THE EFFECTIVENESS OF SCHOOL INTERVENTION PROGRAMS ON TOBACCO USE, ALCOHOL AND DRUG USE AMONG FORM TWO STUDENTS IN FOUR SECONDARY SCHOOLS IN KOTA BHARU, KELANTAN.

By

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ABSTRAK

OBJEKTIF:

Untuk mengkaji tahap pengetahuan, sikap, kemahiran dan amalan yang berkaitan dengan penggunaan tembakau (merokok), arak dan dadah dikalangan murid-murid sekolah menengah tingkatan dua di Kota Bharu, Kelantan, dan untuk melihat keberkesanan program intervensi di sekolah yang menggunakan pelajar sebagai kumpulan penggerak (Briged Kesihatan Sekolah) untuk membimbing rakan sebaya.

KAEDAH:

Kajian intervensi telah dijalankan dikalangan pelajar-pelajar tingkatan dua di empat buah sekolah menengah kerajaan (harian) di Daerah Kota Bharu, Kelantan.. Kajian ini telah bermula pada bulan Januari 1999 hingga Disember 1999. Seramai 36 orang pelajar dari SMK dan 38 orang pelajar dari SMTM telah dipilih untuk menjadi pengajar (Briged Kesihatan Sekolah). Program intervensi dijalankan dengan melatih Briged Kesihatan Sekolah dan mereka menyampaikan program-program tersebut kepada pelajar-pelajar tingkatan dua yang lain di dua buah sekolah selama 3 bulan. Soalan-soalan kajiselidik kendiri (Bahasa Malaysia) telah diberikan kepada pelajar-pelajar di empat buah sekolah tersebut sebelum (pre) pada April 1999 dan selepas (post) program intervensi pada Oktober 1999.

KEPUTUSAN:

i) Data Demografi

Seramai 707 orang pelajar telah mengambil bahagian dalam kajian ini, dimana 392 (55.5%) pelajar adalah dari kumpulan intervensi dan 315 (44.5%) pelajar dari kumpulan kawalan. Daripada keseluruhan pelajar, 388 (54.9%) adalah pelajar lelaki dan 319 (45.1%) pelajar perempuan. Kesemua pelajar adalah Melayu yang beragama Islam.

ii) Penggunaan tembakau (rokok) dikalangan pelajar

Seramai 150 (21.2%) pelajar pernah cuba merokok dan 139 (19.7%) pelajar telah menjadi perokok.

iii) Penggunaan arak dan dadah dikalangan pelajar

Seramai 28 (4%) pelajar pernah meminum arak dan 20 (2.9%) pelajar telah menjadi penagih arak. Seramai 22 (3.1%) pelajar pernah mencuba dadah dan 11 (1.6%) pelajar telah menagih dadah.

iv) **Kesan program intervensi terhadap tahap pengetahuan, sikap, kemahiran dan amalan pengambilan tembakau (merokok)**

Selepas program intervensi terdapat peningkatan ketara pada nilai pertengahan pencapaian (skor) dan nilai pertengahan perbezaan pencapaian untuk pengetahuan tentang penggunaan tembakau dengan nilai $p<0.001$.Bagaimana pun tiada perbezaan yang ketara pada sikap, kemahiran dan amalan pengambilan tembakau.

v) **Kesan program intervensi terhadap tahap pengetahuan, sikap, kemahiran dan amalan pengambilan arak dan dadah**

Selepas program intervensi terdapat peningkatan ketara pada nilai pertengahan pencapaian (skor) dan nilai pertengahan perbezaan pencapaian untuk pengetahuan, sikap terhadap pengambilan arak dan dadah, dan amalan pengambilan arak dan dadah dengan nilai $p<0.05$. Bagaimana pun tiada perbezaan ketara pada kemahiran untuk mencegah dari pengambilan arak dan dadah.

KESIMPULAN:

Program-program intervensi yang diberikan oleh Briged Kesihatan Sekolah di dua buah sekolah (kumpulan intervensi) selama 3 bulan telah dapat meningkatkan pengetahuan pelajar tentang pengambilan tembakau (merokok) tetapi tidak dapat memperbaiki sikap, kemahiran dan amalan mereka. Juga program tersebut telah dapat

meningkatkan pengetahuan pelajar tentang pengambilan arak dan dadah, memperbaiki sikap mereka terhadap pengambilan arak dan dadah tetapi tidak untuk kemahiran mencegahnya. Tambahan pula ia telah dapat memperbaiki amalan pelajar akan pengambilan arak dan dadah.

ABSTRACT

OBJECTIVES:

To assess the knowledge, attitudes, skills and practices in relation to tobacco use, alcohol and drug use among Form Two students in four secondary school in Kota Bharu, Kelantan and to assess the effectiveness of school intervention programs that use students as a peer group to educate their colleague.

METHODOLOGY:

An intervention study was carried out among Form Two students in four secondary school (daily type) in Kota Bharu, Kelantan. The study was started in January 1999 till December 2000. Thirty-six students in SMK and thirty-eight students in SMTM were selected to be the teachers (SHB). The intervention programs were done mainly by these trained SHB who disseminated the programs to other Form Two students in two schools over a 3 months period. Self-administered questionnaire (Bahasa Malaysia) were given to the students in four schools before (pre) on April 1999 and after (post) intervention programs on October 1999.

RESULTS:

i) Demographic data

There were 707 students who participated in this study in which 392 (55.5%) students in the intervention group and 315 (44.5%) students in the control group. 388 (54.9%) of the students were males and 319 (45.1%) were females. All the students were Malays Muslim.

ii) Tobacco use (smoking) among students

There were about 150 (21.2%) students who had tried smoking and 139 (19.7%) students who were regular smoker.

iii) Alcohol and drug use among students

There were 28 (4%) students who had tried alcohol and 20 (2.9%) students were alcohol abusers. There were 22 (3.1%) students who had tried drug use and 11 (1.6%) students were drug abusers.

iv) The effect of intervention programs on the KASP of tobacco use

After intervention programs there was significant increased in mean score and mean difference of score for knowledge of tobacco use with p value <0.001. However there were no significant difference seen in attitudes, skills and practices of tobacco use.

v) The effect of intervention programs on the KASP of alcohol and drug use

After intervention programs there were significant increased in mean score and mean difference of score for knowledge, attitudes towards alcohol and drug use, and practices and of alcohol and drug use with p value <0.05. However there were no significant difference seen in skills against alcohol and drug use.

CONCLUSION:

Intervention programs given by SHB in two school within 3 months period can increase the knowledge of tobacco use, but unable to change their attitudes, skills and practices. Also it can increase their knowledge of alcohol and drug uses, improved their attitudes towards alcohol and drug use but not for skills against it. Futhermore it improved their practices of alcohol and drug use.

Abbreviations

AIDS	-	Acquired Immune Deficiency Syndrome
ADK	-	Agensi Dadah Kebangsaan
CDC	-	Centre for Disease Control
HIV	-	Human Immunodificiency Virus
KASP	-	Knowledge, Attitudes, Skills and Practices
MMA	-	Malaysian Medical Association
MOH	-	Ministry of Health
NADI	-	National Drug Information System
PBSS	-	Program Bersepadu Sekolah Sihat
PMR	-	Peperiksaan Menengah Rendah
SHB	-	School Health Brigade
SMK	-	Sekolah Menengah Ketereh
SMP	-	Sekolah Menengah Panji
SMPK	-	Sekolah Menengah Pangkal Kalong
SMTM	-	Sekolah Menengah Tanjung Mas
SPSS	-	Statistical Package for Social Sciences
U.K.	-	United Kingdom
U.S.A.	-	United States of America
U.S.M.	-	Universiti Sains Malaysia
USMCK	-	Universiti Sains Malaysia Cawangan Kelantan
WHO	-	World Health Organization

CHAPTER 1:

INTRODUCTION

INTRODUCTION

1.1 Adolescents Health Issues

The WHO Technical Report Series 886 (1999) on Programming for Adolescent Health and Development states that adolescent health no longer requires justification. More than half the world's population is below 25, with four out of five young people living in developing countries.

Changing conditions are bringing about changes in behaviour, and countries have recognized that behaviour formed in the second decade of life has lasting implications for individual and public health. The multiplicity of health problems associated with specific types of behaviour include problems associated with the use of tobacco, alcohol and other substances that impair judgement and increase the risk of cancers, cardiovascular and respiratory diseases.

Health-enhancing behavior is primarily the responsibility of young people themselves, who must increasingly take and effect decisions with major health consequences for the present and future. Young people often have little understanding of their own maturation, are unprepared for new relationships, and are unaware of health services available to them. Young people who have developed personal competence, social maturity, and a sense of identity and self-esteem are much more likely to make decisions, which will positively affect their health and development.

The second decade of life is a period of rapid growth and personal development without which individuals cannot acquire the competence needed to adapt to a diverse and changing world. Generally, competence develops whenever there are opportunities to practice certain skills by understanding and using social conventions. The ability to solve problems and anticipate the outcome of one's choices helps to develop a positive sense of self-efficacy and self-worth.

One feature of modern society is the rapidity with which people, ideas and images move across cultures, including the rural to urban transition. This can threaten adult's value systems, authority and knowledge. Yet, such increase in communication provides access to information and ideas that can be value. Meanwhile, the shift of economic control from the public to private sector accentuates a competitive rather than cooperative model of society, and this may also threaten traditional values. Global communication also changes aspirations, and many young people are disadvantaged by the increasing gaps between the rich and poor of North and South and within countries. This situation is aggravated by rapid population growth in countries least equipped to meet the new challenges.

There are health problems which need to be dealt with differently in adolescents than in adults and children – clearly, the traditional approach to preventing and managing the health problems of adults is not always effective in dealing with those of adolescents.

Early education programs for the prevention of smoking sought to inform about the long-term health problems of smoking. The programs often used scare tactics; futilely

relying on the theory that fear of consequences would deter adolescents from smoking. More successful programs now focus on the development needs of adolescents. They emphasize the short-term physical and social consequences of smoking (such as the disagreable odour on clothes and on the breath, stains on the fingers and teeth, and reduced exercise and sports performance). In addition, they prepare adolescents to resist social and peer pressure by helping them strengthen their skills.

Adolescent health, like adolescent development, is a positive concept. It comprises physical, mental and social well being and not merely the absence of disease or infirmity (WHO Constitution) and, like development, it is closely related to adolescent behaviour. However, many diseases and injuries are the result of an unsafe environment beyond the control of the adolescent. Health issues related to the young person's own behaviour include: the age at which sexual activity is initiated, and whether protection is used; eating habits; level of physical activity; and use of tobacco, alcohol and other psychoactive substances. Evidence shows that the health problems of adolescents are interrelated. That is because the factors, which determine their health behavior, are also interrelated. Adolescents who have had the safety, support and opportunity to develop their physical, psychological, social, moral, spiritual, artistic or vocational potential are more likely to have the self-esteem, knowledge and skills to be healthy, and to behave in ways that avert life- or health-threatening problems.

Most programs designed to 'prevent' a specific problem do so primarily by promoting competencies that are at the heart of adolescent development. Moreover, many programs are beginning to employ strategies to modify the social environment of adolescents,

recognizing the inherent risk and protective factors in the environment. The process of development involves the changing relations between the adolescent and his or her context. Healthy development requires the meeting of basic needs and also the acquisition of the competencies necessary to negotiate the social environment and take on adult roles.

Programming that focuses on helping adolescents meet their basic personal needs and master by competencies for living strengthen their overall development and resilience, and ultimately contributes to the motivation and skills needed, to make choices that enhance health. Adolescents with self-esteem, who have mastered essential skills, are better prepared to exploit educational, vocational and social opportunities, or to cope better than others with the lack of such opportunities.

The concept that certain problems have common causes has been validated by findings in a recent study in Cape Town, South Africa, showing that risky types of behaviour involving sexuality, smoking, alcohol and drug use, and suicide are strongly related. An extensive study of American adolescents concludes that love; understanding and parental attention help adolescents to avoid high risk activities both in one-parent and two-parent households. At school positive relationship with teachers were found to be more important in protecting adolescents then any other factor, including classroom size or the amount of training a teacher has (WHO, 1999).

The overall aim of adolescent programs must be to produce well-informed, skilled young people who are motivated to make healthy choices, through an environment that encourages and facilitates these choices, and provides key services, opportunities, and

interpersonal support. The information young people need and are entitled to be part of a safe and supportive environment for them.

- Adolescents require basic information about growth and development and the changes experienced physically, psychologically (both emotionally and cognitively), and socially during maturation.

- Adolescence represents an important opportunity to share and explore information about the needs (both shared and sex-specific) that males and female experience, and about the roles each sex plays in relationships, family life and society.

- Adolescents require information about specific areas of health, such as nutritional requirements etc.

- Adolescents require information about potential risks to their health from behaviour such as use of tobacco, abuse of alcohol and other drugs, and on how to avert these risks.

- Adolescents also need information about opportunities and available services related to health, education and vocational and recreational opportunities, to optimize the use of resources available to them.

The information should be interactive, active in approach, offered to a 'voluntary' as opposed to a 'captive' audience tailored to the needs of individual adolescents and reaches a large number of people.

Peer to peer education has been found to be effective approach to sharing information. Young people are often willing to listen to and follow advice from their peers. Researches indicate that peer-led education is at least as successful as adult-led education in health

risk reduction programs on matters such as drug abuse, prevention of pregnancy and HIV. Young people stating support for and modeling important prevention behaviour (such as thinking about personal choices by avoiding abuse of alcohol) have been found to help create and strengthen positive attitude in-groups towards the healthy behaviour. As role models, peers can be very effective in enhancing information sharing as an intervention.

The intervention of building skills is the process of teaching competencies to influence behaviour through a set of structured activities. Teaching of skills is practical and intended to equip the young people with new or improved abilities in selected areas. Young people need to develop competencies and particular skills in physical, psychological, social, moral and vocational areas, to promote healthy development and help prevent particular health problems. Skills that are needed for performing various specifics task in everyday life and include:

- practical self-care skills
- livelihood skills
- skills for dealing with specific risky situations, such as the ability to say 'no' while under peer pressure to use drugs.

The activities used to build skills include working in small groups and pairs, brainstorming, rehearsal, role-playing, games and debates. To teach a new skills, it is useful to introduce the behaviour or skill and provide information on its use, demonstrate the skill, give participants an opportunity to try it out, ask for self-assessment of performance (and of ways to improve it), provide feed-back, and then provide the opportunity to try out the skill again. It has been found most effective to give the

feedback in a constructive, supportive manner. This in itself is an important skill that adolescents and adults to learn. If the technique of role-playing is used, for example to learn skills for avoiding risky situations, it is often useful to introduce progressively complex situations to which the young person must respond, thereby practising the selected skills.

A review of some research on life skills programming noted:

- positive changes in self-reporting of health behaviour (for example substance abuse and smoking) following the programs;
- those based upon skill learning worked better than traditional approaches based upon information provision;
- improvements in mental health status, in particular self-esteem and self-confidence;
- improved relations, and more open communication with parents;
- evidence of teacher satisfaction, improved teacher-pupil relations and classroom behaviour, following training and implementation of a program on skills.

A review (J Howard unpublished data, 1995) of the effectiveness of interventions to reduce substance abuse identified training in skills along with cognitive behaviour and residential treatments, as having positive outcomes in the few controlled trials available. Training in skills has also been cited as important in reducing alcohol consumption among adolescents in both the short and long terms.

A review of the effectiveness of tobacco, alcohol and drug abuse programs for young people noted the importance of teaching young people skills to help them resist identified

pressure in the media and correcting misconceptions of social norms governing drug use. Also highlighted was the importance of teaching adolescents general skills to prevent drug use. These typically include two or more of the following types of training in skills: problem solving and decision-making, cognitive skills for resisting negative social influences, skills for increasing self-control and self-esteem, coping strategies for relieving stress and anxiety, interpersonal and assertiveness skills. Such approaches have reportedly shown some success in relation to both alcohol and marijuana use.

Intervention plays a dual role in promoting healthy development and reducing high-risk behaviour. Designing programmes, which involve a combination of interventions suited to the particular, needs of the young people served can enhance this dual benefit.

Various studies have confirmed that the factors related to antisocial behaviour in late adolescence and adulthood are found in childhood and early adolescence – the absence of a competent or caring adult, early educational difficulties and unaddressed learning difficulties, among others – are directly related to unprotected sexual activity, delinquency, drug abuse and other antisocial and self-destructive behaviour. In addition, evidence from many developing countries suggests that adolescents are dropping out of school as early as age 10. Thus, empirical demographic trends as well as research from developmental psychology suggest that investing in problem prevention for vulnerable adolescents should start at an early age. It is important to encourage the development of desired behaviour at crucial stages of adolescence before undesirable behaviour becomes habits.

Adolescence is a time in which various developmental tasks must be completed. The consolidation of identity, reduced dependence on parents, establishment of intimate relationships outside the immediate family and selection of a vocation are major tasks of adolescence.

The focus of interventions can be seen as two-fold:

- Interventions are required which focus on the individual: intervention, such as providing information and building skills, and counseling may be offered in-group of varying sizes or on an individual basis, but the main focus of each intervention is on influencing the development and behavioural choices of adolescents as individuals.
- Interventions are also required which address selected external factors in the adolescents social environment: (a) existing or non-existent policies and legislation, such as laws on smoking and school attendance of pregnant adolescents; (b) the social norms prevailing in a society, such as attitudes towards the general role of adolescents, and towards sexual activity of young people; and (c) the presence of caring and supportive family, friends and other adults.

A safe and supportive environment is part of what motivates young people to make healthy choices. 'Safe' in this context refers to absence of trauma, excessive stress, violence (or fear of violence) or abuse. 'Supportive' means an environment that provides a positive, close relationship with family, other adults (including teachers and youth and religious leaders) and peers. Such relationships can nurture and guide young people, set limits when needed, and challenge certain assumptions and beliefs supportive and caring

relationships with adults and friends, and positive school experiences are particularly significant aspects of a supportive environment for adolescents. Such relationships provide specific support in making individual behaviour choices, such as when to become sexually active, how to handle anger, what to eat, and when and if to use substances.

Adolescent is a gateway to the promotion of health. Many of the behavioural patterns acquired during adolescence (such as gender relations, sexual conduct, the use of tobacco, alcohol and other drugs, eating habit, and dealing with conflicts and risks) will last a lifetime. They will affect the health and well being of future generations. Adolescence provides opportunities to prevent the onset of health-damaging behaviour and potential repercussions. Fortunately, adolescents are receptive to new ideas; they are keen to make the most of their growing capacity for making decisions. Their curiosity and interest are tremendous opening to foster personal responsibility for health. Furthermore, engaging in positive and constructive activities provides occasions to forge relationships with adults and peers as well as to acquire behaviour that is crucial to health.

The attitudes and behaviour programs seek to influence (e.g. sexual behaviour and gender relations, use of substance, dealing with conflicts and risks) often arise from and feed off one another. For example, the use of psychoactive substances alters judgement and thus makes aggressive acts, unprotected sex and accidents more likely (WHO, 1999).

1.2 Adolescents and Smoking

It is no longer a doubt that smoking is hazardous to health. Tobacco consumption is the form of cigarette smoking is a serious public health problem in Malaysia. The most important cause of preventable premature death in this country is related to smoking for the past decade, heart diseases, cerebrovascular diseases and cancers remain the leading causes of death (MOH, Malaysia, 1996). Smoking is a major problem amongst youth in Malaysia. A survey by the Ministry of Youth and Sports on negative behaviors among 5860 adolescents showed that 80% of them smoked (N N Naing et al, 1997).

Cigarette smoking has gradually been accepted as part of 'modern culture'. Small-scale community studies and the 1987 nationwide survey conducted by the Ministry of Health have reported a smoking prevalence of 40 to 50 per cent. Studies among university students in the 1970's have found a smoking prevalence of about 25 per cent (B Hashami et al, 1994). The National Health and Morbidity Survey 1996 conducted by Ministry of Health have reported a smoking prevalence of 31.3 per cent. By age group 18 to 19 years old smoking prevalence of 22.5 per cent. In Kelantan State the prevalence of smoking among adult's age > 18 years old was 38.3 percent. There are also a studies that shown the prevalence of smoking was 26.6 per cent among students in Malaysia and 18.8 per cent among students in Australia (average 23.4 %) (B Hashami et al, 1994).

Z Ahmad (1999) in his preliminary report was mention nearly half of the students who smoke started smoking while are still in the primary school (48.6%). For non-smokers, only 31 students (2.3%) are keen to start smoking when they become adults. The majority

of the students (51.0%) have fathers who are smokers. Nearly 30% of the students have elder brothers who are smokers. However, only a small number 206 (12.0%) have got close friends who are smokers. The majority of students 921 (52.3%) occasionally asked to buy cigarettes for their fathers while their fathers frequently ask 128 (7.4%) students buy cigarette. In other studies have shown that most of the smokers (69.6%) started the habit during secondary school. However, 31.8% of them started even during their primary school. Two common reasons given for smoking are peer influence and personal problems. Twenty-five (54.3%) admitted to smoke 1-5 cigarettes per day while 10 (21.7%) smoked more than 20. Almost all of them (93.5%) knew that smoking is dangerous to their health (N N Naing et al, 1997). In another study have shows that around two third of the smokers started the smoking habit before the age of 15. Reasons for smoking were mainly imitation, enjoyment, relaxation at free time, feeling of maturation and normal behaviour of man (N N Naing et al, 1996). We now know that the period between the ages of 9 and 10 has been identified as a time when children experiment with their first cigarette. Curiosity, and the fact that others are trying smoking, plays an important role in this early experimentation. The cigarette is usually obtained from another person and smoked in the company of others. However, most experimentation with smoking occurs in late childhood and early adolescence. Studies confirm that it reaches a peak between the ages of 11 and 14, and half of all children who experiment with smoking before they are sixteen do so in their first three years of secondary school (B Bellew, D wayne, 1991).

The prevalence of smoking among children and adolescents has been studied in many countries. Most studies from Britain have shown that at the age of 16 years 25% of

British boys admit to being regular smokers (Horn et al, 1959; Bough et al, 1982). From among countries neighboring the UAE, in Saudi Arabia the smoking prevalence was 7.8% and 37% among high school children (Rowland and Shipstar; Bener 1987), in Kuwait 30% (Moody et al, 1996), and in Jordan 17% (Awidi, 1990). In Japan the corresponding figure was 37% (Ogawa et al, 1988), in Greece 22.3% (Kokkevi, 1991), in Ireland 16-21% (Borehan, 1993), and in Australia 28% (Levy, 1991) (A Bener, L M B Al-Ketbi, 1999) (see Table 1.2). In Hong Kong, China and other Asian countries, the rise in the prevalence of smoking in adults is a more recent phenomenon then in the UK and US. Although the rise in smoking in children occurred later, current prevalence is now approaching that in the West (T H Lam et al, 1998).

Table 1.2: The prevalence of smoking in different countries

Country	Author & year	Age of population	Prevalence teenage boys
Australia	Levy, 1986	14-19	28
China	Zhu et al, 1988	15-18	14-23
Greece	Kokkevi, 1991	14-18	22.3
Japan	Ogawa et al, 1988	12-15	23-29
Jordan	Awidi, 1991	16	16.7
Saudi Arabia	Rowlands et al,1987	18-19	12
UK	Charlton, 1983	16	26
USA	Portnoy, 1989	Tenth grade	21
UAE	Bener et al, 1999	15--19	19

Source: A Bener and LMB Al-Ketbi (1999)

Recent evidence has shown that cigarette smoking and its major health problems are no longer confined to adults. Although minors suffer primarily from passive smoking due to parental smoke, children of parents who smoke are also influences to begin smoking early. Apart from the role of parents, minors also smoke as results of the lack of national, strategies to prevent children from smoking. A paper in this issue of the Medical Journal of Malaysia has shown that our children can easily purchase cigarettes without being asked their age or for whom the cigarettes are. Yet another factor is the aggressive marketing strategies employed by cigarette companies. Dwindling sales in developed countries have resulted in these companies diverting their resources and attention to developing countries. As these countries have populations with large numbers of children and adolescents, marketing strategies are deliberately targeted at the younger age groups. Cigarette advertisements in developing countries therefore use themes and role models that would markedly appeal to adolescents and children. Cigarette companies also sponsor programs that appeal to younger age groups like sports, music, travel and other recreational activities. The psychological effect of this in children is the conditioning of their minds and the formation of an associations between smoking and these 'acceptable' activities while this does not automatically make children take up the habit, it nevertheless create some degree of permissiveness in their minds towards smoking. Other factors also play a part in determining smoking behavior in children. Recent studies have shown these factors to be cultural, peer pressure and psychobiological (H M Hussain, 1998).

Earlier initiation of smoking is associated with developing heavier use and earlier onset of related illnesses. Tobacco smoking is addictive; therefore these young smokers

form a cohort of future chronic users who are at risk for numerous diseases. Tobacco products have been readily available to young people. Flay BR (1993) has noted that the social learning process of young people is affected when they observe how easy it is to obtain tobacco (R A Dovell et al, 1998). Pierce and Gilpin estimate that teenagers who become smokers today will remain addicted for an average of 16 to 20 years. In addition, adolescent smoking is a dynamic process, with many experimenting but fewer going on to regular use. Mental Health might influence the process of becoming a smoker at various points: initiation of smoking, transition to regular use and the process of quitting (G C Patton et al, 1996).

What is perhaps most striking is that 7 of 10 young people who smoke report that they regret ever having started. Three of four young smokers have tried to quit at least once and failed. The sense of regret and helplessness among teenagers was documented in focus group studies of young smokers sponsored by one Tobacco Company more than a decade ago. A report on one of those studies noted:

However intriguing smoking was at 11, 12 or 13, by the age of 16 or 17 may regretted their use of cigarettes for health reasons and because they feel unable to stop smoking when they want to. Over half claim they want to quit. However, they cannot quit easier than adult can.

A subsequent report on youth smoking for the company stated:

The desire to quit seems to come earlier now than before, even prior to the end of high school. Infact, it often seems to take hold as soon as the recent starter admits to him that he is hooked by smoking. However the desire to quit and actually carrying it out, are two

quite different things, as they would be quitters soon learns. Young people are aware of the dangers associated with smoking and nicotine addiction, but they do not believe that these dangers apply to them. Until they are in the grip of nicotine addiction, they greatly underestimate its power over them (D A Kessler, 1995).

Nicotine meets the key criteria for addiction or dependence used by major medical organizations. The market place for tobacco products is sustained by this addiction. The 1988 Surgeon General's report concluded 'cigarettes and other forms of tobacco are addicting...[and] nicotine is the drug in tobacco that causes addiction'. The Surgeon General's conclusion drew on criteria for addiction or dependence used by U.S. and international medical organizations, including the following:

Compulsive use (despite a desire, or repeated attempts to quit), psychoactive effects produced by the action of the substance on the brain and behavior motivated by the 'reinforcing' effects of the psychoactive substance (D A Kessler, 1995).

Given the high level of awareness about the dangers of tobacco, why are teenagers smoking in ever-greater numbers? Many cite tobacco advertising as major contributor to this increase. The amount being spent by this industry in the United States has more than doubled in a 10-year period, rising to 4-6 billion dollars in recent years. As a result, young people see tobacco advertising messages everywhere: on bill boards, in stores, in magazines, on clothing and at community events. These ubiquitous images and messages serve as a symbolic social influences by conveying to young people that tobacco use is desirable, socially acceptable, safe, healthy and prevalent in society (E Feighery et al, 1998).

With regard to the transition from non-smoker to experimental smoker, they cite longitudinal studies which have identified predictors such as social disadvantage; a social milieu that model smoking; availability or affordability of cigarettes; a personalities that is rebellions, risk taking and independent, with fragile self-esteem; relatively weak refusal skills; exaggerated beliefs about the prevalence of smoking; non scholastic orientation; attitudes and intentions favorable to smoking and a favorable subjective response to cigarette advertising. Studies concerning the transition from experimental to regular smoker have identified predictors such as modeling and approval by peer group, an independent, risk-taking personality; exaggerated prevalence estimates; and attitudes and intentions favorable to smoking. There is also evidence that nicotine addiction and beliefs about the value of smoking to control weight are relevant factors (B Bellew, D Wayne, 1991).

Goddard E (1990), in her longitudinal study of school children in England and Wales has concluded that the onset of smoking among young teenagers is rarely a single distinct event with a simple explanation; on the contrary, the smoking behavior of children is erratic and complex (B Bellew, D Wayne, 1991).

Unfortunately, cigarette smoking is common among young people, including preadolescents, and up to 75% of adolescent's experiments with cigarettes at least once. During the past two decades, the age at which adolescents begin smoking has decreased, particularly among girls, with some reports showing that children as young as 9 years old are smoking. The Centers for Disease Control and Prevention have reported that 91% of adult's smokers began smoking before the age of 20; however, the peak ages for

experimenting with tobacco vary by study. In a study of children in military households, Chisick et al. reported that most smokers began using cigarettes between the ages of 9 and 14. By contrast, Esconbedo et al. found 17 to 19 years of age to be the peak years of smoking initiation across all racial and ethnic groups. Laws banning the sale of cigarettes to minors have been beneficial in reducing smoking initiation; however, nearly 75% of juniors and seniors in high school who smoke obtain cigarettes from family members or friends. Parents appear to strongly influence whether their children will begin smoking. Peer pressure appears to play an important role in smoking initiation. Group membership dramatically influences whether an adolescent will use tobacco and social pressures for popularity continue to induce smoking behavior among teenagers, particularly before the age of 16 (J S Hampl, N M Betts, 1999).

The evidence that tobacco was harmful began to accumulate during the 19th century, much of it relating to cancer and the use of clay pipes. As the incidence of lung cancer among men began to rise in the first decades of the 20th century, several epidemiological (case-control) studies were carried out in Britain, Germany and the USA to explore the reasons for the observed increase. For various reasons, these studies failed to establish unequivocally the role of tobacco in producing lung cancer. The situation changed dramatically in 1950 with the publication of five major case-control studies (four carried out in the USA (Schrek et al., Levin et al., Wills and Porter, and Wynber and Graham and one in the United Kingdom (Doll and Hill), all of which revealed a close association between smoking and lung cancer (A D Lopez, 1999).

The study found that there was an estimated 16% increased risk of lung cancer among non-smoking spouses of smokers. For place exposure, the estimated increase in risk was 17%. The results of this study are consistent with those from major scientific reviews of this question published during 1997 and 1998 by the Government of Australia, the State of California and the Government of United Kingdom. A major meta-analysis of passive smoking and lung cancer has also been published in the British medical journal. From these and other previous reviews of the scientific evidence a clear global scientific consensus has emerged: passive smoking does cause lung cancer and other diseases (World Health Forum, 1998).

The epidemic of addiction to nicotine among young people has enormous consequences for public health. Each year in the United States, more than 400,000 smoker's die of smoking related illnesses. Smoking kills more people than AIDS, car accidents, alcohol, homicides, illegal drugs, suicides and fires combined. Diseases associated with smoking include heart disease, lung cancer, chronic bronchitis and emphysema (D A Kessler, 1995).

The challenge remains, however to accelerate public health action to reduce cigarette consumption everywhere, particularly in the developing world. As the evidence on the hazards of tobacco confirms to accumulate in developing countries, the need for more effective tobacco control programs will become increasingly urgent. If appropriate policy and program responses are not implemented today, the prediction of 10 million deaths a year from tobacco consumption worldwide by 2030 will tragically become a reality (A D Lopez, 1999).

1.3 Adolescents Alcohol and Drug Use Issues

Alcohol related problems are a matter for concern in many countries. Besides producing psychiatric and physical complications for the alcohol dependent person, alcohol abuse also causes grave difficulties for his family, as well as causing social problems such as motor vehicle accidents, absenteeism from work and increased cost of health care (T Maniam, 1994). The overall effect of alcohol consumption in a population depends on the distribution within it of consumption and the prevalence of diseases the frequencies of which are modified by alcohol. A study in the USA suggested that the reduction of mortality attributable to the beneficial effects of alcohol might slightly outweigh the excess mortality attributable to the harmful effects. Even if a net excess of mortality is attributable to alcohol, this is less than the mortality attributable to smoking. The net effect of drinking on years of life lost (as opposed to death rates) may be less favourable because the causes of death prevented by alcohol occur mostly in older individuals, whereas accidents and suicide (the risks of which are increased by alcohol) are important causes of death in young adults (C May, 1991). The actual prevalence of alcoholism and alcohol-related disorders in Malaysian community is unknown, since there have been no studies done to estimate this. However, the Consumer Association of Malaysia estimates there to be 200,000 alcoholics in this country, of which 65% are Indian, 25% is Chinese and 9% are Malays. In 1988, the Consumers Bulletin reported the total of 80 deaths from drinking adulterated alcohol in the last 11 years (K I Saroja, O Kyaw, 1993). The 1996 National Health and Morbidity Survey conducted by Ministry of

Health has reported alcohol prevalence among non-Muslim (age >18 years old) was 29.2 percent and or Kelantan State was 33.7 percent.

Alcohol has two entirely different effects on brain. One is an anxiolytic (anxiety relieving) or tranquilizing effect, the other a stimulatory effect. People who tend to worry unnecessarily under normal circumstances and who become even more anxious when faced with demanding situations, for example public appearances often exploit the anxiolytic or tranquilizing effects of alcohol. The relief offered in these situations by the anxiolytic effects of alcohol may lead to habitual drinking, with an increasing need for larger quantities of alcohol. In a relatively short time, these people are unable to cope without alcohol – they have become alcoholics. This dependence on alcohol can affect anyone, even athletes. Recent research has shown that alcohol stimulates certain brain functions. It helps a person to relax and promotes a feeling of well being (euphoria), which is probably the most potent reason for social drinking. Even at low blood concentrations, alcohol impairs co-ordination and prolongs reaction times, which obviously diminishes athletic performance. Symptoms also include memory disturbances. The deterioration in performance exists long before other indications of intoxication become apparent and has led to the introduction of legal limits for drunken driving in many countries (limits vary). Important signs are already evident at the low blood alcohol level corresponding to the consumption of one to two bottles of strong beer (9715(b) Res 16).

Alcohol use is an excellent example of a biopsychosocially-determined condition, the cause of which is multidimensional and multifactorial. Studies have explored personality, demographic, psychological, familial and environmental characteristics associated with adolescent alcohol use. Ongoing research supports the following antecedents of adolescent alcohol use: laws and norms favorable toward use; the availability of alcohol; extreme economic deprivation; neighborhood disorganization; and low bonding to traditional social support groups, such as religious groups, clubs and youth activity organizations. Children and adolescents who experience considerable problems in behavior (such as aggressiveness and rebellious deviancy), in cognition (such as learning disabilities and attention deficit disorders), in psychological well-being (such as depression, isolation and low self-esteem) and in family functioning (such as neglect, abuse, loss and lack of close relationships) have been shown to be at increased risk. Early onset of alcohol use is one of the best predictors of subsequent use (M J Werner et al, 1999).

The structure of the family itself continued to changed in most parts of the world, generally becoming more nuclear and thereby weakening traditional patterns of social solidarity and support. Just one of the factors involved has been the increasing number of women in developing countries entering the paid labor force for economic reasons. Family breakdown and other changes in family structure have had repercussions on the health of individual family members and of the family as a whole as well as on the health and social services, which have often not been able to respond to increased demands. It has also had an impact on behavior especially that of young people and particularly in the

area of sexual relations and the use of tobacco, alcohol and other drugs with important short- and long-term consequences for health (WHO, Geneva, 1994). Parents serve as important role models for their children. Attitudes and beliefs regarding alcohol develop early in life, often by age 7 or 8 years. Parents need to be aware that their attitudes and beliefs can strongly influence and play a major role in shaping their child's behavior. Clear parent-defined conduct norms are an important protective factor. Adolescents least likely to use alcohol and other drugs are emotionally close to their parents, receive advice and guidance from their parents, have siblings who are intolerant of drug use, and are expected to comply with established conduct rules. The parents of nonusers typically provide praise and encouragement, develop feelings of trust, and are sensitive to their children's emotional needs (M J Werner et al, 1999).

The average age of first drinking alcohol outside of family-sanctioned use or religious occasions is now down to 12 years of age. The earlier an individual begins to drink or use other drugs, the greater the likelihood of later problems related to alcohol and/or other drugs. Alcohol use is a major factor in the deterioration of the health status of adolescents and young adults. The leading causes of death in teenagers are accidents or unintended injuries, homicide and suicide. Approximately one half of fatal motor vehicle accidents and homicides, as well as a substantial proportion of suicides, are associated with the use of alcohol and other drugs. Postmortem studies show that 45% to 50% of adolescent victims of violent deaths had been drinking alcohol before their death, as evidenced by blood alcohol concentrations. In addition, alcohol has been implicated in a majority of drowning, fire-related deaths and fatal falls. Alcohol use contributes substantially to the

burden of mental health disorders affecting adolescents. Moreover, children and adolescents who engage in alcohol and other drug use often engage in other risk taking behaviors. There is a correlation between alcohol use and sexual activity, including initiation of sexual intercourse for some adolescents. Most date rapes involve the use of alcohol by one or both partners. Those adolescents who use tobàcco are often involved in problematic alcohol or other drug use (M J Werner et al, 1999).

Some of the most promising prevention approaches focus on deterring initial use. Although the content may vary, these approaches encompass problem solving, decision making, cognitive skills for resisting social pressures, learning nondrug coping alternatives, interpersonal skills, and assertiveness training, all of which are taught through demonstration, rehearsal or homework assignments (M J Werner et al, 1999).

Since early nineteenth century, drugs are being abused in Malaysia, at that time mainly by Chinese laborers who smoked opium. A change a pattern of drug abuse was seen in the 1960s' where youths of all ethnic groups started abusing drugs. Besides smoking drugs are also taken orally, inhaled, sniffed or more dangerously injected intravenously. Types of drug abuse also differ, heroin being most common, followed by cannabis. The geographical location of Malaysia close to the drug Golden Triangle promotes availability of illegal drugs here. The Golden Triangle, which comprises areas in Laos, Myanmar and Thailand, is one of the biggest producers of raw opium in the world. The number of youths abusing drugs escalated since 1960s', creating much abuse related problems prompting the Malaysian Prime Minister, on the 19th February 1983 to declare