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United Nations Office on Drugs and Crime



Guidelines
on drug prevention and treatment
for girls and women

UNITED NATIONS OFFICE ON DRUGS AND CRIME

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Guidelines on
Drug Prevention and
Treatment for
Girls and Women

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Introduction

Although overall drug use remains low among women, with men three times more likely than women to use cannabis, cocaine or amphetamines, women are more likely than men to misuse prescription drugs, particularly prescription opioids and tranquillizers (UNODC, 2015). In addition, as described later in the document, there are indications that this 'gender gap' might be closing among girls. Yet, as it will become clear, only a very limited number of substance use prevention strategies target girls specifically and it cannot be assumed that existing evidence-based substance use prevention strategies benefit girls as much as they do boys. Moreover, it is estimated that, while one out of three drug users is a woman, only one out of five drug users in treatment is a woman. (UNODC, 2015).

The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being (WHO, 1946), and access to health care services should be provided on a basis of equality of men and women (UN, 1976). These principles have recently been re-iterated by the Member States of the United Nations in the context of the Sustainable Development Goals. Sustainable Development Goal 3 is to “ensure healthy lives and promote well-being for all at all ages”, and one of its targets is to “strengthen the prevention and treatment of substance abuse” (target 3.5). As all the Sustainable Development Goals are “integrated and indivisible”, the attainment Goal 3 and its targets should be accomplished together with Goal 5 to “achieve gender equality and empower all women and girls” (UN, 2015). The guidelines also respond to Resolution 55/5 inviting “the United Nations Office on Drugs and Crime to work with relevant United Nations agencies, including the United Nations Interregional Crime and Justice Research Institute, to assist and support Member States in developing and adapting measures and strategies, at the national, regional and international levels, addressing the specific needs of women as an essential element of more effective, just and human rights-based policies;”.

In this context, the overarching aim of this document is to inform and encourage governments, policy-makers, and other partners to take the necessary actions to implement evidence-based prevention strategies and treatment services for substance use disorders in order to provide everybody, girls as well as boys, and women as well as men, with the skills and opportunities to prevent the initiation of unhealthy behaviours and, in case of individuals who use drugs and suffer from drug use disorders, with the optimal support for improving their life circumstances.

This document is a component of Project DAWN - Drugs, Alcohol and Woman Network, implemented by the United Nations Interregional Crime and Justice Research Institute (UNICRI) with the support of the Anti-Drug Policies of the Presidency of the Council of the Ministers of the Government of Italy. The aim of the project has been to establish a network of experts on gender differences in substance use and addiction recovery, who can advocate and assist in the development and implementation of evidence-based interventions, policies and best practices which are tailored to the particular needs of women. The network has been initially active in Italy (with the creation of the national network DAD.Net) and in the Mediterranean region in collaboration with the Pompidou Group. In addition, it has documented best practices in drug prevention and treatment (UNICRI, 2015) and, to complement this publication, UNODC has developed these guidelines.

Overview of the document

The document first briefly discusses the alcohol and drug use prevalence and trends for girls and women worldwide, as well as the research on the factors of vulnerability and resilience that are specific to girls and women. The following section contains the results of a review of the literature on the effectiveness among girls and women of different kinds of drug prevention strategies and identifies indications on how to maximize their effectiveness among girls as much as among boys. The final section of the document summarizes current scientific evidence in a series of principles and guidelines on how to treat drug use disorders effectively among both girls and women.

Methodologically, the content of the document has been developed on the basis of a summary of the scientific literature undertaken by two consultants in 2013. A draft of the guidelines was published in 2014 as a Conference Room Paper to the 57th Session of the Commission on Narcotic Drugs (E/CN.7/2014/CRP.12) and was shared with all the Member States of the United Nations, as well as with recognized scientists and practitioners in the field of prevention of drug use and of treatment, care and rehabilitation of drug use disorders. This final version takes into account the comment received in this context, as well as some major publications that appeared in the meantime.

Scope and limitations

The document attempts to provide guidelines to improve outcomes of drug prevention, treatment and care for girls and women. In this context, some limitations must be acknowledged. The first limitation is with regard to the lack of research in general. As it will become more clear in the following sections of the document, there exists many research gaps on how drug use and drug use disorders affect girls and women differently from boys and men and on how to address this phenomenon. Moreover, as it is the case in many other fields, research is overwhelmingly based in few high-income countries. In addition, even in the context of these countries, existing research explores the impact of other socio-economic characteristic only to a limited extent, e.g. marginalisation due to poverty and/or ethnic identity. Notwithstanding these serious issues, there exist at least some research available that the document attempts to summarise with a view to providing useful indications.

Secondly, it is recognised that each culture possesses its own specificity in the way it assigns roles in the society to individuals born of female or male sex (gender roles). The document does not attempt an in-depth analysis of how gender roles shape the initiation and use of drugs, the development of drug use disorders and the relationship to prevention, treatment and care services. It should also be remembered that, in each culture, gender roles also vary accordingly to socio-economic status, as well as the relation of the different ethnic groups within the society at large. A comprehensive analysis would need to take also these dimensions into account. Such an analysis would be of great benefit, but also of great complexity and is unfortunately beyond the scope of this document. In this context, the document limits itself to summarise the existing research as to differences in the epidemiology and aetiology of drug use and drug use disorders between girls and boys, as well as between women and men, as well as in the effectiveness of drug prevention strategies and drug treatment and care services. Even this basic analysis provide useful indications that, if implemented, monitored and evaluated, could result in better outcomes for girls and women.

Finally, it should be noted that the document does not include examples of best and successful practices, as these have been already extensively presented in “Promoting a gender responsive

approach to addiction” (UNICRI, 2015), the collection of best practices examples published by UNICRI that is a companion to these guidelines.

For clarification, there are several terms that were selected for use throughout the document. First, the term substance or drug use disorder was selected and has been uniformly used to indicate the spectrum of problems with substances for which women need to be provided with treatment and care services. This is both a scientific term and accepted nomenclature that encompasses the widest spectrum of problem substance use (APA, 2013). In this context, it should also be noted that the term ‘drug use’ is employed to refer to the use of drugs controlled by the three international drug conventions for non-medical purposes¹.

In general, it is understood that female children (0-10 years of age) and adolescents (11-18 years of age) are girls and older female individuals are women. These are to be considered broad indicative categories, as the issue of both chronological and developmental age, as well as cultural differences all need to be taken into account. Medically, puberty is the defining characteristic for categorizing females into girls or women. Before completing puberty a female is a girl. A female is a woman when she is physically an adult, and old enough to marry and bear children. Many cultures have rites of passage to symbolize a girl's coming of age, i.e. when she becomes a woman. Different cultures also recognize different ages of girls reaching sexual maturity or womanhood. Thus, the expected age of sexual initiation marriage and first childbirth varies by culture. It is important to note that while a girl may have the physical capacity for reproduction, it does not mean she has the emotional and mental maturity to consent to sex or marriage. These changes in chronological age as well as developmental age and corresponding cognitive abilities and cultural expectations need to be taken into account when planning and providing services for girls and women.

¹ Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol; Convention on Psychotropic Substances of 1971; and United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988.

I. Prevalence, trends and aetiology of substance and drug use disorders among girls and women

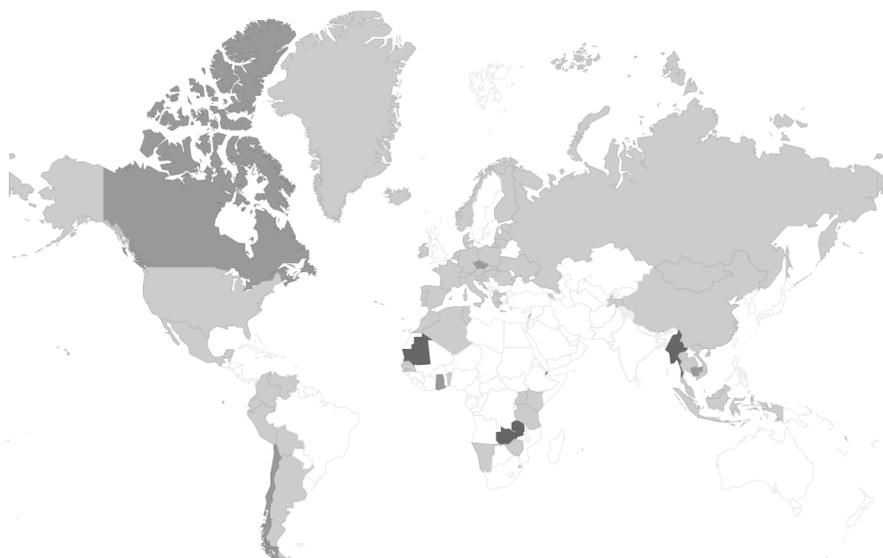
This first section discusses the current use prevalence and trends in tobacco, alcohol and drug use in adolescents, with an emphasis on determining differences in use prevalence for girls as compared to boys. The general situation with regard to drug use and drug use disorders worldwide, as well as to the health and social consequences, has been exhaustively described in other publications and will not be repeated here.

In general, compared with drug use among men, overall drug use remains low among women. At the global level, men are three times more likely than women to use cannabis, cocaine or amphetamines. By contrast, women are more likely than men to misuse prescription drugs, particularly prescription opioids and tranquillizers (UNODC, 2015). Globally, the gaps in reporting on the drug use situation are considerable and it should be considered that this is particularly the case with regard to girls and women, which are sometimes more difficult to reach. In addition, in many cases epidemiological tools do not take into account that women absorb and metabolize some substances differently and generally have less body mass than men. Epidemiological tools that do not use sex specific criteria (e.g. for 'heavy episodic alcohol use') underestimate the proportion of girls and women who engage in this behaviour (Poole et al., 2014).

Also among girls and boys, this traditional gender gap of prevalence being higher among boys than among girls appears to still largely exist. Figure 1 below summarises data from two different WHO surveys among students 13-15 years old indicating where the prevalence of lifetime cannabis (or drugs) use is significantly higher for boys, roughly the same or is significantly higher for girls. Although the data is not strictly comparable, as the surveys have taken place between 2001 and 2013, it is useful to provide a general idea of the situation.

However, substance use prevalence for girls has been increasing in the past two decades in some high-income countries, particularly with regard to the non-medical use of prescription drugs. In addition, in few countries (13 out of 82), the Global school-based student health survey (GSHS) was undertaken twice and in most cases for which the data is available (16 out of 23), the gender gap (i.e. the difference between the prevalence of a substance among boys and girls) has in fact been closing with prevalence among girls either decreasing less than the one among boys or increasing more. The following section provides a summary of the available data. As it will become clear, the gaps in the data are profound and allow only for a very general picture to be painted.

Figure 1. Higher or lower prevalence of lifetime use of cannabis (drugs) among boys and girls



Note: LIGHTEST grey: prevalence among boys is higher than among girls, MIDDLE grey: prevalence among boys and among girls is approximately the same, DARKEST grey: prevalence among girls is higher than among boys.
Source: GSHS National Fact Sheets (see references), HSBC report for the survey 2009/10, Secretaria de Salud, (2011).

1. Africa

The table below reports the data collected in various African countries by WHO through the Global School-based Student Health Survey. Although the surveys were undertaken in different years, this data is useful to provide a partial picture of the use of some substances in the countries, bearing in mind that these are percentages among the school population and 13-15-year old youth who are not in school are not represented.

Table 1. Percentage of 13-15-year old students using various substances in African countries

Country	Drugs (used drugs once or more during their life)		Alcohol (really drunk once or more during their life)		Tobacco (smoked cigarettes on one or more days in the last 30 days)		Year
	Girls	Boys	Girls	Boys	Girls	Boys	
Benin	0.9%	1.5%	11%	14.3%	1.6%	3.3%	2009
Botswana	--	--	17.4%	24.9%	14%	9.4%	2005
Djibouti	6.7%	6.5%	--	--	2.8%	3.7%	2007
Ghana	24.8%	24.6%	33%	32%	--	--	2007

Country	Drugs (used drugs once or more during their life)		Alcohol (really drunk once or more during their life)		Tobacco (smoked cigarettes on one or more days in the last 30 days)		Year
	Girls	Boys	Girls	Boys	Girls	Boys	
Kenya	12.7%	13.5%	33%	24.4%	10.7%	17.3%	2003
Malawi	--	--	2.3%	3.4%	3.8%	5.9%	2009
Maldives	--	--	2.2%	6.1%	4.3%	13.9%	2009
Mauritania	8.7%	7.3%	--	--	16.8%	17.2%	2010
Mauritius	2.4%	8.9%	13.5%	20.8%	9.4%	23.3%	2011
Namibia	26.6%	31.3%	28.9%	35.4%	14.2%	18.2%	2004
Senegal	0.8%	1.7%	2.1%	6.6%	2.7%	9.1%	2005
Seychelles	6.8%	19.6%	50%	56.2%	10.8%	24.1%	2007
Swaziland	5.3%	10.3%	15.9%	23.7%	--	--	2003
Tanzania	4.8%	6.8%	3.4%	7.5%	2%	5.3%	2006
Uganda	7.5%	9.4%	13.9%	16.6%	2.6%	6.2%	2003
Zambia	39.3%	36.7%	46.5%	38.6%	--	--	2004
Zimbabwe	3.6%	12.1%	13.8%	19.4%	2.2%	9.6%	2003

Source: GSHS National Fact Sheets as detailed in the references and as available online at <http://www.who.int/chp/gshs/en/>

In all these countries, tobacco, alcohol and drugs were used more by boys than girls. This is with the notable exception of the use of drugs in Djibouti, the use of alcohol and drugs in Ghana and the use of tobacco in Mauritania, the prevalence of which was fairly similar between boys and girls. In Zambia, both the use of drugs and alcohol was reported to be significantly higher among girls. It is not clear why this might be the case. However, this resonates with other data collected by WHO, reporting that in all African region countries, alcohol use in the past month was more common among boys, except the Seychelles (WHO, 2011).

2. North America

In the early 1990s, prevalence of current smoking (30-day, daily, and half pack or more per day) in USA rose more among boys than girls, and boys have reported consistently slightly higher prevalence since 1991 among 12th graders. In the lower grades, the genders have had similar smoking prevalence since their use was first measured in 1991, although in the past couple of years a small difference has emerged, with slightly more boys smoking than girls. Among college students, since about 2001 there has been little consistent gender difference in smoking among

college students (Monitoring the Future, 2011). In Mexico, among adolescents between 12 and 17 years of age, boys still smoke twice as much as girls (Secretaria de Salud, 2011).

Since the beginning of the US school-based surveys in 1975, called Monitoring the Future (MTF), boys have had slightly higher alcohol and drug use prevalence than girls. However, this gender gap has been narrowing in the past decades with 30-day alcohol use in girls being about 13% lower in 1975 than boys, but only 5% lower in 2012. When considering daily drug use including marijuana boys exceed girls' use by two to three times among 8th, 10th, 12th grades. This is because in 2012, as in prior years, the rate of daily marijuana use in high school senior boys was almost three times higher at 9.1% for boys and only 3.6% for girls. However, if you consider drug use excluding marijuana, 8th and 10th grade girls' use has been higher since first measured in 1990. By 1995, 8th grade girls exceeded boys in their use of cigarettes, methamphetamines, amphetamines, cocaine, crack, inhalants, and tranquilizers and by 2002 in 30-day alcohol use. By 2005 10th grade girls also exceeded boys in 30-day alcohol use until a slight decrease beginning four years ago.

Eighth grade boys have higher prevalence of heavy drinking; however, in their 30-day prevalence of alcohol use at 8th grade, girls surpassed the boys in 2002 and have had higher prevalence since. At 10th grade, girls caught up to the boys by 2005, but boys have had higher 30-day prevalence of alcohol use for the past four years. Among 12th graders, the prevalence in 2011 were 18% for girls versus 26% for boys. This difference has generally been diminishing since MTF began; in 1975 there was a 23-percentage-point difference, versus an 8-point difference in 2011. College males report considerably higher prevalence of daily drinking than college girls (6.2% vs. 2.3% in 2011). A similar gender difference also exists in the non-college group (6.3% vs. 3.8% in 2011).

Frequent alcohol use tends to be disproportionately concentrated among boys. Daily alcohol use, for example, is reported by 2.9% of 12th-grade boys versus 1.2% of 12th grade girls. Boys are also more likely to drink large quantities of alcohol in a single sitting: 26% of 12th-grade boys reported drinking five or more drinks in a row in the prior two weeks versus 18% of 12th-grade girls. The rate among 12-17-year-old in Mexico was 17.3% for boys and 11.7% for girls (Secretaria de Salud, 2011). Girls in 8th grade showed about the same rate of being drunk in the prior 30 days as did boys (4.2% versus 4.4% for boys), whereas in 12th grade the rate for boys (28%) was higher than the rate for 12th-grade girls (22%).

The annual prevalence for 12th-grade boys, compared to 12th-grade girls, are more than twice as high for hallucinogens, LSD, hallucinogens other than LSD, salvia, heroin, heroin with a needle, Rohypnol, GHB and steroids. In 8th grade, girls actually have higher prevalence of use for some drugs, including inhalants. Prevalence of amphetamine use are fairly close for both genders in all grades. Girls have higher prevalence of tranquilizer use in all three grades and this is of great concern given that the non-medical use of prescription or over-the-counter drugs to get high is second only to marijuana use (University of Michigan, Monitoring the future 2012). In the case of Mexico, boys (12-17) report twice as much use of any drug (2.2% including prescription drugs) as girls (1.1%) (Secretaria de Salud, 2011).

3. Central America, the Caribbean and South America

The table below reports the data collected in various countries of Central America, the Caribbean and South America by WHO through the Global School-based Student Health Survey. Although

the surveys were undertaken in different years, this data is useful to provide a partial picture of the use of some substances in the countries, bearing in mind that these are percentages among the school population and 13-15-year old youth who are not in school are not represented.

Table 2. Percentage of 13-15-year old students using different substances in various countries of Central America, the Caribbean and South America

Country	Drugs (used drugs once or more during their life)		Alcohol (really drunk once or more during their life)		Tobacco (smoked cigarettes on one or more days in the last 30 days)		Year
	Girls	Boys	Girls	Boys	Girls	Boys	
Antigua and Barbuda	--	--	19.5%	26.1%	6.1%	8.2%	2009
Argentina	6.5%	10.6%	26.8%	28.9%	20.5%	17%	2012
Barbados	11.2%	17.8%	19%	29%	6.6%	12.7%	2011
Belize	7.4%	15.6%	15.5%	21.1%	--	--	2011
Bolivia	2%	2.9%	9.3%	12.8%	8.9%	15.7%	2012
British Virgin Islands	--	--	20.7%	17.7%	4.3%	7.3%	2009
Chile	9.3%	9.7%	21.1%	22.1%	33.5%	24.7%	2005
Colombia	8.3%	13.7%	43.3%	47.2%	20.1%	20.2%	2007
Costa Rica	--	--	15.6%	15.8%	8.4%	10.1%	2009
Dominica	--	--	28.8%	37.6%	--	--	2009
Ecuador	4.1%	7%	24.2%	31.2%	10.6%	14.5%	2009
Grenada	7.8%	21.9%	22.1%	33.9%	3%	7%	2008
Guatemala	--	--	8.8%	13.1%	--	--	2009
Guyana	--	--	24.5%	34.7%	6.8%	17.4%	2010
Honduras	--	--	10.6%	10.7%	11.1%	14%	2012
Jamaica	--	--	27%	43.5%	16.9%	31%	2010
Peru	1.9%	5.7%	10.2%	16.8%	11.9%	22.9%	2010
Saint Vincent and the Grenadines	13.4%	26.9%	30%	40.3%	5.1%	12%	2007
St. Lucia	15.8%	29.7%	30%	41.5%	6.2%	9.8%	2011
Suriname	--	--	9%	21%	8.6%	12.5%	2009
Trinidad and Tobago	3.8%	11%	22.2%	25.3%	6.9%	13.6%	2011

Country	Drugs (used drugs once or more during their life)		Alcohol (really drunk once or more during their life)		Tobacco (smoked cigarettes on one or more days in the last 30 days)		Year
Uruguay	--	--	24.7%	24.5%	12.6%	8%	2012
Venezuela	1.7%	4.7%	15%	25.5%	--	--	2003

Source: GSHS National Fact Sheets as detailed in the references and as available online at <http://www.who.int/chp/gshs/en/>

Also in this region, the ‘gender gap’ appears to be largely the norm as in most countries the prevalence of use of substances among 13-15-year old students was significantly higher than that of girls. In a few countries, the picture was slightly different, with girls smoking significantly more than boys in Argentina, Chile and Uruguay and more or less the same in Colombia. With regard to alcohol, prevalence were reported to be similar between boys and girls in Chile, Costa Rica, Honduras and Uruguay. In another WHO survey, in Central America and the Caribbean, alcohol use in the past month was more common among boys, except Costa Rica (23.6% of girls vs 23.4% of boys), Saint Vincent and the Grenadines (53.5% of girls vs. 52.6% of boys) and Trinidad and Tobago (42.0% of girls vs.39.6% of boys) (WHO, 2011).

4. Europe

The average figures for lifetime, past 12-months and past 30-day alcohol use prevalence are about the same for adolescent girls and boys, but for more frequent drinking within each time frame, boys have higher consumption. Boys in most EU countries drink about one-third more than girls per drinking episode (2011 averages of 5.8 versus 4.3 centilitres of 100% alcohol). However in a couple of countries (Iceland and Sweden) the average quantities were about the same among girls as among boys. In a large majority of the countries, beer is the dominant beverage among boys. Spirits are the most frequently used beverages among girls in just over half of the European countries.

The “heavy episodic drinking” in the past 30 days in girls had increased dramatically from 29% in 1995 to 41% in 2007, but slightly decreased to 38% by 2011. Among boys this alcohol binge drinking rate was slightly higher in 2011 (43%) than in girls, and it has remained relatively stable since the 1995 rate of 41%. However, alcohol-related problems are more common among boys in terms of physical fights and trouble with the police. In a WHO survey, in most European countries and on average, the prevalence of being drunk more than once in a lifetime among 13-15-year-old students was still higher among boys than girls. However, 9 countries reported a higher prevalence among girls in 2010, compared to 4 in 2001. Moreover, in 25 out of 31 countries, the ‘gender gap’ narrowed between 2001 and 2010.

There were small gender differences in 30-day cigarettes use in 2011. At the aggregate country level, the sex differences in 2011 were negligible for smoking in the past 30 days. So girls were smoking more since in 1995 and 1999 when slightly more boys were smokers. However, in 2011 some individual countries had large sex differences with higher figures for girls in Bulgaria,

Monaco, France, Slovenia, Faroe Islands and Ireland and higher figures for boys in Albania, Cyprus and Moldova, Ukraine and Montenegro.

In European teens, reported use of drugs varies considerably across the countries with higher lifetime experience reported by boys than girls (19 % vs 14 %) and drug use significantly higher for boys in 27 countries (EMCDDA, 2012).

Annual cannabis use was reported as 15% among boys and 11% among girls, while 30-day use was reported by 8% of the boys and 5% of the girls. Regular 30-day marijuana use is higher in boys than girls (EMCDDA, 2012). Lifetime use of cannabis was reported by more boys (19%) than girls (14%), and the figures were significantly higher for boys in 27 countries. The average lifetime prevalence in 15-year-old students in the HSBC survey of WHO, which covers mostly European countries, fell a bit faster for boys (from 26% to 20%) than for girls (from 19% to 15%) between 2001/2 and 2009/10.

While, more boys than girls have tried drugs other than cannabis, 7% versus 5% in 2011 (EMCDDA, 2012), more girls (8%) than boys (5%) report non-medical use of prescription drugs. Lifetime use of tranquillizers or sedatives without a doctor's prescription, together with mixing alcohol and pills, are the only substance-use behaviours that have been more common among girls than boys (EMCDDA, 2012). The use of inhalants increased equally in both sexes to 10% in 2011 for the first time.

5. North Africa and the Middle East

The table below reports the data collected in various countries of North Africa and the Middle East by WHO through the Global School-based Student Health Survey. Although the surveys were undertaken in different years, these data are useful to provide a partial picture of the use of some substances in the countries, bearing in mind that these are percentages among the school population and 13-15-year old youth who are not in school are not represented.

Table 3. Percentage of 13-15-year old students using different substances in various countries of North Africa and the Middle East

Country	Drugs (used drugs once or more during their life)		Alcohol (really drunk once or more during their life)		Tobacco (smoked cigarettes on one or more days in the last 30 days)		Year
	Girls	Boys	Girls	Boys	Girls	Boys	
Algeria	0.3	4	--	--	1.4	18	2011
Egypt	--	--	--	--	1.4	5.8	2011
Iraq	--	--	--	--	4.6	12.1	2012

Country	Drugs (used drugs once or more during their life)		Alcohol (really drunk once or more during their life)		Tobacco (smoked cigarettes on one or more days in the last 30 days)		Year
Jordan	--	--	--	--	7.6	17.7	2007
Kuwait	--	--	--	--	7.5	23.7	2011
Lebanon	1	6.3	16	27.1	--	--	2011
Libya	--	--	--	--	1.1	7.1	2007
Morocco	1.3	4.1	--	--	2.3	7.4	2010
Qatar	--	--	--	--	10.8	25.3	2011
Sudan	--	--	--	--	3.6	8.5	2012
Syria	--	--	--	--	4.8	16.2	2010
Tunisia	1.9	5.7	--	--	2.7	12.7	2008
United Arab Emirates	--	--	--	--	5.8	15.6	2010

Source: GSHS National Fact Sheets as detailed in the references and as available online at <http://www.who.int/chp/gshs/en/>

In the countries of this region, less data was collected with regard to both alcohol and drugs. However, for those countries that did collect the data, and with regard to tobacco use, in all cases the prevalence among boys was significantly higher than the prevalence among girls.

6. Asia

The table below reports the data collected in various Asian countries by WHO through the Global School-based Student Health Survey. Although the surveys were undertaken in different years, this data is useful to provide a partial picture of the use of some substances in the countries, bearing in mind that these are percentages among the school population and 13-15-year old youth who are not in school are not represented.

Table 4. Percentage of 13-15-year old students using various substances in Asian countries

Country	Drugs (used drugs once or more during their life)		Alcohol (really drunk once or more during their life)		Tobacco (smoked cigarettes on one or more days in the last 30 days)		Year
	Girls	Boys	Girls	Boys	Girls	Boys	
Cambodia	1.2%	1.2%	2.9%	6.2%	2.4%	2.9%	2013
China	0.7%	1.2%	4.8%	11.9%	2.4%	15.3%	2003
Fiji	--	--	8.3%	17.3%	7.4%	16.2%	2010
India	--	--	--	--	0.2%	1.9%	2007
Indonesia	0.3%	0.6%	0.5%	4.8%	0.9%	22.1%	2007
Kiribati	1.6%	6.8%	10.4%	35.4%	19.5%	34.4%	2011
Malaysia	0.4%	1.4%	3%	6.8%	1.9%	14.3%	2012
Mongolia	0.9%	1.5%	4.7%	8.5%	3.5%	8.3%	2013
Myanmar	0.5%	0.4%	0.3%	2.6%	0.6%	3.4%	2007
Nauru	--	--	15.9%	24.5%	24.5%	19.5%	2011
Pakistan	--	--	--	--	1%	9.9%	2009
Philippines	--	--	13.6%	17.8%	6.4%	18%	2011
Tajikistan	0.7%	1.5%	0.5%	2%	0.6%	1.1%	2006
Thailand	2.4%	15.8%	14.8%	25%	1.5%	10.8%	2008
Vanuatu	1.9	5	5.8	10.3	8.2	19.4	2011
Viet Nam	0.2	0.5	8.1	17.7	1.2	3.6	2013

Source: GSHS National Fact Sheets as detailed in the references and as available online at <http://www.who.int/chp/gshs/en/>

Also in the Asian countries, the ‘gender gap’ is still substantially present, with a significantly larger percentage of boys using various substances than girls and with the exception of the use of drugs in Cambodia and Myanmar that, whilst low, is substantially similar between girls and boys.

II. Aetiology

Currently, the reasons for different prevalence of the use of substances and drugs by girls and boys (generally lower in girls), as well as for the rise of substance and drug use in girls in some countries (particularly in earlier teens and with regard to some specific substances) remain unclear. However, this section summarizes the available evidence to provide some indications as to the factors that might make girls and boys vulnerable or resilient to start using substances and drugs, as well as to other risky behaviours. This chapter is not meant as an in-depth discussion of the aetiology of substance use disorders, as this would warrant a publication of its own. Rather, it will highlight where the factors of vulnerability and resilience between girls and boys and women and men differ.

Several explanations for the gender gap in substance use have been advanced including the increased genetic risk in boys and recent family environmental risks in girls with rapid changes in social roles. Biological and socially constructed gender differences do appear to produce unique development trajectories for boys and girls, with concomitant vulnerability and resiliency factors that lead to different substance use behaviours and different motivations for using substances (Chesney & Pasko, 2004; Guthrie & Low, 2000).

This section discusses different influences on substance and drug use starting with personal characteristics and moving into 'micro' influences close to the life of the individual (family, school, peers), as well as into 'macro' influences in the larger environment (social and physical dimensions of the community, the neighbourhood, the society at large).

1. Personal characteristics

There is evidence that boys have twice as high a genetic risk of alcohol dependency compared to women according to early twin adoption studies conducted in Sweden, Denmark and USA (Pickens et al, 1991). In certain Northern European families, there is a type of alcoholism called "Type II Alcoholism or Male Limited Alcoholism" characterized by early onset of use and many male relatives who become alcoholics (Vaillant, 1995). A study of college males with this family history and found that they had rapid brainwaves, increased emotional liability and autonomic nervous system (ANS) hyper- or over-reactivity (Schuckit, 2009). Consuming alcohol smoothed out their brainwaves and emotional over reactions. These genetic risks help to explain why addiction appears to be a "family disease" with children of parents with substance use disorders at much higher genetic risk.

In addition, among the different personal characteristics that are linked to the initiation of substance and drug use and dependence, depression and aggressiveness in the first grade appear to have stronger predictive power for boys than girls, while conduct disorder and higher anxiety response have stronger predictive power for girls. Current research has not yet explained these differences.

Table 5. Vulnerability factors for drug use in adolescence as it relates to gender

Vulnerability factors for drug use in adolescence that are more relevant for ...	Girls	Boys
Depression	√	
Conduct disorder		√
Cigarette use	√	
Maternal alcoholism	√	
Maternal drug use disorder	√	
Low parental attachment	√	
Low parental monitoring	√	
Low parental concern	√	
Unstructured home environment	√	
Dysfunctional family	√	
Smoking During Pregnancy	√	
Aggressiveness in first grade		√
Higher Anxiety Response	√	
Peer Difficulties		√
Childhood Sexual Abuse	√	

Source: Lee Wetherington (2012)

High prevalence of comorbidity exist between substance use and depression in girls (Kloos et al., 2009; Lillehoj et al., 2004). Substance abusing girls are more likely to be depressed than boys (Chander & McCaul, 2003). Likewise, depression leads to increased substance use disorders, reduced self-esteem, and increased suicide attempts for girls (Kloos et al., 2009). Girls who believe that drinking alcohol reduces depression report more alcohol use. More girls than boys (as young is the 6th grade) believe in self-medicating powers of alcohol to reduce depression, anger or frustration even before they begin to drink. Other drugs such as ecstasy and marijuana are also used by girls to reduce depression (Smith et al., 2002).

Delinquency and substance misuse have been associated with low levels of self-esteem in teenage girls (Wild et al., 2004). Girls who at age 12 with low self-esteem were nearly 2.5 times more likely to engage in heavy alcohol use at age 15 than those higher in self-esteem; no such relationship was found in boys (Young et al, 2012; Emler, 2011).

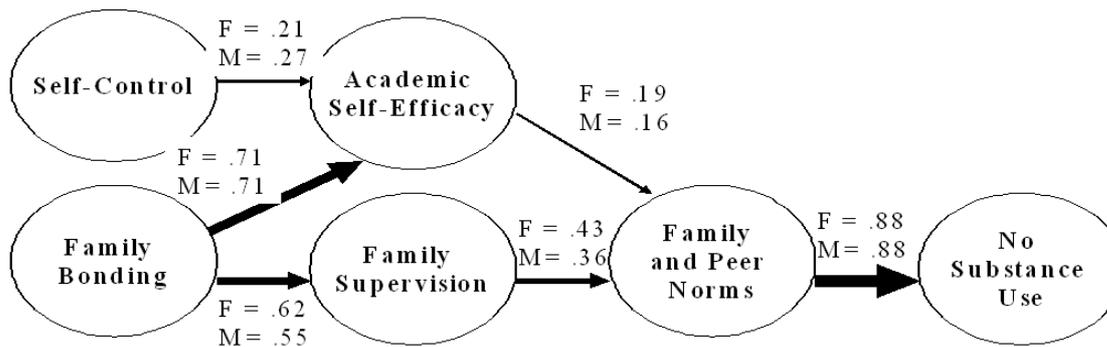
Finally, during puberty, both girls and boys must adopt new behaviours to comply with gender expectations inherent to their culture. Some girls experience low self-esteem and loss of "voice" as a result of social conditioning to suppress their self-expression as a means of maintaining important relationships (Spira, et al. 2002).

With regard to the development of substance use disorders, it is a medically established and widely recognised fact that substance use can progress into alcohol and drug use disorders more quickly for adolescent girls than for boys, even when using the same or lesser amounts of a particular substance.

2. Micro-environment: family, schools and peers

As indicated in Table 5, girls appear to be more affected by family problems than boys. This is also apparent in one of the few tested causal models by gender, the Social Ecology Model of adolescent vulnerability to substance use. Using Structural Equation Modeling (SEM) statistical analysis of a database of about 10,000 youth from multiple ethnicities in the USA, the researchers found that the pathways to drug use were fairly similar for girls and boys (CSAP, 2001; Kumpfer et al., 2003; Sales et al. 2003), with a strong pathway between family bonding and academic performance.

Figure 1. - Social Ecology Model (SEM) of substance use by gender



Note: In this chart F = girls and M = boys and the numbers are beta weights. The higher the number or size of the arrows, the stronger the causal influence.

However, as it can be understood from Figure 1., the family pathway from parent/child bonding and attachment, to better parental supervision, to communication of positive family values and reduced substance use was stronger in girls than boys, whereas the community environment path was slightly stronger in boys. The final pathway to drug use collapsed into combining parental and peer values/norms as a factor because of the close association and was equally powerful for girls and boys. Lack of behavioural and emotional self-control had a slightly larger role in later drug use in boys, possibly because boys have a higher incidence of emotional and impulse control disorders. Girls were more influenced by their academic performance and self-efficacy than boys.

A similar SEM model was tested for school failure, delinquency, and teen pregnancy as well as alcohol and drug use with similar results (Ary et al., 1999). Moreover, it has been found that low parental supervision had a greater influence on adolescent girls' alcohol and drug use than on boys (Fothergill and Ensminger, 2006).

Peer pressure may be more strongly associated with drinking for girls than it is for boys. Middle school girls who report high levels of peer pressure to drink are twice as likely to use alcohol than those who report less peer pressure; this relationship between peer pressure and alcohol is not

found for boys. When several of a girl's closest friends smoke or drink, they are more than seven times more likely to drink and smoke, whereas, boys are only three times more likely. Finally, early maturing girls who have older friends appear to be a group at an elevated risk for substance misuse, truancy, delinquency and sexual activity (Caspi et al., 1993; Lanza & Collins, 2002).

Sexual abuse and violence appears to be a stronger risk factor for girls and women, possibly due to the higher prevalence of victimization. One out of every three girls and women are victims of violence. The percentage of women in drug treatment facilities that were sexually abused as a child is high: 55% to 95% (Kumpfer & Bays, 1995). In the USA, the prevalence of sexual abuse was reported to be 60% for incarcerated adolescent girls and 20% for adolescent boys, with the prevalence of physical abuse being about 40% to 50% for both genders (Dembo et al., 2000). Finally, youth who misuse alcohol, marijuana, or drugs are at increased risk of victimization, with girls that use substances at particularly elevated risk of sexual assault (Testa & Livingston, 2009).

3. Macro-environment

Exposure to media messages that normalize or even glamourize drug and substance use, as well as to environment where psychoactive substances are easily accessible is a risk factor for both girls and boys. However, in many societies, girls are being exposed to media and societal pressures to conform to an unrealistically thin body ideal (Reel & Beal, 2009; Sypeck et al., 2004). Significantly more girls than boys begin using tobacco and drugs because they believe it helps them to keep their weight down. In the USA, the use of amphetamines among Caucasian girls is linked to the desire to lose weight (NCASA, 2003b). In general, reasons for girls' use of harmful substances were found to include concerns about weight and dieting (NCASA, 2003a). Girls ages 10 to 15 who report being highly concerned about their weight are nearly twice as likely to get drunk as those who are less concerned about their weight. Up to 50% of girls with eating disorders misuse alcohol or drugs compared to 9% of the general population and up to 35% of substance abusing girls also have an eating disorder (Piran and Gadalla, 2007). In another study, about 25% of US college women were skipping meals to save on calories and get drunk quicker. Girls who combine disordered eating with binge drinking are also more at risk for violence, risky sexual behaviour, alcohol poisoning, substance use and chronic diseases later in life, and cirrhosis of the liver (Baker et al., 2010). This phenomenon has also been reported in other countries of Latin America. Hispanic girls in the USA report disordered eating at higher prevalence than Caucasian or African-American girls.

III. Effective drug prevention among girls

1. The scientific literature

In the past twenty years research on the effectiveness of prevention strategies has reported that several programs demonstrate consistent positive findings when implemented completely and with fidelity (UNODC, 2013). While a variety of school-based, family-based and community-based programs have been effective at changing adolescent health behaviours, little is known on the effectiveness of these strategies by gender or on how programs can be tailored to be more gender-aware or gender-specific (Blake et al., 2001; Fothergill & Ensminger, 2006). The few studies that have examined gender differences directly have found mixed results, with some showing effects among girls, but not boys and vice versa (Vigna-Taglianti et al., 2009, Flay et al., 2004).

This chapter presents the results of a review undertaken in 2013 of two online databases of evidence-based programmes: the National Registry of Evidence-based Programs and Practices (NREPP) of the Substance Abuse and Mental Health Services Administration (SAMHSA) of the USA and the Exchange on Drug Demand Reduction Action (EDDRA) of the European Monitoring Centre for Drugs and Drug Addiction. Each database includes programmes in accordance to established criteria with regard to the evaluation and, in the case of NREPP, also the results of the programme. The databases were searched for programmes categorised as ‘prevention’, including universal, selective and indicated prevention. In turn, the results were searched for results disaggregated by gender. In addition, a questionnaire was sent to all the contact persons of drug prevention programmes as described above soliciting unpublished results disaggregated by gender. Only a few prevention program developers reported that they have conducted sub-group analyses for effectiveness by gender and the results are presented below. About one-third of those that did conduct analysis by gender found that boys and girls do, in fact, respond differently to prevention interventions.

School- and community-based programmes

The results with regard to the 11 school- and community-based programmes that conducted an analysis of the effectiveness by gender are reported in Table 6. Four (4) reported positive results for boys, but no significant positive results for girls, 1 reported positive results for boys, but negative results for girls, 3 reported positive results for girls, and 3 programs (Keepin’ it REAL, Al’s Pal and a culturally tailored intervention for Native American youth) reported no gender difference. Two (2) of the programs that worked for girls only (SMART and ALERT) reported results only for tobacco and cannabis. In addition, a school-based gender specific programme targeting female athletes (ATHENA) reported positive results for girls.

In some cases these gender differences were only in sub-groups. In the case of ALERT, the more positive results for girls were only in high risk girls. The Keepin’ it REAL programme showed no overall gender difference for substance use. Subgroup analysis by ethnicity revealed gender effects, but only among less acculturated Latino youth. These gender effects were found for larger

positive changes in alcohol and cigarette use, and anti-drug norms among the boys, but not as much for girls.

One of the programmes reporting no gender differences in results (AI's Pals) was targeting a very young children and focusing heavily on their personal and social skills with a strong parenting component.

The European Drug Abuse Prevention (EU-Dap) curriculum 'UNPLUGGED' is a school-based 12-session teacher-led social skills programme for students including 3 meetings with parents. It was evaluated in seven European countries with 6,600 students. Baseline use prevalence revealed that boys were more likely than girls to have used cannabis and other drugs; whereas girls had a higher prevalence of cigarette smoking. There was a significant association between the programme and a lower prevalence of all behavioural outcomes, and a delay in onset of use. Boys benefited significantly more than girls, but both did have reduced frequency of use.

Finally at the school level, ATHENA, a gender-specific programme for female high school athletes, was found to increase the knowledge of drug consequences and intentions not to use as well as decreasing use of drugs compared to a no-treatment control group (Elliot et al., 2002).

At the community level, The 48 Community Partnership Cross-Site Study included a 10% sample of the 240 communities with a drug prevention coalition matched with a similar community in their state without a coalition. The results from this study revealed that statistically significant positive effects were found for 8th grade and 10th grade boys and adult men in reducing drug and alcohol use, but no positive effects for girls or women. In fact, a significant negative effect on 8th grade girl's use of drugs was discovered (Yin & Ware, 2000). This may be due to the fact that these programmes tend to focus more on environmental policy changes like access to tobacco and alcohol for minors and enforcement of laws and ordinances that may have more of an impact on boys rather than girls.

Family-based programmes

Our survey of evidence-based prevention programs revealed that of the 7 evidence-based family programmes who had done a gender analysis all reported equally effective results for girls and boys and one reported better results for girls –Treatment Foster Care (see Table 7. below). In addition, 5 gender-specific family-based programmes for girls reported positive results for girls.

A recent gender analysis of a large Strengthening Family Program (SFP) normative database of over 4,000 families from SFP groups worldwide found that SFP is equally effective for girls as for boys and in some cases even more effective for girls despite lower base prevalence of risk factors, possibly because girls are more influenced by family relationships (Magalhães, 2013).

Of the three gender-specific programmes, randomized control trials of the mother-daughter substance use prevention programme delivered through CDs or internet showed good results for reducing HIV risk, alcohol and drug use among inner city Hispanic, African American and Asian American girls (Fang & Schinke, 2013; Schinke et al. 2009 and 2011; Schwinn et al., 2010). Two gender and ethnic adaptations of Strengthening Families Program 6-11 Years (SFP) targeting mothers and daughters also reported positive results for Hawaiians, (Kameoke, 1996) and Hispanic mothers and daughters (Alvarado, ***).

The general positive results of family-based programmes is consistent both with the brief discussion above of factors of vulnerability and resilience that are particular to girls, and with other general reviews of the effectiveness of family-based programmes (Petrie et al., 2007).

Table 6. Gender differences in outcomes of school and community-based prevention programs

Name of programme and references	Brief description of content	Age group	Dosage or number of sessions	Level of risk	Effect on use by youth	No gender difference	Better for girls	Better for boys
Self-Management and Resistance Training (SMART) (Graham et al., 1990)	Peer pressure resistance training and normative education, plus affective education, stress management and negative self-image enhancement.	7 th grade students	12 sessions	Universal			Tobacco Marijuana	
ALERT (Donaldson et al, 1994) and ALERT Plus (Longshore et al., 2007)	Drug prevention curriculum based on social learning theory.	7 th and 8 th grades	14 sessions, 11 delivered in 7 th grade and 3 in 8 th grade	Universal	Tobacco: -0%; Alcohol: -0%; Cannabis: -4%; Other drugs: -4%		Tobacco and cannabis. NOTE: at risk girls only, no effect in boys.	
Oslo Youth Study Smoking Prevention Program	Social influences-based smoking prevention program	5 th to 7 th grades		Universal				Tobacco, alcohol, drugs NOTE: Effects only on non-smoking boys and no effect on girls
North Karelia Youth Programme	Is a school- and community-based smoking prevention program using a social influence approach. Students are taught about social pressures and are trained by demonstration and role playing to deal with them.	13-15 years	10 sessions: 3 in 7 th grade, 5 in 8 th grade, and 2 in 9 th grade.	Universal				Tobacco, alcohol, drugs

Name of programme and references	Brief description of content	Age group	Dosage or number of sessions	Level of risk	Effect on use by youth	No gender difference	Better for girls	Better for boys
Project Towards No Drug Abuse	Students are educated on the consequences and misperceptions associated with drug use. Interactive sessions provide motivation and decision making skills targeting the use of cigarettes, alcohol, cannabis and other drugs, and violence related behaviour.	14-19 years	12 sessions	Universal	Tobacco: -0%; Alcohol: -0%; Cannabis: -0%; Other drugs: -4%			Tobacco, alcohol, drugs
Keepin' it REAL (Kulis et al., 2007 and 2005)	Risk assessment, decision making, where to go for support, and communication skills such as conflict resolution and drug refusal skills.	7th and 8th grades	10 sessions	Universal	Alcohol: - 11% ; Cannabis: - 5%	No gender difference		Better for boys in less acculturated Latinos
European Drug Abuse Prevention (EU-Dap) curriculum 'UNPLUGGED' (Fiaggano et al., ***; Vigna-Taglianti et. al., 2009)	Involves students in an interactive curriculum designed to improve and develop life skills, based on a comprehensive social influence model.	12-14 years	12 sessions for students plus 3 sessions for parents	Universal	Reduced alcohol and drug use.			Reduced alcohol and cannabis best with some reduction in tobacco and other drugs. Best in boys and higher frequency users.

Name of programme and references	Brief description of content	Age group	Dosage or number of sessions	Level of risk	Effect on use by youth	No gender difference	Better for girls	Better for boys
Al's Pals: Kids Making Healthy Choices	This is a resiliency-based, early-childhood prevention curriculum and teacher training programme that develops personal, social and emotional skills. It includes a component on building positive relationships between parents and children, which reinforces Al's Pals concepts at home. It is designed to help children gain the skills they need in order to express feelings appropriately, relate to others, accept differences, use self-control, resolve conflicts peacefully, cope and make safe and healthy choices.	3-8 years	46 lessons lasting 10-15 minutes each.	Universal		As effective for girls as for boys.		

Name of programme and references	Brief description of content	Age group	Dosage or number of sessions	Level of risk	Effect on use by youth	No gender difference	Better for girls	Better for boys
CASASTART	This is a neighbourhood-based, school-centred program aimed at preventing substance use and delinquency among high-risk adolescents and reducing drug-related crime in their neighbourhood, working with schools, law enforcement agencies, and social service agencies to create a network allowing every child the opportunity for healthy development.	8-13	8 sessions	Selective	Cannabis: -0.4%; Other drugs: -8.6%		Negative effects for girls	Positive effects for boys
Culturally tailored intervention for Native American youth (Schinke, Tepavac & Cole, 2000)	Intervention was derived from a conventional theoretical model of life skills training and culturally tailored for Native American. Recruitment was done through schools.	youth	15 sessions each 50-minute weekly with 2 booster 50 minute sessions semi-annually	Universal	3.5-yr sig. reductions in 6-12 month alcohol, marijuana, and smokeless tobacco cigarette consumption.	As effective for girls as for boys.		
ATHENA	Targets female athletes improving nutrition and exercise to prevent drug misuse and eating disorders.	Adolescents		Selective			GENDER SPECIFIC with positive results for girls.	

Table 7. Gender differences in outcomes of family-based prevention programs

Name of programmes and references	Brief description	Age group	Number of sessions	Level of risk	Effect on use by youth	No gender difference	Better for girls	Better for boys
Family Matters (Bauman et al., 2002)	Parent education to make parents more aware of factors related substance use among adolescents.	12-14 years	Four booklets mailed home with follow-up calls by health educators.	Universal	Tobacco: -7%; Alcohol: -6% 3 & 6 months follow up indicated reduction in alcohol consumption & smoking	As effective for girls as for boys		
Creating Lasting Family Connections (Strader)	Programme designed for parents and youth which offers training modules for both. Content: communication, conflict resolution, peer resistance coping mechanisms to resist negative social influences; practice effective refusal skills for both parents and youth; engender self-knowledge, personal responsibility, and respect for others; and impart knowledge and understanding about the use of tobacco, alcohol and drugs.	Targeted couples are 18 years of age or older	10 sessions			As effective for girls as for boys		

Name of programmes and references	Brief description	Age group	Number of sessions	Level of risk	Effect on use by youth	No gender difference	Better for girls	Better for boys
Multisystemic Therapy for Delinquents and Substance Abusing Youth (Borodin, et.al, 1995; Haggler)	Intensive family- and community- based treatment for juvenile offenders who have committed serious offences and their families.	12 - 17 years	The course of treatment ranges from three to five months; the intensity of the treatment varies according to clinical need (from 2 to 15 hours per week).	Indicated	Reduced substance use and criminal behaviour among young persons and the number of juveniles placed in care.	As effective for girls as for boys.		
Multidimensional Treatment Foster Care Middle School Success (Chamberlain, P., ***)	A community-based alternative to placement in group or residential care for children and adolescents with severe emotional and behavioural problems. Coordinated interventions in the home, with peers, in educational settings, and with the child or adolescent's birth parents, adoptive family, or other long-term placement resource.	9-18 years	6-9 months	Selective	Prevents ongoing delinquency, incarceration, and associated behavioural problems for adolescents.		More effective for girls with regard to preventing tobacco, alcohol and drug use.	

Name of programmes and references	Brief description	Age group	Number of sessions	Level of risk	Effect on use by youth	No gender difference	Better for girls	Better for boys
Strengthening Families Program (SFP), (Kumpfer, Magalhães, 2013)	1. Parent skills training: goals, increasing positives, communication skills, and, effective discipline. 2. Children or teen skills training: goals, speaking and listening, peer refusal, anger and coping, etc. 3. Family skills training parent/child positive time, family meetings, chore charts, discipline practice sessions.	0-17 Years	Each session consists of the whole family attending 3 separate 1 hour classes held on same night. Number of sessions varies by version, level of risk and age of the children from 7 to 14 sessions.	Universal and/or selective	Tobacco: -7%; Alcohol: -18%; Cannabis: -15%; Other drugs: -11%	As effective for girls as for boys.		
Multidimensional Family Therapy (Liddle, et al., 2001,2009, 2011)	MDFT is a manual-driven intervention with specific assessment and treatment modules for drug abusing youth. MDFT helps the youth develop more effective coping and problem-solving skills for better decision making and helps the family improve interpersonal functioning as a protective factor against substance use and related problems.	12-18 Years	Delivered across a flexible series of 12 to 16 weekly or twice weekly 60- to 90-minute sessions,	Indicated	Decreased drug use	As effective for girls as for boys.		

Name of programmes and references	Brief description	Age group	Number of sessions	Level of risk	Effect on use by youth	No gender difference	Better for girls	Better for boys
Triple P: Positive Parenting Program (Sanders et al.)	Parenting skills tiered programme targeting different level of risks and different ages.	0-18	Number and delivery of the sessions vary according to the level of risk ranging from media messages to 1 – 10 group or individual sessions.	Universal, selective and indicated.		As effective for girls as for boys		
Incredible Years (Webster-Stratton)	A curriculum each for parents, teachers and children, based on cognitive social learning theory, which emphasizes the importance of the family and of teacher socialization processes for young children.	0-12	Approximately 20 sessions each for parents and children	Universal, selective, indicated.		As effective for girls as for boys		
Mothers and Daughters (Computer Mediated) Schinke, Cole, & Fang (2009)	Gender-specific, online interactive program for mothers and daughters to complete. Dyads are recruited from Craigslist. Gift cards for survey completion.	10-14	9 web-delivered 35-45 minute mother and daughter interactive lessons.	Universal	2-month follow-up sig. reductions in 3-6-12 month alcohol misuse.		GENDER SPECIFIC FOR GIRLS with positive results	
Asian American Mothers and Daughters Program, Schinke, Cole, & Fang (2009) Fang & Schinke, 2013.	Online interactive program for Asian American mothers and daughters to complete. Dyads are recruited from social media and community agencies. Gift cards for survey completion	10-14	9 web-delivered 35-45 minute mother and daughter interactive lessons. Average 5.8 months to complete	Universal	2-yr sig. reductions in 3-6-12 month alcohol, marijuana, and prescription drug misuse, but not smoking.		GENDER SPECIFIC FOR GIRLS with positive results	

Name of programmes and references	Brief description	Age group	Number of sessions	Level of risk	Effect on use by youth	No gender difference	Better for girls	Better for boys
Strengthening Family Program 6-11 years (Kameoke, Alvarado)	Two different culturally adapted family group curriculums for Hawaiian and Hispanic Families of the SFP (See description above).	6-11	14 sessions	Universal	Improved social skills, decreased conduct disorders, depression and other risk factors		GENDER SPECIFIC FOR GIRLS with positive results	
RealTeen program (Schwinn,Schinke & Noia, 2010)	Gender-specific, interactive Internet based program. Girls were recruited through the youth-oriented website. 9 theory-based sessions along with introduction and quizzes.	13 -14 years	12 web delivered 25 minute interactive sessions. Average 6 weeks to complete at the rate of 2 sessions per week	Universal	6-month follow-up showed reduction for 30-day alcohol use, marijuana use, poly drug use, and total substance use.		GENDER SPECIFIC FOR GIRLS with positive results	
Mother daughter intervention among Black and Hispanic Adolescent Girls (Schinke, Fang, & Cole, 2009; 2011)	Gender specific CD-ROM or internet based program for mothers and daughters. Recruited from postings on craigslist.org and from advertisements in New York City newspapers.	10 -13 years	10 interactive sessions	Universal	Post and 2 year outcomes indicated lower reports of girls' alcohol use and in their lower expectations of future tobacco, alcohol, and prescription drug use.		GENDER SPECIFIC FOR GIRLS with positive results	

2. Guidelines on preventing substance and drug use disorders among girls

A gender-aware approach does appear to be necessary to prevent drug and substance use among girls and women

Whilst the research base is very limited, it does point in the direction of the necessity of a gender-attentive approach. There are factors of vulnerability and resilience that are specific to girls and women and there are indications that drug prevention strategies do not necessarily benefit girls and boys equally. A gender-attentive approach might implement gender-specific strategies for girls. Alternatively, it might try and insert components in universal programmes addressing factors of vulnerability and resilience that are specific to girls and women and to their development. In addition, the cultural adaptation research suggests that enrolment and retention can increase dramatically with adaptations (UNODC, 2009 family) and this might conceivably apply also in the case of gender.

On the basis of the current research, family-based interventions appear to be a promising strategy to prevent drug and substance use as well among girls as among boys.

The limited research indicates that, whilst family-based strategies are almost consistently providing as good effects for girls as for boys, school- and community-based strategies often fail girls. These results are also consistent with family factors of vulnerability and resilience with girls more affected by family problems and more protected by family bonding and supervision.

Developing new strategies to respond to other factors of vulnerability and resilience that are specific to girls is crucial.

As girls suffering from or at risk of depression and anxiety appear to be more vulnerable than boys with the same characteristics, it might be worth exploring programmes targeting girls screened for these factors and providing them with the skills to cope with negative emotions in a healthy and constructive way.

This is based on the significance of low self-esteem, depression, anxiety and substance use by peers (particularly significant others) in the vulnerability of girls to drug and substance use. Moreover, topics to include in adolescent programming that might have a particular effectiveness for girls are: dealing with stress, depression, social assertiveness, body image and improving relations and communication with parents and other significant others.

Modules on dating, meaning of love and sexual relationships, date rape, unwanted pregnancy, and sexually transmitted diseases would be helpful for young girls as well as boys. Having a time for

boys and girls to have their own separate groups, but then working together might be a good format to use in gender-specific prevention programmes.

Given the importance of abuse, and particularly sexual abuse, as a very strong vulnerability factor in the development of substance use disorders, especially among girls and women, programmes to prevent such abuse and, particularly, to support the victims and to address post-traumatic stress disorders appear to be essential.

Finally, the association between eating and substance use disorders in some countries would suggest some promising strategies with regard to addressing the factors of vulnerability of adolescent girls and women to eating disorders (such as societal pressures on girls and women to conform to unrealistically thin body ideals in some countries) and with regard to screening eating and substance use disorders concurrently. Such components could be conceivably included interventions in all major domains (school, media, community, family).

Monitoring and evaluation are more essential than ever, including gender disaggregated data collection and analysis and the dissemination of results

Worldwide, the effectiveness of only a very limited number of drug prevention strategies is evaluated and, of these, only a minuscule number collect data that are disaggregated by gender and conduct the relevant analysis. This means that in practice, we know very little about the effectiveness (or otherwise) of the vast majority of drug prevention interventions and policies that are implemented globally, let alone about whether they benefit girls as well as boys. Moreover, this serious situation is particularly the case (although it is by no means limited to) low- and middle-income countries. That is why any strategy aiming at preventing drug and substance use among girls and/or boys should include a systematic and scientific monitoring and evaluation component. In the case of non-gender specific programmes, this should include sex disaggregated data collection and analysis. For existing evidence-based programmes, secondary data analyses could be conducted on all major prevention program data sets to determine their effectiveness for girls as compared to boys. In all cases, results, including negative results, should be disseminated widely, for the benefit of the drug prevention community globally.

Additional research is absolutely necessary

The limited existing research provides some precious indications as to how to maximize the effectiveness of drug prevention strategies for girls as well as boys, but it is simply not enough. This should not prevent us from acting now. However, in addition to the systematic evaluation of interventions and policies as noted above, there is the absolute necessity of a deeper understanding of which factors of vulnerability and resilience are really specific to girls and women and whether and how this varies across cultures. Moreover, component analysis are needed to determine which aspects of the interventions contribute the most to the effectiveness for girls and boys. In general, we need to identify which aspects of the development, vulnerability and resilience factors and patterns of use of girls and women need to be addressed and how in order to be prevent drug use effectively among girls, or among girls as well as boys.

IV. Effective treatment, care and rehabilitation of substance use disorders for girls and women

Unlike the case of prevention, an increased awareness of women's complex treatment needs in the context her substance use disorder led to the provision of funding for special services and programs designed specifically for women in the 1980s. By now there is an established corpus of scientific evidence and the purpose of this section is to summarize it in 10 basic principles, including specific guidelines for both girls and women. It should be emphasized that once in treatment, being biologically male or female does not predict drug dependence treatment outcome. However, several established predictors of drug dependence treatment outcomes may vary in prevalence, severity, or significance by sex, and these predictors may have a different level of importance for drug treatment outcomes for women than men. The general principles of evidence-based treatment, care and rehabilitation are well established (UNODC/WHO, 2016) and will not be repeated here.

1. Women-centred treatment: accessible, responsive to individual needs, strength-based, and with active patient involvement

It is well established that girls and women have differences in the contexts in which they initiate drug use, maintain their drug use and enter treatment for such use. For example, girls and women are more likely to first try drugs in the presence of intimate male partners in their life. In contrast, boys and men more often start drug use in the presence of peer relationships. Women commonly begin using substances later in life than do men, report different reasons for maintaining the use of the substances, and enter treatment earlier in the course of their illnesses than do men (e.g., Brady and Randall., 1999). Women also tend to have a higher prevalence of comorbid psychiatric disorders (e.g., depression and anxiety) than men. Although women may present to treatment with more complex issues, women typically do as well as men in treatment.

Research and clinical experience has shown that women and girls respond well to treatments that are women-centred. In fact, they have better treatment outcomes if they are in a women-only treatment rather than a mixed-gender program (e.g., Hser et al., 2011). A women-centred program is defined as having everyone in the program working to take into account the issues that girls and women face in their lives. These issues include, but are not limited to, challenges to treatment access and engagement. Specifically, women-centred treatment programs take into account social and structural barriers limiting accessibility to treatment services and acknowledge the fact that girls and women are both viewed as and serve the role of the predominant caregivers. Women-centred care includes a trauma-informed program and provides trauma-specific interventions to women who have such needs. Each patient is seen to have her own unique strengths and vulnerabilities and treatment serves to promote her strengths and reduce vulnerabilities. Within a

woman-centred program, a patient is empowered to make informed decisions about her treatment and is actively involved in all aspects of her care. The principles of women-centred treatment shown below are based upon the premise that all health care practitioners will be sensitive to the needs of girls and women.

Guidelines for adolescent girls

Provide treatment to girls that is based on their developmental age, not just their chronological age.

Youth treatment providers should be sensitive to the developmental differences among girls and make the necessary adjustments to accommodate such differences. The treatment of a 13-year-old girl should not be identical to that of an 18-year-old girl. For example, treatments that rely on more abstract thinking may not be as useful for girls who are just acquiring this type of thinking. General developmental features that tend to distinguish younger from older girls, as well as some guidelines pertaining to professional behaviour and attitudes that reflect these differences can be found in the Treatment of Adolescents with Substance Use Disorders: Treatment Improvement Protocol (TIP) Series 32 (Substance Abuse and Mental Health Services Administration, 2008).

Girls need special attention in terms of their stage cognitive development, coping skills development and educational desires.

Girls entering treatment for substance use disorders often present to treatment with a cumulative impact of psychological, health, and social consequences. Girls and boys may be poorly motivated for treatment and have problems in the domains of mental health, academics, family, and behaviour. They often have a limited range of coping and social skills. They may lag behind non-drug using peers in achieving important developmental tasks, including individuation, moral development, and conceptualization of future educational, vocational, and family goals (Rutter, Giller, & Hagell, 1998). The complexity of the problems girls typically bring to treatment for substance use disorders underscores their need for multimodal treatment approaches that address a broad range of mental health and psychosocial problems beyond the treatment of the substance use disorder (Riggs, 2003).

Based upon the developmental age of the patient, different services at different stages of her life are needed.

For example, girls may need age-appropriate comprehensive sex education and youth-friendly sexual and reproductive health services. For girls in their reproductive years, they may need family planning and maternal health care as a part of treatment for substance use disorders. They may also need support in defining what healthy relationships are and how to minimize the likelihood of emotional, physical, and/or sexual abuse.

Keep girls separated from boys in treatment.

Programs for substance use disorder treatment need to recognize that mixing girls and boys within a program risks harms to girls, as they may be harassed, may feel less comfortable to talk openly about issues, and may feel less safe physically and emotionally in their treatment environment.

Identify multiple pressures girls have in their lives and help them develop positive coping mechanisms to address them.

Girls who have a substance use disorder face unique challenges to their self-confidence, sense of personal power, and ability to process emotional issues. Girls tend to be more sensitive to family conflicts, and thus crave a stable social support network. Girls are more prone to depression than boys. Thus, each of these factors deserve consideration in developing a treatment plan that is responsive to each girl's individual needs, building on her unique strengths and how to best actively engage her in the treatment process.

Give girls the emotional support they need to feel physically and emotionally safe in treatment.

Girls undergo different physical, social, and emotional changes than do boys and they are often not given adequate support to deal with these changes. Treatment can be a time for girls to have a safe space to develop and learn healthy behaviours that can promote transition into adulthood.

Treatment goals need to be clear, dynamic and collaboratively set with the girl.

Treatment will be most effective for girls when they take an active part in their treatment planning, when goals are achievable and made clear, and when they receive constructive feedback on their progress in treatment.

Guidelines for adult women

Create a treatment environment that empowers women.

One overarching barrier that women face in accessing treatment for substance use disorders is that they may be living in very deprived circumstances. This deprivation is characterized by poverty, inadequate basic health care and reproductive care, low literacy rates, lack of access to household money and being victims of interpersonal violence. In some societies, women may have little power or resources to change their life circumstances. Women need to be empowered by society to take steps to change their life circumstances and minimize or eliminate the impact of gender inequality in their life.

Review all structural aspects of the program to ensure as many barriers are minimized so that women can access treatment.

Examples of structural barriers include the cost of treatment, the lack of treatment availability, and the lack of access to transportation to and from treatment, because treatment may not be located in an accessible part of her local community. Some programs refuse to accept patients who are concurrently treated for psychiatric disorders. This limitation may have a greater impact on women than men because women have higher prevalence of some psychiatric disorders such as anxiety, depression and posttraumatic stress disorder and greater prevalence of use of psychoactive medication. Many women with substance use disorders are at heightened vulnerability to interpersonal violence (e.g., women exchanging sex for food, drugs, housing and or clothing) and the lack of physical and emotional safety inside and outside the treatment program can be a barrier to entering and remaining in treatment. The treatment schedule also needs to be flexible so that treatment is compatible with her daily life activities. Women often have the primary childcare giving responsibilities and on-site childcare for women to bring their children while they are in treatment should be viewed as mandatory for any treatment program that is women-centred.

Train staff so that stigma, shame, guilt and fear can be quickly minimized for women in treatment.

Examples of societal barriers that can impede women from seeking treatment for substance use disorders include stigma, shame, and guilt related to substance use disorders. Women with substance use disorders are typically more stigmatized than men with such disorders. This stigma from family, friends and society creates the context for shame and guilt that women experience about their substance use and their “failure” to live up to society’s expectations of being a good daughter, wife and mother. These feelings may be even greater for women engaged in commercial sex work due to the need for economic survival. In some societies, women have a real fear of losing custody of children.

Women who are pregnant or parenting are often fearful of disclosing that they have a substance use problem and are seeking treatment. They have an often well-founded fear that they will be deemed an unfit mother and lose custody of their children. Women often lack of support from family and/or a husband/partner in their life. Studies have documented that women are more likely than men to have a substance using sexual partner and to have families of origin who have substance use problems. Because relationships play such a significant role in women’s lives, women living with a substance-using partner may be deterred from seeking treatment because they fear the loss of the relationship. In some cultures, women may be forbidden to leave their homes to go to treatment, or husbands may not support their wives leaving family and household responsibilities. In these circumstances, family members may only bring women to treatment when they are unable to fulfil their family responsibilities or are very sick.

For many women, substance use serves as a way to self-medicate emotional problems or the experience of living in conditions of extreme distress. For example, some women are in relationships that are characterized by shared substance use, physical and sexual abuse, HIV and other infectious diseases and, sometimes, coercion into sex work and/or drug trade. In such situations, women may feel overwhelmed by their life circumstances and unable to see a way out. Research on women’s perceptions of treatment indicates that some women feel that they can handle the problems themselves and/or lack confidence in the effectiveness of treatment. When treatment is made more women-centred, the effectiveness of treatment can be improved.

Treatment goals need to be clear, dynamic and collaboratively set with the woman. Treatment will be most effective for women, when they take an active part in their treatment planning, when goals are achievable and made clear and when they receive positive feedback on their progress in treatment.

2. Treatment that is based on theory and evidence

The most effective treatments for substance use disorders are those treatments that have a foundation in theory, because theory provides a framework for all aspects of patient care. However, even treatments provided based on a theoretical framework need to have accumulated scientific knowledge, an evidence base, to support their use. The high standard of an evidence base for many medical disciplines (e.g., cardiology) needs to be applied uniformly in the drug dependence field. It is important to note that while treatments have been found to be efficacious for girls and women, the majority of the research on substance use disorders and their treatment has been conducted with men. Among the research on women, much of this literature is focused

on pregnant and parenting women. Thus, future research needs the active involvement of women researchers and a focus on girls and women of all age ranges and across the life span.

Guidelines for adolescent girls

Pharmacotherapy to treat substance use disorders should be used with girls only after carefully evaluating and discussing with the girl the risks and benefits of the medication. Many medications commonly used to treat adult substance use disorders have not been studied in controlled trials with adolescents. There is some support for the use of opioid agonist, especially methadone in adolescents when they are considered able to consent to such treatment and it should be used for adolescents with severe drug use disorder and high risk for continuing drug use. The consent should be provided also by the parents and in compliance with national legislative policies. Adolescents with a short duration of opioid use disorder who have a lot of family and social support may respond to opioid withdrawal with or without naltrexone as a relapse prevention strategy. Appropriate pharmacotherapy should also be used to treat co-occurring psychiatric disorders as a part of integrated treatment plan that also involves psychosocial treatments (UNODC, 2016). If medications are used in treating adolescents, they must be used with caution, careful monitoring, and consideration of the developmental characteristics that distinguish girls from women, such as developing hormones, brain development, greater impulsivity and polydrug use (Riggs, 2003).

Evidence-based psychosocial interventions are effective and expected standards of treatment for substance use disorders.

Research on psychosocial interventions for adolescents with substance use disorders has made significant advances in the past decade. Controlled trials now provide good evidence that several psychosocial treatment approaches can be effective in treating girls and boys with substance use disorders and other associated problems. Several of these interventions are based on modalities that have been effectively used with adults and modified substantially to make them developmentally appropriate for adolescents (Deas, Riggs, Langenbucher, Goldman, & Brown, 2000; Drug Strategies, 2002; Wagner, Brown, Monti, Myers, & Waldron, 1999). Behavioural therapy has been shown to help adolescents become drug-free and to improve problems in other areas, such as employment, school attendance, family relationships, conduct problems, and depression (Azrin, Donohue, Besalel, Kogan, & Acierno, 1995; National Institute on Drug Abuse, 1999).

Family-based interventions should be used with girls as a component of treatment for substance use disorders.

Family based interventions include structural strategic family therapy, parent management training (PMT), multisystemic therapy (MST), and multidimensional family therapy (MDFT). They are based on family systems theory and share the assumption that dysfunctional family dynamics contribute to adolescent substance use disorders and related problems. In practice, clinicians perform a functional analysis to identify problem behaviours, and relationship patterns that are then targeted with restructuring interventions. Parents are taught better monitoring skills and basic behavioural management principles to improve their adolescent's behaviour and reduce drug use together with strategies to improve overall family functioning and sustain the gains of treatment (Drug Strategies, 2002; Wagner et al., 1999).

Cognitive-behavioural therapy can be used with girls.

Cognitive-behavioural therapy based on learning theory, also has been shown to be effective in treating adolescent substance use disorders (Drug Strategies, 2002; Wagner et al., 1999). Evidence exists to support both girls and women benefitting from cognitive-behavioural intervention approaches where there is a functional analysis of substance use (e.g., understanding substance use as it relates to the antecedents and consequences of substance use) and training patients in skills to support abstinence (e.g., recognize and avoid times or occasions when there is a risk of substance use and learn and apply coping skills if avoidance of these situations is not possible) (Carroll, 1998). Despite the emerging empirical support for use of cognitive-behavioural therapy among girls and women, additional research is needed to best understand how it works for special populations.

Motivational enhancement therapy can be a helpful adjunct to treatment but should not be used as a stand-alone treatment for girls.

Motivational enhancement therapy has been used both as a stand-alone, brief intervention (for example, among adolescents presenting to emergency rooms with alcohol-or drug-related injuries) and integrated with other modalities such as cognitive-behavioural therapy (Monti, Barnett, O'Leary, & Colby, 2001) 2001). Recent controlled trials indicate that treatment of co-morbid psychiatric disorders alone is not likely to significantly reduce substance use or induce abstinence in dually diagnosed adolescents e.g., (P.D. Riggs, Mikulich, & Hall, 2001)].

Guidelines for adult women

Women's treatment needs to address women's specific needs.

These include childcare assistance, pregnancy, parenting, interpersonal violence, sexual trauma and victimization, psychiatric co-morbidity, housing, income support, and social services. To date, most substance use treatment models have been designed for men and based predominantly on evidence from research with male participants. However, gender-specific interventions that are designed to deliver information and services tailored for women are beginning to emerge in response to mixed-gender programs, which often fail to address women's specific needs, such as childcare assistance, pregnancy, parenting, interpersonal violence, sexual trauma and victimization, psychiatric co-morbidity, housing, income support, and social services (Orwin, Francisco, & Bernichon, 2001).

Pregnant women should not be turned away from treatment for substance use disorders.

In a meta-analysis examining single-gender treatment of women, Orwin and colleagues (Orwin et al., 2001) concluded that single-gender treatment was effective and its strongest effect was on pregnancy outcomes, psychological well-being, attitudes/beliefs, and HIV risk reduction.

Additional research is needed to determine which women will benefit from which treatments.

Additional research is also necessary to elucidate gender differences in response to specific pharmacotherapy and behavioural treatments, to identify subgroups of women who can benefit from single-gender versus mixed-gender treatments, and to improve understanding of the effectiveness and cost-effectiveness of gender-specific versus standard treatments (Greenfield et al., 2010).

3. Staff demonstrating respect and empathy for their patients

All staff working with girls and women need to have the appropriate training, experience and qualifications to work with girls and women who have substance use disorders. While this background is critical for treatment, it is equally important to interact with patients in ways that are respectful. Being respectful entails explicitly stating and maintaining the boundaries of patient confidentiality and allowing patients to be autonomous, and have control over all aspects of her care. The staff needs to work with an orientation of justice, beneficence, and without maleficence. Patients respond best to staff who demonstrate empathy, the ability to see the patient's views, and create a treatment program that responds to these views. Program leadership has the responsibility of ensuring that staff receives appropriate training, supervision, and ongoing support for maintaining respect and empathy. Ideally staff should be trained and skilled in the unique needs of girls and women; however, if the staff lacks such training, this absence of training should not be used as a reason for excluding girls and women from treatment. There is a need to balance adequate training with the need to provide services to girls and women.

Guidelines for adolescent girls

Treatment providers must be sensitive to motivational barriers to change at the outset of intervention.

There are several strategies suggested by Miller and Rollnick for encouraging reluctant clients to consider behavioural change (Miller and Rollnick, 1991).

The style and personality of the health care provider and the philosophy of care are considered to be very important in the care of girls with substance use disorders.

The clinician needs to be genuinely interested in girls as individuals first, then in their problems, and also in their parents. The clinician needs to genuinely feel at ease with girls and be able to communicate well with her patients and the parents or caregivers. The clinician should help to enhance family communication while assuring confidentiality when requested around personal issues.

The clinician should establish rapport by listening and displaying interest.

It is important but not always easy to establish rapport with a girl during the first visit or several visits. Listening closely to the girl can be a key to developing rapport, as is demonstrating concern and interest with a non-judgemental attitude. The adolescent should also have time to ask questions.

The clinician should ensure confidentiality.

It is critical to insure a sense of confidentiality with any patient, but most particularly with a girl. The clinician should be familiar with those laws and regulations that cover consent and confidentiality among minors in their particular locality. The limits of confidentiality should also be discussed. Parents should also be aware of these confidentiality guidelines.

The clinician should act as an advocate.

Because a girl may have had encounters with some adults who have been non-supportive, an opportunity presents itself for the clinician to stress the girl's positive attributes, characteristics and abilities. This is not the same as supporting high-risk behaviours.

Guidelines for adult women

Staff should be trained in how to deliver treatment to women with respect and empathy. Demonstrating respect and empathy towards women in every interaction is very much at the core of women-centred treatment (discussed above).

Treatment needs to allow active and interdependent roles for women.

Treatment in this context takes into account gender roles and female socialization. It does not allow sexual harassment while it supports active, interdependent roles for women. Treatment emphasizes mutuality and empathy and empowers women not with power over others but with power with others. Staff will also address women's unique treatment issues, such as trauma, parenting skills, coping mechanisms, and self-worth. Women feel more able to share power for constructive, creative ends.

4. Continuous treatment planning, from screening to discharge

Before a patient can receive appropriate treatment, the presence and severity of the alcohol and/or drug disorders must be determined. Given that girls and women will very likely have multiple treatment needs that span physical, mental and social domains, screening is needed to identify the areas where help may be needed. Next, an assessment process is needed to determine the extent and the severity of any problem that was initially identified in any domain of the screening. The screening and assessment findings then form the basis of a personalized treatment plan to engage the patient into treatment and address her issues. The intensity and duration of treatment should be adequate to the patient's needs. Numerous research studies support that patient outcomes are improved if the modality and intensity of treatment matches the intensity of her pre-treatment drug use and other psychosocial needs relative to every patient getting the same modality and level of treatment. Treatment planning needs to be a dynamic process, taking into account the severity of each problem that a patient has, as well as of each strength with which she presents to treatment. Deciding and reviewing treatment goals best proceeds as a cooperative and interactive process with the patient. Treatment planning needs to adjust as the patient progresses in treatment and discussions regarding where the patient will receive continued services once treatment is completed should be started well in advance of her discharge.

Guidelines for adolescent girls and adult women

Programs need a plan to reach girls who cannot easily access care.

For many locations in the world, women are a hidden and under-recognized population of people with drug use disorders. Women often find treatment by word of mouth from other women drug users. Thus, outreach from social workers and trusted community representatives can be helpful in reaching women to educate them about the treatment services available and to provide them with basic survival needs as they consider treatment options. In addition, outreach is often needed to be able to reach hidden populations such as girls, who may not be able to access or easily engage in structured forms of treatment.

Screening and assessment methods are important for determining the need for and type of services for substance use disorders.

Screening and assessment tools for substance use disorders and other mental health issues for women are available. These tools are also available for pregnant women. There are fewer reliable and valid screening and assessment measures for youth, including girls, than there are for adults, including women. Screening and assessment tools only for girls do not appear to be available. When possible and appropriate, the girl's parents or caretakers should be present at her initial clinical interview. Their presence enables the counsellor to establish the rules of confidentiality (including that reports of abuse, neglect, or threats of harm to self or others must be disclosed), obtain early development history, and assess family dynamics. Subsequently, a private interview with the adolescent is important to facilitate a strong treatment alliance and elicit candid information about substance use and behaviour problems that the patient may not be comfortable disclosing with parents present.

Consider the unintended consequences of labelling with diagnoses.

Even more than with boys and men, there may be unintended consequences of diagnosis of substance use disorders and other co-morbid issues with women in that these labels may place them at risk for harm in other areas of their life including family and others close to them. Being identified as a drug user may also jeopardize the parental rights of women regarding their children as well as any current employment. Although this might not be always the case, this consideration should be kept in mind.

Take the time needed to build rapport and a solid trusting relationship

Engaging girls in treatment requires rapport to be built between a girl or a woman and the health professional. She must trust that care will be given in a professional, confidential and respectful manner. Girls and women are more likely to engage in treatment if the health care provider shows empathy and therapeutic alliance with her. Further, providing women-centred care (described above) will increase the likelihood that women will engage and continue in treatment.

Empowering increases the chances of a successful outcome

Treatment planning with girls and women is more likely to be successful when they are active partners in setting goals and have a voice in their course of treatment. Treatment planning needs to be a cooperative, collaborative effort between the girl/ woman and her provider; she needs feedback and the opportunity to change treatment planning aspects that are not working for her. Retention in treatment will be most likely to occur if she feels empowered by the treatment staff to make life changes.

Start thinking and preparing for discharge well before the expected last day of treatment. Discharge planning needs to start early so that the patient is well prepared to leave the treatment, put her new life skills to use, and have a smooth transition into their community.

5. Address issues over and beyond substance use disorder, in particular history of abuse and psychiatric co-morbidity

Compared to boys and men with substance use disorders, girls and women with substance use disorders tend to have greater medical, childhood, lifetime and/or current trauma and interpersonal violence histories, as well as more current mental/psychological and social problems. Thus, these multiple domains need to be considered as a part of complete treatment. While this document is focused on a discussion of issues related to being an adolescent girl or woman, it is also critically important that treatment be appropriate for a patient's developmental stage in life, as well as sensitive to such potentially important characteristics such as her ethnicity and culture, family history, and sexual orientation.

Guidelines for adolescent girls

Emotional and physical neglect and/or emotional, physical and sexual abuse are very likely in girls with substance use disorders and these issues must be concurrently treated. As noted in the introduction, substance use disorders occur in the context of complex life issues. These issues can include poverty, deprivation, poor nutrition, in the midst of environmental disparity (e.g., no access to clean water), exposure to multiple forms of violence, forced work or forced exclusion and untreated comorbid psychiatric disorders. For girls, there must be a keen awareness of possible childhood and/or current trauma in terms of emotion and physical neglect or emotional, physical and sexual abuse. These issues needs to be treated concurrently and integrated into the substance use disorder treatment and not in parallel.

An integrated treatment strategy to treat the substance use disorder concurrent with the co-morbid psychiatric issues is important for improving treatment outcome. Co-morbid psychiatric issues of ADHD, depression, bipolar disorder, anxiety disorders and eating disorders are prevalent in girls with substance use disorders.

Until very recently, little was known about the safety and efficacy of medications for treatment of psychiatric disorders in adolescents with substance use disorders or the potential for adverse interactions with used drugs. Thus, clinicians have been understandably reluctant to treat psychiatric disorders with medications in this population, often referring youths for substance use treatment before considering treatment of psychiatric co-morbidity. This sequential approach is cautious, but it perpetuates a clinical conundrum. Treatment for the co-morbid disorder is withheld pending successful drug treatment and achievement of abstinence, but the untreated psychiatric illness significantly diminishes the likelihood of successful drug treatment. While caution is reasonable and abstinence ideal before initiation of pharmacotherapy for a co-morbid disorder, treatment risks must be balanced against the potential consequences of leaving psychiatric illness untreated. Although there is not yet consensus on "best practices" for the use of medications to treat co-morbid disorders for adolescents' dual diagnosis, these recent advances offer preliminary

evidence for an integrated treatment strategy, moving current practice standards forward until research can guide further refinement.

Bipolar disorder can be treated while the girl is in treatment for substance use disorders. Data with adolescent girls and boys supports treating bipolar disorder in the context of concurrent treatment for substance use disorders.

Adolescent girls with severe depression often need to receive both psychotherapy and pharmacotherapy.

Current practice guidelines recommend that adolescents with severe depression receive both psychotherapy and pharmacotherapy, while those with mild or moderate symptoms may be offered a trial of psychotherapy alone before medications are considered (Birmaher, Brent, & Benson, 1998). Both cognitive behavioural therapy and interpersonal psychotherapy have demonstrated efficacy for depression in adolescents without substance use disorders (Birmaher et al., 1998). Cognitive behavioural therapy may also be helpful in treating anxiety disorders, including posttraumatic stress disorder, in this adolescent girl population (Najavits, 2003). Medications to treat anxiety disorders in substance abusing adolescents has not been well studied. However, some girls may benefit from medication treatment of anxiety disorders in dually diagnosed adolescents in conjunction with substance use disorders treatment, given the available data (from previously mentioned depression studies) that fluoxetine (an SSRI) appears to have a favourable safety profile even in adolescents who use drugs (Lohman, Riggs, Hall, Mikulich, & Klein, 2002).

Guidelines for adult women

Women need a holistic approach that includes addressing physical and mental health. Like girls with substance use disorders, women face many of the same challenges. There is a need to focus on a holistic approach to include both survival needs, basic health care, gynaecological and psychological health as well as recovery from trauma (childhood and current), the ability to become economically independent, live in safe housing, establish and maintain healthy relationships and provide nurturing care for children. Build good working relationships with a comprehensive list of community services. Referrals to other specialised and general services may be needed.

6. Include interactive skills training and practice to improve self-efficacy and competence

Outcomes for treatment of alcohol and/or substance use disorders will be improved if women are given both knowledge of and support to change their substance use behaviour, as well as the knowledge and opportunity to practice skills related to reducing other risky behaviour and problem areas in their lives. With skills practice in a safe environment, girls and women may gain self-efficacy, the belief that they can make meaningful changes in their lives, and the confidence and competence to make these changes.

Girls need developmentally appropriate positive models and practice of skills such as conflict negotiation, communication, drug refusal skills, and risky behaviour reduction. Providing homework outside of the treatment day can also reinforce skills. The homework used in cognitive-behavioural therapy has also been an active ingredient for reducing substance use among women.

In addition, women deserve to have accurate information about sexual and reproductive health and the materials and skills to protect themselves. Women have been shown to benefit from learning new knowledge and practicing skills such as condom use to reduce risky sexual behaviour.

7. Recognize and address the unique needs of women during pregnancy and the post-partum period

While the vast majority of girls and women who enter treatment for alcohol and/or drug use disorders during pregnancy were using substances before they became pregnant, pregnancy can be a time that adolescent girls or women may be open to receiving treatment for their substance use disorder due to their concern over the health of the unborn child. For in-depth guidance on the management of substance use disorders during pregnancy, the reader is referred to the recently published guidelines by WHO (WHO, 2014).

A pregnant adolescent girl or woman should receive prenatal care and not be forced to terminate her pregnancy or feel stigmatized by any health care provider. Pregnant girls and women should be offered counselling if they do not want to end a pregnancy. For pregnant girls and women, the stigma of having a substance use disorder, the fear of losing custody of her child, and the threat of incarceration and/or being mandated to enter treatment often pose insurmountable barriers to her seeking treatment. Creating a treatment environment that is welcoming, non-judgmental, and supportive is essential to overcoming such barriers.

A pregnant adolescent girl or woman deserves to receive treatment that matches the severity of her alcohol and/or drug use disorder. For heroin, opiate, opium and prescription-opioid-dependent patients, methadone and buprenorphine pharmacotherapy have been shown to improve maternal and infant outcomes compared to no treatment for the substance use disorder. In most cases, detoxification from opioids followed by no medication or the tapering of methadone or buprenorphine will result in relapse to opioid use unless patients have strong psychosocial resources and high motivation to remain opioid-free. In any case, programmes should expect that poly-drug use is the norm, not the exception and treat multiple drug use in an integrated manner. Although there are medical complications associated with specific drugs, it is rare that a pregnant woman's substance use disorder will include only one drug. As a result, there are both multiple medical risks and cumulative medical risks due to concomitant substance use and these need to be taken into account.

In addition to medical care, patients will need specific educational information about several issues. It is helpful to discuss with the patient the scope of prenatal care in terms of what to expect at each visit and the reasons for certain procedures and tests. The discussion should also include the specific risks of substance use and particularly drug interactions (e.g., methadone and benzodiazepines). Prenatal health education should be provided through classes conducted by nursing staff, videos, and/or printed booklets. Any printed materials must be written at the appropriate reading level for patients. Opioid-dependent pregnant patients should have a thorough

understanding of the risks and benefits of medication-assisted treatment in pregnancy. The adequacy of the methadone or buprenorphine dose should be discussed so that the patient understands the difference between symptoms of withdrawal and normal discomforts of pregnancy; how a therapeutic dose varies for each individual so that the appropriate dose for her may differ from that of her fellow patients; how her dose may need to be increased as her pregnancy progresses; how to recognize foetal stress if she begins to experience withdrawal; and the risk to both her and her foetus of continued substance use. She should understand that upon delivery her opioid agonist medication dose may need to be tapered down, and she should request a decrease if she feels overly sedated. Patients being treated for substance use disorders have a great deal of misinformation about sexuality, pregnancy, labour and delivery, birth control, and breastfeeding. Education about these aspects of care can be provided individually or in group formats.

Great care needs to be taken in ensuring that girls and women are informed about any medical procedure before it occurs giving them power and decision making can help avoiding re-traumatizing those who have a history of victimization. Pain management during labour and delivery needs to be taken seriously as many individuals with substance use disorders have increased sensitivity for pain. For opioid users, they may need more pain medication to achieve pain relief than their non-opioid using counterparts. For prenatally opioids exposed babies, they should be evaluated for neonatal opioid withdrawal and a protocol needs to be in place for assessing and treating such babies. Recent research has also found that mothers and babies have better outcomes if the mother and baby are kept together and not separated due to neonatal opioid withdrawal monitoring or treatment.

Guidelines for adolescent girls and adult women

Pregnancy in adolescence requires special care

Girls are at higher risk of obstetrical problems than women. Moreover, even more so than in the case of adult women, they need to be prepared for labour and delivery, as well as about caring for themselves and their baby before and after birth.

Programs should have a good working relationship with social and child protective services.

The legal framework and the organisation of services for the protection of children can vary greatly globally and drug treatment and care programs and staff must always be clear of their responsibilities as health care providers in this respect. In this context, and as appropriate, they should provide the support, clinical services, and referrals necessary to eliminate or reduce the chances that the mother will need to be reported to child protective services.

Pregnant girls and women with substance use disorders should not be turned away from obstetrical care.

Obstetrical complications that occur in pregnant girls and women with substance use disorders are similar to those observed in pregnant women who do not receive prenatal care, such as spontaneous abortion, stillbirth, placental insufficiency, intrauterine growth retardation, premature labour/delivery, premature rupture of membranes, anaemia, preeclampsia, and abruptio placentae (Curet & Hsi, 2002; Finnegan, 1979). Therefore, pregnant girls women with substance use disorders must receive appropriate screening and assessment. They must be engaged in treatment

services as early in gestation as possible, and treatment programs must provide coordinated services that include both prenatal care and substance use treatment.

Obstetrical and drug treatment services are most beneficial for girls and women when they are provided in an integrated manner.

Coordinated services can be provided in different settings: prenatal and obstetrical care can be integrated within a comprehensive substance use treatment program (Finnegan, Hagan, & Kaltenbach, 1991), or substance use treatment can be part of a comprehensive perinatal care program for women in treatment for substance use disorders (Curet & Hsi, 2002).

8. Adapt the delivery of treatment to the ethnic, cultural, and socio-economic context of the patient

Drug treatment for girls and women has a greater opportunity to be effective if it is adapted to the local situation and circumstances of girls and women in the local community. While there are many different treatment modalities and evidence-based approaches available, these methods need at least minimal adaptation to be accepted, utilized, and effective in different treatment contexts.

Great care needs to be taken in both the selection of treatment modalities and evidence-based approaches, as well as how the methods are refined for the local situations and circumstances. A careful, sensitive and thorough process of verification needs to be undertaken to ensure that any adaptation of a treatment still retains the essential elements of that evidence-based intervention and that this adapted treatment meets the actual needs of the girls and women.

Girls and women who are ethnic minorities may encounter additional barriers when accessing substance use disorder treatment services, including language difficulties and or incompatible aspects of treatment with religious or spiritual practices. Ethnic, cultural, and religious diversity needs to be taken into consideration when providing treatment. Cultural mediators may need to be involved as outreach for these patients in order to help them in attending and engaging in treatment.

Guidelines for adolescent girls and women

Consideration of the ethnic and cultural status of girls and women and honouring and integrating these aspects into their care may help increase treatment engagement, especially in the case of girls and women who belong to ethnic minorities. For example, using traditional stories or learning about the traditions or history of her culture or ethnicity.

9. Include frequent and systematic monitoring and evaluation components

It is the treatment program's responsibility to ensure that quality care is being provided to patients. Evaluation and feedback on service and system performance for quality is needed from the staff, the patients and the larger community. A regular monitoring and evaluation system is needed because the types of drugs and consequences of drug use change over time as does the patient population seeking treatment. Thus, programs need to keep current with changing trends in drug use patterns and psychosocial functioning to best meet patient needs.

Guidelines for adolescent girls and women

Treatment for girls and women needs to include feedback from them about the process and experience of treatment.

Girls and women should be given opportunities to provide feedback about the program in a safe way where there is no fear of negative consequences based on a negative evaluation of the program. Conducting focus groups, in-depth interviews or surveys about the likes and dislikes and satisfaction with services as well as suggestions for improvement can help the treatment program stay current in providing what patients need.

Adolescents in particular can benefit from concrete feedback and monitoring.

Girls are often very relational in their life orientation and having the chance to see how they are progressing in treatment, getting praise or gentle corrective feedback about what can be done in the future can help her modify future behaviour.

Adolescents in particular can provide useful information for the planning of treatment services.

Asking girls about the latest drug trends, how drugs are being used, what drugs are being used, what new trends they are seeing can help the treatment system prepare for new emerging drugs which may require different treatment responses.

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