head of Translation Studies at the University of the Witwatersrand issued a certificate to confirm that the translation was adequate (**Appendix 9**).

3.5 Ethics

The protocol was submitted to the Committee for Research on Human Subjects and the clearance certificate number M011116 was issued on 23/01/01 (**Appendix 3**) and the protocol was approved by the Post Graduate Committee (**Appendix 10**). Permission was obtained from the Gauteng Department of Education (**Appendix 2**) to have access to

schools in Johannesburg. The principal's permission to conduct the research at the school was also sought.

The research involved young learners aged 14 to 21. All learners were given an information letter and consent form to have signed before being allowed to participate in the research. If the learner was 18 years or older they could sign the consent form themselves. The younger learners had their consent forms to be signed by their parents or guardians.

The learners that took part in the research were required to report personal information about health risk behaviours. In order to address the possible questions and concerns relating to these issues, each learner received an information package. This included "Stop Smoking: make a fresh start", a publication by the National Council against Smoking, "What your friends don't tell you", a publication by the Gauteng Department of Social Services and "Lovefacts" a publication from Lovelife. All learners also received a list of the contact details of people and associations that may be able to assist them.

3.6 Data Collection

On research day the researcher and research assistant presented to the school with a list of those learners that were eligible to take part in the study. Consent forms were previously checked and approved. After checking the learner's names off the list, learners were given a research questionnaire and allowed to enter into the research venue. Once all the learners were seated a brief explanation was given on how to fill out the questionnaire properly, in terms of choosing only those sections applicable to them. The research team was present throughout each session and learners were instructed to request help in clarifying any

questions. Practical difficulties like too few desks and a lack of writing material had to be dealt with. With each session, the whole process improved and eventually ran smoothly. After completing the questionnaires each learner was given an information package related to adolescent health risk behaviours.

Completion of the questionnaires occurred under the same conditions of a written school examination. This was to ensure that there was no discussion between learners and that learners felt reasonably comfortable that their responses to questions were not in open view of everyone. The time allocation was an average school period of 30 minutes. Before learners started filling in the questionnaire, a reminder about the reason for conducting the study was explained.

Instructions were given about the way in which to answer the questionnaire, especially the exit points from each section where a learner did not have a general practitioner or was not involved in particular health risk behaviours.

The learners were reminded not to fill in their names anywhere on the questionnaire to ensure anonymity. Each learner was reminded to collect an information package relating to adolescent health risk behaviours as well as a list of contact details of organizations and people involved in adolescent health problems. The teachers and principals were available, but did not play an active role. This ensured that learners did not feel intimidated when completing the questionnaire.

3.7 Data Analysis

All questionnaires were put in batches according to the educational district, school and grade. Each questionnaire was individually coded. The educational district was represented

by either one of the letters S, N, E and W representing Johannesburg South, North, East and West respectively. As seen in Table 4.1, a number was assigned to each school from each educational district. The grade was included in the coding with either a 10, 11 or 12. Each questionnaire in each class was assigned a number from 1 upwards. For example, **N1 (10) 13** represents the first school in the Johannesburg North district selected for participation in the study. The questionnaire is the 13th one in the grade 10 class of this school. This coding was essential to facilitate data capturing at the Medical Research Council in Pretoria. The data was analyzed using the EPI Info Program. Frequency tables and bar charts were used to present the data describing various aspects of the study sample. In order to present the data in a meaningful way, differences between subgroups could only be highlighted if percentages were compared because all the n values differed for each subgroup. This also meant that non responders could not be shown on the tables. Statistical significance of observed data in subgroups was determined using the two tailed p values with a 95% confidence interval.

3.8 Limitations

The following limitations may apply:

1. The research was conducted in Johannesburg. It is not broad-based, so it may not be applicable to all adolescents in other areas of Gauteng Province or other provinces in South Africa. This lack of generalisabilty was unavoidable due to the restraints on resources available to conduct the research. All attempts, however, were made to ensure that the study sample was representative of most young people attending secondary schools.

2. Only some of the adolescent health risk behaviours were selected for study. The research is therefore not comprehensive to include all adolescent health risk behaviours.

3. The research is limited to high school learners from 14 to 21 years of age. In South Africa, attending school is compulsory for all 7 to 15 year olds. The dropout rate for high school learners engaged in health risk behaviours may be significant. The incidence of health risk behaviours in schools may therefore be significantly lower than the general population in this age group. In this way selection bias may have been introduced.

4. Public schools were selected. This excludes all high school learners attending private schools and high schools with specialized curricula (Arts and Drama) and for those with special needs (the mentally and physically impaired). The vast majority of the adolescents attending high school are located in our public schooling system with a normal curriculum.

5. The absenteeism rates for high school learners are high, especially for those involved in health risk behaviours, so a "healthy learner effect" may occur. In this way selection bias may have been introduced.

6. The research relies on the self-reporting of health risk behaviours and the receipt of preventive services in the general practice setting. Adolescents' self-report of the care they have received is a valid method of determining the content of preventive health service delivery, but is only accurate within 5 to 7 months of receipt of the

service[23]. The questionnaire is based on the Centers for Disease Control and Prevention's (CDC), Youth Risk Behaviour Surveillance System (YRBSS)[15] in order to obtain information on health risk behaviours especially in terms of self-reporting health risk behaviours and determining the patterns of the health risk behaviours.

7. The extent of underreporting and over-reporting cannot be determined, although the Youth Risk Behaviour Survey Questionnaire, on which the research questionnaire was based, demonstrates good test-retest reliability[24].

CHAPTER 4: RESULTS

4.1 Response Rates

Fifty-four schools had to be approached in order to get 20 schools to participate which is a 37% response rate from schools. As shown on Table 4.1 a total of 2287 consent forms were handed out to each learner in the classes that were selected for participation in the study.

Table 4.1: Learner Response Rates According to Schools

South	1		68
South	2		91
South	3		75
South	4		50
South	5		68
South	6		59
South	7		44
South	8		75
North	1		67
North	2		47
North	3		61
North	4		47
East	1		41
East	2		83
East	3		103
West	1		38
West	2		72
West	3		51
TOTALS			**1139**

The drop-off occurred at two levels, firstly those who did not have consent to take part in the study and secondly, those who were absent on research day. A total of 1269 consent forms (55%) were returned that were filled out correctly and in time for research day. On

research day, 1139 learners filled out the research questionnaire that is 90% of those who had consented. The response rate of those who were invited and those who completed the research questionnaire was 50%.

Of the 1139 learners taking part in the research, 47% (530 learners) were from the Johannesburg South, 19% (221 learners) were from the Johannesburg North, 20% (227 learners) were from Johannesburg East and 14% (161 learners) were from Johannesburg West educational districts.

4.2 Result Presentation Format and Remarks

It was possible to report on information about particular educational districts, schools and even particular classes in each school. This approach was not taken because of the practicality of presenting so many sub-groups where numbers would be small. The data relating to those learners who are not involved in health risk behaviours was not reported on in this research report, except in the context of doctors providing primary prevention to this subgroup. This omission was intentional, firstly because the data addressing the research objectives had to be presented first and secondly because of the practical difficulty in reporting the huge volume of data not essential in meeting the requirements for this research report. The research questionnaire covered the important features of four different health risk behaviours and many aspects of the interaction of learners with their general practitioners. In order to present all this data in an easily understandable form, all the results were grouped and presented in the following way:

In Section A, the results of all learners (1139) that took part in the study were presented. This included the demographics, health risk behaviour profiles and patterns, and self-

perceived health risks. The information had to be extracted from different sections of the research questionnaire.

Section A: All Learners

Learner Demographics:

Section A, Questions 1-5

Health Risk Behaviour Profiles and Patterns:

Section C, Questions 1-3

Section D, Question 1

Section E, Questions 1-2

Section F, Question 1

Self Perceived Health Risk:

Section C, Questions 4-5

Section D, Questions 2-3

Section E, Questions 3-4

Section F Question 1

In Section B, the results of the subgroup (271 learners), namely those learners who have a general practitioner, were presented. The same aspects as in Section A were covered, except that in this section the differences in the two subgroups (the doctor group and those without a general practitioner) were highlighted.

Section B: Learners with General Practitioners

Learner Demographics of the Doctor Group:

Section A, Questions 1-5

Health Risk Behaviour Profiles of the Doctor Group:

Section C, Questions 1-3

Section D, Question 1

Section E, Questions 1-2

Section F, Question 1

Self Perceived Health Risk of the Doctor Group:

Section C, Questions 4-5

Section D, Questions 2-3

Section E, Questions 3-4

Section F Question 1

In Section C, all aspects relating to the general practitioner were presented. Only the271 learners with general practitioners completed the relevant sections of the research questionnaire. General practitioner demographics, various consulting patterns, factors influencing learner's choice of general practitioner and the way in which general practitioners dealt with the health risk behaviours were presented.

Section C: Learners Interaction with their General Practitioners

General Practitioner Demographics

Section A, Questions 6,8,9

Consulting Patterns

Section A, Questions 7,10-17

Learners choosing their General Practitioners

Section B, Questions 1-5

General Practitioners Dealing with Health Risk Behaviours

Section A, Questions 18

Section C, Questions 6-9

Section D, Questions 4-7

Section E, Questions 5-8

Section F, Questions 2-5

4.3 Results

Section A : All learners

4.3.1 Learner Demographics

In 2001 the GDE institution list, which divided Johannesburg into four educational districts, was a useful way to randomly select schools from all over Johannesburg. Today, however, Johannesburg schools are no longer designated to these educational districts. Results have therefore been presented for Johannesburg as a whole, and not using the previous Johannesburg educational districts. The only significant finding that emerged relating to the educational district was that the learner's doctor's consulting rooms was more likely to be in the same district.

For easier access to adolescents, learners in particular grades were entered into the study. Leaner age, however, provide more substantial findings as apposed to the learner grade.

It was important to ascertain if the majority of learners answered an English research questionnaire in their preferred language. This was confirmed with 62% (710 learners) responding that English was their preferred language. It was also important to establish that if any school requested a translation that it was truly warranted. This was also confirmed with 100% of learners reporting Afrikaans as their preferred language in an Afrikaans-medium school that requested an Afrikaans translation of the research questionnaire. In

English –medium schools, the preferred language indicated by the learner does not correlate well with the ethnicity of the learners. It is for this reason that learner preferred language was not used as a learner variable when presenting results. The learner demographics selected to present the data were learner gender, learner age and income score because these variables highlighted more significant results.

In order to present the data in a meaningful way, the learner age was categorized into 'younger' learners (14-17 years old) and 'older' learners (18-21 years old) with almost an equal number of learners in each group. Learner gender was assigned either male or female. The income score was categorized into 'lower' income scores (0-3) and 'higher' income scores (4-12) also with almost an equal number of learners in each group.

4.3.1.1 Learner Age

When entering the data only the year achieved was used. For example, 15 years and 11 months was entered as 15. Figure 4.1 shows the learner age distribution.

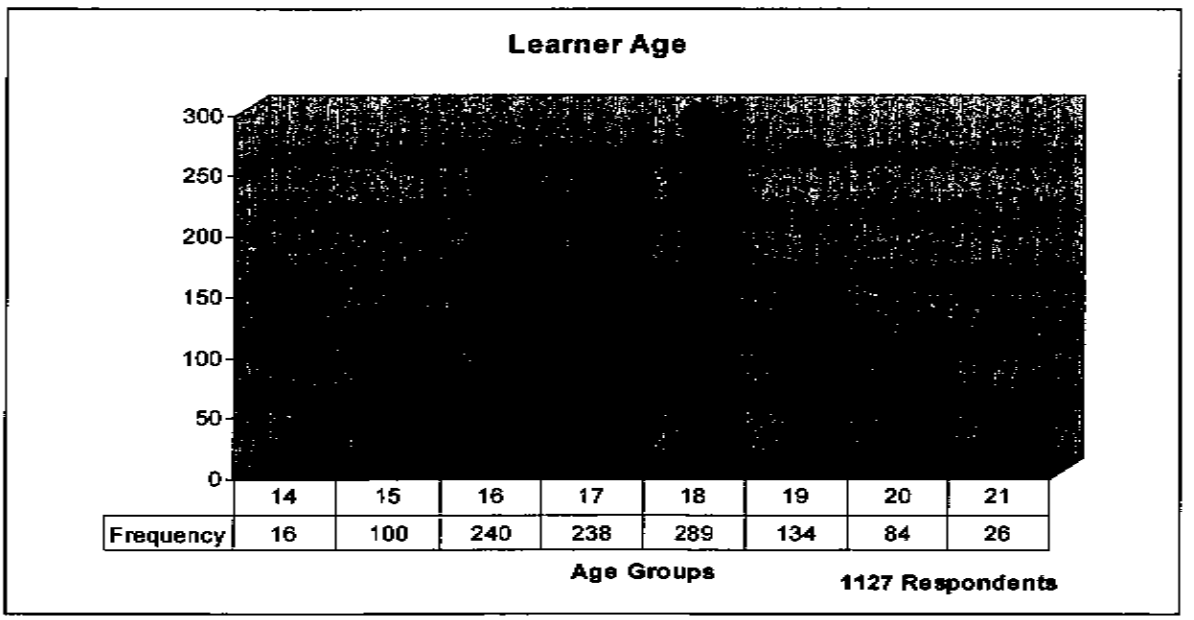


Figure 4.1: Learner Age

Of the 1139 learners, 99% (1127 learners) indicated their age in years and months. 53% (594 learners) are in the younger age group and 47% (533 learners) are in the older age group. It is important to note that 21% (244 learners) are 19 to 21 years old (above the age expected for a Grade 12 learner starting formal schooling at 6 to 7 years old). The 95% confidence limits for the younger learners is 49, 7% and 55, 7% and for the older learners, 44, 3% and 50, 3%.

4.3.1.2 Learner Gender

Of the 1139 learners, 1138 learners indicated whether they were male or female. Of the respondents, 59% (675) of the learners were female and 41 % (463) were male. The 95% confidence limits for learner gender are: Males: 37,8% and 43,6%, Females: 56,7% and 62,2%.

4.3.1.3 Income Scores

Learners attending government schools are predominantly from the lower and middle socio-economic groups. It was necessary, to confirm this in the study sample and possibly relate income scores to other variables. Income level was very difficult to assess because learners generally do not know the family income. In order to get an idea of family income, the learner had to enter as much detail about the occupations of their father, their mother and/or their guardian if they were contributing to the family income. The term "guardian" meant any person who supports the learner and not necessarily the legal term. Each occupation was then given a score. The total score was out of 12. Table 4.2 shows the work description for each income score.

Table 4.2: Income Scores based on work description

Score	Description
0	Unemployed (also deceased, prisoner, housewife)
1	Pensioner (also disability, grants, donations, beggar, police reserve)
2	Manual laborer (also domestic worker, taxi driver, security guard, cleaner, tea lady)
3	Clerical work (also receptionist, cashier, salesman)
4	Professional/entrepreneur (also lawyer, taxi-owner, manager, nurse, teacher)

In learner's responses, three scores were sought out for 3 possible sources of income. In this way the maximum was 12. Some learners were being supported by their grandparents' pension only. This response attained a score of two (0+1+1). It is important to note that this method only provides an income score and may not correlate with socio-economic levels. Even though this method has limitations, the figure shows us that most of the income scores are low, which is expected because the learners are from government schools. Figure 4.2 shows the distribution of the income scores.

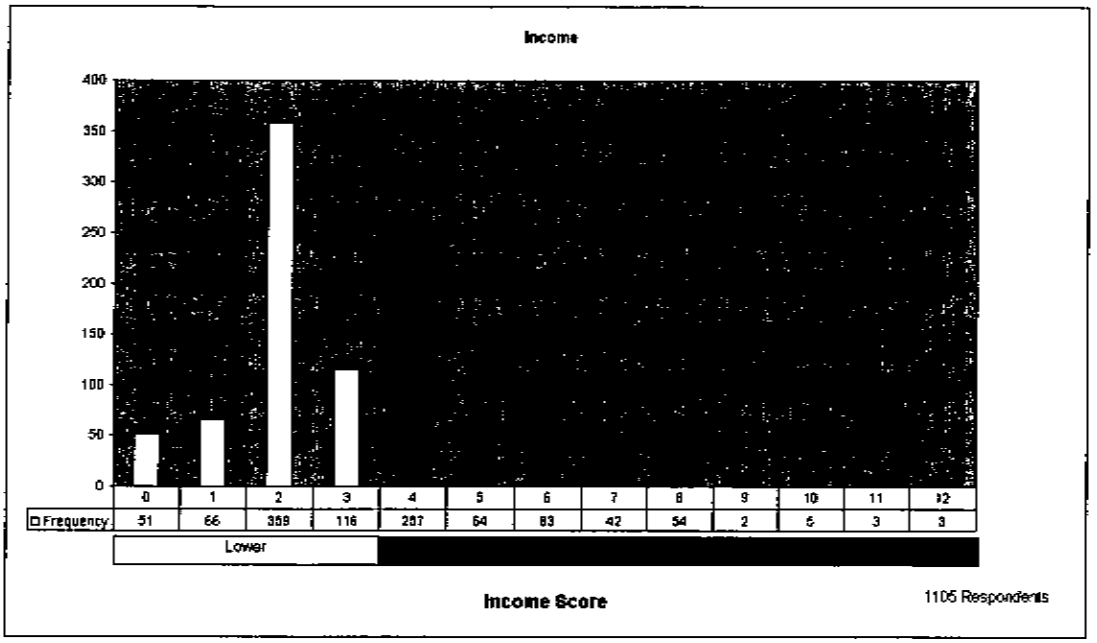


Figure 4.2: Income Scores

Of the 1139 learners, 97% (1105) indicated what work their father; mother and/or guardian did, if they were supporting them. 51 learners reported no income source, which is difficult to interpret. Interpretation of the income data, therefore, may not be accurate. 54% (592 learners) reported lower incomes scores while 46% (513 learners) reported higher income scores. The 95% confidence limits for income scores are: lower income score: (LL= 50,6% and HL= 56,5% and higher score: (LL=43,5% and HL= 49,4%).

4.3.2 Health Risk Behaviour Profiles and Patterns

In this section, the data relating to the profile and patterns of the health risk behaviours will be discussed with regard to the learner demographics. Percentage tables have been used to compare the various health risk behaviours. Table 4.3 shows the learner demographics and the health risk behaviour profiles.

Table 4.3: Learner Demographics and Health Risk Behaviour Profiles

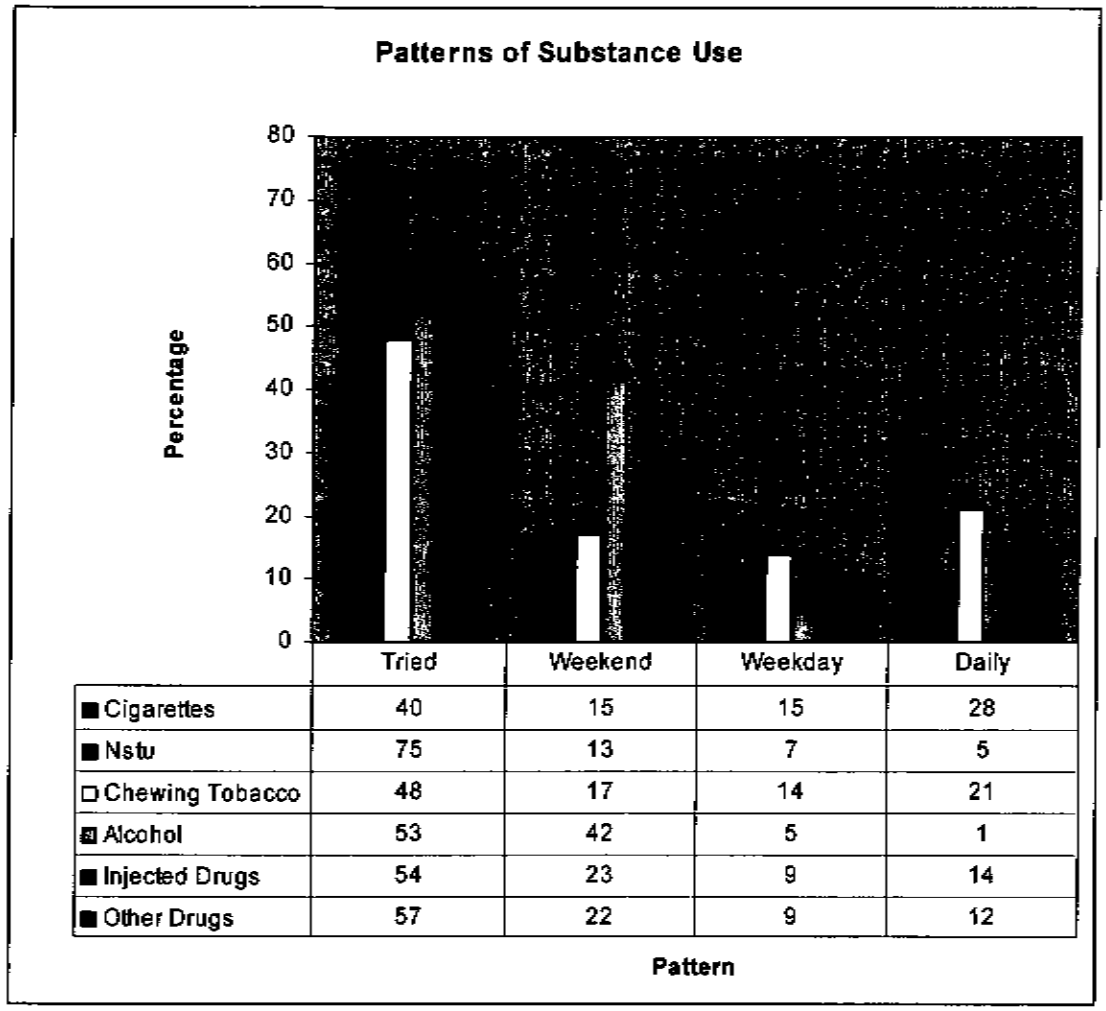
Male (n=463)	50%	232	77%	357	24%	112	73%	340
Female (n=675)	31%	208	57%	383	9%	63	45%	304
Non Response (n=1)		1		1		0		1
Younger (n=594)	36%	214	61%	365	14%	85	41%	246
Older (n=533)	41%	221	69%	368	16%	84	73%	388
Non Response (n=12)		6		8		6		11
Lower (n=592)	34%	204	65%	384	13%	78	61%	363
Higher (n=513)	45%	230	66%	337	18%	93	51%	260
Non Response (n=34)		7		20		4		22

The highest reported health risk behaviour was alcohol use (65%), followed by sexual activity (57%), tobacco use (39%) and drug use (15%). The gender percentages show more males than females to be involved in all health risk behaviours. All these values were statistically significant with the following p values and 95% confidence limits for male learners: tobacco ($p<0,05$, LL=45,5% and UL=54,7%), alcohol ($p<0,05$, LL=73,3% and UL=81,1%), drugs ($p<0,05$, LL=20,4% and UL=28,4%) and sexual activity ($p<0,05$, LL=69,3% and UL=77,5%).The older learners are more involved in all health risk behaviours but the only statistically significant results were for alcohol and sexual activity. The p value and 95% confidence limits were: for alcohol ($p=0,007$, LL=65% and UL=73%) and for sexual activity ($p<0,05$, LL=68,9% and UL= 76,6%). The only statistically significant results related to income scores was that there were more learners

with higher income scores reporting tobacco (p<0,05, LL=40,5% and UL=49,3%) and drug use (p=0,024, LL=14,9% and UL=21,8%) and more learners with lower income scores reporting sexual activity (p<0,05, LL=57,3% and UL=65,3%).

4.3.2.1 Substance Use

In this section, only the significant features of the various patterns of substance use will be presented. Tobacco use occurs in the form of cigarettes/cigars, Ntsu or inhaled snuff and chewing tobacco. Of the 441 learners who use tobacco, 97 % (427 learners) reported smoking cigarettes/cigars. 19% (84 learners) reported using snuff and 7% (29 learners) used chewing tobacco. Some learners reported the use or one or more of these forms. Drug use has been categorized into either injected drugs or drugs taken in other ways. Of the 175 learners who use drugs, 37 % (65 learners) reported injecting drugs, 90% (158 learners) reported taking drugs in other ways and 27% (48 learners) injected and took drugs in other ways. Some learners reported injected drug as well as drugs taken in other ways. The patterns of use (tried, weekend, weekday and daily) of these various substances were compared and the data presented in Figure 4.3.



	Tried	Weekend	Weekday	Daily
Cigarettes	40	15	15	28
Nstu	75	13	7	5
Chewing Tobacco	48	17	14	21
Alcohol	53	42	5	1
Injected Drugs	54	23	9	14
Other Drugs	57	22	9	12

Figure 4.3: Patterns of Substance Use

The most frequently reported pattern of substance use was having tried it. Of note is the higher percentage of daily cigarette use when compared to the weekend use of alcohol and injected/other drugs. Weekday use of substances is generally low.

The learner demographics of these important patterns of substance use revealed the following relevant findings on Tables 4.4 and 4.5.

Table 4.4: Learner demographics: The "tried" pattern of substance use

Male	**35%**	**9%**	**42%**	**23%**	**46%**
Female	**45%**	**21%**	**63%**	**14%**	**62%**
Younger	**47%**	**21%**	**59%**	**15%**	**64%**
Older	**35%**	**8%**	**47%**	**25%**	**43%**

Income scores for all substances and learner demographics for chewing tobacco did not yield statistically significant results. There are a higher percentage of female learners and younger learners with the tried pattern of substance use. For female learners the p values and 95%confidence limits were: cigarette use (p<0,05, LL=37,8% and UL=51,7%), Ntsu use (p=0,002, LL= 15,4% and UL=26,8%), alcohol use (p<0,05, LL=57,8% and UL=67,7%). For younger learners the p values and 95% confidence limits were: cigarette use (p=0,010, LL=39,9% and UL=53,7%), Ntsu use (p<0,05, LL=15,8% and UL=27,1%), alcohol use (p=0,004, LL=52,4% and UL=73,7%) and other drugs (p=0,049, LL=52,4% and UL=73,7%). More male learners having tried injected drugs was also statistically significant (p=0,02, LL=15,8% and UL=32,1%).

Table 4.5: Learner Demographics: Weekend and Daily Substance Use

Male	**51%**	**11%**	**22%**	**36%**
Female	**33%**	**5%**	**16%**	**20%**
Younger	**37%**	**7%**	**15%**	**23%**
Older	**46%**	**8%**	**25%**	**34%**

Income score were not statistically significant. Higher percentages of the weekend pattern of substance use are reported by male learners, older learners. The statistically significant result for the male learners were: alcohol ($p<0,05$, LL=45,3% and UL= 55,8%) and injected drug use ($p=0,20$, LL=5,7% and UL=18%). The statistically significant result for the older learners were: alcohol ($p=0,04$, LL=41% and UL= 51,4%) and other drug use ($p=0,49$, LL=16,2% and UL=35,6%). Higher percentages of daily cigarette use are reported by male learners ($p<0,05$, LL=29,6% and UL=42,3%) and older learners (p=.0,01, LL=26% and UL= 38,7%).

4.3.2.2 Sexual Activity

All learners were asked to report on their sexual activity. Out of 1139 learners, 1136 learners responded. 57% (645 learners) reported that they were sexually active. Table 4.6 shows the learner demographics with various patterns of unsafe sexual practices.

Table 4.6: Learner Demographics and Patterns of Unsafe Sex

Male (n=340)	**70%**	**16%**
Female (n=304)	**39%**	**42%**
Younger (n=246)	**46%**	**25%**
Older (n=388)	**62%**	**30%**
Lower (n=363)	**51%**	**28%**
Higher (n=260)	**60%**	**30%**

Unsafe sex practices like "no condom use" and "no condom and family planning use" did not show any statistically significant results. Male learners, older learners and learners with higher income scores reported having multiple partners and these values were statistically significant. P values and 95%confidence limits were: males ($p<0,05$, LL= 65,4% and UL=75,4%) , older learner ($p<0,05$, LL=56,8% and UL=66,7%) and higher income scores ($p=0,03$, LL=53,9% and UL=66%). Sexual activity without the use of family planning was reported by more female learners and this was statistically significant ($p<0,05$, LL=36% and UL=47,4%).

4.3.2.3 Co-existing Health Risk Behaviours

Health Risk behaviours in adolescents very often co-exist. Table 4.7 shows the co-existing health risk behaviours in order of frequency.

Table 4.7: Frequency of Co-existing Health Risk Behaviours

Alchol Use and Sexual Activity	505	44%
Tobacco and Alcohol Use	407	36%
Tobacco Use and Sexual Activity	298	26%
Alcohol and Tobacco Use and Sexual Activity	287	25%
Alcohol and Drug Use	168	15%
Tobacco and Drug Use	156	14%
Tobacco, Alcohol and Drug Use	151	13%
Drug Use and Sexual Activity	139	12%
Alcohol and Drug Use and Sexual Activity	136	12%
Tobacco and Drug Use and Sexual Activity	124	11%
Tobacco,Alcohol and Drug Use and Sexual Activity	122	11%

The most frequently reported co-existing health risk behaviours are alcohol use and sexual activity (44%), followed by tobacco and alcohol use (36%) and then tobacco use and sexual activity (26%). Table 4.8 shows the demographics of those learners who report these co-existing health risk behaviours.

Table 4.8: Learner Demographics and Co-existing Health Risk Behaviours

Totals (N=1139)	**44%**	**505**	**36%**	**407**	**26%**	**298**
Male (n=463)	65%	299	47%	217	41%	192
Female (n=675)	30%	205	28%	189	16%	105
Younger (n=594)	33%	197	32%	191	19%	110
Older (n=533)	56%	301	39%	210	34%	182
Lower (n=592)	38,34%	227	32,10%	190	24,66%	146
Higher (n=513)	41,52%	213	41,13%	211	28,46%	146

There are proportionally more learners reporting co-existing health risk behaviours who are male, in the older age group and with higher income scores. For male learners the p values and 95% confidence limits were: for alcohol use and sexual activity ($p<0,05$, LL=605 and UL=68,9%), for tobacco and alcohol use ($p<0,05$, LL=42,3% and UL= 51,5%) and for tobacco use and sexual activity ($p<0,05$, LL=37% and UL=46,1%). For older learners the p values and 95% confidence limits were: for alcohol use and sexual activity ($p<0,05$, LL=52,1% and UL= 60,7%), tobacco and alcohol use ($p=0,011$, LL=35,2% and UL=43,7%) and for tobacco use and sexual activity ($p<0,05$, LL=30,2% and UL=38,4%). The only statistically significant result for income score was for tobacco and alcohol use ($p=0,001$, LL=36,9% and HL=45,5%).

4.3.3 Self Perceived Health Risk

4.3.3.1 Substance Use

In order to assess self-perceived health risk, learners were asked to indicate whether they felt that their self-reported health risk behaviour might be dangerous to their health and whether it has already made them unhealthy.

There were 441 learners using tobacco. Of these learners 86% (381 learners) felt that tobacco use could be dangerous to their health. 44% (195 learners) felt that their tobacco use had already affected their health.

There were 741 learners using alcohol. Of these learners 75% (556 learners) felt that their alcohol use could be dangerous to their health. 33% (242 learners) felt that their alcohol use had already affected their health.

There were 175 learners using drugs. Of these learners 85% (149 learners) felt that their drug use could be dangerous to their health. 44% (77 learners) felt that their drug use had already affected their health.

Table 4.9 shows the learner demographics and the self--perceived health risk for substance use.

Table 4.9: Learner Demographics and Self-Perceived Health Risk for Substance Use

LEARNER DEMOGRAPHICS AND SELF PERCEIVED HEALTH RISK FOR SUBSTANCE USE						
Learners Demographics	**Tobacco**		**Alcohol**		**Drugs**	
	Danger	**Affected**	**Danger**	**Affected**	**Danger**	**Affected**
Male	89%	50%	70%	34%	88%	51%
Female	84%	37%	80%	31%	79%	32%
Younger	86%	39%	74%	28%	82%	37%
Older	87%	48%	76%	37%	89%	52%
Lower	87%	46%	78%	37%	87%	47%
Higher	86%	42%	71%	27%	83%	41%

There are higher percentages of learners reporting that they feel that their health is in danger because of their substance use as compared to them already being affected by their substance use. In terms of learner gender, statistically significant results were shown for males feeling that they were affected by tobacco (p=0,014, LL=44% and UL=57,3%) and drug use (p=0,012, LL=41,7% and UL=61%)). Female learners reported feeling that their alcohol use could be dangerous to their health (p<0,05, LL=75,8% and UL= 84%). Older learners report higher percentages of risk perception than younger learners. The only statistically significant results were for alcohol use and drug use where the p values and 95% confidence limits were: for alcohol affected (p=0,008, LL=32,4% and UL=42,5%) and for drugs affected (p=0,031, LL=41,7% and UL=64,1%). Risk perception is higher amongst learners with lower income scores. The only statistically significant results were for alcohol use where the p values and 95% confidence limits were: for danger (p=0,025, LL=74% and UL=82,4%) and for affected (p=0,007, LL=31,9% and UL=41,8%).

4.3.3.2 Sexual Activity

There were 645 (57%) learners who were sexually active. Of these learners, 25% (163 learners) felt that they were in danger of getting an STI, 22% (144 learners) felt that they were in danger of getting HIV/AIDS and 29% (187 learners) felt that there was a danger of a pregnancy occurring. 5% (34 learners) reported that they had already had an STI, 2% (14 learners) reported that they already had HIV/AIDS and 9% (58 learners) reported that a pregnancy had already occurred. In terms of the learner demographics and self perceived health risk for sexual activity, only two results were statistically significant, female learners feeling affected by pregnancy (p=0,018, LL=9,9% and UL=17,9%) and older learners feeling in danger of HIV/AIDS (p=0,001, LL=22,5% and UL=31,6%).

Section B: Learners with General Practitioners

In this section, data describing the doctor group will be presented to see if they differ significantly from those who do not have a doctor.

4.3.4 Learner Demographics of the Doctor Group

24% (271 learners) have a general practitioner in private practice. When comparing the doctor group to those without a doctor, the statistically significant results are for gender and for income scores. There are more learners who are younger (65% compared to 49%) (p<0,05, LL=58,9% and UL=70,6%) and with higher income scores (69% compared to 39%) (p<0,05, LL=62,8% and UL=74,4%).

4.3.5 Health Risk Behaviour Profiles of the Doctor Group

When comparing the doctor group to those learners without a doctor, the statistically significant results are for tobacco and drug use and sexual activity. There are more learners who use tobacco (52% compared to 34%) ($p<0,05$, LL=45,9% and UL=58,1%) and drugs (20% compared to 14%) ($p=0,011$, LL= 15,7% and UL=25,6%) and fewer learners who are sexually active (45% compared to 60%) ($p<0,05$, LL=38,9% and UL=51,1%)

4.3.6 Self Perceived health risk in the Doctor Group

Statistically significant results for self perceived health risk in the doctor group are that a smaller proportion of learners feel that they have been affected by tobacco use (38% as compared to 49%) ($p=0,038$, LL= 29,8% and UL= 46,6%) and in danger of alcohol use (69% compared to 77%) ($p=0,011$, LL=60,3% and UL=74.7%).

Section C: Learners Interaction with their General Practitioners

In this section all data reported by those learners who have a general practitioner in private practice will be presented. This group is 24% of the study sample (271 learners).

4.3.7 General Practitioner Demographics

Learners were asked to indicate in the appropriate box, the information best describing their doctors. These variables provide information about the doctors that the learners were consulting. Despite being learner's perceptions of the demographic details of their doctor, we get some idea about the doctors that the learners are consulting. Doctor gender and doctor age group were assessed. Only the 271 learners who had general practitioners in private practice answered these questions. It is important to note that more than one learner may have been describing the same general practitioner. The surgery site was not used as a doctor variable because it did not yield significant results except for the fact that the school the learner was attending was more likely to be in the same area where their doctor's rooms were located. 77% of learners attending a school in Johannesburg South had a doctor in the same educational district and similarly figures for Johannesburg North showed 41%, Johannesburg East showed 75% and Johannesburg West showed 71%.

4.3.7.1 Perceived Doctor Age

Learners were asked to indicate what age they thought their doctor to be. In order to present the data in a meaningful way, the doctor age was grouped into the "younger " doctor with ages less than 40 years and the "older" doctor aged 40 years and more. Of the 271 learners, 98% (266) learners responded. 121 doctors (45%) were younger and 145 doctors (55%) were in the older age group. The 95% confidences limits are: for the younger doctor (LL=39,2% and HL=51,5%) and the older doctor (LL=48,5% and

HL=60,8%). In terms of the learner demographics of the younger and older doctor there were no statistically significant findings.

4.3.7.2 Doctor Gender

Learners were asked to indicate whether their doctor was male or female. Of the 271 learners with doctors 269 learners (99%) responded. 83% of the doctors (224) were male and 17% (45) were female. The 95% confidences limits are: for the male doctor (LL=78,3% and HL=87,6%) and the female doctor (LL=12,4% and HL=21,7%). In terms of the learner demographics of the male and female doctor there were no statistically significant findings.

4.3.8 Consulting Patterns of Learners

80 % (213 out off 269 learners) had consulted with their doctors in the past six months. There were no learner or doctor demographics that were statistically significant

The following aspects relating to the consulting patterns of learners were covered:

1. Learners use of medical aid and if they paid cash instead for confidentiality.
2. People that accompanying the learner to see the general practitioner.
3. The number of visits in the last six months.
4. The number of years that the learner has consulted their doctor.
5. The general practitioner as the family doctor.
6. Consulting alone.
7. Consultation with other doctors.

Only the 271 learners who had a general practitioner in private practice answered the questions in this section.

4.3.8.1 Medical Aid

Learners were asked if they used a medical aid card for payment when consulting with their doctor. Of the 271 learners, 97% (264) responded. 70% (185) of the learners used a medical aid when seeing their doctor. Learners were also asked if it was ever necessary for them to pay cash instead because they did not want their parents to find out about their visit. Of the 185 learners who used a medical aid, 95% (175 learners) responded. 6% (11 learners) who were on medical aid chose to pay cash instead. No doctor or learner demographics were statistically significant for when learners used cash instead. The only two demographic details that were statistically significant for the use of medical aid were learner age (p=0.001) and learner income (p=0,002). The following results reflect 95% confidence limits. 75% of younger learners used medical aid (LL=68% and UL=81,1%) and 56% of older learners used medical aid (LL=45,3% and UL=66,3%). 75% of learners with higher income score used medical aid (LL=68,1% and UL=81%). 55% of learners with lower income scores used medical aid (LL=43,3% and UL= 66,1%).

4.3.8.2 The Person Accompanying the Learner

Learners were asked to indicate the people that have accompanied them to their doctor. The learners could respond with more than one option. 86% (232 learners) responded that they have been accompanied by their parent / guardian, 13% (36 learners) by their friend, 11% (31 learners) by their boy / girlfriend. The only demographics that showed any statistical significance was learner age and doctor age. Table 4.10 shows the relevant demographics with each of the people accompanying the learner when consulting with their doctor.

Table 4.10: The Person Accompanying the Learner

Younger	90%	16%	9%
Older	79%	9%	17%
Younger	82%	21%	18%
Older	89%	8%	6%

The learner age was statistically significant when learners were accompanied by their parents/guardians (p=0,024) and their boyfriend or girlfriend (p=0,034). The 95% confidence limits for the younger learner being accompanied by their parent or guardian are: (LL=84,8% and UL=94,2%) and for the older learner being accompanied by their boyfriend or girlfriend are: (LL=10,3% and UL=26,7%)

The doctor age was statistically significant when learners were accompanied by their friend (p=0,004) and by their boyfriend or girl friend (p=0,001). The 95% confidence limits for the doctor being younger when learners were accompanied by a friend are: (LL=13,8% and UL=29%) and for boyfriend or girlfriend are: (LL=11,8% and UL=26,2%).

4.3.8.3 Consulting Patterns of Learners

Table 4.11 shows the demographics of various other consulting patterns.

Table 4.11: Consulting Patterns of Learners

Younger	43%	92%	53%	80%
Older	36%	88%	71%	76%
Lower	40%	82%	63%	71%
Higher	41%	96%	57%	83%
Doctor Gender				
Male	45%	93%	56%	77%
Female	22%	80%	76%	89%
Younger	28%	88%	68%	79%
Older	52%	94%	53%	79%

Learners were asked:

1. To indicate the number of years that they have been consulting their doctor. Of the 271 learners, 99% (267 learners) responded. In order to present the data, the number of years was grouped and the data for more than five years was presented. 41% (110 learners) have been consulting with their doctor for more than 5 years. Statistically significant results were for doctor gender (p=0,004) and doctor age (p<0,05). 95% confidence limits for male doctors were (LL=38,8% and UL=52,3%) and for older doctors were (LL=45,3% and UL=62,2%)

2. If their doctor sees other members of their family. Of the 271 learners, 268 learners responded. 92% (246) of the learners reported that their doctor sees other members of their family. Statistically significant results were for learner income (p<0,05) and doctor gender (p=0,005). 95% confidence limits for higher income

scores were (LL=92,8% and UL=98,8%) and for male doctors were (LL=90,3% and UL=96,9%)

3. If they ever consulted their general practitioner on their own. Of the 271 learners, 99 % (267 learners) responded. 60 % (160 learners) reported ever consulting on their own. Statistically significant results were for learner age (p=0,004), doctor gender (p=0,022) and doctor age (p=0,016). 95% confidence limits for older learners were (LL=61,8% and UL=80,9%), for female doctors (LL=60,5% and UL=87,1%) and for younger doctors were (LL=59,2% and UL=76,5%)

4. To indicate the number of other doctors that they have consulted. In order to present the data this information was categorized into whether they have consulted another doctor or not. Of the 271 learners, 270 learners responded. 79% (213 learners) have consulted with other doctors. The only statistically significant demographic was learner income score (p=0,013). The 95% confidence limits for higher income scores was: (LL=77,1% and Ul=88,5%)

4.3.8.4 Reasons for Visiting other Doctors

The learners were asked to tick the appropriate blocks next to a list of possible reasons why they consulted with other doctors. The last block allowed the learner to enter any other reason, other than those listed. Table 4.12 show the frequencies of the various reasons for consulting other doctors. The 213 learners who consulted with other doctors could enter more than one option.

Table 4.12: Reasons for Visiting Other Doctors

Reason for Visiting Other Doctors	Percentage	Frequency
I was away from home or the place where I usually stay when I needed to visit my doctor.	35	74
The other doctor I visited was not a general practitioner (for example a specialist)	32	67
My doctor was not able to see me when I needed to visit him/her	21	45
I could not talk about my problem to my own doctor.	8	17
My friend took me to his/her doctor.	7	14
Other reasons for visiting another doctor:		
It was an emergency.	3	7
The other doctor was closer.	2	5
My doctor was too expensive	2	4
I went back to my previous doctor.	2	3
I was referred to another General Practitioner.	2	3
I went for psychotherapy.	1	2
I went for a second opinion.	1	2
My doctor is a bad doctor.	0.5	1

All the reasons were then classified according to whether they were related to site, system, service or doctor personality and quality.

Of the various reasons for consulting other doctors:

67% were related to the way the surgery functions (the doctor being away from the rooms, the doctor not being able to see the learner at the time or being too expensive), 45% were service related (seeing a specialist or seeking a second opinion), 10% were related to doctor qualities and personality (not being able to talk to their doctor about the problem,

seeking out their previous doctor or reporting their doctor to be a bad doctor) and 2% were site related (the learner opted for rooms closer to where they were at the time).

4.3.9 Learners choosing their General Practitioner

Learners were asked to indicate the most important reason for choosing to see their particular doctor. 269 learners responded. 49% (133 learners) reported that the services that their doctor provided was the most important reason, 27% (73 learners) reported their doctor's personality and qualities, 12% (32 learners) reported the way the surgery works (the system), and 11% (31 learners) reported where the doctor's rooms are situated (site) as being the most important reason for choosing their doctor. The only demographic feature that was statistically significant for the most important reason why learners chose their doctor was learner gender (p=0,024).

Figure 4.4 compares the percentages of the reasons why learners choose their general practitioner to the percentages for the reasons why learners consult other doctors.

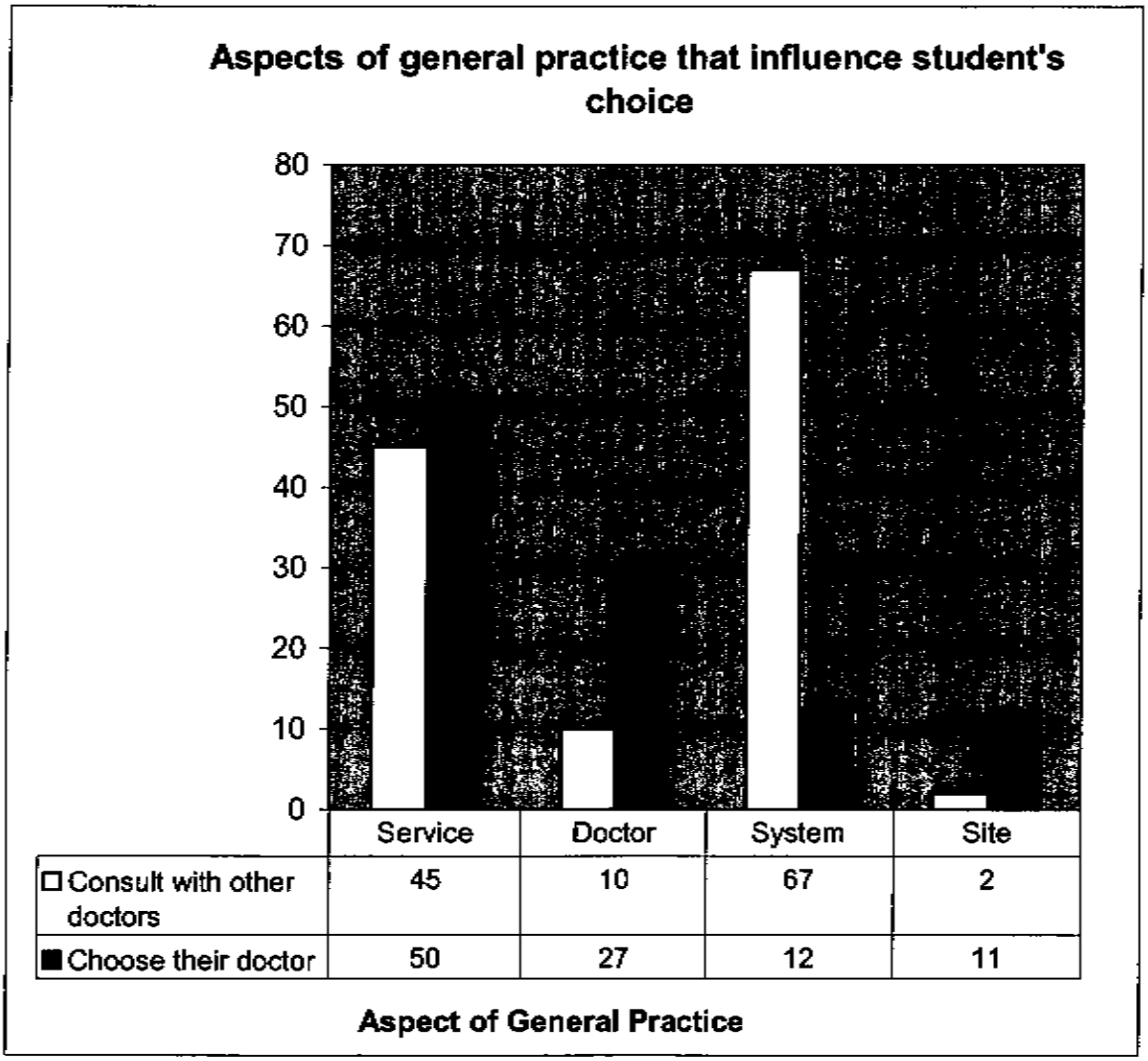


Figure 4.4: General Practice Influencing Learner's Choices

Learners chose to see their particular doctor because of service-related reasons (50%) whereas learners who consulted other doctors reported system-related reasons (67%) as the most common reasons for doing so.

4.3.9.1 Doctor's Services

Learners were asked to indicate, on a list of doctor services, which services made them choose to go to their doctor. The last option allowed the learner to enter a service not mentioned in the list. Of the 271 learners, 270 learners responded. The learners could answer more than one option. Table 4.13 shows the frequencies of responses in terms of the doctor's services.

Table 4.13: Doctors Services

Doctor Services	**Percentage**	**Frequency**
Medical Checkup	59	159
Medicines	50	136
Information about my health	34	93
X-Rays	20	53
Advice and Guidance	16	43
Laboratory tests (like blood tests)	15	40
Family planning	6	16
Condoms	5	14
Other services:		
For injections	1	3
For physiotherapy	0,74	2
To perform surgery	0,37	1
For psychotherapy	0,37	1

It is important to note that the majority of learners chose to go to their doctor for physical examinations, medication, health information and advice and guidance. A relatively

smaller number of learners chose to go to their doctor for family planning and condoms as compared to the larger numbers for services like X-rays and laboratory tests.

4.3.9.2 Doctor's Personality and Qualities

Learners were asked to indicate the doctor personality and qualities that made them choose to go to their doctor. On the list, the last option allowed the learner to enter a personality and quality not previously mentioned. Of the 271 learners, all learners responded. The learners could answer more than one option. Table 4.14 shows the frequencies of learners responses related to doctor personality and qualities.

Table 4.14: Doctors Personality and Qualities

Doctor Personality and Qualities	**Percentage**	**Frequency**
Is the family doctor	69	186
Listens to me.	51	139
Is a male doctor.	51	139
Makes me feel comfortable and relaxed when he/she is checking me up	49	134
Talks to me in words that I can understand	46	125
Makes me feel comfortable to talk about my problems	42	115
Enjoys working with young people	42	115
Tells me exactly what he/she is doing when checking me up	42	114
Shows a real interest in me as a person	42	113
Gives me advice and guidance without judging me	38	104
Does not force me to talk about problems that I am not ready to talk about.	35	95

Doctor Personality and Qualities	Percentage	Frequency
Makes me feel that I am in charge of my own health	32	88
Accepts me as I am, with my good points and my bad points	31	83
Tells me that all the information from my visits will be kept confidential.	30	82
Gives me a chance to talk about my problems without disturbing me.	28	77
Makes me feel as if my problems are important to him/her	27	74
Understands that I need to keep my problems private	23	63
Lets me help him/her to solve my problems	18	48
Is a female doctor.	11	30
Other doctor personality and qualities:		
My doctor is my friend	1	3
My doctor's religion	0,74	2
My doctor makes me feel more important	0,37	1
I know my doctor	0,37	1

The most important doctor personalities and qualities were: the family doctor, being male, listening to them, and feeling comfortable during the checkup. Of note, is the lower percentage of privacy related features: understands that I need to keep my problems private and tells me that the information from my visits will be kept private and confidential.

4.3.9.3 System: The Way the Surgery Works

Learners were asked to indicate which system-related factors made them choose to go to their doctor. The last option allowed the learner to enter a system related factor not

mentioned in the list. Of the 271 learners, 94% (254) learners responded. The learners could indicate more than one option. Table 4.15 shows the frequencies of responses of learners in terms of the way the surgery works, the system.

Table 4.15: The Way the Surgery Works

The Way the Surgery Works	**Percentage**	**Frequency**
If I need to see my doctor, he/she makes the time for me to see him/her	56	141
I can afford to pay the price that my doctor charges	36	92
I feel comfortable when waiting for my doctor in the waiting room	54	136
The receptionist/nurse makes me feel comfortable	42	107
The receptionist/nurse understands that I need to keep my problems private	28	70
I can collect interesting pamphlets for young people without feeling embarrassed to pick them up	26	66
Other ways the surgery works:		
No appointment required	2	4

Learners chose to go to their doctor because of the following system related aspects: their doctor makes time to see them; they feel comfortable waiting in the waiting room, the receptionist or nurse makes them feel comfortable and affordable fees. Of note once again is the low percentage of privacy related features: the receptionist/nurse understands that I need to keep my problems private and I can collect interesting pamphlets without feeling embarrassed to pick them up.

4.3.9.4 Changes Learners Would Like Their Doctors To Make

In an open ended question learners that have general practitioners working in private practice, were asked to comment on what changes they would like their doctor to make in order to visit more easily. Out of the possible 271 learners, only 49% (134 learners) commented on what changes could be made. No limitations were placed on how many changes could be listed. Each change was coded according to 4 categories. The first was related to their doctor's services, the second, to their doctor's personality and qualities, the third, to the way the surgery works (the system) and the fourth category was related to the site of the surgery. 259 comments were made in total. 21% (54 comments) were made relating to changes to their doctor's services, 44% (113 comments) were made relating to changes to their doctor's personality and qualities, 32% (84 comments) were made relating to changes in the way the surgery works and 3% (8 comments) were made relating to the site of the surgery. The comments are discussed later in the Discussion Chapter.

4.3.10 General Practitioners Dealing with Health Risk Behaviours

Out of the study sample of 1139, only 217 learners had general practitioners. With subgroups within this doctor group, p values have become insignificant and confidence limits very wide. It now becomes irrelevant to discuss primary prevention discussions, uncovering of health risk behaviours and secondary prevention discussions and services in terms of learner and doctor demographics. Instead the data will be presented in terms of frequencies and percentages.

4.3.10.1 Primary Prevention

Where learners denied being involved in particular health risk behaviours in Sections C to F of the research questionnaire, their responses to whether they have had discussions with their doctors about maintaining abstinence in Section A of the research questionnaire was examined. Of the 271 learners who have doctors, 27% (74 learners) reported not discussing any primary prevention topics. Primary prevention was highest for sexual activity (28%), then drug (24%), alcohol (23%) and tobacco use (19%).

4.3.10.1.1 Tobacco Use

Of the 130 learners not using tobacco, only 19% (25 learners) received primary prevention. 12% (16 learners) discussed the dangers of tobacco use, 15% (19 learners) talked about saying "no" to tobacco and 8% (10 learners) had a discussion with their doctor regarding both topics.

4.3.10.1.2 Alcohol Use

Of the 97 learners not drinking alcohol, only 23% (22 learners) received primary prevention. 20% (19 learners) talked about the dangers of alcohol use, 13% (13 learners) talked about saying "no" to alcohol and 10% (10 learners) had a discussion with their doctor regarding both topics.

4.3.10.1.3 Drug Use

Of the 216 learners not using drugs, only 24% (51 learners) received primary prevention. 15% (32 learners) talked about the dangers of drug use, 19% (41learners) talked about saying "no" to drugs and 10% (22 learners) had a discussion with their doctor regarding both topics.

4.3.10.1.4 Sexual Activity

Of the 148 learners who are not sexually active, only 28% (41 learners) received primary prevention. In this section a whole range of primary prevention topics were examined. In order to present the data in a relevant manner the primary prevention topics were grouped as follows:

1. The Dangers of Unsafe Sex and Saying No to Sex
2. Correct Condom Use, Correct Family Planning Use and Practicing safe sex
3. Emergency pill and preventing pregnancy
4. Preventing STI's and preventing HIV/AIDS

Figure 4.5 shows the frequencies of learners that reported having a discussion with their doctor about the dangers of unsafe sex, saying no to sex or both topics.

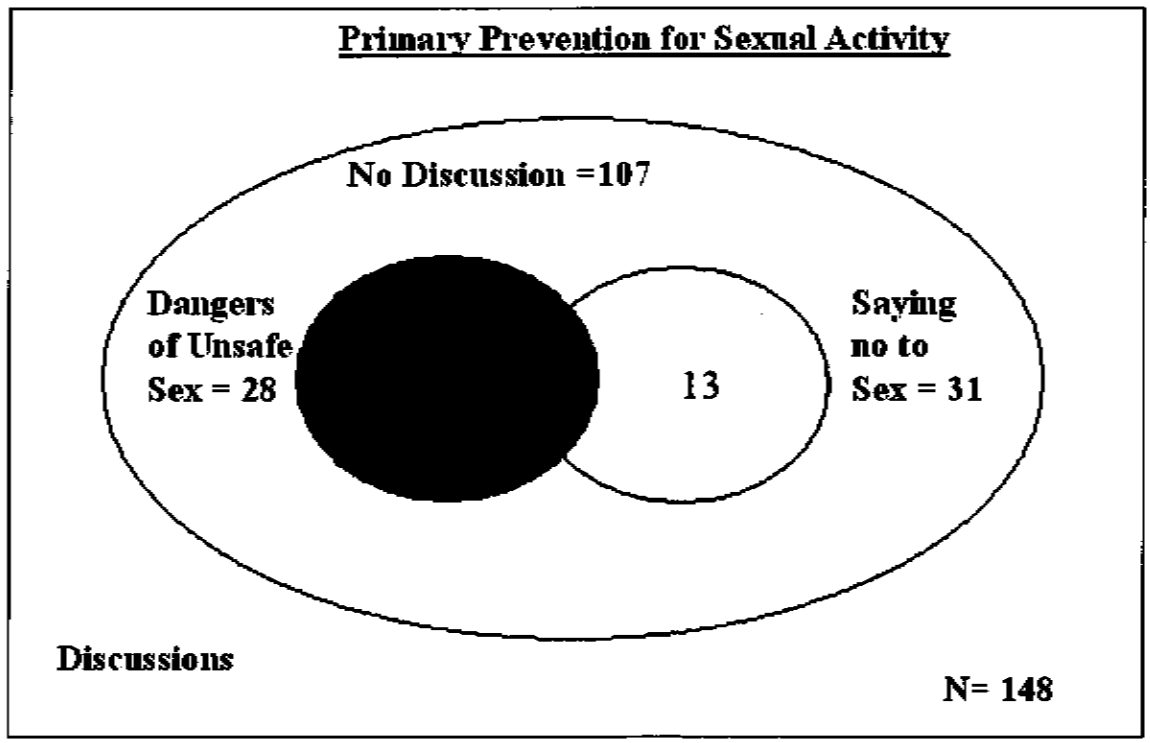


Figure 4.5: Primary Prevention for Sexual Activity (1)

Of the 148 learners who denied being sexually active and have a general practitioner, 19% (28 learners) talked about the dangers of sexual activity, 21% (31 learners) talked about

saying "no" to sex, 12% (18 learners) had a discussion with their doctor regarding both topics. 72% (107 learners) did not have any discussion of these two topics. Figure 4.6 shows the frequencies of learners that reported having primary prevention discussions relating to correct condom use, correct family planning use and practicing safe sex.

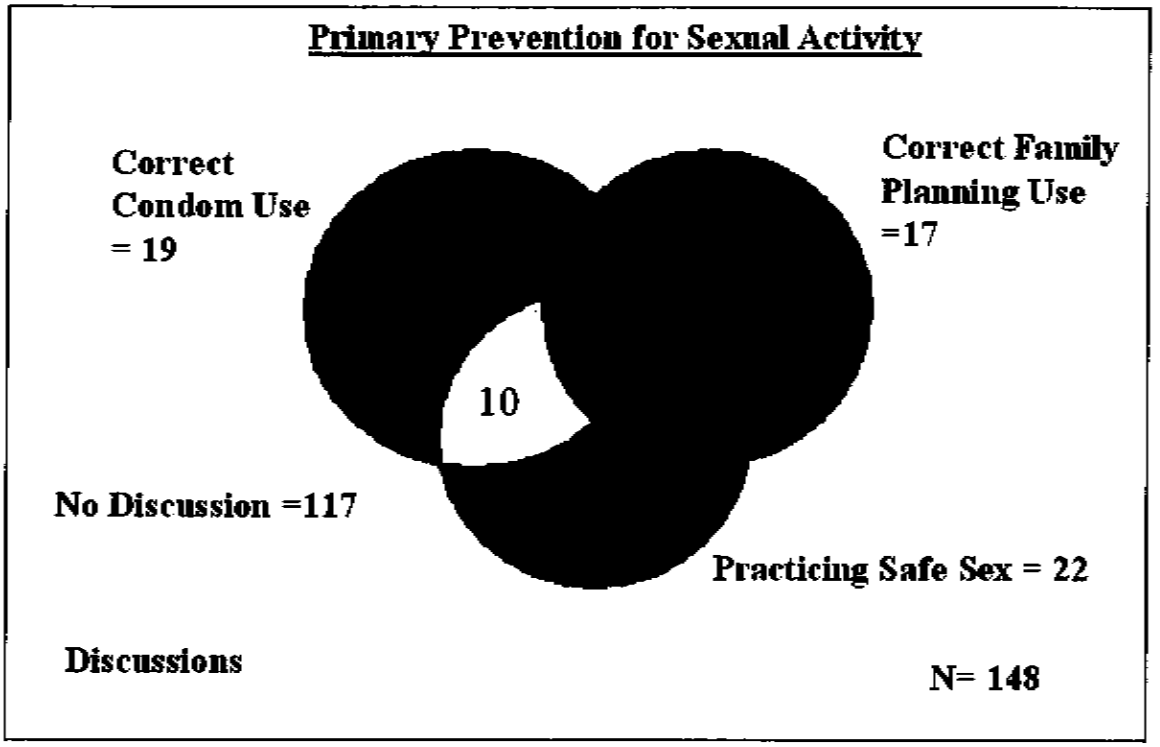


Figure 4.6: Primary Prevention for Sexual Activity (2)

13% (19 learners) talked about correct condom use, 11% (17 learners) talked about correct family planning use and 15% (22 learners) talked about practicing safe sex. 4% (6 learners) had a discussion with their doctor regarding all three topics. 79% (117) did not have any discussion of these three topics. Figure 4.7 shows the frequencies of learners who have had discussions with their doctors about the emergency pill and preventing pregnancy.

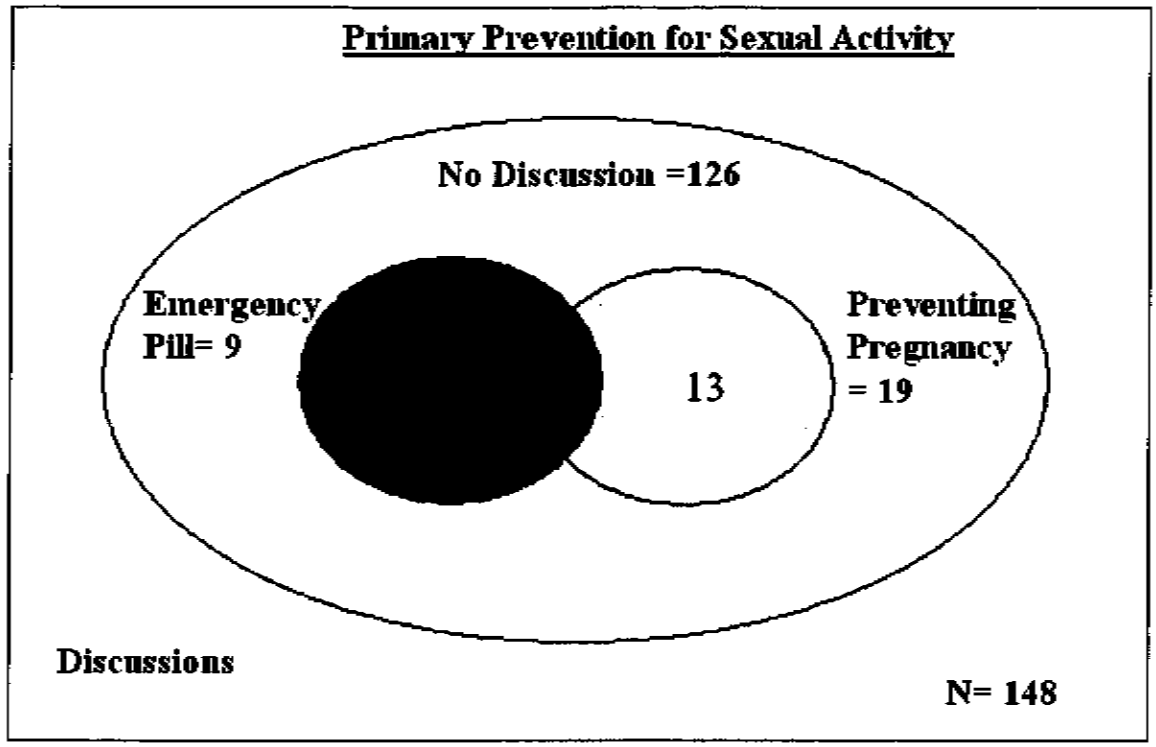


Figure 4.7: Primary Prevention for Sexual Activity (3)

6% (9 learners) talked about the use of the emergency pill, 13% (19 learners) talked about pregnancy prevention and 4% (6 learners) had a discussion with their doctor regarding both topics. 85% (126 learners) did not have any discussion of these topics. Figure 4.8 shows the frequencies of learners who have reported having discussions with their doctors about preventing sexually transmitted infections and preventing HIV/AIDS.

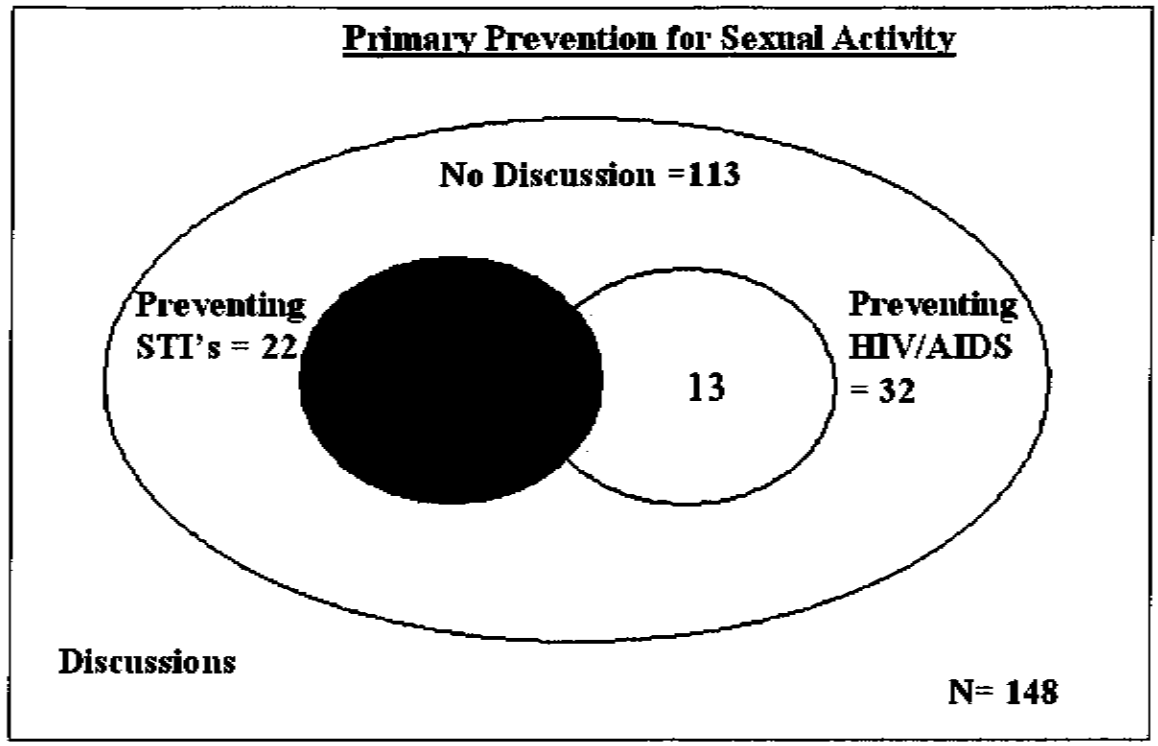


Figure 4.8: Primary Prevention for Sexual Activity (4)

15% (22 learners) talked about preventing STI's, 22% (32 learners) talked about preventing HIV/AIDS and 13% (19 learners) had a discussion with their doctor regarding both topics. 76% (113 learners) did not have any discussion of these topics.

4.3.10.2 Uncovering

Uncovering refers to the general practitioner finding out about health risk behaviours and about co-existing health risk behaviours.

4.3.10.2.1 Uncovering Health Risk Behaviours

Uncovering of health risk behaviours is an essential pre-requisite to addressing the health problems of young people. Table 4.16 shows the ways in which doctors uncovered each of the health risk behaviours.

Table 4.16: Method of Uncovering of Health Risk Behaviours

Variables	Drugs		Total Uncovering	
Total With Doctor (N=271)	**20%**	55		
Total Doctor Uncovered	**11%**	6		**113**
Method of Uncovering:				
Told Without Doctor Asking	33%	2	30%	34
When Doctor Asked Directly	33%	2	47%	53
When Sick	0%	0	5%	6
Caught Out	33%	2	9%	10
Reported By Someone Else	0%	0	1%	1
Doctor Guessed or Assumed	0%	0	2%	2
During a Discussion	0%	0	3%	3
With Blood Test	0%	0	2%	2
No Response	0%	0	2%	2

The table highlights the fact that in all cases the most significant method of uncovering was the doctor asking the learner directly about involvement in health risk behaviours: The most successfully uncovered health risk behaviour was sexual activity, followed by tobacco and alcohol use and then drug use.

4.3.10.2.2 Uncovering Co-existing Health Risk Behaviours

Doctors were most successful in uncovering sexual activity. When this health risk behaviours was uncovered, it is important to look at how successful doctors were in uncovering other co-existing health risk behaviours in these learners. Table 4.17 shows the frequency of uncovering of the co-existing health risk behaviours when sexual activity had been uncovered.

Table 4.17: Uncovering of Co-existing Health Risk Behaviours (Sexual Activity Uncovered)

Uncovering Tobacco Use (n=25)	**14**	**56%**
Uncovering Alcohol Use (n=35)	**16**	**46%**
Uncovering Drug Use (n=15)	**5**	**33%**

Doctors were most successful in uncovering co-existing tobacco use (56%), then alcohol use (46%) and least successful in uncovering co-existing drug use (33%). When alcohol use was uncovered, it is important to look at how successful doctors were in uncovering other co-existing health risk behaviours in these learners. Table 4.18 shows the frequencies of doctors uncovering co-existing health risk behaviours.

Table 4.18: Uncovering of Co-existing Health Risk Behaviours (Alcohol Uncovered)

Uncovering Tobacco Use (n=25)	**13**	**52%**
Uncovering Drug Use (n=16)	**6**	**38%**
Uncovering Sexual Activity (n=23)	**16**	**70%**

Once doctors were aware of alcohol use in learners, they were most successful in uncovering co-existing sexual activity (70%), then tobacco use (52%) and least successful with uncovering co-existing drug use (38%).

Table 4.19 shows the frequencies of uncovering of co-existing health risk behaviours once doctors had uncovered tobacco use.

Table 4.19: Uncovering of Co-existing Health Risk Behaviours (Tobacco Uncovered)

Uncovering Alcohol Use (n=22)	**13**	**59%**
Uncovering Drug Use (n=12)	**3**	**25%**
Uncovering Sexual Activity (n=18)	**14**	**78%**

Once tobacco use was uncovered, doctors were most successful in uncovering sexual activity (78%), then alcohol use (59%) and least successful in uncovering drug use (25%).

There were only 6 learners where doctors uncovered their drug use. Table 4.20 shows the frequencies of those learners where doctors uncovered co-existing health risk behaviours.

Table 4.20: Uncovering of Co-existing Health Risk Behaviours (Drugs Uncovered)

Uncovering of Tobacco Use (n=5)	**3**	**60%**
Uncovering of Alcohol Use (n=6)	**6**	**100%**
uncovering of sexual Activity (n=5)	**5**	**100%**

Of these 6 learners doctors were successful in uncovering all those learners who were also using alcohol (6 learners) and all those learners who were sexually active (5 learners). Doctors were least successful in uncovering co-existing tobacco use (60%).

4.3.10.3 Secondary Prevention

When a learner is involved in health risk behaviours and their doctor is aware of this, the doctor's response in terms of providing secondary prevention discussions and services is important. Table 4.21 shows the doctor's response to each of the health risk behaviours.

Table 4.21: Doctors Response to Health Risk Behaviours

		Drugs
Total With Doctor (N=271)	20%	55
Total Doctor Uncovered	4%	6
Doctor Response		
Discussion	100%	6
Service	67%	4

Secondary prevention discussions occurred in all learners using drugs, 92% of learners who were sexually active, 76% of learners using tobacco and 50 % of those with alcohol use. Secondary prevention services were being used in 86% of learners who were sexually active, 67% of learners using drugs, 32% of learners using tobacco and 25% of learners using alcohol. Secondary prevention discussions are occurring more frequently than secondary prevention services. It is important to note the drop off in figures from the initial number of learners involved in health risk behaviours to those who use a service from their doctor. For tobacco only 6% (8 out of 141 learners), for alcohol only 5% (8 out of 173

learners), for drugs only 7% (4 out of 55 learners) and for sexual activity, only 35% (42 out of 121 learners)

4.3.10.3.1 Doctors Dealing with Tobacco Use

In those 25 learners whose doctors were aware of their tobacco use, learners were asked about their doctor's response in terms of further discussions about tobacco use and about services that learners have used at their doctor's rooms related to smoking cessation.

Discussions with Doctor about Tobacco Use

These 25 learners were asked if they had secondary prevention discussions relating to a quit plan, nicotine gum and nicotine patches. 6 learners reported that their doctors had no further discussion about tobacco use. Further discussions involved a quit plan in 14 learners, the use of nicotine chewing gum in 9 learners and nicotine patches in 1 learner. 5 out of the 18 learners reported that their doctors discussed a quit plan and the use of nicotine gum.

Services Used to Deal with Tobacco Use

The services that doctors can provide relating to tobacco use are the dispensing or prescribing of nicotine chewing gum and patches. Of the 25 learners, in 17 learners no further intervention occurred. In 7 learners, the doctor provided nicotine chewing gum and in one learner the doctor provided the nicotine patch.

4.3.10.3.2 Doctors Dealing with Alcohol Use

In those 32 learners whose doctors were aware of their alcohol use, learners were asked about their doctor's response in terms of further discussions about alcohol use and about services that learners have used at their doctor's rooms related to alcohol cessation.

Discussions with Doctor about Alcohol Use

When doctors are aware that learners are using alcohol, the possible secondary prevention discussions include, a plan to quit, the use of antabuse tablets and referral to Alcoholics Anonymous. Of the 32 learners, 16 learners had no further discussion about alcohol use. Further discussions involved a plan to stop alcohol in 12 learners, the use of antabuse tablets in 2 learners and referral to Alcoholics Anonymous in 2 learners. 1 learner had a discussion involving a plan to stop alcohol and was referred to Alcoholics Anonymous.

Services Used to Deal With Alcohol Use

The services that doctors can provide relating to alcohol use are the dispensing or prescribing of Antabuse tablets and the referral to Alcoholics Anonymous. Of the 32 learners, in 24 learners no further intervention occurred. In 5 learners, the doctor provided tablets to stop drinking and in 3 learners the doctor referred the learner to Alcoholics Anonymous.

4.3.10.3.3 Doctors Dealing with Drug Use

In those 6 learners whose doctors were aware of their drug use, learners were asked about their doctor's response in terms of further discussions about drug use and about services that learners have used at their doctor's rooms related to drug cessation.

Discussions with Doctor about Drug Use

When a learner is using drugs, the possible secondary prevention discussions that can occur when the doctor is aware of this, are a plan to quit, urine tests to screen for drug use, blood tests to look for hepatitis B infection and referral to a rehabilitation hospital. None of the doctors discussed the need for HIV testing and Hepatitis B vaccine when drugs are being injected. Of the 6 learners, 5 learners discussed stopping drug abuse, 1 learner discussed quitting, referral to a rehabilitation hospital and blood tests for liver infections. One doctor discussed urine tests in drug use. All 6 learners had some discussion with their doctor about drug use.

Services Used To Deal With Drug Use

When a doctor is aware that a learner is using drugs, the possible services that this doctor can provide are: urine tests to screen for drug use, blood tests to look for HIV and Hepatitis B infection, immunising against Hepatitis B infection in high risk intravenous drug users and referral to a rehabilitation hospital. Of the 6 learners, 2 learners did not use any services related to drug use from their doctor. None of the learners using drugs had ever had an HIV test done by their doctor. 3 learners had urine tested for drugs, 2 learners were

referred by their doctor for rehabilitation, 1 learner had blood tests done to check for liver infections and 1 learner took a Hepatitis B vaccine from their doctor.

4.3.10.3.4 Doctors Dealing With Sexual Activity

In this section learners were asked to indicate which topics, if any, they discussed with their doctor and which services, if any, they used at their doctor's rooms.

Discussions with Doctors about Sexual Activity

Learners were asked to indicate on a list of possible secondary prevention topics, which ones they had discussed with their doctor. Table 4.23 show the frequencies that learners reported having discussed each topic. Doctors had uncovered sexual activity in 49 learners.

Table 4.22: Discussions with Doctor About Sexual Activity

Discussion Topic	Frequency	Percentage
Condoms must be used **every time** you have sex	41	84%
If a **period** (menstruation) is **missed or is late**, a **pregnancy test** must be done	28	57%
A **blood test** must be done to make sure that you have not been infected with **HIV.**	25	51%
Family planning like the injection, tablets or a loop must be **used every time** you have sex.	24	49%
If you have had **unsafe sex** you must take the **"emergency pill"** (the "morning after pill")	16	33%

Discussion Topic	Frequency	Percentage
If you have an **STI or STD** (sexually transmitted infection/disease), **you and your sexual partner** must take medicine to clear up the infection.	11	23%
A **blood test** must be done to make sure that you have not been infected with **syphillis** (an STI).	10	21%
Women who are having sex must have **regular Cervical tests** to check for cancer of the mouth of the womb (cervix)	9	18%
Injections can be given to prevent Hepatitis B liver infection **(Hepatitis B vaccine)**	3	6%
None of the above. We have not talked about any of these topics	4	8%

Services Used To Deal With Sexual Activity

Learners were asked to indicate on a list of possible secondary prevention services, which ones they had used at their doctor's rooms. Table 4.23 show the frequencies of those services that learners reported having used. Doctors had uncovered sexual activity in 49 learners.

Table 4.23: Services Used to Deal with Sexual Activity

Services Used	Frequency	Percentage
My doctor gave me **condoms**	27	55%
My doctor did a **pregnancy test** on me	15	31%
My doctor gave me **family planning**	13	27%
My doctor did an **HIV blood test** on me	13	27%
My doctor gave me the **emergency pill**	9	18%
My doctor **checked me up** when **I was pregnant**	6	12%
My doctor gave me medicine to **treat an STI/STD.**	3	6%
My doctor did a **syphillis blood test** on me	3	6%
My doctor **did an abortion** on me	2	4%
My doctor did a **cervical test** on me.	1	2%
My doctor **sent me to another doctor for an abortion**	1	2%
My doctor gave me a **Hepatitis B vaccine.**	0	0%
None of the above. I have not used any of these services at my doctor's rooms	9	18%

CHAPTER 5: DISCUSSION

It is important to point out the specific challenges that were encountered in the research process because these probably had an impact on the data. In the majority of cases, government secondary schools in Johannesburg proved to be overcrowded and have poor resources. Ensuring privacy in overcrowded classrooms and the provision of sufficient writing materials were particularly challenging. Despite most schools not requesting translations of the research questionnaire, it became evident while addressing the learners in English that language would probably be the cause of misinterpretation.

In order to have access to adolescents with health risk behaviours that have general practitioners, public secondary school were used. Despite this being the most convenient way to access the adolescent population, it became evident that the numbers would be limited. Firstly, research in the high school setting isolates those adolescents with the least health risk behaviours and their complications. Secondly, government schools service mainly the lower and middle socio-economic groups that are least likely to have general practitioners in the private sector.

In the new South Africa, the expectation is that a random sample of schools in Johannesburg would yield a heterogeneous group of young people from different cultures and backgrounds. Although racial data was not specifically sought in the research, all the research schools except for one had predominantly black learners with a few Coloured and Indian learners, despite being traditional Black, Coloured or Indian schools. The one school was Afrikaans medium (matriculation examinations were written in Afrikaans), and

was attended predominantly by White learners. Despite this, the racial demographics of the study are probably representative of our national racial demographics.

Despite the fact that the learners did well in trying to complete the questionnaire, we must remember that we are dealing with adolescents. Some learners may have lied by denying being involved in health risk behaviours, for fear of being caught out, despite all reassurances of confidentiality of information. Others may have felt that falsely admitting to being involved in health risk behaviours would make their contribution more meaningful.

It is important to note that this study design is descriptive. A random sample of adolescents attending government high schools in Johannesburg was selected and the characteristics of this sample were described. This study, by no means attempts to analyze the specific interactions between learner and doctor variables for which more specific samples with larger numbers would have to be selected. Thus, this study serves to provide us with an overview of the way in which the adolescent population is accessing the general practice resource and perhaps highlight areas where trends are apparent that may require more in depth study.

In the discussion that follows, the headings have been chosen not only to address the objectives as previously described, but to also to highlight the process involved in addressing adolescent health issues on a national level. Profiling adolescent health risk behaviours in terms of describing incidence, patterns, co-existing behaviours and risk perception are necessary pre-requisites. It is then important to examine preventive service delivery to adolescents initially the uncovering of unhealthy lifestyle choices and then the appropriate response by doctors. This response needs to occur at different levels: screening

for co-existing risk behaviours, providing relevant health information and education, immunizing at risk individuals, providing the means to effect behaviour change, screening for the medical complications of health risk behaviours and managing the medical complications of unhealthy lifestyle choices. Finally, it is important to look at the participants in this interaction namely the learners and the general practitioners. The success of this complex interaction is dependant on adolescents' specific needs in the health care setting and the ability of the doctor to provide the ideal conditions for a therapeutic outcome.

5.1 Profiling Adolescent Health Risk Behaviours

Profiling adolescent health risk behaviours is an important aspect of primary health care delivery. Locally and abroad, such an undertaking is becoming an integral part of health surveillance at a national level. It is important to discuss the findings of this research in relation to health risk behaviour surveys done in South Africa and abroad in the same time period. In the South African context, the Cape Peninsula study in 1992[2] and the South African National Youth Risk Behaviour Survey in 2002[3] provide comparative data. In the United States, the CDC's Youth Risk Behaviour Surveillance System (YRBSS) provides a profile of adolescent health risk behaviours from 1991[25, 26]. Comparative data of 1991 and 2001, show interesting trends[27].

This research, like studies done locally and abroad, covers aspects like the incidence and patterns of various health risk behaviours but unlike these studies, it also looks at self- perceived health risk. Self perceived health risk, the sense that an activity may be dangerous to one's health or may have already affected one's health, has been shown to be an important, but not only pre-requisite for behaviour change[6].

5.1.1 Incidence of Health Risk Behaviours

Table 5.1 compares the adolescent health risk behaviour profiles of South African studies and studies conducted in the United States.

Table 5.1: Adolescent Health Risk Behaviour Surveys

	South Africa			USA	
Health Risk Behaviour	**This study 2002**	**Cape Peninsula study 1992**	**National SA YRB survey 2002**	**National USA YRB survey 1991**	**National USA YRB survey 2001**
Tobacco	39%	41%	31%	70,1%	63,9%
Alcohol	65%	53%	49%	81,6%	78,2%
Drugs	15%		13%		
Injected	6%	0,5%		2,1%	2,3%
Other ways	14%	7,5%		31,3%	42,4%
Sexual Activity	57%	17,14%	41%	54,1%	45,6%

In this study, learners reported about ever being involved in health risk behaviours. Tobacco use was reported by 39% of learners, alcohol use by 65%, drug use by 15% and sexual activity by 57% of learners.

When comparing the results of this study to other studies it is important to note that some studies looked at previous use as opposed to current use, quoted results for cannabis use and not all drug use and specified heterosexual exposure as opposed to any sexual exposure.

The 1992 Cape Peninsula study[2] showed the following results: 53% for alcohol use, 41% for previous tobacco use, 7,5% for cannabis use and 17 % for previous heterosexual exposure. The 2002 South African National Survey[3] showed the following results: 49% for alcohol use, 31% for tobacco use, 13% for cannabis use and 41% for sexual activity. It is important to note that the data are not totally comparable because the Cape Peninsula study is only regional and the two studies did not have the same questionnaire format as compared to the CDC' s survey, which is a standardized questionnaire.

When comparing the CDC's YRBSS figures for 1991 and 2001[27, 28], the following trends are seen: a decrease in those who ever tried cigarette smoking from 70,1 % to 63,9%, a decrease in those who had at least one drink of alcohol on one or more days during their life from 81,6% to 78,2%, an increase in marijuana use from 31,3% to 42,4%, no change in injected drug use with figures of 2,1% and 2,3% and a decrease in those who had sexual intercourse from 54,1% to 45,6%. These changes over time were statistically significant.

Of note is the fact that, like the United States, South African studies show a similar trend with a decrease in alcohol and tobacco use in adolescents in the last decade and an increase in cannabis use in the time period. A disturbing observation is that sexual activity in the United States shows a decline among young people, whereas in South Africa, sexual activity has increased in both the 2002 South African YRB Survey as well as this study.

This study, showed a similar trend to the 2002 South African National Survey as compared to the Cape peninsula study, with an increase in drug use and sexual activity, and a decrease in tobacco use. This study, however, shows an increase in alcohol use that differs from the trends seen in the South African National survey and the CDC's YRBSS. This study also shows a much higher increase in sexual activity as compared to the 2002 South African National Survey. These may be real differences or may due to the questionnaires not being standardized in the South African studies. Specifically the Cape study looks at heterosexual activity whereas the other studies do not specify this, and with alcohol use eliciting present use and having ever used alcohol could affect the data. Table 5.2 compares the adolescent health risk behaviour profiles of this study and the South African Youth Risk Behaviour Survey conducted in the same year.

Table 5.2: Adolescent Health Risk Behaviour Surveys in South Africa 2002

Health Risk Behaviour	**2002 SA YRB Survey National**	**2002 SA YRB Survey Gauteng**	**2002 This Study (Johannesburg)**
Tobacco	31%	41,4%	39%
Alcohol	49%	62,1%	65%
Drugs	13%	17,8% (Dagga)	15%
Sexual Activity	41%	47%	57%

The South African national figures highlight the extent of the problem on a national level. When looking at the Gauteng figures, the percentages of the health risk behaviours are

worse. The Johannesburg figures for tobacco and drug use lie between the national and provincial figures. This Johannesburg study shows alcohol use and sexual activity percentages to be highest. Table 5.3 shows the ten-year comparisons of Youth Risk Behaviour Surveys conducted in South Africa and in the United States.

Table 5.3: Ten-Year Comparisons of Adolescent Health Risk Behaviour Surveys

	South Africa		USA	
Health Risk Behaviour	**Cape Peninsula study**	**Western Cape SA YRB survey**	**National USA YRB survey**	**National USA YRB survey**
	1992	**2002**	**1991**	**2001**
Tobacco	41%	51,1%	70,1%	63,9%
Alcohol	53%	63,5%	81,6%	78,2%
Injected Drugs	0,5%		2,1%	2,3%
Drugs in Other Ways	7,5%	18,6% (Dagga)	31,3%	42,4%
Sexual Activity	17,14%	37,8%	54,1%	45,6%

When looking at the ten-year, comparisons in South Africa and the United States of America (Table 5.3), we have to take into account that in South African, we do not have the benefit of national surveys. The best ten year, comparison for the same geographical

region is the 1992 Cape Peninsula Study[2] and the Western Cape figures of the 2002 South African YRB survey[3]. This comparison indicates that in the United States figures for tobacco, alcohol and sexual activity have all improved (Cannabis use increased while injected drugs remained the same). In the South African local figures, however, our adolescent health risk behaviour profile has worsened in all areas.

In this study, the demographic information of learners serves purely to describe learners involved in each of the health risk behaviours. The information may provide insight into certain subgroups being particularly prone to involvement in health risk behaviours. Data that is more truly reflective of the real situation could probably be acquired with larger samples with more specific selection criteria.

5.1.2 Patterns of Health Risk Behaviours

In the Cape Peninsula Study[2] and the South African YRB Survey 2002[3] as well as the CDC YRB Surveys of 1991[25, 26] and 2001[28] health risk behaviour patterns are described using different parameters to gain insight into all facets of the health risk behaviour. If we grade the pattern of use of cigarettes, alcohol and drugs from the least usage to the most then first is "tried", then "weekend" then "weekday" and then "daily". The most frequently reported pattern of use for all three agents was having "tried it" **(Figure 4.3, Page 54).** These results confirm that adolescent health risk behaviours may be transient and experimental. This is the group that has the potential to benefit the most from secondary prevention. The second most common pattern reported with alcohol and drugs is "weekend" use. Alcohol and drugs would affect performance during the school week, so learners probably use these substances over the weekend so that they can still continue with their schooling. One would expect a different pattern of usage in adolescents not attending school. The second

most common pattern for tobacco use was "daily". Tobacco use has less effect on school performance.

In terms of tobacco use, cigarette smoking predominates over Ntsu sniffing and tobacco chewing. It is important to note that 1 in every 5 learner was using tobacco in the form of Ntsu. **(Figure 4.3, Page 54)** shows that there is no significant difference in the patterns of use of injected drugs and drugs taken in other ways.

It is difficult to compare the data from this research to the other studies in South Africa and the United States because different parameters were used when looking at behaviour patterns. The CDC YRBSS looked at patterns in terms of the number of times the substance was used or behaviour committed in particular time frame like every day, 30 days, a 12 month period or lifetime use. South African studies also used these parameters.

In terms of tobacco use, studies show that early smoking is a particular problem because the younger someone starts, the less likely they are to give up, and early initial use of tobacco greatly increases risk of lung cancer. Those who do not smoke regularly in their teens are unlikely to do so in adult life, most adult smokers having acquired the habit by age 19 years[29, 30]. Research has shown that the majority of teenage smokers had tried to quit at least once[31] and that the majority of teenage smokers who received smoking cessation counselling had agreed on a contract with the GP to give up[32]

Binge drinking is a common and hazardous behaviour among this age group, who are at high risk of dying in alcohol-related traffic accidents[33]. In this study, the high school learners the second most common pattern of use after having tried it was weekend use

when the binge drinking is most likely to occur so that school attendance and performance is minimally affected.

In terms of the patterns of unsafe sexual activity the follow aspects were examined: multiple sexual partners, the lack of condom use and the absence of contraceptive methods. The most frequently reported unsafe sex practice is that of having multiple sexual partners (55%) followed by sex without a condom (51%) **(Table 4.6, Page 57)** When considering unsafe sex practices the most frequently reported pattern is that of having multiple sexual partners and not using condoms (31%) followed by multiple sexual partners and not using condoms and family planning (20%). These results highlight that adolescent sexual behaviour patterns are characterized by multiple sexual partners and are frequently unsafe.

Once again, it is important to note that the demographic features that have been presented only serves to describe the learners involved in particular health risk behaviour patterns. It may however be alluding to the possible subgroups that may be prone to the more unsafe health risk behaviour patterns. We would probably need much larger samples with particular selection criteria in order to confirm the possible trends highlighted in this research.

5.1.3 Co-existing Health Risk Behaviours

It is important to note that very often health risk behaviours co-exist. The 2002 Cape Peninsula study[2] as well as the CDC's YRBSS[15] shows a significant relationship between many adolescent risk behaviours.

The findings in the Cape Peninsula study which showed an association between alcohol use, tobacco use and sexual activity is also reflected in this study. In this study 44% of learners reported alcohol use and sexual activity. 35% reported alcohol and tobacco use. 26% reported tobacco use and sexual activity. 25% reported alcohol and tobacco use and sexual activity. 10% reported the use of alcohol, tobacco and drugs and sexual activity **(Table 4.7, Page 58).**

The demographic data of the learners who are involved in more than one health risk behaviour **(Table 4.8, Page 59)** may highlight features that could be important when designing intervention programs to address adolescent health risk behaviours. The numbers involved, however, may be too small, and perhaps a larger sample with an analytical methodology would be more informative.

5.1.4 Self – Perceived Health Risk

When assessing self perceived health risk, two aspects were assessed, firstly if the learner felt that their use may be "dangerous" to their health and secondly whether they felt that their use had already made them "unhealthy".

Learners reported more frequently that their health was in danger when compared to their health being affected by their involvement in particular health risk behaviours. **(Tables 4.9, Page 61)** This highlights the fact that the effects of adolescent health risk behaviours are usually seen later in adult life.

It is important to note that learner's risk perception for substance use (tobacco, alcohol and drugs) was higher than their risk perception for unsafe sexual practices. Unsafe sexual

practices have the potential to cause more complications during adolescence than does tobacco use. Yet, in this study, learners reported that their tobacco use has affected them to a much higher degree than unsafe sexual practices. The possible reason for this could be the 'healthy student effect'. The complications of unsafe sexual practices have the potential to remove learners from the public schooling system to a much higher degree than does tobacco use. Despite alcohol use being the most frequently reported health risk behaviour compared to tobacco use, learners perceive more negative effects with tobacco use. The possible reason for this could be related to the patterns of use of these substances where learners hide the effects of alcohol use by weekend use.

In the doctor group the risk perception with substance use was less than those learners who do not have a general practitioner. The possible reasons for this could be the differences in their demographics (the doctor group having younger learners), their health risk behaviour profiles (relatively fewer reported health risk behaviours) and pattern (relatively safer patterns of substance use and sexual activity) as well as the other socio-economic difference in the two groups.

The Soul City Institute for Health and Development Communication [34] is South Africa's premier edutainment project. Edutainment is the art of integrating social issues into popular and high quality entertainment formats. It uses prime time television and radio dramas to engage mass audiences in a powerful way. It is important to ascertain whether this means of education will in the long run influence risk perception and ultimately behavior change. Risk perception among young people in South Africa has not been widely studied. Overseas studies[16] seem to indicate that education alone will not have an impact on adolescents, who are experiencing a normative biological need to experiment

while self-regulatory mechanisms are still developing. So as adolescents get older we can expect risk perception to increase. This study shows that risk perception is higher in the older age group (18-21 years old) **(Tables 4.9, Page 61).** Studies aimed at analyzing the trends that seem to be occurring is necessary because they may impact on the way future preventive service delivery for young people is structured. A Canadian study showed that adolescents are less concerned about being involved in health risk behaviours than the consequences of the health risk behaviours. Their health concerns were related to direct and more immediate consequences of their health risk behaviours as opposed to long term effects[34].

5.2 Adolescent's Perceptions of their General Practitioner's Provision of Preventive Services to Deal with Health Risk Behaviours

In South Africa, the large majority of adolescents are probably using the public health care sector to address their primary health care needs. This research however attempted to bring to light the extent to which economically disadvantaged adolescents who traditionally make use of government services are utilizing preventive services in the private sector. Overburdened public health resources and the foresight that greater involvement of the private sector in health care delivery to the economically disadvantaged being the way forward, served as motives for examining the interaction between economically disadvantaged youths and private general practitioners. The research uncovered important and perhaps specific aspects of this interaction that may be useful in planning future preventive service delivery to young people in South Africa.

In overseas countries like the United States, Britain and Canada, attempts have been made to expand and optimize preventive service delivery in the primary health care sector[7].

These countries have national guidelines for designated preventive visits for adolescents. These guidelines can be applied in various settings where adolescents consult like paediatricians, school nurses, family physicians and primary health care workers in clinics. They have reached a stage where comparative data is available in settings where these guidelines are implemented and where they are not. The conclusion of such studies is that when guidelines are applied, preventive service delivery is occurring at rates below recommended levels, but at rates greater than those in settings where guidelines are not applied[8]. This highlights firstly the need for national guidelines to be applied and secondly the need for continual review in order to optimize its use.

In South Africa, in the absence of such national guidelines it is important to look at preventive service delivery to adolescents in the primary health care sector. It is important to note that overseas the funding for adolescent preventive services is a combination of private and government resources in varying proportions. In South Africa the public and private sector function predominantly independent of each other. This study only gives us an idea of how young people perceive their receipt of preventive services for a few health risk behaviours from general practitioners working in the private sector.

We can elicit the receipt of preventive services from either the general practitioners providing the service or from the adolescents receiving the service. In this study learner's self-reporting of their receipt of preventive services was used. A study in the United States, concluded that adolescents' self-report of the care they have received is a valid method of determining the content of preventive health service delivery. Although recall of screening and counselling is more accurate within two to four weeks after preventive care visits, adolescents can report accurately on the care they have received five to seven months after

the preventive health care visits occurred[23]. It is important to note that once again these are designated preventive health care visits. In South Africa preventive services are probably occurring on an opportunistic basis at the time of an acute care visit.

Young people involved in health risk behaviours can only benefit from a service, if the medical attendant uncovers the behaviour and responds to it in the appropriate way. Therefore uncovering, education and service provision are critical aspects in any behaviours change intervention program.

5.2.1 Uncovering of Health Risk Behaviours by General Practitioners

In the general population, there are young people who are engaged in health risk behaviours and they are seeing general practitioners. Any intervention is only possible if uncovering of the health risk behaviour occurs.

Uncovering occurred in 41% in sexual activity, 19% in alcohol use 18% in tobacco use, and 11% of those learners that reported drug use **(Table 4.16, Page 83).** This indicates that the health risk behaviours that produce symptoms in adolescence are more likely to be uncovered. It is important to note that one would expect drug use to be uncovered more than tobacco use, but here pattern of use becomes important. Weekend drug use is least likely to affect the health and performance of learners attending high school and is thus be least likely to be uncovered. Unsafe sexual activity, on the other hand, is more likely to present with symptoms and is thus more likely to be uncovered.

By far the commonest way the health risk behaviour was uncovered was by the doctor asking the learner directly about the health risk behaviour. The second means of

uncovering in all health risk behaviours was by the learner reporting the health risk behaviour without the doctor having to ask about it.

This highlights the fact that uncovering of adolescent health risk behaviours is low and that the initiative to uncover is coming from the doctor. Learners are typically not going to volunteer health risk behaviour involvement.

5.2.2 General Practitioners' Response to Health Risk Behaviours

Once the health risk behaviour has been uncovered by the doctor, by whatever means, it is now necessary for the doctor to respond to the health risk behaviour. This is where secondary prevention is necessary in terms of:

5.2.2.1 Screening for co-existing health risk behaviours,

5.2.2.2 Providing relevant education and information,

5.2.2.3 Immunizing at risk individuals,

5.2.2.4 Providing the means to effect behaviour change and

5.2.2.5 Screening for the medical complications of the health risk behaviour

5.2.2.6 Managing the medical complications of the health risk behaviour.

As can be expected, the number of learners with health risk behaviours and with doctors who are aware of their health risk behaviours is small, but this shows what little impact general practitioners are having on the part of our population that most needs intervention.

5.2.2.1 Screening for Co-existing Health Risk Behaviours

Doctors have the greatest success in uncovering sexual activity. Once this health risk behaviour has been uncovered, how successful are the doctors in uncovering other co-existing health risk behaviours. The results show that tobacco use as a co-existing health risk behaviour was uncovered in 56% of the 25 learners who were also using tobacco, 46% of the 35 learners who were also using alcohol and 33% of the 15 learners who were also using drugs. This shows that doctors are not uncovering co-existing health risk behaviours sufficiently enough.

5.2.2.2 Providing Relevant Health Information and Education

It is expected that once a doctor has uncovered a health risk behaviour, relevant health education and information related to that health risk behaviour must be provided. Research has shown that young people trust doctors for health related information[36] and want to discuss a broad range of health topics[37]. Yet, in this study only 76% had some discussion with their doctor related to tobacco use, 50% had some discussion with their doctor related to alcohol use, all had some discussion with their doctor related to drug and 92% had some discussion with their doctor related to sexual activity even once the doctor had uncovered the health risk behaviour. **(Table 4.22, Page 90)**

It is important to compare the rate of secondary prevention discussions to the rate of primary prevention discussions. Only 19% (compared to 76%) of learners not using tobacco had discussions, 23% (compared to 50%) of learners not using alcohol had discussions, 24% (compared to 100%) of learners not using drugs had discussions and In 28% (compared to 92%) of those not sexually active had discussions. These figures

highlight the fact that in this primary health care setting, secondary preventive efforts are outweighing primary preventive efforts. General practitioners are having discussions more readily when the adolescent is already involved in a health risk behaviour.

There may be doctor characteristics and learner characteristics that determine the extent to which primary and secondary discussions occur. The numbers were too small in this study to show anything significant. This information could provide primary health care providers with insight into the limitations in their own present preventive discussions when dealing with young people in terms of health risk behaviours.

5.2.2.3 Immunizing at Risk Individuals

When a doctor has uncovered that an adolescent is involved in a health risk behaviour, the appropriate immunization related to that health risk behaviour must be advised and provided where possible in order to reduce the complications of that health risk behaviour. The Hepatitis B vaccine is indicated in those learners who are sexually active and are using drugs especially those that are injected. Only 6% of learners, whose doctors were aware of their sexual activity, discussed the Hepatitis B vaccine **(Table 4.22, Page 90)** and none provided the vaccine **(Table 4.23, Page 92).** Only one doctor was aware that the learner injected drugs but neither a discussion nor the provision of the vaccine occurred. There was one learner who had a discussion with their doctor about blood tests for Hepatitis B infection and was given the Hepatitis B vaccine, but this learner used drugs in other ways only. Once again the number of learners in this subgroup is small and may not be statistically significant, but the results may indicate a low level of immunization for at risk adolescents. It is important to note that the Hepatitis B vaccine is part of our expanded

immunization program, so some learners may have received this immunization during the childhood vaccination. It is still important, however, that high-risk learners, those who are sexually active and those who use intravenous drugs, are aware of the risk for hepatitis B infection and the necessity for the vaccine and have discussions with their doctors about it. It is important to note that there are various other vaccines that are indicated especially in high risk adolescent, which are not specifically for substance use and sexual activity, but are nonetheless important.

5.2.2.4 Providing the Means to Effect Behaviour Change

When a general practitioner has uncovered a health risk behaviour, it is important to discuss and to provide the means to change the behaviour. As has been mentioned previously, an important pre-requisite to behaviour change is the adolescent's perception of personal risk. This in turn may be influenced by the information and education adolescents receive about health risk behaviours. This study did in no way assess behaviour change but some of the important pre-requisites for behaviour change can be described.

When considering the use of tobacco, doctors may not only discuss but also provide either by dispensing or filling out a prescription for nicotine chewing gum or patches. 68% reported not using these services, 4% had access to nicotine patches and 28% had access to nicotine chewing gums. With regard to the use of alcohol, doctors may either dispense or fill out a prescription for tablets to help young people to stop alcohol use and refer those in need of counseling and support to Alcoholics Anonymous. 75% reported not using these services, 16% reported having access to Antabuse tablets and 9% reported referral to Alcoholics Anonymous. In terms of the use of drugs, the general practitioner can refer those in need of counseling and support to drug rehabilitation units, utilize urine tests for continued follow up. 33 reported not using these services, 50% reported having a urine test

for drugs and 33% reported being referred for rehabilitation. When an adolescent is sexually active and abstinence is not an option for them, the general practitioner can provide adolescents with the means to practice safe sex, like condoms and contraception. 14 % reported not using these services, 55% reported that their doctor provided condoms and 27% reported that their doctor provided family planning **(Table 4.23, Page 92).**

These results indicate that service provision for tobacco and alcohol use is poor, perhaps not only because of adolescents not having a discussion about options available to quit but also because of adolescents do not perceive risk from their behaviour and are not willing to stop the health risk behaviour. An important consideration would therefore be to focus not on getting adolescents to stop the health risk behaviour but rather to assist them in how to make their behaviour least harmful to them. Service provision for sexual activity showed better results, perhaps because the complications of this health risk behaviour occur during adolescence and thus learners are more likely to seek out these services perhaps from general practitioners who are able to supply government family planning at an affordable rate.

It is important to note that despite reporting poor utilization of these services from their general practitioner, learners may be accessing government clinics and hospitals where these services are more affordable.

The demographic data can provide us with an idea of the type of learner who is receiving the means to effect behaviour change and the type of doctor who is providing the means to effect behaviour change. Such insight can allow doctors to be critical of their present provision of services to address health risk behaviours in an effort to look for ways to

expand and optimise service provision for young people from poorer backgrounds. Due to the small sample size, the demographic details may not be a true reflection and perhaps cohort studies may prove to be more informative.

5.2.2.5 Screening For the Medical Complications of Health Risk Behaviours

Health risk behaviours in adolescence may have an impact on absenteeism, poor school performance and the dropout rate. This is especially true about alcohol, drugs and sexual activity. Drugs and alcohol abuse may also lead to violence and crime. However, in terms of the medical complications of these health risk behaviours the effects are usually seen in adulthood.

In terms of screening for the medical complications of health risk behaviours, only drug use and sexual activity are applicable during adolescence.

When an adolescent is injecting drugs it is important to screen for HIV and hepatitis. In this study none of the learners that were injecting drugs had an HIV test performed by their doctor and only one learner had tests for hepatitis.

When an adolescent is sexually active and has not practiced safe sex, pregnancy testing, HIV and syphilis testing, and regular cervical smears may be necessary. Of the 49 learners, 31% had pregnancy tests, 27% had HIV testing, 6% had syphilis testing and 2% had a cervical smear **(Table 4.23, Page 92).**

Once again the number of learners in this subgroup is small and may not be statistically significant, but the results may indicate a low level of screening for the medical complications of adolescent health risk behaviours. These learners may also be utilizing the government clinic resources that may be more affordable.

The demographic data could be very valuable in assessing the learners who were screened for the medical complications of health risk behaviours and the doctors who did the screening. The data presented is purely descriptive but may be indicating the circumstance that allow for screening. This information can instigate changes in screening for complications in young people with limited financial resources.

5.2.2.6 Managing the Medical Complications of Health Risk Behaviours

Drugs and alcohol abuse may lead to violence, crime and injury. The problems associated with alcohol and drug use are usually directed towards the health care system. General practitioners are in a unique position to identify users and be involved in a shared care approach with psychiatrists and rehabilitation health care workers. The management of the medical complications of adolescent health risk behaviours can involve many health care professionals including counselors, psychiatrists, orthopedic surgeons, physiotherapists and occupational therapists. In terms of the way in which general practitioners can manage the medical complications of health risk behaviours, sexual activity will be discussed.

If an adolescent has had unprotected intercourse they must have access to emergency contraception. 18% reported use of this service. If an adolescent has an STI, treatment must be provided. In this study 6% received STI medication. If an adolescent is pregnant

and is requesting a termination of pregnancy, the doctor may either perform the procedure or refer the adolescent to the appropriate center. In this study, 4% reported that their doctor performed a termination of pregnancy and 2% reported that their doctor referred them. If an adolescent is pregnant and a termination of pregnancy is not an option, antenatal assessments must be done regularly. In this study, 12% visited their doctor for antenatal checkups **(Table 4.23, Page 92).**

These results reflect that this level of intervention by general practitioners is low, perhaps due to the fact that these services may be more cost-effective for adolescents in the public health sector.

Demographic data show the characteristics of the learners who seek management from their general practitioner and the general practitioners who are providing these services. These purely descriptive data serves to highlight the possibility of managing the complications of health risk behaviours among young people with poor resources in the private sector.

5.3 Interactions between Adolescents and Their General Practitioners

5.3.1 Adolescents

It is important to note that if we consider seven as the age to start school, the study sample of senior high school learners should have consisted of a larger proportion of 15 to 17 year olds. In fact there were an almost equal number of 18 to 21 year olds **(Figure 4.1, Page 48)** and learners older than 21 were excluded from sampling process. There are, therefore, a significant number of adolescents above 17 years old in the public schooling system. This has tremendous implications on the effects of peer pressure among adolescents in schools. Female learners made up 59% of the study sample. It is important to note that teenage

pregnancy removes many female adolescents from the public schooling system so this group of adolescents is being under-represented. Government high schools largely service young people from the middle and lower socio-economic groups. This was reflected in the income score results **(Figure 4.2, Page 51).** The demographics, health risk behaviour profiles and patterns and interaction with general practitioners would all probably be very different in the general population of adolescents. The secondary schooling environment probably represents the adolescents least affected by unhealthy lifestyle choices.

5.3.2 General Practitioners

The important aspect of the demographic details of general practitioners was that more male learners are consulting with male doctors and more female learners are consulting with female doctors. Also the doctors consulting rooms were most likely situated in the same educational district where learners were attending school. At one level, these may be merely the demographics of general practitioners being reported on in the study sample, but on a different level these demographics may also indicate the general practitioners in private practices that are being sought out by young people from economically disadvantaged backgrounds.

5.3.3 The Interaction

The demographic data describing the learners and doctors may be purely descriptive of the study sample but may be alluding to the complex nature of adolescent consulting patterns and choices of a general practitioner. Larger study samples with a more analytical methodology may describe these aspects of adolescent interaction with health care providers more comprehensively. Research has shown that adolescents choose specific individuals to discuss specific health concerns[35].

84% of male learners were seeing male doctors but when asked if this was the reason for choosing their doctor only 51% **(Table 4.14, Page 74)** reported that they had a preference for a male doctor. 17% of female learners were seeing female doctors but only 11% reported having a preference for a female doctor. Learners reported that their general practitioner is the 'family doctor' in 92% **(Table 4.11, Page 68)** but reported that this was the reason for consulting with their doctor in 68% **(Table 4.14, Page 74).** These observations may indicate that the sex of the doctor may not be as important as the fact that their chosen doctor is the family doctor.

Young people from poor backgrounds that are consulting general practitioners are usually on medical aid (70%). When an adolescent uses their parent's medical aid but needs to consult with their doctor about a sensitive problem that they do not want their parents to find out about, it is not possible. The parent will get a statement from the medical aid revealing the diagnosis and treatment of that consultation. Some young people may in these cases opt to pay cash instead when they consult for more 'sensitive' problems requiring privacy. In this study only 6% chose this option. This could either mean that learners are not aware of the billing system of medical aids, they cannot afford to pay cash or that wanting a confidential consultation was not ever necessary. These learners may also be consulting doctors other than their own general practitioner when sensitive problems arise.

When learners are consulting with an accompanying person, this is usually the parent/guardian in 86% **(Table 4.10, Page 66).** The opportunity to discuss future confidential visits therefore exists. 60% of learners reported that they do consult their doctors on their own **(Table 4.11, Page 68)** so that the opportunity to discuss preventive

issues does occur. An American study showed that at the age of 15 many young people make the decision to consult and 50 % consult on their own[9]. 79% of learners consulted their doctors at least once in the past 6 months so it is possible for preventive issues to be discussed. Perhaps asking general practitioners about the content of preventive care delivery would reveal a more accurate account, but this approach also has its limitations. Research has shown that adolescent's self-report of the care they have received is a valid method of determining the content of preventive health service delivery, but is only accurate within 5 to 7 months of receipt of the service[23]. 80% of learners in the study visited their general practitioner within the last 6 months but this visit was probably not solely a preventive care visit. Previous research suggests that young people consult with their doctors two to three times a year [38].

An American study[5], shows that young people are aware of the factors contributing to their decisions to seek care. It highlighted that provider characteristics are of greater importance than site or system characteristics.

In an overall ranking of the most important reason for choosing their general practitioner, learners ranked services (49,08%), doctor personality and qualities (26,94%), system (11,81%) and site (11,44%) in that order of importance. The American study highlighted that young people placed greater importance on provider characteristics (doctor services and personality and qualities) than site or system characteristics. In this study, when looking at the reasons why learners consult with other doctors, however, learners reported system (66,7%), services (45,1%), doctor personality and qualities (9,9%), and site (2,4%) in that order of frequency **(Figure 4.4, Page 72).**

In South Africa, young people from disadvantaged backgrounds have poor access to services. This is borne out by this study showing that the most important reason why learners chose their doctor was because of the services that their doctor provides. As expected, most learners reported choosing to go to their doctor for a check-up, medication, and for health information and advice and guidance **(Table 4.13, Page 73).** A small percentage of learners used family planning and condoms from their general practitioner. This could indicate that they are using the government clinics for free family planning and condoms because their doctors do not provide an affordable service for them. It is surprising that learners go to their doctors for X-rays and laboratory investigations because these services are very expensive in the private sector. It may indicate that learners have poor access to these services at government institutes and families are willing to get the funds for these services in the private sector. Most of these learners (70%), however, are on medical aid that covers these services. Learners chose to go to another doctor when a specialist visit was necessary or when they were seeking a second opinion **(Table 4.12, Page 70)**

The fact that their general practitioner is the family doctor is the most important reason why many learners chose their doctor **(Table 4.14, Page 74).** It is important to note that confidentiality related features did not rank as very important reasons for choosing to go to their doctor. This could be that many young people assume that this is inherent in any consultation with your doctor, or that the nature of previous consultations did not require confidentiality to be reassured. This study confirmed the findings of an American study which showed that young people want to be respected, listened to, taken seriously, and treated with dignity and respect when consulting with primary care providers[19].

The most common doctor related reason why learners chose to visit another doctor was that they felt that they could not discuss their problem with their doctor **(Table 4.12, Page 70)**. Learners reported that the most important system related aspect that made them choose to go their doctor is that their doctor makes time to see them **(Table 4.15, Page 76).** The most important reason for going to another doctor was system related in terms of the doctor not being available and making time to see the learner **(Table 4.12, Page 70)**. This highlights the fact that young people want to be seen without delay when they get to their doctor's rooms. Of note again is of what little importance is placed on the confidentiality-related aspect of the way the surgery works. Of note here are aspects like the staff understanding the need for privacy and learners being able to take reading material without being embarrassed.

In an open-ended question learners were asked to mention changes that they would like their doctors to make in order to visit more easily. These results were reported as percentages in the results chapter. They will now be discussed in terms of:

- Doctors Services
- Doctor Personality and Qualities
- System (The way the surgery works)
- Surgery Site

Learners' responses that were in Afrikaans were translated into English for presentation.

Relating to doctor's services, learners requested more advice and guidance in terms of how to maintain good health and prevent diseases and understanding what causes diseases. "My doctor must tell me what's wrong and what's right about my health". In many cases

this was specifically related to their sexual health. "My doctor should talk to me about STI's as well as AIDS, and the consequences of unsafe sex". "I want my doctor to tell me about teenage pregnancy, how I can not get pregnant". Specific mention was also made of the provision of medication in terms of an affordable price, a sufficient supply, dosing instructions, medication side effects and the choice of pills over injections. "He must explain to me the medication he prescribes and their side effects". "Must not give me an injection, must give me lots of pills". Learners expressed a need for their doctor to expand their services to include family planning, procedures like circumcision and special investigations like X-rays. "I want my doctor to tell me about family planning injections, tablets and loops". As can be seen in the learner responses, adolescents are receptive to discussing a broad range of health concerns.

With regards to their doctors' personality and qualities, learners requested that their doctor expand their roles "Not only act as a doctor but also as a mentor and advisor". Some learners requested that their doctor should involve their parents, their family and the community. "My doctor must allow young people to talk with their parents about sex in the surgery in order for young people to be free". "He must phone more frequently and find out about how the family doing and how the problem improving" "My doctor must take part in campaigns that we do as the youth, he must try to contribute in the HIV/AIDS campaign". Learners expressed their concern for confidentiality. "The doctor must not tell my parents about my problems". "He must not tell anyone about my problems, not even his receptionist". "My doctor must not check me in front of my parents". An American study showed that 64% of young people who were assured of unconditional confidentiality were willing to disclose information and seek future health care as compared to 36% of those who were assure conditional confidentiality.[39]

In terms of the system, learners commented on various aspects of the way the surgery works. Some learners wanted their doctor to provide transport to their rooms. Many learners expressed a need for their doctor to be available to see them when they wanted to consult.

"My doctor must remain at the surgery at time allocated." "He must not leave us to go for tea time or lunch." "When I visit my doctor, I don't want to find someone replacing him." Learners asked for their doctor to have longer office hours, make it easier for them to make appointments and to be seen without delay. "To wait for a shorter time in the waiting room." "Hire at least two more doctors to help him, we wait too long in the waiting room." "Make appointments more easily." "The doctor must be available for longer hours". Learners asked for their doctors to reduce their fees. "Stop charging me more money that I can't afford." Many commented on the need for a more spacious, comfortable and colorful waiting area. " Must get a bigger waiting room." Some learners commented on the need for better support staff. "The assistant is too cheeky." "My doctor has to fire his nurse, she is rude and doesn't care about people." "I would not mind if he could hire a new receptionist which is friendly and good personality." Some learners asked for things to keep them occupied while waiting. "My doctor must have a TV so that I can watch it when I am waiting for him." "Providing some magazines." "He must have HIV/AIDS posters and pamphlets."

In terms of the site of the surgery, comments were made about their doctor's rooms being within walking distance from them and opening another surgery closer to them.
These comments highlight the fact that young people are very aware of their specific needs in the healthcare setting.

CHAPTER 6 CONCLUSIONS AND RECOMMENDATIONS

The research shows that there is a high prevalence of adolescent health risk behaviours in Johannesburg among the lower-income groups. The prevalence of alcohol use and sexual activity in this Johannesburg study is higher than the Gauteng and the National figures, reflected in the 1st South African National Youth Risk Behaviour Survey[3] conducted in 2002. Of the nine provinces in South Africa, Gauteng features in the top three in prevalence for tobacco, alcohol and drug use and sexual activity. Of importance in the face of an HIV/AIDS epidemic, Gauteng showed the highest prevalence of sexual activity (along with the Free State). There is some indication that our adolescent health risk behaviour profile has worsened in the past decade. The only available data for comparison is the Cape Peninsula study in 1992[2] and the Western Cape figures from the 2002 1st South African National Youth Risk Behaviour Survey[3] These figures show a worsening in tobacco, alcohol and drug use as well as sexual activity. The United States however, shows a decrease in prevalence in tobacco and alcohol and sexual activity in the CDC's YRB Survey from 1991 to 2001[15]. This is probably attributable not only to systematic surveying of adolescent health risk behaviours at a national level over the past fourteen years, but also to the application and implementation of national guidelines for the delivery of adolescent preventive services. It is only with national surveying and the application of national guidelines that realistic goals can be set with well-defined end points and reasonable time frames.

We need to have an indication of the prevalence and trends of adolescent health risk behaviours through systematic surveying on a national level. In South Africa we have already completed our second national survey in 2005. We also need national guidelines to

deliver adolescent preventive services in all primary health care settings, including general practitioners. Policy guidelines for adolescent and youth health started in 1998 are currently being finalised. The NAFCI programme is being implemented and evaluation of its performance is currently being undertaken. This initiative is at present, directed at the government clinics, and does not involve the general practitioners in private practice.

The research shows that young people from economically disadvantaged backgrounds are using general practitioners in private practice. Traditionally, health resources in the private sector have been predominantly for those who can afford them. The public health resource has serviced those who cannot afford private health care. The public health system is bursting at its seams, especially as a result of the HIV/AIDS epidemic.

We can no longer continue to ignore that the private sector will have to become more involved in complementing the services of government hospitals and clinics, especially with regard to addressing the health needs of adolescents in an affordable way.

NAFCI accredited primary health care workers and facilities in both the public and private health care sectors can implement national guidelines relating to the content and delivery of adolescent preventive services in South Africa. Private general practitioners can be reimbursed for conducting annual health care visits for adolescents from economically disadvantaged backgrounds. In the same way as the completion of the Road to-Health card is a necessary prerequisite for children entering formal education in Grade One, so too can the Adolescent Health Card be a necessary pre-requisite for registration for high school. These cards will, however, need to fulfil all the necessary pre-requisites for confidentiality and privacy and must only serve as a record of attendance and not as a medical record.

In terms of delivery, all young people from the age of 11 to 21 will need to have an annual preventive service visit. Health care workers can structure these visits so that they are age and developmentally appropriate, and are sensitive to the individual and socio-cultural needs of the particular adolescent. Health care workers can provide adolescents and their parents with an information letter detailing the aims of this initiative and laying out clear policies regarding confidentiality and the extent of parental involvement. These details can also be included on the adolescent health card.

In terms of the content of the preventive health visit, this can be aimed at parents as well as adolescents.

Firstly, discussions with parents regarding adolescent health issues can be organized at least once during each of the age groups, 11-14 years, 15-17 years and 18-21 years. The adolescent health card can reflect attendance by parents for these three visits (with the adolescent not necessarily being present). At these visits, important adolescent health issues can be discussed which include: normal adolescent physical, sexual and emotional development (signs and symptoms of disease and emotional problems), appropriate parenting behaviours which will promote healthy adolescent adjustment (the necessity of parents being open for discussions and serving as role models for health related behaviours), helping the adolescent to avoid potentially harmful behaviours (promoting driving vehicles with a license, avoiding weapons or keeping weapons safe in the home, not having easy access to weapons or potentially lethal medication when a suicide risk is present) and monitoring their adolescent's social and recreational activities for tobacco, alcohol and drug use and sexual activity.

Secondly, adolescents should attend an annual health visit to discuss issues like normal adolescent physical, psychosocial and psychosexual development, encouragement to become actively involved in decision making especially where their health is concerned is important, injury reduction (no alcohol or drugs while driving, using protective gear like seatbelts and helmets, resolving interpersonal conflict without violence, weapon safety and appropriate physical conditioning before exercise), healthy diets and safe weight management, the benefits of safe physical activity on a regular basis, sexual responsibility (either abstinence or safe sexual practices with condoms to prevent HIV and STI's, birth control to prevent unwanted pregnancies and counselling to protect themselves from sexual exploitation) and the avoidance of tobacco, alcohol, drugs and anabolic steroids. Practically, the adolescent can request the discussion of specific areas of interest and have access to health information in the form of pamphlets, educational audiovisual information and internet access for adolescent health websites.

Thirdly, annual health visits can be used to screen for hypertension, hyperlipidaemia, eating disorders (with serial body mass index), tobacco, alcohol and drug use, sexual activity (condom use , contraceptive methods, sexual orientation, number of sexual partners, sex for money or drugs, previous pregnancies and STI's), HIV (with confidential HIV testing with informed consent and pre- and post test counselling), cervical cancer (with cervical smears in sexually active females above 18 years), depression and suicide risk (declining school grades, chronic melancholy, family dysfunction, homosexual orientation, physical or sexual abuse, alcohol or drug use, previous suicidal attempts or ideation), emotional, physical and sexual abuse, learning or school problems (truancy, absenteeism, declining school performance could allude to learning disabilities, attention

deficit hyperactivity disorder, medical problems, abuse, family dysfunction, mental disorder or alcohol or drug use) and pulmonary tuberculosis depending on risk factors.

Fourthly, annual visits can serve to assess immunization needs; tetanus boosters need to be given every 10 years and if not given during childhood, Rubella, Varicella, Hepatitis A and Hepatitis B vaccines should be given at 11-12 years and optional vaccines for selected populations can be given which include meningococcal, pneumococcal and influenza vaccines.

The research also shows that the interaction between the youth from economically disadvantaged backgrounds and their general practitioner is not optimal. General practitioners can begin to make changes in the way they deal with young people while the process of surveying and developing national guidelines for adolescent health risk behaviour is in its early stages.

The data on the patterns of substance use confirms its experimental nature where the most common pattern was having "tried" a substance. This indicates that there is a great scope for initiating primary and secondary preventive measures. General practitioners working in the primary care setting need to acknowledge that their practices should be predominantly involved in primary and secondary prevention.

This study confirms the notion of a syndrome of adolescent health risk behaviours found valid in the Cape Peninsula study[2] as well as research overseas[14] At present government clinics are addressing the country's need to immunize children and provide antenatal services for pregnant women at an affordable rate. The government hospitals and clinics

have recently started dispensing anti-retroviral drugs. All of this is essential. But can the public health system take on the challenge of improving the health needs of our youth in a holistic way? Some services are available for young people, but it is not functioning at a level where all health risk behaviours are being addressed. The NAFCI programme is being run to improve this aspect of preventive service provision. Perhaps fewer government health care facilities with more efficient comprehensive services complimented by the assistance of private general practitioners should be considered. Using multi component strategies at both a national and local level may be critical in addressing adolescent health issues successfully.

General practitioners will need to find ways of drawing young people from poor backgrounds into their practices and initiating primary preventive strategies as early as 11 years of age. The study showed that young people that consult general practitioners are usually attending schools in the same area. General practitioners need to see their practices as part of a community. Doctors could offer their services to the local high schools by not only complementing the school program with discussions about health related issues, but also making learners aware of the role of their general practitioner in health promotion and disease prevention. General practitioners can make learners aware that the possibility to develop a relationship with their doctor where they feel comfortable to discuss their health concerns in a confidential way.

The research showed that 70% of the learners that consulted with general practitioners were using medical aid. The possibility exists that these learners may need to seek help elsewhere or use cash instead when problems requiring confidentiality arise. General practitioners need to instigate changes in the way medical aid companies' service young

people. Medical aid companies can encourage and reward the use of primary and secondary preventive services in a way that does not compromise confidentiality.

The study showed that the most important way to get young people to the consulting rooms is to provide services at an affordable rate. General practitioners can approach government departments to provide them with family planning and condoms. In return, strict control of supplies and providing regular statistics is necessary. It is a small yet valuable contribution to the sexual health young people. Emergency oral contraception packs can be made available at a minimal cost to young people who are at a particular risk of unprotected sex. General practitioners can negotiate with their local laboratory to perform basic investigations involved in primary health care like cervical smears, HIV and syphilis tests, urine cannabis and blood alcohol levels at reasonable rates, with all the price benefit being conferred onto the patient. General practitioners can negotiate with their local radiology department and motivate for better rates for basic films like chest X-rays for their indigent patients. These initiatives can complement services available at overburdened government clinics and hospitals.

The study showed that the most important way to keep young people in the practice is to make the system 'adolescent friendly' especially with regards to cost and doctors being available to young people without appointments. General practitioners could start evaluating their practices to identify ways of making their practices more 'adolescent friendly'. Practically trying to improve factors relating to doctor personality and qualities, can be achieved through experience and also, organizing and attending workshops related to the adolescent consultation. General practitioners can involve adolescents in organising the system at their consulting rooms indirectly through suggestion boxes or by encouraging

more direct input. As general practitioners we need to feel comfortable working with young people or we run the risk of losing them at the most pivotal times in their lives.

Data on the patterns of substance use in adolescence, confirmed its 'deceptive' nature where drugs and alcohol effects are hidden with weekend use. In this study, uncovering usually occurred, by doctors asking about health risk behaviours directly. General practitioners need to be more successful in uncovering health risk behaviours. Important pre-requisites are that the adolescent feels comfortable discussing issues with their doctor, permission is sought and confidentiality is assured. It is important for general practitioners to go beyond scare tactics and advice to quit, when dealing with young people. They need to be shown the steps they need to take in order gain control over their own actions, learning how to say no. In many situations adolescents do not want to stop the health risk behaviour. A more prudent approach to health promotion may be necessary to advocate harm reduction methods where interventions focus on decreasing the harmful consequences of health risk behaviours rather than the elimination of their use altogether.[39] .Adolescents that are involved in health risk behaviours need to be informed of and have access to all the sources of assistance, aimed at reducing the complications. In this way we can empower adolescents to seek help when it is appropriate.

This research was school based simply because this was the easiest way to access young people. The research however has also served to shed some light on the challenges facing school based intervention programs. A significant proportion of high school learners in the latter three years of study are over 18 years old, indicating a high degree of school failing. It is this subgroup of learners that report the heavier patterns of substance abuse and unsafe

sexual practices. The degree of peer pressure in this environment cannot be under-estimated.

This research has merely provided us with an overview of the interaction of adolescents from poorer backgrounds with private general practitioners. It has only shown possible trends and possible relationships between learner and doctor variables in terms of preventive services for adolescent health risk behaviours. The research has probably resulted in more questions being asked than answers being provided. It is hoped that the findings of this purely descriptive study will instigate further analysis with more focused aspects of adolescent preventive service delivery in larger cohorts of adolescents. Focus group studies will probably be more effective in defining the needs of an adolescent friendly preventive service.

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APPENDICES

Appendix 1: Invitation Letter to Principals

Appendix 2: Gauteng Department of Education Permission

Appendix 3: Committee for Research on Human Subjects (Medical Permission)

Appendix 4: Information Letter and Consent Forms

Appendix 5: Nominal Group Consent Form and Information Leaflet

Appendix 6: Pilot Study Questionnaire (Available on Request)

Appendix 7: Final Research Questionnaire

Appendix 8: Afrikaans Research Questionnaire (Available on Request)

Appendix 9: Certificate for Afrikaans Translation

Appendix 10: Post Graduate Committee Approval

APPENDIX 1: INVITATION LETTER TO PRINCIPALS

APPENDIX 1: Invitation Letter to Principles

Dear Sir/Madam

I am Dr Caron Thomas, a general practitioner in private practice. I am doing research in the field of adolescent health to get my Master's degree in Family Medicine. My study focuses on how high school students are using their general practitioner's service in dealing with lifestyle choices that may affect their health. The proposed research has been approved by the Post-Graduate Committee of the University of the Witwatersrand and the Committee for Research on Human Subjects. Permission has been granted by the Gauteng Department of Education to approach schools for research. All information obtained from the study will be recorded in an anonymous form. Results will be published or presented in such a way that all students, doctors and schools will not be identifiable.

If you agree to assist me in my study the following will be necessary:

1. The name of a contact person at the school with whom I can liaise in this regard.
2. Information about the numbers of students in each class and the male to female ratio will be requested.
3. Three classes (one Grade 10, one Grade 11 and one Grade 12 class) will be randomly selected to take part in the study. Thirty five minutes is required to conduct the research.
4. Students, 21 years and younger, in the classes that have been selected will be given an information letter and consent form to be signed by the parent/guardian. Students who are 18 years and older can sign consent forms.
5. Only those students who have signed consent forms will be eligible to take part in the study.

Please note:

1. The information obtained in the study is confidential.
2. Students are not obliged to take part in the study and will not be at any disadvantage if they choose not to participate.

If you would like to assist me in my research please contact me at:

Tel: (011) 614-4578 (home)

Tel: (011) 483-2820 (work)

Fax: (011) 728-3362

e-mail: kcdaya@global.co.za

The study will take place between the 18 February 2002 and 20 September 2002.

Thanking you in anticipation of your consideration of my request and your prompt reply.

_____

Dr Caron Thomas

APPENDIX 2: GAUTENG DEPARTMENT OF EDUCATION PERMISSION

OFFICE OF THE SENIOR MANAGER
STRATEGIC POLIC DEVELOPMENT

Particulars of researcher:
Dr C. Thomas
120 Highlands Road
Kensington

Tel: (011) 483282014

Fax: (011) 7283362

17 January 2002

Dr C. Thomas

Request to conduct a research study

Topic: "SENIOR HIGH SCHOOL STUDENTS PERCEPTIONS OF THEIR USAGE AND THEIR GENERAL PRACTITIONER'S PROVISION OF PREVENTIVE SERVICES TO ADDRESS CERTAIN HEALTH RISK BEHAVIOURS"

Approval is hereby granted that you may approach the GDE schools in connection with your research study.

Schools:

Districts: Johannesburg North, South, East and West

Permission is subject to the following conditions, and may be withdrawn if these conditions are not met:

1. The District Directors concerned are to be informed that you have received permission from the Gauteng Department of Education to approach school principals to request access to schools for research purposes. The District Directors must be approached for permission to involve District Support Staff in your project.
2. Please show this letter to the school principal and the chairperson of the School Governing Body (SGB) as proof that you have received the Department's consent to carry out the research.

3. A letter/document which sets out a brief summary of your intended research should please be made available to the principals of the schools concerned.
4. Please obtain the goodwill and co-operation of the principal, chairperson of the SGB, teachers and learners involved. Persons who offer their co-operation will receive no special benefit from the Department, while those who prefer not to participate will not be penalised in any way.
5. You must conduct your research after school hours, and the normal school programme should be interrupted as little as possible. The principal must be consulted as to the times when you may carry out your research.
6. In line with international practice on research, the department recommends that the maximum interview time be 35 minutes per participant.
7. You may commence your research from the third week of **February**, as generally permission is not granted to conduct research in GDE schools during the month of **January** and the **last term** of the year.
8. It is the researcher's responsibility to contact the parents of the learners to obtain permission for their children to take part in your study.
9. You are responsible for supplying your own research resources, such as stationery, photocopies, transport, faxes and telephone costs.
10. The names of the schools, principals, teachers and learners may not appear in your research report without their consent. Parents as partners in education should be handled in an equally sensitive manner
11. Please supply the Department via the Strategic Policy Development Directorate with a bound copy of your report. You may also be requested to give a short presentation on your findings.
12. Please supply the Director of the districts with a brief summary of your findings.

The Department wishes you well with this important project and looks forward to hearing from you in due course.

Regards

Sally Rowney (Senior Manager)
Strategic Policy Developments and Research Coordination

Dr C. Thomas
Researcher

21/01/02
Date:

APPENDIX 3: COMMITTEE FOR RESEARCH ON HUMAN SUBJECTS (MEDICAL PERMISSION)

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Division of the Deputy Registrar (Research)

COMMITTEE FOR RESEARCH ON HUMAN SUBJECTS (MEDICAL)
Ref: R14/49 Thomas

CLEARANCE CERTIFICATE **PROTOCOL NUMBER** M01-11-16

PROJECT Senior High School Students Perceptions of Their Usage And Their General Practitioners Provisions of Preventitive Services To Address Certain Health Risk Behaviour

INVESTIGATORS Dr C Thomas

DEPARTMENT School of Clinical Medicine, Wits Medical School

DATE CONSIDERED 01-11-09

DECISION OF THE COMMITTEE *

Approved ~~unconditionally~~ subject to provision of the final research questionnaires to the Committee for approval.

DATE 01-01-23 **CHAIRMAN** ..... (Professor P E Cleaton-Jones)

* Guidelines for written "informed consent" attached where applicable.

c c Supervisor: Dr A Wright
Dept of School of Clinical Medicine, Wits Medical School

~~WorkData\2015\Hum2007.mdb\M 01-11-16~~

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10001, 10th Floor, Senate House, University.

I/we fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee.

DATE 04/02/2002 SIGNATURE .....

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

APPENDIX 4: INFORMATION LETTER AND CONSENT FORMS

APPENDIX 4: Information Letter and Consent Form

Dear Student and Parents/Guardians,

I am Dr Caron Thomas, a general practitioner in private practice. I am doing research in adolescent health to get my Masters degree in Family Medicine. The research focuses on how young people are using their general practitioner's service in dealing with lifestyle choices that may affect their health.

The proposed research has been approved by the Post Graduate Committee of the University of the Witwatersrand and the Committee for Research on Human Subjects. The Gauteng department of Education has granted permission to approach high schools to take part in the research.

The principal of the school that your son/daughter attends has agreed to assist me in my research. Your son's/daughter's class has been randomly selected to take part in the study and not because I consider him/her to have more health problems than any other student.

Students need to fill out a **questionnaire** relating to **their health and how they use their general practitioner's service**. Students need to think about the **general practitioner they usually consult**. The questionnaire is **confidential**. The information will be kept in an **anonymous** form, that is, students must not mention their names nor their doctor's name when answering the questions. Results will be published or presented in such a way that all students, doctors and schools names will remain unidentifiable.

Student's participation in this research is voluntary. If you would like your son/daughter to assist me in my research please sign the consent form below. If your son/daughter is 18 years or older he/she may sign the consent form. Please note that your son/daughter is not obliged to take part in the study and he/she will not be at any disadvantage if they choose not to take part in the study.

I have read and understood the above information before signing this consent form.

Name of student _____(Print full name and surname)

Age of student _____ years _____ months

Signature of student (if 18 years or older) _____ Date (dd/mm/yy) _____

(when consent is signed)

Name of Parent /Guardian_____(Print full name and surname)

Signature of Parent/Guardian _____ Date (dd/mm/yy) _____

(when consent is signed)

Please return this consent form as soon as possible.

APPENDIX 5: NOMINAL GROUP CONSENT FORM AND INFORMATION LEAFLET

APPENDIX 5: Nominal Group Consent Form and Information Leaflet

Dear Parents/Guardians

I am Dr Caron Thomas, a general practitioner in private practice. I am doing research in the field of adolescent health to get my Master's degree in Family Medicine. My research focuses on how high school students are using their general practitioner's service in dealing with lifestyle choices that may affect their health.

The proposed research has been approved by the Post Graduate Committee of the University of the Witwatersrand and the Committee for Research on Human Subjects. The Gauteng department of Education has granted permission to approach high schools to take part in the research.

Your son/daughter has volunteered to be part of a **group discussion**. The information from the group discussion will be documented in an anonymous form. Student's names, doctor's names and school's names will not be mentioned when reporting information.

If you agree to your son/ daughter taking part in the study please sign the consent form below. If your son/ daughter is 18 years or older he/she can sign the consent form.
Please note that you son/daughter is not obliged to take part in the study and will not be at any disadvantage if he/she chooses not to take part.

Name of student _____

Age of student _____ years _____ months

Signature of student (if 18 years and older) _____ Date (dd/mm/yy)_____

Name of Parent/Guardian_____

Signature of Parent/Guardian _____ Date (dd/mm/yy)

_____

Please return this consent form **as soon as possible.** Please note that only four students in your son's/daughter's class will be randomly selected to take part in the group discussion.

NOMINAL GROUP INFORMATION LEAFLET

Certain lifestyle choices like unsafe sex and alcohol, tobacco and drug use may affect a young person's health.

We are meeting to discuss how you feel a general practitioner can **best care** for a young person who may or may not have made an unhealthy lifestyle choice. We do not have a perfect health system, but what would you expect in **an ideal situation**.

We will discuss this by trying to answer the following three questions:

1. What is the **general practitioner's role** when caring for a young person who **has not made** an unhealthy lifestyle choice? This young person is at risk because his/her peer group has taken on health risk behaviors. List the general practitioner's role under each of the following headings.

    - Unsafe sex
    - Alcohol use
    - Tobacco use
    - Drug use

2. What is the **general practitioner's role** when caring for a young person who **has made** an unhealthy lifestyle choice? List the general practitioner's role under each of the following headings.

    - Unsafe sex
    - Alcohol use
    - Tobacco use
    - Drug use

3. What make a **general practitioner's service acceptable** to a young person who may or may not have made an unhealthy lifestyle choice?

APPENDIX 6: PILOT STUDY QUESTIONNAIRE (AVAILABLE ON REQUEST)

APPENDIX 7: FINAL RESEARCH QUESTIONNAIRE

SECTION A:

Information about you:

1. Enter your **age.** (For example, 16 years and 3 months)_____years and _____months.
2. What is your **sex?** ☐ Male or ☐ Female
3. What **Grade** are you in? ☐ Grade 10 or ☐ Grade 11 or ☐ Grade12
4. Mark ☒ **one language** that you feel is the **easiest for you to read, write and speak.**

☐ English ☐ Afrikaans ☐ Zulu ☐ Xhosa ☐ Other (say which one)----------

5. What **work** does your **father** do? ----------What **work** does your **mother** do? ----------

If you are not taken care of by one of your parents, what **work** does your **guardian** (aunt, uncle, grandparent or other person who supports you) do? ----------

Information about your doctor:

If you **do not have a doctor, please go to Section C on Page 5.** →

If you do have a doctor, that is, a general practitioner working in private practice, then continue. ↓

6. **Where** is your doctor's surgery? (Write the area's name, for example, Naledi) ----------
7. Do you use a **medical aid** when you see your doctor?

☐ No **Please go to Question 8** ↓

☐ Yes Have you ever **paid cash instead,** because you did not want your parents to know the reason for your visit? ☐ Yes or ☐ No

8. What **sex** is your doctor? ☐ Male or ☐ Female
9. **How old** do you think your doctor is? (Mark ☒ **only one block**)

☐ 20-29 ☐ 30-39 ☐ 40-49 ☐ 50-59 ☐ 60-69 ☐ 70-79 ☐ over 80

10. For **how many years** has he/she been your doctor? (Mark ☒ **only one block**).

☐ Less than 1 year ☐ 1 to 5 years ☐ 6 to 10 years ☐ 11 to 15 years ☐ 16 to 21 years

11. Does your doctor see **other members of your family**? ☐ Yes or ☐ No
12. Do you ever see your doctor **on your own**? ☐ Yes or ☐ No
13. Which of the following people **have been with you** when you see your doctor? (You may mark ☒ **more than one block**) ☐ Mother/father/guardian ☐ Boyfriend/girlfriend ☐ Friend ☐ Other (say who else)---------- ☐ None of the above
14. How **many times** have you visited your doctor in the **past 6 months?** (Mark ☒ **only one block**)

☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ more than 5

15. How **many months ago** did you **last visit** your doctor? (Mark ☒ **only one block**)

☐ Less than 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ more than 6

16. How many **other doctors** have you **ever visited?** (Mark ☒ **only one block**)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ more than 5

☐ I have never visited another doctor. **Please go to Question 18. ↓**

17. **Why** did you visit other doctors ? (You may mark ☒ **more than one block**)

☐ The other doctor I visited was not a general practitioner (for example a specialist).

☐ My doctor was not able to see me when I needed to visit him/her.

☐ My friend took me to his/her doctor.

☐ I could not talk about my problem to my own doctor.

☐ I was away from home or the place where I usually stay when I needed to visit my doctor.

☐ Other (write your reason)----------

Information about you and your doctor:

18. Mark ☒ only the health topics that **you and your doctor have talked about**.

☐ The dangers of cigarettes (nicotine/tobacco) to your health.

☐ Saying "no" to cigarettes (nicotine/tobacco).

☐ The dangers of alcohol (liquor) to your health.

☐ Saying "no" to alcohol (liquor).

☐ The dangers of drugs to your health.

☐ Saying "no" to drugs.

☐ The dangers of having sex without a condom and family planning (unsafe sex).

☐ Saying "no " to sex.

☐ How to practice "safe sex" with condoms and family planning (like injections, tablets and loops)

☐ How to use a condom in the correct way.

☐ How to use family planning like injections, tablets and loops in the correct way.

☐ When to use the emergency pill (the "morning after" pill, the pill taken after unsafe sex)

☐ How to prevent STI' s or STD' s (sexually transmitted infections/diseases)

☐ How to prevent HIV/AIDS.

☐ How to avoid falling pregnant or making your girlfriend pregnant.

☐ None of the above.

SECTION B:

1. **Doctor services.** Mark ☒ only the ones that **makes you choose to go to your doctor.**

- ☐ A medical checkup.
- ☐ Family planning
- ☐ Xrays
- ☐ Information about my health.
- ☐ Other (write which other services) ———————————————
- ☐ Medicines
- ☐ Condoms
- ☐ Advice and guidance
- ☐ Laboratory tests (like blood tests)

2. **Doctor personality and qualities.** Mark ☒ only the ones that **makes you choose to go to your doctor.**

My doctor:

- ☐ Is the family doctor.
- ☐ Enjoys working with young people.
- ☐ Shows a real interest in me as a person.
- ☐ Makes me feel comfortable to talk about my problems.
- ☐ Understands that I need to keep my problems private.
- ☐ Tells me that all the information from my visits will be kept confidential (private).
- ☐ Gives me a chance to talk about my problems without disturbing me when I am talking.
- ☐ Listens to me.
- ☐ Makes me feel as if my problems are important to him/her.
- ☐ Accepts me as I am, with my good points and my bad points.
- ☐ Gives me advice and guidance without judging me.
- ☐ Does not force me to talk about problems that I am not ready to talk about.
- ☐ Talks to me in words that I can understand.
- ☐ Lets me help him/her to solve my problems.
- ☐ Makes me feel that I am in charge of my own health.
- ☐ Makes me feel comfortable and relaxed when he/she is checking me up.
- ☐ Tells me exactly what he/she is doing while checking me up.
- ☐ Is a male doctor.
- ☐ Is a female doctor.
- ☐ Other (write down which other doctor personality and qualities)———————————————

3. **The way the surgery works.** Mark ☒ only the ones that **makes you choose to go to your doctor**

☐ If I need to see my doctor, he/she makes the time for me to see him/her.

☐ I can afford to pay the price that my doctor charges.

☐ I feel comfortable when waiting for my doctor in the waiting room.

☐ The receptionist/nurse makes me feel comfortable.

☐ The receptionist/nurse understands that I need to keep my problems private.

☐ I can collect interesting pamphlets for young people without feeling embarrassed to pick them up.

☐ Other (write down which other ways in which the surgery works)----------

4. What is **the most important reason** why you choose to go to your doctor? Mark ☒ **only one block.**

☐ My doctor offers good services that I need.

☐ My doctor has good qualities and a good personality.

☐ The way my doctor's surgery works is friendly to young people.

☐ It is easy for me to get to my doctor's surgery.

5. What **changes** would you like your doctor to make so that you will **visit him/her more easily?** (Write short sentences. For example, "My doctor must tell me what he is doing, when checking me up")

(1)----------

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(2)----------

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(3)----------

SECTION C:

"**Tobacco use**" refers to the smoking of cigarettes or cigars, the sniffing of snuff or Ntsu, and the chewing of tobacco. "I have **used** tobacco in my life."

☐ **No, I have never** used tobacco in my life. **Please go to Section D on Page 6.** →

☐ **Yes, I have used** tobacco in my life. **Please continue with this section.** ↓

1. Smoking of cigarettes/cigars. Mark ☒ **only the one** that tells the way **you smoke** cigarettes/cigars.
   - ☐ Never
   - ☐ At least **one time** in my life.
   - ☐ At least **one time on most days of the week.**
   - ☐ At least **one time on most weekends.**
   - ☐ At least **one time every day.**
2. Snorting Ntsu or snuff. Mark ☒ **only the one** that tells the way **you snort** Ntsu or snuff.
   - ☐ Never
   - ☐ At least **one time** in my life.
   - ☐ At least **one time on most days of the week.**
   - ☐ At least **one time on most weekends.**
   - ☐ At least **one time every day.**
3. Chewing tobacco. Mark ☒ **only the one** that tells the way **you chew** tobacco.
   - ☐ Never
   - ☐ At least **one time** in my life.
   - ☐ At least **one time on most days of the week.**
   - ☐ At least **one time on most weekends.**
   - ☐ At least **one time every day.**
4. I feel that my tobacco use **may be dangerous to my health** ☐ Yes or ☐ No
5. I feel that my tobacco use **has already made me unhealthy.** ☐ Yes or ☐ No

If you do not have a doctor, please go to Section D on Page 6. →

If you do have a doctor, please continue with this section. ↓

6. My doctor: ☐ **does not know** that I use tobacco. **Please go to Section D on Page 6** →

   or ☐ **knows** that I use tobacco. **Please continue with Question 7.** ↓
7. How did **your doctor find out** about your using tobacco? (Mark ☒ **only one block**)
   - ☐ I told my doctor about it **without my doctor asking** me about it.
   - ☐ I told my doctor about it **when my doctor asked** me about it directly.
   - ☐ Other. (Say how he/she found out about it)----------
8. What have **you and your doctor talked about** to help you to stop your tobacco use? (You may mark ☒ **more than one block**).
   - ☐ A plan to stop tobacco use (quit)
   - ☐ Using nicotine chewing gums to help to stop tobacco use.
   - ☐ Using nicotine patches to help to stop tobacco use.
   - ☐ **None of the above.** We have not talked about any of these topics.
9. Which of the following **services have you used at your doctor's rooms**? (You may mark ☒ **more than one block**).
   - ☐ My doctor gave me **nicotine chewing gums.**
   - ☐ My doctor gave me **nicotine patches.**
   - ☐ **None of the above.** I have not used any of these services at my doctor's rooms.

SECTION D:

"**Alcohol use**" includes drinking beer, wine, whiskey, brandy, wine coolers, rum, gin and vodka. It does not include sips of wine for religious purposes or toasting family occasions, like weddings.

"I have **used** alcohol (liquor) in my life."

☐ **No, I have never** used alcohol (liquor) in my life. **Please go to Section E on Page 7.** →

☐ **Yes, I have used** alcohol (liquor) in my life. **Please continue with this section.** ↓

1. Drinking of alcohol/liquor. Mark ☒ **only the one that tells best** how you drink alcohol/liquor.

☐ At least **one time** in my life.

☐ At least one drink on **most days of the week.**

☐ At least one drink, **on most weekends.**

☐ At least one drink, **every day.**

2. I feel that my alcohol use **may be dangerous to my health.** ☐ Yes or ☐ No

3. I feel that my alcohol use **has already made me unhealthy.** ☐ Yes or ☐ No

If you do not have a doctor, please go to Section E on Page 7. →

If you have a doctor please continue with this section. ↓

4. My doctor

☐ **Does not know** that I drink alcohol (liquor). **Please go to Section E on Page 7.** →

or ☐ **Knows** that I drink alcohol (liquor). **Please continue with Question 5.** ↓

5. How did your **doctor find out** about you drinking alcohol/liquor? Mark ☒ **only one block**

☐ I told my doctor about it **without my doctor asking** me about it.

☐ I told my doctor about it **when my doctor asked me** about it directly.

☐ Other. (Say how he /she found out about it)——————————

6. What have **you and your doctor talked about** to help you to stop drinking alcohol/liquor? (You may mark ☒ **more than one block**)

☐ A plan to stop alcohol use

☐ Tablets to stop alcohol use (Antabuse)

☐ Going to alcoholics anonymous (AA) meetings where others are trying to stop drinking alcohol.

☐ **None of the above.** We have not talked about any of these topics.

7. Which of the following **services have you used at your doctor's rooms**? (You may mark ☒ **more than one block**)

☐ My doctor gave me tablets to stop drinking alcohol/liquor.

☐ My doctor advised me to go to an AA meeting.

☐ **None of the above.** I have not used any of these services at my doctor's rooms.

SECTION E:

"**Drug use**" refers to the use of substances like cannabis (dagga, zol), PCP (angel dust), LSD (acid), mandrax (buttons), coccaine (coke, snow), heroine (H, China White), barbiturates (barbs), benzodiazepines (downers), steroids (testosterone), amphetamines (speed, uppers), malpitte, Khat, ketamine, magic mushrooms, poppers, ecstasy (E), morphine (M), Welconal (pinks) and inhaled thinners or glue. " I have **used** drugs in my life."

☐ **No, I have never** used drugs in my life. **Please go to Section F on Page 9.** →

or ☐ **Yes, I have used** drugs in my life. **Please continue with this section.** ↓

1. **Injecting** an illegal drug into your body. Mark ☒ **only the one that tells best** how you inject an illegal drug into your body.

☐ Never ☐ At least **one time** in my life. ☐ At least **one time on most days of the week.**
☐ At least **one time on most weekends.** ☐ At least **one time every day.**

2. **Swallowing, snorting, inhaling or smoking** illegal drugs. Mark ☒ **only the one that tells best** how you swallow, snort, breathe in , or smoke illegal drugs.

☐ Never ☐ At least **one time** in my life. ☐ At least **one time on most days of the week.**
☐ At least **one time on most weekends.** ☐ At least **one time every day.**

3. I feel that my use of illegal drugs **may be dangerous to my health.** ☐ Yes or ☐ No
4. I feel that my use of illegal drugs **has already made me unhealthy.** ☐ Yes or ☐ No

If you do not have a doctor, please go to Section F on Page 9. →
If you do have a doctor, please continue with Question 5. ↓

5. My doctor ☐ **Does not know** that I use illegal drugs. **Please go to Section F on Page 9.** →
☐ **Knows** that I use illegal drugs **Please continue with Question 6.** ↓
6. How did your **doctor find out** about your drug use? (Mark ☒ only one block)
   - ☐ I told my doctor about it **without my doctor asking** me about it.
   - ☐ I told my doctor about it **when my doctor asked me** about it directly.
   - ☐ Other. (Say how he/she found out about it)----------

7. What have **you and your doctor talked about** because you are using drugs? (You may mark ☒ **more than one block**).

- ☐ A plan to stop using drugs
- ☐ Testing your urine to be sure that you are not taking drugs.
- ☐ Doing a blood test to check for HIV.
- ☐ Doing blood tests to check for liver infections.
- ☐ Giving you an injection (Hepatitis B Vaccine) to prevent you from getting Hepatitis B infection.
- ☐ Sending you for special care to stop your drug use at a rehabilitation hospital.
- ☐ **None of the above.** We have not talked about any of these topics.

8. Which of the following **services have you used at your doctor's rooms?** (You may mark ☒ **more than one block)**

- ☐ My doctor did **a urine test to check for drugs.**
- ☐ My doctor did an **HIV blood test** on me.
- ☐ My doctor did **blood tests to check for liver infections.**
- ☐ My doctor gave me a **Hepatitis B Vaccine.**
- ☐ My doctor sent me to a **drug rehabilitation hospital.**
- ☐ **None of the above.** I have not used any of these services at my doctor's rooms.

SECTION F:

" I have **had sex** in my life."

☐ **No, I have never had sex in my life. You have completed the questionnaire. Thank You.**

☐ **Yes, I have had sex in my life. Please continue with this section.** ↓

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1. Mark ☒ only those that are **true about you.** (You may need to mark more than one block).

☐ I have had **sex with more than one person.**

☐ I have had **sex without a condom** being used at least one time.

☐ I have had **sex without family planning** being used at least one time. (Family planning like injections, tablets and loops so that you do not fall pregnant)

☐ I have had sex at least one time where a **condom and family planning was not used.**

☐ **I may be in danger of getting an STI or STD.** (Sexually transmitted infection/disease)

☐ **I may be in danger of getting HIV/AIDS.**

☐ **I may be in danger of falling pregnant** or **making my sexual partner pregnant.**

☐ **I have already had an STI or STD.** (Sexually transmitted infection/disease)

☐ **I have already been pregnant** or **made my sexual partner pregnant.**

☐ **I have already had abortion/termination of pregnancy** (ended an unwanted pregnancy) or **miscarriage** (accidental loss of baby).

☐ I have done a blood test for HIV and **my blood result is positive for HIV.**

☐ I am a teenage mother /father because **I already have a child.**

☐ **None of the above is true about me.**

If you <u>do not have a doctor</u>, you have completed the questionnaire. Thank you!

If you do <u>have a doctor</u>, please continue with Question 2. ↓

2. My doctor:

☐ **Does not know** that I have had sex. **You have completed the questionnaire. Thank you!**

or ☐ **Knows** that I have had sex. **Please continue with Question 3.** ↓

3. How did your **doctor find out** that you have had sex? Mark ☒ only **<u>one block</u>.**

☐ I told my doctor about it **without my doctor asking** me about it.

☐ I told my doctor about it **when my doctor asked** me about it directly.

☐ Other. (Say how he/she found out about it)----------

4. What have **you and your doctor** **talked about** so that you and your sexual partner can **be safe** because you have **chosen to have sex?** (You may mark ☒ **more than one block**)

☐ **Condoms** must be used **every time** you have sex.

☐ **Family planning** like the injection, tablets or a loop must be used **every time** you have sex.

☐ If you have **had unsafe sex,** you must take **" the emergency pill"** (the 'morning after' pill).

☐ If you have an **STI or STD** (sexually transmitted infection/disease), **you and your sexual partner** must take medicine to clear up the infection.

☐ If a **period** (menstruation) is **missed or is late, a pregnancy test** must be done.

☐ A **blood test** must be done to make sure that you have not been infected with **HIV**.

☐ A **blood test** must be done to make sure that you have not been infected with **syphillis** (an STI).

☐ Women who are having sex must have **regular Pap tests** to check for cancer of the mouth of the womb (cervix).

☐ Injections can be given to prevent Hepatitis B liver infection **(Hepatitis B vaccine).**

☐ **None of the above.** We have not talked about any of these topics.

5. Which of the following **services have you used at your doctor's rooms?** (You may mark ☒ **more than one block)**

☐ My doctor gave me **condoms.**

☐ My doctor gave me **family planning**.

☐ My doctor gave me the **emergency pill.**

☐ My doctor gave me medicine to **treat an STI/STD.**

☐ My doctor did a **pregnancy test** on me.

☐ My doctor did an **HIV blood test** on me.

☐ My doctor did a **syphillis blood test** on me.

☐ My doctor did a **Pap test** on me.

☐ My doctor gave me a **Hepatitis B vaccine.**

☐ My doctor **did an abortion** on me.

☐ My doctor **sent me to another doctor for an abortion.**

☐ My doctor **checked me up** when **I was pregnant.**

☐ **None of the above.** I have not used any of these services at my doctor's rooms.

You have completed the questionnaire. Thank you!

APPENDIX 8: AFRIKAANS RESEARCH QUESTIONNAIRE (AVAILABLE ON REQUEST)

APPENDIX 9: CERTIFICATE FOR AFRIKAANS TRANSLATION

University
of the Witwatersrand,
Johannesburg

School of Literature and Language Studies

Private Bag 3, Wits 2050, South Africa ◦ Telephone: +27 11 717-4240 ◦ Fax: +27 11 403-2329

Dr Caron Thomas
P O Box 46250
Orange Grove
2119
Fax: 728 3362

3 May 2002

Dear Dr Thomas

This is to certify that I have read the translation done for you by Ms Emmerentia Potgieter and found it to be adequate.

Yours sincerely

Dr E Meintjes
Head of Translation Studies
School of Literature and Language Studies
School Graduate Studies Co-ordinator

APPENDIX 10: POST GRADUATE COMMITTEE APPROVAL

Faculty of Health Sciences

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

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DR C THOMAS
P O BOX 46250
ORANGE GROVE
2119

APPLICATION NUMBER 8509044
STATUS (DEG 91) (MMY00) PZZ

2001-11-15

Dear Dr Thomas

Approval of protocol entitled senior high school student's perceptions of their usage and their general practitioner's provision of preventive services to address certain health risk behaviours .

I should like to advise you that the protocol and title that you have submitted for the degree of Master Of Family Medicine (Part-Time) (Coursework) have been approved by the Postgraduate Committee at its recent meeting. Please remember that any amendment to this title has to be endorsed by your Head of Department and formally approved by the Postgraduate Committee.

Dr AE Wright has/have been appointed as your supervisor/s. Please maintain regular contact with your supervisor who must be kept advised of your progress.

Please note that approval by the Postgraduate Committee is always given subject to permission from the relevant Ethics Committee, and a copy of your clearance certificate should be lodged with the Faculty Office as soon as possible, if this has not already been done.

Yours sincerely

JO Mainwaring (Mrs)
Faculty Officer
Faculty of Health Sciences

Telephone 717-2075/2076

Copies - Head of Department____Supervisor/s

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