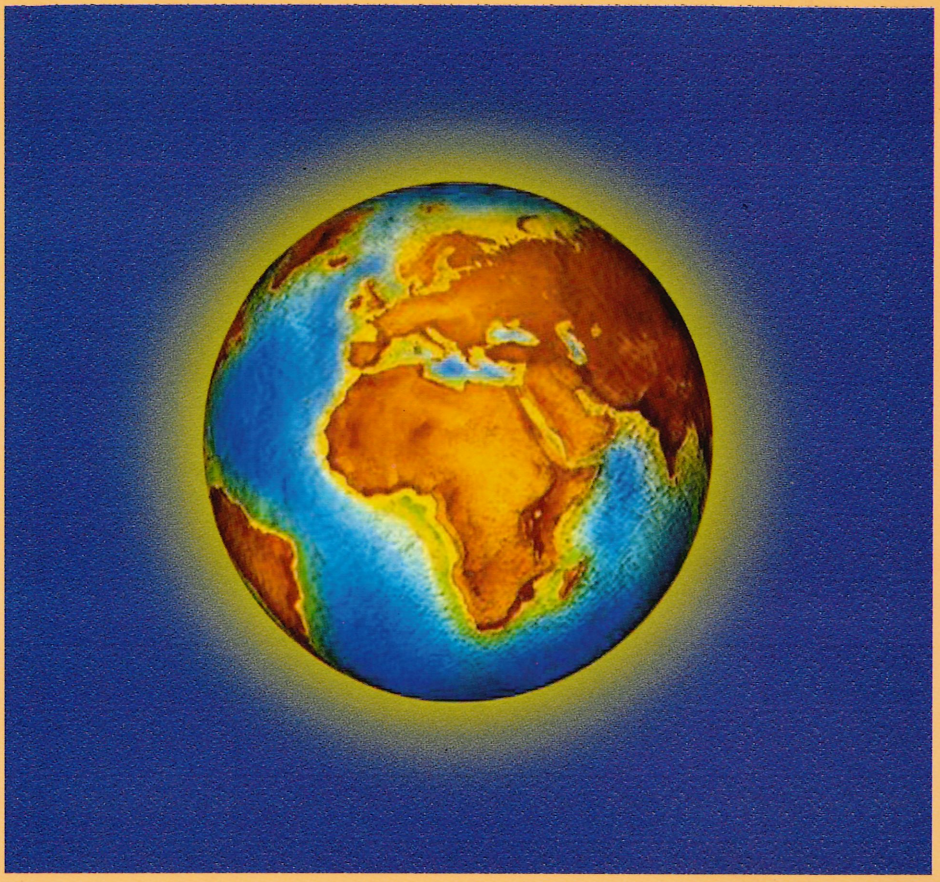
A Collection of Research Papers And Research Abstracts on Drug Abuse In Sri Lanka



National Dangerous Drugs Control Board

Foreword

This collection comprise the research undertaken and completed by the research division of the NDDCB in colleboration with the treatment and rehabilitation division of the Board.

It includes research done into the use or more precisely the abuse and prevalence of "Madana Modaka", an ayurvedic preparation which had been widely abused. Its abuse was fast becoming a social problem as it had spread among some school children in the higher grades.

Another important insight has been made possible by the research on women abusers of heroin and other drugs. Drug abuse and prositution (now given a respectable tag - "Commercial Sex") is a growing problem.

These research papers on Drug Control in the North & the East and survey of drug trafficking and injecting drug users published in this collection is a new area of reseach.

We think this collection will be of immense use to the NGO's involved in drug abuse management and concerned members of Civil Society in their activities in this field.

D. P. Mendis P. C
Chairman

29th October 2007

Contents

	Page
Foreword	iii
Trends in drug use of women in Sri Lanka 1996-2000	01
Heroin using female sex workers	11
Rapid prevalence survey on heroin use	20
Trends of drug abuse in Sri Lanka	24
Modaka use among school children	29
ගංජා අඩංගු මෝදකවල සුලභත්වය සහ භාවිතය පිළිබඳ අධ්‍යයනය	33
Assessment of Ayurveda treatment for heroin dependents	54
නාවින්න බණ්ඩාරනායක අනුස්මරණ ආයුර්වේද පර්යේෂනායතනයේ හෙරොයින් ඇබ්බැහිය සඳහා වූ ප්‍රතිකාර ක්‍රමය පිළිබඳ ඇගයීමක්	58
Imprisoned female heroin users	73
Preliminary needs assessment for drug control in the Northern and Eastern Provinces	87
Treatment for women affected by drug abuse problems	98
Opinion survey on heroin trafficking in Sri Lanka	105
Injecting drug users In Sri Lanka	116
Women, drug use and commercial sex	134

Trends in Drug Use of Women in Sri Lanka 1996-2000

P. R. Kandiah

Abstract

Changes in the trends of women using drugs were analyzed employing drug related data on arrests, imprisonment and treatment as indicators in this paper. Data for each indicator for women was compared with that of men and the total number of persons. The finding of this paper is based on drug enforcement and drug treatment data.These data are dependent on internal and external factors affecting the drug enforcement and drug treatment programmes. Hence, the findings should be considered as an indicator of increase in women drug use rather than the exact level in increase of women drug use.

The number of women arrested for drug offences was 276 in 2000 and 90 in 1996. The women arrested for drug offences had doubled between 1996 and 2000. The number of women who sought treatment for drug use in 2000 was 12, which increased from 4 in 1996. Women who sought treatment for drug use too had doubled between 1996 and 2000. Among persons who sought drug treatment, the persons divorced were 25, separated 20 and widowed 8 in 2000. The corresponding figures were 8, 9 and 2 in 1996. Among the treatment seekers, divorced or separated had doubled and widowed had trebled during the above-mentioned period.

Women imprisoned for narcotic offences were 51 and for excise offences 221 in 2000. The women arrested for the former were 53 and the latter 200 in 1996. While women arrested for narcotic offences had decreased to 96% that for excise offences had increased to 110% during the period under review. Women imprisoned for drug offences in 2000 were 533, which was 666 in 1996. The number of women imprisoned had decreased to 80% in 2000 compared to that of 1996.

Even though small in number at present the female drug use was increasing faster than that of men between 1996 and 2000. It is also has the potential to become a sizable drug user population in the future. Compared to the drug use of men, the women drug use could have more negative consequences to the health, family and society. Hence, there is

a need policy planning, and drug programme development and implementation for women.

Introduction

The estimated number of women in Sri Lanka in 2001 was 9.4 million that constituted 49% of the total population. The women workforce of the country was 4 million, which represented 32.5% of the total workforce in 1998 of the island (Statistical Pocket Book 1999). Women played many roles as spouses, mothers, housewives, decision makers and income earners in the Sri Lankan society.

A descriptive study was conducted on a sample of 19 heroin using female sex workers in 2001. The sample constituted 12% of the total women imprisoned for drug offences at Welikade prisons in March 2000. The age of 64% of the sample was between 31 and 40 years. Of them, 53% were either separated or cohabiting and 21% widowed. Among them 89% had children. Among the sex workers, 37% had never been to school.

Of the sex workers, cigarettes were used by 95%, alcohol by 31%, cannabis by 26% and hashish by 5%. They had experimented with flunitrazepam, diazepam and barbitone. All were daily heroin users by ' Chinese method' while 11% had experimented with intravenous use. Most of them (79%) had used between 4 and 6 packets of heroin and spent between Rs. 200 and 300 per day on it. A third of them had received treatment for sexually transmitted diseases (Heroin using female sex workers 2001).

An exploratory study was conducted on 15 female heroin users in 1992, which represented 4% of a sample of heroin users studied, mostly from urban areas. Two third of the females were imprisoned persons. Nearly half of the users (46%) were aged between 15 and 29 years. Among them, 80% were married and 13% separated. Of the female heroin users 13% had never been to school.

Female drug users spent Rs. 250 on approximately 6 packets of heroin a day. Among the users, 93% had used tobacco, 27% alcohol and 20% cannabis. Also they had experimented with psychotropic medicines such as flunitrazepam, diazepam, methadone, chlorophenerain maleate (piriton) and largactil. Almost all of them had used heroin by Chinese method while 14% had experimented with intravenous use. Among the

users, 73% had been arrested for various offences and 60% for drug related offences.

Drug using women are likely to be more stigmatised than their male counterparts because their activities are regarded by society as 'double deviance': taking drugs is seen as both deviance from accepted social code of behaviour and deviance from the traditional expectations of the female as wife, mother and family nurturer (Fagan. J, 1994)

The lives of women who consume drugs regularly tend to become more absorbed and conditioned by the habit and increasingly isolated from those of non-users, especially if, by trading sex, women alienate themselves even more from their existence as wife or mother. This progressive slide into the drug culture identity has been termed *role engulfment* (Stephens, R. C. 1991). Evidence suggests that drug abuse causes worse problems to women. Drugs seem to be more functional in a sexual relationship for women than that for men: females are more often initiated to drug use by males than vice versa and may be dependent upon the male for continued supplies (Amaro, H., Hardy - Fanta, C., 1995).

Women of drug abusing males shield them from consequences of their abuse. Thus, women may experience social, health and economic disadvantages including domestic violence. They may themselves be drawn into alcohol or drug abuse. Woman of a drug dependent spouse may be the sole supporter of the family. Some women may trade sex to support their partner's drug habit and thus risk from Sexually Transmitted Disease (STD). The HIV virus is more readily transmitted sexually from an infected male partner to an uninfected female than the other way around (Women and Drug Abuse, 1995).

Methodology

This paper was prepared using secondary data collected on drug use by the police and the National Dangerous Drugs Control Board. The drug abuse data in 1996 was compared with that of 2000 for drug arrests, prison admission and treatment.

Drug related arrests, prison admissions and treatment admissions were considered as indicators of drug use. The total numbers for each indicator and its breakdown by cannabis and heroin use were taken into consideration to determine the trends.

Limitations

The finding of this paper is based on drug enforcement and drug treatment data. These data are dependent on internal and external factors affecting the drug enforcement and drug treatment programmes. The drug enforcement data often reflect enforcement policy rather than the level of drug abuse. The drug treatment data are dependent on number of treatment admissions including programme emphasis, capacity of the treatment institutions, data collection methods and reporting procedures. Hence, the findings should be considered as an indicator of increase in women drug use rather than the exact level increase of women drug use.

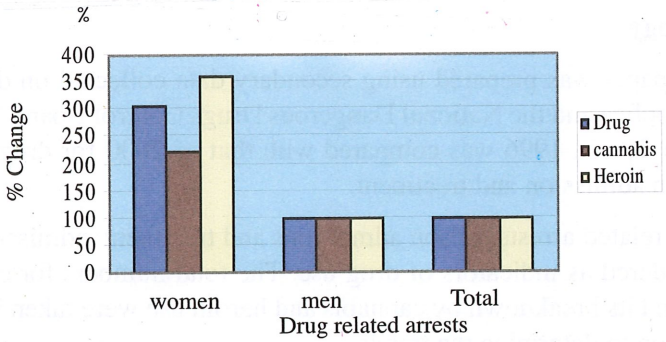
Results

The number of women arrested for drug offences in 2000 was 276 (1.8%), men 14845 (98.2%) and total number 15121(100%). The corresponding figures for 1996 were 90(0.6%), 14710 (99.4%) and 14800(100%). The number of women arrested for drug related offences had increased to 306%, men to 101% and total number to 102% in year 2000 compared to that of 1996.

Cannabis use

The number of women arrested for cannabis related offence in 2000 was 74 (2%), men 4579(98%) and total number 4653 (100%). The corresponding figures for 1996 were 34 (1%), 4609 (99%) and 4643(100%). In 2000 compared to that of 1996 the number of women arrested for cannabis had increased to 217%. While the men arrested for cannabis had decreased to 99% and the total number had not changed in 2000 compared to that of 1996.

Exhibit 1 - Trends of drug arrests 1996-2000.



Heroin use

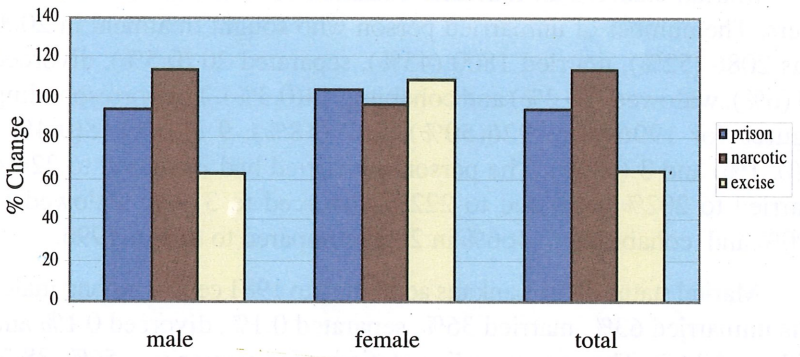
The number of women arrested for heroin related offences was 202 (2%), men 10261 (98%) and the total number 10463 (100%). The corresponding figures for 1996 were 55(1%), 10065 (99%) and 10120(100%). The women arrested for heroin had increased to 367 %, men to 101% and the total to 103% in 2000 compared to that of 1996.

Prison admissions

Drug offences were the largest category of prison admission for women, men and total prison admission for 2000. The number of women, men and total prison admission for drug offences in 2000 were 272 (51%), 11, 177(61.4%) and 11,449 (61.2%), respectively. The corresponding figures for 1996 were 253(38%), 11,748 (68.6%) and 12,001(67.5%). The number of prison admissions for drug offences had increased for women to 107%, while it had decreased for men and total admissions to 95% each in 2000 compared to that of 1996.

Number of prison admissions for narcotic offences for women, men and total admissions in 2000 were 51(9.6%), 8300 (45.6%), 8351(44.6%) respectively. The corresponding figures for 1996 were 53(8%), 7296 (42.6%) and 7349 (41.3%). The number of prison admission had increased to 113% for men an total admission while it had decreased to 96% for women.

Exhibit 2 - Trends of drug related prison admissions 1996-2000

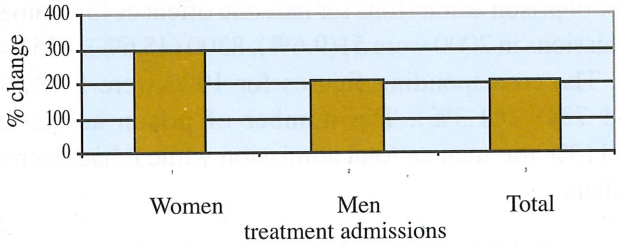


Excise offences related prison admissions in 2000 for women, men and total admissions were 221(41.5%), 2877(15.8%) and 3098 (16.6%), respectively. The corresponding figures for 1996 were 200 (30%), 4452(26%) and 4652 (26.2%). The excise related prison admission had increased for women to 110% while it had decreased to 65% for men and 67% for total admissions.

Drug treatment admissions

The total number of women who sought drug treatment was 12(03%), men 3941(97%), and total admissions 4038 (100%) in 2000. The corresponding figures in 1996 were 4(1%), 1847 (99%) and 1851 (100). The number of women who sought treatment for drugs had increased to 300%, men to 213% and total to 217% in 2000 compared to that of 1996.

Exhibit 3 - Trends of treatment admissions 1996-2000



Marital status of persons seeking drug treatment:

Marital status is an indicator common for male and female drug users. The number of unmarried person who sought treatment in 2000 was 2086 (52%), married 1800 (45%), separated 20 (0.5%), divorced 25 (6%), widowed 8(0.2%) and cohabitng 14(0.3%). The corresponding figures for 1996 were 926(50%), 887 (48%), 9 (0.5%), 8(0.4%), 2 (0. 1%) and 3 (0.2%). The person unmarried had increased to 224% married to 202% separated to 222%, divorced to 312%, widowed to 400% and cohabiting to 466% in 2000 compared to that of 1996.

Marital status of Sri Lankans according to 1981 census among males was unmarried 63%, married 36%, separated 0.1%, divorced 0.1% and widowed 0.6%. The corresponding statistics for women was 56%, 38%,

0.1%, 0.2% and 2.5%, respectively. The number of separated and divorced persons is comparatively more among treatment seekers than that of the general population of males or females in Sri Lanka.

The number of persons cohabiting among treatment seekers in 1996 was 3(0.1%) that increased to 14(0.3%) in 2000, which was a 466% increase. Nevertheless, no census statistics were available on cohabitation. This marital group needs further investigation due to its health and sociological implications.

Table 1 - Trends of marital status of persons admitted for drug treatment

Marital Status	1996	2000	% change	Sri Lanka population	
				Male '000	Female '000
Unmarried	929 (50)	2086 (52)	224	4747.7 (63)	4086.4 (56)
Married	887 (48)	1800 (45)	202	2706.3 (36)	2784.9 (38)
Separated	9 (0.5)	20 (0.4)	222	9.1 (0.1)	90.5 (0.1)
Divorced	8 (0.4)	25 (0.6)	312	11.5 (0.1)	17.7 (0.2)
Widowed	2 (0.2)	8 (0.2)	400	90.5 (0.6)	377.5 (2.5)
Cohabiting	3 (0.2)	14 (0.3)	466	**	**
Total	**1857 (100)**	**4038 (100)**	**217**	**7568.3(100)**	**7278.5(100)**

Percentage are given within parentheses

** data not available

Sri Lanka population according to 1981 cencus

The increase in the women arrested was two-and-half fold that of men and the total number arrested during the corresponding period. Hence, the increase in the women arrested for cannabis, heroin and other drugs was more than that of the men and the total number of arrests in 2000 compared to that of 1996.

The number of women imprisoned for drugs had increased by 7% in 2000 compared to that of 1996. The men and total number of imprisonments for drugs had decreased by 5% during the corresponding period. The number of women imprisoned for excise offencses had increased by 10% in 2000 compared to that of 1996. The men and total number of imprisonment for excise offences had decreased by 35% and

33%, respectively during the corresponding period. The men imprisoned for drug and narcotic offences increased by 13% and 10%, respectively in 2000 compared to that of in 1996. The women imprisoned for narcotic offences had decreased by 4% during the corresponding period.

While the women seeking treatment had increased by 200% and that of the men by 112% total number had increased by 117% in 2000 compared to that of 1996. The rate of increase of seeking treatment among women was more than that of men between 1996 and 2000.

Marital status, which is an indicator common for male and female drug users, could suggest about stability of the family of the drug users. The persons who sought treatment among the separated had increased by 122%, divorced by 212% and cohabiting by 366% in 2000 compared to that of 1996. Apparently the number of persons seeking drug treatment with marital problems had increased between 1996 and 2000.

Fagan (1994) is of the view that women drug users are more stigmatised than men drug users because the women are firstly stigmatised for using drugs and secondly for violating the social code of a woman, This phenomenon is termed double deviance. Two-third of the sample imprisoned female heroin users were involved in anti-social activities. Among them, 48% was involved in sex work and 19% in selling heroin (Women and heroin use, 2000). Involvement in the above-mentioned anti social activities in addition to drug use would cause stigmatisation of the women. Even though, less in number women drug users in Sri Lanka may be more socially stigmatised than that of the men drug users.

According to Stephan (1991) women drug users isolate themselves from non-drug using groups and tend to alienate themselves from the role of wives and mothers. Hence, the impact of women drug users to the society would be more than that of the men. A study on female heroin users (1992) revealed that 13% of the sample was separated from their spouses. Another study on women and heroin use (2000) revealed that 47% of the sample was separated or widowed. Amongst heroin using women, 16% was cohabiting. The separated and widowed among the Sri Lankan population were 0.1% and 0.6%. Hence, marital problems among drug users were more than that of the general population of the country. Hence, these women are more isolated than the non-drug using

women, Nevertheless, the impact of drug use would be more than their male counterparts.

Amro and Hardy-Fanta (1995) were of the view that drug use cause worse problems to women and it is mostly initiated by men than vice versa and women are dependent on men for continued drug use. An exploratory study done on a sample of female heroin users revealed 73% had been arrested for various offences and 60% for drug offences (Female Heroin Users 1992). This suggests a considerable number of women get into trouble with the law and some of them would be imprisoned which may cause separation of them from their families. This situation could adversely affect the children and the family. Of the spouses of females, 20% were either heroin or cannabis users and a similar number had initiated heroin use due to their spouse or partner. A report on imprisoned drug users at Welikade prison revealed that 19% of the women users had initiated drug use, due to their spouses. (Women and heroin use 2000). This suggests that a considerable number of spouses of the women were drug users themselves and were the cause for initiation drug use in these women.

Report on Women and Drug Abuse (1995) suggests the some women of drug users may abuse alcohol and drug, trade sex to support the drug habit and are more vulnerable to the spread of HIV. According to a study on heroin using sex workers, 95% smoked cigarettes and 31% used alcohol. Cigarette and alcohol use among Sri Lanka women is very less. Of imprisoned women prisoners in 2000. 48% were sex workers themselves and 16% had been treated for sexually transmitted diseases. Hence the women drug users could be considered as a potential risk group for sexually transmitted diseases such as HIV.

Conclusions:

Even though less in number at present the female drug use was increasing faster than that of men between 1996 and 2000. It also has the potential to become a sizable drug user population in the future. Compared to the drug use by men the women drug use could have more negative consequences to health, family and society. Hence, there is a need policy planning, and drug programme development and implementation for women.

References:

Handbook of drug abuse information 1996-2000. Research and Publication Division, National Dangerous Drugs Control Board.

Statistical pocket book of the democratic socialist republic of Sri Lanka - 1999, Department of Census and Statistics, Ministry of Finance & Planning.

Amaro, H., Hardy-Fanta, C. Gender Relations in Addiction and Recovery, **Journal of Psychoactive Drugs,** Vol 27(4), Oct - Dec 1995.

Bhadrani Senanayake, **A study on heroin using female sex workers, 2001**, National Dangerous Drugs Control Board.

Fagan, J. Women and Drugs Revisited: Female Participation in the Cocaine Economy, **The Journal of Drug Issues**, 24(2), 179-225, p182 1994.

Ratnayake Y. & Kandiah P. R. **Female heroin users in Sri Lanka 1992**, National Dangerous Drugs Control Board.

Stephens, R. C. **The street Addicts Role: A theory of Heroin Addiction, 1991**, Albany: State University of New York Press.

Women and Drug abuse: A Positional Paper by the United Nations System, prepared in 1994 for the 1995 IVth world Conference on Women and Development.

Women and heroin use: Report on drug use among women prisoners at **welikade** Prisons, 2000, NDDCB.

This paper was presented at the 8th National Convention on Womens Studies of the Centre for Women's Research (CENWAR), Colombo, 2001.

Heroin using female sex workers

Bhadrani Senanayake

Abstract

The paper contains descriptive primary data collected from the female ward of the Welikada Prison, Colombo 9.A non random sample of 19 heroin using female sex workers (N) was interviewed face to face using a questionnaire for a survey on drug use among female drug offenders at the Welikada Prison during March 2000, which represented 12% of Narcotic Offenders at the female ward.

Nearly two-thirds (64%) of the sex workers were aged between 31 and 40 years and 26% were between 26 and 30 years. Half of them (53%) were either cohabiting or separated. 16% of the sex workers were married, 5% unmarried and 5% divorced. 21% were widowed. While seven (37%) of them had never being to school, 10% had completed G.C.E. (Ordinary Level). The majority of the sex workers (89%) were children. The heroin using sex workers were multiple drug users. In addition to heroin, they had used cigarettes (95%), alcohol (31%), cannabis (26%) and hashish (5%). They had also experimented with psychotropic drugs such as methadone, diazepam and barbitone.

Nearly a third (37%) of sex workers had started on heroin below 20 years of age and 16% had started below 15 years. All of them were daily heroin chasers (Chinese method). However, 11% had experimented with intravenous drug use and discontinued it due to fear of contracting HIV. While 79% used between 4 and 6 packets of heroin, 21% used between 7 and 10 packets a day. A third (32%) had been treated for sexually transmitted diseases (STD) at the STD clinic in the Colombo Hospital.

Introduction

Many studies on gender differences in drug abuse, sex workers, and drug using sex workers have been carried out in other countries. However, such studies on drug use and sex work, specially illicit drugs are very few in Sri Lanka.

Women constituted 51% of the Sri Lankan population. The role of Sri Lankan women is fast changing due to various social and economic forces. Drug use is increasing and getting more and more acceptance among women. According to the prison statistics 56% of the female prison admissions was for excise and narcotics offences in 1999. In 1996, 253 women were arrested for drug related offences. It was increased to 452 in 1999, (79%). The number of women imprisoned for narcotic drug offences in 1996 was 53. The number went up to 148 in year 1999. This indicates an increase of 170% during the corresponding period.

The National Dangerous Drugs Control Board (NDDCB) conducted a drug intervention programme between March 2000 and 2001 for the imprisoned female drug offenders at Welikada Prison. This paper is based on a survey conducted during the above period as part of the drug intervention programme. A non-random sample of 19 heroin using female sex workers was interviewed for the study. This number represented 12% of Narcotic offenders at the female ward. The aim of conducting the survey was to collect information on the heroin using sex workers.

Chambers (1970) had pointed out that research on the relationship between prostitution, and drugs indicates that approximately 100% of all female heroin users support their habits through prostitution.

Eldered and Wasington (1975) had pointed out that 40% of their sample were prostitutes and most of them had become a prostitute after the drug use.

Rosenbaumn (1981) argues that after the introduction to heroin, female usage is indicative of the traditional sex role differentiate. i.e. role expected to play in the society due to the sex. Thus, if a man uses drugs and is addicted the women's social role dictates that she shares that activity as well. Also women became addicted to heroin faster than men. Of the women of her sample 47% was addicted within 3 months from first use.

Elinwood (1986) observed that women tend to maintain longer drug habits before trying abstinence and showed less oscillation than men do (between drug use and abstinence). Perhaps this is due to the option of supporting drug habits through commercial sex work.

Haser (1987) reported that in contrast to men, women showed a marked difference in the consumption of non-narcotic drugs before

heroin. However, after using heroin, women gave up the use of other drugs, but men continued to experiment with other drugs at the same time.

Anglin (1987) is of the view that women an men followed similar pattern of narcotics use but women's addiction careers being "compressed" or in shorter cycles. The other major areas of sex differences were in accordance with sex role stereo type of the women and non-related tc age.

Athuraliya (1989) had identified three contributing factors for illegal activities by female heroin users in Sri Lanka. These are (a) broken family situation, (b) poverty and (c) poor urban community environment (shanty, slums). Furthermore, the females had not taken medical assistance to overcome their drug dependency. The drug peddlers were motivated mainly by the extra income they could earn themselves by using these females. Two females earned money for drugs through prostitution.

Methodology

A survey was conducted on a non-probable sample of 19 heroin using sex workers imprisoned at Welikada Prison. The sample was obtained by "snow balling". A pre-tested questionnaire in Sinhala Language was used for data collection of the survey. The questionnaire contained close-ended questions on socio-demographics, drug use, and sex work. In addition, interviews were conducted and observations were recorded. The data recorded was checked for completeness and accuracy prior to data analysis. Summary tables on each item of the questionnaire were prepared with total and percentage calculated.

Results

Socio-demographics

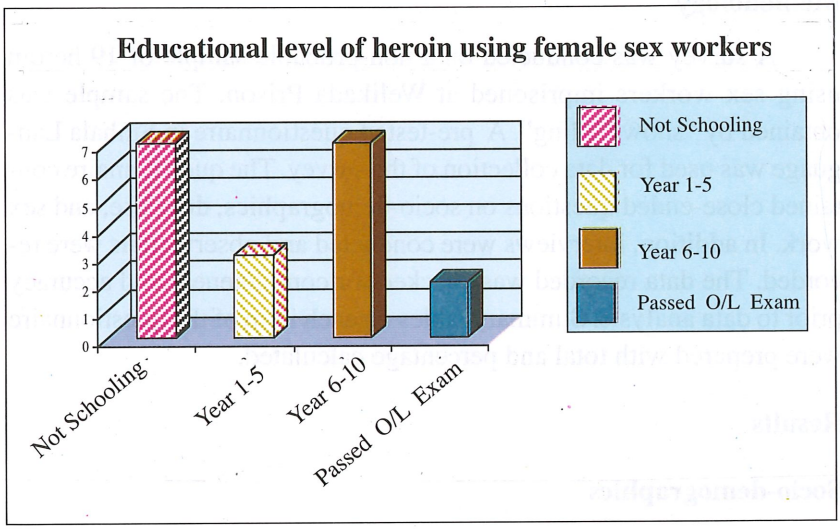
A total of 19 (N) females were interviewed for the survey. Eleven (58%)female drug users were from Colombo City. 10% from Rajagiriya, one (5%) each from Modara, Dehiwala, Peliyagoda, Homagama, Kelaniya and Kalubowila.

A majority of them came from unstable family backgrounds and generally from economically poor social strata of the society. Their spouses were labourers or street level heroin vendors. Among the sex workers, 17 (89%) had children. Among the children 26% did not attend school. Most of the children were living with the sex worker's parents, relatives. Some children were under the care of the church.

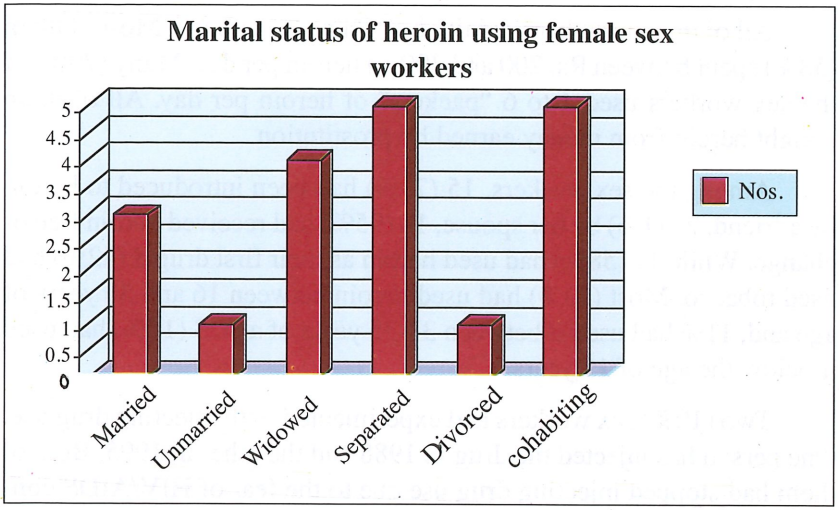
The ages of the sex workers ranged from 21-40 years. Nearly two-third (64%) of the sex workers were aged between 31-40 years and (26%) were aged between 26-30 years and one female did not know her age or her birthday.

Among the sex workers 17 (90%) were Sinhala. One (5%) each was Tamil or Muslim. Fourteen (74%) of them were Buddhists, four (21%) Christians and one (5%) Muslim.

Of the sample 7 (37%) had studied between Grade 6 and 10, 3 (16%) had studied between Grade 1 and 5, 2 (11%) had completed G. C. E. Ordinary Level. Of them 7 (37%) had not gone to school. One of them couldn't write.



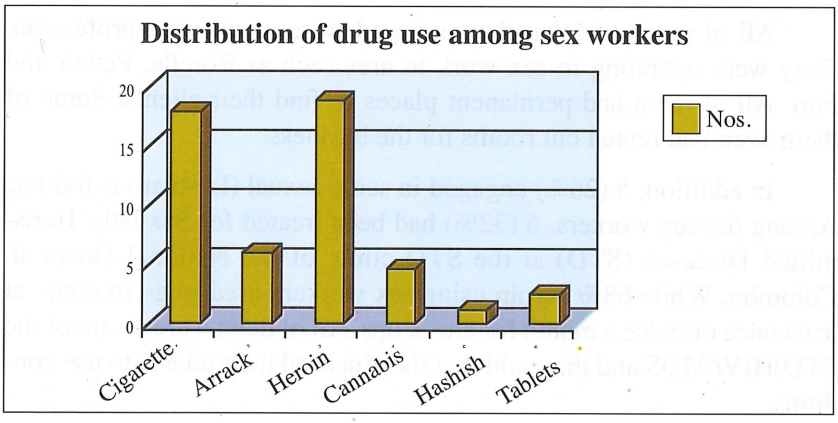
Most of the sex workers (53%) were either cohabiting (26%) or separated (26%). Only 3 of them were married legally. One was unmarried. 5% of the sample was divorced and 21% widowed.



All women of the sample earned their income by sex work. One (5%) was engaged in pick pocketing, selling heroin or selling fruits in addition to sex work. Of the sample 18 (95%) earned between Rs. 2000 and 3000 per day and one (5%) earned between Rs. 3000 and 4000.

Drug use background of the subjects

The heroin using sex workers were multiple drug users. Amongst them, 6 (31%) consumed alcohol, 5 (26%) cannabis and 1 (5%) hashish. Smokers in the sample were 95%. Among them 3 (16%) had used medical drugs such as diazepam, barbitone and methadone, as an alternative for heroin when their pockets were empty or when heroin was not available in the market.



All of them used heroin daily by "Chinese method". Most of them (58%) spent between Rs. 200 and 300 on heroin per day. Many (79%) of the sex workers used 4 to 6 "packets" of heroin per day. All of them bought heroin from money earned by prostitution.

Among the sex workers, 15 (79%) had been introduced to heroin by a friend. 2 (11%) by her spouse, 18 (95%) had received heroin free of change. While 11 (58%) had used heroin as their first drug 8 (42%) had used tobacco. Most (73%) had used heroin between 16 and 30 years of age and, 11% had used it between 31-35 years of age. 3 (16%) had used it below the age of 15 years.

Two (10%) sex workers had experimented with injecting drug use. One person has injected the drug in 1988 and the other in 1995. Both of them had stopped injecting drug use due to the fear of HIV/AIDS contraction.

Drug use in the Prisons by subjects

Among the sample 10 (53%) have been taking heroin in the Prison. 6 (16%) of them consume heroin at least once a week and 2 (20%) of them at least 2-3 times a week. Rest 2 (20%) used it occasionally. Among them 7 (70%) smoked local cigars (made by themselves using tobacco) daily, 8-10 times per week. They bought heroin from the Wanatamulla area by exchanging money, soap, milk powder etc. through the Prison wall. Usually most of the females chew beetles in the prison.

Sex work history of the subjects

All of them said that they engaged in sex work as a profession. They were operating in sex work in ares such as Borella, Pettah and Fort. All of them had permanent places to find their clients. Some of them even had rented out rooms for the business.

In addition, 5 (26%) engaged in same sexual (Lesbian) activities. Among the sex workers, 6 (32%) had been treated for Sexually Transmitted Diseases (STD) at the STD clinic of the National Hospital, Colombo. While 68% heroin using sex workers used to go to clinic at least once or twice a month for check ups. All of them were aware of the STD/HIV/AIDS and they said that they insisted their clients to use condoms.

Discussion and conclusion

The subjects were residents of Colombo and its suburbs. The findings of the study would be more applicable to heroin using female sex workers living in this particular area.

Elinwood and his assistance had revealed that urban women used drugs more than the rural women. This argument is true for urban female sex workers too.

Among women prisoners, drug users are lower than those of men in Sri Lanka. Most of the female offenders were imprisoned due to drug related offences. They were repeat offenders.

Most of the females (95%) of the sample claimed to earn less than Rs. 3000 per month. Their spouses were labourers. They belong to the low income social strata of the Sri Lankan society.

The average age distribution of the subject ranged from 21 to 40 years. In a previous study, (Athuraliya 1989) the average of the majority of female drug prisoners was between 16-35 years. This suggests that the age range of heroin using females had slightly increased between 1989 and 2000.

Of the sex workers, 37% had never being to school. In the previous study, 67% had never being to school and this is attributed to the economic hardship faced by their families. As a result of economic problems women were discouraged of studies by their parents. This suggests that although the free education system exists in Sri Lanka a considerable number of women drug users have not had the opportunity of having any formal education.

Most of them (89%) had children, and 26% of them were in the school going age. But they were not attending school. Most of the children were living with relatives, or were under the care of the church. This suggests that there is a need for special attention for these children's education as their mothers are imprisoned.

53% of the females were either separated or cohabiting and only 16% were married. Of the Sri Lankan population 58.2% was married, 0.24% was divorced and 0.16% was legally separate. According to a previous study (Aturaliya-1989) most female imprisoned drug users came from unhappy families, with broken marriages, deaths and remarriages.

This suggests marital discord is very high among the females of the sample. Whether marital discord contributes to drug use or vice versa is an area worth investigation by social researchers.

All female of the study used 4 and 6 "packets" of heroin daily and spend Rs. 200 to 300 per day. In the previous study most women spent between Rs. 100 and 150 per day on heroin and used heroin more than three times a day. Apparently, the females are spending more on heroin in 2000 than in 1989.

Most of the females (79%) had been introduced to heroin by friends. (Peer pressure) This suggests that peer pressure had been the main cause for the initiation of heroin use.

Most of them were multiple drug users. In addition to heroin, they had used cannabis, hashish, alcohol and tobacco. They had also experimented psychotropic drugs. This suggests that there is not much difference of multiple drug use between men and women.

Ten subjects (52%) used to take drugs in the prison and these women were promoting drugs to other female offenders. This situation reveals that drugs can be smuggled in to the prisons and this is a high risk place.

All the women in the sample said that they supported their drug use by engaging in prostitution. This supports the view of Ellinwood that women could continue drug use longer through prostitution. Chambers also revealed that all female (100%) heroin users supported their drug habits through prostitution. In the previous study, the females claimed that they engaged in sex work to support their drug habit and used drugs to alleviate the discomfort of sexual intercoure with several clients during a single night. (Athuraliya 1989)

In the present study even though, 100% of the females claimed they engaged in sex work, only 7% of the previous study claimed to have engaged in sex work. It may be that more and more of the females are engaging in sex work to support their drug habit in 2000 than that of 1989. Alternatively, in 1989 the females would have been reluctant to tell that they engaged in sex work to support their drug use.

Of the females, 11% had experimented with intravenous (IV) drug use and discontinued it due to the fear of contracting HIV. This suggests

that the sex workers had awareness of the dangers of HIV/AIDS and as a result discontinued the IV drug use.

Of the sample, 32% had been treated for Sexually Transmitted Disease (STD). This suggests that a considerable proportion of sex workers had engaged in unsafe sex.

References:

1. Anglin, M.D. et. al. Sex differences in Addict Careers: 2 becoming addicted. Am. J. Drug and alcohol Abuse 13(1&2) 1987:59-71
2. Athuraliya, C.A. study on Imprisoned female drug offenders, National Dangerous Drugs Control Board, 1989: Pg. 1-4
3. Chambers C. A. et. al. Narcotics addiction in females: A rare comparison. Int. J. Addict 5 1970: 253-280
4. Eldred, C.A. and Washington, M.N. Female Heroin addicts in a city treatment programme, 1975.
5. Ellinwood, E.G. et. al. Narcotics Addiction in males and females: A comparison. Int. J. Addict 1 1989: 33-45
6. Hand Book of Drug Abuse Information 1996-2000, Research & publication division, NDDCB, 33-35.
7. Haser, Y. et. al. Sex differences in addict careers: 1. Initiation of Use. Am. J. Drug Alcohol Abuse 13 (1&2) 1987: 33-57
8. Kandiah, P.R. Heroin Users in Sri Lanka, Refinement of the careers study, Research Unit, NDDCB, 1994, 31-40
9. Rosenbum, M. Women on Heroin, Burnswick, New Jersey, Ruguers University Press, 1981
10. Rosenbum, M. Sex role among deviants: the women addicts. Int. J. Addict 16 1981: 859-877.

This paper was presented at the 57th Annual Session of Sri Lanka Association for the Advancement of Science (SLAAS)], 2001

Rapid Prevalence Survey on Heroin Use (October - 2001)

Y. Ratnayake

Summary

Background

Prevalence of heroin use in Sri Lanka has not been clearly established through rigorous research studies. In the absence of such studies and valid data, various parties tend to award speculative estimates of the degree of heroin use according to their own calculations. The National Dangerous Drugs Control Board has been attempting to resolve conflicting claims concerning the prevalence of heroin use in Sri Lanka. Milestones towards this direction are establishment of a database (Drug Abuse Monitoring System), training of staff, improved regular publications (DAMS reports, Handbook of Drug Abuse Information) and 1998 prevalence study (Estimates and forecasts of the prevalence of drug use in Sri Lanka).

The 1998 study of prevalence of heroin use suggests that the number of heroin users is in the country could be in the range of 19,500 - 26,000. This study employed estimation, nomination and capture - recapture methods to arrive this figure.

The present survey was conducted following a decision taken at the Project Review Meeting held in May 2001 to conduct a rapid prevalence survey on heroin use.

Method

Epidemiologists use the measures of frequency (prevalence and incidence) most frequently to quantify occurrence of a disease. This survey is an attempt to measure the level of drug abuse using a measure of frequency, namely prevalence. Thus the study quantifies the proportion of heroin users on Sri Lanka at this point of time and provides an estimate of risk that an individual will become a heroin user. The survey was conducted using snowballing technique to identify heroin user in 18 selected cities representing all provinces during the month of October 2001. Trained field investigators using a pretested questionnaire gathered information on heroin users.

Results

The total number of heroin users identified during the survey was 6,664. A heroin user was defined as a person who consume heroin at least once during last 30 days just prior to the interview. Results of the survey or the number of heroin users identified in the 18 locations are given in the table 1.

Table 1: Distribution of heroin users by districts

Area/ City	Number of Heroin Users	Area/ City	Number of Heroin Users
Ampara	8	Kegalle	95
Anuradhapura	15	Kurunegala	392
Badulla	99	Mannar	36
Batticalaoe	45	Matara	03
Colombo	2,356	Monaragala	61
Galle	190	Puttalam	568
Gampaha	2,041	Polonnaruwa	18
Hambantota	107	Ratnapura	332
Kandy	244	Trincomalee	54

Analysis

First, Prevalence of heroin use was calculated using the total number of heroin users in all 18 cities as the numerator and total population as the denominator. This was done without considering the validity of representation in each city. It should be observed that some locations, namely in the Colombo city, Matara, and Anuradhapura the number of heroin users identified is very low.

Table 2 : Prevalence of heroin abuse based on total sample

Region	Total Population (Millions)	Population Age 15 + (Millions)	Male Population Age 15 + (Millions)	Estimated Number of Drug Abusers (per million) %		
				Total Population	Total Population Age 15 +	Male Population Age 15 +
All	18,802	10,585	5,168	372 (0.03)	629 (0.06)	1,284 (0.12)

Overall estimate

The estimated number of heroin users according to this survey is 22,855.

Heroin use patterns

The highest percentage (86%) of heroin users was found within the age group of 21-40 years. Literate persons had a higher percentage (94%) among identified heroin users Large number of heroin users was unskilled labourers (47%) and self-employed (17%) persons. Skilled labourers (5%) and drivers (3%) were other important occupational categories in the identify users. The classification of heroin users by income groups.

Indicates that majority of (46%) of heroin users earned Rs. 2000 - 5000 a month while 32 percent of them earned more than Rs. 5,000 a month. The percentage of heroin users who earned below Rs. 2,000 was 15%.

The heroin use has been introduced to most of them (79%) by a friend. The percentage of self- introduction of the drug is 11%. While majority (71%) of heroin users consumed 3-7 packets of heroin (approximately 30 milligrams each) 19% of heroin users only require 1-2 packets a day. The main ethnic group among heroin users was Sinhala (79%), while Moor (11%) and Tamil (8%) were the second and the third groups respectively. They were adhered to Buddhism (64%) , Christianity (18%), Islsm (12%) and Hinduism of the (6%) . Out of the 6,664 heroin users 48% were married while 47% were single.

The number of new heroin users found (113) was not statistically significant. The history of heroin use among them was varying from 1-20 years. The majority (34%) of heroin users have been in the habit for 6-10 years. The next category (16%) is 11 - 15 years of heroin use while 11% had a history of 16 - 20 years. New users, with less than a history of one year, were nearly 2%.

Most favorite (47%) alternative to heroin for them was 'tablets' (Piriton, Panadol, Rhypanol, Methadeone, Diazepam).Other alternatives are Arrack (16%) and cigarettes (15%), Cannabis (2%), including Madanamodaka, was and alternative to a few. Most favorite treatment source for the heroin user is a private practitioners/hospital. Out of the

6664 heroin users 2433 have obtained treatment at least once during their cparrier. Majority (73%) has treated by private practitioners/hospitals. Next service provider (27%) is the National Dangerous Drugs Control Board. Self-medication (9%), Government hospitals (7.5%), Prison diversion scheme (4%) and NGO treatment facilities (2%) has been chosen by some of them.

All persons were "multiple-drug/substance users". Smoking was common (90%) among them. Cannabis (40%) and Arrack (19%) were other popular drugs consumed by the heroin users.

Trends of drug abuse in Sri Lanka

P.R. Kandiah and B. Senanayake

Abstract

Drug abuse trends in Sri Lanka between 1997 and 2001 are discussed in this paper. Indicators of drug treatment and drug law enforcement were used to analyse the drug abuse trends. These indicators suggest the following changes in trends of drug use in 2001 compared to those of 1997. The changes of the indicators were determined using percentage change and prevalence rate change of the variables.

The findings of the paper are based on quantitative data reported from the drug law enforcement and treatment agencies. Data reporting of these agencies are subjected to many internal and external factors. Also, due to the stigma attached tc drug use obtaining reliable data is consrtrained. Hence, wherever possible the findings of the paper should be corroborated with qualitative data, for a more accurate picture of the drug use situation.

The new trends reported between 1997 and 2001 were as follows. The rate of persons seeking treatment for drug use had increased at a higher rate than that of drug related arrests. Number of women seeking drug treatment and getting arrested for drug offences had increased at higher rates than those of men. Number of Tamils seeking treatment for drug use and getting arrested for drug offences had increased at a higher rate than those of other ethnic groups. Number of persons aged below 30 years seeking treatment for drug use and getting arrested for drug offences had decreased. Number of persons seeking drug treatment from outside the Western Province and Colombo districts has increased. Cannabis related arrests had increased at a higher rate than those of other drugs. Number of persons seeking treatment for drug use from Non-Governmental treatment facilities had increased at a higher rate than those from Government treatment facilities.

Trends related to gender, ethnicity, age, location, drug type of treatment facility had changed in 2001 compare to that of 1997 with respect to drug treatment and drug law enforcement. Policy makers and programme planners should take these new trends into consideration when developing drug control programmes.

Introduction:

Drug abuse trends in Sri Lanka are discusses in this paper. The National Dangerous Drugs Control Board (NDDCB) compiles data related to drug law enforcement and drug abuse treatment into a hand-book of drug abuse information each year. Based on data collected by between 1997 and 2001, drug abuse trends for the country is analysed. The aim of this study was to describe the changes in the trends of drug abuse in 2001 compared with that of 1997 and to emphasis its significance to drug control activities.

Methodology:

Indicators of drug treatment and law enforcement were use to determine the drug abuse trends. Secondary data collected from the drug law enforcement agencies and treatment agencies were used for this purpose. The percentage change for each indictor was determined by comparing the data in 2001 with that of 1997.

Drug law enforcement Indicators taken into consideration were number of total number of drug related arrests and number of arrests by gender, by ethnicity,by age, by drug, by geographical location, average street price of drugs, foreigners arrested for drug offences in Sri Lanka and sri Lankans arrested for drugs abroad. Drug treatment indicators considered were total number of treatment adminissions and number of treatment admissions by gender, by ethnicity, by age, by drug by treatment agency, by route of use and by geographical locations.

Results:

Treatment:

The total number of treatment admissions in 2001 was 7008, which had increased from 1498 in 1997, which has increased by 372%. Of the treatment admissions in 2001, 6041 (86%) were from Government treatment facilities and 967 (14%) were from NGO treatment facilities. Drug treatment admission from Non-Government sector had increased by 812% in 2001 compared to that of 1997, which had increased at a higher rate than that of the Government Sector. Two-third of persons treated in 2001 had used heroin. Those have used non-heroin type of drugs had increased by 2842% in 2001 compared to that of 1997, which had increased at a higher rate than heroin-type.

Fig -1. Treatment admissions in 1997

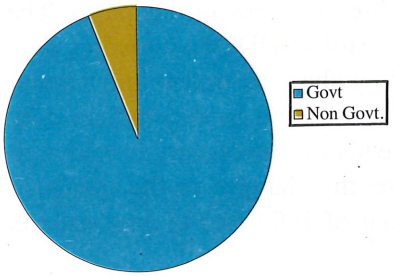
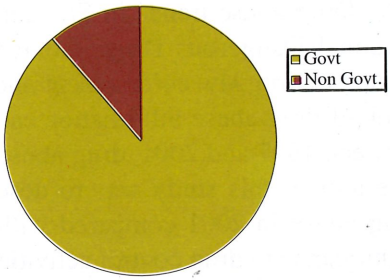


Fig -2. Treatment admissions in 2001



Of the persons treated in 2001, 1480 (99%) were male and 4(1%) female. The corresponding figures for 1997 were 6801(97%) and 24 (3%). While the males seeking drug treatment had increased by 360%, the females seeking treatment has increased by 500% in 2001 compared to those of 1997. "Chinese Method" was the most preferred route of drug use among those who came for drug treatment. Drug injecting had increased by 600% in 2001 compared to that of 1997. Seeking treatment for drug use had increased in all ethnic groups in 2001 compared to that of 1997. While majority of drug treatment seekers were Sinhalese, Tamil and Malays seeking drug treatment had increased by 704% and 500% in 2001 compared to that of 1997.

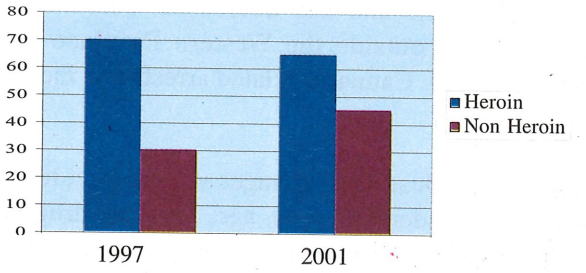
Amongst the persons sought treatment, 4051 (58%) in 2001 and 687 (46%) in1997 were aged 30 years or more. Persons who sought drug treatment below the aged 30 years had decreased by 11% in 2001 compared to that of 1997. Persons from Western province and Colombo district were the majority of those who sought drug treatment. Persons seeking treatment from the Western province had decreased by 15% in 2001 compared to that of 1997. Eastern, Sabaragamuwa and North-Central provinces reported 1900%, 1150% and 710% increase of person seeking drug treatment in 2001 compared to that of 1997. Kegalle, Trincomalee and Hambantota districts reported 2400%, 1700% and 1267% increase among persons seeking treatment for drug use, correspondingly.

Law Enforcement:

Cannabis, heroin, opium, hashish and cocaine were seized in Sri Lanka in 2001. Cocaine was the latest addition. While cannabis was the largest quantity of drug seized and the highest number of persons

arrested was for heroin, The number of persons arrested for cannabis has increased 31% and that of heroin by 8% in 2001 compared to that of 1997. The quantity heroin seized, number of persons arrested average street price per kilogramme and the purity of had increased in 2001 compared to that of 1997. While the prices of opium and hashish had increased the quantity seized and the number of persons arrested for had decreased. The average street prices of all drugs were more for foreigners than for Sri Lankans.

Fig 3. Type of drug related arrests



Males were the most year arrested for drug offences. The women arrested for drug offences had increased by 232% than that of males in 2001 compared to 1997. Drug offenders came from all ethnic groups and the Sinhalese were the majority. Tamils arrested for drug offences had increased by 260% in 2001 compared to 1997. Majority of drug offenders were aged 30 years or more.The number of Sri Lankans arrested in foreign countries for drug offences were less than that of foreigners arrested in Sri Lanka. All Sri Lankans arrested abroad for drug offences were arrested in India. Most of the arrested foreigners were either Indians or Pakistanis. Western Province and Colombo district reported most of the drug related arrests.

The following trends were observed in 2001 compared to that of 1997. Females arrested for drug offences had increased by 232% which had increased at a higher rate than that of mates, Tamils arrested for drug offences had increased by 260%. Comparatively, persons arrested for drug offences aged less than 30 years had decreased by 17%. Central, North Central and North-Western provinces reported increases in drug related arrests by 73%, 53% and 36% and Nuwara Eliya, Kalutara and Kegalle reported increased in drug related arrests by 703%, 172% and 85% in 2001 compared to that of 1997.

Discussion:

Indicators of drug treatment and drug law enforcement suggest the following trends of drug use in 2001 compared to that of 1997. The rate of seeking treatment for drug use had increased at a rate higher than that of drug related arrests. Women seeking drug treatment and getting arrested for drug offences had increased at higher rates than that of men. Tamils seeking treatment for drug use and getting arrested for drug offences had increased at a higher rate than other ethnic groups. Persons seeking treatment for drug use and getting arrested for drug offences aged less than 30 years and had decreased. Persons seeking drug treatment from areas outside the Western Province and Colombo districts have increased. Cannabis related arrests had increased.

Conclusion:

Trends of drug abuse have changes with respect to seeking treatment for drug use, gender, ethnicity, age, location, drug type between 1997 and 2001. Policy makers and programme planners should take into consideration these new trends when developing drug control programmes.

Reference:

Handbook of drug abuse information - 2002, Research and Publication Unit, National Dangerous Drugs Control Board.

This Paper was presated of the 58th Annual Session of Sri Lanka Association for the Advancement of Science (SLAAS), Colombo, 2002.

Modaka Use Among School Children

Y. Ratnayake, Bhadrani Senanayake

Abstract

Modaka use is a new trend of drug abuse in Sri Lanka. Various government organizations, NGOs and the general public expressed their concern to the National Dangerous Drugs Control Board. They have observed that modaka was freely available and use of modaka by students had incerased regarding this issue. As a response the National dangerous Drugs Control Board appointed a committee to find out the actual situation of modaka abuse Board on a suggestion made by the committee. An exploratory study on prevalence and availability of modaka use was conducted in January and February 2002. A non-probable snowball sample of 60 student modaka users and 88 vendors were interviewed using a pre-tested questionnaire. In addition, observations of the students and the vendors were recorded. The objective of the study was to ascertain availability and prevalence of modaka use among school children.

All modaka users Identified in all (19) locations were male. The highest percentage (94%) of modaka users was found within the age group of 16-20. The majority were Sinhala (82%) and Buddhist (80%). 93% of them were studying at Advanced Level. The modaka has been introduced to most of them (68%) by friends. Of them 12% of were regular modaka users, while 33% used 2-3 times a week. 35% used it occasionaly. The majority (65%) had been in the modaka habit for 1 - 2 years. Among them (45%) consumed 1-3 packets a day (approximately 5 - 8 grams). Forty seven per cent used modaka for intoxication.

The 88 shops studied include boutiques, stores, hotels and pharmacies of indigenous medicines. Twenty brands of modaka were available for sale in those shops. Among them "Day Power" was the most popular brand. On average of 370 "Day Power" packets were sold during a day. Average of 62 packets had sold during a day. The daily average of sale ranged between 1,114- 1,255 packets a day. Although modaka is an indigenous medicine, presently it is abused by the youth. The number of illegal modaka producers has increased. The present study revealed that modaka use is spread in the country and has the potential of becoming a big problem like heroin use.

Introduction:

The various government organizations, NGOs and the general public informed the National Dangrous Drugs Control Board that modaka was freely available and use of modaka by students had increased.As a response to it, the Board appointed a committee to look onto the modaka abuse. After studying the allegations, the committee decided to conduct an exploratory study on use and availability of modaka among school children. The study was carried out January and February in 2002. The objectives of the study were to ascertain availability and prevalence of modaka use among school children.

Ganja (also known as Kansa) is a very popular herbal medicine used by both ayurvedic and traditional physicians. It is well-attested in medical texts as an herbal medicine utilized from ancient and medieval times. In the distant past cannabis was believed to grown in every village for it's use in indigenous pharmacopoeia, where the traditional physician exercised a social control on the abuse of the drugs. As described in the Ayurvedic Pharmacopoeia and the manufacturers literature, modaka is being claimed as a remedy for a variety of ailments such as neurasthenia, rheumatism, lack of sexual vigor, dyspepsia and in general for rejuvenation and the promotion of virility.

This cannabis preparation is manufactured only according to the Ayurvedic drugs pharmacopoeia. The Ayurvedic Drug Corporation (ADC), registered ayurveda doctors and drug producers are the state owned manufacturers of Modakaya and Cannabis containing drugs. However, production of Modaka by unauthorized private manufactures is very common. Many kinds of Modaka preparations are available in the market. Many youngsters including school children are abusing these narcotic productions. Modaka use is recognized, as a new trend of drug abuse in Sri Lanka and a pressing health and social issues in recent times.

Methodology:

Present study is a descriptive one, conducted in selected locations in Colombo district. A non-probable and snowball sample of 60 modaka using students and 88 vendors were interviewed. A pre-tested questionnaire was used for the data collection of the study. In addition, observations were recorded.

Discussion:

The findings of the present study indicate that modaka use is prevalent among the school children and it is freely available in the local market. The most vulnerable age group for initiation of modaka use is 15-20 years. Students, who are studying in O/L and A/L classes and attending evening classes, participating in sports after school, were the high-risk group.

Peer influence was the most important factor for the initiation of modaka use and curiosity was the second reason. Majority used modaka for intoxication. Of the fourteen brands of modaka they had chosen "Day Power" as the best one for intoxication.

The study revealed that modaka label was also one of the factors for attraction to modaka use by youth. Both the students and vendors had positive attitude towards modaka use. Of the vendors 84% had justified the modaka use among youth. Their perception was that modaka was not a harmful drug, and it is not a social problem such as heroin.

Conclusion and Suggestions:

Modaka is being abused by youth. Illegal modaka productions are available freely. Modaka use has the potential of becoming a severe social and health problem.

There is a need for grater awareness on effects of modaka use. Special attention should be given to those who are studying in O/L and A/L classes. Vendors too need more information and guidelines for selling modaka productions. Teachers and the parents should pay attention to possible modaka use by their children.

Ayurvedic authorities should make an assessment of annual requirement of modaka.

Issue of licenses and cannabis paste should be according to the annual requirement.

Sale of modaka should be discouraged except for medicinal purposes. The current law about the modaka productions, standards of modaka products, sale and issue of permits is not adequate and need to be amended by the Ayurveda Department.

Reference:

1. Ayurveda pharmacopoeia, Volume 1-Part 1, Dept. of Ayurveda, 1970, pg 1-6
2. Ratnapala, N. Drug and narcotic dependers in Sri Lanka; City print ers, 1986, pg 50

This Paper was presated of the 58th Annual Session of Sri Lanka Association for the Advancement of Science (SLAAS), Colombo, 2002.

ගංජා අඩංගු මෝදකවල සුලභත්වය සහ භාවිතය පිළිබඳ අධ්‍යයනය

වයි. රත්නායක සහ හදානි සේනානායක

හැඳින්වීම

ගංජා හෙවත් කංසා අඩංගු කොට නිෂ්පාදනය කරනු ලබන මෝදක වර්ග රාශියක් රට පුරා වෙළඳසැල්වල විකිණීමට ඇති බවත්, ඒවා භාවිත කරන අය අතර පාසල් සිසුන් රාශියක් සිටින බවටත් අන්තරායකර ඖෂධ පාලක ජාතික මණ්ඩලයට විවිධ රාජ්‍ය නිලධාරිනුත්, රජයේ නොවන සංවිධානත්, විවිධ පුද්ගලයනුත් විසින් කරන ලද දැනුම් දීම්වලට ප්‍රතිචාරයක් වශයෙන් ඒ පිළිබඳව සොයා බැලීම සඳහා මණ්ඩලය විසින් අනු කමිටුවක් පත් කරන ලදී. අදළ තොරතුරුවල යම් සත්‍යතාවක් ඇති බව මේ කමිටුවට හැඟී ගියෙන් ඒ පිළිබඳ ගවේෂණාත්මක අධ්‍යයනයක් කිරීමට යෝජනා විය. එම තීරණය අනුව 2002 ජනවාරි සහ පෙබරවාරි මාසවල මෙම අධ්‍යයනය දියත් කරන ලදී.

ඉතා ඈත අතීතයේ දී පටන් ශ්‍රී ලාංකාවේ පාරම්පරික වෛද්‍ය ක්‍රමයේ සහ ආයුර්වේද වෛද්‍ය ක්‍රමයේ "ගංජා" හෙවත් "කංසා" භාවිත කර ඇත. ලංකාවේ ගංජා අඩංගු ඖෂධ නිෂ්පාදන රාශියක් ඇති අතර ඒවා අතර රණහංස රසායනය, සුරංවිදුර වටි, බුද්ධරාජ කල්කය, වාමර රසායනය, අබිංගුලිය, දලුපනු ගුලිය. ජාතිපලාඩි චූර්ණය, ලේගියම්, මෝදක වැනි දෑ දක්නට ඇත. මොණරාගල, වැල්ලවාය, කොස්ලන්ද, වාලවිවේන, අම්පාර, මඩකලපුව, පොතුවිල්, සියඹලාණ්ඩුව, අගුණකොළපැලැස්ස, තණමල්විල, සූරියවැව, ඇඹිලිපිටිය, හම්බන්තොට, අනුරාධපුර වැනි ප්‍රදේශවල ගංජා වගා කරනු ලබයි.

ගංජා අඩංගු ඖෂධ පාවිච්චි කිරීමෙන් මත්වීම මෙන්ම වාතරෝග, පිත් රෝග, රක්ත රෝග, මුත්‍රා වර්ධනය, අර්ශස් සහ ගුද රෝග, මානසික අවනතිය, අතිසාරය, ශ්වාස රෝග, ගර්භාෂ ගත රෝග, ලිංගික බෙලහීනතාව, වැනි රෝග රාශියක් නිවාරණය වන බව ආයුර්වේද ඖෂධ සංග්‍රහයේ සඳහන් වී ඇත. "ජලත්‍රාප" රෝගයෙහි කංසා විශිෂ්ට ඖෂධයකි. එමෙන්ම පුරාතන වාත සහ මහලු මිනිසුන්ගේ රාත්‍රී කාලයේදී අත්පා වේදනා අධික වාත රෝගයන්හි කංසා මිශ්‍ර සංයෝග බෙහෙවින් ප්‍රයෝජනවත්ය"[1]. මීට අමතරව දකුණු අප්‍රිකාවේ මැලේරියා මර්දන ඖෂධයක් ලෙස ගංජා භාවිත කරනු ලබයි.[2]

මෑතකාලීනව ගංජා භාවිතයෙහි ලෝක ප්‍රවණතාවය පිළිබඳව සලකා බලන විට එහි වර්ධනයක් දැකිය හැකි බව සහ වෙළඳපළේ ඇති ගංජාවල THC මට්ටම වැඩි බව වාර්තා වී ඇත. එක්සත් ජාතීන්ගේ සංවිධානයේ

වාර්තාවලට අනුව අවුරුදු 15 සහ ඊට වැඩි පුද්ගලයන් දශලක්ෂ 147 ක් ගංජා භාවිත කරන අය වූහ. ඒ අනුව ආසියාවේ ගංජා භාවිතය ඒ මට්ටමින්ම පවතින අතර, යුරෝපයේ, උතුරු ඇමරිකාවේ සහ අප්‍රිකාවේ ගංජා භාවිතය වැඩිවී ඇත.[3]

"කැනබිස් පැටයිවා" යනුවෙන් හඳුන්වන පැළෑටියේ අඩංගු වී ඇති "ඩෙල්ටා 9" ටෙට්‍රා හයිඩ්‍රොක්සි, කැනබිනෝල් (THC) නම් වූ මනස කෙරෙහි බලපාන සහ කල්පනා ශක්තිය වෙනස් කළ හැකි ද්‍රව්‍යය නිසා එය පාවිච්චි කරන්නවුන් තුළ මත් ස්වභාවයක් ඇති කරයි. එහි මත් කිරීමේ ශක්තිය රඳා පවතින්නේ පැළෑටියේ විවිධ කොටස් තුළ අන්තර්ගත වී ඇති THC ද්‍රව්‍යයේ ප්‍රමාණය අනුවය[4]. මේ නිසා ගංජා අඩංගු ඖෂධ නිෂ්පාදනයේදී ගංජා විෂහරණය කිරීමකට ලක් කරනු ලබයි.

අතීතයේදී ආයුර්වේද නිෂ්පාදන සඳහා ගංජා හෙවත් කංසා වගා කිරීමට පවා අවසර ලබාදී තිබුණ අතර මේවා රෝග නිවාරණය සඳහා පමණක්ම යොදා ගැනුණි. එහෙත් අප රටේ මිනිසුන් එකල ගංජා සුරුට්ටු, අබිං ගුලි, ලේගියම්, මෝදක වැනි දෑ භාවිත කර තිබුණද ඒවා සමාජ පාලනයෙන් යුක්තව භාවිත කර ඇත.[5] එහෙත් වර්තමාන සමාජය තුළ ගංජා අඩංගු ඖෂධ වර්ග දුර්භාවිත කෙරේ. විශේෂයෙන් මෝදක වගී දුර්භාවිතය වාර්තා වී ඇත. මෑතකදී හෙළිවූ තොරතුරු අනුව පාසල් සිසුන් හා තරුණයන් සැලකිය යුතු පිරිසක් මෝදක භාවිත කරන බවට සාධක ඇත. මෝදක භාවිත කරන සංඛ්‍යාව පිළිබඳ නිශ්චිත තොරතුරු නොමැති වුවද වෙළඳපලේ විවිධ වගීවලින් යුත් මෝදක වගී අලෙවි කරනු ලබයි. මේවා අතුරින් කාමේශ්වරී මෝදකය, මදන මෝදකය, වාමර මෝදකය. ඩේ පවර් වැනි මෝදක වගී ජනප්‍රිය මෝදක වර්ග වේ. ආයුර්වේද ඖෂධ සංග්‍රහයේ මෝදක බණ්ඩය යටතේ මෝදක වගී 16 ක් නිෂ්පාදනය කරන ආකාරය හා ඒවායෙහි ප්‍රමිතීන් දක්වා ඇති අතර මෝදක භාවිත කිරීම තුළින් නිසි ආහාර ජීර්ණය හා නින්ද ඇති කිරීමද, වාතජ සහ කවිජ රෝග, කාස, ග්‍රහනී, වලි, පලිත, ආමවාත, විකාර, සංග්‍රහ ග්‍රහනී යන රෝග නසන බවද සඳහන්ය. තවද අධිව්‍යාධි (මනොව්‍යා, කායික ව්‍යාධා) හරය, ක්ෂය, කුෂ්ට නාශකයි. වෘංහනයි, කාම වර්ධකයි, සෞන්ධර්‍යය වඩයි, ග්‍රහ දෝෂ නසයි යනුවෙන් ආයුර්වේදයේ සඳහන් වී ඇත.[6]

කංසා අඩංගු මෝදක නිෂ්පාදනය කළ යුත්තේ ආයුර්වේද සංග්‍රහයට අනුකූලවය. නිෂ්පාදනය කළ හැක්කේ රජයේ ආයුර්වේද ඖෂධ සංස්ථාවට හෝ ලියාපදිංචි ආයුර්වේද ඖෂධ නිෂ්පාදකයින්ට පමණි. කංසා අඩංගු නීත්‍යානුකූල නොවන නිෂ්පාදන ළඟ තබා ගැනීම, බෙදා හැරීම හා ඖෂධ සංග්‍රහයට අනුව නිෂ්පාදනය කළ මෝදක වගී වෛද්‍යවරයකුගේ නිර්දේශයකින් තොරව අලෙවි කිරීමත් නීති විරෝධී වේ. නමුත් කංසා අඩංගු "මෝදක" යන නමින් යුත් ද්‍රව්‍ය රැසක් අද වෙළඳපලේ නිදහසේ අලෙවි කරනු ලබයි.

ආයුර්වේද ඖෂධ සංස්ථාව හා බලයලත් නියෝජිතයන් විසින් 2001 වසරේදී ගංජා අඩංගු ආයුර්වේද නිෂ්පාදන සඳහා ගංජා කිලෝ 666.076 ක් පරිභෝජනය කර තිබුණ අතර 1997 සිට 2001 දක්වා කාලය තුළ ගංජා කිලෝ 2299.485 ක් පරිභෝජනය කර තිබුණි. 2001 වසරේ මදන මෝදක නිෂ්පාදනය සඳහා ගංජා කිලෝ 72.240 ක් ආයුර්වේද ඖෂධ සංස්ථාව පමණක් පාවිච්චි කර තිබුණි.[7]

නීත්‍යානුකූල නොවන නිෂ්පාදන සඳහා භාවිත කරන ගංජා ප්‍රමාණය හෝ ප්‍රමිතිය පිළිබඳව තොරතුරු නොමැත. එහෙත් මෑතකදී සිට නීත්‍යනුකූල නොවන මෝදක අලෙවිය වැඩි බවට තොරතුරු ලැබී ඇත. අන්තරායකර ඖෂධ පාලක මණ්ඩලය සහ ආයුර්වේද දෙපාර්තමේන්තුව මෝදක පිළිබඳව පුවත්පත්වල පළකල අවවාදාත්මක දැන්වීම් වලින් අනතුරුව නීත්‍යානුකූල නොවන මෝදක අත්අඩංගුවට ගැනීම් වැඩිවී ඇත. මහරගම දෙහිවල පාරේ වෙළඳසැල් 13 ක් වටලා විෂ සහිත මත්ද්‍රව්‍ය අඩංගු මෝදක (චූර්ණ) තොගයක් මහරගම පොලිසිය මගින් අත්අඩංගුවට ගෙන තිබුණි. ආයුර්වේද ඖෂධ සංස්ථාවේ මෝදකවලට සමාන අයුරින් නිෂ්පාදනය කර ඇති මෙම මෝදක වගී ව්‍යාජ ඒවා බවත් එහි සඳහන් ලිපිනයන් පවා ව්‍යාජ බව පොලිසිය සඳහන් කර තිබුණි. පාසල් ළමුන්ද විශාල ලෙස මෝදක භාවිතයට පෙළඹී ඇති බව පවසන මහරගම පොලිසිය එම මෝදකවල අත්තන ඇට සහ කංසා අඩංගු බවට සැක කරයි.[8]

තොටළඟ ප්‍රදේශයේ ලියාපදිංචි ආයුර්වේද ෆාමසි, ලියාපදිංචි නොවූ ආයුර්වේද ෆාමසි සහ වෙළඳසැල් රාශියක මෝදක ඇතුලු ගංජා අඩංගු නිෂ්පාදන අලෙවි කිරීමට ඇති බව මෑතකදී වෛද්‍ය රනිල් අබේසිංහ විසින් නීත්‍යනුකූල නොවන මද්‍යසාර (කසිප්පු) පිළිබඳව කළ පර්යේෂණයේදී හෙළිවී තිබුණි. ඔහු පවසන පරිදි ගංජා භාවිතය තොටලග ප්‍රදේශයේ පැතිරී ඇති අතර මල් ගංජා සුලබව ඇත. තරුණයන් සහ වැඩිහිටියන් මරණ ගෙවල් වලදී ප්‍රසිද්ධියේම ගංජා භාවිත කරති. එමෙන්ම ප්‍රදේශය තුළ මෝදක භාවිතයද බහුලය. මෝදක අත්තන ඇට වලින් නිෂ්පාදනය කරන බවටද එම ප්‍රදේශයේ මහජන මතයක් ඇත. මෝදකවල ගංජා, එලඟිතෙල්, සීනි වැනි ඖෂධ වගී අධික බවටත් ටෙට්‍රා හයිඩ්‍රොක්සි කැනබිනෝල් (THC) වැඩියෙන් ඇති බවත් ඔහු සඳහන් කර ඇත. රු. 5/= කට වැනි මුදලකට තොටලග සිංහල බෙහෙත් බඩු කඩයෙන් පවා ලබා ගත හැකි මෙම මෝදක පාවිච්චි කිරීමෙන් කෑම රුචිය හා කාය වර්ධනය වැඩි වන බවට පාවිච්චි කරන්නන් විශ්වාස කරනු ලබයි. ඔහු සඳහන් කරන පරිදි එම ප්‍රදේශයේ "ඩේ පවර්" (Day Power) නැමති මෝදක වගීය ඉතා ජනප්‍රිය වී ඇති අතර වැඩි ඉල්ලුමක් ඇත. මෙම මෝදක වගීයෙහි තිබිය යුතු ප්‍රමිතියට වඩා වැඩි ප්‍රමාණයක් ගංජා අඩංගු වීම නිසා ඉල්ලුම වැඩි බව ඔහු සඳහන් කරයි. මීට අමතරව නාහල්ලේ මදන මෝදකයට හා ආයුර්වේද මදන මෝදකයටද එම ප්‍රදේශය තුළ ඉල්ලුමක් ඇත.[9]

පාසල් ළමුන්ගේ පාසල් බෑග්වල, හෙරොයින් සහ ගංජා තිබුණ නමුත් ඒවා ළමුන්ගේ භාවිතය සඳහා නොවන බව වෛද්‍ය අබේසිංහ සඳහන් කරයි. එම ළමුන්ගේ දෙමාපියන් මත්ද්‍රව්‍ය භාවිතා කරන බවත් ඔවුන් විසින් ළමුන්ගේ පාසල් බෑග්වල හෙරොයින්, ගංජා පැකට් සඟවා තැබීම නිතර නිතර පුරුද්දක් ලෙස සිදු කරනු ලබයි. එහෙත් පාසල් ළමුන් හෙරොයින්, මද්‍යසාර භාවිත නොකළද, විශේෂයෙන් උසස් පෙළ සිසුන් කලාතුරකින් මදන මෝදක භාවිත කරන බව ඔහු සඳහන් කර ඇත.[9]

ජානක අබේසිංහ විසින් 2000 වසරේදී කරන ලද ගංජා අඩංගු ආයුර්වේද නිෂ්පාදනවල ඖෂධීය ගුණය සහ නිත්‍යානුකූලභාවය පිළිබඳ කරන ලද විශ්ලේෂණයේදී ආයුර්වේද නිෂ්පාදන වන මදන මෝදක හා කාමේශ්වරී මෝදක ආයුර්වේදයේ අනුමත ප්‍රමිතීන්ට අනුකූලව නිපදවා ඇති බවත් වෙළඳපලේ විකිණීමට ඇති කාමේශ්වරී, මාදවී, චාමර රසායනය වැනි අනෙකුත් මෝදක වගී හා ලේගියම් ආයුර්වේද ඖෂධ නිෂ්පාදන සංග්‍රහයට අනුකූලව නිෂ්පාදනය කර නොමැති බවත් තහවුරු වී තිබුණි. ඔහු විසින් අහඹු ලෙස මෝදක අලෙවි කරන වෙළඳසල් 164 කින් තොරතුරු ලබාගෙන තිබුණ අතර මෝදක සාම්පලද එකතු කර තිබිණි. මෙම වෙළඳසැල් අතුරින් 82% ක්ම මෝදක සිල්ලරට විකුණනු ලබන ස්ථාන වේ. ඔහුගේ අධ්‍යයනයේදී මෝදක නිෂ්පාදනය කරන පුද්ගලික නිෂ්පාදන ආයතන 23 ක් හඳුනාගෙන තිබුණ අතර, එයින් නිෂ්පාදන ආයතන 12 ක් ආයුර්වේදයේ ලියාපදිංචි වී තිබූ අතර අනෙක්වා ලියාපදිංචි වී නොතිබුණි.[10]

වෛද්‍යවරුන් නිකුත් කරන බෙහෙත් වට්ටෝරුවකින් තොරව ආයුර්වේද ෆාමසි වලින් සහ සිල්ලර වෙළඳසැල්වලින් මෝදක ලබා ගත හැකි අතර මේවා වෙළඳසැල් හිමියාට පහසුවෙන් ගතහැකි වන පරිදි බෝතලයකට දමා අතේ දුරින් හෝ කවුන්ටරය අසලම විකිණීමට තබා ඇත. මෙම නිෂ්පාදන කුඩා පැකට් 25 කින් යුක්ත ප්ලාස්ටික් බෝතල්වල හෝ කාඩ්බෝර්ඩ් පෙට්ටිවල අසුරා තිබුණි. සියළුම පැකට් වණී හෝ සුදු පොලිතීන්වලින් ඔතා තිබුණි. රුපියල් 3 - 5 අතර මුදලකට එක් පැකට්ටුවක් ලබා ගත හැකි අතර පැකට්ටුවක බරෙහි අනුපාතය ග්‍රෑම් 5.70 - 10.01 අතර වී තිබුණි. ආයුර්වේද ඖෂධ සංග්‍රහයට අනුව වෛද්‍යමය හේතූන් සඳහා මෝදක ග්‍රෑම් 1 - 2 අතර ප්‍රමාණයක් පාවිච්චි කිරීම සුදුසු වේ. නමුත් පුද්ගලික නිෂ්පාදනවල ග්‍රෑම් 1 - 10 දක්වා ප්‍රමාණයක් සුදුසු බව සඳහන් වී තිබුණි. ඔහුගේ අධ්‍යයනයේදී අවුරුදු 10 - 50 ත් අතර වයස් ප්‍රමාණයේ බහුතරයක් මෝදක භාවිත කරනු ලබයි. ඉඳහිට මෝදක භාවිත කරන පිරිස සාදවලදී, විනෝද ගමන් වලදී සහ පාසල් ක්‍රීඩා උත්සවවලදී (බිග්මැච්) භාවිත කිරීමට පුරුදු වූ අය වූහ.[10]

අබේසිංහගේ අධ්‍යයනයට අනුව වෙළඳපලේ විකිණීමට ඇති පුද්ගලික නිෂ්පාදන ආයතනවල නිෂ්පාදිත මෝදක වගීවල ටෙට්රා හයිඩ්‍රොක්සි

කැනබිනෝල් ප්‍රමාණය ("ඩෙල්ටා 9" THC) වැඩිය. THC ප්‍රමාණය වැඩි මෝදක මත්ගතිය වැඩි නිසා ජනප්‍රයතාවයෙන් වැඩිය. අහඹු ලෙස මෝදක පැකට් 15 ක් ගෙන ඔහු විසින් කරනු ලැබූ විශ්ලේෂණයේදී වෙළඳපලේ ඇති මෝදක පැකට්වල ටෙට්රා හයිඩ්‍රොක්සි කැනබිනෝල් රසායනිකය විවිධ ප්‍රමාණවලින් යුක්ත බව තහවුරු වී තිබුණි. අනුපාතයක් ලෙස ගත් කළ එය 0.0183% සිට 0.0742% ක් බව සඳහන් කර තිබුණි. ඔහු විසින් කරන ලද විශ්ලේෂණයේදී මෝදකවල අත්තන ඇට මිශ්‍ර බවට තහවුරු වී නැත. මදන මෝදකවල "ඩෙල්ටා 9" THC ප්‍රමාණය වැඩි නිසා අත්තන ඇට මිශ්‍රකිරීම අනවශ්‍ය බව ඔහුගේ තර්කය වී තිබුණි.[10]

අරමුණු

(1) පාසල් සිසුන්ගේ මෝදක භාවිතය අධ්‍යනය කිරීම.

(2) මෝදකවල සුලභතාවය සහ ප්‍රචලිත බව පිළිබඳ අධ්‍යනය කිරීම.

ඉහත අරමුණු ළඟා කර ගැනීම සඳහා මෝදක භාවිත කරන පාසල් සිසුන් හා වෙළඳසැල්හිමියන් කණ්ඩායම් දෙකක් වශයෙන් සමීක්ෂණයට ලක් කළ අතර, එම තොරතුරු වෙන වෙනම විශ්ලේෂණය කෙරේ.

ක්‍රමවේදය

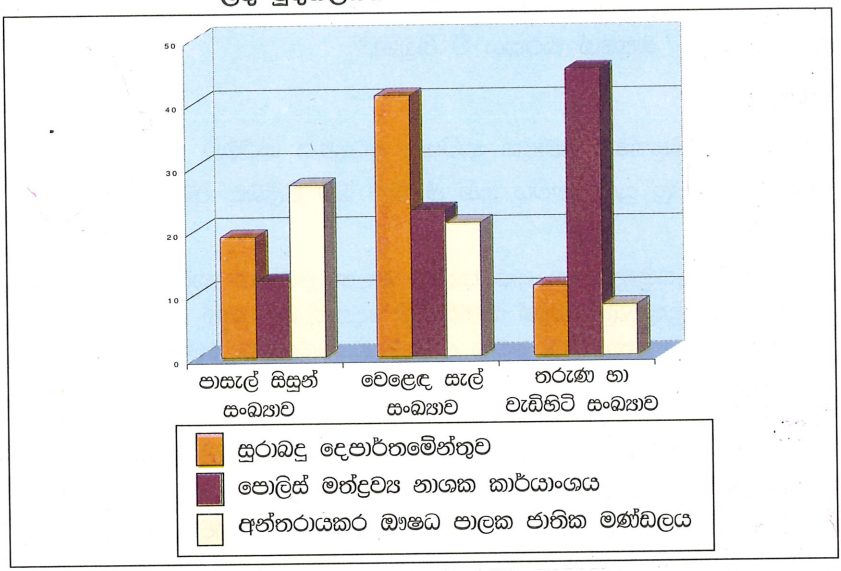
මෙය ගවේෂණාත්මක අධ්‍යයනයක් (Descriptive Study) ලෙස හැඳින්විය හැකි අතර තොරතුරු ලබා ගැනීම සඳහා ප්‍රශ්නාවලි ක්‍රමය හා නිරීක්ෂණය මූලික වශයෙන් භාවිත කරන ලදී. අධ්‍යයනය පවත්වන ලද්දේ 2002 ජනවාරි හා පෙබරවාරි මාස දෙක තුළය. මරදන සිට කඩුවෙල දක්වා ප්‍රධාන මාර්ගය, කිරුලපන සිට කොට්ටාව දක්වා ප්‍රධාන මාර්ගය, කොළඹ 01. තොටලඟ, කොටහේන, කොළඹ 14 යන ප්‍රදේශවල මාර්ග දෙපස පිහිටි වෙළඳසැල් සහ සිසුන් අධ්‍යයනයට ලක් විය.

මෝදක භාවිත කරන පාසල් සිසුන්ගේ මෝදක භාවිතය පිළිබඳ දත්ත රැස් කිරීමට ආවෘත ප්‍රශ්නාවලියක් (Close-ended) භාවිත කරන ලදී. පාසල් වේලාවෙන් අනතුරුව ක්‍රීඩා පුහුණුවිමිවල නිරත වූ හා සවස පංති සඳහා සහභාගි වූ පාසල් සිසුන් 60 ක් අධ්‍යයනයට ලක් කරන ලද අතර, පාසල් ක්‍රීඩාංගනවලදී හා වෙනත් සිසුන් එක් රැස් වන ස්ථානවලදී සිසුන්ගෙන් තොරතුරු ලබා ගන්නා ලදී. මිට අමතරව හඳුනා ගත් මෝදක භාවිත කරන සිසුවකු මාර්ගයෙන් තවත් සිසුන් අධ්‍යයනය සඳහා එක් කර ගන්නා ලදී (Snow balling).

වෙළඳසැල් හිමියන් සඳහාද ආවෘත ප්‍රශ්නාවලියක් (Close-ended) භාවිත කළ අතර, වෙළඳසැල් හිමියන් 88 දෙනෙකුගෙන් තොරතුරු ලබා ගන්නා ලදී.

සුරාබදු දෙපාර්තමේන්තුවේ, පොලිස් මත්ද්‍රව්‍ය නාශක කාර්යාංශයේ සහ අන්තරායකර ඖෂධ පාලක ජාතික මණ්ඩලයේ නිලධාරීන් සමීක්ෂකවරයන් ලෙස කටයුතු කරන ලදී. ප්‍රශ්නාවලිය පිරවීම හා තොරතුරු ලබාගැනීමට අදළව සමීක්ෂකවරු පුහුණු කරන ලදී. ඔවුන් විසින් අධ්‍යයනයට භාජනය කරන ලද පුද්ගලයන්ගේ සංඛ්‍යාව වෙන් වෙන්ව පහත සඳහන් වේ.

ප්‍රස්ථාර අංක 1: අධ්‍යයනයට සහභාගි වූ ආයතන විසින් අධ්‍යයනය කරන ලද පුද්ගලයන් සංඛ්‍යාව සහ වර්ග



අධ්‍යනයේදී මතු වූ ගැටළු / සීමා

අධ්‍යයනය කිරීමේදී විශේෂ ගැටළුවක් මතු නොවූ අතර මෙම අධ්‍යයනයට මාස කිපයකට පෙරාතුව අන්තරායකර ඖෂධ පාලක ජාතික මණ්ඩලය විසින් මෝදක පිළිබඳව පළකළ අවවාදාත්මක පුවත්පත් දැන්වීම් නිසා සිසුන් හා වෙළඳුන් මෝදක භාවිතය හා වෙළඳාම පිළිබඳ පිළිතුරු දීමට බියක් දැක්වූහ.

පළමුවන කොටස

පාසල් සිසුන් ගේ මෝදක භාවිතය පිළිබඳ අධ්‍යයනය

මෝදක භාවිත කරන පාසල් සිසුන් 60 දෙනෙකු අධ්‍යයනයට භාජනය වූ අතර ඔවුන්ගෙන් බහුතරය තමන්ගේ නම හෝ පදිංචිය සඳහන් නොකළහ. සමීක්ෂණයෙන් ලද තොරතුරු අනුව ඔවුන් කොට්ටාව, පාදුක්ක, කොටහේන, කෝට්ටේ, මෝදර, මහරගම, කිරිඳිවැල, අවිස්සාවේල්ල, පන්නිපිටිය, දෙමටගොඩ, නුගේගොඩ, රාජගිරිය, මාලෙබේ, මුල්ලේරියාව, අතුරුගිරිය, හැඳල, වැල්ලවත්ත, එඩේරමුල්ල, මොරටුව යන ප්‍රදේශවලදී හමු වූ අය වූහ.

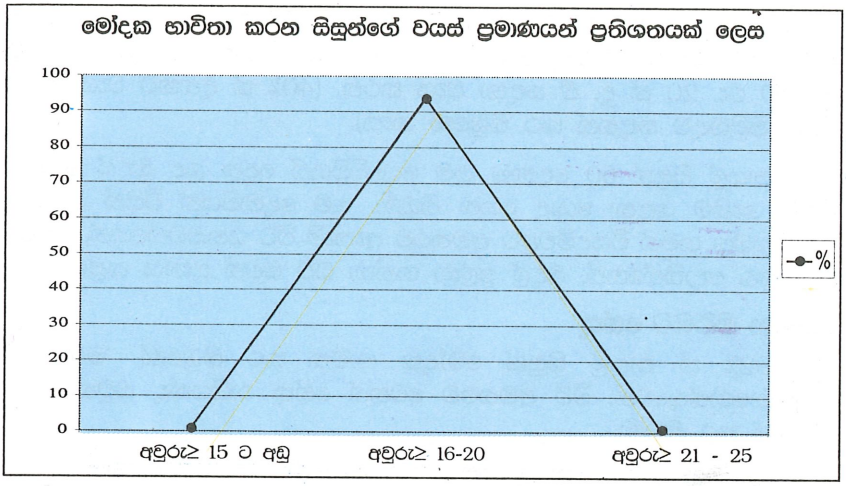
සමාජ හා ප්‍රජා දත්ත

සමීක්ෂණයට ලක් කළ පාසල් සිසුන් සියලු දෙනාම පිරිමි ළමුන් විය. 81% ක් සිංහල වන අතර 11% ක් දෙමළ සහ 6% ක් මුස්ලිම් ජාතිකයන් විය. 2% ක් තම ජාතිය සඳහන් කර තිබුණේ නැත.

සිසුන්ගෙන් 79% ක් බෞද්ධ වූ අතර 11% ක් හින්දු සහ 6% ක් ඉස්ලාම් භක්තිකයන් වූහ. 2% ක් ක්‍රිස්තියානි භක්තිකයන් වූ අතර 2% ක් තම ආගම සඳහන් කර තිබුණේ නැත.

මෝදක භාවිත කරන පාසල් ළමුන්ගෙන් බහුතරය එනම් 94% ක් වයස අවුරුදු 16-20 අතර අයවූහ. 2% ක් අවුරුදු 15 ට අඩු වූ අතර 4% ක් වයස අවුරුදු 21 - 25 අතර අය වූහ.

ප්‍රස්ථාර අංක 2



මෝදක භාවිත කරන පාසල් සිසුන් 93% ක් සාමාන්‍ය පෙළ විභාගය සමත් වී උසස් පෙළ හදාරමින් සිටී. 7% ක් උසස් පෙළ විභාගය සමත් වී ඇත.

පාසල් සිසුන්ගේ මෝදක භාවිතය

අධ්‍යයනට භාජනය වූ අයගෙන් 15% ක් අවුරුදු 1 ට අඩු කාලයක් තුළදී මෝදක පාවිච්චි කිරීමට පටන් ගෙන තිබුණ අතර 65% ක් අවුරුදු 1 - 2 අතර කාලයක් තිස්සේ මෝදක භාවිත කර තිබුණි. 18% ක් අවුරුදු 3 - 4 ක කාලයක් සිට මෝදක සඳහා ඇබ්බැහි වී තිබුණි. 2% ක් අවුරුදු 7 - 8 ක් තිස්සේ මෝදක භාවිත කරනු ලබන බව පවසා ඇත.

ප්‍රථම භාවිතය

සිසුන්ගෙන් 68% දෙනෙකුට මෝදක මුලින්ම හඳුන්වා දී තිබුණේ ඔවුන්ගේ යහළුවන්ය. 27% ක් තමා විසින්ම කුතුහලය නිසා මෝදක භාවිතයට පුරුදු වී තිබුණි. එක් පුද්ගලයකුට (2%) වෙළඳසැල් හිමියකු මුලින්ම මෝදක හඳුන්වා දී තිබුණි. (3% ක් පිළිතුරු දී නොතිබුණි).

භාවිත කරන ප්‍රමාණය

මෝදක භාවිත කරන සිසුන්ගෙන් 12% ක් දිනපතාම මෝදක භාවිත කරති. 33% ක් සතියකට දින 2 - 3 ක්ද, 15% ක් සතියකට වරක්ද, 35% ක් ඉඳහිටද, 5% ක් මසකට වරක්ද මෝදක භාවිත කරති. මොවුන්ගෙන් 45% ක් දිනකට පැකට් 1 - 3 අතර ප්‍රමාණයක් පාවිච්චි කරන අතර, 55% ක් පාවිච්චි කරන ප්‍රමාණය සඳහන් කර තිබුණේ නැත. පැකට් එකක් සාමාන්‍යයෙන් ග්‍රෑම් 5-6 ක් පමණ බරකින් යුක්තය.

වියදම් කරන මුදල

38% ක් දිනකට රු. 5 - 10 අතර මුදලක් මෝදක සඳහා වියදම් කරනු ලබයි. 12% ක් රු. 5 ක්ද, 8% ක් රු. 10 - 15 ත් අතර මුදලක්ද, 2% ක් දිනකට රු. 20 ක් ද, ඒ සඳහා වැය කරති. (40% ක් දිනකට වැය කරන මුදල පිළිබඳව සඳහන් කර තිබුණේ නැත).

පාසල් සිසුන් 60 දෙනාම තම දෙමව්පියන් දෙන ලද මුදල් මෝදක මිලදී ගැනීම සඳහා යොදා ගෙන තිබුණි. තම දෙමාපියන් විසින් දිනපතා දෙනු ලබන ගමන් වියදම්වලට අමතරව ඇතැම් විට යහළුවන්ගෙන්, පවුලේ අනෙකුත් ඥාතීන්ගෙන්, මුදල් ඉල්ලා ගන්නා බව ඔවුන් ප්‍රකාශ කළහ.

භාවිතා කිරීමට හේතු

92% ක් පාසල් සිසුන් මෝදක භාවිත කර තිබුණේ "මත්වීමේ" බලාපොරොත්තුවෙනි. මීට අමතරව වෙනත් හේතු රාශියක්ද ඔවුන් විසින් සඳහන් කර තිබුණි.

වගු අංක 1: පාසල් සිසුන් මෝදක භාවිත කිරීමට හේතු

හේතුව	සංඛ්‍යාව	%
මත්වීම	55	92.0
විනෝදයට	17	28.0
යහළුවන් භාවිත කරන නිසා	16	27.0
තෘප්තියක් සඳහා	10	17.0
කෑම රුචිය සඳහා	08	13.0
ලිංගික දුර්වලතා මග හරවා ගැනීමට/ කාය වර්ධනයට	05	8.0
ඇඟපතේ අමාරුව නැතිකර ගැනීමට	05	8.0
මනස විකෘති වූ විට නිරවුල් කර ගැනීමට	03	5.0
** පිළිතුරු එකකට වඩා වැඩිය.*		

සිසුන් භාවිත කර ඇති මෝදක වර්ග

මෙම අධ්‍යයනයට භාජනය වූ පාසල් සිසුන් භාවිත කර ඇති මෝදක වර්ග ගණන 14 කි. තමා පාවිච්චි කරන මෝදක වගීයේ නම නොදත් සිසුන් සංඛ්‍යාව 38% කි. පාවිච්චි කරන වගී අතුරින් බහුතරය එනම් 38% ක් පාවිච්චි කර තිබුණේ "ඩේ පවර්" නැමැති වගීයකි. මෙය මොණරාගල දිස්ත්‍රික්කයේ නිෂ්පාදන ආයතනයක් විසින් නිෂ්පාදනය කරනු ලබයි. ලියාපදිංචි අංකයක් සහිතව "ආයුර්වේද ඖෂධ සංග්‍රහයේ ප්‍රමිතින්ට අනුව නිපදවන මාහැඟි ඖෂධයකි". "වැඩිහිටියන්ට පමණයි" යනුවෙන් එහි ලේබලයේ සඳහන් කර තිබේ. මීට අමතරව ඔවුන් පාවිච්චි කර තිබූ මෝදක වගී පහත පරිදි වේ.

වගු අංක 2 : සිසුන් පාවිච්චි කළ මෝදක වගී හා ප්‍රතිශතය

මෝදක වගීය	පාවිච්චි කළ සංඛ්‍යාව	%
ඩේ පවර්	23	38.0
කාමේශ්වරී	06	10.0
කැටවල	11	18.0
නාහල්ලේ	09	15.0
ශ්‍රීමත් මෝදක	11	18.0
පොඩි මැණිකේ	06	10.0
සංජීවනී	06	10.0
මීගොඩ	03	5.0
කහපොල	03	5.0
සුන්දරී	01	2.0
අමාරස	01	2.0
මාදවී මෝදක	01	2.0
නව වාමර	01	2.0
වගීය නොදන්නා	23	38.0

* පිළිතුරු එකකට වඩා වැඩිය

මෙහි සඳහන් මෝදක වගී අතුරින් සිසුන් 25% ක් වඩාත් කැමති වගීය ලෙස "ඩේ පවර්" සඳහන් කර තිබුණි. 7% ක් කාමේශ්වරී මෝදකයද. 8% ක්

ශ්‍රීමත් මෝදකයද. 5% ක් නාහල්ලේ මෝදකයටද වඩා කැමති බව ප්‍රකාශ කර තිබුණි. 2% බැගින් සංජීවනී, කැටවල, අමාරස, පොඩි මැණිකේ යන නම් වලින් යුත් මෝදක සඳහන් කර තිබුණ අතර, 47% ක් වඩාත් කැමති වර්ගීය පිළිබඳ සඳහන් කර නොතිබිණි.

වඩාත් කැමති මෝදක වර්ගීය නම් කළ පාසල් සිසුන් අතුරින් 23% ක් සඳහන් කර තිබුණේ වැඩි කාලයක් මත් ගතියෙන් සිටීමට හැකි නිසා "ඩේ පවර්" පාවිච්චි කරන බවයි. 8% ක් අධික පැණි රසට කැමති නිසා මෝදක පාවිච්චි කරන බව පවසා තිබුණි. වැඩි තෘප්තියක් ලබා ගැනීමට, කෑම රුචිය ලබා ගැනීමට, 8% ක් මෝදක භාවිතා කරනු ලබයි. 4% ක් සුවඳ නිසා මෝදක භාවිත කරන බව පවසා තිබුණි. 57% ක් මේ ප්‍රශ්නයට පිළිතුරු දී තිබුණේ නැත.

විකල්ප මත්ද්‍රව්‍ය භාවිතය

මෝදක නොමැති විට ඒ වෙනුවට 35% ක් වෙනත් මත්ද්‍රව්‍ය භාවිත කරති. ඔවුන් අතුරින් 86% ක් දුම්වැටිද, 43% ක් ගංජාද, 14% ක් මත්පැන්ද, 5% ක් බිරද පාවිච්චි කරන බව ප්‍රකාශ කර තිබුණි.

මෝදක පිළිබඳ ඇති දැනුම අවබෝධය

මෝදක භාවිත කරන පාසල් සිසුන්ගෙන් 100% ක්ම මෝදක භාවිත කරනු ලබන්නේ වෛද්‍ය උපදෙස් මත නොවේ. මෝදකවල අඩංගු ද්‍රව්‍ය පිළිබඳව 89% කට කිසිම අවබෝධයක් නොතිබුණි.

ඔවුන්ගෙන් 11% කට සුළු අවබෝධයක් තිබූ අතර ඔවුන් සියලුදෙනාම එහි ගංජා අඩංගු බව ප්‍රකාශ කළහ.

පාසල් සිසුන් සියලුදෙනාටම මෝදක භාවිතයෙන් ඇතිවිය හැකි සෞඛ්‍ය හා අනෙකුත් ආබාධ පිළිබඳව අවබෝධයක් තිබුණේ නැත. වෙළඳපලේ නීත්‍යානුකූල නොවන මෝදක අලෙවි කරන බව දැන සිටියේ 13% ක් පමණි. 87% ක් ඒ බව නොදන්නා බව ප්‍රකාශ කරන ලදී.

දෙවන කොටස

තරුණ හා වැඩිහිටියන්ගේ මෝදක භාවිතය පිළිබඳ අධ්‍යයනය

මෝදක භාවිතා කරන පාසල් නොයන තරුණ හා වැඩිහිටියන් 67 දෙනෙකු අධ්‍යයනයට භාජනය කරන ලදී. ඔවුන්ගෙන් 79% ක් තම පදිංචිය සඳහන් කර තිබුන අතර, 21% ක් පදිංචිය අනාවරණය නොකරන ලදී. පදිංචිය සඳහන් කළ පිරිස, දෙමටගොඩ, වැල්ලවත්ත, හෝමාගම, කඩුවෙල, මිනුවන්ගොඩ, පිටකොටුව, ඔබේසේකරපුර, මට්ටක්කුලිය, ග්‍රෑන්ඩ්පාස්, කොච්චිකඩේ, මරදාන, කොල්ලුපිටිය, කොම්පඤ්ඤවීදිය කෝට්ටේ යන ප්‍රදේශවල පදිංචි වූ අය වූහ.

සමාජ හා ප්‍රජා දත්ත

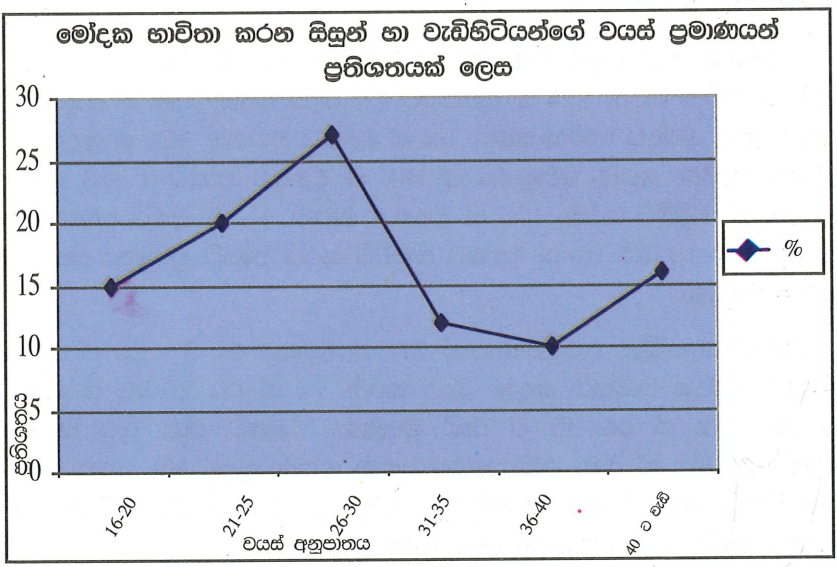
සමීක්ෂණයට ලක් කරන ලද මෝදක භාවිතා කරන තරුණ හා වැඩිහිටි පුද්ගලයන් සියළුදෙනාම පිරිමි වූහ. එම පුද්ගලයන්ගෙන් 49% ක් විවාහ වී තිබුණි. 46% ක් අවිවාහක වන අතර 2% ක් වෙන්වූ අය වූහ 3% ක් විවාහකත්වය සඳහන් කර නොතිබුණි.

මෝදක පාවිච්චි කරන තරුණ හා වැඩිහිටියන්ගෙන් 72% ක් සිංහල වූ අතර, 15% ක් මුස්ලිම් හා 10% ක් දෙමළ ජාතිකයන් වූහ. 3% ක් තම ජාතිය සඳහන් කර නොතිබුණි. ඔවුන් විවිධ ආගම්වලට අයත් වූ අතර 61% ක් බෞද්ධ, 13% ක් ඉස්ලාම් භක්තියකයන් ද, 13% ක් ක්‍රිස්තියානි භක්තිකයන්ද, 11% ක් හින්දු භක්තිකයන් ද වූහ. 2% ත් තම ආගම සඳහන් කර නොතිබුණි.

තරුණ හා වැඩිහිටි මෝදක භාවිතා කරන අයගෙන් බහුතරය 59% ක් අධ්‍යාපනය ලබා තිබුනේ වසරර 1 -10 දක්වා පමණි. 33% ක් අ.පො.ස.(සා. පෙළ) සමත් වී තිබුණි. 4% ක් උසස් පෙළ සමත් වී තිබුන අතර 2% ක් අධ්‍යාපනය ලබා තිබුනේ නැත. 2% ක් අධ්‍යාපනය පිළිබඳ තොරතුරු සඳහන් කර නොතිබුණි.

මෝදක භාවිතා කරන්නන්ගෙන් බහුතරය එනම් 62% ක් වයස අවුරුදු 16-30 අතර වයස් කාණ්ඩයට අයත් වූහ. 32% ක් වයස අවුරුදු 31-50 ත් අතර වයස් කාණ්ඩයට අයත් වූහ. 3% ක් වයස අවුරුදු 50 ය වැඩි වූ අතර 3% ක් වසය පිළිබඳව සඳහන් කර නොතිබුණි.

ප්‍රස්ථාර අංක 3



මෝදක භාවිත කරන පුද්ගලයන්ගෙන් 79% ක් රැකියා කරන අය වූහ. ඔවුන්ගෙන් 29% ක් කම්කරුවන් වන අතර 24% ක් වෙළඳාම් කරන අය වූහ. මීට අමතරව ත්‍රිරෝද රථ රියැදුරන් (6%) ක් ද, වෙළඳ සහායකයන් (8%) ක් ද පෙදරේරුවන් (4%) ක්ද, ලිපිකරුවන් (6%) ක් ද, මොටර් රථ කාර්මිකයන් (1%) ක් ද, කාර්යාල කාර්ය සහායකයින් (1%) ක් ද වූහ.

තරුණ හා වැඩිහිටියන්ගේ මෝදක භාවිතය

අධ්‍යයනයට භාජනය වූ පුද්ගලයන්ගෙන් 10% ක් අවුරුදු 1 - 2 අතර කාලය තුලදී මෝදක භාවිත කිරීමට පටන් ගෙන තිබුණි. 49% ක් අවුරුදු 3 - 6 කාලයක් තිස්සේ ද 33% ක් අවුරුදු 7-15 අතර කාලයක් තිස්සේද මෝදක භාවිතයට ඇබ්බැහි වී තිබුණි. එක් පුද්ගලයකු (2%) අවුරුදු 15 ට වැඩි කාලයක් තිස්සේ මෝදක භාවිත කරන අතර 6% ක් පාවිච්චි කරන කාලය සඳහන් කර තිබුණේ නැත.

ප්‍රථම භාවිතය

60% ක් මෝදක භාවිත කර තිබුණේ තමාගේ ස්ව කැමැත්ත මතය. 39% කට මෝදක හඳුන්වා දී තිබුණේ ඔවුන්ගේ යහළුවන්ය. එක් පුද්ගලයකුට (1%) මෝදක හඳුන්වා දී තිබුණේ තම ඥාති සහෝදරයකු විසිනි.

භාවිතා කරන ප්‍රමාණය

මෝදක භාවිත කරන තරුණ හා වැඩිහිටියන්ගෙන් 49% ක් දිනපතාම මෝදක භාවිතා කරති. 22% ක් සතියකට දින දෙක තුනක්ද, 9% ක් සතියකට එක් වරක්ද මෝදක භාවිත කරති. 5% ක් මසකට වරක් ද 15% ක් ඉඳහිටද මෝදක භාවිතා කරති. මොවුන්ගෙන් 81% ක් දිනකට පැකට් 1 - 3 අතර ප්‍රමාණයක් පාවිච්චි කරති. 10% ක් දිනකට පැකට් 4 - 5 අතර ප්‍රමාණයක් පාවිච්චි කරනු ලබයි. 9% ක් දිනකට පාවිච්චි කරන පැකට් ප්‍රමාණය සඳහන් කර නොතිබුණි.

මෝදක භාවිතා කරන්නන්ගෙන් 77% ක් දිනකට රු. 5 - 20 ත් අතර මුදලක් මෝදක භාවිතය සඳහා වැය කරති. 7% ක් රු. 20-50 ත් අතර මුදලක්ද, 7% ක් රු. 30 ට වැඩි මුදලක්ද, දිනකට වැය කර තිබුණි. ඔවුන්ගෙන් 81% ක් තමා රැකියාවෙන් උපයා ගන්නා මුදල් මේ සඳහා වැය කර තිබුණි. 16% ක් තම දෙමාපියන්ගෙන්ද, 3% ක් සොරකම් කිරීමෙන් ද මෝදක භාවිතය සඳහා මුදල් සොයාගෙන තිබුණි.

භාවිත කිරීමට හේතු

තරුණ හා වැඩිහිටි මෝදක භාවිත කරන්නන්ගෙන් 69% ක් මෝදක භාවිත කර තිබුණේ "මත්වීමේ" බලාපොරොත්තුවෙනි. මීට අමතරව පහත සඳහන් හේතු කරුණු ඔවුන්ගේ මෝදක භාවිතයට හේතු වී තිබුණි.

වගු අංක 4: තරුණ හා වැඩිහිටියන් මෝදක භාවිතා කිරීමට හේතු

හේතුව	* %
මත්වීම	69
ලිංගික දුර්වලතා මඟහරවා ගැනීම	55
ඇඟපතේ අමාරුව නැති කර ගැනීම	46
කෑම රුචිය වැඩි කර ගැනීම	37
මත්ගතිය වැඩි නිසා	21
සිනාසීමට හැකිවීම	2
පාළුව මඟහරවා ගැනීමට	6
නින්දයාම	3
පෙම්වතිය අතහැර යාම	2
ඇබ්බැහිය නිසා	4
විනෝදය සඳහා	8
පැණිරස	7

* පිළිතුරු එකකට වඩා වැඩිය

භාවිත කර ඇති මෝදක වර්ග

අධ්‍යයනට ලක්වූ තරුණ හා වැඩිහිටි පුද්ගලයන් 67 දෙනා භාවිත කර තිබූ මෝදක වගී ගණන 20 කි. ඒ අතුරින් ඔවුන් (58%) බහුලව භාවිතා කරන වර්ගය හා වඩාත් කැමති වගීය වූයේ කාමෙග්වරී මෝදකයයි. 45%ක් කැටවල වගීයට සහ තෙවනුව 31% ක් ඩේ පවර් වගීයට කැමැති බව සඳහන් කර තිබුණි.

වගු අංක 5 :- **තරුණ හා වැඩිහිටියන් අතර වැඩිම පාවිච්චියක් තිබූ මෝදක වර්ග හා ප්‍රතිශතය.**

මෝදක වර්ගය	පාවිච්චි කළ සංඛ්‍යාව	%
කාමේශ්වරී	39	58
කැටවල	29	43
ඩේ පවර්	21	31
මාධවී	15	22
නාහල්ලේ	15	22
ශ්‍රීමත් මෝදක	09	13
වල්ගම ශ්‍රීමත්	09	13
රත්න කාමේශ්වරී	06	09
අමාරස	05	07

මීට අමතරව වඩාත් කැමති වර්ග ලෙස නාහල්ලේ (22%) මාධවී (22%) ශ්‍රීමත් මෝදක (13%) වල්ගම (13%) යන වර්ග සඳහන් කර තිබුණි. 13% ක් වඩාත් කැමති වර්ගය සඳහන් කර නොතිබුණි. ඔවුන්ගෙන් වැඩි දෙනෙකු එනම් 75% ක් පවසා තිබුණේ කෑම රුචිය වැඩි කර ගැනීම හා ලිංගික උත්තේජනය සඳහා කාමේශ්වරී, කැටවල හා ඩේ පවර් මෝදක වර්ග ඉවහල් වන බවයි.

විකල්ප මත්ද්‍රව්‍ය භාවිතය

මෝදක භාවිත කරන තරුණ හා වැඩිහිටියන් විවිධ මත්ද්‍රව්‍ය භාවිතයට පුරුදු වූ අය වූහ. ඔවුන්ගෙන් 76% ක් සුරුට්ටු, බීඩි, සිගරට් වැනි දෑ පාවිච්චි කරන අතර, 60% ක් මත්පැන්ද 34% ක් ගංජාද භාවිතා කරන අය වූහ. මෝදක නොමැති විට ඒ වෙනුවට විකල්ප මත්ද්‍රව්‍ය ලෙස 30% ක් මත්පැන්ද 66% ක් ගංජාද, 30% ක් සිගරට්ද 5% ක් හෂිස්ද භාවිත කර තිබුණි.

මෝදක පිළිබඳ ඇති දැනුම අවබෝධය

මෝදක භාවිත කරන තරුණ හා වැඩිහිටි පුද්ගලයන්ද වෛද්‍ය නිර්දේශයකින් තොරව මෝදක භාවිත කරන අතර 69% කට මෝදකවල අඩංගු ද්‍රව්‍ය පිළිබඳ නිසි අවබෝධයක් නොතිබුණි. ඔවුන්ගෙන් 31% ක් මෝදකවල ගංජා, අබිං, වුර්ණ වැනි ඖෂධ අඩංගු බව ප්‍රකාශ කර තිබුණි.

වැඩිහිටියන්ගෙන් 97% කට මෝදක භාවිතය තුළින් ඇතිවිය හැකි සෞඛ්‍ය හා අනෙකුත් ආබාධ පලිබඳව අවබෝධයක් නොතිබුණි. මෝදක අනිසි භාවිතය තුළින් ශරීරය දුර්වල වන බව 3% ක් ප්‍රකාශ කර තිබුණි. වෙළඳපලේ

නිත්‍යානුකූල නොවන මෝදක අලෙවි කරන බව 90% ක් නොදැන සිටි අතර 10% පමණක් ඒ බව දැන සිටියහ.

තුන්වන කොටස

මෝදක සුලබතාවය පිළිබඳ අධ්‍යයනය

ප්‍රතිඵල

වෙළඳසැල් හිමියන් 88 දෙනෙකු සම්මුඛසාක්ෂාත්කාරයට ලක් කළ අතර ඔවුන්ගෙන් වැඩි දෙනෙක් එනම් 26% ක් කොළඹ 14 ප්‍රදේශයේ පදිංචි වෙළඳසැල් හිමියන් විය. අනෙකුත් වෙළඳසැල් හිමියන් කොටහේන, මරදාන, කඩුවෙල, බොරැල්ල, මෝදර, බත්තරමුල්ල, පන්නිපිටිය, මාලබේ, වේල්ලවීදිය, දෙමටගොඩ, තලංගම, මහරගම, බෝමිරිය, කොළඹ 01, තොටලඟ, මාළුකඩේ, ඔබේසේකරපුර යන ප්‍රදේශවල තම වෙළඳසැල් පවත්වා ගෙන යනු ලැබුහ, සිංහල බෙහෙත් බඩු කඩ, බුලත්විට කඩ, ස්ටෝර්ස්, ග්‍රොසරි, හෝටල්, පෙට්ටිකඩ යනාදී සියල්ල මෙම වෙළඳසැල් 88 ට ඇතුළත් විය. වෙළඳසැල් තෝරා ගැනීමේදී පාසල් අවට ඇති වෙළඳසැල් කෙරෙහි වැඩි අවධානයක් යොමු කරන ලදී. මීට අමතරව ඒ අවට පූජනීය ස්ථානයක් තිබේද යන්න පිළිබඳවත් නිරීක්ෂණය කරන ලදී.

වෙළඳසැල් 70 ක් පාසලකට කිලෝ මීටරයකට හෝ ඊට අඩු දුරකින් පිහිටා තිබුණි. කිලෝ මීටරයකට හෝ ඊට අඩු දුරකින් පන්සලක්, පල්ලියක් වැනි පූජනීය ස්ථානයක් අසල පිහිටි වෙළඳසැල් සංඛ්‍යාව 34 කිත ලබා ගත් දත්ත අනුව පාසල, පූජනීය ස්ථානය හා වෙළඳසැල් අතර එකිනෙක දුර ප්‍රමාණය පහත සඳහන් පරිදි වේ.

වගු අංක 5 : වෙළඳසැලේ සිට පාසලට හා පන්සලට ඇති දුර ප්‍රමාණයන් මීටර්වලින්

දුර ප්‍රමාණය (මීටර්)	පාසැල් අසල පිහිටි වෙළඳසැල් සංඛ්‍යාව	%	පූජනීය ස්ථාන අසල පිහිටි වෙළඳසැල් සංඛ්‍යාව	%
මීටර්100 ට අඩු	09	10·0	06	7·0
මීටර්101-200	28	32·0	15	17·0
201-300	10	12·0	0	0·0
301-400	02	2·0	02	2·0
401-500	08	9·0	05	6·0
501-600	01	1·0	0	0·0
601-700	01	1·0	0	0·0
701-800	01	1·0	01	1·0
801-900	01	1·0	0	0·0
901-1000	09	10·0	05	6·0
සඳහන් නොකළ	18	21·0	54	61·0
එකතුව	88	100·0	88	100·0

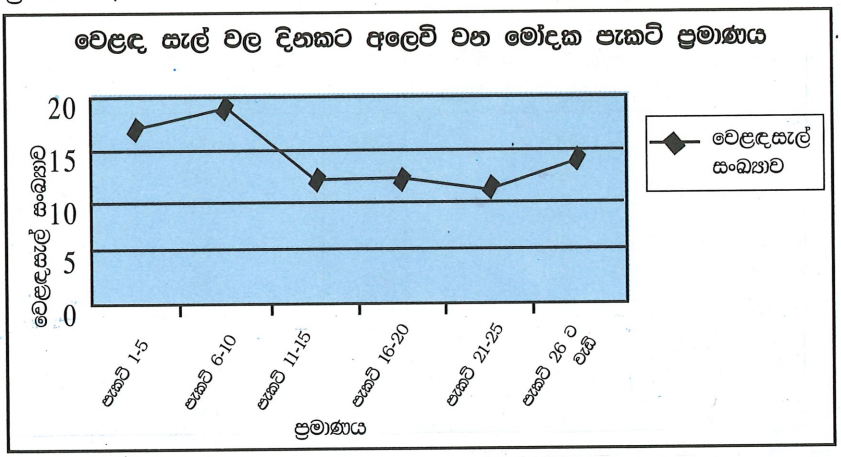
මෙම වෙළඳසැල්වල කාමේශ්වරී, නාහල්ලේ, කැටවල ශ්‍රීමත්, මොරවක මදන මෝදක, රක්ත කාමේශ්වරී, අමාරස, මිගොඩ, මධාරා, කුරුලුබල, වල්ගම ශ්‍රීමත්, මදන මෝදක, ආටිගල, ගම්පහ සිද්ධාර්යුවේද, ජීව ශක්ති, මධුර. වාමර රසායනය, ආසයාදි මෝදකය, වැනි විවිධ මෝදක වර්ග විකිණීමට තබා තිබුණි. ඒ වගී අතුරින් "ඩේ පවර්" නමැති මෝදක වර්ගය වැඩිවශයෙන් අලෙවි වේ.

මෝදක මිල

මෝදක වර්ගවලින් කැටවල ශ්‍රීමත්, නාහල්ලේ, මධු මිහිර, රත්න කාමේශ්වරී. ඩේ පවර්, වාමර යන වගී වල මිල රු. 5.00 ක් වේ. එහෙත් කාමේශ්වරී, මාදවී, නාහල්ලේ, කැටවල "ශ්‍රීමත්" යන මෝදක ඇතැම් වෙළඳ මධ්‍යස්ථානවල රු. 6/- බැගින් විකුණා තිබුණි. "මධාරා", "ඩේ පවර්", යන මෝදක රු. 5/- බැගින්ද "ජීව ශක්ති" "කැටවල" රු. 7.00 බැගින්ද "මදන මෝදක" රු. 8.00 බැගින්ද, "මිගොඩ මෝදකය" රු 10.00 බැගින්ද විවිධ මිලගණන් යටතේ අලෙවි කර තිබුණි.

මෙම වෙළඳසැල් 88 හි දිනකට අලෙවි වූ පැකට් ප්‍රමාණයන් සහ මෝදක වර්ග සලකා බලන විට දිනකට පැකට් 25 කට වඩා වැඩියෙන් අලෙවි වන වෙළඳසැල් සංඛ්‍යාව 14 ක් විය. දිනකට පැකට් 1 - 5 අතර ප්‍රමාණයක් විකුණන වෙළඳසැල් 17 ක් ද, දිනකට 6 - 10 අතර විකුණන වෙළඳසැල් 19 ක් ද 11 - 15 හා 16 - 20 අතර විකුණන වෙළඳසැල් 12 බැගින් ද විය. පැකට් 21 - 25 අතර විකුණන වෙළඳසැල් සංඛ්‍යාව 11 කි.

ප්‍රස්තාර අංක 4

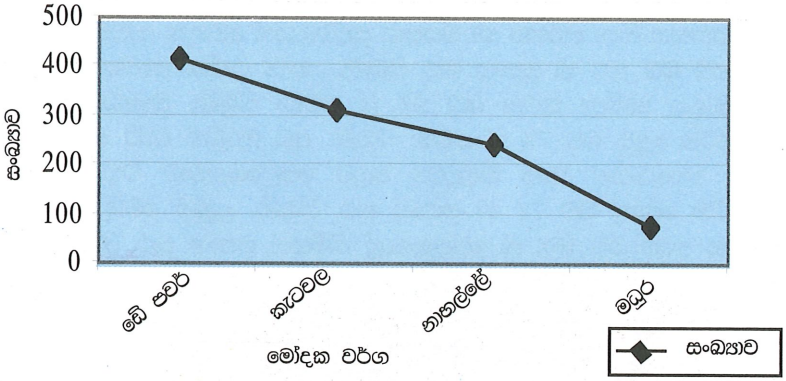


මෙම වෙළඳසැල් 88 හි දිනකට අලෙවි වන සියලුම මෝදක වර්ගවල සාමාන්‍ය පැකට් සංඛ්‍යාව 1,114 කි. දිනකට අලෙවි වන උපරිම පැකට්

ප්‍රමාණය 1.255 ක් පමණ වේ. මෝදක වර්ග අනුව වැඩියෙන් අලෙවි වූ මෝදක වර්ගය වී තිබුණේ "ඩේ පවර්" වර්ගයයි. එය දිනකට සාමාන්‍යයෙන් පැකට් 324ක් ද, උපරිම වශයෙන් 415 ක් ද අලෙවි වී තිබුණි. "කැටවල ශ්‍රීමත්" සහ "නාහල්ලේ" යන මෝදක පිළිවෙළින් දෙවන හා තෙවන ස්ථානයන් ගන්නා අතර, පිළිවෙළින් පැකට් 314 හා 240 බැගින් දිනකට අලෙවි වී තිබුණි.

ප්‍රස්තාර අංක 5

වෙළෙඳසැල් වල දිනකට වැඩිම අලෙවියක් ඇති මෝදක වර්ග



මෙම වෙළඳසැල් වලින් 39% ක් සඳහා මෝදක නිෂ්පාදන අලෙවි කර තිබුනේ ලියාපදිංචි නොවූ පුද්ගලික නිෂ්පාදන ආයතන විසිනි ලියාපදිංචි පුද්ගලික නිෂ්පාදන ආයතන වලින් මෝදක ලබා දෙන බව 36% ක් වෙළඳසැල් හිමියන් පවසා තිබුණි. 1%ක් පමණක් ආයුර්වේද නිෂ්පාදන ලැබෙන බව සඳහන් කර තිබුණි. ලියාපදිංචි/ලියාපදිංචි නොවූ නිෂ්පාදන අලෙවිය පිළිබඳව වැටහීමක් නොමැති බැවින් ඒ පිළිබඳ නොදන්නා බව 24% ක් වෙළඳසැල් හිමියන් ප්‍රකාශ කර තිබුණි.

අදහස් හා ආකල්ප

මෙම වෙළඳසැල්වලින් මෝදක නිෂ්පාදන මිලදී ගන්නා පුද්ගලයන් පිළිබඳව විමසිමේදී 95% ක් පිරීන් ඒවා මිලදී ගන්නා බවත් ඉතිරිය කාන්තාවන් මිළදී ගන්නා බවත් හෙළි වී තිබුණි. මෝදක මිලදී ගැනීමට පැමිණෙන පුද්ගලයන්ගෙන් 75% ක් තරුණයන්ද, 25% ක් පමණ වැඩිහිටියන් ද බව ඔවුන්ගේ අදහස විය..

පාසල් ළමුන්ගේ මෝදක භාවිතය පිළිබඳ තොරතුරු සැපයීමට වෙළඳසැල් හිමියන් අකමැත්තක් දක්වා තිබුන අතර, පාසල් සිසුන් මෝදක පාවිච්චි කරන

බව නොදන්නා බව 42% ක් සඳහන් කළහ. 44% ක් පවසා තිබුනේ පාසල් ළමුන් මෝදක පාවිච්චි නොකරන බවයි. 14% ක් පමණක් පාසල් සිසුන් මෝදක භාවිත කරන බව පැවසුහ.

මෝදක භාවිත කිරීම පිළිබඳව ඔවුන් විවිධ අදහස් පවසා තිබුණි. කුලී වැඩ කරන මිනිසුන් ඇඟපත අමාරුව මගහරවා ගැනීම සඳහා මෝදක භාවිතා කරන බව වෙළඳසැල් හිමියන් 24% ක් ප්‍රකාශ කර තිබුණි. ඇඟේ පතේ අමාරුවට මෝදක භාවිත කිරීම වරදක් නොවන බව ඔවුන්ගේ හැඟීම විය. 16% ක් කාමාශාව, ලිංගික දුර්වලතා හා පුරුෂ ශක්තිය වැඩි කර ගැනීමට අවශ්‍ය නිසා මෝදක භාවිතා කළාට ගැටළුවක් නැති බව 22% ක් පවසා තිබුණි. මත්වීම සඳහා මෝදක භාවිතා කරන බව 16% ක් ප්‍රකාශ කර තිබුණි. අසහනය නිසා තරුණ හා වයසක පුද්ගලයන් මෝදක පාවිච්චි කලාට වරදක් නැති බව 16% ක් ප්‍රකාශ කර තිබුණි. . කෑම රුචිය ඇතිකර ගැනීම සඳහා මෝදක භාවිතා කරන බව 9% ක් පවසා තිබුණි. ඖෂධයක් නිසා පාවිච්චි කිරීම සුදුසු බව 7% ක් පවසා තිබුණි. අඩු මුදලින් වැඩි තෘප්තියක් ලැබීමටත් හෙරොයින් වැනි මත්ද්‍රව්‍ය වලට පෙළඹෙනවාට වඩා මෝදක භාවිත කිරීම හොඳ බව 7% ක් ප්‍රකාශ කර තිබුණි. ළමුන් මෝදක භාවිත කිරීම සුදුසු නැති බව 16% ක් වෙළඳසැල් හිමියන් ප්‍රකාශ කර තිබුණි.

මෝදක නිෂ්පාදනය හා ආලෙවිය සම්බන්ධව වෙළඳුන් සතු වූයේ සීමිත දැනුමකි. මෝදක නිෂ්පාදනය කළ හැක්කේ ඒ සඳහා අවසර ලත් ආයුර්වේද වෛද්‍යවරුන්ට පමණක් බව දැන සිටියේ වෙළඳසැල් හිමියන්ගෙන් 40% ක් පමණි.

නීත්‍යනුකූල නොවන කංසා අඩංගු නිෂ්පාදන අලෙවි කිරීම නීති විරෝධී බවට අවබෝධයක් තිබුනේ 45% කට පමණි. 55% ක් ඒ බව දැන සිටියේ නැත.

කංසා අඩංගු මෝදක අලෙවි කළ යුත්තේ ආයුර්වේද වෛද්‍යවරුන්ගේ නිර්දේශ මත පමණක් බව යන්න 27% ක් දැන සිටියහ. බහුතරය එනම් 73% ක් ඒ පිළිබඳව නොදනී.

නිගමන

පාසල් සිසුන් අතර මෝදක භාවිතය පවතින බව නිගමනය කළ හැකිය. මෝදක භාවිත කරන සිසුන්ගේ බහුතරය අවුරුදු 15 - 25 වයස්

කාණ්ඩායමට අතර වේ. විශේෂයෙන් සාමාන්‍ය පෙළ හා උසස් පෙළ හදාරන, සවස පන්ති සඳහා සහභාගි වන සිසුන් හා ක්‍රීඩා කරන සිසුන් අතර මෝදක භාවිතය ප්‍රචලිත වී ඇත. අබේසිංහ විසින් මීට ඉහතදී මෝදක භාවිතය පිළිබඳ කරන ලද අධ්‍යනයේදී පැසල් ළමුන් "බිග් මැව්" වලදී මෝදක භාවිතා කරන බව හෙළිවී තිබුණි.

මෝදක භාවිත කරන තරුණ හා වැඩිහිටි පුද්ගලයන්ගෙන් බහුතරය එනම් 62% ක් අවුරුදු 16-30 අතර වයස් කාණ්ඩයට අයත් වූහ. 31% ක් වයස අවුරුදු 31-50 අතර වයස් කාණ්ඩයට අයත් වූහ. මේ අනුව බලන විට වැඩිහිටියන්ට වඩා තරුණ පිරිස මෝදක භාවිතයට හුරුවී ඇති බව නිගමනය කළ හැකිය.

තරුණ හා වැඩිහිටයන්ගෙන් 61% ක් වසර 1 - 10 දක්වා පමණක් අධ්‍යාපනය ලබා තිබුන අතර, ඔවුන්ගෙන් බහුතරය 59% ක් කම්කරු, සුළු සේවක, වෙළඳාම්වල නිරත වූ අය වූහ. මේ අනුව අධ්‍යාපනය අතරමග නතර කළ අඩු ආදායම් ලාභීන් මෝදක භාවිතයට හුරු වී ඇති බව පෙනේ.

මෝදක භාවිත කරන පාසැල් සිසුන්ගෙන් බහුතරය තම යහළුවන්ගේ බලපෑම් මත මෝදක භාවිතයට පුරුදු වී ඇත. කුතුහලය දෙවන ප්‍රධාන සාධකය වේ. මොවුන් නිදහස් වේලාවලදී කණ්ඩායම් වශයෙන් මෝදක භාවිත කරති.

මත්ද්‍රව්‍ය භාවිතයේදී සමීප ඇසුර බලවත් සාධකයක් වුවද, මෝදක භාවිත කරන තරුණ හා වැඩිහිරි පුද්ගලයින් සඳහා සම වයස් කණ්ඩායම් බලපා නොතිබුන අතර, 60% ක් ම මෝදක භාවිත කර තිබුනේ තමාගේ කැමැත්ත, අවශ්‍යතාවය මත බව පැහැදිලි වුනි.

"මත්වීමේ සහ විනෝදවීමේ" අරමුණින් බහුතර සිසුන් සංඛ්‍යාවක් මෝදක භාවිත කර තිබුණි. විවිධ මෝදක වර්ග වෙළඳපළේ ඇති අතර ඒවායින් මෝදක වර්ග 14 ක් නියැදියේ සිසුන් විසින් භාවිත කර තිබුණි. මෙයින් සිසුන් වඩාත්ම කැමති වර්ගය වී තිබුණේ "ඩේ පවර්" නැමැති මෝදක වර්ගයයි. එම වර්ගය තුළින් වැඩි කාලයක් මත්වී සිටිය හැකි බව සිසුන්ගේ නිගමනය වී තිබුණි. වෛද්‍ය අබේසිංහගේ අධ්‍යයනයේදීද "ඩේ පවර්" අලෙවිය වැඩිබව සනාථවී තිබුනි.

මෝදක පිළිබඳව සිසුන් මෙන්ම තරුණ හා වැඩිහිටියන්ද ගූහවාදී අදහස් දරයි. මෝදක සඳහා වෙළඳපළේ දක්නට ලැබෙන ආකර්ශණීය වෙළඳ දැන්වීම් සිසුන් මෝදක භාවිතය සඳහා පොළඹවන බව නිගමනය කළ හැකිය. බොහෝ දැන්වීම් සිත්ගන්නාසුළු ශක්තිමත් පුරුෂ රූපයකින් හෙබිවන අතර නිසි ආහාර පීරිණය හා නින්ද ඇති කිරීමට, කාය වර්ධනයට, පුරුෂ ශක්තිය වර්ධනයට, මත්වීමට, වාතජ සහ කවිජ රෝග, කාස, ශ්‍රසනී, වලි, පලිත, ආමවාත, විකාර, සංග්‍රහ ග්‍රහනී යන රෝග නැසීමට මෝදක ඉතා

ප්‍රත්‍යක්ෂ ඖෂධයක් බව ආයුර්වේදයේ සඳහන් වීම නිසා එය භාවිත කිරීමෙන් ඉහත ලෙඩ රෝග සුවවන බවට භාවිත කරන්නන් තුළ ඉතා ඉහළ විශ්වාසයක්, පිළිගැනීමක් ඇත.

මෝදක පිළිබඳව ඇති නීත්‍යානුකූල භාවය, මෝදකවල අඩංගු ද්‍රව්‍ය හෝ ඒවා භාවිත කිරීම තුළින් ඇතිවන අතුරු ආබාධ පිළිබඳ ප්‍රමාණවත් දැනීමක්, අවබෝධයක් තරුණ හා වැඩිහිටියන්ට මෙන්ම සිසුන්ටද නොතිබුණි.

මෝදක භාවිතයට අමතරව පාසල් සිසුන් මෙන්ම තරුණ හා වැඩිහිටි කණ්ඩායමද අනෙකුත් මත්ද්‍රව්‍ය භාවිතයට පෙළඹී ඇති බව නිගමනය කළ හැකිය. මෝදක නොමැති විට ඒ වෙනුවටද මෝදක වලට අමතරව ද ඔවුන් දුම්වැටි, බීර, මත්පැන්, ගංජා වැනි මත්ද්‍රව්‍ය වලට පුරුදු නී ඇත. පාසල් සිසුන් අතර මෝදක භාවිතය තවදුරටත් ව්‍යාප්ත විය හැක.

වෙළඳසැල් හිමියන් 74 දෙනෙක්ම (84%) මෝදක භාවිතය සාධාරණීකරණය කර තිබුණි. කවර තරාතිරමක පුද්ගලයකු වුවද මෝදක භාවිත කිරීම ප්‍රශ්නයක්, ගැටළුවක් නොවන බව ඔවුන් සිතයි. එමෙන්ම අනෙකුත් මත්ද්‍රව්‍ය භාවිත කරනවාට වඩා මෝදක භාවිත කිරීම තුළින් වන හානිය අඩු බව ඔවුන්ගේ හැඟීමයි. හෙරොයින් වැනි මත්ද්‍රව්‍යයක් තුළින් තරුණ ජීවිත විනාශ වුවද මෝදක භාවිතය තුළින් පුද්ගලයාට හා සමාජයට හානියක් නොවන බව වැඩි දෙනාගේ හැඟීම විය.

මෝදක භාවිතයේ හෝ අලෙවියේ ඇති නීත්‍යානුකූල භාවය පිළිබඳ ඔවුන්ට මනා අවබෝධයක් නැත. මෑතකදී මෝදක අලෙවිය පිළිබඳ අන්තරායකර ඖෂධ පාලක ජාතික මණ්ඩලය විසින් පල කළ පුවත්පත් දැන්වීම් කියවීමෙන් පසු ඇතැම් වෙළඳුන් මෝදක අලෙවියට බිය පල කර ඇති අතර මෝදක, ප්‍රසිද්ධියේ පාසල් සිසුන්ට අලෙවි නොකිරීමට පෙළඹී ඇත.

මෙම වෙළඳසැල්වල අලෙවි කිරීමට මෝදක වර්ග බොහෝ ඇති අතර ඒවායෙහි නිෂ්පාදන තත්ත්වය හෝ නිෂ්පාදන ආයතනය පිළිබඳව වෙළඳුන් සොයා බලන්නේ නැත. නිෂ්පාදන ආයතවල ඇති නීත්‍යානුකූල බාවය පිළිබඳව ඔවුන් කිසිම දිනක විමසීමක් ද කර නැත.

මෝදක නිෂ්පාදනය සහ ඉල්ලුම ඉහළ ගොස් ඇති බව මෙම තොරතුරු වලින් නිගමනය කළ හැක. එමෙන්ම ඕනෑම සිල්ලර කඩයක/බෙහෙත් බඩු වෙළඳසැලක පෙට්ටි කඩයක පවා මෝදක මිලදී ගැනීමට හැකිය. එමෙන්ම නීත්‍යානුකූල නොවන විවිධ වර්ගයේ මෝදක වෙළඳපලට පැමිණ ඇත. මේවා ආයුර්වේද ඖෂධ සංග්‍රහයේ ප්‍රමිතියට අනුකූලව නිෂ්පාදනය නොවන නිසා මේවායෙහි අඩංගු ගංජා ප්‍රමාණය අධික වේ. මේ නිසා මත් වීමෙන් තෘප්තියක් ලැබීමේ අපේක්ෂාවෙන් පැසැල් සිසුන්, තැණයින් මෙන්ම වැඩිහිටියන් මෙයට ඇබ්බැහි වීමේ අවදනමක් දැකිය හැකි බව නිගමනය කළ හැකිය.

යෝජනා

අ.පො.ස. සාමාන්‍ය පෙළ හා උසස් පෙළ හදාරන සිසුන් සඳහා මදන මෝදක පිළිබඳ සත්‍ය තොරතුරු ලබා දීම පාසල් සිසුන් අතර මදන මෝදක භාවිතය වැළැක්වීමේලා මූලික වනු ඇත. ගුරුවරුන්ගේ හා දෙමාපියන්ගේ අවධානය හා මැදිහත්වීම ලබා ගත යුතුය.

තරුණ හා වැඩිහිටි පිරිස සඳහා ද වෙළෙඳසැල් හිමියන් සඳහා ද මෝදක පිළිබඳ සත්‍ය තොරතුරු ලබා දිය යුතු අතර, ඔවුන්ව රැකියා ස්ථාන තුළදී හෝ ගම් මට්ටමින් දැනුවත් කිරීමේ වැඩසටහන් ආරම්භ කළ යුතුය.

වෛද්‍යමය හේතු වලට හැර මදන මෝදක වෙළඳම අධෛර්යමත් කළ යුතුය. වෙළඳුන් දැනුවත් කිරීම හා නීතිමය පියවර ගැනීම අවශ්‍ය වේ.

ආයුර්වේද දෙපාර්තමේන්තුව විසින් මදන මෝදක නිෂ්පාදනය, ප්‍රමිතින්, වෙළඳම හා අවසර පත් නිකුත් කිරීම පිළිබඳ දැනට පවතින ක්‍රියා පිළිවෙල හා නීති රීති පද්ධති විමර්ෂණය කර අවශ්‍ය සංශෝධන කළ යුතුය.

නිෂ්පාදන ආයතන හිමියන්, ආයුර්වේද වෛද්‍යවරුන්, ආයුර්වේද දෙපාර්තමේන්තු නිලධාරීන්, නීතිය ක්‍රියාත්මක කරන ආයතන හා එක්ව ආයුර්වේද නිෂ්පාදන දුර්භාවිතය වැළැක්වීමට ආයුර්වේද දෙපාර්තමේන්තුව ක්‍රියාකළ යුතුව ඇත.

විමර්ශන - References

1. ආයුර්වේද ඖෂධ සංග්‍රහය - ප්‍රථම පියවර, පළමු කොටස, ආයුර්වේද දෙපාර්තමේන්තුව, 1961 පිටු - 77.
2. Jayaweera, D.M.J. Medical Plants used in Ceylon, Part 2, National Science Council of Sri Lanka - 1980, Pg -7
3. Global Illicit Drug Trends, ODCCP Studies on Drugs and Crime UNODCCP, New York, 2002, Pg - 254.
4. මත්ද්‍රව්‍ය අනිසි ලෙස භාවිතය, ප්‍රශ්ණෝත්තර කිහිපයක් - අන්තරායකර ඖෂධ පාලක ජාතික මණ්ඩලය. පිටුව - 5
5. Ratnapala Nandasena, Drug and Narcotic Dependence in Sri Lanka - 1986, Pg - 50-65
6. ආයුර්වේද ඖෂධ සංග්‍රහය - එම පිටු 196 - 205
7. Ratnayake, Y. Senanayake Bhadrani, Hand Book of Drug Abuse Information - 2002, NDDCB, Pg - 34
8. දිවයින 2002 - ජූලි 11 පිටුව 4
9. Dr. Abeysinghe, Ranil, Illicit Alcohol - Drinking Culture in Colombo, 2002, Pg 41 - 140
10. Abeysinghe D. M. U. J. Ayurvedic Preparations Containing Cannabis - Some Analytical Aspects of Pharmacological and Legal importance, 2000, Pg - 86-108.

Assessment of Ayurveda treatment for heroin dependence

Bhadrani Senanayake, Eranga Egodapitiya and Ravi Kandiah

Abstract

National Dangerous Drugs Control Board (NDDCB) carried out an assessment of the Ayurveda (indigenous) treatment for heroin dependence at Bandaranaike Memorial Ayurveda Research Institute (BMARI) in 2001. The objectives of the assessment were to document the treatment process, to assess the effectiveness of the treatment process and to make recommendations to increase the efficacy of the treatment. The assessment was an exploratory study to appraise the effectiveness of the BMARI's treatment process for heroin users. The assessment was conducted by interviewing a non-probable sample of 50 persons treated at the BMARI between 1995 and 1999, treatment personnel, making observations about the treatment process, and analysis of urine for opiates using Enzyme Multiplied immunoassay Technique (EMIT).

Among the persons treated, 14% had given up heroin use and 10% had refrained for its use between 1 and 3 years, and 30% was able to refuse heroin when offered. Most persons treated for heroin use at BMARI came from locations closer to it. Of the six persons tested for opiates in urine, one (16%) was negative for heroin, two and half months after discharged from the treatment. Seventy per cent of the persons treated had maintained good family relationships in spite of their drug use.

The Research Officer was able to observe the following shortcoming of the treatment programme; insufficient emphasis on treating mental craving for drugs, inadequate counselling provided for heroin users; mairly due to lack of counselling skills in treatment personnel, not enough follow-up after discharge, lack of motivation to receive treatment and no confidence to change by heroin users and lack of interests out side drug use, and absence of a relapse prevention plan, Treatment for heroin dependence at BMARI, using Ayurveda and Acupuncture, is one of indigenous treatment for heroin dependence with a potential for perfection. It could be improved by strengthening the present shortcomings of the programme.

Introduction:

National Dangerous Drugs Control Board (NDDCB) carried out an assessment of the Ayurveda (indigenous) treatment for heroin dependence at Bandaranaike Memorial Ayurveda Research Institute (BMARI) at Navinna in 2001. The objectives of the assessment were to document the treatment process, to assess the effectiveness of it and to make recommendations to increase its efficacy.

Methodology

The assessment was conducted by interviewing a non-probable sample of 50 persons treated at the BMARI between 1995 and 1999 using a pre-tested questionnaire, carrying out discussions with the treatment personnel, making observations on the treatment process, and analyses of urine samples for opiates using Enzyme Multiplied Immunoassay Technique (EMIT) of treated persons.

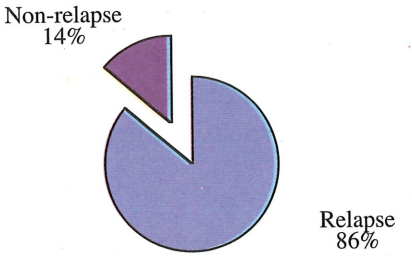
Due to the sampling process and the design of the assessment, it would reflect much on the treatment process at BMRI than the efficacy of Ayurvea or Acupuncture medicine in treating heroin users.

Results:

Most persons treated for heroin use at BMARI came from locations closer to the BMARI Navinna. Of the persons treated, 54% were aged between 26 and 35 years and 76% were educated up to year 10 or less. Ninety percent of the treated people were self-employed persons and 60% had supported the drug use through their earnings. Among the persons treated, 54% was unmarried. One of the six persons (16%) tested was reported negative for opiates in urine after two and half months of discharge from the treatment.

Seventy per cent of the heroin users had maintained good family relationship in spite of their drug use. Among the treated, 14% had completely overcome the craving for heroin and 30% was able to refuse heroin when offered.

Fig 1 Relapse and Non-relapse rates of Ayurveda Treatment



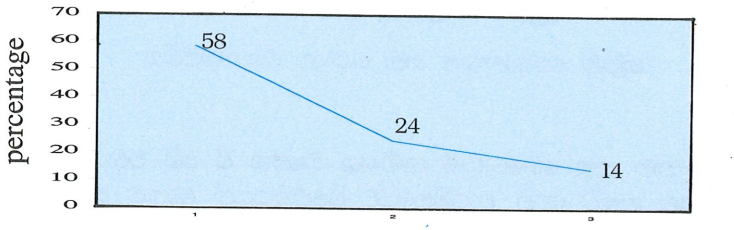
Nearly two-third of the persons treated were concerned about their personal hygiene. Eighty six per cent of personal treated at BMARI stated that the Ayurveda treatment was useful.

The following limitations of the treatment programme were noticeable insufficient emphasis on treating the mental craving for drugs, inadequate counselling provided for heroin users, mainly due no counselling training among treatment personnel, improper follow-up after discharge, deficient motivation to receive treatment and confidence to change their lifestyles by heroin users, scarce interests outside drug use, and absence of a effective relapse prevention plan.

Discussion:

The findings of the study are limited to those had received treatment at BMARI between 1995 and 1999. Among the persons treated, 14% had given up heroin use and 10% had refrained from using it between 1 and 3 years. The treatment programme could be considered as one of the indigenous treatment options, which could be perfected with indigenous knowledge-Ayurveda. Proven successful, it would be attractive to many heroin users in Sri Lanka, especially among those in the rural areas. The commitment of the BMARI treatment staff to treat heroin users was high despite limited resources. The inadequate attention to psychological dependence, absence of counselling, insufficient follow-up, and absence of an effective relapse prevention plan were the limitations observed of the programme.

Fig 2 Non-relaps rate of persons received Ayurveda treatment



The efficacy of the BMARI treatment programme could be improved if the limitations observed in the assessment could be eliminated.

Conclusion

Treatment for heroin dependence at BMARI, using Ayurveda and Acupuncture, is one of indigenous treatment option available in Sri Lanka with a potential for perfection. The treatment programme could be improved by elimination of the limitations of the programme.

Reference:

Jeff Word, Richard Maltick and Wayme Hall, Key issues in Methadone Maintenance Treatment, pp.138-165.

Pillapitya, U., et al., A study of efficacy of an Ayurveda treatment and Acupuncture for heroin dependence, BMARI, pp. 1-7.

This paper was presated of the 58th Annual Session of Sri Lanka Association for the Advancement of Science (SLAAS), Colombo, 2002.

නාවින්න බණ්ඩාරනායක අනුස්මරණ ආයුර්වේද පර්යේෂණායතනයේ හෙරොයින් ඇබ්බැහිය සඳහා වූ ප්‍රතිකාර ක්‍රමය පිළිබඳ ඇගයීමක්

හද්‍රානි සේනානායක සහ එරංගා එගොඩපිටිය

හැඳින්වීම

ශ්‍රී ලංකාව තුළ හෙරොයින් භාවිතය ව්‍යප්ත වී මේ වන විට දශක දෙකක් පමණ ගතවී ඇත. ආරම්භයේදී විදේශිකයන් ඇතුළු සුළු පිරිසක් හෙරොයින් භාවිතයට පුරුදු වී සිටියද මේ වන විට සැලකිය යුතු පිරිසක් එයට ඇබ්බැහි වී ඇති අතර, වර්තමානයේ එය අපේ රටේ ප්‍රධාන සමාජ ප්‍රශ්නයක් බවට පත්ව ඇත. හෙරොයින් භාවිත කිරීම, භාවිතා කරන්නන්ගේ සෞඛ්‍ය, මානසික හා පුද්ගල පැවැත්මට හානි දායක වනවා මෙන්ම ඔවුන්ගේ පවුල්වල සාමාජිකයින්ට හා පොදු සමාජයට ද මෙය තර්ජනයක් වී ඇත. මෙවැනි පසුබිමක් තුළ මත්ද්‍රව්‍ය පිළිබඳ ප්‍රශ්නය පාලනය කිරීමට සහ භාවිතා කරන්නවුන් සඳහා ප්‍රතිකාර හා පුනරුත්ථාපන කටයුතු ක්‍රියාත්මක කිරීමට ශ්‍රී ලංකාව තුළ විවිධ රාජ්‍ය හා රාජ්‍ය නොවන සංවිධාන බිහිවිය. අන්තරායකර ඖෂධ පාලක ජාතික මණ්ඩලයට අමතරව රජයේ රෝහල් ද, ඇතැම් ආයුර්වේද රෝහල් ද විවිධ රාජ්‍ය නොවන ආයතන ද හෙරොයින් සඳහා ප්‍රතිකාර ක්‍රම ක්‍රියාත්මක කරනු ලබයි. භාවිතා කරන්නන් සඳහා කෙරෙන ප්‍රතිකාර ක්‍රම සලකා බලන විට නේවාසික, බාහිර, ප්‍රජා මූලික සහ දිවා සුරැකුම් වැනි ප්‍රතිකාර විධි හඳුනා ගත හැකිය. හෙරොයින් සඳහා කරන ප්‍රතිකාර අතර උපදේශනය, බටහිර ඖෂධ මගින් කරනු ලබන ප්‍රතිකාර, හෝමියෝපති, චීන කටු සහ ආයුර්වේද ප්‍රතිකාර ක්‍රම ප්‍රචලිතය.

1987 සිට හෙරොයින්වලට ඇබ්බැහි වූවන් සඳහා නාවින්න බණ්ඩාරනායක අනුස්මරණ ආයුර්වේද පර්යේෂණ ආයතනය ප්‍රතිකාර කරනු ලබයි. අවුරුදු 3000 කට වඩා පැරණි ආයුර්වේද ප්‍රතිකාර ක්‍රමයෙහි "මදාත්‍ය" හෙවත් මත්පැන් ගැනීම නිසා ඇති වන රෝග ලක්ෂණ සහ ඒවාට කළ යුතු ප්‍රතිකාර (වරක චිකිත්සා 24) සැලකිල්ලට ගනිමින් අත්හද බැලීමක් ලෙස හෙරොයින්වලට ඇබ්බැහිවූවන් සඳහා ලක්ෂණානුකූල ප්‍රතිකාර ක්‍රම සහ ශරීර ශෝධන රසායන ක්‍රම සහ කටු චිකිත්සාව උපයෝගි කර ගනිමින් ආයුර්වේද ප්‍රතිකාර ක්‍රමය සිදු කරනු ලබයි. ව්‍යාපෘතියක් ලෙස ආරම්භ කළ මෙම ප්‍රතිකාර ක්‍රමයෙහි අරමුණ වී තිබුනේ හෙරොයින් ඇබ්බැහිය සඳහා සාර්ථක ආයුර්වේද ප්‍රතිකාර ක්‍රමයක් සෙවීම සහ හෙරොයින්වලට ඇබ්බැහි වූ පුද්ගලයින් එයින් මුදවා ගැනීම, සුවපත් කිරීම සහ පුනරුත්ථාපනය සඳහා යොමු කිරීමයි.

බණ්ඩාරනායක ආයුර්වේද පර්යේෂණ ආයතනයෙන් ප්‍රතිකාර ලැබුවන් 105 දෙනෙකු අතුරින් 68% ක් විරමණ ලක්ෂණවලින් ඉවත් වී සාර්ථක ප්‍රතිඵල ලබා ගත් බව ඔවුන්ගේ පර්යේෂණ වාර්තාවක සඳහන් වී තිබිණි. (A

study on Efficacy of an Ayurvedic Treatment and Acupuncture for Heroin dependence - Dr. Upali Pilapitiya - Etal) තවද රෝගීන් 175 දෙනෙකු සඳහා කළ පසු විපරමි අධ්‍යයනය තුළින් ද විරමණ ලක්ෂණ නතර වී සාර්ථක වූ රෝගීන් 119 (68%) ක් සිටි බව වාර්තා වී තිබුණි. (හෙරොයින් ඇබ්බැහිය සඳහා ආයුර්වේද ප්‍රතිකාර ක්‍රමයක සහ කටු චිකිත්සාවෙහි සාර්ථකභාවය හැඳැරීම - පිටුව 6) හෙරොයින් සඳහා දැනට අප රට තුළ ක්‍රියාත්මක කරන අනෙකුත් ප්‍රතිකාර ක්‍රමවල ප්‍රතිඵල හා සන්සන්දනය කරන විට 68% ක සංඛ්‍යාව සලකා බැලිය යුතු ඉහළ ප්‍රතිශතයක් බව පෙනේ. එමෙන්ම ආයුර්වේද ප්‍රතිකාර ක්‍රමය මෙතරම් ප්‍රතිඵලදායක නම් මීට වඩා මේ කෙරෙහි අවධානය යොමු කළ යුතුව ඇති අතර, එම ප්‍රතිකාර ක්‍රමය සම්පූර්ණයෙන්ම හෝ එහි ප්‍රයෝජනවත් කොටස් අදාළ අනිකුත් ප්‍රතිකාර හා පුනරුත්ථාපන ආයතනවලට ද අත්හදා බැලිය හැකිය.

මේ නිසා හෙරොයින් සඳහා වූ ආයුර්වේද ප්‍රතිකාර ක්‍රමය සහ එහි ප්‍රතිඵලදායක බව අධ්‍යයනය කිරීමට අන්තරායකර ඖෂධ පාලක ජාතික මණ්ඩලය පෙළඹුණි.

අධ්‍යයනයේ අරමුණු

(1) ආයුර්වේද ප්‍රතිකාර ක්‍රමය සහ එහි ප්‍රතිඵලදායක බව අධ්‍යයනය කිරීම

(2) හෙරොයින් භාවිත කරන්නෙකුට භාවිතයෙන් මිදීමට ආයුර්වේද ප්‍රතිකාර ක්‍රමය කොතරම් දුරට උපකාරී විද යන්න තක්සේරු කිරීම.

ක්‍රම වේදය

ආයුර්වේද රෝහලින් නේවාසික ප්‍රතිකාර ලබා ගත් රෝගීන් 50 දෙනෙකුගෙන් යුත් අහඹු නියැදියක් තෝරා ගන්නා ලදී. 1995 සිට 1999 දක්වා කාලය තුළ ප්‍රතිකාර ගත් රෝගීන්ගේ නාමලේඛනය මේ සඳහා භාවිතා කළ අතර අහඹු නියැදිය 1999 න් ආරම්භ කර 1995 දක්වා අවරෝහණ ක්‍රමයට ලබා ගන්නා ලදී. ආයුර්වේදයෙන් ප්‍රතිකාර ලැබුවන් බහුතරය කොළඹ හා කොළඹ අවට නගරවල ජීවත් වුවන් නිසා කොළඹ දිස්ත්‍රික්කයේ පදිංචි රෝගීන්ගෙන් නියැදිය තෝරා ගන්නා ලදී.

ප්‍රතිකාර ලැබුවන්ගෙ දත්ත රැස් කිරීම සඳහා ප්‍රශ්නාවලියක් භාවිතා කළ අතර ප්‍රශ්නාවලියෙහි ප්‍රතිකාර ලැබුවන්ගේ ප්‍රජා දත්ත, මත්ද්‍රව්‍ය භාවිතය ප්‍රතිකාර ඉතිහාසය, ආයුර්වේද ප්‍රතිකාර ක්‍රමය පිළිබඳ ආකල්ප අදහස් මෙන්ම ඔවුන්ගේ පවුල් හා සමාජ සබඳතා, රුකියාව වර්යා රටාවන් සහ හැසිරීම පිළිබඳ විවෘත සහ ආවෘත ප්‍රශ්න ඇතුළත් කරන ලදී. දත්ත රැස් කිරීමට පෙර පූර්ව පරීක්ෂණයක් කර ප්‍රශ්නාවලියෙහි අඩුපාඩු සකස් කර නිරවද්‍යතාව තහවුරු කරගන්නා ලදී. දත්ත රැස් කිරීමට ප්‍රථම පිළිතුරු දෙන්නා සමග සමීප සම්බන්ධතාවයක් (Rapport) ඇති කර ගත් අතර

පර්යේෂණය පිළිබඳවද හඳුන්වා දෙන ලදී. පක්ෂග්‍රාහී නොවන අයුරින් දත්ත රැස් කිරීමට පර්යේෂණ නිලධාරිනිය වග බලාගන්නා ලදී.

දත්ත රැස් කිරීම සඳහා සම්මුඛ සාකච්ඡාව භාවිත කරන ලදී. ප්‍රශ්නාවලියට සීමා නොවී සම්මුඛ සාකච්ඡාව යොදා ගැනීම නිසා අපැහැදිලි පිළිතුරු වඩාත් පැහැදිලි හා නිරවුල් කර ගැනීමට හැකිවිය. එමෙන්ම ආයුර්වේද ප්‍රතිකාර ක්‍රමය පිළිබඳ හැදෑරීමේ දී වෛද්‍යවරියන්ගෙන් සම්මුඛ සාකච්ඡා මාර්ගයෙන් අවශ්‍ය තොරතුරු ලබා ගන්නා ලදී.

මීට අමතරව දත්ත එකතු කිරීම සඳහා නිරීක්ෂණය භාවිත කළ අතර එමගින් ප්‍රශ්නාවලියේදී සහ සම්මුඛ සාකච්ඡාවේදී නොලැබුන තොරතුරු ලබාගත හැකිවිය. ආයුර්වේද ප්‍රතිකාර ක්‍රමයෙහි බෙලිමල් වාෂ්ප ඇල්ලීම, තෙල් ගල්වා පිරි මැඳීම, වින කටු ප්‍රතිකාරය වැනි ඇතැම් ප්‍රතිකාර ක්‍රම ක්‍රියාත්මක කරන ආකාරය ඇසින් දැක නිරීක්ෂණය කිරීමට හැකිවිය. මීට අමතරව පසු ඇගයීමේදී ඇතැම් පිළිතුරු දෙන්නන් විසින් ඉදිරිපත් කරන ලද සාවද්‍ය තොරතුරු නිරීක්ෂණය තුළින් වටහා ගත හැකි වූ අතර විශේෂයෙන් ඔහු මත්ද්‍රව්‍ය භාවිත කර ඇත්ද නැද්ද යන්න සොයා ගැනීමට එය උපකාරී විය.

මුත්‍රාවල ඕපියේට (Opiates) අඩංගු දැයි පරීක්ෂා කිරීම තුළින් රෝගියා හෙරොයින් භාවිත කර ඇති/නැති බව නිවැරදිව සොයාගත හැකිය. මේ සඳහා Enzyme Multiplied Immunoassay Technique (EMIT) භාවිත කරන ලදී. මෙම පරීක්ෂණය තුළින් මුත්‍රා සම්පලවල මත්ද්‍රව්‍ය ඉතා කුඩා ප්‍රමාණයක් අඩංගු වී තිබුනද (0.3µg/ml) හඳුනාගත හැකි නිසා ප්‍රතිඵල ගුණාත්මක බවකින් යුක්තය.

නියැදිය සඳහා රෝගීන් හය දෙනෙකුගේ මුත්‍ර සාම්පල ලබාගන්නා ලද අතර මුත්‍රාවල ඕපියේට (opiates) අඩංගු දැයි පරීක්ෂා කරන ලදී.

ප්‍රතිකාරය සඳහා රෝහලට ඇතුළත් වූ දිනයේදීම සෑම රෝගියෙකුගේම මුත්‍ර සාම්පල පරීක්ෂා කරන ලදී. අනතුරුව ප්‍රතිකාර කාලය තුළ සෑම දින තුනකට වරක්ම මුත්‍ර සම්පල ලබාගෙන පරීක්ෂා කරන ලදී.

රෝහලින් ප්‍රතිකාර ලබා පිටවී ගිය පසුව මාස 2-3 ත් අතර කාලය තුළදී පසු ඇගයීමක් ලෙස මෙම රෝගීන් හයදෙනාගේ මුත්‍රා සාම්පල ලබාගෙන පරීක්ෂා කරන ලදී.

ගැටලු

දත්ත රැස් කිරීමේදී ඇතැම් ලිපිනයන් නිවැරදි නොවීමත් ප්‍රතිකාර ලැබුවන් දිවා කාලයේදී හමුවීම අපහසු වීමත් නිසා නියැදිය සම්පූර්ණ කිරීමට දීර්ඝ කාලයක් ක්ෂේත්‍රයේ ගත කිරීමට සිදු විය. ව්‍යාපෘති සැලැස්මේ දී රෝගීන් 100 දෙනෙකු පසු ඇගයීමට ලක් කිරීමට බලාපොරොත්තු වුවද

බාහිර ප්‍රතිකාර සඳහා පමණක් පැමිණි රෝගින් සොයා ගැනීම අපහසු වූ බැවින් නේවාසික රෝගින් 50 දෙනෙකුට පමණක් නියැදිය සීමා කිරීමට සිදු විය.

හෙරොයින් භාවිත කරන්නන් සඳහා ආයුර්වේද රෝහල මගින් දෙනු ලබන ඖෂධවල අඩංගු ක්‍රියාකාරී ද්‍රව්‍යවල විද්‍යාත්මක අධ්‍යයනයක් කිරීමට අධ්‍යයනය ආරම්භයේදී බලාපොරොත්තු වුවද එය ඉතා සංකීර්ණ ක්‍රියාවලියක් බව පෙනී ගියෙන් අත්හැර දැමීමට සිදුවිය. මෙම අධ්‍යයනයේ මුල් අදියර ලෙස ලබා ගත් මූත්‍රා සම්පල පරීක්ෂණයෙන් නියැදියෙන් පස් දෙනෙකුගේම මූත්‍ර සාම්පලවල ඕපියේට (Opiates) අඩංගු වී තිබීම නිසා ඔවුන් නැවත හෙරොයින් භාවිත කරන බවට තහවුරු විය. දිගුකාලීන අධ්‍යයනයක් සඳහා නේවාසික රෝගින් සංඛ්‍යාව ප්‍රමාණවත් නොවිය. පසු ඇගයීමට ලක් කළ රෝගින් හමු වීම දුෂ්කර විය.

ආයුර්වේද ප්‍රතිකාර ක්‍රමය

හෙරොයින් සඳහා වූ ආයුර්වේද ප්‍රතිකාරය ප්‍රධාන වශයෙන් බාහිර සහ නේවාසික යන ක්‍රම දෙකකට සිදු කරනු ලබයි. ප්‍රතිකාර සඳහා සායනයට පැමිණෙන පුද්ගලයින්ට කටු ප්‍රතිකාර හා ලාක්ෂණික ප්‍රතිකාර බාහිරාංශයෙන් ලබා දෙන අතර, ක්‍රමයෙන් ගන්නා හෙරොයින් ප්‍රමාණය අඩු කිරීමට උපදෙස් දෙනු ලබයි. ප්‍රතිකාරයෙහි අන්තර්ගත ප්‍රතිකාර ක්‍රම පහත සඳහන් පරිදි වේ.

පරීක්ෂණ

හෙරොයින් ගන්නා පුද්ගලයන්ගේ රුධිරය, මූත්‍රා සහ මල පරීක්ෂාවට ලක් කරනු ලබයි. රුධිර පරීක්ෂණයේදී රුධිරය ඝන සෙන්ටිමීටරයට ශ්වේතානු ප්‍රමාණය සහ ශ්වේතානුන්ගේ ප්‍රභේද පරීක්ෂා කරනු ලබයි. මූත්‍රා සම්පූර්ණ පරීක්ෂණයක් කරන අතර මළවල ඇමීබා බීජ සහ සිස්ට් පරීක්ෂා කරනු ලබයි. (වෛද්‍ය ලක්ෂ්මි සේනාරත්න ඇතුළු පිරිස හෙරොයින් ඇබ්බැහිය සඳහා ආයුර්වේද ප්‍රතිකාර ක්‍රමයක සහ කටු චිකිත්සාවෙහි සාර්ථකත්වය හැදෑරීම පිටුව 3).

වින කටු ප්‍රතිකාරය

ආයුර්වේද ප්‍රතිකාර සඳහා පැමිණෙන රෝගින්ට සති 1 සිට 2 කාලයක් වේදනාව සහ විරමණ ලක්ෂණ අඩු කිරීම සඳහා වින කටු ප්‍රතිකාරය කරනු ලබයි.

ඖෂධ ප්‍රතිකාරය

අනතුරුව ශරීර වේදනාව නැති කිරීමට හා රක්ත ශෝධනය සඳහා කසාය දෙනු ලබයි. ආහාර රුචිය වැඩි කිරීම හා ආහාර ජීර්ණය සඳහා අරිෂ්ට දෙනු ලබයි. නිසි ආහාර ජීර්ණය හා නින්ද ඇති කිරීමට මෝදක දෙනු ලබයි. (එම පිටුව 4).

වාෂ්ප, ස්වේද හා ශිරෝධාරා

වාෂ්ප, ස්වේද හා ශිරෝධාරා බෙහෙත් ක්‍රම එනම් ශරීරයේ තෙල් ගල්වා, බෙලිකොළ තම්බා දින 7 ක් දුම් වැදීමට සැලැස්වීම සහ හිසට මඳ උණුසුම් තෙල් වත් කර දින 7 ක් හිස පිරිමැදීම කරනු ලබයි. මෙම ප්‍රතිකාර ක්‍රමය තුළින් වේදනාව නසා ස්නායු ශක්තිමත් කර අපවිත්‍ර දෑ දහඳිය මගින් බැහැර කරන බව විශ්වාස කෙරේ (එම පිටුව 4).

වමන හා විරේක කම්

වමන හා විරේක කම් කරනු ලබයි. ගිතෙල් මාත්‍රාව ක්‍රමයෙන් වැඩි කරමින් දින 3-5 දී වමන ඖෂධ දීමෙන් වමන කර්ම කිරීමද පසුව නැවත ගිතෙල් මාත්‍රාව වැඩි කරමින් දී විරේචන ඖෂධ දී විරේක කිරීම කරනු ලබයි. මේ තුළින් හෙරොයින්වල විෂහරණය කරනු ලබයි. (එම පිටුව 4)

රසායන කර්ම

රසායන කර්ම තුලින් ශරීරය ප්‍රකෘති තත්ත්වයට පත් කිරීමට අරිෂ්ඨ හා ලේහයක් දෙනු ලබයි. මාසයක් පුරා ඉහත ප්‍රතිකාර ක්‍රමය ක්‍රියාත්මක කරන අතරතුර ප්‍රතිකාර කාලය තුළ රෝගීන් සමග ඉතා සමීපව කතා බස් කර මත්ද්‍රව්‍ය ගැනීමෙහි ආදීනව පහදා දී ඔවුන් මත්ද්‍රව්‍ය ගැනීමට පෙළඹෙන හේතුව සොයා බලා ප්‍රතිකාරයෙන් පසු නැවත ඇබ්බැහිය වැළැක්වීමට රෝගියාට මෙන්ම භාර කරුවන්ටද උපදෙස් දෙන අතර, සාර්ථකව ප්‍රතිකාර අවසන් කළ රෝගීන් රුවන්වැල්ලේ අමද්‍යප තරුණ පුනරුත්ථාපන මධ්‍යස්ථානයට සහ සමාජ සේවා දෙපාර්තමේන්තුවේ පුනරුත්ථාපන මධ්‍යස්ථානයට යවනු ලබයි. (එම, පිටුව 4)

සමීක්ෂණයේ ප්‍රතිඵල

නියැදියේ බහුතරය එනම් 20% ක් මොරටුව ප්‍රදේශයෙන් පැමිණි අය වූහ. එයට හේතු වී තිබුණේ මොරටුව ප්‍රදේශයෙන් පැමිණි සේවාලාභීන් කිහිප දෙනෙකු ප්‍රතිකාරවලින් පසු හෙරොයින් භාවිතය නතර කර තිබීමයි. මේ නිසා අසල් වැසි දෙමාපියන් තම දරුවන් ආයුර්වේද ප්‍රතිකාරයට යොමු කර තිබුණි. 14% ක් පන්නිපිටිය ප්‍රදේශයේ පදිංචි අය වූහ. 12% ක් මහරගම ප්‍රදේශයේ අය වූහ. 8% ක් නුගේගොඩද, 6% ක් බොරලැස්ගමුවේද පදිංචි අය වූහ. ඉතිරි 40% රත්මලාන, දෙහිවල, පිළියන්දල, බත්තරමුල්ල, වත්තල, දෙමටගොඩ, කෝට්ටේ, හෝමාගම, බොරැල්ල, කිරුලපන යන ප්‍රදේශවල පදිංචි අය වූහ.

වයස

නියැදියෙන් 34% ක් වයස අවුරුදු 31-35 අතර අය වූහ. 30% ක් වයස අවුරුදු 26-30 අතර අය වූහ. 4% ක් අවුරුදු 21-25ත් අතර වයස්

කාණ්ඩයට අයත් වූහ. 32% ක් වයස අවුරුදු 36-50 ත් අතර වයස් ගත වූ අය වූහ.

අධ්‍යාපන මට්ටම

නියැදියේ එක් පුද්ගලයකු හැර සියලු දෙනාම අධ්‍යාපනය ලබා තිබුණ අතර, 74% ක් 6-10 දක්වා අධ්‍යාපනය ලබා තිබුණි. 18% ක් අ.පො.ස. සා. පෙළ) සමත් වී තිබුණි.

අධ්‍යාපන මට්ටම	සංඛ්‍යාව	ප්‍රතිශතය (%)
පාසල් නොගිය	01	02
1-5 දක්වා	01	02
6 - 10 දක්වා	37	74
සා. පෙළ සමත්	09	18
උසස් පෙළ සමත්	02	04
එකතුව	**50**	**100**

රැකියාව

ප්‍රතිකාර ගැනීමට පෙර නියැදියෙන් 90% ක් කුමන හෝ රැකියාවක නිරත වී සිටි අය වූහ. දොළොස් දෙනෙකු එනම් 27% ක් වඩු වැඩ, මේසන් වැඩ, කාර්මික වැඩ වැනි රැකියාවල නිරත වූ අය වූහ. එකොළොස් දෙනෙකු (24%) ක් කුලී වැඩ රැකියාව ලෙස කළ අය වූහ. 18% ක් වෙළඳම රැකියාව ලෙස කළ අයවූ අතර 9% ක් රියැදුරන් වූහ. 6% ක් ත්‍රිවිධ හමුදාවේ රැකියාවල නිරත වූහ. ඉතිරි 16% ඇඟළුම් කම්හල්වල පුද්ගලික ආරක්ෂක සේවාවල වැනි වෙනත් සුළු සුළු රැකියාවල නිරත වූ අය වූහ. ප්‍රතිකාරයට පැමිණෙන විට මොවුන්ගෙන් 63% කට මත්ද්‍රව්‍ය භාවිතය නිසා රැකියා අහිමි වී තිබුණි.

ප්‍රතිකාරයෙන් පසු 30% ක් නැවත රැකියා සොයාගෙන තිබුණි. මෙම පිරිස අතර ප්‍රතිකාරයට පෙර වඩු/මේසන්/කාර්මික වැනි රැකියාවල නිරත ව සිටි අයගෙන් 10% ක් නැවත එම රැකියාවල නිරත වී සිටියහ. 6% ක් සවුදි අරාබියාවේ රැකියාවට ගොස් සිටියහ. ඉතිරි 14% ඇඟළුම් සේවක, කුලී වැඩ, වෙළඳම වැනි රැකියා කරන අය වූහ.

විවාහක/අවිවාහක බව

54% ක් ප්‍රතිකාරයට පෙර විවාහ වූ අයවූ අතර 46% ක් අවිවාහක අය වූහ. ප්‍රතිකාර ලබාගත් පසු අවිවාහක අයගෙන් 6% ක් විවාහ වී තිබුණි.

විවාහක පුද්ගලයින්ගේ භාර්යාවන් සහ දරුවන් ඔවුන්ව ප්‍රතිකාර සඳහා උනන්දු කර තිබුණි.

ආයුර්වේද ප්‍රතිකාර කාලය

සමීක්ෂණයට ලක්වූ සේවාලාභීන් 100% ක් ම නේවාසිකව ප්‍රතිකාර ලැබූ අය වූහ. නේවාසික වීමට පෙර ඔවුන් සියලු දෙනාම බාහිර ප්‍රතිකාර ක්‍රමයට ඇතුළත් වූ අයවූහ. 50%ක් සති තුනකට වැඩි කාලයක් නේවාසික ප්‍රතිකාර අවසන් කර තිබුණ අතර 20% ක් සති දෙකක් ද තවත් 20% ක් සති දෙකකට අඩු කාලයක්ද ප්‍රතිකාර ලබා තිබුණි. 10%කට ප්‍රතිකාර කාලය පිළිබඳ මතකයක් නොතිබුණි. 66% ක් ආයුර්වේද ප්‍රතිකාර කාලය අවසන් කර රෝහලින් පිටවී ගොස් තිබුණ අතර 34% ක් අවසරයක් නොමැතිව ප්‍රතිකාර කාලය නිම නොකර පිටවී තිබුණි.

නියැදියෙන් 38%ක් 1998 වසරේදී ද 32% ක් 1997 වසරේදී ද 10% ක් 1999 වසරේදී ද 18% ක් 1996 වසරේදී ද, 2% ක් 1995 වසරේදී ද ප්‍රතිකාර ලැබූ අය වූහ.

හෙරොයින් භාවිතය අත්හැරීම

නේවාසික සේවාලාභීන්ගෙන් හත් දෙනෙකු එනම් 14% ක් මේ වනවිට ආයුර්වේද ප්‍රතිකාර නිසා හෙරොයින් භාවිතය අතහැර තිබුණි. හෙරොයින් භාවිතය නතර කළ 14% න් 4% ක් භාවිතය නතර කර වසරක් ගෙවී තිබුණි. 10% ක් භාවිතය නතර කර වසර 1 - 3ත් අතර කාලයක් ගතවී ඇත. භාවිතය නැවැත්වූ පිරිසෙන් තිදෙනෙක් (43%) ක් මොරටුවේ පදිංචි අය වූහ. ඉතිරි හතර දෙනා (57%) මහරගම, බොරලැස්ගමුව, කෝට්ටේ, දෙමටගොඩ යන ප්‍රදේශවල පදිංචි කරුවන් වූහ.

මත්ද්‍රව්‍ය නැවත භාවිතය

නියැදියෙන් 86% ක් නැවත හෙරොයින් භාවිත කරන අතර, 72% ක් නැවත දුම්වැටි හා 26% ක් මද්‍යසාර භාවිත කරන අය වූහ.

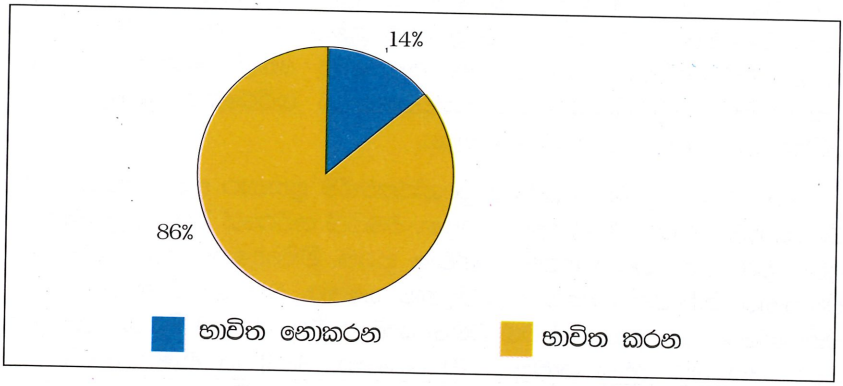
මත්ද්‍රව්‍ය	භාවිත කරන සංඛ්‍යාව	ප්‍රතිශතය (%)
හෙරොයින්	43	86
දුම්වැටි	36	72
මත්පැන්	13	26
ගංජා	03	06
බුලත් විට	01	02

නැවත හෙරොයින් භාවිත කිරීමේ අනුපාතය (Relaps Rate)

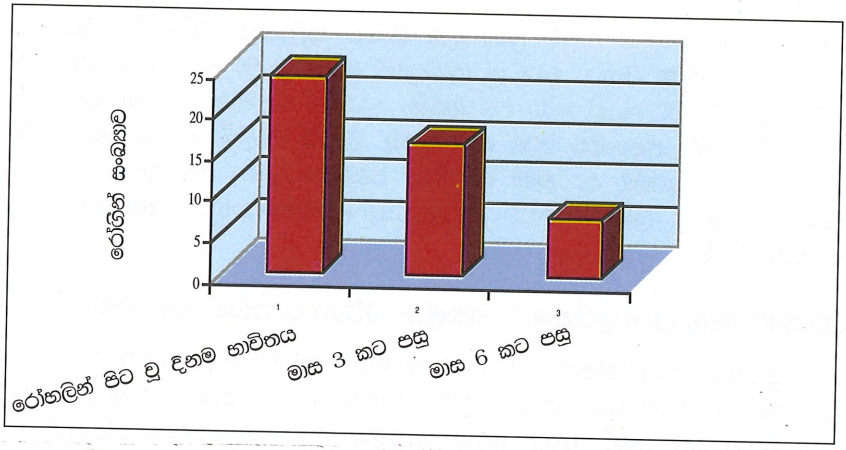
හෙරොයින් භාවිත කරන පුද්ගලයින්ගෙන් 56% ක් ආයුර්වේද ප්‍රතිකාරයෙන් බැහැර වූ ද සිටම නැවත හෙරොයින් භාවිත කර තිබුණි. 37% ක් මාස

තුනකට අඩු කාලයකදීද 7% ක් මාස 6 කට අඩු කාලයකදීද නැවත භාවිතයට යොමු වී තිබුණි.

නැවත හෙරොයින් භාවිත කිරීමේ අනුපාතය



නැවත භාවිත කිරීම සිදු වී ඇති කාල පරිච්ඡේදය



මේ අනුව මුළු නියැදියෙන් 86% ක්ම මාස 6 කට අඩු කාලයක් තුළ දී නැවත භාවිතයට යොමු වී ඇත. භාවිත කරන පුද්ගලයින්ගෙන් 91% ක් දිනපතාම හෙරොයින් භාවිත කරන අයවූ අතර (regular users) 9% ක් පාලනයකින් යුතුව හෙරොයින් භාවිත කරන (control users) අය වූහ.

ප්‍රතිකාර ක්‍රමය පිළිබඳ සේවාලාභීන්ගේ අදහස්:-

ආයුර්වේද ප්‍රතිකාර ක්‍රමය පිළිබඳ අදහස් විමසීමේදී 86% ක් ඒ පිළිබඳව සුභවාදීව කථා කළ අතර 12% ක් තමාට ඉන් ප්‍රයෝජන ගැනීමට

නොහැකි වීම නිසා ප්‍රතිකාර පිළිබඳව කිසිත් පැවසීමට නොහැකි බව පවසන ලදී. තවත් 2% ක් ඒ පිළිබඳව කිසිත් නොදන්නා බව පැවසුවේය.

වැඩි දෙනෙකුගේ (86%) පොදු අදහස වූයේ ආයුර්වේද ප්‍රතිකාර ක්‍රමය තමා ප්‍රයෝජනයට ගන්නේ නම් ඉතාමත් හොඳ ප්‍රතිකාර ක්‍රමයක් බවයි. හෙරොයින් විෂ හරණයට බටහිර ප්‍රතිකාර ක්‍රමයට වඩා ආයුර්වේද ප්‍රතිකාර හොඳ බව ඔවුන්ගේ අදහස වූහ. ආයුර්වේද තෙල්, බෙහෙත්, අරිෂ්ඨ, කසායවලින් හෙරොයින්වල විෂ සම්පූර්ණයෙන් ශරීරයෙන් ඉවත් වී ලේ පිරිසිදු වන බව ඔවුන් විශ්වාස කළහ.

ආයුර්වේද ප්‍රතිකාර ක්‍රමයේ ප්‍රයෝජනවත්ම ප්‍රතිකාර ක්‍රමය වමනය සහ විරේක කර්මය බව 54% ක් ප්‍රකාශ කළහ. එමගින් ශරීරයේ විෂ සම්පූර්ණයෙන් ඉවත් වන බවට ඔවුහු තරයේ විශ්වාස කරති. විසිදෙනෙකු (40%) චීන කටු චිකිත්සාව කිරීමෙන් ඇඟපතේ වේදනාව සමනය වන බවත් පැවසීය, කටු චිකිත්සාවෙන් සහ බෙහෙත් වගී මගින් කෑම රුචිය, සියලුම විරමණ ලක්ෂණ පහව යන බව ඔවුහු පැවසූහ. 19 දෙනෙකු (38%) ක් වාෂ්ප ස්වේද හා ශිරෝධාරා (ශරීරයේ තෙල් ගල්වා බෙලිකොළ තම්බා දුම් වැදීමට සැලැස්වීම) ප්‍රතිකාරය ඉතා ප්‍රයෝජනවත් බව පැවසූහ.

ප්‍රතිකාර කාලය තුළදී ලබා දුන් ඖෂධ පිළිබඳව එතරම් මතකයක් ඔවුන්ට නොතිබුණ අතර, 44% ක් පැවසුවේ කසාය ලබා දුන් බවයි. 36% ක් පැවසුවේ ගුලි වර්ගයක් ලබා දුන් බවයි. 44% ක් එළඟිතෙල් ලබා දුන් බව පැවසුවේය. මීට අමතරව 20% ක් අරිෂ්ඨ, 2% ක් වැල්මී 4% ක් මිකිරි, 4% ක් බෙලිකොළ යනාදී දෑ ලබා දුන් බව පැවසූහ. ලබා දුන් බෙහෙත් වගී පිළිබඳ දැනුමක් ලබා ගැනීමට බහුතරයකට අවශ්‍යතාවක් නොතිබුණ බව පැහැදිලි වුණි.

ප්‍රතිකාර ලැබූ පුද්ගලයින්ගේ ආකල්ප, වර්යා රටාවන්, හැසිරීම:-

ප්‍රතිකාර ලැබූවන්ගෙන් 42% ක් තවමත් තමන්ට හෙරොයින් පිළිබඳව දැඩි ආසාවක් ඇති බව පැවසූහ. 12% ක් තරමක් දුරට ආසාවක් ඇති බවත් 22% ක් ආසාව අඩුවී ඇති බවත් පැවසූහ. 14% ක් හෙරොයින් පිළිබඳ කොහෙත්ම ආසාවක් නැති බවත්, 10% ක් ඒ පිළිබඳව නිශ්චිතව යමක් පැවසිය නොහැකි බවත් ප්‍රකාශ කළහ.

16% ක් හෙරොයින් පාවිච්චි කිරීමට දැඩි ඇල්මක් දක්වන අතර, එය වින්දනයක් ලැබිය හැකි දෙයක් ලෙස තවමත් දකී. 58% ක් එය ප්‍රතිඵලයක් නොමැති විනාශකාරී බීමක් ලෙසත්, 12% ක් ඇබ්බැහිය නවතා ගත නොහැකි වීම පිළිබඳව පසුතැවිලි වන බවත්, හෙරොයින් එපා වී ඇති බවත් පැවසූහ.

හෙරොයින් භාවිතා කරන පුද්ගලයකු දුටු විට තවමත් තමාටත් බීමට ආශාවක් ඇතිවන බව 50% ක් ප්‍රකාශ කරන ලදී. වෙනත් කෙනෙකු බොන

විට තමාට කිසිදු අපහසුවක් නොදැනෙන බව තවත් 38% ක් පැවසූහ. යහළුවෙකු හෙරොයින් බිමට කථා කළහොත් 30% ක් එය ප්‍රතික්ෂේප කරන බවත් 56% ක් ඔහුත් සමග එකතු වී හෙරොයින් බොන බවත් පැවසූහ.

ප්‍රතිකාර ලබා ගත් පුද්ගලයින්ගෙන් 64% ක් කොන්ඩය රැවුල කපා පිරිසිදු ඇඳුම් අඳින බව පැවසූ අතර, එය නිරීක්ෂණය තුළින්ද තහවුරු විය. 29 දෙනෙකු (58%) දිනපතා ස්නානය කරන බව පැවසුවේය. විසි එක් දෙනෙකු (42%) ක් තමාගේ සෞඛ්‍ය ගැන සැලකිලිමත් වන බව පෙනුණි. 28% කගේ ක්‍රියාශීලී බව දක්නට ලැබුණ අතර 24% ක් දිනපතා කාල සටහනකට අනුව වැඩ කරන බව පැවසූහ. 24% ක් විනෝදාංශ වල යෙදෙයි. 22% ක් සමාජ සේවා වැනි බාහිර වැඩවලට සම්බන්ධ වී ඇත.

නියැදියෙන් 60%ක් කුමන හෝ රැකියාවක් කර හෙරොයින් භාවිතය සඳහා මුදල් උපයයි. 23 දෙනෙකු (46%) රැකියාවෙන් තෘප්තියක් ලබති. 34% ක් නියමිත වේලාවට රැකියාව සඳහා යන බව දැනගන්නට ලැබුණි. 30% ක් රැකියාව කැපවීමෙන් කරන බවද 50% ක් මුදල් කාගෙන් හෝ ණයට ඉල්ලා ගන්නා අතර 44% ක් සොරකම් කරයි. 46% ක් බොරු කියා මත්ද්‍රව්‍ය භාවිතයට මුදල් ලබා ගැනීම කරන බව පැවසූහ.

හෙරොයින් භාවිතය කරදරයක් වුවද තවමත් 70% කගේ දෙමාපියන් ඔවුන්ව පිළිගන්නා බව දැනගන්නට ලැබුණි. 54% ක් හෙරොයින් භාවිත කළද තම බිරිඳ, දරුවන් පිළිබඳව සොයා බලන අය වූහ. ඒ අනුව ඔවුන්ගේ පවුල් සබඳතා හොඳ මට්ටමක පැවතුණි. 40% කගේ අසල්වැසියන් ඔවුන් පිළිබඳව සතුටු වෙති. 30% ක් පන්සල, පල්ලිය සමග සම්බන්ධතාවක් ඇති බව දැනගන්නට ලැබුණ අතර 26% ක් ගමේ පොදු වැඩවලට මෙන්ම බාහිර කටයුතු සඳහාත් සහයෝගය දක්වති.

මූත්‍රා සාම්පල පරීක්ෂණ ප්‍රතිඵල

ආයුර්වේද රෝහලට හෙරොයින් ප්‍රතිකාර සඳහා වරකට රෝගීන් දෙදෙනෙකු ඇතුළත් කරගන්නා ලදි. පරීක්ෂණයට ලක්වූ රෝගීන් භය දෙනා ගෙන් ප්‍රතිකාර සඳහා ඇතුළත් වූ දිනයේදීම මූත්‍රා සාම්පල ලබාගත් අතර සියලුදෙනාගේම මූත්‍රාවල ඕපියේට (Opiates) අඩංගු වී තිබුණි. ඉන්පසුව දින තුනකට වරක් ලබාගත් මූත්‍රා සාම්පලවල දෙවන, තුන්වන, හතරවන හා පස්වන අවස්ථාවලදී එක් රෝගියෙකුගේ හැර තිදෙනෙකුගේ මූත්‍රා සාම්පලවල ඕපියේට අඩංගු වී නොතිබුණි. ප්‍රතිකාර කාලය සම්පූර්ණ වීමට ප්‍රථම රෝහලින් පිටව යාම නිසා පළවෙනි හා හයවෙනි රෝගීන්ගේ මූත්‍රා සම්පල අවස්ථා දෙකකදී පරීක්ෂා කිරීමට නොහැකි විය. එහෙත් ඔවුන් පසු ඇගයීම්වලදී මුණගැසුණ අතර ඒ වනවිටත් ඔවුන් නැවත භාවිතයට යොමු වී තිබුණි.

මුත්‍රා සාම්පලවල ඕපියේට (Opiates) සඳහා විශ්ලේෂණ වාර්තාව

රෝගියාගේ අංකය	මුත්‍රා සාම්පල පරීක්ෂාව					
	පළමු	දෙවන	තුන්වන	හතරවන	පස්වන	පසු ඇගයීම
1	ඇත	නැත	නැත	*	*	ඇත (මාස 3 ට පසු)
2	ඇත	නැත	නැත	නැත	නැත	නැත (මාස 2 $^{1}/_{2}$ ට පසු)
3	ඇත	නැත	නැත	නැත	නැත	ඇත (මාස 2 ට පසු)
4	ඇත	නැත	නැත	නැත	නැත	ඇත (මාස 2 ට පසු)
5	ඇත	ඇත	නැත	ඇත	ඇත	එම **
6	ඇත	නැත	නැත	*	*	ඇත (සති 3 කට පසු)

සටහන:-

නේවාසික ප්‍රතිකාර සඳහා ඇතුළත් වූ දින හා ඉන්පසු සෑම දින තුනකට වරක් මුත්‍රා සාම්පල ලබාගන්නා ලදී.

* ප්‍රතිකාරය අතරමග නවතා රෝහලින් බැහැරව ගොස් තිබුණි.

** නිවසේ නොසිටීම නිසා මුත්‍රා සාම්පල ලබා ගැනීමට නොහැකි වූ නමුදු ඔහු නැවත භාවිත කරන බව දෙමාපියන් පවසන ලදී.

පස්වන රෝගියාගේ මුත්‍රා සාම්පල පරීක්ෂණවලදී නේවාසිකව සිටි අවස්ථා හතරකදීම ඕපියේට අඩංගු වී තිබුණි. මේ අනුව ඔහු ප්‍රතිකාර කාලය තුළ දී ද හෙරොයින් භාවිතා කළ බව නිගමනය කළ හැකිය.

පසු ඇගයීම මුත්‍රා සාම්පල පරීක්ෂාවේදී එක් රෝගියකු හැර අනෙකුත් සියලුමදෙනා නැවත අධික ලෙස හෙරොයින් භාවිතයට යොමු වී තිබුණි. හෙරොයින් භාවිතය නවතා තිබූ රෝගියා භාවිතය නවතා මාස 2 ක් ගතව තිබුණි. මේ අනුව පැහැදිලි වන්නේ ප්‍රතිකාර කාලය අතරතුර හා අවසන් වූ වහාම ඔවුන් නැවත භාවිතයට යොමු වී ඇති බවයි.

සාකච්ජාව

ආයුර්වේද ප්‍රතිකාර ක්‍රමය තුළින් හෙරොයින් භාවිතයෙන් ඉවත් වූ සංඛ්‍යාව 14% කි. මොවුන් භාවිතයෙන් ඉවත් වී අවුරුදු 1 - 3 ත් අතර කාලයක් ගත වී ඇත. ආයුර්වේද ප්‍රතිකාර ක්‍රමයට පැමිණීමට පෙර ඔවුහු වෙනත් ප්‍රතිකාර සහ පුනරුත්ථාපන මධ්‍යස්ථානවලට ඇතුළත් වී භාවිතය නැවැත්වීමට උත්සාහ දරා තිබුණි. එමගින් ලැබූ අත්දැකීම්ද ආයුර්වේදයෙන් ලැබුන ප්‍රතිකාර තුළින්ද භාවිතය නැවැත්වීමේ දැඩි අවශ්‍යතාව මතද ඔවුන් හෙරොයින් භාවිතය නතර කළ බව ඔවුන්ගේ මතය විය.

හෙරොයින් භාවිත කරන ඕනෑම පුද්ගලයකු ගත් විට කාලයක් යන විට ඔහු හෙරොයින්වලට කායිකව හා මානසිකව ඇබ්බැහි වන බව පිළිගත් සිද්ධාන්තයකි. මේ සඳහා කෙරෙන ප්‍රතිකාරයේදී හඳුනා ගත් විශේෂ සාධකයක් වී ඇත්තේ හෙරොයින් සඳහා ඇති මානසික ඇබ්බැහිය කායික ඇබ්බැහියට වඩා ප්‍රබල සාධකයක් වන බවයි. ආයුර්වේද ප්‍රතිකාර ක්‍රමයෙහි ද කායික හා මානසික ඇබ්බැහිය සඳහා ප්‍රතිකාර කරයි. එම ප්‍රතිකාර ක්‍රමය අධ්‍යයනය කරන විට කයික ඇබ්බැහිය සඳහා කරන ප්‍රතිකාරය කෙරෙහි ඔවුන් වැඩි අවධානයක් යොමු කර ඇති බව පැහැදිලි වුණි.

ආයුර්වේද රෝහලට පැමිණෙන බාහිර රෝගීන්ට විරමණ ලක්ෂණ අඩු කර ගැනීම සඳහා (Withdrawal Symptoms) චීන කටු චිකිත්සාවෙන් ආරම්භ කරන ආයුර්වේද ප්‍රතිකාරය අනතුරුව ශරීර වේදනාව නැති කිරීමට හා රක්ත ශෝධනය සඳහා කසාය දෙනු ලබයි. මීට අමතරව වාෂ්ප ස්වේද හා ශිරෝධාරා තුළින්ද වේදනාව නැසීම සහ ස්නායු ශක්තිමත් කිරීම අපේක්ෂා කර ඇත. වමන හා විරේක කර්ම තුළින් හෙරොයින් වල විෂහරණය කරනු ලබයි. (හෙරොයින් ඇබ්බැහිය සඳහා ආයුර්වේද ප්‍රතිකාර ක්‍රමය සහ කටු චිකිත්සාවෙහි සාර්ථක භාවය හැදෑරීම - පිටුව 4)

ඉහත ප්‍රතිකාර පිළිබඳව නියැදියේ සේවාලාභීන්ගෙන් ලබාගත් තොරතුරු අනුවද ආයුර්වේද ප්‍රතිකාර ක්‍රමය මගින්, හෙරොයින් භාවිතයෙන් ඇතිවන විරමණ ලක්ෂණ පහව ගොස් කායික සුවයක් ලැබෙන බව නිගමනය කළ හැකිය, ඇඟපතේ අමාරුව, සොටු දියර ගැලීම, කඳුළු ගැලීම, ඇනුම් යාම, මල බුරුල් වී පිටවීම, ආහාර අරුචිය, නින්ද නොයාම යනාදි කායික අපහසුතා සම්පූර්ණයෙන් පහවී කායික සුවයක් ලබන බව නියැදියේ සියළුම දෙනා ප්‍රකාශ කළහ. ලබාදෙන බෙහෙත් වගී වමන හා විරේක කර්ම, වාෂ්ප ඇල්ලීම චීන කටු චිකිත්සාව වඩාත්ම ඒ සඳහා ප්‍රයෝජනවත් වූ බව ඔවුහු පැවසූහ. ආයුර්වේදය මගින් මීට කලින් කරන ලද අධ්‍යයන හා පසු විපරම් මගින් ද 68% ක් විරමණ ලක්ෂණ වලින් සුවය ලැබූ බව සනාථ වී තිබුණි.

එහෙත් ආයුර්වේද ප්‍රතිකාර ක්‍රමයෙහි මානසික ඇබ්බැහිය සඳහා කරන ප්‍රතිකාරය ඉතා සුළු වශයෙන් සිදුවන බව පැහැදිලි වුණි. පසු ඇගයීමට ලක්වූ ප්‍රතිකාර ගත් පුද්ගලයින්ගේ අදහස වූයේද ආයුර්වේද ප්‍රතිකාර තුළින් හෙරොයින් වලට ඇති ආසාව අඩු කර ගැනීමට හෝ නැවත නොබී සිටීමේ ශක්තිය වර්ධනය කර ගැනීමට නොහැකි වූ බවයි.

හෙරොයින් සඳහා කෙරෙන ප්‍රතිකාරයේදී උපදේශනය ඉතා වැදගත් ස්ථානයක් හිමි කර ගනී. බටහිර වෛද්‍ය ප්‍රතිකාර ක්‍රමයක් වූ මෙතඩෝන් (methadone) ප්‍රතිකාර ක්‍රමයේ පවා උපදේශනය ඉතා වැදගත් බව Jeff Word සඳහන් කර ඇත. (Key issues in Methadone Maintenance Treatment Jeff Word, Richard Maltick and Wayme Hall (Pg. 138-165) තවද

Newman සහ Peyar හෙරොයින් ඇබ්බැහිය සඳහා කෙරෙන ප්‍රතිකාරයේදී උපදේශනය ඉතා අත්‍යාවශ්‍ය බව පවසා ඇත. (do, 1921)

මත්ද්‍රව්‍ය උපදේශනය හුදෙක් විශේෂිත ස්වරූපයක් දැරුවද ඒ සඳහා උපයෝගි කරගනු ලබන්නේ සාමාන්‍ය උපදේශනයේදී භාවිතා කරන මූලධර්ම හා විධි ක්‍රමයන්ය. ඇබ්බැහිකාරී තත්ත්වයට ආවේනික ගති ලක්ෂණ නිසාම මත්ද්‍රව්‍ය උපදේශනය සංකීර්ණ ක්‍රියාවලියක් බවට පත් වී ඇත. මෙහි දී ඇබ්බැහිකාරීත්වයේ ස්වභාවය විරමණ ලක්ෂණ නැවත භාවිතයට ඇතුළත් වන ප්‍රතිශතය සමාජ ආකල්ප මත්ද්‍රව්‍ය කෙරෙහි පුද්ගලයා දරන ආකල්ප කෙරෙහි වැඩි අවධානයක් යොමු කළ යුතු වේ.

ආයුර්වේද ප්‍රතිකාර ක්‍රමයේද උපදේශනය ක්‍රියාත්මක වී තිබුනද, එය ඉතා අවම මට්ටමින් සිදුවී ඇති බව අධ්‍යයනයේදී පැහැදිලි වුනි. ඔවුන්ගේ ප්‍රතිකාර ක්‍රමය තුළ උපදේශනය ලෙස රෝගීන් සමග ඉතා සමීපව කටා බස් කිරීම මත්ද්‍රව්‍ය ගැනීමෙහි ආදීනව පහද දීම, මත්ද්‍රව්‍ය ගැනීමට පෙළඹෙන හේතුව සොයා බලා ප්‍රතිකාරයෙන් පසු නැවත ඇබ්බැහිය වැළක්වීමට රෝගියාට මෙන්ම භාරකරුවන්ට උපදෙස් දීම යනාදිය දැකිය හැකිවිය.

වෛද්‍යවරියන්ගේ අනෙකුත් කාර්ය භාරයන් හමුවේ නේවාසික රෝගීන් සඳහා උපදේශනය උපරිම මට්ටමින් දිගුකාලීනව කරගෙන යා නොහැකි වූ බව පැහැදිලි වුනි. ව්‍යාපෘතියේ වෛද්‍යවරියනට උපදේශනය සඳහා කාලය මිඩංගු කළ නොහැකි වුවද උපදේශනය පිළිබඳ විශේෂඥයින්ගේ සහායන්ද ලබාගෙන නොතිබුණි.

තවද මත්ද්‍රව්‍ය උපදේශනයේදී ඉතාමත් වැදගත් කොන්දේසියක් වන්නේ සේවාලාභියාගේ ස්වේච්ඡා කැමැත්තයි. එම නිසා සේවාලාභියා තුළ මත්ද්‍රව්‍ය නැවැත්වීමට අභිප්‍රේරණයක් ඇති කිරීම උපදේශනය විසින් ඉටු කළ යුතු ප්‍රධාන කර්තව්‍යයක් ලෙස හැඳින්විය හැකි ය. මේ සම්බන්ධව ආයුර්වේද ප්‍රතිකාර ක්‍රමයෙහි අඩු අවධානයක් යොමු වී ඇත. නියැදියෙන් 34% ක් ආයුර්වේද ප්‍රතිකාර කාලය සම්පූර්ණ නොකර ඉවත් වී තිබිණි. මෙම පුද්ගලයින් සියළුදෙනාම පැවසුවේ ආයුර්වේද ප්‍රතිකාර සඳහා පැමිණියේ ස්වේච්ඡාවෙන් නොව දෙමාපියන්ගේ, දරුවන්ගේ හෝ භාර්යාවගේ බලපෑම මත බවයි. ප්‍රතිකාර සඳහා පැමිණීමේ සාමාන්‍ය තත්ත්වය මෙය වුවද ප්‍රතිකාරයට පැමිණි පසු ඔහු තුළ ප්‍රතිකාරය සඳහා අභිප්‍රේරණයක් ඇති කිරීම ඉතා වැදගත් වේ.

හෙරොයින් සඳහා කෙරෙන ප්‍රතිකාරයේදී හෙරොයින් සඳහා පුද්ගලයා තුළ ඇති බැඳීම ආසාව අවම කිරීම උප සංස්කෘතික බලපෑම් මඟින් කරන බලපෑම් වලින් මුදවා ගැනීම සහ තමා කැමති අභිමතාර්ථයකට යොමු කිරීම, නැවත භාවිතයට පෙළඹීම පාලනය කිරීම සහ පසු රැකවරණ ක්‍රියාවලිය නොකඩවා සිදු කිරීම වැදගත් වේ.

ආයුර්වේද ප්‍රතිකාර ක්‍රමයෙහි හෙරොයින් සඳහා පුද්ගලයා තුළ ඇති බැඳීම, ආසාව නැති කිරීමට හෝ අවම කිරීමට ගන්නා උත්සාහය එතරම් සාර්ථක බවක් නොපෙනේ. විරමණ ලක්ෂණ සඳහා ප්‍රතිකාර කිරීම තුළින් පමණක් මානසිකව එයට ඇති බැඳීම අත්හැරිය හැකි ද? අවම වේද යන්න ප්‍රශ්නයකි. එයට හේතුව ආයුර්වේද ප්‍රතිකාර ක්‍රමය ලබා ගත් සේවාලාභින්ගේ නැවත භාවිතයට යොමු වීමේ ප්‍රතිශතය ඉතා ඉහළ අගයක් ගැනීමයි. එය 86%කි. (Relaps Rate) 56%ක් රෝහලින් පිටවූ දින සිටම නැවත භාවිතා කර තිබේ. 44% ක් මාස 6 කට අඩු කාලයක් තුළ දී නැවත භාවිතයට යොමු වී ඇත. කායික ඇබ්බැහිය සඳහා ප්‍රතිකාර ලැබුනද මානසික ඇබ්බැහිය නවත්වා ගැනීමට ප්‍රතිකාර ක්‍රමය අපොහොසත් වීම නිසා නැවත භාවිතය වැඩි වීමට එක් සාධකයක් වූ බව නිගමනය කළ හැක.

ප්‍රතිකාර ක්‍රමයේදී පසු රැකවරණ ක්‍රියාවලිය ද වැදගත් වේ. ආයතනවලින් ඉවත් වන සේවාලාභින් එක දිගට වැඩි කාලයක් පසු රැකවරණ ක්‍රියාවලියකට දායක කර ගැනීමෙන් වැඩි ප්‍රතිඵල ලබා කර ගත හැක. ප්‍රතිකාර අවසන් කළ රෝගීන්ට සති දෙකකට /මසකට වරක් සායනයට පැමිණීමට උපදෙස් දී ඇති අතර, හාරකරුවන්ට ලිපියක් යවා ඔවුන්ගේ තත්ත්වය පිළිබඳ විමසීම පසු රැකවරණ කටයුතු ලෙස සිදු කරනු ලබයි. එහෙත් නේවාසික රෝගීන් සියලු දෙනාම සායන වලට නොපැමිණෙන බවත් ලිපි යැවිවද, ලැබෙන ප්‍රතිචාර අඩු මට්ටමක තිබෙන බවත් දැනගන්නට ලැබුණි.

අදහස් සහ යෝජනා:-

ආයුර්වේද ප්‍රතිකාර ක්‍රමය ක්‍රියාත්මක කරන වෛද්‍යවරියන්ගේ දැඩි කැප කිරීම ඉතා ඉහළ මට්ටමක පැවතුනි. අනෙකුත් රෝග සඳහා පැමිණෙන රෝගීන්ටද ප්‍රතිකාර කරමින් සේවා කාලය තුළ උපරිම මට්ටමින් හෙරොයින් සඳහා ප්‍රතිකාර කිරීමට ද වැඩි අවධානයක් යොමු කිරීම පැසසිය යුතුය.

මානසික ඇබ්බැහිය අවම කිරීම, උපදේශනය, ප්‍රතිකාර සඳහා ස්වේච්ඡා පැමිණීම දිරිගැන්වීම, හෙරොයින් ගන්නා පුද්ගලයාගේ සමාජ පවුල් සබඳතා දියුණු කිරීම, වෙනස් වීමේ හැකියාව පිළිබඳ විශ්වාසය වර්ධනය කිරීම, වෛකල්පිත ක්‍රියාකාරකම් කෙරෙහි පුද්ගලයා යොමු කිරීම (උදා: විනෝදාංශ, නිර්මාණාත්මක ක්‍රියාකාරකම්, සාද, කණ්ඩායම් හමුවීම) පසු රැකවරණය යනාදිය කෙරෙහි වැඩි අවධානයක් යොමු වූයේ නම් ආයුර්වේද ප්‍රතිකාර ක්‍රමයෙහි ප්‍රතිඵලදායක බව මීට වඩා වැඩි වීමට ඉඩ තිබුණි. කායික ඇබ්බැහිය සඳහා සාර්ථක ප්‍රතිඵලයක් ලබා ගැනීමට ආයුර්වේද ඖෂධ ප්‍රතිකාර උපකාරී වේ නම් ඒ සමගම මානසික ඇබ්බැහිය සඳහා ප්‍රතිකාරද ක්‍රියාත්මක වුවා නම් ආයුර්වේද ප්‍රතිකාර වල ප්‍රතිඵල වඩා සාර්ථක වනු ඇතැයි නිගමනය කළ හැකිය.

යෝජනා

(1) කායික සහ මානසික ඇබ්බැහිය යන සාධක දෙක කෙරෙහි එකවර ප්‍රතිකාර ක්‍රම ක්‍රියාත්මක කිරීම සහ මානසික ඇබ්බැහිය අවම කර ගැනීමට ප්‍රමාණවත් අවධානයක් යොමු කිරීම

(2) උපදේශනය වඩා විධිමත් ලෙස ප්‍රතිකාර ක්‍රමයට ඇතුළත් කිරීම සහ ක්‍රියාත්මක කිරීම

(3) උපදේශනය පිළිබඳ පුහුණුවක් අදළ වෛද්‍ය නිලධාරිනියන්ට ලබාදීම හෝ ප්‍රතිකාර කාලය අතරතුර විශේෂඥ උපදේශන සේවාවක් ලබා ගැනීම.

(4) පසු රැකවරණ ක්‍රියා අඩුම තරමින් මාස 6 ක් දක්වා සිදු කිරීම.

(5) නැවත භාවිතය වැළැක්වීම (Relapse Prevention) පිළිබඳව ක්‍රියාමාර්ග ගැනීම

විමර්ශන (References)

1. A Study of Efficacy of an Ayurvedic Treatment and acupuncture for Heroin Dependence - Dr. Upali Pilipitiya - Etal Pg. 1 - 7
2. Key Issues in Methadone Maintenance Treatment, Jeff Word, Richard Maltick and Wayme Hall - Pg 138 - 165
3. හෙරොයින් ඇබ්බැහිය සඳහා ආයුර්වේද ප්‍රතිකාර ක්‍රමයක සහ කටු චිකිත්සාවෙහි සාර්ථකභාවය හැදෑරීම - ලක්ෂ්මි සේනාරත්න සහ පිරිස - පිටු 1 - 6
4. මණ්ඩලයේ ප්‍රතිකාර කටයුතුවල මෑතකාලීන පරිණාමය - පර්යේෂණ හා ප්‍රතිකාර අංශය, අන්තරායකර ඖෂධ පාලක ජාතික මණ්ඩලය - පිටු 9 - 19

Imprisoned Female Heroin Users

Bhadrani Senanayake

Abstract

Female heroin users are an inadequately studied group whose numbers appear to be increasing. According to prison statistics, more than half the number of female prisoners (56%) in 1999 was for Excise and Narcotic related offences. Some of these women were repeat offenders.

This study was conducted on a non-probable sample of 37 imprisoned females at Welikada Prison in the year 2000. The sample of the survey represented 25% female narcotic offenders including those remanded and imprisoned at the female ward. The aim of the study was to assess drug use amongst female prisoners. The data collection of the survey was carried out using a pre-tested questionnaire, through interviews and observations. The findings of the study would be more applicable to female heroin users living in Colombo and Suburbs.

92% of the females were residing in and around Colombo, whereas only 8% were from outstations. Most of the women came from unstable family backgrounds and generally from economically poor social strata of the society.

Half of them (52%) were aged between 31-40 years and 43% were between 21-30 years. Only a third (35%) of the women were married. Nearly half of them (50%) were divorced, separated or cohabiting, 13% were widowed, 2% were unmarried.

Of the sample 81% were Sinhala 14% Tamil and 5% Muslim. Amongst them 71% were Buddhist, 13% Christian, 11% Hindu and 5% Muslims. 65% had studied up to year 10 and 11% had passed G.C.E. Ordinary Level Exam. A quarter (24%) of the females had never been to school.

Half of them (51%) were engaged in sex work as a profession. 19% of the sample were street level heroin vendors. 22% of the women were into petty businesses such as selling vegetables, flowers and fruits.

Imprisoned female heroin users were multiple drug users. In addition to heroin, 89% smoked cigarettes, 20% consumed alcohol, 20% cannabis, 5% hashish. Among them 8% had used psychotropic drugs

such as diazepam, barbitone and methodone. Of the sample 67% had started drug use with heroin and only 30% with cigarettes. 3% had used local cigars as their first drug. 27% of the females had started on heroin between 16-20 years of age and 11% had started below 15 years of age.

All of them were regular heroin users (Chinese method). However, 5% had experimented with intravenous drug use and discontinued it due to fear of contracting HIV. Among the female heroin users, 25 (67%) had been introduced to heroin by a friend, 10 (27%) by her spouse or boyfriend. 36 (97%) had received heroin free of charge at the introduction, one had used it due to curiosity while selling heroin.

16% had been treated for sexually transmitted diseases (STD) at the STD clinic in the Colombo Hospital. Five (13%) of them were Lesbians.

Introduction

Although the ratio of female to male drug users is still low in Sri Lanka it is noteworthy that there is less documantation about women drug users than their male counterparts. Specially, studies on gender differences in drug abuse are very few in Sri Lanka. This paper is based on a survey conducted as a Master of Social Sciences (MSsc) assignment in year 2000 for the imprisoned female drug offenders at Welikada prison. Non- random sample of 37 female heroin users were interviewed for the study. This number represented 25% of narcotic offenders at the female ward. The aim of conducting the survey was to collect information on the socio-demographic, drug use characteristic, and their life style in the prison.

Drug abuse and addiction have been recognized as pressing health and social issues in many countries, posing serious health risks and often tragic consequences for those who are afflicted and for their families and communities. Social attitudes have often led to women's drug use, drug use related problems being concealed. There was no social acceptance of drug use among women and these women are marginalized in the communities or societies. In male-dominated world, women are more regulated by cultural norms and social expectations which demand them to be "a good girl", "a good wife" and " a good daughter and have fewer choices open to them.

Women's involvement in drugs can be divided in to four categories such as (a) a women drug users (b) women as partners of drug users (c) the girl child as daughters of drug users (d) women who are involved in the production and or distribution of drugs. Most women who do not use drugs but who have male drug user in the family suffer a different fate, specially if the husbands are so addicted to drugs that they cannot function normally. The women often have to suffer verbal and physical abuse, sexual abuse, poverty, lack of emotional and social security, concern about the future not only of themselves but also of their children. Many women often have to become heads of households and shoulder all responsibilities for feeding all the family members.

Women constituted 52% of the Sri Lankan population. The role of Sri Lankan women is fast changing due to various social and economic forces. Presently drug use is increasing and getting more and more acceptance among women in Sri Lanka. Women play leading roles in the drug use and they are addicted not only to heroin but also other drugs such as cigarettes, alcohol, cannabis, tablets etc. And they are also involved in small and large-scale drug trafficking and selling. Further more, women have become the targets of various drug producing companies. They are trying to promote drugs to women.

According to the prison statistics 56% of the female prison admissions was for excise and narcotics offences in 1999. In 1996, 253 women were arrested for drug related offences. It was increased to 452 in 1999, (178%). The number of women imprisoned for narcotic drug offences in 1996 was 53. The number went up to 148 in year 1999. This indicates an increase of 267% during the corresponding period.

The Asian Harm Reduction Network Newsletter (AHRN - 1999) revealed that, in the US, 9 million women used illegal drugs in the year 1998 and more than 70% of the AIDS cases among women were drug related.

Dr. Usa Duongsaa's (AHRN Newsletter - 1999) study revealed that there are many extreme cases of tribal women in northern.Thailand being forced to go to begging or prostitution themselves in order to earn enough money to buy drugs for their husbands and they are at high risk of HIV infection. And also she pointed out that in contrast to the case of a male drug user whose wife will often stay with him, take care of the

children for him, and even make efforts to rehabilitate him, a woman who uses drugs often finds she is left alone, her husband likely to leave, and the children are often taken away from her because she is not regarded as a "good wife" or a "good mother" any more.

Drug using women are likely to be more stigmatized than their male counterparts because of their activites are regarded by society as 'double deviance". Taking drugs is seen as both 'deviance' from accepted social codes of behavior and deviance from the traditional expectations of the females as wife, mother and family nurture (World Drug Report-1997).

Athuraliya (1989) had identified three cotributing factors for illegal activities by female heroin users in Sri Lanka. These are (a) broken family situation, (b) poverty and (c) poor urban community environment (shanty, slums). Furthermore, the females had not taken medical assistance to overcome their drug dependency. The drug peddles were motivated mainly by the extra income they could earn themselves by using these females. (Two females earned money for drugs through prostitution).

Haser (1987) reported that in contrast to men, women showed a marked difference in the consumption of non-narcotic drugs before heroin. However, after using heroin, women gave up the use of other drugs, but men continued to experiment with other drugs at the same time.

Anglin (1987) is of the view that women and men followed similar pattern of narcotics use but women's addiction careers being " compressed" or in shorter cycles. The other major areas of sex differences were in accordance with sex role stereo type of the women and non - related to age.

Elinwood (1986) observed that women tend to maintain longer drug habit before trying abstinence and showed less oscillation than men do (between drug use and abstinence). Perhaps this is due to the option of supporting drug habits through commercial sex work.

Rosenbaumn (1981) argues that after the introduction to heroin, female usage is indicative of the traditional sex role differentiate. i.e. role expected to play in the society due to the sex. Thus, if a man uses

drugs and is addicted, the women's social role dictates that she shares that activity as well. Also women became addicted to heroin faster than men. Of the women of the sample 47% was addicted within 3 months from first use.

Eldered and Wasington (1975) had pointed out that 40% of their samples were heroin using prostitutes and most of them had become a prostitute after drug use.

Chambers (1970) had pointed out that research on the relationship between prostitution and drugs indicates that approximately 100% of all female heroin users support their habits through prostitution.

Methodology

The survey was conducted on a non-probable sample of 37 female heroin users imprisoned at Welikada Prison. The sample was obtained by "snow balling". A pre-tested questionnaire in Sinhala Language was used for data collection of the survey. The questionnaire contained close - ended questions on socio-demographics, drug use and sex work. In addition, interviews were conducted and observations were recorded. The data recorded was chcked for completeness and accuracy prior to data analysis. Summary tables on each item of the questionnaire were prepared with total and percentage calculated.

Results

Socio-demographics

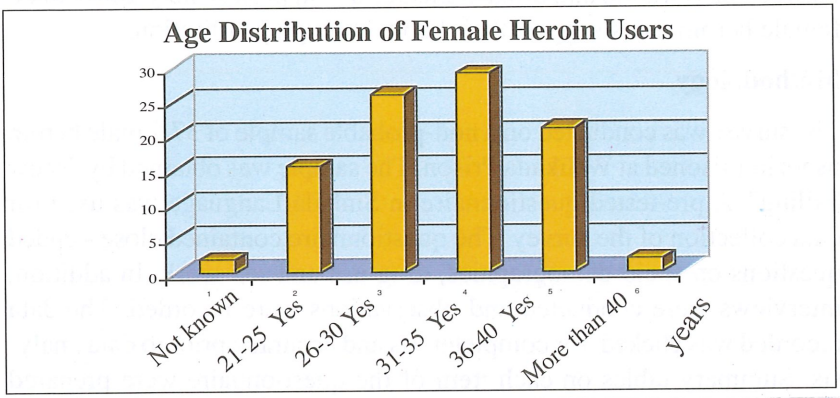
A total of 37 (N) females were interviewed for the survey. Thirty Four (92%) female drug users were from Colombo City and Suburbs. Three (8%) of them from Ratnapura, Gampaha and Kalutara districts. These women were temporarily resided in Colombo. Of the Sample some women were living on streets.

A majority of them came from unstable family backgrounds and generally from poor social strata of the society. Their spouses were labourers or street level heroin vendors.

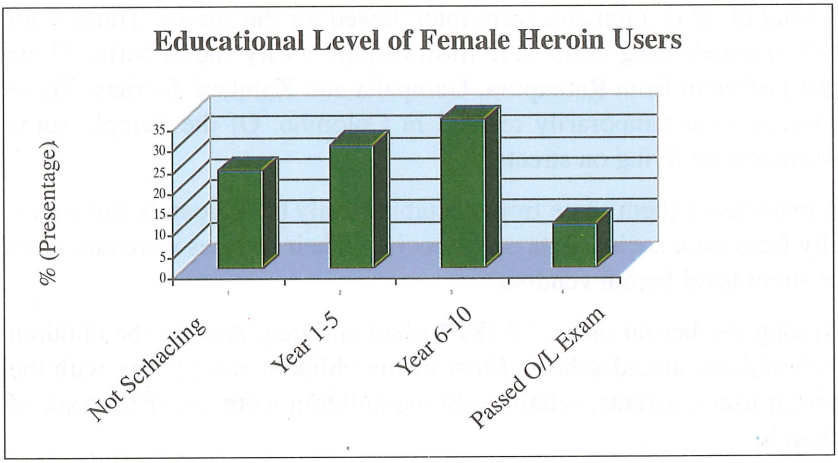
Among the heroin users, 33 (89%) had children. Among the children 30% did not attend school. Most of the children were living with the heroin user's parents, relatives. Some children were under the care of church.

Among the heroin users, 30 (81%) were Sinhalese. Five (14%) were Tamil and 5% Muslims. 26 (71%) of them were Buddhists, four (11%) Hindu, five (13%) Christians and 5% Muslims. Even though there were opportunities to practice their religion within the prison premises only christian women worshipped.

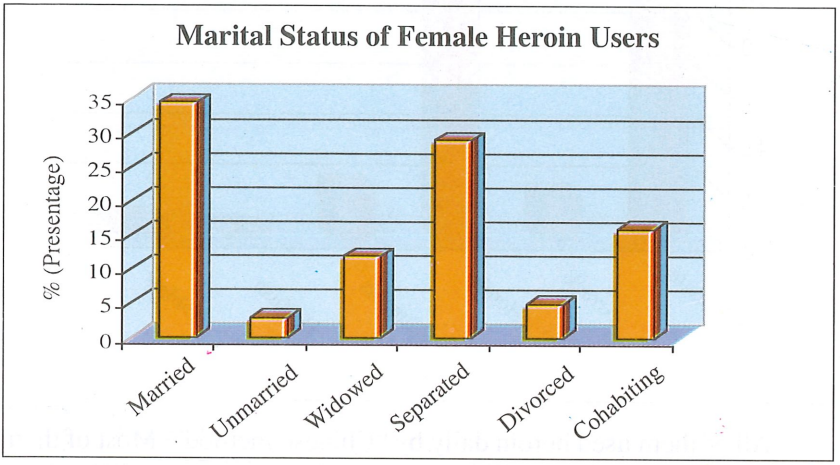
The age of the heroin users ranged from 21-40 years. Half of them 52% were aged between 31-40 years and 16% were between 21-25 years. 27% were between 26-30 years and 3% was between 41-50. One (2%) female did not know her age or her birthday.



Of the sample 65% had studied up to Grade 10 and11% had passed G.C.E. Ordinary level exam. A quarter (24%) of the females had never being to school. Among the uneducated, Five (11%) could write their name and place their signature.



Most of the female heroin users (45%) were either cohabiting (16%) or separated (29%). 35% of them were married legally. One (2%) was unmarried. 5% of the sample was divorced and 13% widowed.

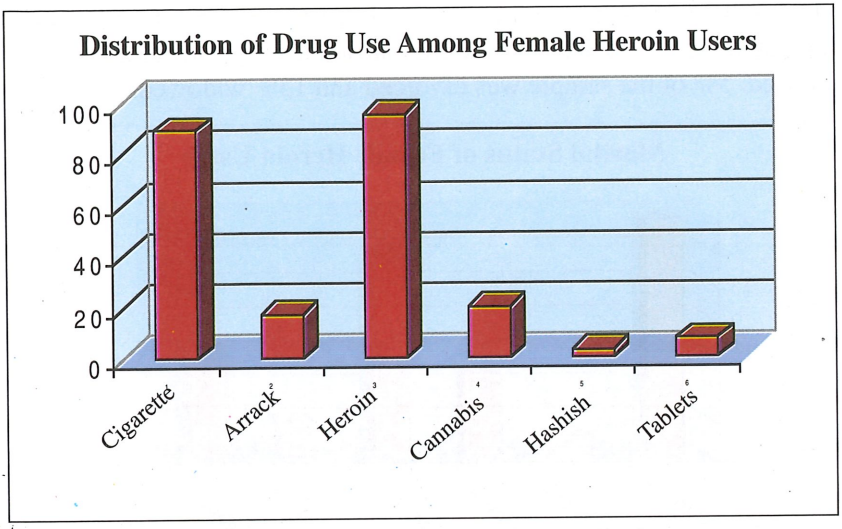


Most of the female heroin users (95%) were employed in the variety of occupations. 19 (51%) women were sex workers and one woman was engaged in pick pocketing in addition to sex work. 07(19%) women were street level heroin vendors. 22% were small businesswomen such as selling flowers, fruits, vegetables and king coconuts. One (3%) was a music teacher (private tuition) and 5% were unemployed.

Of the sample 30 women (81%) earned between Rs. 2000 and 3000 per month and 11% earned less than Rs. 1000. Three of them (8%) had no permanent income. Although some of them earned more than 1000 per day they did not reveal the actual earning.

Drug use background of the subjects

The study subjects were multiple drug users. In addition to heroin, 7 (20%) consumed alcohol, 7 (20%) cannabis and two (5%) hashish, Smokers in the sample were 81%. Among them 3 (8%) had used medical drugs such as diazepam, barbitone and methadone, as an alternative for heroin when their pockets were empty or when heroin was not available in the market.



All of them used heroin daily by "Chinese method". Most of them (60%) spent between Rs. 200 and 300 on heroin per day. 27% of the heroin users spent between Rs. 100-200 per day and only 13% spent between Rs. 300-400. 31 (84%) women used 4 to 6 "packets" of heroin and 16% used 7-10 "packets" per day. Normal price of one heroin packet is Rs. 50-60 in the market.

Of the sample 19(51%) women earned money for heroin through sex works. 19% women earned money through selling heroin, and 24% women earned money through petty business. 6% earned money through illegal activites.

Among the female heroin users 25 (67%) had been introduced to heroin by a friend. 10 (27%) by her spouse or partner and 3% by one of her relatives. Another one (3%) had used it due to curiosity while selling heroin. 36 (97%) had received heroin free of charge at the introduction.

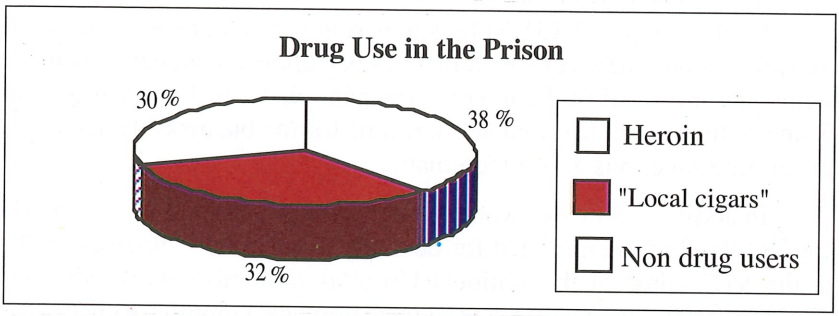
25 females (67%) had used heroin as their first drug, 11 (30%) had used tobacco and 3% had used cigar. 43% of the females had used heroin between 21-25 years of age of first use and, 11% had used it below the age of 15 of first use. Another 27% had used heroin between 16-20 years of first use. 16% had used it between 26-35 years of age and only one (3%) had used it the age of 53 years.

Two (5%) women had experimented with injecting drug use. One person has injected the drug in 1988 and the other in 1995. Borth of them had stopped injecting drug use due to the fear of HIV/AIDS contraction.

Drug use in the Prisons by subjects

Among the sample 14 (38%) have been taking heroin in the Prison. 7(50%) of them consume heroin at least once a week and 4 (28%) of them at least 2-3 times a week. Rest 3 (22%) used it occasionally.

Among them 12 (32%) smoked "local cigars". (Made by themselves using tobacco). Among them 33% smoked daily, 8-10 times per week. 6 (50%) of them smoked 1-2 times per week and 2 (17%) used if occasionally. 30% of them were non drug users in the Prisons.



They obtain drugs in the Prison in following ways.

* Through forming groups (gang) obtaining heroin from Wanatamulla on the other side of the prison.
* From visitors who come to see them
* Bought drugs when they went to courts
* Made "local cigars" from tobacco brought for chewing betel.

They often obtained heroin by using the first method. They have more contacts with the heroin vendors in Wanatamulla area where they lived in the community, or in the prison.. They pass massages "send us Kudu" written on a piece of paper, and tied to a stone and is thrown over the prison wall. Then the seller returns another stone as a signal. Then they send money and obtained heroin. Usually they bought heroin by exchanging money, soap, milk powder, clothes, etc. Sometimes they steal goods belonging to other women prisoners and buy heroin.

The second method of obtaining heroin is by the supply through relatives and friends. They bought heroin hidden in lunch packets, buns, breads, fruits and milk powder.

They bought drugs on their journey to attend courts through relatives and friends. They used to hide drugs in breast or underwear.

The fourth method is common in the prison. Usually most of the females chew beetls in the prison and female heroin users made local cigars from tobacco.

The prison officers are well aware of these methods and are trying to stop smuggling drugs in to the prison. Women are severely punished them when they are caught with drugs.

Sex work history of the subjects

Of the sample 19 (51%) female heroin users engaged in sex work as a profession. They were operating in sex work in areas such as Borella, Pettah and Fort. All of them had permanent places to find their clients. Some of them even had rented out rooms for the business. House owners at time functions as a middleman.

In addition, 5 (13%) women were lesbians. Among the sex workers 6 (16%) had been treated for Sexually Transmitted Diseases (STD) at the STD clinic of the National Hospital, Colombo, while 35% sex workers used to go to clinic at least once or twice a month for check ups. All of them were aware of the STD/HIV/AIDS and they said that they insisted their clients to use condoms.

Treatment and rehabilitation

Of study subjects 35% had taken treatment for heroin from private doctors. They never had taken drug treatment at residential treatment center. They had poor knowledge about drug prevention and treatment facilities available.

Discussion

Subjects were residents of Colombo and its suburbs. The findings of the study would be more applicable to female heroin users living in this particular area.

Female heroin users are lower than those of men in Sri Lanka. According to the statistical data available of drug arrest, heroin using women are only 3% and 97% are men. Among imprisoned population

heroin using women are lower than males in Sri Lanka. That was 2% in the year 1999. Among women prisoners, most of them were drug related offenders and repeat offenders. This is similar to male drug offenders.

Traditional role of the Sri Lankan women had been changed due to various social, economic and political factors with positive implications. But the role of female heroin users has been changed to worse. They have less education, less skills, no employment, treatment, health and other services. They have been marginalized by their families and society, as they could not fit into gender notions of "Good girl", "Good daughter" and "Good wife". Therefore they feel a sense of alienation and try to escape from the family and society. It is clear that women drug users are often hidden from the public view.

Imprisoned female heroin users belong to various sub groups, sub culture in the prison and they are involved in various illegal activities such as drug smuggling, theft, sex work etc. These women are also harassed by the police, prison officers, other fellow prisoners.

Elinwood and his assistance had revealed that urban women used drugs more than the rural women. 92% imprisoned heroin using women were urban women in the present sample and this suggests that urban women use heroin more often than rural women.

Most of the females (92%) of the sample claimed to earn less than Rs. 3000 per month. Their spouses were labourers. They belong to the low income social strata of the Sri Lankan society.

The average age distribution of the subject ranged from 21 to 40 years. In a previous study, (Athuraliya 1989) the average age of the majority of female drug prisoners was between 16-35 years. This suggests that the age range of heroin using females had slightly increased between 1989 and 2000.

Of the female heroin users, 24% had never been to school. In a previous study, 67% had never been to school and this is attributed to the economic hardships faced by their families. As a result of economic problems, women were discouraged to study by their parents. This suggests that although the free education system exists in Sri Lanka a considerable number of women drug users have not had the opportunity of having any formal education.

Most of them (89%) had children, and 30% of them were in the school going age. But they were not attending school.Most of the chil

dren were living with relatives, or were under the care of the Church. This suggests that there is a need for special attention for these children's education.

50% of the females were either separated, divorced or cohabiting and only 35% were married. Of the Sri Lankan population 58.2% was married, 0.24% was divorced and 0.16% was legally separate. According to a previous study (Aturaliya-1989) most female imprisoned drug users came from unhappy families, with broken marriages, deaths and remarriages. This suggests that marital discord is very high among the females of the sample. Whether marital discord contributes to drug use or vice versa is an area worth investigation by social researchers.

All females of the study used 4 and 6 "packets" of heroin daily and spend Rs. 200 to 300 per day. In the previous study most women spent between Rs. 100 and 150 per day on heroin and used heroin more than three times a day. Apparently, the females are spending more on heroin in 2000 than in 1989.

Most of the females (67%) had been introduced to heroin by friends. (Peer pressure) This suggests that peer pressure had been the main cause for the initiation of heroin use.

Most of them were multiple drug users. In addition to heroin, they had used cannabis, hashish, alcohol and tobacco. They had also experimented psychotropic drugs. This suggests that there is not much difference of multiple drug use between men and women.

Fourteen subjects (38%) used to take drugs in the prison and these women were promoting drugs to other female offenders. They smuggled drugs in to the prison and using drugs in the "ward", toilet or public places in the prison. As Non users could observe the drug use they become a vulnerable group or high-risk groups in the prisons.

There is a relationship between drugs and sex work. 51% of the women in the sample said that they supported their drug use by engaging in sex work. This supports the view of Ellinwood that women could continue drug use longer through sex work. Chambers also revealed that all female (100%) heroin users supported their drug habits through sex work. In a previous study, the females claimed that they engaged in sex work to support their drug habit and used drugs to alleviate the discomfort of sexual intercourse with several clients during a single night. (Aturaliya 1989)

In the present study even though, 51% of the females claimed they engaged in sex work, only 7% of the previous study (Aturaliya-1989) claimed to have engaged in sex work. It may be that more and more of the females are engaging in sex work to support their drug habit in 2000 than that of 1989. Alternately, in 1989 the females would have been reluctant to tell that they engaged in sex work to support their drug use.

Of the females, 5% had experimented with intravenous (IV) drug use and discontinued it due to the fear of contracting HIV. This suggests that the sex workers had awareness of the dangers of HIV/AIDS and as a result discontinued the IV drug use.

Of the sample, 16% had been treated for sexually Transmitted Disease (STD). This suggests that a considerable proportion of sex workers had engaged in unsafe sex.

Conclusion

Although the female heroin users are few in Sri Lanka a considerable number of low-income urban women involved in drug use and drug trafficking. Most of them are vulnerable to drug use and has become a high-risk group in the prison. Therefore it is necessary to create a drug free environment in the prison. There should be a treatment programe for them including an effective follow-up service.

The major cause is that heroin using women lack empowerment as women due to inadequate education and vocational training opportunities. Although the prison is conducting some vocational training programmes, these women did not participate, as they are traditional ones as well as unable to earn enough money for their habit. Hence we need to empower women through equal access to education and vocational skills training. There is a also need to conduct awareness programmes on prevention of drugs, HIV/AIDS, treatment, and rehabilitation and should promote them for treatment.

The other major cause is the gender bias prevalent in society, and in the prison culture. Therefore we need to sensitize both men and women about gender bias and how it affects our lives. Policy makers, Decision makers, Police officers, Prison officers have to be made aware of how their gender bias affects policies and decisions they make and how these affect the lives of heroin using women.

References:

1 AHRN newsletter (The Asian Harm Reduction Network), 16, July - August 1999. 2-4p.

2 Anglin, M.D. et. al. Sex differences in addict careers; 2 becoming addicted. Am. J. Drug and Alcohol Abuse 13(1&2) 1987: 59-71p.

3 Athuraliya, C.A. Study on imprisoned female drug offenders; National Dangerous Drugs Control Board, 1989: 1-4p.

4 Chambers C. A. et. al. Narcotics Addiction in females; A rare comparison. Int. J. Addict 5 1970: 253-280p.

5 Eldred, C. A. and Washington, M. N. Female Heroin addicts in a city treatment programme; 1975:

6 Ellinwood, E. G. et. al. Narcotics Addiction in males and females; A comparison. Int. J. Addict 1 1989: 33-45p.

7 Ratnayake, Y. Senanayake, B. Hand book of drug abuse 1996-2000, Research & publication division. NDDCB, 33-35p.

8 Haser, Y. et. al. Sex differences in addict careers; 1. Initiation of Use. Am. J. Drug & Alcohol Abuse 13 (1&2) 1987: 33-57p.

9 Kandiah, P. R. Heroin users in Sri Lanka, Refinement of the careers study. Research Unit, NDDCB, 1994, 31-40p.

10 Rosenbum, M. Women on heroin. Burnswick, New Jersey, Ruguers University Press, 1981 abuse information.

11 Rosenbum, M. Sex role among deviants; the women addicts. Int. J. Addict 16 1981: 859-877p.

12 World Drug Repot. Oxford University Press, 1997. 79p.

This paper was presented at the "Eighth National Convention on Women's Studies" on 24th March 2002, at Center for Women's Research (CENWOR)

Preliminary Needs Assessment for Drug Control in the Northern and Eastern Provinces

Y.Ratnayaka, P.R. Kandiah, Bhadrani senanayaka.

Background

With cessation of hostilities with the Government and LTTE in 2002, all government agencies were asked to visit and restore the operations and services in Nothern and Eastern provinces. To re-establish drug control measures in the area the National Dangerous Drugs Control Board decided to assess the situation the two provinces. Due to the Prolonged ethnic conflict, like may other infrastructure facilities the infra structure for drug control is skeletal in the North and East. Therefore, preliminary needs assessment for drug control work in the Nothern and Eastern provinces was critical. Although the NDDCB was in tough with the provinces, had conducted outreach activities in the Ampara district and conducted training and awareness programmes on trincomalee and in jaffna, and was collecting whatever data available on drug abuse in these areas, it was necessary to get a clear and up t date assessment. The Board received financial assistance from the world Health Organization for the study.

The Northern and Eastern Provinces

The Nothern and Eastern Provinces, Popularly known as "North-East", occupy the entire North-Eastern coastal area of the country. The area consists of 19,000 sq. km of land and eight districts. The districts of Jaffna, Kilinochchi, Mannar, Mullaitivu and Vavunia belongs to the Nothern province while the districts of Ampara, Baticcaloa, and Trincomalee represent the Eastern province. The whole area is basically dry during the most part of the year. The North-east monsoon brings the rain to the area during September to December.

Both provinces had "cleared" and "uncleared" areas until very recently. The term "cleared area" referred to areas controlled by the Government while the term "uncleared area" refers to the areas controlled by LTTE. The same areas now called government- controlled areas and LTTE controlled areas. The Government provide services on both areas. However, major services such as health has been weak in the entire North-East area for a substantial period.

The census of population and Housing conducted in july 2001 covered only 18 districts out of 24 districts in the country. Only Ampare district was fully covered out of the eight districts in the Nothern and Eastern provinces.

The conflict situation in the last two decades has severely interrupted the health information collection system in the provinces. No information is available on Nothern and Eastern provinces, except Ampara district, in the Health Bulletin.

In the Northern and Eastern provinces, 2062 cases of drug related arrests from the Eastern province and 44 cases from Northern Province Was reported between 1997 and 2001. In the Eastern province, 2,119 cases of cannabis, 442 cases of heroin and 2 cases of opium were reported during the period under review. Similarly, from the Northern province, 44 cases of cannabis and 33 cases of heron were reported during the corresponding period.Furthermore, 61 persons had received treatment for drug use from the Northern and Eastern province between 1997 and 2001.

Table 1 : Population in Northern and Eastern province by Districts

District	Land area Sq km	1981	2001	GA Report	Population Density 81	Population Density 01
Ampara	4,430	388,970	589,344	589,344	86	140
Batticaloa	2,610	330,333	486,447	504,000	134	186
Trincomalee	2,648	255,948	340,158	322,000	98	135
Jaffna	983	738,788	490,621	493,000	795	528
Kilinochchi	1,237	91,764	127,263	152,000	80	106
Mannar	2,002	106,235	151,577	104,000	53	81
Mullaaitivu	2,517	77,189	121,667	199,000	39	50
Vavuniya	1,197	95,428	149,835	138,000	36	81
Total	**17,724**	**2,084,665**	**2,456,904**	**2,501,000**		
Sri Lanka					230	299

Source : Department of Census and Statistics

Northern province is only separated by approximately 29 km of shallow sea with close link to south India. The province has well established smuggling routes for good, including drugs. Considerable number of persons from the North and East had gone to south India as displace person. Some of them had

Table 2 : Distribution of population by ethnicity in Northern & Eastern Provinces

District	Sinhala	Tamil	Muslim	Other	Total
Ampara	39%	18.7%	41.6%	0.7%	100%
Butticaloa	2%	75%	24%	1%	100%
Trincomalee	28%	34%	37%	1%	100%
Jaffna					
Kilinochchi					
Mannar	1%	95%	4%	0%	100%
Mullaitivu					
Vavuniya	11%	82%	7%	0%	100%

Source : Department of Census and Statistics

Table 3 : Number of persons Arrested / Treated for Drug Abuse in Northern & Eastern provinces for drug related offences between 1997 and 2001

District	Number of persons Arrested	Number of persons Treated
Eastern Province	2898	31
Ampara	1966	4
Batticaloa	335	2
Trincomalee	597	25
Northern province	77	30
Jaffna	11	0
Kilinochchi	0	21
Mannar	6	1
Mullaitivu	3	3
Vavuniya	57	5

Source : Handbook of Drug Abuse information 2002, NDDCB

Been lured to heroin use and sex work in South India while their stay as displaced persons. This had implications for the spread of drug use and HIV/AIDS.

Several persons from the Northern province had been arrested internationally as couriers of heroin, especially to Western countries. There are also reports of narco-terrorism involving militant group in the North and East. Eastern province has well established illicit cannabis cultiva

tions, which supply it to other parts of the country. Considerable number cannabis related arrests had been reported from the Eastern province.

Part 1 - Assessment on Eastern province

A Rapid Preliminary Needs Assessment (RPNA) for Drug Control for the Eastern province was conducted at Uppuvali, Tricomalee on December 10, 2002. Participants from Health, Education, Law enforcement, Social services and Non-governmental Organizations of Trincomalee, Batticaloa and Ampara districts were represented at the meeting.

The aim of the meeting was to obtain quantitative and qualitative information related to drug abuse situation, available human resources and infrastructure facilities and assess the resources needed for drug control activities in the Eastern province (EP). The assessment was carried out with face-to- face discussions with the participants by the NDDCB personnel on various aspects of drug control in the province. Health, Education, Law Enforcement and NGOO sectors of Eastern province were represented at the meeting.

The discussion of issues was centred on the present drug abuse situation in the EP, present level of drug control activities in the province and drug control needs of EP and way to meet these needs. The need for a drug surveillance system for EP was emphasized at the meeting. The surveillance system would continuously collect information about drug abuse situation in the province and take appropriate response to prevent drug abuse in the province. The system would function at district level, which would be coordinated at provincial level.

Also the participants pointed out the need for specialized centre for treating drug dependents, including alcohol dependents, in the Eastern province. Therefore, these persons are compelled to travel to Colombo or Western province to obtain treatment services, which is costly and time consuming. This situation including other factors inhibit drug dependent persons seeking treatment. Also most of the drug prevention activities in the Eastern province are carried out in an ad-hoc manner. Therefore, the participants were of the view that this centre could coordinate these activities in the EP.

The provincial Director of Health stated that he could allocate a building for this purpose at the meeting. The NDDCB personnel pointed

out based on their experience of running four drug treatment centres that these centres are much expensive to be maintained in the long run. Also suggested that the "camp" method is a more cost-effective way of treating drug dependents. The NDDCB could provide technical support if such camps for drug dependents could be organized in the Eastern province.

Health sector participants were of the view that drug control activities are needed in the Eastern province. Drug dependent persons have come for treatment for drug use in Trincomalee, Batticaloa and Ampara districts to them. They anticipate drug related problems would increase with the revival of tourism and increased transport facilities with the areas of Eastern province. Programmes for prevention of drug abuse would help to tackle such problems in the province. According to health sector participants, abuse of alcohol by school students needs attention. Abuse of drugs and alcohol by internally displaced persons due to the war is another area, which needs action.

Health sector representatives stressed on the need for contineous collection of information and data for drug control activities in the Eastern province. They stressed on the need for drug surveillance system. This system would collect date at destrict level and provincial level and provide information for drug control in the province. A multi-disciplinary team for drug control in the province comprising health, law enforcement. social services and educational sectors will co-ordinate activities at the district and provincial level.

Educational sector participants stressed on the need to conduct drug prevention programmes at the schools, educational institutions and for school dropouts. They suggested that dramas, street dramas, speeches and contests based on drug prevention activities could be conducted. Participants from social services department and probation stated that presently Social service officers engage in counselling of drug dependent persons and probation officers deal with young drug users.

Law enforcement officials stated that drug abusers were arrested from all districts of the province on recent times. Heroin abuse is presently restricted to pockets of urban areas. However, it has a potential to increase many-fold with the revival of normalcy in the province.

Participants of all the sectors agreed on the need for a drug surveillance system and a centre for drug control in the province. Also agreed on the need to appoint a multi-disciplinar group to co-ordinate the drug control activities in the province.

Drug abuse situation

Cannabis, heroin, alcohol, kassippu (*illcit* liquor) are the durgs abused in the Eastern province. Manual workers and farmers mostly abuse cannabis. It is also used in cooking meat curries, to prepare 'subji'- a homemade beverage and rotties. Cannabis is used with tea and smoked like a cigar or through water vapour. The estimated number of cannabis users in the Eastern province to be 30,000 persons according to the participants of the study. The high- risk groups for cannabis use are persons who are above 14 years of age engage in manual work or farming.

Heroin abuse has been reported from Trincomalee, Batticaloa and Ampare districts. The estimated number of heroin users in the Estern province is 1,550 persons according to the participants Trincomalee, Ampare and Batticaloa were 750, 500 and 300 respectively. The number of users could be considered less due to the transport difficulties in the province. As the fisher folks live in close knit communities and often have contacts with business groups thus, they are more vulneralde to heroin use. As they are part of fish business networks fishermen travel to Trincomalee from other districts.

The high-risk groups for heroin use are mostly fisher folks in the Eastern province. The identified high-risk areas of heroin use in the Trincomalee district were Linganagar. Alaswatta China Bay, Town area and jamaliya. Kathankrdi in Batticaloa was considered as highly vulnerable area for heroin due its well established commercial with Colombo city.

Alcohol abuse is on the increase and even some women have become users. Internally displaced persons are affected by increase alcohol use including illicit liquor. Kassipu is sold in polythene packets which price ranging form Rs. 10 and 15 per packet, also available is bottle for Rs. 40. Today is also used by alcohol users, which is used at Rs. 20 per bottle. Between 10% and 15% of house- hold have an alcohol user. Cigarette smoking is coming down especially in the upper social cases in the Eastern province.

Table 4 : Estimated number of substance abusers and at- risk groups in the Eastern province

Substance	Estimated number	At risk groups
Cannabis	30,000	Farmers, manual workers
Heroin	1,550	Fisher Folks
Alcohol*	8,000	Internally displaced persons
Psychotropic	2 to 3 per week	Bus or train passengers

* Including illicit liquor

Ten thousand internally displaced families, approximately 50,000 persons, live in the Eastern province. Among them there are 8,000 persons were estimated to be addicted to alcohol.

Psychotropic substances unwittingly introduced to passenger travelling to Eastern provinces. At least one case is reported each week and the symptoms last for 3 to 4 days. Largactil or lorazepam in 1 to 2 mg is the drug in question.

Indicators of drug use:

The following indicators were suggested to measure drug use in the Eastern province: number of drug related hospital admissions, number of drug related arrests, number of drug related complains, number of drug related crimes, quantities of drugs arrested, number of drug related family disputes and number of teacher counsellors available.

Surveillance:

No drug surveillance system available at present in the Eastern province. Deputy provincial Directors could formulate district level drug surveillance groups involving the Divisional secretariats to be coordinated.

Social issues:

The major social issues that affect the Eastern province at present are unemployment and school drop-outs which is over 50% after G.C.E (ordinary level). The anticipated future problems are resettlement of internally and externally displaced persons in the province, issues associated with middle east workers and increase in the availability of drug abuse ease of transport to Eastern province.

Sources of information: prof. Somasundaram, Jaffna Teaching Hospital, Dr. Ganaeshan, Batticoloa Teaching Hospital and Dr. Murganathan, Batticoloa Hospital were identified as sources of additional information of drug abuse situation in the Eastern and Northern provinces. Dr. Arulanathan, Batticoloa hospital is involved in the HIV/AIDS programme.

Campaigns

The health promotion campaign currently functioning in the EP are HIV/AIDS programme in Batticoloa, Nutrition improvement programme in Batticoloa, Dengu Eradication campaign, UNESCO programme and Divisional secretariat Environment committee.

Non-Governmental Organizations

Lions, Rotary, Care international, sarvodaya, sariram, MSF, Sri Lanka Red Cross, international centre for Red cross and population Lanka were the Non Governmental Organizations were identified at the meeting as could be helpful in future activities.

Participants of the meeting requested assistance for Drug Awareness programmes, training of trainers programmes, in-service training programmes on drug control, street drama teams, mobile video unit, counsellor training programmes and mobile drug training programmes.

Recommendations for drug control

Cannabis, heroin and alcohol are abuse in the Eastern province. Prevention, Treatment and rehabilitation services for these drugs are not adequate in the province. These problems have the potential to increase in the near future. There exist a need for trained human resources in the drug related problems such as counsellors. There is a need for a surveillance system for drug abuse in the EP at district level and provincial level. There is a need for 'centre' to co-ordinate drug control activities for the EP.NDDCB could provide the technical assistance to develop such a centre in EP. The 'camp' method of treating of drug dependents could be use to treat drug dependents. The assistance of the provincial Director of Health services is forthcoming for drug control activities in the Eastern province.

Part II - Assessment on Northern Province

A Rapid preliminary Need Assessment (RPNA) for drug control activities in the Northern province was carried out in jaffna in March 2003. Regional Director of Health services office in jaffna organised meetings under the guidance of the provincial Health services of the Northern and Eastern provinces. Officials from the Health, Education, and NGOO sectors attended. While allopathic and indigenous medical practitioners represented health sector international and local NGOO too participated. Representatives from the Thamil Eelam Health Service, which is responsible for health services in the LTTE controlled area, too, attended. Jaffna, Killinochchi, Mullaithivu and Vavuniya districts were represented.

Tobacco, alcohol (licit and illicit), cannabis psychotropic medicines were the substances used in the Northern province according to the participants. They also stated that there were some indications to suggest that heroin is being used in Mannar district. However, the use of Kasippu, illicit alcohol was the major problem in the Northern province. It was sold in small poly thene packs alcohol poisoning too have been reported due to the improper distillation process. The consumption of alcohol had increased during the period of ethnic problem. And in some areas and families especially some widows, had taken to producing and distributing illicit alcohol to support them economically.

Few persons were reported to be using morphine, sosagan, pentasosagan and pethidine. They have initially used these drugs for traumatic conditions under medical advice and continued to use them even without it. Northern province is a traditional tobacco growing area in the country. Many verities of tobacco are produced in this area and one such type is tobacco leaf dipped in cannabis and other psychotropic substances solutions known as koodu. Also, "artificial opium" from Kankuram plant (*Nux Vormica*), is used by some. Panparak - packeted sweet arecanut - is the latest addition to substances used in the North. Detailed findings of the Rapid Assessment of drug abuse situation in the districts of the Northern province were as follows.

Jaffna

Jaffna district had an approximate population of 600,000 in 2003 with a male to female ratio of wom en slightly more than men (around 4.5 to 5.5). The substances used in the Northern province were alcohol,

cannabis, opium *Nuxs vormica* ("artificial opium") - an extract from kankuran tree, tobacco, and psychotropic medicines. Approximately 60% males and 5% females used alcohol and tobacco. Less than 1% of male in the district used other substances. Unskilled workers, drum beaters (Natuvars) and temple priests were the high- risk groups of cannabis. Cannabis was also used for cooking purposes and making coffee. Persons who used psychotropic medicines for traumatic conditions on medical advice had continued their use even without it. Valvatithurai, a costal town once well known for smuggling opium from India in the past, is situated in the Northern province.

Killinochchi

Killinochchi district has a population of 180,000 in 2003 with a male to female ratio of 1:1. Most areas of this district are under LTTE control at present. Alcohol, tobacco and psychotropic medicines were used in the districts. Illicit alcohol is the main problem in this district. Nearly 50% of male and 5% female were alcohol or tobacco users. Less than 1% used psychotropic medicines.

Mullaitivu

Mullaitivu district had a population of 146,000 with a male to female ratio of 1:1 Alcohol use, licit and illicit, was the most pressing problem. Seventy five percent of males and 5% of female used it. With the return of the normalcy, many Muslims had returned to Mullaitivu district. An increase in the use of cannabis could be expected. Abuse of psychotropic medicines is a problem in the district. Ayurvdic practitioners, too resort to prescribing allopathic medicines. Also there were a large number of disqualified Phamacist who dispense medicines without medical prescriptions. Some parts of Mullaitivu district is under LTTE control.

Vavuniya

Vavuniya district has a population of 145,000 with a male to female ratio of 1.:1. Alcohol, cannabis, tobacco, psychotropic medicines were used in the district. Sixty per cent of male and less than 5% of females used alcohol. Of the males, 50% use tobacco and 5% cannabis less than 5% of the people used psychotropic medicines. Illicit alcohol packed in polythene bags were sold as soothe, *vadi* or *kaffir*. Mostly unskilled workers and persons in the welfare centres of internally dis-

placed persons used it. Ex- member of the militant groups uses psychotropic medicines such as sosagan intravenously. These drugs have been used by them to overcome trauma at some point of their life on medical advice, which they had continued even with out it. Some persons who had returned to Vauniya from South India, who had fled the area as result of the conflict use drugs intravenously.

Table 3 : Drug abuse situation of the Northern province in 2003

Drug	District affected	Estimated Number of Users	At risk groups
Alcohol	Jaffna, Killinochchi, Mullaitivu, Mannar, Vauniya	308,000 maies and less than 26,000 females	Mostky male unskilled workers, displaced persons and less than 5% of females
Tobacco Cannabis	Jaffna, Killinochchi, Mullaitivu, Mannar, Vauniya	282,000 males and less than 25,000 females	Mostly males and less than 5% of females
  Heroin	Mullaitivu, Mannar, Vauniya Mannar	Less than 25,000 persons Not available	Males including drum beaters, priests and unskilled workers
Psychotropic Medicines			Few persons in Mannar district
	Jaffna, killinochchi, Mullaitivu, Mannar, Vauniya	Less than 25,000 persons	Ex-militant group members and persons treated for trauma

Mannar

The drug use situation of the Mannar district much similar to Vauniya district which are adjacent districts. Due to it's the proximity to Tamil Nadu, South India, and the ethnic conflict, many persons had fled to South India have returned to the district after the normalcy. Some of the returnees had brought back their drug use and sexual habits from India, which are pron to HIV/AIDS. There had been some reports to suggest drug traffickers too, are trying to exploit this district to smuggling drugs from India.

Treatment for Women Affected by Drug Abuse Problems

Abstract

P. Ravi Kandiah and Bhadrani Senanayake

The objective of this paper is to highlight the need for Women Drug Treatment Programme (WDTP) and an to outline the concept of such a treatment programme. Even though the female drug users reported are around 1% of the total the drug users in Sri Lanka, apprenly they are much under reported. This is mainly due to the stigma and discrimination associated with female drug use and due to absence of women friendly drug treatment programmes.

Research on women drug users suggests that even though less women initiate drug use than men, they get dependent on drugs in a shorter time period than men, become more isolated from non-drug using women. Women are stigmatised than men due to drug use and considered more deviant than their male counterparts by the society. Often women initiate drug use due to men and become dependent on these men for their social and economic needs. Women who are associated with male drug users are more vulnerable to antisocial activites and to sexually transmitted diseases than non-drug using women. One the other hand women in developing countries have less access to information and treatment for drugs or sex related problems.

The available drug treatment programmes in the country at present are mostly patronised by male drug users and less geared to meet the needs of female drug users, However there is a need for a WDTP with counselling and referral services for women and theirr families. The ideal WDTP would be community based, women and family friendly, demand driven, with a holistic approach to problems of women Most importantly these treatment programmes should be cost effective and sustainable with community resources with minimal outside intervention.

Overview:

Based on a research done on imprisoned women, more than half (52%) were drug users. Among them nearly a third (32%) was for excise offences and a fifth (20%) was for narcotic offences. Even though the

women drug users were around 1% of the total, the male to female ratios was decreasing over the last years. (Handbook on Drug Abuse information - 2003).

Women are more vulnerable to drug peddling or prostitution as a means to support their drug use than men. Their drug use could due to their spouses, children or siblings. Half of the number of imprisoned women was involved in sex work and a third of them were affected with Sexually Transmitted Diseases. Ten percent of them had experimented with injecting drug use. The profile of female drug user a women in her 30's with a low level of education income with involved in antisocial activities. Almost all the women drug users (95%) smoked tobacco and a considerable number of them used alcohol or psychotropic substances (Female Drug Offenders, 2000).

The heroin using female sex workers used more than one drug. Almost all (95%) smoked tobacco, a third drank alcohol, a quarter used cannabis and 1 in 20 had used hashish or abused prescription drugs such as diazepam, barbiltone and flunitrazepam. Among the sex workers, a third had been treate for Sexually Transmitted Diseases (STD). The age of the female sex workers ranged from 21 to 40 years. While two third of the sex workers had not attended school, a third of their too did not attend school due to economic hardships faced by the families. Majority of sex workers (95%) earned less than Rs. 100 (1 US $) a day (Study on heroin using female sex workers, 2001).

The family situation, poverty and poor dwelling conditions were attributed to continued women drug use. Being able to earn money from drug peddling and to continue with drug use had prevented them form seeking treatment for drug use Most of the Female drug offenders were aged between 16 and 50 years (Athuraliya, 1989).

The number of women arrested for drug use and women treated for drug use had doubled between 1996 and 2000. The number of women arrested and treated for drug offences had increased at a higher rate than that of men during the corresponding period. Even though women drug users are less in number at present there is a potential they become sizeable number in the future. The health and social consequence of such a situation could be devastating. Hence there is need for a national policy and strategy for dealing with women drug problems Kandiah, 2001).

International research literature on women drug use suggests following aspects about it. The female's social role dictates that the shares her spouse's drug use if her male spouse being a dependent of drugs and addicted. Women become addicted to heroin faster than men. Nearly half the number of women drug users becomes addicted a drugs within 3 months from the first use. However, this is dependent of the traditional sex role woman is expected play in the society she lives (Rosenbaumn, 1981). Even though, women and men followed similar pattern of narcotic use yet women's addiction careers being "compressed" or in shorter cycles. The other major areas of sex differences were in accordance with the sex role stereotypes of the women and it was not related to their age (Anglin 1987) . Women tend to maintain longer drug habits before trying abstinence and showed less oscillation than man do (between drug use and abstinence). Perhaps this is due to the option of supporting drug habits though prostitution (Ellinwood, 1966). Research on the relationship between prostitution, and drugs indicates almost all female heroin users support their habits though prostitution, while some estimate range as high as 70%(Chambers, 1970). Nevertheless, some research suggest otherwise.

The women involvement in drugs can be broadly categorised into women nondrug users with drug abusing family member or partners, women drug users and women involved in production and distribution of drugs. Women drug users become more isolated from non-drug using women than men, thereby more stigmatised, and be seen as 'doubly deviant' than their male counterparts in their society. Women often initiate drug use due to men and once they become dependent on drugs, they become dependent on these men for their economic and social needs. By trading sex, they alienate themselves even more from their existence as wife or mother. This progressive slide into drug culture identity is termed 'role engulfrment'. Research suggests that women tranquillisers twice as much as men use Poverty and intimidation drive women to become drug couriers in the developing world. This is mostly due to financial temptations and many women involved in it were unaware of the crime committed and had no previous criminal record (World Drug Report, 1997).

Women and Children friendly programmes:

The available drug treatment programmes for drug use in Sri Lanka at present are mostly patronised by male drug users. A part form prison

drug treatment programmes a some wards in residential treatment programmes there are very few treatment programmes for women drug users. Most of the available treatment programmes are residential and institutional type. These Programmes are not much geared for the needs of women drug users or their families. Even the few institutional type treatment programmes for women cater only to specific women groups like female prisoners and could not be extended to other groups of women drug users. As these programmes carry certain amount of stigma and discrimination for which women drug user are sensitive to.

The utilization of drug treatment services by women is dependent on many factors. Two of such main factors are stigmatisation attached to the programmes and childcare concerns. Women drug users are much sensitive to treatment services that would stigmatise or discriminate against them. Therefore, the treatment services should be women friendly to attract women drug users in the first place. Childcare responsibility provides contrasting response among women drug users. Some women drug users may approach drug treatment services due to their concern for children while the others may postpone doing so to care for their children. Hence, being accommodative to childcare concerns would enable the women to overcome barriers to entering drug treatment.

Outreach Counselling and Referral:

Women associated with drug use are often subject to physical and psychological problems and often have a low self-esteem about them. Many women may have a history of domestic violence or sexual violence. Women drug user may feel stigmatised by the society and themselves. Despite their drug using life styles, many women would hold traditional values and want to be mothers and cares. They may often be in conflict with themselves and society having deviated from these social roles. The discrimination against these women would narrow their option and compel them to remain in drug using life styles. Therefore, activities to enhance the self esteem and empowerment of the women is a vital prerequisite for successful treatment programme. These could be the major determinants for relapse prevention as well. Problems related to pregnancies, reproductive health and sexually transmitted diseases could be major concerns in women drug users.

The women affected by drug problems should have access to healthcare, child welfare, vocational and income generation activities, if

necessary Government and Non-Governmental Organizations providing these services should be encouraged to extend their services to women drug users as well. Professionals in relevant areas could work as volunteers. Recovered and recovering women drug users could be 'peer educators' in women drug treatment programmes.

Domestic violence poverty and malnourishment in the families and sexual exploitation could occur due to dug use. Young women working in the garment industry and special economic zones are vulnerable to drug use mostly due change in lifestyle patterns. Women drug users who had recovered form institutional treatment programmes such as prisons would need support once they out of it. The treatment programme should have an outreach arm to meet needs of women drug users.

Detoxification and relapse prevention:

Detoxification and relapse prevention are core areas of drug treatment programmes. Drug prevention professionals trained and experienced in counselling and behavioural therapy could handle these aspects better. Their work could be augmented by volunteers. Scientifically based treatment methods should be used with consideration to social, cultural and education background of women drug users. Pharmacotherapy for detoxification and management of withdrawal pain along with psychotherapy could be used under medical supervision. The treatment prosess should strive for international ethical and professional standards. The treatment goal and modalities should be tailored as far as possible to individual women drug users.

A non residential and community based treatment environment would be much better than a residential institutional one for women drug users. Counselling and psychotherapies should be main tools of treatment. The treatment methodology should be continuously adapt to the needs of wonen drug users and adopt innovation and creative approaches, where necessary. The treatment programme should be women friendly, demand driven, with a holistic approach to needs of women. The programme could incorporate day care, night care, halfway houses and home visits to women affected by drug problems. Also leisure activities and income generation activities for women could be incorporated in the programme. The programme should ideally conducted in a community based organization or primary healthcare or community organization setting.

The woman drug treatment programme should have a guiding philosophy, policies, plan, procedures and an implemeatation strategy. The treatment plan with set objectives, activities and milestones of results. The overall treatment programme should be run by a leader-cum-manager, who could champion the cause, and a motivated multidisciplinary team. Furthermore there should be well identified stakeholders of the programme. The possibility of modifying the community based 'camp' treatment approach for women drug user is worth exploring. The women treatment programme should be sustainable with available community resources, at least in the medium term; women's organizations could play a major role in this connection. The women drug users and ex-women drug users could be encouraged to form a supportive group environment.

Monitoring, evaluation and documentation:

Continues monitoring and evaluation of outcomes the treatment programme and continuous improvement of the treatment process is needed for a pragmatic community based women drug treatment programme. Promotion of health and wellbeing should be the thrust of the treatment programme. The lessons learned, innovation and creativity of the programme should be documented for evaluation. The treatment programmes should have a constantly evolving dynamic approach. A focus group discussion or a panel discussion with a women drug users and drug workers on regular intervals could help to assess the actual needs of women drug users.

The cost-benefit and sustainability are critical factors of the women drug treatment programme. Wherever possible the service providers i.e. resource persons of the programmes and the service recipients i.e. women drug users and their families and should be from the immediate environment of the programme. The role of the informal and formal leadership should be acknowledged and they need to encouraged to become stakeholders of the programme. Having a written proposal with a work-plan, monitoring and evaluation of outcomes of the programme could help to improve the implementation of the women drug treatment programme.

Organizations or individuals interested in developing and implementing Women Drug Treatment programmes as outlined in the paper are welcomed to contact the authors of the paper on ravi@nddc b.gov.lk or badrani@nddcb.gov.lk

Reference:

1. Athuraliya, C.A., (1989), Study on imprisoned female drug offenders: National Dangerous Drugs Control Board, pp 1-4
2. Anglin, M.D. et al, (1987), Sex difference in addict careers: 2 Becoming addicted A.m J. Drug Alcohol Abuse, 13(1&2): 59-71
3. Chambers, C.et al (1970), Narcotics addiction in females: A rare comparison. Int. J. Addict 5: 257-278
4. Ellinwood, E. H. et al. (1966), Narcotic Addiction in males and females: A comparison. Int.J.Addict 1 1986:33-45
5. Senanayake, Bhadrani, (2001) Study on heroin using female sex workers, A collection of Research Papers and Research Abstracts on Drug Abuse, National Dangerous Drugs Control Board. 2001-2: 68-78
6. Handbook on Drug Abuse information - 2003, National Dangerous Drugs Control Board, p 42 - 48
7. Kandiah. P.R., (2001), Trends in drug use in women in Sri Lanka: 1969-2000) A collection of research papers and research abstracts on drug abuse 2001 & 2002, National Dangerous Drugs Control Board, pp 41-50
8. Rosenbaum, M. (1981) Sex role among deviants: the women addicts. Int. J. Addict 16: 859-877
9. World Drug Report, Oxford University Press, 1997, pp 79-82

This paper was preseted at the 9th National Convention on Women's Studies at Centre for Women's Studies (CENWOR) 2004.

Opinion Survey on Heroin Trafficking in Sri Lanka

R. Chandrasoma, B. Senanayaka, K. Bandara.

Introduction

Today the drug problem is recognized as a complex phenomenon having national and international dimensions. In the Asian region lies illicit poppy and opium plantations known as the Golden crescent and Golden Triangle are situated within the region. Therefore, the most important transit routes for trafficking of heroin through out the world lies in close proximity to Sri Lanka.

Drug trafficking and drug abuse is one of the main causes of loss of well being in Sri Lanka. Hence, the law enforcement agencies have a great responsibility in controlling the production and trafficking of illicit drugs to this country. The department of Police, Excise, Customs and the Police Narcotics Bureau are the main law enforcement authorities in Sri Lanka. Based on the heroin seizures between the year 2000 and 2004, the estimated street level supply of heroin in Sri Lanka was 763kg per annum or nearly 2 kilograms per day[1]. According to the available data, law enforcement agencies involvement is insufficient to overcome this problem.

Many studies on drug trafficking and smuggling have been carried out in other countries. Such studies especially on illicit drugs are rare in Sri Lanka. The National Dangerous Drugs Control Board decided to carry out this opinion survey of key persons to obtain a wider view of the possible scenarios related to illicit drug trafficking in Sri Lanka.

Methodology

The survey was conducted by interviewing a non-probable sample of 21 persons including government officials from the Police Narcotics Bureau, Excise - Narcotics Division, Customs Narcotics unit and the heroin users who obtained treatment from the NDDCB treatment center at Thalangama, during February 2005, using an interview guide. In addition, secondary data also collected. All the information collected was recorded. The data records were checked for completeness and accuracy prior to analysis.

Limitations

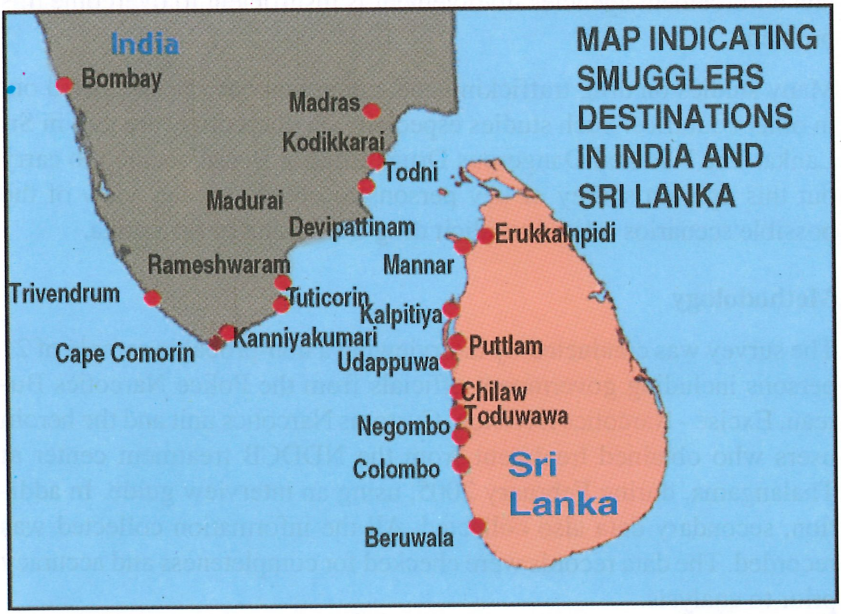
The findings of this survey were based on opinions of drug enforcement officers and drug users. The sample size was rather small and the information was based on their experiences, knowledge and observations on drug trafficking. Some of the interviewees had different ideas, some times collide with each other.

Some of the figures and facts could not be accurate due to the sensitive questions, which effects the ethics of the law enforcement personnel.

Results

Heroin smuggling situation

India, Pakistan, Afghanistan, Thailand, Iran, Laos and Myanmar are the main drug manufacturers in the Asian region. More than 90% of the sample revealed, that most of the heroin was smuggled to the country from India and Pakistan via South India to Western coast of Sri Lanka using fishing boats. However, the law enforcement officials feel that



heroin is transported from Thailand too though there was no evidence on this. In addition to heroin, many other kinds of drugs also illegally traffic from these countries. 33% of the sample reported that hashish, opium, morphine and ecstasy were smuggled to the country in addition to heroin.

Heroin from India is mainly transported by sea. It is transported by boats coming from Chennai, Trivendram, Madras and through the Rameswaram Kovil and reach coastal areas of Sri Lanka such as Hikkaduwa, Trincomalee, Thalaimannar, Chilaw, Maravila, Negombo, Beruwala, Mannar, Kalmunai, Akkaraipattu, Thoduvawa, Batticaloa, Arugambay, Panadura, Puttlam and Udappuwa. Eighty-one percent of the persons interviewed pointed out that heroin is coming via Chilaw and 71% said through Negambo and 67% via Mannar. This condition can be attributed to the fact that there are many natural harbors along the coast of Sri Lanka.

When heroin is trafficked by sea, heroin traffickers adopt varies kinds of tactics and means to dispatch heroin to Sri Lanka. One of them is that some fishermen obtained heroin from the incoming boats. Further, for the exchange of heroin in the middle sea they use light signals and cellular phones to communicate to each other. They conceal heroin inside the imported goods coming by ships. In some occasions some members of the all three forces help the heroin traffickers as they have taken bribes. There is also evidence that heroin is sent through refugees, transported from India to Sri Lanka. To avoid detection, the traffickers tie packets of heroin under the boat and transport to Sri Lanka, and if detected by the police or the navy, traffickers cut the ropes and allow the bags of heroin to settle in the sea and later fetch them through divers. Mostly, fishermen and fishing boat owners in Chilaw area bring heroin into the country.

More Pakistanis and comparatively less number of Indians are smuggling heroin by air through the airport. In comparison, lesser quantity of heroin is trafficked by air than sea. For an example, about 30-40 kg of heroin is transported by sea at one time and a smaller quantity of about 400-500 g is transported at a time by air.

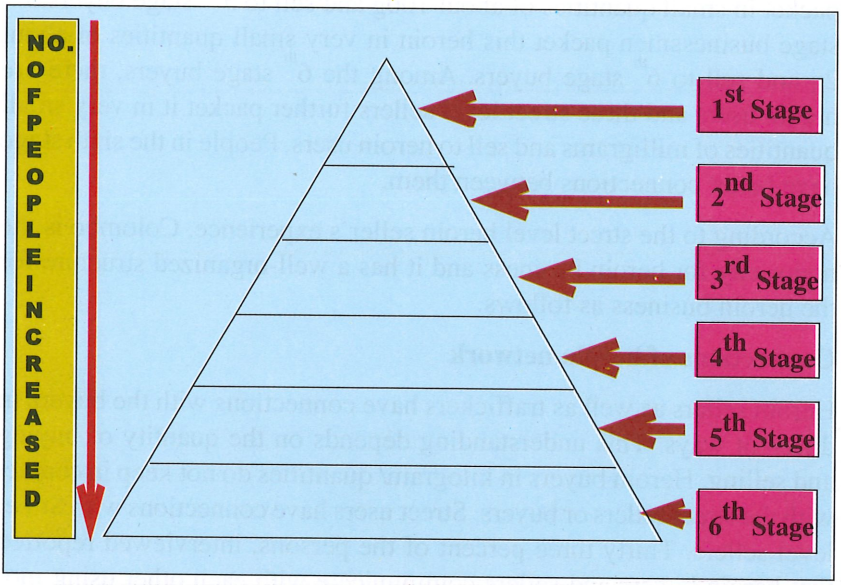
Heroin traffickers use various kinds of methods or systems to traffic heroin by air. They conceal heroin in the body cavities, spaces in electrical appliances, in shoes and in condoms, liquid form dipped in cloths etc. In addition to that, transports of heroin is arranged via Middle East to Sri Lanka due to strict check up and search of flights from Pakistan to Sri Lanka at the Katunayake airport. Sometimes the person who traffics heroin in his/ her bag is unaware that he/ she is transporting heroin. Furthermore the person, who transports heroin, tries to show checking and legal officers that he/ she is an ordinary person as others. Furthermore in some other occasions helps a stranded passenger by purchasing an air ticket for him or her and through them, dispatch heroin to Sri Lanka.

In addition to heroin, other kinds of illicit drugs also transported to Sri Lanka comparatively in lesser quantities such as Hash, Opium, Ecstasy (Ethylene Dioxy Meta Amphetamine) and Morphine. Thirty three percent of the people interviewed, stated that in addition to heroin, hash comes second in order. The foreign visitors or tourists bring this narcotic item to Sri Lanka.

Network of heroin business in Sri Lanka

There are various types of people, nationalities and teams smuggling heroin to Sri Lanka. Among the people interviewed, 33% said that politicians are involved and 19% said underworld gangs are trafficking heroin to Sri Lanka. In addition to that L.T.T.E., senior business magnates in fishing trade, jewelers, vehicle importers, owners of tourists hotels, some travel organizations and some people in coastal region who keep connection with South India, traffic heroin to Sri Lanka. According to the classification of PNB, there were three grades of heroin businessmen, graded as 'A', 'B' and 'C'. Nineteen persons belong to grade 'A', 29 persons belong to grade 'B'. The number of persons in street level which belong to grade 'C' was not estimated yet. But the P.N.B. has not clearly defined these grades. However, the capacity of heroin smuggling, resources of smugglers and financial positions are considered as rough parameters to grade these three categories. Thirty eight percent of the interviewees said that most of the heroin businessmen mainly live in Colombo City and suburbs.

According to the opinion of law enforcement officials, there is a network or a hierarchical order in Sri Lanka for heroin business. Most of the interviewees did not have a clear idea of this.



1st Stage - Persons who have not seen or touched heroin (money investors)

2nd Stage - Persons who have seen but haven't touched

3rd Stage - Persons who have seen, touched and sold heroin

4th Stage - Whole sale dealers

5th Stage - Retail sale dealers

6th Stage - Street level sellers

According to the above diagram, the ringleader of this business is one person who has not seen or touched heroin. He is dealing only with the credits and debits of the business. The people who were 2nd in command in this business have seen heroin but not touched it. The people who are first and second in command deal with the whole heroin business in the country and the law enforcement institutions of Sri Lanka so far has not clearly identified these persons. It is felt that there are only around three

persons in these stages. The law enforcement agencies in Sri Lanka are aware of 3rd to 6th stages people and the 3rd stage people are the ring leaders of selling heroin. The underworld gang leaders are 3rd stage sellers and selling heroin in kilos. 4th stage obtain heroin from 3rd stage and packet in small quantities of about 100g and sell to 5th stage buyers.5th stage businessmen packet this heroin in very small quantities of about 2g and sell to 6th stage buyers. Among the 6th stage buyers, there are heroin users and these street level sellers further packet it in very small quantities of milligrams and sell to heroin users. People in the sixth stage have better connections between them.

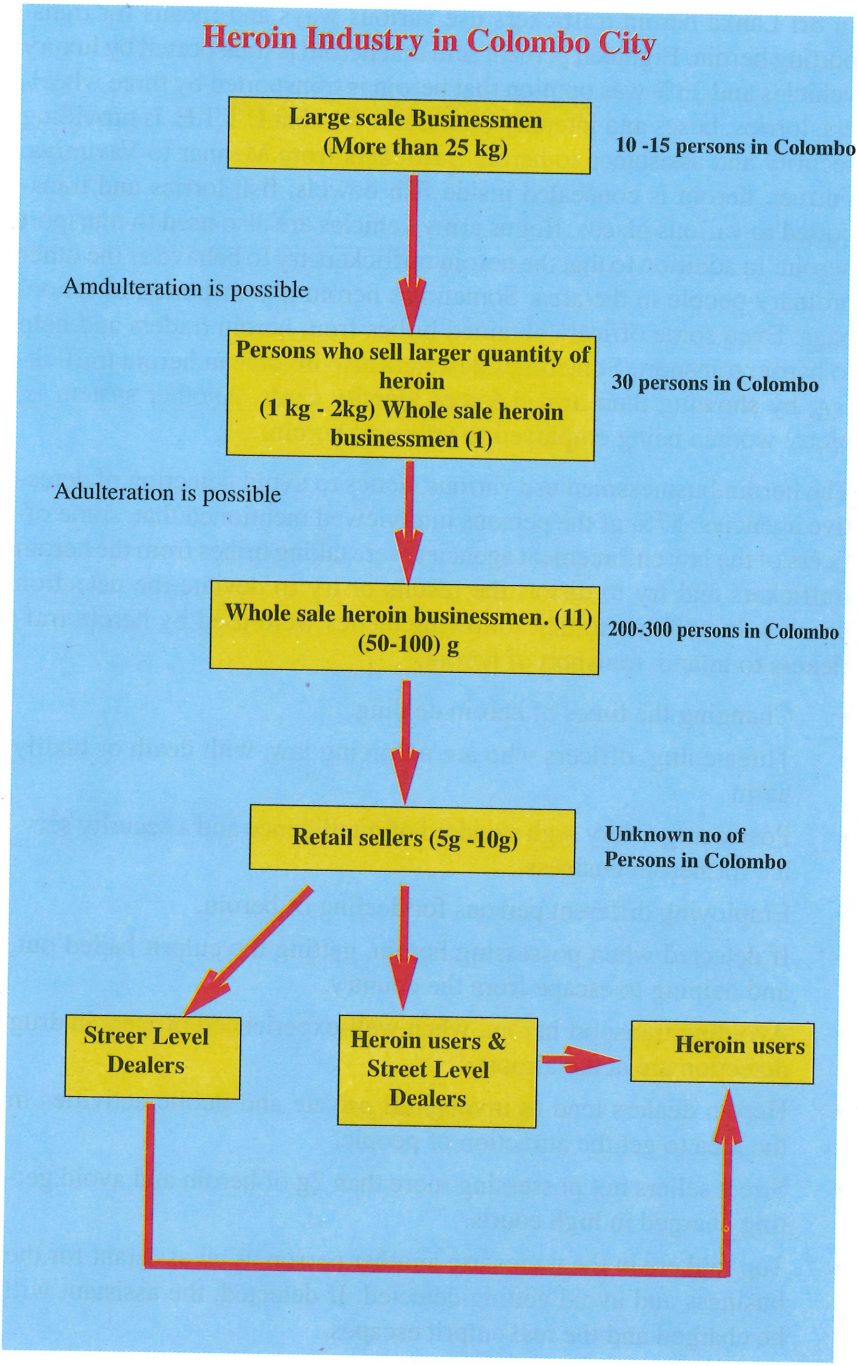
According to the street level heroin seller's experience, Colombo is the major city for heroin business and it has a well-organized structure for the heroin business as follows.

Connections of heroin network

Heroin sellers as well as traffickers have connections with the buyers in different ways. This understanding depends on the quantity of buying and selling. Heroin buyers in kilogram/ quantities do not keep in contact with the street sellers or buyers. Street users have connections with Street level sellers. Thirty three percent of the persons, interviewed reported that heroin buyers and sellers communicate with each other using mobile phones. Further 22% of the sample mentioned that sellers and traffickers do not have close connections with the buyers, but due to varies reasons, the number of heroin buyers is increasing daily. Some heroin users tend to traffic heroin, to obtain their daily heroin requirements. Similarly when unemployed persons obtain money, they carry out this business effectively. Furthermore heroin dealers help the people in the area on various matters and win their hearts. Sometimes high quality heroin packets (packets contain more amount of di acetyl morphine than an ordinary one) are sold or given to new users or non-users to increase their group of customers.

Internal transport of heroin

According to the information of PNB, after unloading heroin in Colombo, it is taken to safe houses for hiding. Very often these safe houses are changed for safety, time to time. Later, heroin is distributed to various places in Sri Lanka. The highest profit for sale of heroin is obtained in the Colombo district.


Heroin Industry in Colombo City
Large scale Businessmen (More than 25 kg)
10 -15 persons in Colombo
Amdulteration is possible
Persons who sell larger quantity of heroin (1 kg - 2kg) Whole sale heroin businessmen (1)
30 persons in Colombo
Adulteration is possible
Whole sale heroin businessmen. (11) (50-100) g
200-300 persons in Colombo
Retail sellers (5g -10g)
Unknown no of Persons in Colombo
Streer Level Dealers
Heroin users & Street Level Dealers
Heroin users

In Sri Lanka heroin traffickers use various ways and means for transporting heroin. Eighteen percent said that heroin is transported by luxury vehicles and 23% was opinion that heroin is transported by three wheelers, lorries, buses and intercity buses. It is felt that L.T.T.E. is providing security and assistance to heroin traffickers from Mannar to Vavuniya. Further, heroin is concealed inside fish bowels, fish lorries and transported to various places. Bogus army vehicles are also used to transport heroin. In addition to that the heroin traffickers try to behave as the other ordinary people in the area. Sometimes heroin is transported in school bags. Even some officers obtained bribes from heroin traders and help to heroin transport. Sometimes deserters also involve in heroin trafficking, by showing their armed forces identity cards. Another system is, pretty women being employed to transport heroin.

The heroin businessmen use various tactics to avoid detection of detective agencies. 57% of the persons interviewed mentioned that, some officers of the law enforcement agencies were taking bribes from the heroin traffickers and try to distort the results or try to deviate the detection process. In addition to that following tactics were used by heroin traffickers to inland transport of heroin.

- Changing the times of heroin dealing.
- Threatening, officers who are enforcing law, with death or bodily harm.
- Possessing a very high standard of intelligence and a security service for heroin business.
- Employing different persons for dealing of heroin.
- If detected when possessing heroin, getting the culprit bailed out, and helping to escape from the country.
- Avoiding transport heroin, when well-experienced officers in drug detection are at the airport.
- Heroin dealers tend to involve all private and public activities in the area to get the attraction of people.
- Street sellers not possessing more than 2g of heroin and avoid getting charged in high courts.
- Top rankers in the trades use another person as an assistant for the business and avoid getting detected. If detected, the assistant will be charged and the real culprit escapes.

Quantities of heroin

Eighty one percent of persons interviewed reported that Brown Sugar is the most abundant heroin variety, which illegally comes in to Sri Lanka. Thirty eight percent of the interviewees pointed out that, the total quantity of heroin is brought to Sri Lanka for a year is insufficient to meet the demand whereas 29% said that the heroin quantity brought to Sri Lanka is sufficient for Sri Lankan consumption.

Fluctuations of heroin supply

Fifty seven percent of the people, interviewed were of opinion that lesser quantity of heroin were imported from India and Pakistan during their festival season (June and August)[3]. In addition when of main heroin dealers were taken in to custody, there was a drop of heroin supply to Sri Lanka (e. g.: year 2001). Further, during the shortage period heroin users tend to use tablets such as methadone, barbiturates and charas (low quality heroin / mono acetyl morphine) etc. optionally.

Twenty percent of the interviewees, pointed out that during the festival and tourist seasons (March, April and May), the quantity of heroin coming to Sri Lanka was increased when compared with the rest of the year. After MOU signed with the LTTE, the quantity of heroin trafficked to Sri Lanka has increased. Heroin supply to Sri Lanka depends on the periods and the degree of poppy harvesting in heroin manufacturing countries. Five percent of the people interviewed said that definite periods couldn't be defined on this regard.

Sri Lanka as a transit country for heroin

Sixty two percent of the persons interviewed reported that heroin was transported from Sri Lanka to other countries and 24% said it was transported to Maldives and 19% said to Dubai. It is doubtful whether heroin is transported to Western countries, Middle East, U.S.A, Nigeria, Germany and Australia via Sri Lanka.

Purity of heroin

All the people interviewed said that various kinds of adulterants or diluents are mixed with heroin to reduce the intensity of di-acetyl morphine content. This is done at third and fourth stages of the heroin business network. According to the interviewees, sometimes-heated paracetamol powder, ash of mosquito coils, stones, many kinds of tablets (pheno

barbiton, diazepam) powders were mixed to heroin but not poisonous substances were introduced.

However, di-acetyl morphine content of street level samples of heroin was analyzed on monthly basis by the National Narcotic Laboratory of the NDDCB has proved that caffeine, diazepam, glucose, sucrose, lactose, strychnine, paracetamol and acetaminophen are the adulterants that are used for the adulteration purpose of heroin[4].

Suggestions of law enforcement officers to control heroin trafficking

Provision of advanced scientific training and technological systems for the investigation, detection of heroin smuggling will help to improve enforces.

Fourteen percent of the interviewees reported that more sophisticated equipment should be provided to drug detective officers.

Public must be motivated, to provide confidential and true information on illegal smuggling of drugs.

Government should introduce an effective reward system for the people who give accurate information on drug trafficking and must be assure their safety.

A satisfactory salary increment, awards for law enforcement officers should be implemented.

A Narcotics Control Unit should be opened in every police station islandwide.

Politicians should not be interfering with the narcotic control activities or narcotic control officers.

All institutions engage in curbing narcotics in Sri Lanka must be brought under one authority and if required, law must be framed or amended.

All the people in this country must be made to understand this menace and help control this narcotic usage in Sri Lanka.

Conclusion

The major countries that smuggled heroin to Sri Lanka are india and Pakistan. Larger amount of heroin is smuggled via sea from India and comparatively smaller amount of heroin is through air from Pakistan.

The heroin couriers come via seaways reached Sri Lankan coastal towns like Chilaw and Mannar. Brown sugar is the most abundant variety, which imported to Sri Lanka. Various kinds of tactics used by heroin traffickers to transport heroin through air as well as via the sea.

It is felt that many politicians, senior businessmen, under world gangs are predominantly involved in heroin trafficking in Sri Lanka. Muslims are the main ethnic group, engaged with heroin trafficking in the country. Most of the heroin businessmen generally live in the Colombo district.

The study reveals that, there was no estimation of the number of heroin traffickers as well as the quantity of heroin trafficked to Sri Lanka. Luxury vehicles, three wheelers, fish transport lorries and inter city buses are used to internal transport of heroin. The quantity of heroin illegally enter to Sri Lanka per annum is circulated throughout the Country. There is a constant supply of heroin to Sri Lanka, from January to December except, between June and August. During June and August heroin supply to the country was decreased. Therefore heroin users tend to use other drugs such as "charas" (low quality heroin) and psychotropic substances during this shortage period.

Paracetamol ad caffeine are commonly used adulterants in heroin. Sri Lanka is considered as a transit country for heroin, which transport heroin to the Maldives and Dubai. In addition to heroin trafficking, Hashish, ecstasy (MDMA), opium and morphine also are illegally smuggled to Sri Lanka comparatively in lesser quantities.

Drug traffickers tend to provide bribes to the officers of law enforcement authorities and kill people to break the chain/ network of heroin business, as tactics to escape from the law of the country. Therefore, all narcotics drugs control authorities of Sri Lanka must work together to control the supply of heroin to Sri Lanka.

References

1. Ratnayake, Y. Senanayake Bhadrani, Handbook of Drug Abuse Information 2004, NDDCB, Pg - 22-30.
2. Annual Report - 2003, Sri Lanka Police Narcotics Bureau, Pg - 6.
3. Seasonal Variations in the demand for Drug Treatment Services (internal Research report), Research Unit, NDDCB, Pg. 1-2.

This paper was presented at the 10th International Conference on Sri Lanka Studies at University of Kalaniya, 2005.

Injecting Drug Users in Sri Lanka

Ravi Kandaiah, Bhadrani Senanayake, Y. Ratnayake

Abstract

An exploratory descriptive study on injecting Drug Users (IDUs) in Sri Lanka was undertaken in the light of the increase in the number of IDUs between 1998 and 2002. The aim of the study was to understand the nature and extent of injecting drug use in the country. Case histories of 45 IDUs were studied and their demographics of drug use, injecting drug use, criminality and sexual practices. Hence, the information on IDUs of Sri Lanka was minimal and most of it was anecdotal such a study was justifiable. A non-probable "snow-ball" sample of IDUs was studied from the correctional institutions (80%) and the community (20%) Face-to-face interviews were conducted with IDUs taking into consideration of their physical signs of drug injecting, and their body language and verbal expressions during the interviews.

All of the IDUs interviewed were males. The highest 58% was within the age group of 31-40 years. Majority (78%) of them come from Colombo and adjacent urban areas. Most of them were from lower social, economic and educational background and employed as small-scale entrepreneurs or manual workers. The IDUs could be broadly categorized into 3 groups regular injectors, intermittent injectors and those injected once or few occasions. Some had started injecting drugs abroad while the others had started in Sri Lanka. Many of the regular IDUs had criminal record of drug dealing or commitment for money.

Periods of social and political instability or high profile drug law enforcement appear to have enhanced the spread of injecting drug use. The 'Bishanaya" period between 1988-89 is an example for the former and middle of 2001 was that of for the later had coincided with increase in injecting drug use. During these periods, the street level supply of heroin had been severely hampered, which had forced the heroin chasers (Chinese method users) to switch to injecting as a means of survival. The current low prevalence of injecting is probably due to the high purity of, around 50%, heroin available at the street level. This could be enabling the chasers to achieve the expected results. Nevertheless, during the heroin scarcities, some heroin users had resorted to injecting and pharmaceutical drug use. The reason for switching to injecting was to

obtain a better high with the least amount of heroin. Even though it had been possible initially, in the long run the tolerance to heroin had increased, making it necessary to increase the quantity of heroin injected to get the same high. As a result the withdrawal symptoms too had become overwhelming. Being unable to cope, some IDUs had reverted to chasing after some time.

Many of the IDUs had engaged in un-protected sexual activities with multiple partners. This includes commercial sex-workers from several countries of high seroprevalence of HIV/AIDS and STDs. Many IDUs have believed that injecting heroin could enhance their sexual libido, which had been proven otherwise within 3 months of regular injecting. This had been the prime reasons for injecting in some IDUs. Even though sharing of injecting equipment was minimal among IDUs, many of them had shared needles and syringes with the person whom they had learnt to inject drugs. The IDUs had several beliefs about injecting. First belief was that if an air bubble would enter into the circulatory system it would burst within body causing death to the injector. Second, if 'impure' or 'dust' heroin was injected it would make a IDUs extremely sick. Third, if heroin injected into the same area of the body repeatedly the veins in that area would 'disappear'. Fourth, consuming lot of fruits is good for IDUs.

Disposable 5cc or 10 cc syringes were used for injecting heroin. Hot water, limejuice and Detol were the disinfectant used for cleaning. 'Inject", 'cylindering' and 'shooting' were the terminology used to describe injecting drug use. Limejuice and Vitamin C pills were added to heroin to make it more soluble to facilitate injecting. Some cases of hospitalisations and deaths of IDUs were reported due to heroin overdose.

Sri Lanka at present could be considered as a low prevalence country for injecting drug use and HIV/AIDS. Nevertheless, with the decrease in accessibility of heroin, mainly due to high price, variation in the purity and frequent scarcities, the prevalence of injecting drug use could increase. Hence the injecting drug use along with seroprevalence of HIV/AIDS and other blood and sexually transmitted diseases need to be closely monitored. Regular screening for these conditions among selected at-risk populations and contingency programmes to manage associated health and social cost are required.

Overview

An increase in the number of injecting drug Users (IDUs) was reported during the recent past in Sri Lanka. The number of reported IDUs increased from 7 in 1998 to 24 in 2002. The highest increase of IDUs (77) was reported in 2001. The information on the current situation about injecting drug use in Sri Lanka is mostly anecdotal and needs scientific investigation. Possibly the number of IDUs could increase due to the constant increase in price of heroin as well as frequent break downs of supply of heroin at street level. One of the main reason for low prevalence of IDUs is the availability of high purity heroin at the street level that satisfies the needs of heroin chasers. The annual average purity of heroin or the Di-Acetyl Morphine content was 56.2% and 46.1% in 2001 and 2002 respectively (Ratnayake, Y. and Senanayake, B. 2003).

Based on a study conducted on 371 non-probable sample of heroin users in 1994, 3% was Injecting Drug Uses (IDUs). The mean age of an IDU was 26 years. Most IDUs were Sinhalese while the Muslims were more than of Tamils. Being able to get a better high while keeping the cost low was the main reason for switching to injecting from chasing. Quarter of heroin used for chasing for a dat was sufficient for injecting. Those injected regularly was 6% and those injected daily was only 2% of the heroin users. Forty per cent of the IDUs had shared needles or syringes at least once while 26% had cleaned their injecting equipment. Among the IDUs., 68% was injecting with another person. Nearly 62% of the IDUs had used heroin to enhance their sexual performance and 16% of IDUs have had 'sex-for-money' (Kandiah, 1994).

In a study carried out on 400 prisoners for drug offences at Welikade Prison in 2002, which consisted of 200 male prisoners 3% was IDUs. Only 11% of the sample was aware that HIV could transmitted through contaminated needles and syringes sharing and 8.5% was aware it spread though sexual contacts. Only 12% believed that they could contract HIV/AIDS (Ameelan and Sujatha, 2003).

Sri Lanka, has about 8,500 adults and children living with HIV infection as of December 2000. UNAIDS estimates that HIV infection rate among adults, between the ages of 15 and 49, is 0.07%. Since 1986, 495 cases have been officially reported of AIDS. While men outnumber women in the early phases of HIV epidemic, the number of women in

fected almost equals the number of men. The current ratio of HIV positive men to women is 1.4 to 1.

Although the overall HIV prevalence is low, extensive risk factors and behavior patterns, which facilitate rapid spread of the infection, are widespread and make Sri Lanka highly vulnerable to an HIV/AIDS epidemic. These risk factors of HIV epidemic include low condom use, commercial, sex, Sexually Transmitted Diseases, high mobility and Injecting Drug Use.

Sri Lanka has an estimated 40,000 heroin dependents, of whom about 2% inject the drug. Although there have been no reported cases of HIV thus far, this group is at high risk because of needle sharing.

Although research on sexual behavior of drug users in Sri Lanka has been limited, a few studies conducted in the urban areas suggest low condom use among men. For example in 1997, only 4.7% of men between the age of 15-49 in Matale and 9.6% of men in Colombo reported ever having had used condoms, although about two thirds of them had heard it. Among men who declared that they have had sex with casual partners during the last 12 months, only 26.3% in Matale and 44.4% in Colombo reported using a condom.

It is estimated about 30,000 women or girls and 15,000 boys work in commercial sex in the country. The risk of spread of STD among those engaged in sex work is heightened by low condom use and prevalence of STDs. In one study 45% of female sex workers had experienced multiple STDs, and 70% of male patients at STD clinics had reported frequenting sex workers. In addition, women and children in prostitution are considered most vulnerable to HIV infection, because they often lack the ability or power to negotiate condom use with clients or to seek STD treatment. They are often "hidden," creating a challenge for HIV prevention services to reach them.

Every year, estimates of STD cases that are detected vary from about 60,000 to 200,000, of which only 10%-15% are seen in the government clinics. This is a concern because STDs facilitate the spread of HIV infection and serve as indicators for low condom use and other high-risk sexual behaviors. Seventy percent of male patients at STD clinics had reported frequenting sex workers, and 45% of female sex workers had experienced multiple STDs.

Migration within Sri Lanka and to neighboring countries-such as India, Where HIV prevalence is higher. Thousands of men live away from their families as sailors and migrants abroad and as workers in the free trade Zones and plantations. Removal from traditional social structures, such as family and kin, had been shown to promote unsafe sexual practices, such as engaging in multiple sexual partners and in casual and commercial sex as well as abused women and children (World Bank, 2002).

"The current low prevalence of injecting is probably due the high purity of, around 50%, heroin available at the street level. This could be enabling the chasers to achieve the expected results. Nevertheless, during the heroin scarcities, some heroin users had resorted to injecting and pharmaceutical drug use".

HIV Positive Sex Workers were reported only from Kurunegala, which was 0.5%. The reported mode of HIV transmission were 86% heterosexual, 12% homosexual/bisexual, 1% blood transmission and 1% mother to child. Transmission by injecting drug use has yet to be seen (National STD/AIDS Control Program 2001).

Nevertheless, IDUs had not been selected as a population to test. The Draft National HIV/AIDS Policy recognizes that the efforts should be concentrated among groups in society, which are vulnerable to HIV infection, and this includes IDUs. Furthermore, Sri Lanka had decided to adopt a policy that HIV in drug using population should be reduced by reducing the size of the drug using population rather than adopting harm reduction strategies (Government of Sri Lanka 2001.)

Injecting is considered as the most dangerous method of drug administration. One of the principle reasons for this is the link between the unsafe injecting practices and the possibility of contracting HIV/AIDS (World Drug Report, 1997). The biggest share of HIV transmission in the USA is due to sex between homosexual men. However, in Europe the dominant mode of transmission had been injecting drug use. Patterns in Asia are changing rapidly, with an increasing share attributable to IDU (UNDCP, 1992). With the passage of time it becomes increasingly evident that the heterosexual transmission overlaps with other transmission categories, very often the category of person having sex with

injecting drug user (IDU). This leads to a category of persons with Sexually transmitted Diseases (STDs) through whom acquisition and transmission of HIV is greatly facilitated (Mann.j., 1996).

The use of blood-contaminated injecting equipment by which the virus is injected directly into the blood or body tissues may carry a higher risk of HIV/AIDS than unprotected sexual intercourse. Nowadays, an unsuspecting average person may contract HIV most probably through unprotected heterosexual intercourse with an HIV-infected injecting drug user (IDU). The micro-transfusion of blood that occurs when two or more people share same needle and/or syringe contaminated with HIV are particularly efficient vehicle for the transmission of HIV as well as other blood born infectious diseases. Therefore such a shrining injecting equipment carries a high risk of AIDS and other blood born infectious diseases (World Drug Report, 1997)

Based on a profile study on 6,390 IDUs recruited mainly outside treatment agencies between 1989 and 1992, the results of 12 major cities world-wide, the typical IDU was a male, predominantly aged between 20 and 34 years, not married, less than ten years of full-time education, unemployed, with no source of legal income, mostly living with current sex partner and homeless, more than 50% had been in prison and over 30% had been incarcerated more than 5 times (WHO, 1997). The IDUs population to be between 3.1 and 3.6 million according to a survey covering 61% of the world population published in 1992,. The number of IDUs per 100,000 populations ranged less than one In Indonesia and the Philippines to 5948 in Bermuda. On average it was of few hundreds per 100,000 populations in many countries (Mann.j, 1996).

It is difficult to give a rationale for the spread of injecting drug use independent of continent, culture, religion, social class, urban or rural circumstances (De Jarlais, D. C., et al., 1993). Yet injecting drug use had become a world wide phenomenon: the IDU has become a frequent source of infection as Asia entered the HIV/AIDS epidemic in the course of the 1980s. Injecting drug use is now the second most frequent type of exposure to HIV. To date, 80% of HIV infection in Malaysia (Tschie, H., et at., 1995) and China (Zheng, X., et al, 1995) seems to be related to injecting drug use.

Injecting tend to be the predominant route of heroin administration unless inexpensive, pure, high quality heroin is available in ample quan-

tities. This has not been the case in recent years, even in source countries (Grund, J. P. C., et al, 1992). The reduced volume of injectable form facilitate illicit distribution, while compared to inhaling or smoking, injected heroin provides of equivalent 'high' with only one third of the quantity. Injecting not only maximizes the quantity of drug enters the brain, but does the dose of drug fully utilized (Mann, J., 1992).

In macro cities like New York, Rio de Janeiro and Bangkok, HIV had been introducing to local people through 'bridge groups' such as drug injecting homosexual men and 'drug tourists'. Both have various patterns of needle and syringe sharing (WHO, 1994). A Core of drug users (14%) was sharing needles and syringes on a daily or weekly basis according to this study.

Based on the WHO's Multi-City study, countries with less than 5% seroprevalence of HIV among IDUs were rated 'law', between 5% and 20% as 'medium', and more than 20% as 'high'. Large-scale behavioural changes with respect to injecting drug use and safer sex among IDUs have been followed by stabilization of HIV seroprevalence in almost all cities in the study. At a global level, some 22% of world's HIV/AIDS population injects drugs (Des. Jarlais, D. C., et al., 1995). Individual countries reported quite different shares form 6% in UK to 80% in Thailand. These data are crucial guide both for formulation of preventive policy and anticipate future health costs related to HIV/AIDS.

Taking into consideration the health and social consequences of injecting drug use, the new trends in the increase in number of IDUs in Sri Lanka merited investigation. There is also a need to formulate a policy and a programme to meet the spread of injecting drug use and any related contingencies and their consequences. A preliminarily exploratory study on IDUs were carried out to understand the present state of injecting drug use in the country.

The aim of the study was to understand the extent and nature of Injecting Drug Users in Sri Lanka in 2003. The objectives of the study were (a to describe the socio-demographics of IDUs, b) to identify factors and situation that facilitate or inhibit spread of injecting drug (c to identify high risk behavior among IDUs, and d) to describe knowledge, perceptions and practices among IDUs.

Methodology

This exploratory descriptive study was conducted on Injecting Drug Users (IDUs) between year 2003 and 2004. Such a methodology was considered suitable due to the paucity of information available on the IDUs. Case histories on an opportunistic (non-probable) sample of 45 IDUs were studied. The sample was "snow-balled" starting with "seeds" from the prisons and the community. Research Officers of National Dangerous Drugs Control Board (NDDCB) conducted the data collection through face-to-face interviews with the IDUs. An interview guide with questions on socio demographic, drug use, injecting drug use, criminality and sexual practices were used to collect information.

The rapport with IDUs in the prisons (80%) were established though the prison Welfare Officers. Even though there was some skepticism among the IDUs about the research it was soon overcome by explaining aims and objectives of the study with them. The main apprehension among the IDUs was wether providing any information to the research could have any bearing on their impending court cases or their stay in the prisons. It became much easier as some IDUs had obtained the services of NDDCB in the past. As time progressed, excellent rapport was built between the researchers and the imprisoned IDUs. The NDDCB Outreach Workers enabled the researchers to contact IDUs in the community (20%). Some IDUs were interviewed at a community based drug treatment camps held at Badovita and Dehiwela.

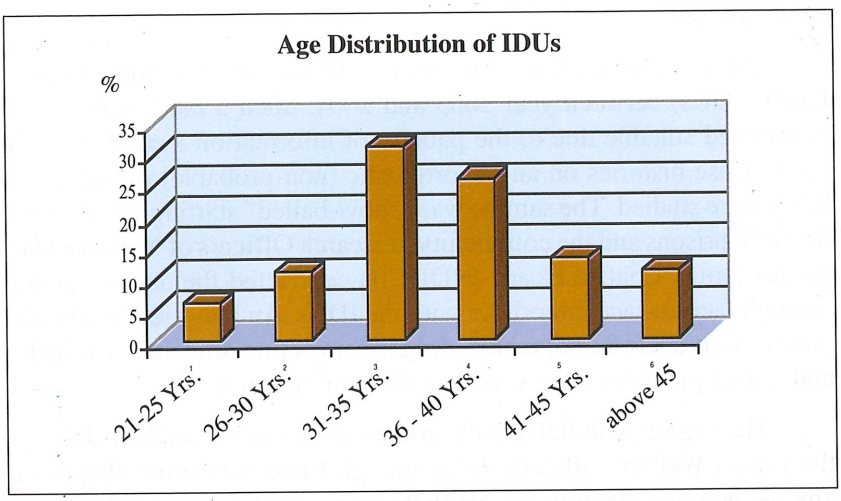
Any signs of drug injecting of IDUs was observed to validate information collected Furthermore, the Researchers monitored body language and verbal expressions of the IDUs to cross check the responses given.

Results

Socio-demographics

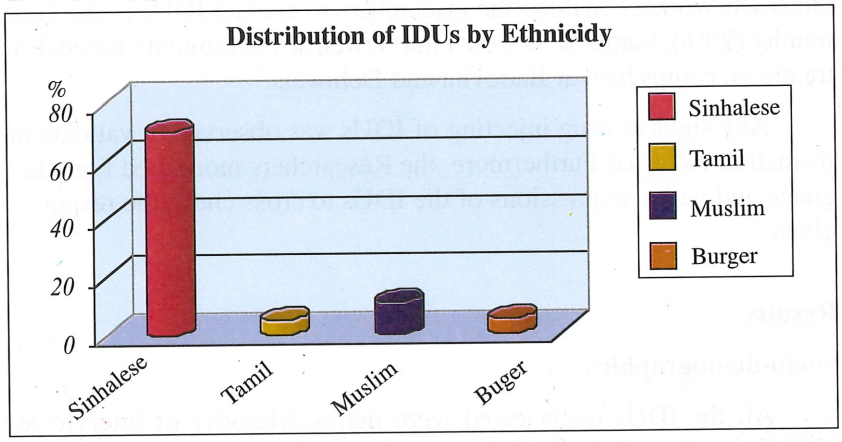
All the IDUs interviewed were males. Majority of interviewed (78%) came form Colombo district and 22% of them were from Puttalum, Kurunegala, Galle and Vavunia districts. 80% of them were imprisoned IDUs and the others were from the community.

The highest percentage (58%) was within the age group 31 -40 years and next age group (20%) was 41-50 years.

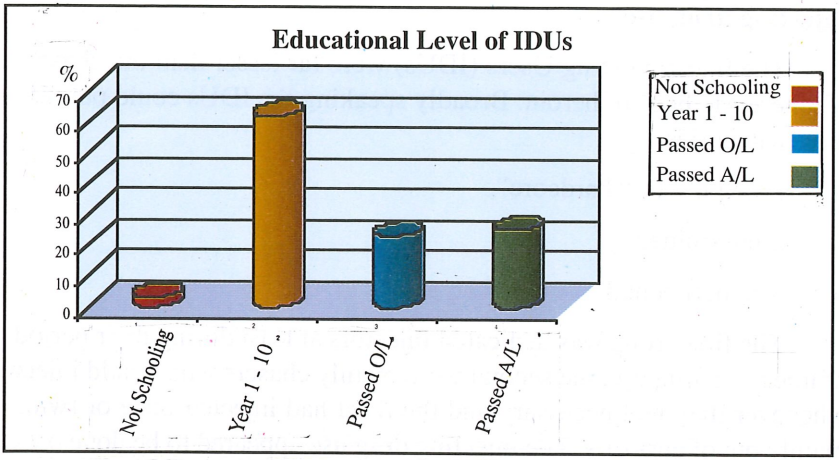


Half (51%) of the subjects were married with children. 45% was unmarried and 4% was divorced.

Majority of them were Sinhala (71%) Buddhist (67%). 15% of them were Moor, 7% Tamils and 7% Burgers.



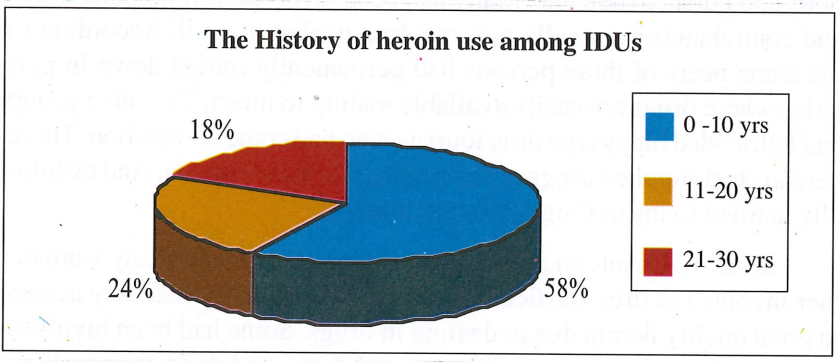
Majority (64%) had dropped out of school prior to G.C.E. (ordinary level) due to poverty or truancy. Some (18%) had attended leading schools in Colombo and even completed their G.C.E (Advanced Level). 16% completed G.C.E. O/L.



The IDUs (82%) were mostly self-employed persons or daily wage earners. One IDU was a member of the Under World gang. Their occupations ranged from sales, beauty saloons, and hotel trade to artwork. They did not have fixed work schedules with much free time in between work and their income were variable.

Drug use background of the IDUs

The history of heroin use among them was varying from 1-30 years. The majority (58%) of heroin users have been in the habit for 10-20 years. The next category (24%) was 20-30 years of heroin use while 18% had a history of 1-10 years. New users with less than history of five year were nearly 10% during these periods they started to inject drugs.



The IDUs were multiple drug users. In addition to heroin they consumed alcohol & tobacco, cannabis, hashish and used psychotropic drugs such as diazepam, barbiton and methadone.

Injecting drug use

The Injecting Drug Users (IDUs) were far lesser than the chasers (Chinese Method) of heroin. Broadly speaking the IDUs could put into three categories:

1 Regular or " hardcore",

2 Intermittent

3 Experimental.

The first group was dedicated injectors at least during their period of injecting drug use, the second were mainly chasers who would inject whenever they feel necessary and the third had injected once or twice mainly out of curiosity. The injecting drug use appeared to be done on a more secretive manner than chasing. This could be mostly due to the difficulty in hiding injecting paraphernalia in case of detection by law enforcement officers. Howèver, some IDUs had perfected the injecting technique so well that they could swiftly inject drugs even in a traveling vehicle.

While some IDUs had initiated the practice prior to 1990 and the others started it afterwards. The former group mostly consist of persons who had travel abroad in search of jobs as seamen or those persons who had links with tourist, mostly hippy type. They had lived in port cities like Mumbai or Karachi for a long time and subsequently got involved in 'sex-cum-drug' culture therein. Thereafter they had traveled to many ports and pursued the same. Many had been involved in smuggling drugs and contrabands eventually become drug dealers as well. According to the some peers of these persons had permanently settled down in port cities where drugs are easily available mainly to inject. The other group had befriended hippy type drug tourists who had come on vacation. These persons had supplied drugs or sex partners to these tourists. And eventually learned to inject drugs form the tourists.

Most: IDUs interviewed had a criminal record and many were either involved in drug trafficking or drug dealing. They had easy access to good quality heroin due to dealing in drugs. Some had been involved in crimes for profit such as robberies and thefts mainly to support their drug habit, which had also provided them with the necessary 'guts' to engage in such activities. Few IDUs had also been involved in violent

crimes such as thuggery and murder. Yet they claim injecting heroin had never induced them for any of these (Possibly there could be a sample bias as many IDUs were interviewed in prisons).

Socio-political factors appeared to have affected the spread of injecting drug use. Acute shortages in supply of heroin at street level had occurred during the periods of politically and socially unsettled times. This in turn had driven some heroin users to switch to injecting drug use form chasing to economies on heroin use and to maintain the drug habit.

Many chasers had switched to injecting as a means of getting a better 'high' with minimum amount of heroin. This was coupled with curiosity or peer pressure. Even though, many had been apprehensive of injecting the need for heroin had been so high that they had been able to overcome their apprehensions. Often the first experience of injecting and exceeded more than the expected level of high. Even though some have had some discomforts. Apparently this have given them a sense of achievement as they could manage nearly one third of the quantity of heroin needed for chasing a day.

Among the IDUs some have experienced of withdrawal symptoms and psychological problems such as phobia and nightmares. One IDU described the withdrawal as a 'ball of pain' running all over the body another as " ants bitting" over the body. However, over a period o time the withdrawal had been overwhelming to some and they had ceased injecting heroin and reverted to chasing. Another reason for doing so was the difficulty of carrying around the injecting apparatus without detection and the need to find clean syringes every time. Those IDUs who had easy availability of heroin (eg. Heroin dealers or criminals) were able to sustain the injecting drug use longer than those who did not.

The IDUs had initially got another IDUs, who had been injecting for sometime, to inject heroin on them. Thereafter, learned the technique injecting by trial-and-error. Often the new IDU had shared needles and syringes and other paraphernalia with the former IDUs. Only after sometime that they had started with their own needle and syringe. Apparently, the need to inject drugs had overcome the concern for about the spread of diseases during the initial stages of injecting.

Two cc or 5cc plastic disposable syringes used for injecting insulin were often used for injecting heroin. Some were of the habit of using the

same needle and syringe several times while others had used a new one every time. Sterilization of needles and syringe by the IDUs was minimal. Hot water, limejuice and dettol were the disinfectants used for this purpose. Most of IDUs had awareness about the health consequence of drug injecting and the spread of HIV/AIDS yet not much concern that they could contract it.

'Inject', 'cylindering' and 'shooting' were the common terminology used for injecting drugs by IDUs. The brown sugar heroin available at the street level has an average of 50% di acetyl morphine. Limejuice and vitamin C (Ascorbic acid tablets) added to heroin to dissolve it. The term 'going out' - means injecting heroin to a place other than a vein. Most new IDUs faced this problem, which would causes swelling of the place injected with acute pain. This situation was overcome by deeply massaging the place of the swelling. Disappearance of veins (nahara hangenawa in sinhala) for injecting is a result of prolonged injecting to the same area. e.g. hand. This would make the IDUs to inject to areas such as legs and groin.

Prescription medicines were abused by IDUs. Diazepam was one such commonly drug abused drug. Some IDUs claimed they had used up to 50 tablets a day. Heroin peddlers in Thotalanga known to sell a prescription drug " Nillasoya" which had got that name due to the blue colour of the tablet. Few unscrupulous dealers in pharmaceuticals were said to be supplying these drugs to heroin peddlers in the area.

A personal experience of injecting heroin of a dedicated injecting drug user was described as given below:

" About 1/2 gramme of heroin would be placed on a table spoon, few drops of lime juice with half to one tablets of vitamin C would be added to dissolve it. This mixture in the spoon would be heated with a bottle lamp or candle.

When the mixture gets heated and turns golden brown it is drawn into a syringe using cigarette filter or a cotton bud. Then the syringe would be dipped into water to be cooled.

A strip of cloth or a small twain rope would be rapped into the area eg. Arm where a vein could be tapped. Once a suitable vein is located the needle would be inserted into it then some amount of blood would be drawn into the syringe. The purpose of doing so would be two fold.

One would be ensure that a vein had been located and the other is to mix the heroin solution with blood and inject it back into the circulatory system.

In case if heroin is inject outside a vain that area would become swollen causing pain. Within seconds, along with a slight sweet, a very high sense of calmness would be felt. There after a cigarette would be puffed ad a sweetmeat or a ripe fruit would be eaten, which would enhance the feeing."

Even though many IDUs had taken to injecting drug use with the assumption that it would enable them to get better higher with a small quantity of heroin, it had not happened so in the long run. After a short while, the tolerance to heroin had increased making it necessary to increase the quantity of heroin use it have the same amount of high. On the other hand the withdrawal symptoms due to injecting drug use had been intense. Unless large quantities of heroin were injected more frequently, the withdrawals had been overwhelming. In such a scenario, the injected drug users were compelled to take to criminal activities such as property crimes and drug dealing mainly to support their heroin use. Several cases of hospitalisations and deaths of IDUs due to overdose too were reported.

Perception associated with Injection

One of the strong perceptions associated with injecting of heroin was it would enhance the sexual powers of the injector by delaying the ejaculation during sexual intercourse. This had been the reason for initiating heroin use for several IDUs interviewed. Even though, they had experienced such an effect initially which could be a placebo effect, it had disappeared within the first 3 months of injecting. Some have even lost interest in sex sometime after injecting. On the other hand, some sexual partners of the injectors had experienced displeasure due to prolonged delay in ejaculation.

Death due to entry of an air bubble into circulatory system of the injector was another such perception. Several deaths of drug injectors were attributed by IDUs interviewed to this phenomenon.

Another perception was that entry of heroin 'dust' into the injectors system could make the injector 'sick'. This could make the injector

shiver vehemently. The remedy for such situation was covering the person completely with a thick blanket till he would sweet out profusely.

Most IDUs think that they should eat more fruits while injecting drugs.

Drug smuggling & sex work

Drug dealers at international level to street level were among the IDUs interviewed. Some of them had been operating form India or Pakistan and trafficking in heroin to Middle East, Sri Lanka and European Countries. Many of them had Gone to Pakistan or India as entrepreneurs, got involved in smuggling gold or textiles across country and subsequently got involved in dealing in drugs such as heroin with the view to get-rich-quick. Even though some had become rich for a short period, they had been apprehended and even severing life sentences in prisons. Even though they had lived luxurious lives once hardly anyone visits them in prisons now.

The IDUs who were dealing in heroin appears to have a longer span of injecting drug use, mostly due to easy availability of heroin to them. Some of the IDUs have had sexual relationships with many partners. This includes relationships with commercial sex workers of Russian, Philippine, Pakistani and Indian origin. Some stated they have had homosexual encounters in prisons and in community. However, they have been reluctant to use condoms even when having sexual intercourse with commercial sex workers. The IDUs were predominantly heterosexual while few have had homosexual relationships.

Discussion

The sample of the study is much similar to the WHO'S Multi-City study on IDU in many ways. Considerable number of IDUs were in correctional institutions. Sri Lanka could be considered as low prevalence country for injecting drug use by international standards and Asian standards. However, when cheap and pure heroin was in short supply Sri Lankan heroin users too had shown a tendency to switched to injecting drug use for better high. (Grund et.al). It appears that during socially and politically unstable periods eg. Bishanaya in 1988-89 had reduced the supply of street level heroin. Consequently some chasers of heroin had switched to injecting. The vigilante groups, mostly motivated by political ideologies, had 'banned' the use of heroin and other intoxicant.

Violator of the 'ban' was dealt with swift 'punishments' with summary justice, which included severe physical punishment. Another acute shortage of street level heroin supplies occurred around mid 2001, mainly due to high intensity of drug law enforcement activities severing the supply of heroin from South India to Sri Lanka. High level of political instability in Sri Lanka (Terrorist attack on Kantunayake Airport) and Internationally (Terrorist attempt take hostage in Indian Parliament and September 11) coincided this period. Probably, heroin tracking networks would have got hampered resulting in severe short supply of heroin at the street level, which would have forced some heroin users to switch to injecting for chasing. Similar time periods should be considered as critical periods for the spread of injecting drug use. Therefore, outreach and treatment options should be formulated to meet these situations.

The IDUs differ form chasers of heroin due to their high level of dependence, intense withdrawal symptoms. Over a period of time the high IDUs had got from injecting heroin had become less and the level of withdrawal symptoms had increased correspondingly. This could be mainly due to increase of tolerance to heroin. This had resulted in the need to increase the quantity of heroin injected and its frequency. In the long run continuing without injecting had become more and more difficult. Withdrawal symptoms such as severe body pains, difficulties in consuming food and sleep disorders has become intense. However, the level and the intensity of withdrawal varied among IDUs according to physical, pshychological and drug use factors.

The IDUs more involvement in criminal activities including dealing in drugs and health problems such as susceptibility to sexually transmitted diseases like HIV/AIDS. Therefore a distinct policy and programme is needed to prevent the spread of injecting drug use and its associated problems.

As discussed in the results section of this paper, several perceptions and beliefs about injecting drug use exists. Therefore more studies are needed to verify about these perceptions and beliefs.

Eventhough, sharing of needles, syringes and injecting equipment was not so common, many had shared needles and syringes for the first time or during the initial stages of injecting drug use. There is a possibility of spreading blood born infections including HIV/AIDS due to this practice. Many regular injecting drug users have had un-protected sex (without condoms) with many partners including commercial sex work-

ers. This phenomenon could make sharing needles and syringes more vulnerable to spread sexually transmitted and blood born diseases. An awareness and preventive education programme targeting IDUs is vital. Hence, many IDUs appear to serve some time in the correctional institutions, these places could be used for sensitization programmes on injecting drug use.

Nevertheless, injecting drug use is minimal in Sri Lanka. However, it had the potential to increase many fold provided the necessary environmental conditions and factors come into play health, social and addiction consequences due to injecting drug use could become much severe than chasing and other methods drug use in such a situation.

Conclusion

A small group of injecting Drug Users (IDU) s exists among heroin users in Sri Lanka. Even though much less in number they could be considered as 'hardcore' users of heroin due to the quantity, frequency, withdrawal symptoms due to heroin use. Also have criminal history and exposed to local and foreign commercial sex workers.

Recommendations

A programme is needed for prevention, treatment and rehabilitation of Injecting Drug Users. This should be in conjunction with the present drug policy and programmes of the country. The treatment needs of the Injecting Drug Users of heroin differ from those of heroin chasers. For example the injectors would have acute and higher level of withdrawal symptoms during detoxification than that of chasers. Hence, there is a need for treatment module for IDUs. Also in the correctional institutions too, treatment options should be available for IDUs.

An awareness on Injecting Drug Use and its relationship to communicable diseases such as HIV/AIDS and other diseases should be provided to law enforcement and health workers. A programme for attitudinal change and skills development to handle IDUs to the above-mentioned is very vital.

References

1. Anandarajah Ameelan & Sujatha Samarakoon, A study of persons imprisoned for drug offences, Ministry of Health, Daily News, 30 June 2003, p7
2. Commission on Narcotic Drugs, General Debate, 'Economic and Social consequence of Drug abuse and illicit trafficking: An Interim Report, Note by the secretariat, United Nations Economic and Social Council, 9 November 1994.
3. Des. Jarlais, D. C., et al., HIV/AIDS-related behaviour, op.cit., 1995
4. Government of Sri Lanka 2001. National HIV/Aids Policy, Draft, Government of Sri Lanka.
5. Ground, J. P. C., et al., Drug Use Contexts and HIV consequences: The Effect of Drug Policy on Pattern of Everyday Drug Use in Rotterdam and Bronx, British Journal of Addiction, 87, 1992.
6. Ratnayake, Y. and Senanayake, B., Handbook of Drug Abuse Information 2003,
7. National Dangerous Drugs Control Board, Rajagiriya, Sri Lanka.
8. Kandiah, P.R, Heroin Users in Sri Lanka; Refinement of the Careers Study, Research and Publications Division, NDDCB/UNDCP/WHO project, 1994.
9. Mann, J., J., op.cit., 1992, and WHO, The World Health Report, op.cit., 1996.
10. National STD/AIDS Control Programme (NSACP) 2001. Overview of HIV/AIDS and STI Sri Lanka. NSACP, Colombo. Sri Lanka.
11. Tschie, H., et at., HIV-1 Variant in South and South-East Asia, International Journal of STD & AIDS, 6, 1995
12. UNDCP, Drug Abuse, Consequences and Responses, Regional Report: Asia and the Pacific, 1992
13. World Drug Report, United Nations International Drug Control Programme, Oxford University Press 1997, p87
14. World Drug Report, United Nations International Drug Control Programme, Oxford University Press 1997, p89, 90.
15. WHO, - Multi City, op. cit., 1994
16. www. Worldbank.org/ungass/srilanka.htm
17. Zheng, X., et al., HIV Risk Behaviours but Absence of Infection Among Drug Users in Detoxification Centres outside Yunnan Province, China, 1993, AIDS, 9, 1995.

This paper was presented at the 10th International Conference on Sri Lanka Studies at University of Kalaniya, 2005.

Women, Drug Use and Commercial Sex

Abstract

Bhadrani Senanayake

A descriptive study on women, drug use and commercial sex was carried out in the light of the increase in the number of drug using women and sex workers. The objectives of this paper were to assess trends and patterns of drug use and the relationship between drugs and sex amongst women. This study was conducted on a non-probable snowball sample of 55 women drug users in year 2005

The result indicated that 95% of the women were living in Colombo and belongs to the poor social strata of the society. Most of them were from broken families. Most women were sinhala Buddhist. 67% had studied up to year 10 and 42% were aged between 31-40 years. They were multiple drug users. They had been using drugs for periods ranging from 1 to 30 years. 4% of them were newcomers. Most (82%) of them had been introduced to drugs by a friend, by her spouse or a client. 9% of the sample were street level heroin vendors. 96% of the drug using women were convicted offenders.

The study revealed that half (53%) of the drug using women were commercial sex workers. Drug using commercial sex workers can be divided into two categories based on their operational method namely drug using street sex workers and drug using brothel sex workers. The most important finding of this study is the co relationship between drugs and sex works.

The study reveals that drug using women are more vulnerable to drug peddling or commercial sex as a means to support their drug use. There is a need for an effective intervention for women drug users.

Introduction

The prevalence of drug using women and commercial sex workers in urban lowincome communities is high. They are an inadequately studied group. Often these women are neglected by the society and the family. The role of Sri Lankan women is fast changing due to various social and economic reasons. Presently drug use getting more acceptance among women in Sri Lanka. Women play leading roles in the drug trade and they use multiple drugs.

Women constituted 52% of the Sri Lanka population. Prison statistics reveals that 60% of the women arrestees were for excise and narcotics related offences in 2004. In 2000. 272 women were arrested for drug related offences. It was increased to 474 in 2004, (74%). The number of women imprisoned for narcotic drug offences in 2000 was 51. The number went up to 140 in year 2004. This indicates a three fold increase during the corresponding period.

Drug abuse and addiction have been recognized as health and social issues in many countries, posing serious health risks and often-tragic consequences for those who are afflicted and for their families and communities. Social attitudes have often led to women's drug use, drug use related problems being concealed. There was no social acceptance of drug use among women and these women are marginalized in the communities or societies.

Women's involvement with drugs can be divided into four categories such as (a) a women drug users (b) women as partners of drug users (c) the girl child as daughters of drug users (d) women who are involved in the production and or distribution of drugs. Most women who do not use drugs but who have a male drug user in the family suffer a different fate, specially if the husbands are so addicted to drugs that they cannot function normally.

Today the number of commercial sex workers is increasing. Sri Lanka today there were approximately 14,433 sex workers both male and female. (Ratnapala-95). In the past their population was limited Drug using women are also engaged in commercial sex. They are more vulnerable to sex works for earning money for drugs.

Dr. Usa Duongsaa's (AHRN Newsletter- 1999) study revealed that there are many extreme cases of tribal women in northern Thailand being forced to go to begging or prostitution themselves in order to earn enough money to buy drugs for their husbands and they are at high risk of HIV infection.

Methodology

A descriptive study was conducted on a non-probable sample of 55 women drug users. The sample was "snow ball" starting with :weeds" from the community and the prisons. This number represented 60% of

narcotic drug offenders at the welikada prison (Female Ward) and the 40% women from Dehiwala, Wellawatta, Moratuwa, Nugegoda, Kirulapone, and from Borella. The study was conducted from July to December 2005

Objectives of the study were as follows.

1. To assess trends and patterns of drug use amongst women.

2. To study the relationship between of drugs and sex work.

Data collection was conducted using a pre-tested questionnaire. In addition case studies and observations used. The questionnaire contained close - ended questions on socio-demographics, drug use and selling, sex work, and history of conviction. The data recorded was checked for completeness and accuracy prior to data analysis. Summary tables on each item of the questionnaire were prepared with total and percentage calculated.

Results

A total of 55 (N) women were interviewed for the survey. Fifty two (95%) drug-using women were from Colombo city and suburbs. Five (5%) of them were from Hambantota, Anuradhapura and Kurunegala districts and were temporarily residing in Colombo. Some women were living on streets and they had no permanent house to live.

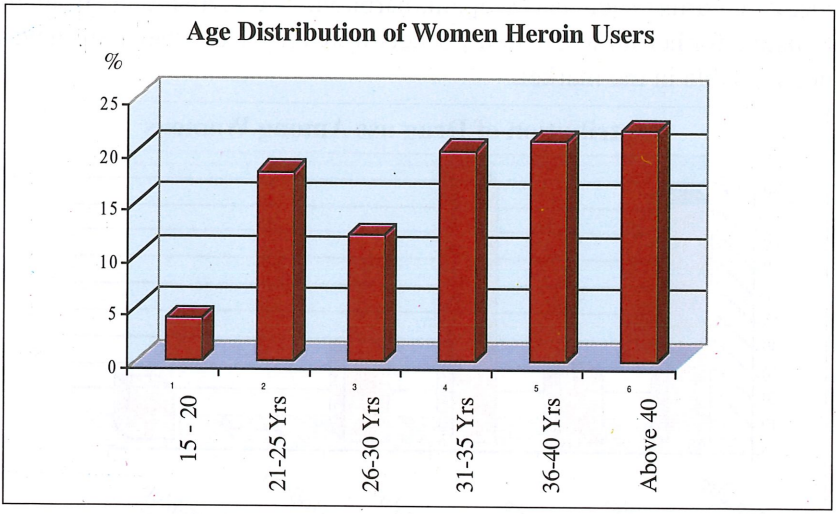
A majority of them were from unstable family backgrounds and generally from poor social strata of the society. Their spouses were labourers, petty businessmen or street level heroin vendors.

Among the women heroin users, 35 (64%) had children. Among them 31 women had between 1-3 children and rest (22%) had 4-6 children. Among the children 29% did not attend school. Most of the children were living with the heroin user's parents, relatives or in children's homes.

Among the heroin users, 39 (71%) were Sinhalese. Nine (16%) were Tamil and 11% Muslims. 30 (55%) of them were Buddhists, six (11%) Hindu, ten (18%) Christians and 7% Muslims and 9% was Catholics.

The highest percentage (42%) of women heroin users were found within the age group of 31-40 years. 31% of them were aged between

21-30 years and 18% were between 41-50 years 5% of them were above 50 and 4% of them were between 15-20 years.



Most of the women (38%) were either cohabiting (18%) or separated (20%). 35% of them were married legally. Two (4%) was unmarried. 5% of the sample was divorced and 18% widowed.

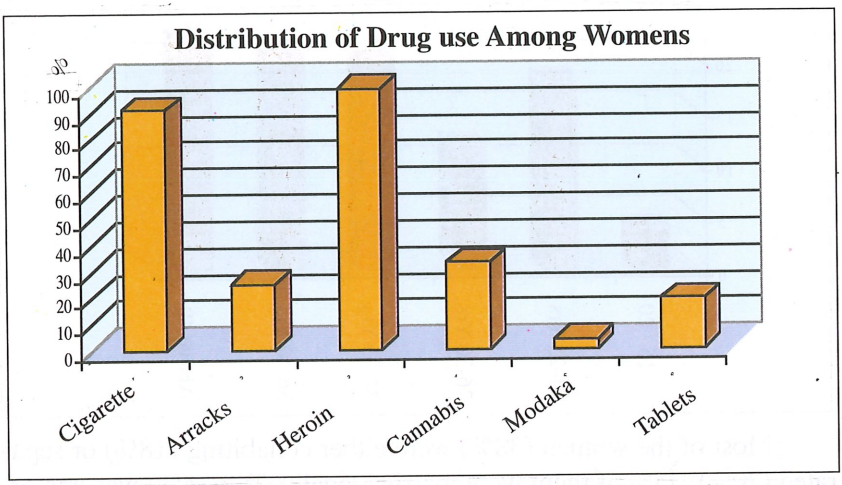
Of the sample 71% had studied up to grade 10. No body had ccompleted G. C. E. Ordinery Level or Advanced Level exam. 29% of the women had never been to school.

Most of the women heroin users (93%) were employed in the variety of occupations and 7% was unemployed. 29 (53%) women were commercial sex workers and one woman was engaged in pick pocketing in addition to sex work. 6 (11%) women were street level heroin vendors. 9% were small businesswomen such as selling flowers, fruits, vegetables and king coconuts. Six (11%) of them were housemaids, 5% was beggars and 4% was labourers.

Of the sample 42 women (76%) earned more than Rs 5000 and 15% earned between Rs. 3000 and 5000 per month. Only 2% was earned between Rs 2000 to 3000. Four of them (7%) had no permanent income and they got money from the parents or spouses to heroin use. Few earned between 20,000 - 30,000 per month and spent all the money for drugs.

The study subjects were multiple drug users. In addition to heroin, 16

(29%) consumed alcohol, 20 (36%) cannabis and three (5%) modaka. Smokers in the sample Were 91%. Among them 10 (18%) had used medicinal drugs such as diazepam, barbitone and methadone, as an alternative for heroin when their pockets were empty or when heroin was not available in the market.



All of them used heroin daily by "Chinese method". Most of them (45%) spent more than Rs 1000 per day. 16% spent between Rs. 500 and 1000 on heroin per day. 15% of the heroin users spent between Rs. 400-500 per day and 23% spent between Rs 100-400. 25 (45%) women used more than 8 "packets" of heroin per day and 30% used 5-8 "packets" of heroin per day. 25% used 1-4 "packets" per day. Normal price of one heroin packet is Rs. 100/= in the market.

Of the sample 29(53%) women earned money for heroin through sex works and others through earned money by selling heroin, petty business, housemaids, labour work and illegal activities.

Among the female heroin users 38 (69%) had been introduced to heroin by a friend. 7 (13%) by her spouse or partner and 5% by one of her relatives. Another seven (13%) had used it due to curiosity. 50 (91%) of the sample had received heroin free of charge at the introduction.

The history of heroin use among them was varying from 1-30 years. The majority (50%) of women have been in the habit for 6-20 years. The next category (16%) was more than 20 years of heroin use, while 13% had a history of 1-5 years. New users, with less than one year, were 4%.

The history of cannabis use among the women was varying from 1-25 years. The Majority of them (50%) have been in the habit for 1-5 years. 30% had a history of 6-15 years. 20% had used it more than 15 years. The drug had been introduced by their friends (65%) and or by husbands (10%).

Of the sample 38% women had experience in drug selling in the past and still 9% women were engaged in drug peddling. Among the total 29% women were running their own business and others (71%) were daily paid workers. All of them were street level vendors and 86% of them were earning between Rs 1000-3000 per day. 14% of them earning more than Rs 5000 per day. Daily paid workers were getting between 1-10 packets per day free of charge plus the salary.

Among the sample 14 (25%) have been taking heroin in the prison. 4(29%) of them had it at least 2-3 times a week. Rest 10 (71%) used it occasionally. Among the sample 18% were introduced to the drug while in the prison.

Among the women 20 (36%) were smoked "local cigars". (Made by themselves using tobacco) and 7% smoked cannabis.

They obtain drugs in the prison in following ways.

- Through forming groups (gang) obtaining heroin from Wanatamulla on the other side of the prison. They written, "send us kudu" on a paper and tied to a stone with money and thrown over the prison wall to wanatamulla. Then the seller sends the heroin.
- From visitors who come to see them
- Bought drugs when they went to courts
- Made "local cigars" from tobacco brought for chewing betel.

Of the sample 96% women were remand for drug related offence or sex works. Among them majority 66% were in the remand for between 1-5 times. 15% were remanded between 6-10 times and 19% had been in the remand for more than 10 times.

Among the arrestees 95% were convicted at least once. 79% were convicted offenders between 1-5 times. 14% were convicted between 6-15 times and 7% were convicted more than 20 times.

Among the women 87% was released after paying the fine impost to the courts at least once. Most of them released several times after paying the fine impost.

Treatment and rehabilitation

Of study subjects 64% had taken treatment for heroin dependency. Among them 85% had got treatment from private doctors and 9% had taken treatment from government hospitals. 4% had taken residential treatment from NDDCB and the NGOs. One woman had tried to stop heroin at home by using traditional aurvedic treatment methods. All of the women who got private treatment went to a doctor who practised in Totalanga. He was a famous doctor among the drug users. According to women it is a treatment for withdrawal symptoms and costs Rs 3,500-4,000 for medicine. Of the sample 36% had never taken any drug treatment or a consulting.

Drug using commercial sex workers

Of the sample 29 (53%) women were commercial sex workers. Among the women 59% had become sex workers after drug dependency. 41% had acquired the habit later.

According to the results drug using sex workers can be divided in to two main categories based on their operational method.

1. Drug Using Street Sex Workers
2. Drug Using Brothel Sex Workers

Some of the women has come to Colombo for seeking jobs and ended up as a sex worker. Some of them are rape victims, some of them deserted by their lovers or husbands. Few of them has been cheated by brothel owners. Some were pushed for sex by their drug dependent husbands or partners.

Majority 52% of them were aged between 31-40 years and 31% were between 21-30 years and only one woman was 19 years of age. 76% sex workers were Sinhalese and Buddhist (62%) 14% Tamil 10% were Muslims. Among the Muslims women there were three sisters and they worship Buddhism.

Majority (44%) of the sex workers has studied up to year 6-10. 28% had studied up to year 5 and 28% had never being to school.

Of the sample 24% were legally married. 10% were widowed, 10% were divorced and another 21% were separated. Among the sample 35% were cohabiting.

Majority (59%) of them engadge in sex trade support their drug habit. These women need to earn money for themselves and for their drug dependent spouse or partner.

There perception about the sex was "We have no hesitation or a shy to earn money through sex because as we needs money for drugs".

Street sex workers usually earn between Rs. 1000-2000 per day. Brothel sex workers earn Rs. 3000-4000 per day. They spend all the money for drugs.

Majority 66% had children all of them live with grand parents, relatives, or in a children's home. Among the children 53% are students.

Drug using street sex workers

Drug using street sex workers in the sample was 72%. Street sex workers can be defined who were sitting on a street and find a partner. They were living in Wellawatta, Dehiwala, Borella, Pettah, Fort and Nugegoda areas.

Drug using sex workers are of different sub categories as follows.

- There are those who operate on the street, taking their customer to a particular hotel, which is the focal point.
- Then the next group would take the customer to near by shanties or to a dark corner.
- The third group would accompany the customer would like to go.
- The fourth group provide sex in Three Wheelers, Cars, and Cinema Halls or on the beach or gardens or even public toilets.

Street sex workers belong to lower social strata of the society. They have poor Socio-cultural background and less education. They work till earn enough money to buy drugs. They revealed that some days they had 5-10 clients.

These women were very cunning and tactful. some times they cheated the clients and robbed them. One woman was in the sample that was a

pickpocketer. She has robbed two rich clients and stolen Rs. 50,000 and Rs. 150,000 money.

Drug using brothel sex workers

Brothel sex workers in the sample were 28%. All of them had a permanent places to find their clients. Some of them even had rented out rooms for the business. House owners were women and they function as a middle worker at times. Sometimes they provide clients. There are regular clients too.

Few women's, spouses were running the brothel at a shanty house. These women had been forced to do sex work by their husbands.

All of the sex workers had knowledge of HIV/ AIDS/ and STD. They insisted to use condoms. They were getting free condoms from NGOs, which engaged in HIV/ AIDS control work. Also these women were regular visitors to the STD clinic for checkups.

Discussion

The number of female heroin users are lower. According to the statistical data available, the man to women ratio of drug arrest was 46:1 in year 2004. Of the drug related arrests, heroin-using women were only 2%. Imprisoned heroin using women were 1% in the year 2004.

The present study revealed that female heroin users were marginalized by their failies and society, as they could not fit into gender nation of "Good girl", "Good wife". "Good mother" and "Good daughter".

Subjects were residents of Colombo and its suburbs. They belong to the low-income social strata of the Sri Lankan society. It is clear that prevalence of drug use limited to the main cities.

The present study revealed that majority of them were unstable family background. This suggests that marital discord is very high among the women.

Peers or spouses had introduced most of the women to drugs. This suggests that peer pressure or force by the husband had been the main cause for the initiation of heroin use.

Majority of women started drug use in 1990s. Few women started in early 1980s. Hence majority of the women drug users were middle age women and average age was 21 - 40 years. But 4% new comers were the

sample. These results highlight of need careful consideration on young women, drug users and sex workers.

Imprisoned women used to take drugs in the prison and they were promoting drugs to other female offenders too. Most of the women were remand or imprisonment for drug use or sex works. Imprisonment was a generalized among the both women drug users as well as sex workers. Some of them were relax in the prison and continuing of drug use in the prison. They smuggled drugs in to the prison and using drugs in the "ward", toilet or public places in the prison. In the sample some non users had been introduced to the drugs while in the prison. These indicate that a need of a drug free environment in the prison.

The study revealed that women had poor knowledge regarding the available treatment services & rehabilitation in the country and service providers such as the government and NGOs. Most of them know the famous doctor at Totalanga and his medical assistance to overcome their drug dependency.

There is a co-relationship between drugs and sex work. These women supported their drug use by engaging sex work. Among the women drug users 31% became a sex worker to find easy money for drugs. As the result of associating drug-using peers 22% of the sex workers became a drug user. These suggest that women drug users more vulnerable to sex work and women sex workers are more vulnerable to drug use.

Most of the women were street sex workers and their main ambition was to earn money for drugs rather than live in a better life. Upper class or middle class drug using sex workers were not found in the sample. Only two brothel sex workers found from high-class families and they were not the high-class sex workers. Drug using brothel sex workers were had comfortable life than drug using street sex workers.

The women often have to suffer verbal and physical abuse, sexual abuse, and lack of emotional and social security. Husbands, partners or clients often abuse women. Some times they had threaten by the clients. One woman was in the sample had to hospitalise as her face was cut by a client.

Conclusion

Although the female heroin users are few in Sri Lanka a considerable number of low income urban women are involved in drug use and sex

work. These appear to be a co-relation between drug and commercial sex. Among the women 4% were newcomers and there was a high-risk group in the prison as well as in the community. It has the potential to become a sizeable women drug user population in the future.

Suggestions

- It is necessary to create a drug free environment in the prisons
- There should be an effective intervention programmes for the women drug users.
- Should promote and encourage NGOOs & Private Institute to provide their treatment services & facilities for women too.
- Conduct effective awareness programme for the women drug users and sex workers.

References:

1. AHRN, news letter (The Asian Harm Reduction Net Work), 16, July-August 1999, pp 2-4.
2. Athuraliya, C. A. (1989) Study on imprisoned female drug offenders; National Dangerous Drugs Control Board, pp 1-4.
3. National survey on emerging issues among adolescents in Sri Lanka, (2004), UNICEF, pp 85.
4. Prison statistics of Sri Lanka, (2005), Statistics Division, Prison Head Quarters, Vol-24-pp34.
5. Rathnapala, N, (1995), Behavior modification among commercial sex workers of Sri Lanka, Deepani Printers, pp 4-6.
6. Ratnayake, Y. Senanayake, B.(2005), Handbook of drug abuse information, Research & publication division. NDDCB, pp 33-35.
7. Senanayake, B.(2002), A study on imprisoned female heroin users in Sri Lanka; National Dangerous Drugs Control Board, pp 15-19.
8. World Drug Report, (1997), Oxford University Press, pp 79.

This paper was presented at the 10th National Conwention on Women's Sstudies at Centre for Women's Reserch (Cenwor), 2006.