A Retrospective Study &

A Prospective Study of

Psychoactive Substance Abusers of P S 33

Benjamin Lai
MBBS(HK), Dip. Psychotherapy(IABMCP),
MRCPsych(UK), FHKCPsych., FHKAM(Psych).
Honorary Consultant Psychiatrist, P S 33.

Sponsored by the Narcotic Division of the Hong Kong Government and the Action Committee Against Narcotics

Foreword

Professor Char-Nie Chen
Department of Psychiatry, the Chinese University of Hong Kong
OBE, JP, MB, Msc, FRCPsych, FRANZCP, FHKCPsych, FHKAM(Psych), DPM

This is a commissioned report by a research team led by Dr. Benjamin Lai, a former colleague of mine in the Academic Department of Psychiatry, the Chinese University of Hong Kong. In the past Dr. Lai already showed himself a good teacher to students, a warm clinician to patients, and a keen observer in psychiatry. He was particularly interested in learning how mental health services work to the best quality. After leaving the Department he continued to pursue his interest, and has since heavily involved in community services for the mentally ill. To list just a few of his achievements, he is currently the Vice-President of the Hong Kong College of Psychiatrists, a member of the Subcommittee on Research, the Action Committee Against Narcotics, Hong Kong; and the Co-convenor of the Kwun Tong Complex of Services, the Mental Health Association of Hong Kong.

This report is an evaluation study of the work carried out by PS-33, a walk-in community service agency for psychotropic drug abusers run by the Hong Kong Christian Service. The report consists of four parts. First, a retrospective study of 49 out of a total of 80 clients registered between January 1993 to March 1995. Second, a prospective study of 60 out of 71 new clients registered between April 1995 and June 1996. Third, a qualitative in-depth case study of 7 clients who were either drug-free, relapsing, or unable even to complete detoxification. Fourth, an overall evaluation of the agency as a whole in its services for the clients with abuse problems primarily of the psychotropic drugs.

There is no doubt that such evaluation study is timely. Not only that there is a need for all subvented agencies to be accountable to the use of public fund, it is also necessary for all financially independent agencies to be accountable to their clients who are likely to look for services that are clinically effective, environmentally safe, financially reasonable, and ethically appropriate. This is perhaps one major reason that the SAR Government has drafted a new law, being under general consultation at present, regulating non-medical institutions in drug abuse in order to guarantee the right of the clients.

This report, when released publicly, is certainly worth reading by those who are concerned about the services for the psychotropic drug abusers.

Advisors

Mr. P. H. Chan

Mr. Y. M. Chan,

Miss Rainbow Cheung

Mrs. Sarah Kwok

Professor Law Chi Kwong

Professor Mok Bong Ho

Professor Daniel Shek

Mr. Max Szeto

Miss Betty Woo

Acknowledgements

Acknowledgement is extended to Hong Kong Christian Services for the approval of the research to be carried out in PS 33. The advice and continual support of Miss Betty Woo, Miss Rainbow Cheung and Mr. Max Szeto to the studies are much appreciated. The help from all the staff of PS 33 have been much more than initially expected, and sincere thanks need to be extended to them. Their kind help in tracing the subjects for interviews and provision of relevant information for the proceed and compilation of the qualitative study are much appreciated.

The advice and support from the advisors of the study and members of the Research Subcommittee of the Action Committee Against Narcotics have been most valuable. The opinions and comments of Mr. P.H. Chan on the draft of the report of the retrospective study have been most helpful. The Action Committee Against Narcotics and the Narcotics Division of the Hong Kong Government has to be acknowledged for their funding and support of the project.

Sincere thanks are to be extended to Mr. Ho Wai Chi, who was part-time research assistant to the retrospective study, and Miss Ida Chung, who had been part-time research assistant to both the retrospective and the prospective studies. Their untiring efforts in locating the study subjects, waiting for hours for them for assessments, and performing the many other aspects in the proceed of the studies are most appreciated.

Benjamin Lai,
MBBS(HK), Dip. Psychotherapy(IABMCP),
MRCPsych(UK), FHKCPsych., FHKAM(Psych).
(Principal Investigator)
June 1997

Correspondence address:
Room 504 Belgian Bank Building,
721 Nathan Road, Mongkok, Hong Kong.

CONTENTS

A RETROSPECTIVE STUDY OF OUTCOME OF CLIENTS OF P S 33

Dr. Benjamin Lai, Mr. Ho Wai Chi, and Miss Ida Chung Yee Ha

SUMMARY

Forty nine psychoactive substance abusers who have received treatment at PS 33 are followed up at a mean interval of about 16 months from their initial intake. They are in general young adults with more male and single persons. Majority have education of Form Three or less and they have employment problem. The majority are living with their family but less than half of the family are involved in their treatment. They have in general abused psychoactive substance for six years before they approach PS 33 for treatment. Only 7% have received previous treatment at other treatment agencies. Cough mixture, tranquilliser, cannabis are the major primary drugs abused. Peer influence and sensory satisfaction form the major initial reasons for abuse, while problem solving, sensory satisfaction and withdrawal symptoms form the reasons for maintaining the drug. About 43% and 88% have psychiatric and social problems respectively.

At follow up 67.3% of the subjects are free from psychoactive substance abuse. They have received treatment by social workers for about 52 sessions. Seventy percents have received medical outpatient treatment and 39% inpatient treatment. Three quarters of the subjects appropriately disagree that they can control the abuse of non-opioid psychoactive substance and that they will not be dependent. In the 26 subjects consented to more comprehensive assessment, they have relatively low scoring in their attitude towards purpose in life and their self esteem. The whole group also has a high mean scores on General Health Questionnaire indicating the presence of psychiatric disturbances. They have higher belief in control of health by oneself and by a powerful other and less belief in control of health by chance.

The number of nights dining with family in a month, the relationship with father, high General Health Questionnaire score, and low belief in chance in the control of health are the significant differences between the non-abusers and abusers at the time of follow up assessment.

INTRODUCTION

In the annex II of Paper 9/94 presented to the Research Subcommittee, ACAN, a research on evaluation of the services provided by PS 33 was raised. The objectives of the research mentioned included the following,

1. to evaluate the effectiveness of P S 33 in the treatment of psychotropic substances abusers,

2. to design a monitoring system so that the services are provided to the most cost-effective manner, and

3. to analyse the characteristics of its clients with a view to channelling them into different forms of treatment.

P S 33 was set up in March 1988 as a pilot project to provide services in the area of non-narcotic psychoactive substance abuse. It had been the only centre set up specifically for this area of service till 1994. The staff structure of P S 33 and the financial allocation to the centre had been limited for a number of years. The objectives of the centre included the provision of services to clients and their relatives, preventive education, professional training and public enquiry.

A proposal of both a retrospective study and a prospective study of outcome of clients of PS 33 was subsequently accepted by the Research Subcommittee, ACAN. The retrospective study serves to compile the data on the characteristics of clients of PS 33, and the social and medical services they have received. The outcome of the clients are assessed independently and analysed to see to what extent they have been helped. This thus serves as part of the evaluation of the effectiveness of PS 33 in its services provided to its clients. The study also attempts to find out if any factors might have contributed to the differences in the outcome of the clients. The areas of treatment of the clients where efforts need to be enhanced may be better understood. The results in this retrospective study may also throw light on the areas to be further clarified in the prospective study.

This forms the report on the retrospective study of clients of PS 33.

METHODOLOGY

1. Subjects:

All cases of P S 33 from the period of 1 January 1993 to 31 March 1995 were included as potential subjects for the study. Those who were successfully contacted and consented to the study formed the study subjects.

2. Methods:

Attempts were made to contact all potential study subjects and to invite them to consent to the participation in the study. Help from the workers of PS 33 had been obtained in tracing the cases. Subjects consented to the study were invited to return to the centre and to complete a set of self administered questionnaires. Those subjects who declined to return to the centre for completion of the full set of questionnaires but consented to answering enquiries over the phone were administered a short form of the questionnaires.

The areas of assessment covered in both the short form and the full set of questionnaires included recent status and pattern of substance abuse, the employment status, and relationship with family members. Additional areas assessed in the full set of questionnaires included psychiatric state as measured by the 28 item version of General Health Questionnaire (GHQ) (Appendix I), attitude towards drug use (Appendix II), the attitude towards life goal as measured by the Purpose in Life scale (PIL) (Appendix III), view of oneself as measured by the Self Esteem Scale (Appendix IV), the health locus of control as measured by the Multi-dimensional Health Locus of Control (MHLC) (Appendix V), and the social relation as measured by the Provision of Social Relation Scale (Appendix VI). The subjects also rated their subjective degree of satisfaction and helpfulness from their services received.

The initial intake information of the study subjects in PS 33 were also retrieved from their records. These included their basic sociodemographic data, the pattern of drug abuse, the factors leading to drug abuse, the psychiatric state as assessed by the social worker, their social problems and their relationship with their family. The information of the number of times and total duration of counselling the clients received, the need of psychiatric outpatient service, and the need of psychiatric inpatient service were also retrieved from their records.

3. **Analysis:**

The data of the study subjects were compiled. Their basic sociodemographic variables were compared with those of the other potential subjects not included in the assessment to verify whether the sample of study subjects was representative of all the clients of PS 33. The characteristics and outcome of the study subjects were analysed. Those who were free from current active psychoactive substance abuse at the time of the follow up assessment were compared with those reported current active psychoactive substance abuse.

RESULTS

There were in total 80 registered cases in PS 33 for the period 1 January 1993 to 31 March 1995. Fifty two of them were contacted. The rest could not be traced despite repeated attempts. All of the cases that could not be traced were inactive cases of PS 33. Among those contacted 49 consented to participate in the study. Out of these study subjects 26 agreed to complete the full set of questionnaires while 23 completed the short form of questionnaires.

Comparison between the study subjects and the rest of the potential study subjects with respect to their age, sex, marital status, employment status, psychoactive substance abused and the pattern of abuse did not show any significant differences between them (Table 1 & 2). Thus the study subjects could be regarded as representative of the clients of PS 33.

Table 1. Comparison of sociodemographic data between study cases and non study cases

	Study Cases		**Non Study Cases**	
Number	49		31	
Age	mean 25.1		mean 25.2	
Sex	M:F = 61%:39%		M:F = 68%:32%	
Marital status	single	80%	single	71%
	married	16%	married	19%
	cohabited	4%	cohabited	10%
Educational status	F.3 or below	65%	F.3 or below	80%
	F.4 or above	35%	F.4 or above	20%
Employment status	unemployed	29%	unemployed	32%
	employed	55%	employed	57%
	economically inactive	16%	economically inactive	11%

Table 2. Characteristics of referral and substance abuse of study cases and non study cases

	Study Cases		Non Study Cases	
Source of referral	self	43%	self	27%
	family	31%	family	20%
	others	26%	others	53%
Statutory status *		21%		40%
Pattern of drug abuse	habitual	88%	habitual	97%
	occasional	12%	occasional	3%
Primary drug abused	narcotics		narcotics	6.5%
	stimulants		stimulants	3.2%
	tranquilliser	21%	tranquilliser	32%
	cannabis	10%	cannabis	13%
	cough mixture	73%	cough mixture	58%
	others	10%	others	6.5%

(* Statutory status means under court order like probation order.)

Characteristics of the study subjects

Initial characteristics

The sociodemographic data of the study subjects at the time of their initial intake are as in Table 3. Their age ranges from 13 to 54 with a mean age of 25. There is a preponderance of male with a male to female sex ration of about 3 to 2. Almost 80% are single with the rest married or cohabited. About two third has an educational level of Form Three or below. Fifty five percents are employed, while about 29% are unemployed, the rest being either housewife or students. As in Table 4, majority, 88%, are living with their family. About 40% of the family are involved in the treatment of the substance abuse problem of the subjects.

Table 3. Sociodemographic data of 49 psychoactive substance abusers at their initial intake

Age	range:	13 - 54	
	mean:	25.08	(sd 8.7)
Sex	M:F	30:19	(61.2% : 38.8%)
Marital status	single	39	(79.6%)
	married	8	(16.3%)
	cohabited	2	(4.1%)
Educational level	F.3 or below	32	(65.3%)
	F.4 or above	17	(34.7%)
Employment status	unemployed	14	(28.6%)
	employed	27	(55.1%)
	housewife	2	(4.1%)
	students	6	(12.2%)

Table 4. Residence and family relationship of 49 psychoactive substance abusers at their initial intake

Residential districts	HK island	10	(20.4%)
	Kowloon	21	(42.9%)
	NT	18	(36.7%)
Family relationship	Number of family members		
	range	2 - 9	
	mean	4.38	(sd 1.97)
	Living with family	87.8%	
	Family with other abusers	8.2%	
	Family involvement in treatment		
	very involved	18.4%	
	involved	22.4%	
	not quite involved	18.4%	
	no involvement	30.6%	

The characteristics of their substance abuse are as in Table 5. They have an initial age of attempt ranging from 12 to 45 with a mean of about 19. Majority are abusing habitually and together with others. They abused more than one psychoactive substance. Cough mixture is the predominant primary substance of abuse amounting to 71.4% of them. Tranquilliser and cannabis are abused at about 16.3% and 10.2% respectively. The other substances abused include romilar, a cough tablet, and organic solvent. Tranquilliser and cannabis are abused substantially as a secondary drug.

Table 5. Characteristics of substance abuse of 49 psychoactive substance abusers at time of intake at PS 33.

Age of first attempt	range / mean		12 - 45 / 18.95 (sd 7.08)	
Pattern of abuse	habitual : occasional		88.4% : 11.6%	
Context of abuse	social : individual		90% : 10%	
Drug of abuse	Primary		Secondary	
			narcotics	2.0%
	depressants	2.0%	depressants	2.0%
	tranquilliser	16.3%	tranquilliser	28.6%
	cannabis	10.2%	cannabis	24.5%
	cough mixture	71.4%	cough mixture	4.1%
	others	10.2%	others	8.2%
Reasons for taking drug	Initial		Maintaining	
	self medication	22.9%	self medication	29.4%
	peer influence	68.6%	peer influence	20.6%
	adverse environment	8.6%	adverse environment	5.9%
	sensory satisfaction	42.9%	sensory satisfaction	47.1%
	problem solving	5.7%	problem solving	67.6%
	others	2.9%	withdrawal symptoms	35.3%
			others	5.9%

Peer influence is reported as the major reason for taking drug, 68.6%. Seeking sensory satisfaction comes as the second main reason at 42.9%. As to the reasons for their maintenance of the abuse, problem solving is reported by two third of the subjects, while sensory satisfaction and withdrawal symptoms are reported at 47% and 35%.

The majority of the subjects up to 83.3% obtain abused substance from medical retail centres as in Table 6. Friends and drug trafficker come as the second and third sources of abused substances with a percentage of 29.2% and 12.5% respectively.

Table 6. Source of abused substance and history of previous treatments of 49 psychoactive substance abusers

Source of drug	medical retail	83.3%
	medical practitioner	4.2%
	drug trafficker	12.5%
	friends	29.2%
	others	4.2%
Previous treatment	no	46.5%
	treatment agency	7%
	medical practitioner	14%
	rely on oneself	32.6%

Only 7% has received previous treatment at treatment agency. Fourteen percents have sought treatment by medical practitioners. Some 32.6% have tried to come off from their abuse on their own effort although they have not sought treatment from either treatment agency or medical practitioners. Forty six percents have neither sought treatment at treatment agency nor tried to come off from abuse on their own.

Their associated psychiatric and social problems are listed in Table 7 & 8. Some 43% of the subjects have psychiatric problems. Mood problems, anti-social or aggressive behaviour, and psychotic symptoms are their major psychiatric problems ranging from 4.3% to 17.1%. About 88% are found to have social problems. Their major problems include relationship problems with family members, employment problems, inability to assume normal responsibility, poor time management, relationship problem with intimates, and lack of life goal and spiritual satisfaction with percentages ranging from 68.2% to 22.7%.

Table 7. Psychiatric symptoms of 49 psychoactive substance abusers at intake at PS 33.

Percentage of subjects	42.9%		
delusion	5.7%	hallucinations	7.1%
thoughts problem	4.3%	odd behaviour	2.8%
anxiety / avoidance	5.7%	somatic	4.3%
depressed, irritable, expansive mood	17.1%	anti-social / aggressive behaviour	8.6%
self harm	2.9%	others	1.4%

Table 8. Psychiatric symptoms and social problems of 49 psychoactive substance abusers at time of intake at PS 33.

Percentage of subjects	87.8%		
financial	15.9%	accommodation	2.3%
poor time management	25%	lack of self care	4.5%
unable to assume normal responsibility	38.6%	lack of life goal / spiritual satisfaction	22.7%
employment problem	38.6%	study problem	11.4%
relationship problem			
with family	68.2%	with intimate	22.7%
with peer	11.4%		
others	2.3%		

Follow up assessment data

The time intervals between the initial intake of the study subjects at PS 33 and the current assessment range from 8 months to 29 months with a mean of 16.22 months. They have received treatments by the social worker of PS 33 for 4 to 444 sessions with a mean of 51.93 sessions. The total amount of time spent in these sessions by the social worker for each of the study subjects amount to 1.7 hours to 114.7 hours with a mean of 20.28 hours. About 73% have received outpatient medical treatment and 39% inpatient treatment.

Their recent status of psychoactive substance abuse are shown in Table 9. According to their own reports 67% of the study subjects are not abusing psychoactive substance in the four weeks prior to the time of the study. Thirty three percents reported abusing psychoactive substance at a frequency from once a day to less than once a week. Information also shows that 85.7% have been free from drug for at least four weeks in the past year. This indicates that this high percentage of the study subjects have been successfully detoxified from drug of abuse. However, 18.7% have returned to various degree of abuse at the time of the study. The type of psychoactive substances abused by them are shown in Table 10. Cough mixture and cannabis are the major substances abused.

Table 9. Recent status of psychoactive substance abuse among 49 psychoactive substance abusers at the time of follow up study.

	Number	Percentage
Not taking drug	33	67.3%
Not more than once a week	1	2%
At least once a week	7	14.3%
At least once a day	8	16.3%

Table 10. Psychoactive substance ever abused by 49 psychoactive substance abusers in the one year before the time of the follow up study.

depressants	2%
tranquilliser	10%
cannabis	26.5%
cough mixture	48.8%
romilar	2%

The social characteristics of the subjects at the time of the study are shown in Table 11. The proportion of unemployment remains about the same as in the initial intake. About 27% are unemployed. While 55% are employed. Majority of them as in the initial intake live with their family. They report fairly good relationship with various family members. About 8% of the subjects report poor relationship with father and 8% poor relationship with mother.

Table 11. Social characteristics of 49 psychoactive substance abusers at the time of follow up study.

Employment status	unemployed			26.7%		
	employed - full time			51%		
	part-time			4.1%		
	economically inactive			18.3%		
Living with	alone			4.1%		
	family			85.7%		
	others			10.2%		
Dining with family members						
	⩾ once a week			75.5%		
	⩽ once a week			6.1%		
	no			18.4%		
Relationship with	NA	very good	good	fair	poor	very poor
	---	---	---	---	---	---
spouse	83.7%	4.1%	6.1%	6.1%		
father	26.5%	8.2%	18.4%	38.8%	6.1%	2%
mother	12.2%	16.3%	36.7%	26.5%	4.1%	4.1%
children	83.7%	8.2%	4.1%	4.1%		
other family	28.6%	2%	26.5%	38.8%	2%	2%

Their attitude towards substance abuse are as in Table 12. Ninety six percents and 92% think that heroin and other psychoactive substances are dangerous respectively. Fifty nine percents disagree that drug abusers are useless to society. About 25% believe that they can control their abuse of non-opioid psychoactive substance so that they would not become dependent. While 4.2% believe similarly with respect to heroin.

Table 12. Attitude towards drug abuse among 49 psychoactive substance abusers at the time of follow up study

	strongly agree	agree	disagree	strongly disagree
1. Take heroin is very dangerous	73.5%	22.4%	4.1%	0%
2. Take tranquilliser, cough mixture, cannabis is very dangerous	42.9%	49%	8.2%	0%
3. Drug abusers are useless to society	26.5%	32.7%	34.7%	6.1%
4. I can control abuse of tranquilliser, cough mixture, cannabis and they do not make me dependent	4.1%	20.4%	44.9%	30.6%
5. I can control abuse of heroin and it does not make me dependent.	0%	4.2%	45.8%	50%

As to their evaluation of the services they have received, the results are shown in Table 13. For the services received from the social worker 49% rate it as very satisfactory, 36.7% quite satisfactory, and 14.3% fair. In other word all rate the services from social worker positively.

Table 13. The subjective evaluation of treatments received by 49 psychoactive substance abusers at the time of follow up study.

Satisfaction with services received	NA	very unsatisfactory	quite unsatisfactory	fair	quite satisfactory	very satisfactory
social worker				14.3%	36.7%	49%
outpatient doctor	20.4%	2%	4.1%	22.4%	26.5%	18.4%
inpatient doctor	57.1%	2%	2%	12.2%	16.3%	8.2%
Helpfulness in solving problems						
social worker			2%	12.2%	57.1%	28.6%
outpatient doctor	20.4%		12.2%	16.3%	34.7%	12.2%
inpatient doctor	57.1%		6.1%	14.3%	14.3%	4.1%

Eighty percents of the subjects received outpatient medical services, and 43% inpatient medical services. For those who have received outpatient medical services either at the private sector or the public psychiatric service 56.4% rate it as quite satisfactory to very satisfactory, and about 8% rate it unsatisfactory. While those who have received inpatient psychiatric services in the public hospital 57.1% rate it as quite satisfactory to very satisfactory, and 9% as unsatisfactory. As to whether the services have been helpful to their problems, 98% rate the services from social worker positively. On the whole 85.7% rate the social worker as quite capable or very capable in solving their problems. As to the outpatient medical service 58.9% rate it as quite capable or very capable of helping them to solve their problems, and 42.9% rate inpatient service quite capable or very capable. Fifteen percents and 14% rate the outpatient services and inpatient services as not helpful.

Twenty six subjects have completed questions related to their purpose in life, their self esteem, their social relationship and the General Health Questionnaire. The distribution of the scoring in the Purpose in Life scale is shown in Table 14. In general the mean ratings are on the positive side. They rate fairly positively in items 20, 4 and 7. These include having discovered a clear goal and satisfactory purpose in life, meaning and purpose in existence, and plan to do something exciting after retirement. The ratings on items 10, 12, 8 are to the negative side. These include feeling of little value in life should he die today, feeling of the world confusing, and little progress in reaching the goal in life.

Table 14. Distribution of scoring in Purpose in Life of 26 psychoactive substance abusers at the time of follow up study.

Question number	mean	s.d.	minimum	maximum
PIL 1	3.85	1.57	1	7
PIL 2	4.15	1.67	2	7
PIL 3	4.65	1.79	2	7
PIL 4	5.04	1.40	2	7
PIL 5	3.92	1.90	1	7
PIL 6	4.35	2.06	1	7
PIL 7	5.00	1.81	1	7
PIL 8	3.81	1.41	2	7
PIL 9	4.27	1.69	2	7
PIL 10	3.12	1.58	1	7
PIL 11	4.00	1.81	1	7
PIL 12	3.54	1.42	2	7
PIL 13	4.42	1.58	2	7
PIL 14	4.23	2.14	1	7
PIL 15	4.12	2.05	1	7
PIL 16	4.31	2.19	1	7
PIL 17	4.42	1.58	2	7
PIL 18	4.92	1.76	2	7
PIL 19	4.42	1.47	2	7
PIL 20	5.08	1.16	3	7
Total:	81.56	9.22	59	95

Distribution of scoring on self esteem is on Table 15. They score positively in four of the items. They feel satisfied with oneself, they do not feel they are not of any worth, they do not feel they have nothing to be proud of, and they do not feel they are a failure. On the rest they score negatively. They do not feel they can respect oneself more, they do not feel to be valuable, and they do not feel being as capable as others.

Table 15. Distribution of Self Esteem scoring of 26 psychoactive substance abusers at the time of follow up study.

	Mean	s.d.	Minimum	Maximum
1. satisfy with oneself	2.65	0.56	2	4
2. feel nothing of worth	2.58	0.64	1	4
3. feel many merits	2.38	0.70	1	3
4. as capable as others	2.12	0.77	1	3
5. nothing to be proud of	2.58	0.64	1	4
6. feel useless	2.31	0.55	2	4
7. feel valuable	1.92	0.63	1	3
8. respect oneself more	1.77	0.43	1	2
9. feel oneself a failure	2.58	0.95	1	4
10. positive to oneself	2.19	0.57	1	3
Total:	23.08	2.13	17	27

As to their health locus of control, the mean scores of the various aspects are shown in Table 16. They score highest in the internal health locus of control (IHLC) 27.19. They score 22.65 in the control by powerful others (PHLC), and lowest in control by chance (CHLC) 15.92.

Table 16. Distribution of MHLC scoring of 26 psychoactive substance abusers at the time of follow up study.

	mean	s.d.	minimum	maximum
IHLC	27.19	3.58	19	35
PHLC	22.65	3.94	14	30
CHLC	15.92	5.17	6	24

The distribution of scoring on Provision of Social Relations are shown in Table 17. They score higher on the peer support with a mean score of 29.8 versus a mean score of 20.7 in the family support. The overall score of social support has a mean of 50.54.

Table 17. Distribution of scoring on Provision of Social Relationship of 26 psychoactive substance abusers on follow up assessment.

	mean	s.d.	minimum	maximum
Family support	20.73	4.74	13	30
Peer support	29.81	6.29	19	42
Overall social support	50.54	9.45	32	68

The General Health Questionnaire scores show that they have scores ranging from 0 to 23 with a mean score of 10.35 (sd 8.09).

Comparison of characteristics between current non-abusers and current abusers

Initial characteristics

As discussed above 33 subjects are currently free from psychoactive substance abuse while 16 subjects are still currently abusing psychoactive substance. Their data are compared.

Comparison of their initial sociodemographic date is shown in Table 18. Although there is no significant differences, the current abusers are younger in age, less female, all single, and with more percentage of family not involved in their treatment.

Table 18. Comparison of initial sociodemographic data between current non-abusers and current abusers

		non-abuser	**abuser**
Number of cases		33	16
Age	mean:	25.91 (sd 10.1)	23.38 (sd 4.56)
Sex	M:F	57.6% : 42.4%	68.8% : 31.3%
Marital Status	single: married/cohabited	69.7% : 30.3%	100% : 0
Education	below F. 4 : F. 4 & above	60.6% : 39.4%	75% : 25%
Employment status	unemployed	27.3%	31.3%
	employed	48.5%	68.8%
	economically inactive	24.2%	
Family	mean no. of family members	4.25 (sd 1.92)	4.64 (sd 2.13)
Family involvement in treatment			
	highly involved	24.1%	13.3%
	involved	27.6%	20.0%
	not quite involved	20.7%	20.0%
	no involvement	27.6%	46.7%

Comparison of their initial characteristics of psychoactive substance abuse are shown in Table 19. There is no significant differences. The current abusers tend to be younger in their age of initial attempt of substance abuse, more likely to be under peer influence and less likely to seek sensory satisfaction as their initial reasons for taking drug, and adverse environment and peer influence rated more as reason for maintaining drug.

Table 19. Comparison of characteristics of initial psychoactive substance abuse of 33 current non-abusers with 16 current abusers

		non abusers	abusers
Age of first attempt	mean	20.07 (sd 8.27)	16.80 (sd 3.1)
Pattern of abuse	habitual : occasional	85.7% : 14.3%	93.3% : 6.7%
Context of abuse	social : individual	89.5% : 10.5%	90.9% : 9.1%
Primary drug of abuse	depressants	3%	0%
	tranquilliser	18.2%	12.5%
	cannabis	6.1%	18.8%
	cough mixture	69.7%	75%
	others	15.2%	
Secondary drug of abuse	opioid		6.3%
	depressants	3%	
	tranquilliser	21.2%	43.8%
	cannabis	18.2%	37.5%
	cough mixture	3%	6.3%
	others	6.1%	12.5%
Source of drug	medical retail	81.8%	86.7%
	medical practitioner	3.0%	6.7%
	drug trafficker	9.1%	20.0%
	friends	24.2%	40.0%
	others	6.1%	
Initial reasons for taking drug	self medication	26.1%	22.9%
	peer influence	60.9%	83.3%
	adverse environment	4.3%	16.7%
	sensory satisfaction	52.2%	25%
	problem solving	4.3%	8.3%
Reasons for maintaining drug	self medication	31.8%	25%
	peer influence	18.2%	25%
	adverse environment	0%	16.7%
	sensory satisfaction	50%	41.7%
	problem solving	68.2%	66.7%
	withdrawal symptoms	31.8%	41.7%
Previous treatment	no	43.3%	53.8%
	treatment agency	6.7%	7.7%
	medical practitioner	16.7%	7.7%
	rely on oneself	33.3%	30.8%

Comparison of their initial psychiatric symptoms and social problems are shown in Table 20. There appear the higher frequency of psychotic symptoms among the current non-abusers and higher frequency of mood problems, anti-social or aggressive behaviour in the current abusers at the time of their initial presentation to PS 33. As to the initial social problems, there is higher frequency of poor time management, problem with intimate, employment problem, and lack of life goal or spiritual satisfaction in the current abusers.

Table 20. Comparison of initial psychiatric symptoms and social problems between 33 current non-abusers and 16 current abusers.

		non-abusers	abusers
Numbers		33	16
Percentage of with psychiatric symptoms		39.4%	50%
Psychiatric symptoms	delusion	9.1%	6.3%
	hallucination	15.2%	0%
	thoughts problem	9.1%	0%
	odd behaviour	6.1%	0%
	anxiety	9.1%	6.3%
	depression and other mood problem	21.2%	31.3%
	anti-social behaviour	6.1%	25%
	somatic	6.1%	6.3%
	self harm	3%	6.3%
	others	3%	
Percentage with known social problems		87.9%	93.6%
Social problems	financial	15.2%	12.5%
	accommodation	3%	0%
	time management	15.2%	37.5%
	unable to assume normal responsibility	39.4%	25%
	lack of self care	3%	6.3%
	problem with family	60.6%	67.5%
	problem with intimate	15.2%	31.3%
	problem with peer	9.1%	12.5%
	employment problem	30.3%	43.8%
	study problem	12.1%	6.3%
	lack of life goal/ spiritual satisfaction	15.2%	31.3%
	others	3%	

Follow up assessment data

Comparison of the treatment received from social workers of PS 33 between the two groups is shown in Table 21. There is no significant differences between them with regard to the total amount of time spent and the duration of service. There is a bit less mean number of sessions received by the current abusers.

Table 21. Comparison of treatment received from PS 33 social workers between 33 current abusers and 16 current abusers.

	non abusers		abusers	
	mean	sd	mean	sd
Duration of treatment (months)	16.45	5.39	15.75	5.22
Number of sessions	53.9	77.86	48.25	49.7
Total of duration of time (hours)	20.67	22.52	19.47	20.96

There is also no significant differences in the proportion of subjects having received medical outpatient services and inpatient services. There is a higher proportion of current abusers having received inpatient treatment. Some 56% of the current abusers have received psychiatric inpatient treatment as compared to 36% of the current non-abusers.

Comparison of subjective evaluation of the services they have received are shown in Table 22 and 23. There is no significant differences. The current abusers have a higher percentage of rating the inpatient medical service as unsatisfactory and not helpful. Some non-abusers rate the outpatient medical service as unsatisfactory while none of the current abusers rate so.

Table 22. Comparison of the subjective satisfaction of treatments received between 33 current non-abusers and 16 current abusers with different services

	NA	very unsatisfactory	quite unsatisfactory	fair	quite satisfactory	very satisfactory
social worker						
non-abusers				9.1%	36.4%	54.%
abusers				25%	37.5%	37.5%
outpatient doctor						
non-abusers	24.2%	3%	6.1%	21.2%	21.2%	21.2%
abusers	12.5%			25%	37.5%	12.5%
inpatient doctor						
non-abusers	63.6%	3%		6.1%	15.2%	12.1%
abusers	43.8%		6.3%	25%	18.8%	

Table 23. Comparison of the subjective helpfulness of treatments in solving their problems between 33 current non-abusers and 16 current abusers with different services

	NA	very unhelpful	quite unhelpful	fair	quite helpful	very helpful
social worker						
non-abusers			3%	9.1%	48.5%	39.4%
abusers				18.8%	75%	6.3%
outpatient doctor						
non-abusers	24.2%		12.1%	18.2%	27.3%	15.2%
abusers	12.5%		12.5%	12.5%	50%	6.3%
inpatient doctor						
non-abusers	63.6%			12.1%	15.2%	6.1%
abusers	43.8%		18.8%	18.8%	12.5%	

The social characteristics of the two groups at the time of follow up study are shown in Table 24. The current abusers have significantly less number of nights dining with their family, 7.4 nights a month among current abusers as compared to 19.6 nights per month among current non-abusers. There is also significantly poorer relationship with their fathers among the current abusers.

Table 24. Comparison of social characteristics at the time of follow up study between 33 current non-abusers and 16 current abusers psychoactive substance abusers .

		non-abusers		abusers	
Employment status	unemployed	15.2%		43.8%	
	employed	60.6%		50%	
	economically inactive	15.2%		6.3%	
Living with	alone	6.1%		0%	
	family	90.9%		87.5%	
	others	3.0%		12.5%	
Dining with family members					
	⩾ once a week	84.8%		56.3%	
	⩽ once a week	6.1%		6.3%	
	no	9.1%		37.5%	
Number of nights each month having dinner with family - mean :		19.60	(sd 10.43)	7.38	(sd 7.79) ($p<0.001$)
Relationship					
with spouse - mean		2.123	(sd 0.84)	NA	
with father - mean		2.42	(sd 0.72)	3.17	(sd 1.03) ($p=0.015$)
with mother - mean		2.29	(sd 0.94)	2.47	(sd 1.13)
with children - mean		1.75	(sd 0.89)	NA	
with other family - mean		2.719	(sd 0.81)	2.55	(sd 0.520)

The unemployment rate is also higher in the current abusers. There has been an increase in employment rate among the current non-abusers since their initial intake, while there has been a decrease in employment rate in the current abusers. Still 50% of the current abusers are able to maintain employment despite their persisting abuse problem.

As to the comparison of their attitude towards drug abuse, it is shown in Table 25. There is no significant differences between the two groups. There is higher percentage of current abusers thinking that they can control abuse of non-opioid psychoactive substance and that they will not become dependent.

Table 25. Comparison of attitude towards drug abuse between 33 current non-abusers and 16 current psychoactive substance abusers.

		strongly agree	agree	disagree	strongly disagree
1. Take heroin is very dangerous	non-abuser	75.8%	18.2%	6.1%	0%
	abuser	68.8%	31.3%		
2. Take tranquilliser, cough mixture, cannabis is very dangerous	non-abuser	48.5%	45.5%	6.1%	
	abuser	31.3%	56.3%	12.5%	
3. Drug abusers are useless to society	non-abuser	24.2%	33.3%	36.4%	6.1%
	abuser	31.3%	31.3%	31.3%	6.3%
4. I can control abuse of tranquilliser, cough mixture, cannabis and they do not make me dependent	non-abuser	3%	18.2%	48.5%	30.3%
	abuser	6.3%	25%	37.5%	31.3%
5. I can control abuse of heroin and it does not make me dependent	non-abuser		3%	46.9%	50%
	abuser		6.3%	43.8%	50%

Among the 26 subjects who have completed the full set of questionnaires, 16 of them are currently free from substance abuse and 10 still abusing. Comparison of the scoring of the two groups in Purpose in Life is shown in Table 26. Significant differences are found for item 1 and 8. The non-abusers indicate their fondness and feeling of energy towards life, while the abusers indicate feeling of dislike and troubled feelings in life. The non-abusers indicate their feeling of

having reached some hope in their progress to their goal in life, while the abusers indicate they have little progress in reaching their life goal.

Table 26. Comparison of Purpose in Life scoring between 16 current non-abusers and 10 current abusers.

	non-abusers		abusers		
Question number	mean	s.d.	mean	s.d.	
PIL 1	4.44	1.50	2.90	1.20	(p=0.012)
PIL 2	4.50	1.71	3.60	1.51	
PIL 3	4.94	1.48	4.20	2.20	
PIL 4	5.31	1.14	4.60	1.71	
PIL 5	4.13	1.96	3.60	1.84	
PIL 6	4.69	1.99	3.80	2.15	
PIL 7	4.88	1.71	5.20	2.04	
PIL 8	4.31	1.30	3.00	1.24	(p=0.018)
PIL 9	4.63	1.5	3.70	1.89	
PIL 10	3.38	1.54	2.70	1.64	
PIL 11	4.19	1.83	3.70	1.83	
PIL 12	3.56	1.41	3.50	1.51	
PIL 13	4.69	1.54	4.00	1.63	
PIL 14	3.69	1.85	5.10	2.38	
PIL 15	3.75	2.15	4.78	1.79	
PIL 16	4.44	2.31	4.10	2.08	
PIL 17	4.31	1.58	4.602	1.65	
PIL 18	4.75	1.70	5.20	1.93	
PIL 19	4.75	1.44	3.90	1.45	
PIL 20	5.18	0.91	4.90	1.52	

Comparison of their self esteem scoring between the two groups is shown in Table 27. There is no significant differences between them. The current abusers tend to feel less as capable as others and they feel less to be of value.

Table 27. Comparison of Self Esteem scoring between 16 current non-abusers and 10 current abusers

	non-abusers		abusers	
Question	mean	s.d.	mean	s.d.
1. satisfy with oneself	2.50	0.52	2.90	0.57
2. feel nothing of worth	2.69	0.70	2.40	0.52
3. feel many merits	2.44	0.73	2.30	0.68
4. as capable as others	2.31	0.79	1.80	0.63
5. nothing to be proud of	2.63	0.62	2.50	0.71
6. feel useless	2.38	0.62	2.20	0.42
7. feel valuable	2.06	0.57	1.70	0.68
8. respect oneself more	1.81	0.40	1.70	0.48
9. feel oneself a failure	2.69	0.95	2.40	0.97
10. positive to oneself	2.19	0.54	2.20	0.63

As to the comparison of their scores on health locus of control, it is shown in Table 28. There is a statistically significant lower score on chance health locus of control in the current non-abusers as compared to the higher score in the current abusers (Mann-Whitney U- Wilcoxon Rank Sum test, z= -1.959, p=0.05).

Table 28. Comparison of MHLC scoring between 16 current non-abusers and 10 current abusers.

	non-abusers		abusers		
	mean	s.d.	mean	s.d.	
IHLC	27.81	3.76	26.20	3.19	
PHLC	22.88	4.30	22.30	3.47	
CHLC	14.38	5.16	18.40	4.33	(p=0.05)

Comparison of the social support of the two groups is shown in Table 29. There is little difference between them on the total score and the subscores.

Table 29. Comparison of scoring on Provision of Social Relationship between 16 current non-abusers and 10 current abusers.

	non-abusers		abusers	
	mean	s.d.	mean	s.d.
Family support	21.00	5.06	20.30	4.40
Peer support	29.19	6.58	30.80	6.02
Overall social support	50.19	10.42	51.10	8.17

There is significant difference between the General Health Questionnaire scores between the two groups. The mean GHQ score of the current abusers is 14.8 (sd 6.36), and the mean GHQ score of the current non-abusers is 7.56 (sd 7.97). That is the current abusers have a significantly higher abnormal GHQ score compared to the current non-abusers (z= -2.275, p=0.023).

DISCUSSION

The results show that PS 33 has been serving subjects of a wide age range from adolescents to middle age. Subjects tend to have substance abuse for 6 years before they come forward for service at the special psychoactive substance counselling centre. Subjects tend to have stopped studying after Form Three and in the first few years after they stop studying that they start to abuse psychoactive substance.

Similar to other studies peer influence act as a single very important factor leading to the initial abuse of the subjects. When the subjects have started on substance abuse, the psychoactive substance become a means of the subject in solving their problems. This is obviously an inappropriate and ineffective means of solving problems. This is also likely to create a vicious cycle that the more psychological and social problems resulted from substance abuse in an abuser, the more likely he is to take psychoactive substance 'to solve his problems'.

That there is only 7% of the subjects who have received treatment at treatment agencies in the six year long history of substance abuse before they come to PS 33 is an important issue to pursue further. It is natural to expect that the earlier the intervention the less the psychosocial complications from psychoactive substance should occur, and the better response to treatment they should be. How come some 80% to 90% have not been to appropriate treatment warrants further study. It need to clarify whether they are not motivated for treatment or that treatment agency is not availed to them.

The high frequency of psychiatric and social problems indicate the possible significant psychosocial stresses facing the subjects or that their substance abuse has affected them with these psychosocial complications. These reflect that treatments required for this group of subjects should include a comprehensive assessment and biopsychosocial approach in their management. Medical, psychological and social interventions are necessary in the management of the subjects.

Although towards 90% of them are living with their family, there is only 41% of the cases where the family is involved in their treatments. It is not known with the information available whether the families are aware of the substance abuse of the subjects, or that they are aware but not available to involve in the treatment. That the subjects have reported high frequency of relationship problems with their family and their intimates indicate that the subjects may not be ready to communicate to their family members, or invite them or request them to participate in the management of their problems. Or the family members may not be ready to accept that they may also have a part to play in the relationship problem of the abusers, or that they may simply have developed a rejecting attitude towards the abusers. What might have contributed to the relationship problem of the abusers with their family members and how come so large a proportion of family are not involved in the management of the abusers await to be clarified. Clearly family intervention should be an important aspect of management of an abuser.

The occurrence of inability to assume normal responsibility and poor time management among the major social problems of the subjects reflect possibly their inadequate psychosocial development. Psychological treatment often depends on the ability of the client to actively participate in the treatment and to attend treatment sessions regularly as scheduled. The above

mentioned two areas of social problems of the subjects indicate that they require much more effort on the part of the therapist to engage them in psychological treatment.

That 67% of the subjects are free from psychoactive substance abuse at the time of the follow up assessment appear to be quite promising. As mentioned above, there is a preceding higher percentage with successful detoxification from substance abuse. Some 18.7% of the subjects have lapsed back to various degree of substance abuse at the time of assessment. It is another area for study to clarify what factors might have contributed to lapses to abuse after successful detoxification. It may also be helpful to verify the effect of treatment by comparison between the proportion of drug free period before treatment and the proportion of drug free period after treatment has started.

That there is no significant differences in the treatment variables measured between the current abusers and current non-abusers worth further discussion. The treatment variables are only measured broadly in terms of number of sessions, duration and amount of time of treatment, the use of outpatient medical treatment, and the use of inpatient psychiatric treatment. One may postulate that the more the treatment sessions and treatment time, the better the outcome. Yet it is natural to expect that the more severe the problem a subject has, he is more likely to require more treatment sessions and treatment time. Furthermore the more severe the original problem may also be related to more unfavourable outcome. Thus in a way the effectiveness of treatment sessions and treatment time may have been balanced out by the severity of problems of the subjects. Similarly the need of medical outpatient treatment and inpatient treatment may reflect the need and severity of the problems of the subjects.

Perhaps with further development of different treatment modalities, like family therapy, group treatment, day centre, and residential service, in addition to individual counselling, one may be able to see if individual treatment modality or combinations of two or more of the modalities may lead to better outcome. At this stage of development of service it thus appears that the treatments for individual subjects have to be individualised. For this group of subjects, one cannot at the moment categorise the subjects into different groups and channel them into different treatment programmes.

The other possibility to look into the relationship between treatment and outcome may be to measure the therapeutic elements in the treatment process. One may assess the elements in the treatment for the individual subject deemed to be of therapeutic value and the degree to which the elements are achieved both from the perspective perceived by the social worker and that perceived by the subject.

The high ratings in the evaluation of the services they have received from PS 33 is very encouraging. Despite some are still having problems with substance abuse, they still express that the social workers are helping them and that they are satisfied with the services. What the actual help the social workers have been availed to these subjects can be clarified in a more personal interview of the subjects. This is also an important issue to note that helping a subject with substance abuse include help in areas more than just detoxification and prevention of relapse.

Table 30. Comparison of attitude towards drug abuse between psychoactive substance abusers of PS 33 after treatment, young drug abusers, and secondary school students reported in a previous study by Narcotic Division (1994).

		PS 33 subjects	young drug abusers	secondary school students
number of subjects:		49	512	500
1. Take heroin is very dangerous	agree	95.9%	87%	97.8%
	disagree	4.1%	13%	2.2%
2. Take tranquilliser, cough mixture, cannabis is very dangerous	agree	91.9%	81.3%	97%
	disagree	8.2%	18.7%	3%
3. Drug abusers are useless to society	agree	59.2%	42.6%	37.8%
	disagree	40.8%	57.4%	62.2%
4. I can control abuse of tranquilliser, cough mixture, cannabis and they do not make me dependent	agree	24.5%	60.3%	N.A.
	disagree	75.5%	39.7%	N.A.
5. I can control abuse of heroin and it does not make me dependent	agree	4.2%	26.2%	N.A.
	disagree	95.8%	73.8%	N.A.

As in Table 30 it is encouraging to see a more appropriate attitude towards drug abuse in this sample of subjects as compared to the group of young drug abusers reported in the previous study on young drug abusers by the Narcotics Division in 1994. This sample of PS 33 clients reported more like normal secondary school students that taking heroin and psychotropic substances are dangerous. Much less of them believe that they can control their drug intake and that they would not be dependent as compared to the previous sample of young drug abusers. These may indicate that non-opioid substance abusers as in PS 33 are different from young drug abusers in the previous study. In this latter sample some 81% have abused heroin in addition to the high rates of abuse of cough mixture and psychotropic substances. The other possibility is that the sample of substance abusers in PS 33 have changed their attitude towards drugs more appropriately over the course of their treatment at PS 33. This probably requires a pretreatment assessment of the subjects and to re-assess them afterwards.

Some 75% indicate that they cannot control the abuse of non-opioid psychoactive

substances and will not become dependent. Yet there is still 25% indicating that they can control drug abuse and will not be dependent despite treatment by social workers, medical doctors as outpatient and some as inpatient. What have initially led to this belief in the subjects and how come their attitude has not been changed more appropriately need clarification.

As to the scoring on purpose in life, the scores of this sample of subjects are similar to young drug abusers in the previous study mentioned above (Narcotic Division, 1994). In general both groups have less positive attitude in the purpose of life as compared to the control subjects. They score particularly lower in item 1 and 16. That is, they tend to feel more dislike and troubles in life and they tend to have thought more of suicide.

As to their scores in the self esteem questionnaire, in three items they score much less than the normal control and even less than the young drug abusers in the Narcotic Division study mentioned above. They tend less likely to feel valuable, less likely to feel as capable as others, and they think less positively of oneself.

The significant differences between the current non-abusers and current abusers include the number of nights dining together with the family and the relationship with the father. In this retrospective study it is not known whether the problems have been the result or another aspect of manifestation of persistent substance abuse or that either one might have contribute to the unfavourable response to treatment. Both factors support the earlier discussion that family relationship and family intervention are important aspects in the consideration and management of psychoactive substance abusers.

Feeling of trouble and dislike in life, and feeling of little progress in reaching life goal form the other significant differences between the two groups. As again it is not known whether these predict the poor response to treatments or reflect the degree of the abuse problem. These do indicate the importance of inner psychological factors associating with the outcome of substance abusers. These inner psychological factors may not only be managed in individual psychological treatment. Group psychological treatment and actual social activities in a setting of day centre may be important to tackle these sorts of negative feelings of towards life.

Whether the difference in chance health locus of control indicates the less belief in inability to control events because of chance in the current non-abusers or the more belief in chance affecting outcome of events in the abusers need clarification. It is also helpful to see if this factor does affect the outcome of substance abusers in a prospective study.

The higher General Health Questionnaire scores in the current abusers do indicate the presence of more psychological disturbances. As discussed above it awaits to be clarified whether the high GHQ score is the result of the substance abuse or an indication of psychological disturbance leading to persistence of abuse problem.

The study has been a beginning attempt to find out if factors may be significantly associated with different outcome of clients with psychoactive substance abuse after they have started on treatment in a psychoactive substance counselling centre in the local context. With the limited number of study subjects and the retrospective nature of the study, the results reported and discussed above await to be replicated in other studies on psychoactive substance abusers.

CONCLUSION

The services of PS 33 provided to this group of non-opioid substance abusers appear to be fairly favourable despite the associated severe psychosocial problems of the abusers. Concomitant medical outpatient and inpatient services are arranged for some of the abusers. Some factors appear to differentiate between the current non-abusers and the current abusers. These include the number of nights dining with family, the relationship with father, the attitudes towards life goal, including feeling of dislike and troubled feeling in life, and feeling of little progress in reaching life goal, the degree of psychiatric disturbance, and also the level of belief in chance in control of health.

The wide range and degree of psychosocial problems of the abusers indicate that comprehensive biopsychosocial assessment and management of the abusers are necessary. The goal of treatment need to include more than just detoxification and prevention of relapse. Particular difficulty of individual clients in engaging in individual psychological treatment put additional demand on the social worker. Family intervention appears to be an important aspect of management of the abusers. Group treatment and social intervention may also be necessary to help the abusers in the poor image about themselves and the low attitude to their purpose in life. Education on the proper attitude to abuse of psychoactive substance is also necessary. The management of substance abusers take time. The persisting high level of psychological disturbance and relapsing tendency of substance abuse indicate that the abusers need to have continual treatment and services for over a fairly long period of time.

Preventive intervention appears to be necessary especially for young people who have stopped their studying after Form Three. Study and intervention need to be arranged to see how the abusers may reach the services of special counselling centres earlier than is currently observed. Resources appear to be necessary for the multiple approaches of psychosocial intervention needed by the abusers. The prospective study in progress is expected to clarify the issues on some of the factors associated with the different outcome of the abusers.

A PROSPECTIVE STUDY OF OUTCOME OF CLIENTS OF PS 33

Dr. Benjamin Lai and Ms Ida Chung

SUMMARY

Sixty psychoactive substance abusers, newly intake at PS 33, are followed up after they have completed detoxification of their substance abuse within six month of their initial intake. Sixty two percents of the study sample have been successful in completion of detoxification within the period. They have a decrease in their score in General Health Questionnaire and increases in the percentage of appropriate attitude towards substance abuse. A lower score in General Health Questionnaire at initial assessment is significantly associated with success in completion of detoxification within six months.

The detoxified subjects are followed up at six month interval. Sixth eight percents of the subjects are no longer abusing any psychoactive substance, while the others have lapsed back into various degree of substance abuse. Success in maintenance of non-abuse of psychoactive substance is significantly associated with family involvement in the treatment, absence of history of previous treatment, a lower score of General Health Questionnaire, a higher score in Internal Locus of Health Control, and a higher score in Social Support as assessed initially. A positive experience of detoxification is also significantly associated with success in maintenance of non-abuse.

Thirty subjects of the original study sample consented to and completed the final assessment at about nine to twelve months after their initial intake. They have significant decrease in their score in General Health Questionnaire, and increase in their frequency in the appropriate attitude toward taking tranquillisers, cough mixture, and cannabis are dangerous. They have also rated highly their degree of achievement in a range of psychosocial problems over their period of treatment.

I. Introduction

This is the second part of the research project on study of clients of PS 33 as approved and funded by the Research Subcommittee of ACAN. Conducting concurrently with the retrospective study of clients of PS 33, this prospective study aims to clarify further the outcome of clients in detoxification and how they will be after an interval subsequent to successful detoxification from their substance abuse. The study also tries to clarify the factors that may affect the outcome of the clients.

II. Methodology

Subjects

All new clients registered with PS 33 in the period of 1 April 1995 to 30 June 1996 were included as study subjects. Consent was obtained from each of them to be included in the study.

Methods

The study subjects were assessed within a month of their initial registration. The questionnaires administered included the General Health Questionnaire(GHQ), Attitude towards Drugs, Purpose in Life Scale (PIL), Self Esteem Scale (SE), Multi-Dimensional Health Locus of Control Scale (MHLC), and Provision of Social Relation Scale (PSR), as in Appendices I to VI. Information were also retrieved from the Intake Forms of the subjects at PS 33.

Those subjects who had completed detoxification within six months of their initial intake would be interviewed for a second assessment. They would complete the GHQ, the Attitude towards Drugs, and the Detoxification Experience Questionnaire. The Detoxification Experience Questionnaire was a questionnaire designed for this study to assess the presence and degree of discomfort on various areas during the period of detoxification as in Appendix VII. The subjects also rated their subjective degree of satisfaction with their services received.

Those who had completed detoxification and the second assessment would be followed up at six months interval for the final assessment to clarify on their status of substance abuse. For those detoxified subjects who had not been interviewed on the final assessment, their status of substance abuse were obtained from the attending social worker.

The areas of assessment in the final assessment included their recent status and pattern of substance abuse, their employment status, their evaluation of the services received, relationship with family members and questionnaires including the Attitude towards Drug, GHQ, PIL, SE, MHLC, PSR and the Therapeutic Elements Achievement Questionnaires.

The Therapeutic Elements Achievement questionnaires was specially designed for the study as in Appendix VIII. It aimed at measuring the appraisal of the subject on the degree of achievements of himself on different areas of therapeutic tasks during the treatment at PS 33. The contents of the questionnaires had been validated by the social workers of PS 33 as important factors related to the success of treatment of their clients. The length of the questionnaire had been adjusted to fit into the interview of the final assessment.

The other subjects who had not completed detoxification within the six months of intake at PS 33 were also traced for a final assessment at about nine months from their time of initial intake. The contents of this final assessment were the same as the final assessment for the detoxified group as mentioned above.

III. The first assessment

During the period of the first assessment of the study there are 71 new cases. Sixty of them are available and have consented to the study. Seven defaulted follow up or refused treatment shortly after the registration. Two did not consent to participate in the study. One regarded his objective of contacting PS 33 had been reached and did not continue any treatment. One subject consented to the study and had actually been interviewed by the research assistant. However during the interview he was found to be mentally unstable and the interview had to be stopped before completion. He defaulted follow up from PS 33 subsequently.

Results of the first assessment

The sociodemographic data of the sixty subjects are shown in Table 1. Their age range from 13 to 43 with a mean age of 24. There is preponderance of male with a male to female sex ratio of about 7 to 3. Just more than 80% of the subjects are single with 8% married or cohabited, and the rest separated or divorced. Some 64% of the subjects have educational level between Form One to Form Three, 14% Primary level, and the rest Form Four or above. Fifty nine percents are in either full time or part-time employment, while 31% are unemployed, and the rest are either housewife or students.

Table 1. Sociodemographic data of 60 psychoactive substance abusers at their initial intake

Age	range	13-43	
	mean	23.97 (SD 7.27)	
Sex	M:F	43:17 (71.7%:28.3%)	
Marital status	single	49	(81.7%)
	married	1	(1.7%)
	cohabited	4	(6.7%)
	separated	1	(1.7%)
	divorced	5	(8.3%)
Educational level	F.3 or below	45	(77.6%)
	F.4 or above	11	(19.0%)
	others	2	(3.4%)
Employment status	unemployed	18	(30.5%)
	employed	35	(59.3%)
	housewife	3	(5.1%)
	student	3	(5.1%)

The living situations and statutory status of the subjects are shown in Table 2. Some 80% of the subjects are living with their family members. About 11% have other substance abusers in their family.

Table 2. The living situations and statutory status of 60 psychoactive substance abusers at first assessment

Living with		alone	6	(10.0%)
		family	47	(78.3%)
		others	7	(11.7%)
Number of family members living together :		range	1 - 9 / mean	3.83 (sd 1.67)
Family with other abusers			4	(10.8%)
Residential district		HK Island	5	(8.5%)
		Kowloon	25	(42.4%)
		NT	29	(49.1%)
Statutory status		Care & Protection Order	2	(3.4%)
		Probation Order	24	(41.4%)
		Correctional Institute	4	(6.9%)
		Others	2	(3.3%)

As shown in Table 3, two third of the subjects have dinner with their family members once or more than once a week. About 38% of the family are involved in the treatment of the subjects.

Table 3. Frequency of dining with family and their involvement in treatment of 60 psychoactive substance abusers at first assessment

Dining with family members			
	⩾ once a week	40	(66.7%)
	< once a week	10	(16.7%)
	no	9	(15.0%)
	non-applicable	1	(1.7%)
Family involvement in treatment			
	very involved	8	(14.0%)
	involved	14	(24.1%)
	not quite involved	13	(22.5%)
	no involvement	23	(39.4%)

The subjective ratings of the relationship with individual family members are on the whole fair and good as shown in Table 4. Twenty two percents of the subjects have a poor or very poor rating to their relationship with their father.

Table 4. Family relationship of 60 psychoactive substance abusers at first assessment

Relationship with	NA	very good	good	fair	poor	very poor
spouse	90.0%	3.3%	3.3%	1.7%	1.7%	
father	26.7%	8.3%	10.0%	33.3%	11.7%	10.0%
mother	15.0%	20.0%	36.7%	23.3%	1.7%	3.3%
children	88.3%	5.0%	6.7%			
other member	20.1%	13.3%	33.3%	28.3%	3.3%	1.7%

The characteristics of substance abuse of the subjects are as in Table 5. They have an initial age of substance abuse ranging from 12 to 33 with a mean age of 17.8. Among the primary drug of abuse, about 47% take cough mixture, 25% tranquilliser, and 17% cannabis. The other substances abused include organic solvent, stimulants, narcotics and cough tablet. Forty seven percents of the subjects have secondary drugs of abuse. Tranquillisers and cannabis are abused substantially as a secondary drug.

Seventy one percents of the subjects obtain their substance of abuse from medical retail outlet, 37% from friends, and 20% from drug trafficker.

Peer influence is reported by 81% of the subjects as the initial reason for abuse, while 34% reported sensory satisfaction. As to their reasons of maintaining abuse, sensory satisfaction is reported by 59%, problem solving by 43% and withdrawal features by 29%.

About 12% have previous treatment at treatment agency, while 3% by medical practitioners. Twenty two percents have tried to come off from the abused substance by oneself. Sixty three percents have not had any previous treatment.

Table 5. Characteristics of substance abuse of 60 psychoactive substance abusers at time of intake at PS33

Age of first attempt	range / mean	12-33 / 17.75 (SD 4.87)	
Pattern of abuse	habitual : occasional	54:6 / 90%:10%	
Context of abuse	social : individual	45:11 (80.4%:19.6%)	
Primary drug of abuse	narcotics	3	(5.0%)
	stimulant	7	(11.7%)
	tranquilliser	15	(25.0%)
	cannabis	10	(16.7%)
	cough mixture	28	(46.7%)
	romilar	3	(5.0%)
	organic solvent	8	(13.3%)
	others	1	(1.7)
Secondary drug of abuse (N=28)	narcotics	8	(28.6%)
	stimulant	2	(7.1%)
	depressant	3	(10.7%)
	tranquilliser	16	(57.1%)
	cannabis	12	(42.9%)
	cough mixture	7	(24.0%)
	romilar	6	(21.4%)
	organic solvent	5	(17.9%)
Source of drug	medical retail	42	(71.2%)
	medical practitioner	2	(3.4%)
	drug dealer	12	(20.3%)
	friends	22	(37.3%)
	others	7	(8.2%)
Initial reasons for taking drug	self medication	8	(13.6%)
	peer influence	48	(81.4%)
	adverse environment	8	(13.6%)
	sensory satisfaction	20	(33.9%)
	problem solving	11	(18.6%)
	others	2	(3.4%)
Reasons for maintaining drug	self medication	16	(27.6%)
	peer influence	15	(25.9%)
	adverse environment	5	(8.6%)
	sensory satisfaction	34	(58.6%)
	problem solving	25	(43.1%)
	withdrawal symptoms	17	(29.3%)
	others	1	(1.7%)
Previous treatment	no	38	(63.3%)
	treatment agency	7	(11.7%)
	medical practitioner	2	(3.3%)
	rely on oneself	13	(21.7%)

Their associated psychiatric and social problems are as shown in Table 6. Thirty five percents have psychiatric symptoms. Mood disturbances, psychotic symptoms and anxiety are the major psychiatric problems ranging from 20% to 8%. About two third of the subjects are regarded to have psychological problems. All of the subjects are found to have social problems. Their major problems include relationship problems with family members, employment and related problems, financial problems, lack of life goal or spiritual satisfaction, poor time management and relationship problem with intimate partner. They range from 65% to 28%.

Table 6. Psychiatric symptoms and social problems of 60 psychoactive substance abusers at intake at PS33

	No	%
Percentage of with psychiatric symptoms	21	(35%)
Psychiatric symptoms		
delusion	2	(3.4%)
hallucinations	5	(8.7%)
thoughts problem	2	(3.3%)
odd behaviour	3	(5.3%)
anxiety/avoidance	5	(8.7%)
depressed, irritable, depressive mood	12	(20.7%)
anti-social/aggressive behaviour	2	(3.4%)
somatic	1	(1.7%)
self-harm	4	(6.9%)
others	1	(1.7%)
Percentage with known social problems	60	(100%)
Social problems		
financial	21	(35.0%)
accommodation	4	(6.7%)
poor time management	17	(28.3%)
unable to assume normal responsibility	8	(13.3%)
lack of self care	1	(1.7%)
relationship problem with family	39	(65.0%)
relationship problem with intimate	17	(28.3%)
relationship problem with peer	8	(13.3%)
employment and related problem	37	(61.7%)
study problem	7	(11.7%)
lack of life goal / spiritual satisfaction	20	(33.3%)
others	2	(3.3%)

Their attitude towards drug abuse are as shown in Table 7. Ninety five percents deem it dangerous to take heroin, while 90% think it dangerous to take other non-narcotic psychoactive substances. Some 40% think that drug abusers are useless. Thirty three percents believe that they can control substance abuse so as not to become dependent. Eight percents believe they can control heroin abuse so as not to become dependent.

Table 7. Attitude towards drug abuse of 60 psychoactive substance abusers at first assessment

	Strongly agree	agree	disagree	Strongly disagree
1. Take heroin is very dangerous	65.0%	30.0%	5.0%	0%
2. Take tranquilliser, cough mixture, cannabis is very dangerous	35.0%	55.0%	10.0%	0%
3. Drug abusers are useless to society	8.3%	31.7%	46.7%	13.3%
4. I can control abuse of tranquilliser, cough mixture, cannabis and they do not make me dependent	13.3%	20.0%	45.0%	21.7%
5. I can control abuse of heroin and it does not make me dependent	3.3%	5.0%	36.7%	55.0%

They have a mean score of 8.7 in the General Health Questionnaires with a range from 0 to 25 out of a maximum of 28. One third of the subjects have had thought of suicide.

The scores on the Purpose in Life Scale are shown in Table 8. They have a mean total score of 83.5 with a range of 42 to 115 and a standard deviation of 15.9.

The scores on the Self Esteem Scale is as on Table 9. The mean total score of the Self Esteem Scale is 23.4 with a range of 17 to 28 and a standard deviation of 2.

Table 8. Distribution of scoring in Purpose in Life Scale of 60 psychoactive substance abusers at the first assessment

Item	Mean	SD	Minimum	Maximum
1	4.10	1.53	1	7
2	3.65	1.74	1	7
3	4.17	1.84	1	7
4	4.48	1.60	1	7
5	3.42	1.78	1	7
6	4.45	1.81	1	7
7	4.68	1.90	1	7
8	3.60	1.48	1	7
9	4.27	1.55	1	7
10	3.58	1.94	1	7
11	3.92	1.71	1	7
12	3.65	1.59	1	7
13	4.40	1.72	1	7
14	4.42	1.88	1	7
15	4.07	2.03	1	7
16	5.05	2.00	1	7
17	4.33	1.67	1	7
18	4.18	1.79	1	7
19	4.33	1.62	1	7
20	4.73	1.43	1	7
Total	83.48	15.92	42	115

Table 9. Distribution of Self-esteem scoring of 60 psychoactive substance abusers at the first assessment

	Mean	SD	Minimum	Maximum
1. satisfy with oneself	2.53	0.65	1	4
2. feel nothing of worth	2.48	0.75	1	4
3. feel many merit	2.53	0.60	1	4
4. as capable as others	2.08	0.56	1	4
5. nothing to be proud of	2.62	0.67	1	4
6. feel useless	2.42	0.67	1	4
7. feel valuable	2.13	0.54	1	3
8. respect oneself more	1.82	0.54	1	4
9. feel oneself a failure	2.60	0.74	1	4
10. positive to oneself	2.15	0.61	1	4
Total	23.37	2.02	17	28

As to their health locus of control, they have a mean of score of 25.88 in the internal health locus of control (IHLC), 23.38 in the control by powerful others(PHLC), and 17.82 in the control by chance (CHLC). These are shown in Table 10.

Table 10. Distribution of Multidimensional Health Locus of Control scoring of 60 psychoactive substance abusers at the first assessment

	Mean	SD	Minimum	Maximum
IHLC	25.88	4.25	17	36
PHLC	23.38	4.74	11	32
CHLC	17.82	5.44	6	31

The scores on the Provision of Social Relationship are shown in Table 11. They have a score of peer support of 29.97 as compared to a score of 20.62 in the score of family support. The overall score of social support has a mean of 50.58.

Table 11. Distribution of scoring on Provision of Social Relationship of 60 psychoactive substance abusers at the first assessment

	Mean	SD	Minimum	Maximum
Family support	20.62	6.46	6	30
Peer support	29.97	5.95	17	45
Overall social support	50.58	10.75	23	75

Comparison of this prospective sample with the retrospective sample

This sample of study subjects are quite similar in their sociodemographic characteristics to those of previous clients of PS 33 as reported in the retrospective study

of clients of PS 33. The age of the study subjects and their age of first attempt of substance abuse are both one year junior to those of the previous sample of subjects. There are less preponderance of primary drug of abuse of cough mixture. The abuse of tranquillisers and cannabis are more represented in the sample. There are increases in the sources of drug from drug trafficker and friends. Much more of the sample have not had any previous treatments.

Less of the sample are reported to have psychiatric symptoms although significant proportion of them are having psychological problems. Depressive mood and psychotic symptoms remain as the predominant psychiatric symptoms. As to the social problems, relationship with family members and employment problems remain as significant. Financial problem appears to be an important problem for this sample.

As to their attitudes towards drug use, similar proportion of the samples rate it dangerous to take heroin and substance as compared to the sample of the retrospective study. Substantially less proportion of the sample, 40%, regards drug abusers as useless as compared to the 60% in the retrospective sample. Similar percentage of about 35% believe that one can control the abuse of tranquilliser, cough mixture, cannabis not to become dependant. A little bit more of the sample believes that one can control the abuse of heroin not to become dependant.

This prospective sample of subjects have similar overall mean scores on Purpose in Life Scale, Self Esteem Scale, and Provision of social Relations as compared to the retrospective sample. The two samples are also similar in the scores on health locus of control except that the mean scores on the chance locus of control is a little bit higher in this sample with 17.82 as compared to 15.92 in the retrospective sample. The mean GHQ score is also lower for this prospective sample with a score of 8.7 as compared to the mean score of 10.4 in the retrospective sample.

IV. The second assessment

Results of the second assessment

Thirty seven subjects, that is 61.7% of the initial subjects, are reported to have completed detoxification within about six months of their initial intake. Detoxification is operationally defined as abstinence from abuse for a continuous period of four weeks. They have a mean age of 23.4 and a male to female sex ratio of about seven to three.

Their detoxification experiences are reported in Table 12.

Table 12. Detoxification experiences of 37 psychoactive substance abusers who had completed detoxification within six months of their initial intake.

Item						
	none					very severe
	1	2	3	4	5	6
1. physical discomfort (%)	24.3	21.6	13.5	18.9	10.8	10.8
	not long					very long
	1	2	3	4	5	6
2. duration of physical discomfort (%)	35.1	8.1	24.3	18.9	8.1	5.4
	cannot tolerate					highly tolerate
	1	2	3	4	5	6
3. ability to tolerate phy. discomfort (%)	8.1	2.7	18.9	21.6	24.3	24.3
	none					very severe
	1	2	3	4	5	6
4. emotional discomfort (%)	27.0	16.2	13.5	18.9	13.5	10.8
	not long					very long
	1	2	3	4	5	6
5. duration of emotional discomfort (%)	29.7	18.9	18.9	10.8	10.8	10.8
	cannot tolerate					highly tolerate
	1	2	3	4	5	6
6. ability to tolerate emotion.discomfort (%)	16.2	2.7	16.2	13.5	29.7	21.6
	none					very strong
	1	2	3	4	5	6
7. craving for drugs (%)	27.0	24.3	18.9	16.2	13.5	0
	none					very frequently
	1	2	3	4	5	6
8. frequency of craving for drugs (%)	29.7	21.6	21.6	18.9	0	8.1
	very incapable					very capable
	1	2	3	4	5	6
9. ability to control craving (%)	5.4	8.1	18.9	24.3	18.9	24.3
	very inaccessible					very accessible
	1	2	3	4	5	6
10. accessibility of drugs (%)	10.8	8.1	5.4	16.2	13.5	45.9

(Table 12. Detoxification experiences of 37 psychoactive substance abusers, continued)

	none					very frequent
	1	2	3	4	5	6
11. contact with drug peers (%)	32.4	21.6	18.9	13.5	8.1	5.4
	none					very much
	1	2	3	4	5	6
12. support from drug peers to detoxify (%)	10.8	5.4	21.6	8.1	16.2	35.1
	none					very frequent
	1	2	3	4	5	6
13. contact with non-drug peers (%)	13.5	5.4	5.4	16.2	18.9	40.5
	none					very much
	1	2	3	4	5	6
14. support from non-drug peers to detox(%)	2.9	0	5.7	8.6	28.6	54.3
	none					very much
	1	2	3	4	5	6
15. support from family to detox(%)	2.7	2.7	2.7	0	13.5	78.4
	none					very much
	1	2	3	4	5	6
16. concern from family (%)	5.4	0	5.4	13.5	21.6	54.1
	none					very much
	1	2	3	4	5	6
17. suspiciousness of family on relapse (%)	32.4	16.2	10.8	18.9	16.2	5.4
	none					very much
	1	2	3	4	5	6
18. hostility of family (%)	54.1	21.6	8.1	13.5	2.7	0
	none					very much
	1	2	3	4	5	6
19. determined to maintain abstinence (%)	0	5.4	5.4	13.5	32.4	43.2
	none					very much
	1	2	3	4	5	6
20. confident to maintaining abstinence (%)	2.7	5.4	0	10.8	37.8	43.2

Forty one percents of the subjects reported moderate to severe physical discomfort during detoxification and 32% regarded the duration as long or significantly long. Thirty percents rated difficulty in tolerating the physical discomfort. Forty three percents reported moderate to severe degree of emotional discomfort on detoxification, and 32% regarded the duration as long or significantly long. Thirty five percents reported difficulty in tolerating the emotional discomfort. Thirty percents reported moderate to severe degree of craving and with 27% moderate to severe degree of frequency. Thirty two percents reported difficulty in controlling the craving.

Seventy six percents reported ready accessibility to drugs during the detoxification period. Twenty seven percents reported moderate to high frequency of contact with friends with drug abuse. Sixty two percents of the subjects rated their friends with drug abuse having moderate to high degree of support to their detoxification. Seventy six percents reported moderate to frequent contacts with friends without drug abuse, and the percentage of moderate to high degree of the support of these friends to their detoxification was 91%. The percentage of moderate to high degree of support from relatives was 92%. Eighty nine percents rated moderate to high degree of concern from relatives to the subjects. Forty one percents reported moderate to severe degree of suspicion of lapse in abuse by relatives while 16% reported moderate to high degree of annoyance and dislike by relatives.

Eighty nine percents reported moderate to high degree of determination not to abuse substance again and 92% reported moderate to high degree of confidence.

Their attitudes towards drug abuse after detoxification are as shown in Table 13.

Table 13. Attitude towards drug abuse of the 37 psychoactive substance abusers after detoxification

	Strongly agree	agree	disagree	Strongly disagree
1. Take heroin is very dangerous	75.7%	24.3%	0%	0%
2. Take tranquilliser, cough mixture, cannabis is very dangerous	45.9%	51.4%	2.7%	0%
3. Drug abusers are useless to society	13.5%	27.0%	51.4%	8.1%
4. I can control abuse of tranquilliser, cough mixture, cannabis and they do not make me dependent	8.1%	18.9%	51.4%	21.6%
5. I can control abuse of heroin and it does not make me dependent	2.7%	8.1%	43.2%	45.9%

All of the subjects believe that taking heroin is dangerous, while 97% believe that taking substances is dangerous. Forty one percents believe that drug users are useless. Twenty seven percents report that they can control the abuse of cough mixture, tranquillisers and cannabis and would not be dependent on it. About 11% believe similarly that they can control the abuse of heroin and would not be dependent on it.

They have a mean score of 4.76 in GHQ with a range from 0 to 25 out of a maximum of 28.

Their evaluation of the services received by them is shown in Table 14. All are satisfied with the service from the social worker with 81% rated high degree of satisfaction. All rated the social workers as helpful to them in solving problems with 76% rating high degree of helpfulness. Sixty eight percents have received outpatient treatment by medical practitioners. All are satisfied with the outpatient medical service received, with 60% of those received outpatient service rated high degree of satisfaction. Ninety six percents regard the outpatient medical practitioner as capable of helping them with 60% rating high degree of capability. Twenty five percents have received inpatient treatment by medical practitioners. All are satisfied with the inpatient services received with 89% give a rating of high degree of satisfaction. Among those with inpatient treatment ninety-seven percents rate the inpatient doctor as capable of helping them with 78% rating high degree of capability of help from the doctor.

Table 14. Subjective evaluation of the social and medical services received by 37 detoxified subjects

Satisfaction with services received	NA	very un-satisfactory	quite-un-satisfactory	fair	quite satisfactory	very satisfactory	not know
social worker	-- --	-- --	-- --	13.5%	24.3%	56.8%	5.4%
outpatient doctor	32.4%	-- --	-- --	27.0%	13.5%	27.0%	-- --
inpatient doctor	75.7%	-- --	-- --		10.8%	10.8%	2.7%

Helpfulness in solving problems	NA	very un-satisfactory	quite-un-satisfactory	fair	quite satisfactory	very satisfactory	not know
social worker	-- --	-- --	-- --	21.6%	45.9%	29.8%	2.7%
outpatient doctor	32.4%	-- --	2.7%	21.6%	29.8%	10.8%	2.7%
inpatient doctor	75.7%	-- --		2.7%	8.1%	10.8%	2.7%

Factors associated with completion of detoxification

The characteristics at the time of intake of these 37 subjects completed detoxification are compared to the those of the other 23 subjects who have not completed detoxification. The comparison of their sociodemographic data are shown in Table 15. They are of similar age and sex distribution with a bit higher proportion of female in the group completed detoxification. There is a higher percentage of subjects with educational of Form Four or above in the detoxified group with 30% as compared to 10% in the non-detoxified group.

Table 15. Comparison of the initial sociodemographic data between 37 detoxified subjects with 23 non-detoxified subjects

		Detoxified Cases	Non-detoxified Cases
No. of cases		37	23
Age	mean	23.92	24.04
Sex	M:F	68%:32%	78%:22%
Marital status	single	83.8%	78.0%
	married	2.7%	0%
	cohabited	5.4%	8.7%
	separated	2.7%	0%
	divorced	5.4%	13.0%
Educational level	F.3 or below	70.3%	90.5%
	F.4 or above	24.3%	9.5%
	others	5.4%	0%
Employment status	unemployed	27.0%	34.8%
	employed	56.8%	65.2%
	economically inactive	16.2%	0%

The characteristics of substance abuse of the detoxified group are compared to the non-detoxified as in Table 16. They have similar age of first attempt. There is a bit more occasional abuse in the detoxified group. As to the primary drug of abuse, there are higher percentage of abuse of tranquillisers, cannabis and organic solvent in the detoxified group, While in the non-detoxified group higher percentage of abuse of cough mixture. The percentage of subjects with secondary drug of abuse is lower in detoxified group with 35% as compared to 65% in the non-detoxified group. There is more abuse of narcotics as a secondary drug of abuse in the non-detoxified group. There is a higher percentage in the

Table 16. Comparison of the characteristics of substance abuse at the time of intake at PS33 between the 37 detoxified subjects and the 23 non-detoxified subjects

		Detoxified Cases	Non-detoxified Cases
No. of cases		37	23
Age of first attempt:	mean	17.97	17.38
Pattern of abuse	habitual : occasional	86.5%:13.5%	95.7%:4.4%
Primary drug of abuse	narcotics	2.7%	8.7%
	stimulant	10.8%	13.0%
	tranquilliser	29.7%	17.3%
	cannabis	21.6%	8.7%
	cough mixture	40.5%	56.5%
	romilar	5.4%	4.3%
	organic solvent	16.2%	8.6%
Secondary drug of abuse	(% of cases)	(35.1%)	(65.2%)
	narcotics	5.4%	26.1%
	stimulant	2.7%	4.3%
	depressant	5.4%	4.3%
	tranquilliser	24.3%	30.4%
	cannabis	13.5%	30.4%
	cough mixture	13.5%	8.7%
	romilar	10.8%	8.7%
	organic solvent	0	21.7%
Source of drug	medical retail	66.7%	78.3%
	medical practitioner	2.8%	4.3%
	drug dealer	16.7%	26.1%
	friends	44.4%	26.1%
	others	11.1%	13.0%
Initial reasons for taking drug	self medication	16.7%	8.7%
	peer influence	77.8%	87%
	adverse environment	13.9%	13%
	sensory satisfaction	41.7%	21.7%
	problem solving	16.7%	21.7%
	others	2.8%	4.3%
Reasons for maintaining drug	self medication	22.2%	36.4%
	peer influence	30.6%	18.2%
	adverse environment	13.9%	0%
	sensory satisfaction	55.6%	63.6%
	problem solving	41.7%	45.5%
	withdrawal symptoms	27.8%	31.8%
	others	2.8%	0%
Previous treatment	no	62.2%	65.2%
	treatment agency	10.8%	13%
	medical practitioner	5.4%	0%
	rely on oneself	21.6%	21.7%

detoxified group of seeking sensation as the initial reason of abuse and peer influence as their reason for maintaining abuse. The non-detoxified group has a higher percentage in seeing self medication as a reason for maintaining drug. They have similar percentage of previous treatment.

Comparison of the initial psychiatric symptoms and social problems of both groups are shown in Table 17. There is less subjects with psychiatric symptoms in the detoxified group with 27% as compared to 48% in the non-detoxified group. Their psychiatric symptoms are quite similar. There is higher percentage of mood problems in the detoxified group while the non-detoxified group higher in anxiety symptoms. As to the social problems, there is a higher percentage of employment and related problem in the non-detoxified group with 83% as compared to 49% in the detoxified group. There is a higher percentage of problem in time management in the detoxified group with 32% as compared to 22% in the non-detoxified group. Study problem is only reported in the detoxified group.

Table 17. Comparison of psychiatric symptoms and social problems at the time of intake at PS33 between 37 detoxified subjects and 23 non-detoxified subjects

	Detoxified Cases	**Non-detoxified Cases**
% of with psychiatric symptoms	27.0%	47.8%
Psychiatric symptoms		
delusion	2.7%	4.3%
hallucinations	8.1%	8.7%
thoughts problem	5.4%	8.7%
odd behaviour	2.7%	8.7%
anxiety/avoidance	2.7%	17.4%
depressed, irritable, depressive mood	21.6%	17.4%
anti-social/aggressive behaviour	2.7%	4.3%
self-harm	8.1%	4.3%
% with social problems	100%	100%
Social problems		
financial	32.4%	39.1%
accommodation	8.1%	4.3%
poor time management	32.4%	21.7%
unable to assume normal responsibility	13.5%	13%
lack of self care	2.7%	0%
relationship problem with family	64.9%	65.2%
relationship problem with intimate	29.7%	26.1%
relationship problem with peer	10.8%	17.4%
employment related problem	48.6%	82.6%
study problem	16.2%	0%
lack of life goal/spiritual satisfaction	35.1%	30.4%
others	5.4%	0%

As to the comparison of their attitude to drug abuse between the detoxified group and the non-detoxified group, there is not any significant differences as shown in Table 18. There is higher percentages of subjects in the non-detoxified group thinking that taking heroin and substances are not dangerous with 9% and 17% respectively as compared to 3% and 5% in the detoxified group.

Table 18. Comparison of attitude towards drug at the first assessment between 37 detoxified subjects and 23 non-detoxified subjects

Item	Detoxified cases Mean rank	Non-detox. cases Mean rank	z-value	2-tail sig.
1. Taking heroin is dangerous	40.12	34.88	-1.30	ns
2. Taking tranquilliser, cough mixture, cannabis is dangerous	39.23	35.77	-0.79	ns
3. Drug abusers are useless to society	38.59	36.41	-0.48	ns
4. I can control abuse of tranquilliser, cough mixture, cannabis and they do not make me dependent	36.03	38.97	-0.64	ns
5. I can control abuse of heroin and it does not make me dependent	38.78	36.22	-0.57	ns

The comparison of the two groups on their scores on General Health Questionnaire, Purpose in Life Scale, Self Esteem Scale, Multidimensional Health Locus of Control and Provision of Social Relation Scale are shown in Table 19. Significantly lower GHQ score is found in the detoxified group with a score of 6.6 as compared to 12.1 in the non-detoxified group (Mann-Whitney U- Wilcox Rank Sum Test, $z=-3.403$, $p=0.0007$). There are lower PIL score and social support score in the non-detoxified group as compared to the detoxified group but the differences are not significant.

Table 19. Comparison of General Health Questionnaire (GHQ), Purpose in Life Scale, Self Esteem Scale, Multidimensional Health Locus of Control, and Provision of Social Relation Scale at the first assessment between 37 detoxified subjects and 23 non-detoxified subjects.

Scales	Detoxified Cases Mean	SD	Non-detoxified Cases Mean	SD	z-value	2-tail sig.
GHQ	6.59	5.44	12.09	6.77	-3.40	p<0.001
Purpose in Life	85.89	15.65	79.61	15.91	-1.41	ns
Self-esteem	23.16	2.08	23.70	1.92	-1.13	ns
CHLC	17.24	5.43	18.74	5.46	-1.13	ns
IHLC	25.70	4.50	26.17	3.88	-0.69	ns
PHLC	23.95	4.18	22.48	5.51	-0.75	ns
Peer support	30.57	5.98	29.00	5.90	-0.94	ns
Family support	21.59	5.70	19.04	7.38	-1.12	ns
Social support	52.16	10.05	48.04	11.56	-1.12	ns

CHLC: Chance Health Locus of Control
IHLC: Internal Health Locus of Control
PHLC: Health Locus of Control by Powerful Others

In the detoxified group, there are increases in the percentages agreeing that taking heroin and substance are dangerous. There is also decrease in the GHQ score from the initial 6.6 at the first assessment to 4.8 at the second assessment on completion of detoxification. These changes do not reach statistical significance.

V. Outcome of the Detoxified Subjects

Outcome

The 37 detoxified subjects were followed up and assessed about six month after detoxification. Twenty three completed the final assessment. Seven did not consent to the final interview. Six had defaulted follow up or had their treatments terminated, and they could not be traced. One had committed suicide. The status of substance abuse of these fourteen subjects were obtained from social worker.

Twenty five subjects, 67.6% of the detoxified sample, were known not to be abusing any substance while 12 were known to have lapsed back to various degrees of substance abuse.

Factors associated with the outcome

The sociodemographic data of the 25 current non-abusers and the 12 current abusers are compared as in Table 20.

Table 20. Comparison of the sociodemographic data at the time of intake at PS 33 between 25 current non-abusers and 12 current abusers at six month follow up after completion of detoxification.

		non-abuser	abuser
Number of cases		25	12
Age	mean	22.84 (SD=7.08)	26.17 (SD=7.88)
Sex	M:F	68.0%:32.0%	66.7%:33.3%
Marital status	single	84.0%	83.4%
	married/cohabited	8.0%	8.3%
	separated/divorced	8.0%	8.3%
Educational level	F.3 or below	66.6%	83.4%
	F.4 or above	29.2%	16.7%
	vocational training	4.0%	0%
Employment status	unemployed	28.0%	25.0%
	employed	56.0%	58.3%
	economically inactive	16.0%	16.7%
Residential district	HK Island	12.5%	0%
	Kowloon	37.5%	60.0%
	NT	50.0%	40.0%
Family relationship	No. of family members mean	4.17 (SD=1.95)	4.17 (SD=1.53)
Living with	alone	8.0%	16.7%
	family	80.0%	83.3%
	others	12.0%	0%
Dining with family	⩾ once a week	76.0%	66.7%
	⩽ once a week	16.0%	16.7%
	no	8.0%	16.7%
Family involvement in treatment			
	highly involved	13.0%	8.3% ($p<0.05$)
	involved	43.5%	8.3%
	not quite involved	34.8%	25.0%
	no involvement	8.7%	58.4%
Statutory status	Care & Protection Order	8.7%	0%
	Probation Order	43.5%	41.7%
	Correctional Institute	4.3%	0%
	Others	4.3%	0%
	No order	39.1%	58.3%

The current abusers are older with a mean age of 26.2 as compared to 23.8 of the current non-abusers. There are no significant differences in their sex ratio and marital status. There is a tendency of lower educational level in the current abusers with 83% with Form 3 or below as compared to 67% in the current non-abusers. There is little difference in their employment status at the time of their initial intake at PS 33. There are little differences in their percentage of living with family and frequency of dining with family members. There is statistical significance in the higher involvement of the family in the treatment of the current non-abusers ($p<0.05$).

The pattern of the substance abuse of the two groups are shown in Table 21. The current abusers have a longer duration of abuse before intake at PS 33 with a mean duration of 88.9 months as compared to 62.3 months in the current non-abusers. There is a higher percentage of abuse of cough mixture as the primary drug in the current abuser group at 58.3% as compared to 32% in the current non-abuser group.

Table 21. Comparison of pattern of psychoactive substance abuse at the time of intake at PS 33 between 25 current non-abusers and 12 current abusers at six month follow up after completion of detoxification.

		non-abuser	abuser
Age of first attempt	mean	17.67 (SD=4.99)	18.64 (SD=4.03)
Drug duration (mths)	mean	62.25 (SD=53.54)	88.91 (SD=69.38)
Pattern of abuse	habitual : occasional	88.0%:12.0%	83,3%:16.7%
Context of abuse	social individual	87.0%:13.0%	60.0%:40.0%
Primary drug of abuse	narcotics	4.0%	0%
	stimulant	16.0%	0%
	tranquilliser	32.0%	25.0%
	cannabis	32.0%	16.7%
	cough mixture	32.0%	58.3%
	romilar	4.0%	8.3%
	organic solvent	16.0%	8.3%
Secondary drug of abuse	narcotics	8.0%	0%
	depressant	8.0%	0%
	tranquilliser	28.0%	16.6%
	cannabis	20.0%	0%
	cough mixture	12.0%	16.6%
	romilar	12.0%	8.3%
	stimulant	0%	8.3%

Table 22. Comparison of source of abused substance, reasons of abuse, and previous treatments as at the time of intake at PS 33 between 25 current non-abusers and 12 current abusers at six month follow up after completion of detoxification.

		non-abuser	abuser
Source of drug	medical retail	60.0%	75.0%
	medical practitioner	4.0%	0%
	drug dealer	15.0%	16.7%
	friends	48.0%	16.6%
	others	8.0%	0%
Initial reasons for taking drug	self medication	12.0%	25.0%
	peer influence	80.0%	66.6%
	adverse environment	12.0%	16.7%
	sensory satisfaction	48.0%	25.0%
	problem solving	12.0%	25.0%
	others	0%	8.3%
Reasons for maintaining drug	self medication	20.0%	25.0%
	peer influence	36.0%	16.7%
	adverse environment	16.0%	8.3%
	sensory satisfaction	52.0%	58.3%
	problem solving	36.0%	50.0%
	withdrawal symptoms	24.0%	33.3%
	others	0%	8.3%
Previous treatment	no	76.0%	33.3% ($p<0.05$)
	treatment agency	8.0%	16.7%
	medical practitioner	8.0%	0%
	rely on oneself	8.0%	50.0%

As in Table 22 there is tendency of relatively higher percentage of seeking sensation as the initial reason and peer influence as the maintaining reason of abuse for the current non-abusers. The current abusers indicate problem solving and self medication relatively more as the initial reason of abuse and problem solving and withdrawal as the reason to maintain the abuse. There is significantly higher percentage of current abusers as compared to current non-abusers claiming to have previous treatment of their abuse problem before intake at PS 33. Their previous treatments are largely treatment by oneself.

The initial psychiatric symptoms and social problems of the current non-abusers and current abusers are shown in Table 23. There is a higher percentage of current abusers having psychiatric symptoms even at the time of the intake. There is no particular differences of the nature of the psychiatric symptoms between the two groups. As to the

social problems the abusers have more problems in lack of life goal or spiritual satisfaction, relationship problem with intimate, unable to assume normal responsibility, and financial problem. The current non-abusers tend to have more problems in employment and time management initially.

Table 23. Comparison of initial psychiatric symptoms and social problems between 25 current non-abusers and 12 current abusers at six month follow up after completion of detoxification.

	non-abuser	abuser
Numbers	25	12
Percentage of with psychiatric symptoms	24.0%	33.3%
Psychiatric symptoms		
delusion	4%	0%
hallucinations	8%	8.3%
thoughts problem	8%	0%
odd behaviour	4%	0%
anxiety/avoidance	4%	0%
depressed, irritable, depressive mood	20%	25%
anti-social/aggressive behaviour	4%	0%
somatic	4%	0%
self-harm	8%	8.3%
Percentage with known social problems	100%	100%
Social problems		
financial	28.0%	41.7%
accommodation	4.0%	16.7%
poor time management	36.0%	25.0%
unable to assume normal responsibility	8.0%	25.0%
lack of self care	0%	8.3%
relationship problem with family	64.0%	66.7%
relationship problem with intimate	24.0%	41.7%
relationship problem with peer	16.0%	0%
employment and related problem	52.0%	41.7%
study problem	20.0%	8.3%
lack of life goal / spiritual satisfaction	24.0%	58.3%
others	4.0%	0%

There is not any statistical significant difference between the two groups in their attitudes to drug abuse as shown in Table 24. There is a tendency of more current abusers rating that they can control abuse of tranquillisers, cough mixture, and cannabis without becoming dependent.

Table 24. Comparison on attitude towards drug between as at the time of intake at PS 33 between 25 current non-abusers and 12 current abusers at six month follow up after completion of detoxification.

Item	non-abuser Mean rank	abuser Mean rank	z-value	2-tail sig.
1. Taking heroin is dangerous	19.48	18.00	-0.46	ns
2. Taking tranquilliser, cough mixture, cannabis is dangerous	19.16	18.67	-0.15	ns
3. Drug abusers are useless to society	19.74	17.46	-0.66	ns
4. I can control abuse of tranquilliser, cough mixture, cannabis and they do not make me dependent	17.28	22.58	-1.50	ns
5. I can control abuse of heroin and it does not make me dependent	19.18	18.63	-0.16	ns

Table 25 shows that comparison of the initial scores of the two groups at the first assessment on GHQ, PIL, SE, MHLC and PSR. The current abusers have significantly higher GHQ score even at the time of the first assessment The initial mean GHQ score of the current abusers is 8.9 as compared to 5.48 of the current non-abusers ($p<0.05$). The initial PIL is lower in the current abusers at 79.4 as compare to 89 in the current non-abusers. The current abusers have a higher initial CHLC score of 19.3 and the lower initial IHLC score of 23.3 as compared to the CHLC of 16.2 and IHLC of 26.9 of the current non-abusers. The IHLC is significantly lower in the current abusers ($p<0.05$). The initial social support score is 47.8 for the current abusers and it is significantly lower than the non-abusers at 54.3 ($p<0.05$).

Table 25. Comparison of the scores of General Health Questionnaire (GHQ), Purpose in Life (PIL), Self Esteem (SE), Multidimensional Health Locus of Control (MHLC), & Provision of Social Relations at the first assessment between 25 current non-abusers and 12 current abusers at six month follow up after completion of detoxification.

	non-abuser		abuser			
Scales	Mean	SD	Mean	SD	z-value	2-tail sig
GHQ	5.48	5.36	8.92	5.07	-2.37	$p<0.05$
Purpose in Life	89.00	14.25	79.42	17.05	-1.49	ns
Self-esteem	22.92	2.12	23.67	1.97	-0.71	ns
CHLC	16.24	5.17	19:33	5.57	-1.35	ns
IHLC	26.88	4.84	23.25	2.34	-2.54	$p<0.05$
PHLC	23.48	4.19	24.92	4.14	-0.88	ns
Peer support	31.60	6.16	28.42	5.20	-1.64	ns
Family support	22.68	5.11	19.33	6.41	-1.58	ns
Social support	54.28	9.68	47.75	9.73	-1.98	$p<0.05$

CHLC: Chance Health Locus of Control,
IHLC: Internal Health Locus of Control,
PHLC: Health Locus of Control by Powerful Others

The detoxification experiences as assessed on completion of detoxification are compared between the current non-abusers and the current abusers as shown on Table 26. On the whole the current non-abusers have more positive experiences during detoxification while the current abusers rate their experiences more negatively. In the current abuser group, the duration of emotional discomfort is rated as significantly longer ($p=0.05$), and the ability to control craving is less as compared to those experiences of the current non-abuser group. The probability of the latter difference is just short of reaching statistical significance. The detoxification experiences scores calculated from the whole questionnaire show a statistically significant difference between the two groups with more negative experiences in the current abuser group. The mean Detoxification Experience score of the current abuser group was 60.33 in contrast to 48.56 in the current non-abuser group ($p=0.015$).

There are not any significant differences between their attitude to drug abuse and their evaluation of services received from the social worker and the medical practitioners as assessed after their completion of detoxification.

Table 26. Comparison of the subjective evaluation of detoxification experiences of 25 current non-abusers with 12 current abusers followed up six months after completion of detoxification

Item	non-abusers mean	abusers mean	
1. physical discomfort	2.72	3.67	
2. duration of physical discomfort	2.60	3.00	
3. ability to tolerate phy. discomfort	4.44	3.83	
4. emotional discomfort	2.80	3.67	
5. duration of emotional discomfort	2.44	3.75	(p=0.05)
6. ability to tolerate emotion.discomfort	4.20	3.67	
7. craving for drugs	2.52	2.92	
8. frequency of craving for drugs	2.44	3.00	
9. ability to control craving	4.48	3.50	(p=0.057)
10. accessibility of drugs	4.36	4.83	
11. contact with drug peers	2.72	2.33	
12. support from drug peers to detoxify	4.68	3.18	
13. contact with non-drug peers	4.60	4.08	
14. support from non-drug peers to detox	5.42	4.82	
15. support from family to detox	5.60	5.42	
16. concern from family	5.24	4.75	
17. suspiciousness of family on relapse	2.84	2.92	
18. hostility of family	1.92	1.83	
19. determined to maintain abstinence	5.20	4.67	
20. confident to maintaining abstinence	5.24	4.67	
Detoxification Experiences Score	*48.56*	*60.33*	(p=0.015)

VI. The Final Assessment

Results of the final assessment

At the final assessment, as mentioned above 23 subjects out of the detoxified group had completed the final assessment. Among the non-detoxified group, 7 had completed the final assessment. Six had not consented to the final assessment. Six were in institutional treatment. One had died of a natural cause. So in total 30 out of the original 60 subjects completed the final assessment. There is not any significant differences in the sociodemographic data and characteristics of substance abuse between the thirty subjects completing the final assessment and the others.

Table 27. Sociodemographic data and family relationship of 30 psychoactive substance abusers at the final assessment

Age	range		15-42			
	mean		23.60 (SD 6.38)			
Sex	M:F		23:7 (76.7%:23.3%)			
Employment status		unemployed	5	(16.7%)		
		employed				
		full time	23	(76.7%)		
		part-time	2	(6.6%)		
Living with		alone	1	(3.3%)		
		family	29	(96.7%)		
Dining with family members		⩾ once a week	25	(83.4%)		
		⩽ once a week	3	(10.0%)		
		no	1	(3.3%)		
		non-applicable	1	(3.3%)		

Relationship with	NA	very good	good	fair	poor	very poor
spouse	86.7%	6.7%	3.3%	3.3%	0%	0%
father	20.0%	6.7%	20.0%	43.3%	6.7%	3.3%
mother	10.0%	26.7%	30.0%	26.7%	0%	6.7%
children	90.0%	0%	6.7%	3.3%	0%	0%
other family member	16.7%	20.0%	23.3%	33.3%	0%	6.7%

Seventy seven percents of these thirty subjects reported that they had stopped substance abuse for more than four weeks during some time since their initial registration at PS 33. Forty percents of them reported having lapses in substance abuse afterwards. They lapsed back to substance abuse within the first three months after they had stopped the abuse. Fifty seven percents of the sample reported not having been on any substance in the past four weeks.

The sociodemographic data of these 30 subjects at the time of the final assessment are shown in Table 27. Some 77% of the subjects are in full time employment. Ninety seven percents of them are living with their family and 83% have dinner with the family once or more a week. Their relationship with their family members are on the whole fair to good. There is about 14% of the subjects indicate a poor or a very poor relationship with their father while that for their mother is about 7%.

Their attitudes to drug abuse are shown in Table 28. About 97% felt taking heroin was dangerous. Similarly 97% felt it dangerous to take other substances. Forty three percents felt abusers were useless to society. One third of the subjects believed that they could control their abuse of substance not to become dependent while 13.3% believed so with heroin.

Table 28. Attitude towards drug abuse among 30 psychoactive substance abusers at the final assessment

	Strongly agree	agree	disagree	Strongly disagree
1. Take heroin is very dangerous	83.3%	13.3%	0%	3.3%
2. Take tranquilliser, cough mixture, cannabis is very dangerous	56.7%	40.0%	3.3%	0%
3. Drug abusers are useless to society	20.0%	23.3%	56.7%	0%
4. I can control abuse of tranquilliser, cough mixture, cannabis and they do not make me dependent	6.6%	26.7%	40.0%	26.7%
5. I can control abuse of heroin and it does not make me dependent	6.7%	6.7%	40.0%	46.6%

They had a GHQ score of 4.27 with a range from 0 to 22. The score of Purpose in Life Scale was 84.97 as shown in Table 29, and that for Self Esteem Scale was 23 as in Table 30.

Table 29. Distribution of scoring in Purpose in Life of 30 psychoactive substance abusers at the final assessment

Item	Mean	SD	Minimum	Maximum
1	4.30	1.56	1	7
2	4.03	1.71	1	7
3	4.63	1.52	1	7
4	4.57	1.63	1	7
5	3.50	1.76	1	6
6	4.67	2.07	1	7
7	5.00	1.78	1	7
8	3.40	1.43	1	6
9	4.47	1.68	1	7
10	3.43	1.59	1	7
11	3.97	1.65	1	7
12	3.83	1.44	1	7
13	4.67	1.63	1	7
14	4.23	1.91	1	7
15	3.80	2.12	1	7
16	5.40	1.90	1	7
17	3.93	1.72	1	7
18	4.00	1.62	1	7
19	4.53	1.57	1	7
20	4.60	1.57	1	7
Total	84.97	20.90	30	123

Table 30. Distribution of Self-esteem scoring of 30 psychoactive substance abusers at the final assessment

	Mean	SD	Minimum	Maximum
1. satisfy with oneself	2.47	0.73	1	4
2. feel nothing of worth	2.47	0.63	1	3
3. feel many merit	2.53	0.63	1	4
4. as capable as others	1.83	0.46	1	3
5. nothing to be proud of	2.53	0.57	1	3
6. feel useless	2.47	0.68	1	4
7. feel valuable	2.10	0.61	1	4
8. respect oneself more	1.83	0.38	1	2
9. feel oneself a failure	2.57	0.82	1	4
10. positive to oneself	2.20	0.66	1	4
Total	23.00	2.92	10	26

The scores on the individual subscales of the MHLC are shown in Table 31. The scores in CHLC is 17.33, IHLC 25.83 and PHLC 21.6. The Provision of Social Relation Scale has a overall score of 48.4 with family support of 19 and peer support of 29.4 as on Table 32.

Table 31. Distribution of MHLC scoring of 30 psychoactive substance abusers at the final assessment

	Mean	SD	Minimum	Maximum
IHLC	25.83	4.85	17	36
PHLC	21.60	4.31	13	30
CHLC	17.33	4.77	10	31

Table 32. Distribution of scoring on Provision of Social Relationship of 30 psychoactive substance abusers at the final assessment

	Mean	SD	Minimum	Maximum
Family support	19.00	5.45	6	27
Peer support	29.40	5.03	13	37
Overall social support	48.40	7.66	34	59

As to their evaluation of the services received the results are shown in Table 33. All rated the services received from social worker satisfactory with 90% rated high degree of satisfaction. All felt the social worker had been able to help their problems with 82.8% rating high degree of help. Seventy three percents of the subjects had received outpatient medical treatment. Majority rated the services received from the outpatient doctor as satisfactory with 60% rating the service with high degree of satisfaction. Fifty percents reported the outpatient with high degree of help provided to them. Fifty two percents of them had received inpatient services. Majority felt the services satisfactory with 57% rating the services in high degree of satisfaction with 43% rating high degree of help provided to them.

Table 33. The subjective evaluation of the social and medical services received of 30 psychoactive substance abusers at the final assessment

Satisfaction with services received	NA	very un-satisfactory	quite-un-satisfactory	fair	quite satisfactory	very satisfactory	not know
social worker	-- --	-- --	-- --	10.0%	46.7%	40.0%	3.3%
outpatient doctor	26.7%	-- --	3.3%	23.3%	23.3%	16.7%	6.6%
inpatient doctor	43.3%	-- --	3.3%	16.7%	13.3%	13.3%	10.0%

Helpfulness in solving problems	NA	very un-satisfactory	quite-un-satisfactory	fair	quite satisfactory	very satisfactory	not known
social worker	-- --	-- --	-- --	16.7%	50.0%	30.0%	3.3%
outpatient doctor	26.7%	-- --	3.3%	30.0%	16.7%	16.7%	6.7%
inpatient doctor	43.3%	-- --	3.3%	23.3%	10.0%	10.0%	10.0%

The degrees of achievements in various areas of their life as assessed by the questionnaire on therapeutic elements are as shown in Table 34. On the whole the subjects rated that they had achieved or fully achieved by fifty percents in most of the items The elements rated as highly achieved include appropriate behaviour to prevent relapse 67%, motivation to solve one's own psychological problems 60%, acknowledgement of interpersonal relationship problem, motivation to solve interpersonal relationship problem, ability to maintain a stable job 60%, and ability to maintain a regular sleep-wake cycle 63%. They also rated highly that they had achieved good compliance to treatment with social worker in 63%, and developed a trusting relationship with the social worker 83%.

Table 34. Subjective degree of achievement in therapeutic elements of 30 psychoactive substance abusers as assessed at the final assessment

Item	cannot achieve	somewhat achieved	achieved	fully achieved	NA
1. appropriate behaviour to avoid lapses in substance abuse	0%	23.3%	20.0%	46.7%	10.0%
2. acknowledge one's psychological problems	3.3%	26.7%	30.0%	23.3%	16.7%
3. motivation to solve one's psychological problems	3.3%	13.3%	23.3%	36.7%	23.3%

(Table 34. Subjective degree of achievement in therapeutic elements, continued)

Item	cannot achieve	somewhat achieved	achieved	fully achieved	NA
4. steps to solve one's psychological problems	10.0%	16.7%	20.0%	30.0%	23.3%
5. acknowledge one's relationship problem with family	10.0%	26.7%	26.7%	23.3%	13.3%
6. motivation to solve one's relationship problem with family	20.0%	20.0%	26.6%	16.7%	16.7%
7. steps to solve one's relationship problem with family	20.0%	23.3%	16.7%	23.3%	16.7%
8. acknowledge one's relationship problem with partner	3.3%	10.0%	6.7%	10.0%	70.0%
9. motivation to solve one's relationship problem with partner	3.3%	13.3%	3.3%	10.0%	70.0%
10. steps to solve one's relationship problem with partner	6.7%	6.7%	3.3%	13.3%	70.0%
11. acknowledge one's interpersonal relationship problem	3.3%	20.0%	30.0%	20.0%	26.7%
12. motivation to solve one's interpersonal relationship problem	3.3%	20.0%	26.7%	23.3%	26.7%
13. steps to solve one's interpersonal relationship problem	3.3%	23.3%	30.0%	20.0%	23.3%
14. ability to handle one's emotion	16.7%	26.7%	33.3%	16.7%	6.7%
15. ability to handle one's impulse	10.0%	30.0%	26.7%	20.0%	13.3%
16. ability to maintain a stable job	6.7%	16.7%	20.0%	40.0%	16.7%
17. use one's money appropriately	6.7%	36.7%	26.7%	20.0%	10.0%
18. compliance to treatment of social worker	0%	23.3%	26.7%	40.0%	10.0%
19. compliance to psychiatric treatment	10.0%	16.7%	33.3%	16.7%	23.3%
20. ability to use & enjoy leisure time	13.3%	23.3%	30.0%	26.7%	6.7%
21. ability to choose recreational activities	13.3%	23.3%	30.0%	23.3%	10.0%
22. ability to develop social network with non-abusers	13.3%	20.0%	30.0%	23.3%	13.3%
23. ability to maintain a regular sleep wake cycle	16.7%	13.3%	26.7%	36.7%	6.7%
24. trusting relationship with social worker	3.3%	0%	43.3%	40.0%	13.3%

Table 35. Comparison of changes in GHQ, PIL, SE, MHLC and Provision of social relation over the year of follow up in the 30 subjects who had completed both the first and the final assessment.

Scales	1st Assess Mean	SD	final Assess Mean	SD	z-value	2-tail sig
GHQ	8.17	7.01	4.27	6.60	-3.02	p<0.005
Purpose in Life	85.47	16.58	84.97	20.90	-0.29	ns
Self-esteem	23.33	2.09	23.00	2.92	-0.03	ns
CHLC	16.77	5.72	17.33	4.77	-0.28	ns
IHLC	26.43	4.44	25.83	4.85	-0.56	ns
PHLC	23.30	2.09	21.60	4.31	-1.54	ns
Peer support	31.17	5.80	29.40	5.03	-1.08	ns
Family support	21.30	6.17	19.00	5.45	-1.33	ns
Social support	52.47	10.57	48.40	7.66	-1.39	ns

CHLC: Chance Health Locus of Control
IHLC: Internal Health Locus of Control
PHLC: Health Locus of Control by Powerful Others

Table 36. Comparison on attitude towards drug of 30 cases who had completed both the first and final assessment

Item	1st Assess Mean rank	final Assess Mean rank	z-value	2-tail p
1. Taking heroin is dangerous	33.45	27.55	-1.70	ns
2. Taking tranquilliser, cough mixture, cannabis is dangerous	35.28	25.72	-2.39	p<0.005
3. Drug abusers are useless to society	33.70	27.30	-1.57	ns
4. I can control abuse of tranquilliser, cough mixture, cannabis and they do not make me dependent	29.33	31.67	-0.55	ns
5. I can control abuse of heroin and it does not make me dependent	32.33	28.67	-0.91	ns

Changes of the thirty subjects over the period of follow up assessments

Contrasting the conditions of the 30 subjects at this final assessment with their conditions at the initial assessment, the scores of the various scales are shown in Table 35. There is little change with most of the scales with the exception of GHQ. The initial mean GHQ score of the 30 subjects was 8.17. It had significantly improved to 4.27 at the final

assessment (Mann-Whitney U-Wilcox Rank Sum W test, z=-3.023, p=0.0025). There is also significant positive change in one of the item in the attitude towards drug use as in Table 36, the belief that it is dangerous to take substances (Mann-Whitney U- Wilcox Rank Sum W Test, z=-2.388, p=0.017).

Factors associated with outcome of the thirty subjects

As mentioned above among these thirty subjects at the time of follow up 17 had stopped their abuse, while 13 still had abuse. In order to clarify what factors may be associated with this difference in the outcome of substance abuse at follow up between these 17 current non-abusers and 13 currant abusers, their data at the first assessment and at the final assessment are contrasted. Table 37 shows the comparison of their sociodemographic data as at the time of the initial intake. In contrast to the current non-abusers, the current abusers are older at their time of intake, higher percentage with education of Form three or lower.

Table 37. Comparison of the sociodemographic data at the time of initial intake between of 17 current non-abusers and 13 current abusers followed up at about nine months

		non-abuser	**abuser**
Number of cases		17	13
Age	mean	22.71 (SD=6.17)	24.92 (SD=6.63)
Sex	M:F	82.4%:17.6%	69.2%:30.8%
Marital status	single	94.1%	84.6%
	married/cohabited	0%	7.7%
	separated/divorced	5.9%	7.7%
Educational level	F.3 or below	54.5%	84.6%
	F.4 or above	37.0%	15.4%
	vocational training	7.5%	0%
Employment status	unemployed	29.4%	23.1%
	employed	70.6%	69.2%
	economically inactive	0%	7.7%
Residential district	HK Island	12.5%	16.7%
	Kowloon	25.0%	66.6%
	NT	62.5%	16.7%

Table 38. Comparison of the family relationship and statutory status at the time of initial intake between of 17 current non-abusers and 13 current abusers followed up at about nine months

		non-abuser	abuser	
Family relationship	Mean no. of family members	4.31 (SD=1.70)	3.15 (SD=1.82)	
Living with	alone	5.9%	7.7%	
	family	76.5%	76.9%	
	others	17.6%	15.4%	
Dining with family	⩾ once a week	82.4%	69.2%	
	⩽ once a week	11.8%	7.7%	
	no	5.9%	23.1%	
Family involvement in treatment				
	highly involved	20.4%	15.4%	
	involved	39.1%	15.4%	
	not quite involved	32.9%	15.4%	
	no involvement	7.6%	53.8%	($p<0.05$)
Statutory status	Care & Protection Order	6.3%	0%	
	Probation Order	43.8%	30.8%	
	Correctional Institute	6.3%	0%	
	No order	43.8%	69.2%	

As shown in Table 38 the current abusers have less frequency of dining with their family, and less family involvement in their treatment. This less frequency of family involvement in their treatment in the abuser group is statistically significant as compared to that of the non-abuser group.

The comparison of their characteristics of their substance abuse initially is as shown in Table 39. There is a higher percentage of use of cough mixture as the primary drug of abuse in the current abuse group. The current abusers tend to have started the abuse for self medication and problem solving in addition to peer influence, while the current non-abusers are more under the influence of peers and seeking sensation. As to the reasons to maintain the abuse, the current abusers tend to put problem solving and self medication as more as the reasons in contrast to peer influence that remains as important factor affecting the current non-abusers as their reason to maintain their abuse before their intake at PS 33. Significantly more of the subjects of the current abuser group has had previous treatment either at other treatment agency or on oneself before intake at PS 33 ($p<0.05$).

Table 39. Comparison of characteristics of psychoactive substance abuse at the time of intake between 17 current non-abusers and 13 current abusers followed up at about nine months

		non-abuser	abuser
Age of first attempt	mean	18.00 (SD=4.83)	17.58 (SD=3.70)
Pattern of abuse	habitual : occasional	88.2%:11.8%	76.9%:23.1%
Context of abuse	social individual	93.8%:6.3%	75.0%:25.0%
Primary drug of abuse	narcotics	0%	7.7%
	stimulant	23.5%	7.7%
	tranquilliser	23.5%	15.4%
	cannabis	23.5%	7.7%
	cough mixture	41.2%	76.9%
	organic solvent	11.8%	7.7%
	others	0%	15.4%
Secondary drug of abuse	narcotics	5.9%	7.7%
	depressant	5.9%	0%
	tranquilliser	23.5%	38.5%
	cannabis	11.8%	15.4%
	cough mixture	5.9%	15.4%
	stimulant	0%	16.7%
	romilar/organic solvent	17.6%	23.1%
Source of drug	medical retail	52.9%	75.0%
	medical practitioner	0%	0%
	drug dealer	17.6%	6.3%
	friends	52.9%	18.7%
	others	5.9%	0%
Initial reasons for taking drug	self medication	5.9%	16.7%
	peer influence	76.5%	83.3%
	adverse environment	11.8%	16.7%
	sensory satisfaction	47.1%	16.7%
	problem solving	11.8%	25.0%
Reasons for maintaining drug	self medication	17.6%	41.7%
	peer influence	41.2%	16.7%
	adverse environment	11.8%	0%
	sensory satisfaction	58.8%	75.0%
	problem solving	23.3%	58.3%
	withdrawal symptoms	23.3%	41.7%
Previous treatment	no	82.3%	38.5% $p<0.05$)
	treatment agency	5.9%	23.1%
	medical practitioner	5.9%	0%
	rely on oneself	5.9%	38.5%

Their initial psychiatric symptoms and social problems are shown in Table 40. There is a bit higher percentage of psychiatric symptoms among the current abusers at the time of intake. There is little difference in the nature of the psychiatric symptoms. As to their social problems, there are more financial problems, employment problems, lack of life goal or spiritual satisfaction, and inability to assume normal responsibility in the current abuser group.

Table 40. Comparison of initial psychiatric symptoms and social problems between 17 current non-abusers and 13 current abusers followed up at about nine months

	non-abuser	abuser
Numbers	17	13
Percentage of with psychiatric symptoms	23.5%	30.8%
Psychiatric symptoms		
hallucination	5.9%	0%
thoughts problem	11.8%	0%
odd behaviour	0%	7.7%
anxiety/avoidance	5.9%	7.7%
depressed, irritable, depressive mood	23.5%	23.1%
somatic	5.9%	0%
self-harm	5.9%	7.7%
Percentage with known social problems	100%	100%
Social problems		
financial	35.3%	53.8%
accommodation	5.9%	23.1%
poor time management	35.3%	30.8%
unable to assume normal responsibility	11.8%	30.8%
lack of self care	0%	7.7%
relationship problem with family	64.7%	69.2%
relationship problem with intimate	17.6%	30.8%
relationship problem with peer	11.8%	15.4%
employment and related problem	58.8%	76.9%
study problem	11.8%	15.4%
lack of life goal / spiritual satisfaction	17.6%	53.8%
others	5.9%	7.7%

Their attitude to drug abuse as assessed at the time of initial intake are as shown in Table 41. There is no statistical significant differences between the two groups.

Table 41. Comparison on initial attitude towards drug between 17 current non-abusers and 13 current abusers followed up at about nine months

Item	non-abuser Mean rank	abuser Mean rank	z-value	2-tail sig.
1. Taking heroin is dangerous	15.26	15.81	-0.20	ns
2. Taking tranquilliser, cough mixture, cannabis is dangerous	13.88	17.62	-1.35	ns
3. Drug abusers are useless to society	16.85	13.73	-1.06	ns
4. I can control abuse of tranquilliser, cough mixture, cannabis and they do not make me dependent	14.94	16.23	-0.43	ns
5. I can control abuse of heroin and it does not make me dependent	16.65	14.00	-0.93	ns

Table 42. Comparison of the scores of General Health Questionnaire, Purpose in Life Scale, Self Esteem Scale, Multidimensional Health Locus of Control, Provision of Social Relation and duration of substance abuse as at time of initial assessment between 17 current non-abusers and 13 current abusers as followed up at about nine months

	non-abuser		**abuser**			
Scales	Mean	SD	Mean	SD	z-value	2-tail sig
GHQ	5.24	5.88	12.00	6.67	-3.11	p<0.001
Purpose in Life	92.00	15.61	76.92	14.14	-2.45	p<0.05
Self-esteem	23.12	2.29	23.62	1.85	-0.13	ns
CHLC	15.76	5.91	18.08	5.39	-1.22	ns
IHLC	27.71	4.71	24.77	3.56	-1.87	ns
PHLC	23.47	3.83	23.08	4.37	-0.44	ns
Peer support	31.82	5.48	30.31	6.30	-0.67	ns
Family support	22.88	4.81	19.23	7.28	-1.26	ns
Social support	54.71	8.78	49.54	12.29	-1.34	ns
Drug duration	49.76	50.14	94.25	55.50	-2.76	p<0.005

CHLC: Chance Health Locus of Control
IHLC: Internal Health Locus of Control
PHLC: Health Locus of Control by Powerful Others

The comparison of the GHQ, PIL, SE, MHLC and PSR as at the time of first assessment between the two groups are shown in Table 42. GHQ is significantly higher in the current abuser group at the time of first assessment at a score of 12 in contrast to a score of 5.2 in the current non-abuser group ($p<0.001$). The score of PIL is also significantly lower for the current abuser group at a score of 76.9 comparing to 92 in the current non-abuser group ($p<0.05$). There is little difference in the self esteem scale. The current abuser group tend to have a higher score in CHLC and lower score in IHLC. The scores in family support and the social support as a whole are also lower in the current abuser group. The duration of abuse before intake at PS 33 is also significantly longer in the current abuser group at a mean of 94 months comparing to 50 months in the current non-abuser group ($p<0.005$).

The scores of the two groups by the time of the final assessment in GHQ, PIL, SE, MHLC and PSR are as shown in Table 43. The GHQ scores of the two groups are still significantly different as assessed at the time of the final assessment ($p<0.05$) though both have improvements as compared to the initial assessment. The difference in PIL between the two group is also statistically significant ($p<0.005$). Significant difference is also found between the two groups in scores of family support with higher score of 21.23 in the current non-abuser group as compared to 16.08 in the current abuser group ($p<0.02$). The overall social support score is higher in the current non-abuser group but not statistically significant.

Table 43. Comparison of the scores of General Health Questionnaire, Purpose in Life Scale, Self Esteem Scale, Multidimensional Health Locus of Control, Provision of Social Relation as assessed at about nine month between 17 current non-abusers and 13 current abusers

	non-abuser		**abuser**			
Scales	Mean	SD	Mean	SD	z-value	2-tail sig
GHQ	1.82	3.81	7.46	8.14	-1.98	$p<0.05$
Purpose in Life	92.94	19.96	74.54	17.79	-2.91	$p<0.005$
Self-esteem	22.71	3.60	23.38	1.76	-0.26	ns
CHLC	16.06	3.94	19.00	5.37	-1.45	ns
IHLC	26.35	5.44	25.15	4.06	-0.59	ns
PHLC	22.12	4.21	20.92	4.52	-0.59	ns
Peer support	29.35	5.12	29.46	5.11	-0.52	ns
Family support	21.23	4.02	16.08	5.82	-2.42	$p<0.02$
Social support	50.59	7.22	45.54	7.52	-1.89	$p=0.059$

CHLC: Chance Health Locus of Control
IHLC: Internal Health Locus of Control
PHLC: Health Locus of Control by Powerful Others

Table 44. Comparison of degrees of achievement in therapeutic elements between 17 current non-abusers and 13 current abusers as followed up at about nine months

Item	Non-abusers mean	Abusers mean	
1. appropriate behaviour to avoid lapses in substance abuse	2.71	1.77	p=0.004
2. acknowledge one's psychological problems	2.00	1.75	
3. motivation to solve one's psychological problems	2.55	1.92	
4. steps to solve one's psychological problems	2.64	1.25	p=0.002
5. acknowledge one's relationship problem with family	2.15	1.31	p=0.035
6. motivation to solve one's relationship problem with family	2.17	0.85	p=0.002
7. steps to solve one's relationship problem with family	2.25	0.85	p=0.003
8. acknowledge one's relationship problem with partner	2.50	1.57	
9. motivation to solve one's relationship problem with partner	3.00	1.29	p=0.06
10. steps to solve one's relationship problem with partner	3.00	1.17	p=0.04
11. acknowledge one's interpersonal relationship problem	2.30	1.58	p=0.055
12. motivation to solve one's interpersonal relationship problem	2.50	1.50	p=0.008
13. steps to solve one's interpersonal relationship problem	2.50	1.38	p=0.002
14. ability to handle one's emotion	1.93	1.08	p=0.023
15. ability to handle one's impulse	2.00	1.25	p=0.039
16. ability to maintain a stable job	2.57	1.55	p=0.017
17. use one's money appropriately	2.07	1.17	p=0.011
18. compliance to treatment of social worker	2.57	1.77	p=0.019
19. compliance to psychiatric treatment	2.40	1.23	p=0.003
20. ability to use & enjoy leisure time	2.07	1.38	
21. ability to choose recreational activities	2.07	1.31	p=0.052
22. ability to develop social network with non-abusers	2.21	1.17	p=0.009
23. ability to maintain a regular sleep wake cycle	2.53	1.15	p=0.002
24. trusting relationship with social worker	2.64	2.08	p=0.038
Adjusted mean overall TEA score	*2.27*	*1.39*	p<0.001

The two groups are also compared on their scores on the degree of achievement in the therapeutic elements as in Table 44. On the whole the current non-abusers have a higher mean score on all of the items as compared to the current abusers. On 17 of the 24 items the differences are statistically significant. Very significant differences with probability less than 0.01 include the following, appropriate behaviour to avoid lapses in substance abuse, steps to solve one's psychological problems, motivation to solve one's relationship problem with family, steps to solve the problems with family, motivation to solve one's interpersonal relationship problem, compliance to psychiatric treatment, ability to develop social network with non-abusers, and ability to maintain a regular sleep-wake cycle. There is also a significant difference in the adjusted mean overall TEA (Therapeutic Elements Achievement) scores between the two groups with a higher mean adjusted overall score of 2.27 in the current non-abusers and 1.39 in the current abusers ($p<0.001$).

To consider improvements over the follow up period other than their change in substance abuse of the current non-abusers and current abusers, their employment status, attitude to drug abuse, GHQ, PIL, SE, MHLC and PSR at the initial assessment are contrasted with the scorings as assessed at the final assessment. There is significant improvement in the employment status in the current non-abusers ($z=-2.84$, $p<0.005$). As to the attitude to drug abuse there is a significant increase in the current non-abusers in regarding drug abusers as useless ($z=-2.01$, $p<0.05$). Both groups have reduction of the GHQ scores over the follow up period. The score of the non-abuser group has decreased from 5.2 to 1.8 ($z=-2.81$, $p=0.005$), while the GHQ score of the abuser group decreased from 12 to 7.46. There are little changes in the PIL, SE, CHLC, IHLC, PHLC scores of both groups from the initial assessment to the final assessment.

VII. Discussion

This sample of subjects in the prospective study are younger than those subjects in the retrospective sample. This reflects the change in the age of the substance abusers getting younger as reported in the annual reports of ACAN. This may indicate the actual decrease in the age of substance abusers or reflect the earlier of the substance abusers getting into contact with treatment agencies. As the mean age of initial attempt of substance abuse in the sample is also one year less and the mean duration of abuse before intake at PS 33 remains about the same as the previous sample, there is probably a true decrease in the age of substance abuser. Only 15% of the sample reported having previous treatment either at a treatment agency or by a medical practitioner. As discussed in the report of the retrospective study, how come the substance abusers take so many years before they come into contact with the psychoactive substance counselling centre like PS 33 and how they can enter into the appropriate treatments earlier awaits to be clarified.

The types of substances abused by this sample are not particularly different from the previous sample except that cough mixture is of less percentage as the most predominant substance of abuse. It may reflect a changing trend of substance abused by the abusers or it may reflect the more readiness of abusers with other types of abused

substance coming forward to the treatment agency. In either case this indicates that the social workers of PS 33 need to be prepared to help clients with different substances of abuse. Irrespective of the change of the types of substances abused, the psychological problems and social problems of the subjects presented to the centre appear to be equally prevalent if not more.

In the course of the study in follow up of the subjects who had completed detoxification, it was noted that it took quite some time before the subjects began to stop their substance of abuse and go into detoxification treatment. As this is not part of the study, it awaits to be clarified what have hindered the subjects from getting into detoxification treatment earlier. Maybe for some of the abusers more intensive treatment initially is required than is currently available to help the abusers to decide on and to start their detoxification. A day centre whereby the abusers may go daily for psychosocial assessments and treatment can be such a service.

About two third of the subjects have received outpatient medical treatment and one quarter received inpatient medical treatment. These again indicate the importance of the co-ordinated efforts of the counselling centre with the medical services. These also indicate that some one third of the subjects have been able to come off from their substance abuse without any medical input but with the service of the social worker of PS 33.

As in the retrospective study, the rating of satisfaction and degree of helpfulness of the social worker are higher than those accorded to the medical practitioners. These may reflect the attitude of the subjects to treatment facilities of different settings, or different treatment approaches between the social worker and the medical practitioners, or different therapist-client relationship, or real differences in the satisfaction and helpfulness of the different services.

Higher level of education seems to be a good prognostic factor for completion of detoxification within six months of intake. Whether this turns out to be a real significant factor need clarification in future study. It becomes obvious that preventive education or other strategies need to be aimed at those in the junior secondary school or even before that.

That there is a higher percentage of cough mixture in the non-detoxified group indicate that cough mixture despite it is commonly used and available is not as benign as it is intended to be. Efforts need to be aimed at to point out to the at risk groups that cough mixture can be more difficult to come off once it is dependant on.

Multiple drug abusers again have more difficulty in detoxification. These again point to the need of education on the additional risk of multiple substance abuse and the need of early intervention to substance abusers before they have become multiple substance abusers.

Employment and related problems appear to be a bad prognostic factor for detoxification from abused substance. These problems may be an adverse consequence of substance abuse or they may have acted as a stressful factor for the subjects. Anyhow efforts may need to be enhanced on this aspect to help the subjects to resolve their problems related to work and to help them to return to open gainful employment. If the latter is difficult, some forms of sheltered work or assisted employment to help them to learn or relearn the appropriate skills to adjust to open gainful employment seem to be necessary.

The higher percentage of subjects in the non-detoxified group thinking that taking heroin and taking non-narcotic substances are not dangerous worth consideration. Although the differences in the attitudes to drug abuse between the detoxified and the non-detoxified do not reach statistical significance, it is natural to expect those who do not think it dangerous to take drugs would have a higher chance in trying the drugs and taking them on a long term basis. Thus abusers with inappropriate attitudes to drug abuse might need special attention to how they have developed such attitudes and how they can be helped to change their attitudes to more appropriate ones. Indeed based on the comparison of data between of the first assessment and the final assessment to assess the changes of the subjects over the period of follow up, the attitude that it is dangerous to take non-narcotic substances has significant improvement to more appropriate attitude after the period of treatment.

The higher mean GHQ score among the non-detoxified subjects indicates that they have more severe degree of psychological disturbance. This may reflect that they have more severe psychological disturbance primary to substance abuse or that the substance abuse have more disturbance on their psychological well being. Should GHQ have been assessed again in the two groups after completion of detoxification of the detoxified group, a decrease in the GHQ only in the detoxified group and not in the non-detoxified group would support the hypothesis that a GHQ reflects the effect of disturbance caused by substance abuse. Although these data have not been available, comparison of GHQ has been done between the first assessment and the final assessment among the thirty subjects able to be followed up some nine months after intake. It shows that there is decrease in GHQ in both those who have stopped substance abuse as well as those who have not stopped the abuse. Moreover among the detoxified subjects their GHQ score show further decrease in the period of follow up after they have completed detoxification. Both show that the GHQ score indicates psychological disturbance independent of the presence of substance abuse. It can thus be inferred that the substance abusers have primary psychological disturbances. The degree of the psychological disturbance is associated with whether they can complete detoxification within six months of their intake. It is important to treat the underlying psychological disturbance in addition to helping them coming off from the abused substances. As mentioned both the subjects with substance abuse and the subjects without current substance abuse have decrease in GHQ score by the time of the final assessment. This reflects that they have been improving in their psychological state on their treatments received over the follow up period.

The older the subject and the longer the duration of substance abuse before intake at PS 33 are both associated with the likelihood of continuing substance abuse at follow up. These again indicate that the earlier the treatment in the course of substance abuse in an abuser the better the likelihood of success.

The degree of family involvement in the treatment of the abuser is significantly associated with better outcome of the abuser. This reflects either the underlying family relationship or the degree of adverse influence the substance abuse of the abuser may have affected his family. In either case family intervention need to be arranged to verify the situation of the family, to help the family to understand the condition of the abuser, to reduce the adverse influence of any family pathology on the abuser, or to reduce the adverse influence of substance abuse on the family relationship, and to help the family and the abuser to work together with the helping professionals for the best interests of both the abuser and the family.

That previous treatment of substance abuse by oneself is associated with worse outcome worth further consideration. On the hand previous treatment by oneself may reflect self awareness of having problem and motivation to solve the problem. Yet it may also indicates greater degree of problems or adverse effects on one's life. Detoxification on oneself without the help of expert help of the social worker and the help of the medical practitioner can be very distressing. This may act as a frightening experience thereby the abuser tends to avoid facing detoxification again should they have dependence on the substance again. The failure of previous treatment may also affect their self confidence in succeeding in future treatment.

Again GHQ score at the initial assessment is a significant prognostic factor associated with outcome after detoxification. The emphasis of treatment of the psychological ill-health in substance abusers is obvious. The lower score of Purpose in Life scale in the current abusers may reflect their underlying difficulty in personal development or it may be an adverse effect of substance abuse acting on them. As described there is no significant change in the mean PIL scores of both the groups of non-abusers and the abusers over the period of treatment based on the comparison of the thirty subjects with both the first and the final assessments. Thus it seems that the lower mean PIL score in the current abuser group indicates that their underlying personality development is less favourable. It may be of importance to clarify in future studies how the attitude of the subjects in purposes in life may have been developed differently, how they can be helped to change to a more positive attitudes in life, and whether such change would help them in the return to a life without the need of substance abuse.

In this study the higher accord to the control of health by oneself is significantly related to better outcome after detoxification. The belief of chance in controlling one's health is higher among the current abusers. Although this does not reach statistical significance, it need to be reminded that in the retrospective study, higher belief in chance as control of health is associated with current abuse too. As there are not any significant changes of the scores of IHLC, CHLC, and PHLC over the period of follow up in the

thirty subjects followed up, the beliefs in health control are underlying beliefs of the subjects irrespective of their substance abuse.

The degree of social support is significantly associated with the outcome. The part of family support seems to be the more important part within this social support. As discussed above irrespective of whether the lower social support is an underlying problem of the abuser or it be a result of his substance abuse, help to the abuser to enhance their family support and their social support in general is important.

The degree of detoxification experience is significantly associated with the outcome of the subjects may mean that the degree of detoxification experience reflects the degree of dependence. The subject with the less degree of dependence has a better prognosis and the more degree of dependence the worse prognosis. However all of these subjects have completed their detoxification and have been free from the substance of abuse for four weeks or more. It need to be clarified that the degree of detoxification experience on itself does associate with subsequent outcome after completion of detoxification. If it is true, one need to help the substance abusers in minimising their degrees of discomfort during detoxification. It has been noted above that the presence of previous treatment by oneself is negatively associated with outcome.

On the follow up of thirty subjects over the some nine months of treatment about one third of the subjects still hold the belief that they can control the abuse of non-narcotic substances without becoming dependent. There does not seem to be any overall change in this attitude from the first assessment to the final assessment. This is in contrast to the positive change in taking that it is dangerous to take non-narcotic substances. It thus seems that the attitude of belief in ability to control the abuse of substances without becoming dependent is more resistant to change. Although none of the attitude is significantly associated with the outcome of the subjects, it is still worthwhile to clarify how this attitude of one can control the abuse of non-narcotic substances without becoming dependent has developed in this group of subjects and how they can be changed to the more positive attitude.

The scores in the therapeutic elements achievement scale indicate the wide ranges of achievements through their treatment at PS 33 in the group of subjects other than the prevention of relapse from abuse. These cover their psychological problems, their ability to maintain a stable job, the ability to maintain a regular sleep-wake cycle, and their interpersonal relationship problem. In short their achievements include their biological aspect, their psychological aspect, and their social aspect. It awaits to be seen whether such changes have any relationship to their outcome in substance abuse. Indeed in further analysis, the overall adjusted mean therapeutic elements achievement score and the scores of individual items of the scale are significantly associated with the outcome of substance abuse.

The significance of duration of substance abuse prior to intake at PS 33, GHQ, PIL, and family support in association with the outcome of substance abuse shown in the

analysis of different outcome of the detoxified subjects are replicated in the analysis of the outcome of these thirty subjects assessed at the final assessment.

Basing on the results of this prospective study, prognostic factors can be drawn about the likelihood of completion of detoxification within six months of intake. The factors are as shown in Table 45. The most important factor is the initial GHQ score, that is, the initial degree of psychological disturbance.

Table 45. Prognostic factors for success in detoxification from substance abuse

Prognostic factor	good	bad
Educational level	higher	lower
Primary drug of abuse	tranquillisers cannabis organic solvent	cough mixture
Secondary drug of abuse	no	yes
Psychiatric problems	less	more
Social problems		employment and related problem
Attitude to drug abuse -- taking heroin is dangerous	yes	no
GHQ score *	lower	higher
PIL	higher	lower
Social support	higher	lower

(* = statistically significant)

As to the prognostic factors of likelihood of maintenance of abstinence from substance abuse after completion of detoxification are as shown in Table 46. The most important factors include the duration of abuse before intake, the degree of family involvement in treatment, the initial GHQ score, the initial IHLC, the initial PIL, the initial social support, the detoxification experience score, and the duration of emotional discomfort during detoxification. The degree of achievements in therapeutic elements, as reflected in the adjusted mean TEA score, and is also significantly associated with the outcome of substance abuse.

Table 46. Prognostic factors for maintenance of abstinence from substance abuse

Prognostic factors	good	bad
Age	younger	older
Education	higher	lower
Age of first attempt of abuse	younger	older
Duration of abuse *	shorter	longer
Primary drug of abuse	cannabis organic solvent tranquilliser	cough mixture
Family involvement * in treatment	more involved	little involved
Previous treatment *	no	yes
Social problems		financial poor time management unable to assume normal responsibility relationship problem with intimate lack of life goal / spiritual satisfaction
Attitude to drug abuse		believe he can control abuse of substances without becoming dependent
GHQ score *	lower	higher
IHLC *	higher	lower
CHLC	lower	higher
PIL *	higher	lower
Social support *	higher	lower
Detox. Experience score *	lower	higher
Duration of emotional * discomfort	shorter	longer
Ability to control craving	more	less
Therapeutic Elements * Achievement score	higher	lower

(* = statistically significant)

VIII Implications

From the above discussion psychoactive substance abuse appears to be just part of the problems of an abuser. The abuser is usually suffering from an underlying psychological disturbance. Besides, he may have negative attitudes towards life with negative appraisal to his purpose in life. He may also be suffering from a wide range of social problems including employment problems, financial problems, time management problems, and relationship problems with family. He may have little support from his social circles especially that from his family. He may come into contact with an abused substance through his peers. The abused substance is then maladaptively and ineffectively used by the abuser to 'solve' or temporarily 'avoid' his problems. The substance abused in turn lead to varying degrees of physical, psychological and social problems. This then leads to a vicious cycle leading the life of the abuser into greater problems and making his treatment more complicated.

The approach to the management of a substance abuser need to cover a comprehensive assessment of his physical, psychological and social aspects so as to allow the planning and implementation of biopsychosocial treatments for him. The treatment of the underlying psychological disturbance, the resolution of any relationship problem with the family, involvement of the family in the treatment, enhancing the family support to the abuser, and the solution to the possible employment problem are all important parts of the overall management. The knowledge of and attitude to drug abuse need to be assessed and appropriately educated and changed when necessary. Appropriate behaviour to stop the abuse of substances and to prevent lapses of further abuse need to be developed in the abuser. The need of day centre service and non-medical residential service may need to be considered.

Medical services, outpatient and inpatient, serve as an important part of the overall management for a major proportion of the abusers. Appropriate co-ordination of the services from the social worker and the services from the medical practitioners should be desirable for the ultimate benefit of the abuser. The different roles of the medical practitioner and the social worker in the overall management of the individual abuser need to be spelt out and implemented to allow efficient deployment of resources and maximise the efficacy of the management of the abuser. The working relationship between the individual abusers and their medical practitioners need to be facilitated and enhanced.

Prognostic factors for detoxification and maintenance of abstinence for an abuser can be assessed at the beginning of his treatment. Specific treatments can be aimed at the areas of poor prognostic factors as indicated so as to improve the treatment outcome.

The dictum that the earlier the treatment the better the outcome holds equally true for the abusers. It also appears that one need to try to reduce the degree of discomfort of an abuser during detoxification, as the less the detoxification discomfort the more likely he is to maintain abstinence from substance abuse. The degree of achievements of various therapeutic elements for an individual abuser can be also monitored, and appropriate

strategies taken to foster and enhance the achievements in these various specific elements so as to improve the outcome of the abuser.

Future research in the management of the substance abusers may include how to motivate the abusers to enter into treatment programmes earlier, whether and how family intervention may improve the outcome of abusers, whether and how the attitude towards life goals may be changed to improve the outcome of the abusers, whether and how the belief in the control of one's health may be altered to improve the outcome of the abusers, and whether and how improvements in social support may improve the outcome of the abusers. The effective elements of the treatment skills involved in the psychosocial treatments for the substance abusers are important areas of clinical research to allow refinement and further development of the skills in the treatment of the substance abusers.

A QUALITATIVE STUDY OF CLIENTS OF PS 33

Dr. Benjamin Lai and Miss Ida Chung

The ACAN Research Subcommittee has made a request to include a qualitative study of some clients of PS 33 in addition to the prospective study of clients of PS33. This may be helpful to supplement the information obtained in the structured questionnaires in the study and hopefully to clarify some issues unable to be explained in the quantitative analysis of the data obtained from the limited sample size in the prospective study.

Purpose of study

The objectives of the qualitative study are as follows,

1. To supplement the prospective study of clients of PS 33.

2. To provide information on the subjective appraisal of some clients of PS 33 as to what and how they feel they have benefited from the service, and what more they feel they need so as to serve them better.

3. To attempt to clarify what factors may have contributed to different outcome of clients of PS 33.

Methodology

Approval is obtained from Hong Kong Christian Service to carry out the qualitative study of some of their clients. The practicability of the methods of the study is discussed with PS 33.

Subjects

The subjects to be interviewed are those subjects in PS 33 who give consent to the interview and they are selected according to the following categories.

1. Three subjects who have completed detoxification and maintained not to abuse any psychoactive substance in the follow up period. They may have lapses after detoxification but they are able to complete detoxification subsequently and remained free from current substance abuse. They may have differences in the type of substance abused and varying degree of improvements in their psychosocial problems.

2. Two subjects who have completed detoxification but have lapses in their substance abuse such that they have not quite been able to remain free from substance abuse.

3. One subject who has not yet been able to complete the detoxification and has largely remained about the same as before or even worse.

Method of the interview

The interview of the subject is conducted by the research assistant. A semi-structured interview forms a guideline to areas to be covered in the interview. The subject is encouraged to voice out his subjective thoughts and feelings about his problems, the treatments and other wishes. The interview is audio taped to facilitate recording.

The purpose of the interview will be explained to the subject and his consent to the interview obtained. It is also explained that the information so obtained will only be used for the purpose of the study and confidentiality of his identity will be observed.

Information from the social worker

After the interview the research assistant will discuss with the social worker in charge of the subject about the basic information including the condition of substance abuse in the subject.

Questions used in the semi-structured interview:

1. How long has he been receiving help from PS 33?
2. For what purpose has he first got into contact with PS 33?
3. What sorts of help did he then hope to receive?
4. What sorts of help has he actually received from PS 33?
5. What problems does he feel he has when he first sought help from PS 33?
6. How are the problems now?
7. What does he think have been helpful to him in the solution of his problem?
8. In regard to his psychoactive substance abuse how does he think of it now?
9. How is the psychoactive substance abuse now as compared to the time when he first received from PS 33?
10. What does he think have contributed to the change of his substance abuse?
11. What are his views about the detoxification he has gone through or has tried? What have been helpful and what have not? What more does he think he need?

12. What are his views about the lapses of substance abuse he has, if any? What have contributed to the lapses? What has he tried to stop the lapses? What have been helpful to the control of lapses? What have not been helpful?

13. What does he think of his future with regard to his psychoactive substance abuse?

14. What actual steps he has taken or planned that will help him to attain what he personally plan for his future with regard to his substance abuse?

15. What does he think of his future with regard to his other problems in life?

16. What are his other comments about the services he has received?

17. What are the other services he hopes he can receive?

18. How does he feel about his life now?

19. How does he feel about his life as compared to the time just before he received treatment at PS 33?

20. What plans does he have in life other than those he has mentioned above?

21. What advice does he have to other people with psychoactive substance abuse?

22. What advice does he have to PS 33 and other treatment agencies?

23. What are the other views and comments he want to make?

Results

As this is an additional part to the previously scheduled prospective study of clients of PS 33, and there has not been any additional funding, the interviews have been carried out simultaneously with the prospective study, while the final assessments are still on-going. The compilation and analysis of the data obtained in the prospective study have not then been completed. Thus guidance on the case interviews cannot be drawn from the results of the prospective study. The semi-structured interview has been followed.

A number of potential subjects have declined the audio taped interview. Seven subjects have been interviewed. Four of them are currently not abusing any substances, two have gone through detoxification but have lapses, while one not improving at all. One subject more than initially planned has been interviewed so as to include more cases with cough mixture as the primary drug of abuse. The overall impression is the subjects are not used to interview under audio tape. Extra efforts have been made on the part of the research assistant to help the subjects to relax and to speak about their own thoughts and feelings in relation to issues related to their substance abuse.

Case One

Ah Shing was a twenty-three years old single delivery company worker. He studied up to Form Three. Ah Shing presented to PS 33 on the instruction of the probation officer. He was put on probation for one year for possession of ice and cannabis.

He started to take cannabis at the age of nineteen under the influence of his peers. Then he meant to take cannabis to get its sensation and to use it to solve his personal problems. He usually bought half an ounce of cannabis at a time and finished it in three to four times over a week. His father died some six months ago. He began to take ice shortly after the death of his father. He took ice about three to four times a week and he spent several hundred dollars a week on it.

At the time of intake at PS 33 Ah Shing was depressed, irritable, and with expansive mood. He also had relationship problem with his girlfriend. He did not have any other secondary drug of abuse.

He was living with his family members. He had one elder brother and one younger sister. His relationship with them was harmonious. Previously he was arranged by his family to work in his uncle's firm. After the death of his father he returned to work in the transportation company of the family. His brother treated him well and he was supportive to him. especially Ah Shing was known to have addiction to ice. On the whole his family members were supportive.

When Ah Shing first came to PS 33, he intended to get rid of his ice and he meant to see whether PS 33 might be of help. Moreover, he hoped that PS 33 could help him to get rid of his other addiction and in turn enhance his self confidence.

He had received help from PS 33 for more than half a year. During this period he had received services including individual counselling, interview with family members, telephone contact, group activities, and collateral contact. He did not received any outpatient nor inpatient medical treatments.

He got himself off from his substance abuse when he was detained in the detention centre. He did not recall experiencing any significant physical discomfort. He did however feel a strong craving for drugs. During this period of treatment at PS 33 he would go to PS 33 to seek for counselling whenever he felt the strong craving for drugs. He also expressed that the pressure from his probation officer was also an important factor for him to maintain abstinence. He knew that if he relapsed to drugs, he would be directed by the court to enter into compulsory drug treatment programme.

During this period of treatment. he felt he had learnt to evaluate his addictive behaviour from different perspectives. He had now also a better understanding of himself and his problems with the help of the social worker of PS 33. His relationship with his girlfriend and his drug problem had been improving. He could maintain drug free. He had gained nearly twenty pounds since he first sought treatment. He could arrange his leisure activities and thus make his life more fruitful.

He attributed such changes to the help of the social workers of PS 33 and his family. He commented that the social workers did not only provide counselling for him but also encouraged him to participate in supportive peer group activities a as to strengthen his social network. Most importantly, he felt that he himself had also contributed to his improvements by avoiding to mix with his peers with drug abuse. He often reminded himself about the consequences of drug abuse whenever he faced the temptation of drugs. With respect to his views on psychoactive substance abuse, he felt that the drug abuse behaviour was harmful to physical health and it might cause poor memory.

He was at the moment quite contented with his life. He planned to get married after he maintained abstinence for a period of time. Besides, he also hoped to expand his family business to mainland China.

Ah Shing expressed that he would advise drug abusers that they would regret when they became hooked on drugs. As to the drug rehabilitation services, he thought that the governments should establish more drug treatment agencies to help drug abusers.

As to whether he would take ice or cannabis after completing his probation, he thought that he might try it since he was forced not take it for quite a long period of time now. On the other hand, he felt hesitated because of the negative effects of drugs.

During his first assessment, he was found to believe that one could control the use of tranquillisers, cannabis, and cough mixture so as not to become dependent. He had a GHQ score of 4. His IHLC was 28, PHLC 20 and CHLC 10. Both IHLC and PHLC were within the average range of values for the whole group of subjects. While the CHLC was more than one standard deviation below the mean value of 17.8 for the whole group. The scores on the provision of social relations were on the high side within the average range. The Self Esteem score was just around the mean of the group. He had a high score of 103 in PIL, a bit more than one standard deviation from the mean of 83.5.

During the second assessment he had already changed his attitude towards drug abuse. He now did not think that he could control the use of tranquillisers, cannabis, and cough mixture and not become dependent. His GHQ score was zero. He had a detoxification experience score of 53, just around the mean of the whole group.

At the time of the final assessment, his attitude towards drug abuse remained as in the second assessment. His GHQ score remained as zero. There were little significant change in his scores on IHLC, PHLC and CHLC, Self Esteem, and PIL. He rated peer

support a bit lower from 33 to 27. He had a Therapeutic Elements Achievement score of 2.46, just about one standard deviation above the mean of 1.86.

Discussion

This case of Ah Shing illustrates the commonly observed sequence of events of how a teenager becomes a substance abuser. He first started to take cannabis under the influence of his peers. Then he was attracted by the effects of cannabis. He also used it, though maladaptively and ineffectively, to solve his problems. How he got into contact with and then got to be influenced by his peers who abused substance might reflect the presence of vulnerable psychosocial factors or his non-rejecting attitude towards abused substances in the first place.

Cannabis does not have physical withdrawal symptoms. The abuse of cannabis for a few years without getting himself into troubles or problems might have engendered in him the wrong impression that the consequences of taking other substances would be similarly safe and within his control.

The death of his father apparently act as a stressful event to him. whether he realised it or not then, his taking of 'ice' can be seen as a reaction to the death of his father. Then the chemical effects of 'ice' surmount him and lead him into psychiatric symptoms and legal problem. The relationship problem with his girlfriend could be a contributing factor to his abuse and it could also be a sequalae of the effect of abuse of 'ice'.

The detoxification from 'ice' appears to be not of difficulty as he was put behind bars during detention. His main problem in detoxification was craving. Yet within the detention centre, his response was prevented from being fulfilled for the substance was simply not available.

That he was put on probation and referred to treatment by probation officer appear to act as a two way sword. On the one hand it is compulsory for him to receive treatment at PS 33 subsequent to this initial detoxification and remain free from abuse. Or else he would be sent for institutional treatment which he certainly does not want. On the other hand he did have the feeling that he might try substances again after his probation was over as he had been forced not to take for so long.

He did report that fear of institutional treatment had been one of the factors controlling him from further abuse despite craving. Treatment facilities are supposed to be of therapeutic values for the subjects. In the case of Ah Shing, he did not specify whether he was afraid of institutional treatment of those under the jurisdiction of the Correctional Services Department or other treatment agencies. It may be desirable to consider how

come fear does occur with treatment facilities and whether such fear has beneficial effects, or the other way round hindrance of abusers to come forward for appropriate treatments.

The other factor that he utilised to control his craving is PS 33. He literally described that he would go to see his social worker at PS 33 whenever he had craving. It illustrates that 'PS 33' has become in him a means of relief from craving and a source of control of the craving. PS 33 cannot be of chemical nature in him but it must have played some psychosocial effects on him. It is fortunate that he did not feel the fear that he had with institutional treatments. This also seems to indicate that the social worker of PS 33 need to be readily available to see the abuser and to extend the necessary help to them whenever necessary.

In this case Ah Shing himself felt that he was helped by PS 33 not only in substance abuse and abstinence. He has learnt to understand himself more. He has group activities that strengthen his social network. He has improvement in his relationship with his girlfriend.

That his family have been supportive to him all along must have of course been very important in his success of abstinence. His attribution to himself in avoiding his previous peers with substance abuse highlights his positive appraisal of himself and also the importance of the observation that an abusers have to develop new friends and avoid old friends in order to be successful in the treatment of substance abuse.

His attitude towards drug abuse has changed after treatment at PS 33. He no longer regarded that he could control his abuse of cannabis, tranquilliser and cough mixture and do not become dependent. His degree of psychological disturbance as measured by GHQ has improved since his treatment at PS 33. No medicine was used in his case. Probably psychological treatment alone had been effective to help his mild degree of psychological disturbance.

His case also illustrates the presence of good prognostic factors that predict the success of detoxification and maintenance of abstinence at follow up. These include low GHQ at first assessment and a high score in Purpose in Life.

Case II

Jack was a twenty-two years old single male referred by his family members to seek treatment at PS 33 for cough mixture abuse. He started to take cough mixture at the age of eighteen under the influence of his peers. He said that he was told that cough mixture could help him to feel refreshed and enhance his ability to work. He became dependent on it subsequently at a dosage of half a bottle a day. He then increased the

amount of it to three bottles a day. He had contacted PS 33 two years earlier but he did not continue any treatment. Around the time of intake he was taking about three bottles of cough mixture a day. He was unemployed. He was also on probation. He did not have any psychiatric symptoms. He was found to have psychological problem, relationship problem with his family members and he also had employment problem. His mother was highly involved in his treatment.

At the time of intake he felt that he had the only problem in substance abuse. He felt his other problems were minor. He hoped that the worker of PS 33 could assist him to come off from the cough mixture.

He was admitted into Kowloon Hospital Psychiatric Unit for inpatient detoxification. He stayed for a week. In the hospital he had diarrhoea, abdominal pain and fatigue. He also had strong craving for cough mixture. He was given medicine to suppress his withdrawal symptoms. After the detoxification treatment, he was able to maintain abstinence for three months. Then he lapsed back to cough mixture. He attributed this to work pressure. He then attempted to come off from cough mixture on his own. He chose to do so at home instead going into the hospital again because he felt people in the hospital were noisy and the behaviour of some patients in the hospital was embarrassing. Subsequently he was able to maintain drug free for another three months. He again lapsed back to cough mixture. He again attributed this to work pressure. After three months of abuse, He stopped cough mixture and came off from it on his own. He had been able to maintain abstinence for three months till the time of the interview.

When he lapsed back to cough mixture, he lost his self confidence. His relationship with his family also became worse. He felt guilty and painful about his relapse. He felt that he had disappointed his family and the social worker. However, he thought that he could still recover from his abuse problem. He attributed the relapse to work pressure and his having money to spend on cough mixture. He took the failure as a reminder and reference for his current attempt to maintain abstinence. He re-arranged his activities, spent time swimming, and led his life more fruitfully. When he had salary, he would give the money to his mother. His group members also gave him advice and encouragement.

In the mean time he was able to control himself not to be tempted to use cough mixture. He could also manage his emotion and arrange his leisure activities, like swimming. Jack attributed his improvement to his own effort to help himself. He felt that the social worker of PS 33 had helped to him to understand the consequences of substance abuse and the knowledge of drugs. They also taught him how to control his craving. They suggested him to do sports, like swimming, and outdoor activities. He felt such activities could help him to disrupt the craving. They also strengthen his body, train his will and help him to kill time. As to his family he felt that they had helped him through introducing him to the treatment agency. They were also supportive to him.

Now that he was not on cough mixture, he felt he was better than before. In the past while he was on cough mixture, he had confused thoughts, poor physical strength and

poor mental strength. His work performance was impaired. He simply did not have any volition for work. At night he did not seem to want to sleep. Now he was brighter in his thought. He was more quick in his mind. He was better in his work performance. He felt also more relaxed mentally. He did not need to worry of getting into litigation problem.

Jack had received individual counselling and group counselling from the social worker of PS 33. He was also encouraged to participate in peer support group, to acquaint more people, expand his social circle, develop his social network, and other group activities. Moreover, he thought he could learn from other group members through discussions in group activities. As to his inpatient detoxification, he felt that inside the hospital the doctor and the medicine had been helpful to him. Inside the hospital he could not get cough mixture even when he had craving. Afterwards when he tried detoxification at home, he felt easier as he had had experiences of detoxification. He knew what symptoms he would have and he knew he need to be careful. His social worker also helped him to review his progress.

Concerning his future he hoped to find a job as soon as possible. Then he would take up some evening course either on computer or to study from Form Four again. He also hoped that he could have more self confidence. If he could concentrate at his work, he felt he would think less of cough mixture. He also wanted to be able to handle his emotion and be able to handle stress in life. He was still a bit worried that he might lapse back to abuse. He also hoped that drug abusers could come off from addictive behaviour earlier for drugs have aversive effects on the health of the abuser, his family as well as his work.

Over the course of the three assessments of the prospective study, he did not have any significant change in his attitude towards drug abuse. He had little change in his belief in PHLC. But both the IHLC and CHLC had increases from 29 and 12 to 36 and 18 respectively. His rating of peer support and family support also increase from 25 and 18 to 32 and 27. His SE and PIL score were 25 and 87 respectively on the first assessment. They did not quite change by the final assessment. The initial GHQ score was three dropping to 0 in the second assessment and 1 at the final assessment. His detoxification experience was 56 just a bit more than the mean. He had a high TEA score of 2.38.

Discussion

This case again illustrates the beginning of substance abuse as under the influence of peers. According to Jack he also had the alleged but wrong information that cough mixture might be good to his mental strength and booster his work performance. He increased the amount of substance abused as in other cough mixtures abusers probably because of tolerance. Subsequently his work performance was adversely affected and he became unemployed. His thought was also affected. He actually reported impaired

physical and mental strength, contrary to what he originally thought cough mixture was supposed to help him.

He received inpatient detoxification. According to his report his detoxification was helped by his doctor and the medicine prescribed to him. He did not like the environment of the psychiatric ward that he was admitted though.

Detoxification was so relatively easy to him. Yet he lapsed back to cough mixture within three months. He alleged such was related to his work stress. It is not known how much the cough mixture that he had abused for some years had affected not just his work performance but also his ability to adjust to working environment and work habits. The adverse effects might have persisted even after he had come off from cough mixture. He might require some sort of rehabilitation of work habits and ability to adjust to work environment before he could actually adjust to the open gainful employment.

Jack also demonstrated that it was possible to come off from cough mixture on his own. He seemed to indicate that previous experience of supervised detoxification helped him to feel more confident to come off from cough mixture again even on his own. Of course his social worker seems to have been guiding him and supporting him. His group members also seem to have encouraged him and give suggestions to him. Persistence of efforts in detoxification on the part of the client and persistence of support on the part of the social worker despite lapses seem to be of importance. His case also demonstrates how individual counselling by social worker takes helpful effects separately from the beneficial effects of group treatment. Multiple modalities of treatment should thus be arranged for the treatment of individual substance abusers to maximise the outcome of the treatment programme.

The support of the family seems to be important too. Although it is a single case, the scorings of support in both peers and family have increased over the period of treatment reflecting the subjective experiences of the client.

Jack's case also demonstrates the good prognostic factor of low GHQ and high involvement of family members in his treatment.

Case III

Peter was a nineteen years old, single clerical worker. He was a graduate of Vocational Training Institute. He was living with his family members. His father was working in mainland China and he had a younger brother who was a student.

Peter began to take thinner at the age of seventeen when he worked as a mason. He took thinner on his own. The frequency was two to three times a week. The main reason for his abuse was to seek the sensation in sniffing thinner. He had a few friends and he did not have leisure interest. He felt bored after work. He meant to pass his time in confusion by inhaling thinner and to avoid unhappy or boring emotion.

He was forced to seek treatment at PS 33 by his mother after his addictive behaviour was discovered. He felt deeply insulted and lost his self-image as his mother and his relatives brought him to PS 33. Since Peter did not have experience in drug treatment, he cast doubt on the ability of social workers in helping him. Moreover he was afraid to be labelled as an addict.

At the time of intake, he did not have any psychotic symptoms. He was emotional as he thought that his family often looked down upon him. His relationship with his family members was poor. Besides he had harelip. Although he had received operation, this was still a source of his emotional problem. During the period of services at PS 33 he had received individual counselling, telephone contact, phone contact with his family members, escort, group counselling and group activities. The social worker had also helped him to seek professional advice on the effects of organic solvent on human body and referred him to have body check after he was free from thinner.

Initially one week after he stopped from sniffing thinner, he lapsed back to it. Then he quitted his job and tried to come off from thinner again by locking himself at home for three weeks. Though Peter was suffering from headache, he did not feel difficult to bear the symptom. However he did feel boring during the detoxification period. After three weeks' of detoxification he went to mainland China and worked in his uncle's garment factory for half a year. Since then peter had not been sniffing thinner and he felt his self-image had been enhanced.

During the year of service with PS 33 he felt that the social worker had helped him to move away from his psychological hindrance and to accept the service as well as he himself. He thought that his will power had helped him a lot in getting rid of thinner since no medicine can be of help. Besides Peter also worked from day to night in order to forget his craving for thinner. He had been attending some evening courses so that he could learn some interesting things. Finally his family also contributed a lot in supporting him during the process. Peter thought that it was not good to abuse psychoactive substance.

He was confident that he could maintain abstinence. He got improvement in his work as well as his relationship with his family members. He had spent three nights a week to take up courses in English, typing, and computer. He hoped these would help his plan to run his own business. He felt contented with his current living.

Peter advised drug abusers to feel confident to get rid of their addictive behaviour and they should not indulge in drug abuse.

In the three assessments of the prospective study, Peter has little changes of his attitudes towards drug abuse, the health locus of control scores and the scores on self esteem. He has a high GHQ score of 18 in the first assessment. It drops to 7 at the second assessment and 0 at the final assessment. Both his scores in peer support and family support increase a little bit from the first to the final assessment making an overall increase of social support score from 45 to 52. The Purpose in Life score also has an increase from 63 in the first assessment to 89 at the final assessment. He has a Detoxification Experience score of 34 and an adjusted mean Therapeutic Elements Score of 2.85.

Discussion

This case of Peter illustrates a solo substance abuser coming in contact with thinner through work and utilising it to numb his own unhappy and boring feelings. Peter also appears to be someone with strong emotional reaction to happenings in life, say his feeling of being insulted and loss of self image on being forced to seek treatment at PS 33. This, of course, reminds the helping professional that a person presented for treatment might have mixed feelings towards the helping agency. The negative feelings need to be acknowledged and resolved. The fear of stigmatisation of being labelled as drug addict also need to be addressed in individual clients.

His introvert personality, his harelip, having few friends, not too close a relationship with his family and the strong emotional reaction towards happenings in life seem to have contributed to the occurrence of psychological disturbance in him He had a high GHQ score of 18. This is unlikely to be the result of the chemical effect of thinner. With treatments at PS 33 his GHQ scores decrease to 7 after detoxification and decrease further in the subsequent months to 0 at the final assessment. This case tends to support that it is his psychological disturbance that contribute to his abuse of thinner and not the other way round.

Through his treatments at PS 33 he has been helped to stop his thinner sniffing. He has been helped in reduction of his psychological disturbance too. He has also been helped in improving his self image and to accept himself as he is. He has also improved in his relationship with his family. This is reflected in his increase in his score in social support. The management of Peter has encompassed psychological treatments for his underlying possibly depressive illness, low self image, and inadequate social skills.

Peter's case also illustrates that a way to manage craving for abused substance is to schedule one's time fruitfully if not only tightly. He has work and he has evening classes. Again his own motivation and the support of his family all come into play for his success in changing into a life without thinner. He has significant increase in his core in purpose in life.

His case also demonstrate the good prognostic factor of family involvement in treatment, a low detoxification experiences score and an association with a high TEA score.

Case IV

Ah Wai was a twenty-one years old, single male printing worker. He first took cannabis at the age of fifteen under the influence of his peers. A year later he started to take cough mixture, ice and Rohypnol as well. As Wai continued to take the drugs as he found himself addicted to them. Besides he also wanted to seek the sensation of the drugs and to use them to kill time. He used to take drugs after work and before sleep. He felt he had a good knowledge of the effects of each type of drugs.

Ah Wai lived with his parents, younger sister and a twin brother who was also a substance abuser. His relationship with them was not good. The family became more concerned of him after they learnt that he would be sent to a drug treatment agency.

He presented to PS 33 on the instruction of his probation officer. He hoped then that the social worker of PS 33 could act as a mediator between him and the probation officer. Besides obtaining counseling from the social worker, he was also referred to the hospital for detoxification treatment. He had also received other services including phone contact, collateral contact, and home visit.

He stayed in Kowloon Hospital for two weeks for detoxification. He had withdrawal symptoms including bone pain and insomnia. He did not find it very difficult to get off from his abused substances. He did have craving for the drugs and he could keep the craving under control.

Two weeks after his detoxification he was told by his probation officer that his probation would be extended and he would be sent to Enchi Lodge for institutional treatment. He felt very upset by the probation officer. He lapsed back to substance abuse.

Recently his drug problem was even worse that he first contacted PS 33. The amount of drugs had increased. He attributed such increase to heavy work pressure, poor family relationship, and problems with his girlfriend. Besides the withdrawal discomfort also got him back to take more. Sometimes his brother also reinforced him to take more drugs. Though his situation had become worse, he felt he had been more relaxed after counselling by the social worker of PS 33.

He felt he was really 'abusing drugs'. He had progressed his use of drugs from cigarettes, to cannabis, and then to cough mixture and tranquillisers. He was afraid that he

would progress to take heroin and he would become one of the heroin addicts idling on the street. He thought that drug abusers would only be a mess. He hoped to find a job after his discharge from treatment agency. On the whole he was contented with the services provided by PS 33.

In the mean time he was waiting to be admitting to Enchi Lodge for drug treatment. He did not get any improvement in managing his own emotion. His relationship with his family had been improving. Concerning his relationship with his probation officer, he thought that the probation officer had her right to make arrangement for him.

During the first assessment he did not feel that it was dangerous to take heroin and he did not feel that it was dangerous to take other substances. On follow up assessment at the final assessment he had changed his views and agreed that it was dangerous to take heroin and dangerous to take other substances.

His GHQ score is 13 at the first assessment and 17 at the final assessment. His initial scores on IHLC was 24, PHLC 16, and CHLC 24. They changed a bit to IHLC 20, PHLC 23, and CHLC 20 at the final assessment. His score at the peer support subscale was 36 and family support 24 at the first assessment. They changed to 29 and 19 respectively. The self esteem score remain the same over the different assessments at 22. His initial purpose sin life score is 92 and dropped to 81 at the final assessment. His adjusted mean TEA score was 2.25.

Discussion

The case of Ah Wai illustrates another young person getting into substance abuse under the influence of peers. He was attracted to the sensation of the drug and he also used drug taking as a means to kill time. In time he has got into abuse of multiple drugs.

He seems to have responded fairly well to the two week duration of inpatient detoxification. It is difficult to understand how he has been recommended for institutional treatment while he has just received and successfully inpatient detoxification. It is obvious that the recommendation of extension of probation and institutional treatment has become an overwhelming stress to Ah Wai such that he lapsed back to drug abuse. He has not been able to come off from the drugs on his own. He has been waiting for admission into the institution for treatment.

This case also illustrates that the presence of multiple problems can adversely affect an abuser simultaneously. They are just too much for him to solve. It might be hypothesised that Ah Wai had been accumulating his problems over a period of time. He had simply not been able to solve any of them. When these problems accumulated further, he was being affected more and more by them. Drug abuse has been the way, a maladaptive one, he used to escape from his problems. The way ahead for him is to help

him to build up adequate skills to solve his problems in addition to stopping the use of drugs as an erroneous and ineffective way to handle stresses.

Ah Wai himself expressed that the social worker of PS 33 had helped him to feel more relaxed although his associated abuse behaviour has continued. He has also changed his attitude towards the use of drugs after treatment. He now deems that it is dangerous to take drugs.

This case has demonstrated several bad prognostic factors, including multiple substance abuse including cough mixture, longer duration of abuse before intake, lower education, less family involvement in treatment, higher GHQ score, higher belief in chance control of health. The high therapeutic effects achievement scores is not associated with remission from drug abuse in the case of Ah Wai. This demonstrate that TEA score is independent of the effect of substance of abuse. The scores reflect the progress in the psychological treatment between the client and the social worker of PS 33. Hopefully the achievements in the psychological treatment would be effective in helping him in coming off and maintaining abstinence from substance abuse in the future.

Case V

Ah Wing was an eighteen years old single account clerk. she first took cough mixture and romilar at the age of thirteen. Later she also took other drugs including Rohypnol, Dormicum, and cannabis. she also smoked heroin on about ten occasions. She started to take drugs on the influence of her peers. Later she used them solve her worries and to kill time. She was the eldest daughter in the family and she had a younger sister and a younger brother. She had finished Form Five. She lived with her family. Their relationship had been very poor.

At the time of intake at PS 33 Ah Wing was noted to be restless. She had suicidal thoughts and attempts because of unhappy relationship with her family and her peers. Moreover, she had poor health, financial problem, poor time management, employment problem and study problem. Beside she had low self esteem and high anxiety level which was related to her unpleasant experiences with her family since her childhood. She felt her friends also often took advantage of her and that made her felt very unhappy.

Ah Wing had received services from PS 33 for more than one year. The services included individual counselling, interview with family members, phone contact, phone contact with family members, conjoint family interview, group activities, medical consultation, collateral contacts and home visit.

She was referred to Kowloon Hospital for detoxification treatment and she stayed there for more than one month. Then she felt bone pain, breathlessness, insomnia, and mood changes. She was given some medicine to suppress the pain. She felt peaceful and relaxed in the hospital as some girls at her age talked with her. After two weeks' detoxification, she began to work in the day time and return to the hospital after work in the evening. She relapsed to cough mixture after one month' stay in the hospital when her drug treatment was discovered by her family. She felt that the heavy work pressure was also another reason causing her to relapse.

In the mean time she sometimes took three to four bottles of cough mixture in a week. She also understood that she must get rid of cough mixture in the long run. Yet she could not stop it now as it was a part of her life.

Ah Wing thought that her recent condition did not have any differences compared with the time before she sought help from PS 33. She thought that relapse to cough mixture was her own fault. Social workers had taught her drug knowledge and encouraged her to participate in group activities and she could learn from these experiences. She was satisfied with the services rendered by PS 33. However, she did not have much time to attend counselling sessions because of overtime work.

As to her future she hoped to take up some interest classes in the evening or to spend holidays with friends. However she failed to implement her own plan.

During her assessments She had appropriate attitude to drug abuse even at the first assessment. She had a high GHQ score of 25 initially. The GHQ score dropped to 14 during the final assessment. The IHLC was 25, PHLC 16 and CHLC 17. They did not show any significant change over the period of the follow up. The poor support was 28 while the family support score was 14 dropping to 8 at the follow up assessment. The overall all social support score was thus low at 42 at the initial assessment and 36 at the follow up assessment. Her Self Esteem score was 25 and it remained so on follow up. The Purpose in Life scale was 61 on the initial assessment and 68 subsequently. The adjusted mean Therapeutic Element Achievement score was low at 1.33.

Discussion

This case of Ah Wing demonstrates another young adolescent coming into contact with abused substance under the influence of her peers. Again she used quite maladaptively the drugs to solve her worries and used the abuse as a means to kill time.

She also demonstrates an abuser carrying with her multiple social problems from individual to interpersonal, from study to work, and relationship problems with family to those with friends. She had anxious mood and depressed mood.

She has been able to come off from her substance abuse with inpatient detoxification. Yet before she had had discharge from the hospital she had already lapsed back to abuse. According to her the knowledge of her family of her treatment for substance abuse and work pressure were the causes for her relapse. The family of an abuser can be a source of stress for the abuser. It can also be an important ally for the abuser to fight her war against the abused substances. In the case of Ah Wing it is not clear whether the knowledge of her family of her drug problem has been only an imagined negative threat to her or indeed her family has had negative reaction to her. In either case the importance of family intervention and the delicacy in the treatment are obvious.

The statement by Ah Wing that 'cough mixture was a part of her life' reflects the nature and the degree of the problem of substance abuse is not simply a chemical one. On the one hand it may be true that her body has adapted physically to the constant presence of an external chemical, and it would react with various bodily changes and discomforts on the relative absence of the external chemical. On the other hand in the way Ah Wing has described, the act of taking cough mixture has become part of her daily life and her psychosocial being. Drugs have become an integrated part of her. Drugs can no longer be just taken away from her without simultaneously shattering her into pieces. The analogy of taking care in doing psychotherapy as like putting Humpty Dumpty safely from the wall down to the floor holds equally true for the psychosocial treatment of a drug abuser.

That she did not have time to attend the treatment sessions might reflect her resistance to treatment and perhaps also the great emotional turmoil she might be put to face should she go into treatment. She appeared not yet prepared for the change.

She also demonstrates a client who has yet not been able to come off from substance abuse with treatment with PS 33, but she has benefited psychologically. She has improvement in her GHQ score over the period of treatment although she remained taking cough mixture. This case also illustrate the bad prognostic factors for detoxification including high GHQ score, cough mixture as the primary drug of abuse, presence of secondary drug of abuse, employment and related problems, low social support score, and low purpose in life score. Her case also illustrates the bad prognostic factors in remaining drug abuse on follow up. These include no involvement of family in treatment, cough mixture as the primary drug of abuse, high GHQ score, low IHLC, low social support, low PIL score, and the association with low mean therapeutic elements achievement score.

Case VI

Ah Kei was a twenty years old single male sales worker. He presented to PS 33 on the instruction of his probation officer for abusing cannabis.

He had abused romilar and cough mixture for a period of one year in the past. Shortly after stopping abuse of romilar and cough mixture, he began to take cannabis. He had taken cannabis for some four years. He took cannabis only with his friends when they went to disco together. He took one joint of cannabis and he did not think that would affect his normal life. Ah Kei did not have any psychiatric symptoms.

He stopped studying during Form Three and started to work in a computer selling CD ROM. He lived with his family members including his parents, one elder brother and one younger sister. Their relationship was good. They seldom had conflicts. His family members wished that he could get rid of cannabis.

Ah Kei felt that he could stop from taking cannabis whenever he wanted to. He had been able to stop cannabis for two to three months. He thought that taking cannabis would neither affect his health nor his normal life. He defined drug abuse as taking a large amount of drugs and that one became hooked on it. He thought that he would not indulge in taking cannabis and he could control his habit. Therefore it was not necessary for him to get rid of cannabis. He said he would not take heroin like cannabis.

He had received help from PS 33. The services he received included individual counselling, phone contact, and collateral contact.

At the moment he was still taking cannabis when he went to disco with his friends. He expressed that the probation officer indeed gave him great pressure in getting rid of cannabis. The probation ordered him to appear in court every three months. He thought that he had done his best to obey the probation officer. As to the social worker in PS 33, he felt they were like his friends. They would talk with him and advise him with case examples. Moreover the workers also encouraged him to join group activities. He thought that he was not in urgent need of help from PS 33. He also felt that coming to PS 33 to have interviews with social workers would affect his work as he had to ask leave from work. Mostly he was afraid of being labelled by other people, especially his colleagues, if they knew that he received services from PS 33.

Regarding his future plan, he hoped to have his own business. He would drug abusers not to be controlled by drugs, especially heroin. He also expressed that to render counselling services to drug abusers was most effective in their adolescence.

Initial assessments of Ah Kei showed that he had appropriate attitude to drug abuse except that he believed that one could control the use of tranquillisers, cough mixture and cannabis without becoming dependent on them. It was at the second assessment that he changed to take that it was not true. He had a low GHQ score of 4. This remained so at the second assessment. By the final assessment the GHQ score had become 0. He had IHLC score of 22, PHLC 25, and CHLC of 16. There were little change of those scores over the period of follow up. The peer support score was initially 39, and family support score 25. At follow up the peer support score was 30 and family support score 22. The overall social support score had thus a drop from 64 initially to 52

at follow up. He had a high purpose in life score of 94 initially and subsequent follow up 98. He had a detoxification score of 53 at the average and an adjusted therapeutic elements achievement score of 1.89 just above the mean.

Discussion

This case demonstrates another young person getting in contact with abused substances under the influence of friends. He also has a belief that cannabis is not going to be harmful to health and thus he could take it as he likes. Cannabis is a drug that does not have any withdrawal symptoms. Yet literature have shown that it has wide ranges of physical and psychological ill effects. Ah Kei seems to have changed his attitude to abuse of non-narcotic substances to a more appropriate one after treatment at PS 33.

This case also demonstrates the stigma attached to drug abuse even by someone who actually has drug abuse. At least he believed that others had stigma against the abusers and that he did not want to be so stigmatised so much that he rather opted not to come for treatment. This might of course also reflect his own resistance to treatment.

In this case one sees that when a client does not believe that he requires any treatment, the client will have a lot of reasons for not coming to treatment. He also demonstrates the additional difficulty when the family members are not involved in the treatment.

This case also illustrates the presence of substance abusers who do not seem to have significant psychological disturbances, and do not seem to have significant social problems. They do not deem it a problem to take the abused substance and they do not feel the need of treatment. Furthermore they are not ready for any change and they do not achieve much in their treatments with the social workers. These subjects need to be followed up despite their resistance so as to understand more how they subsequently fair in life, and to see how and when they would no longer be under the influence of drugs.

Case VII

May was a thirty-four years old single cashier. She was living with her parents while her four elder sisters and one younger brother were all married.

May first took cough mixture at the age of thirty three when she felt unhappy. She had difficulty to get along with her family and her colleagues. She stated that her poor relationship with family members had long been a problem since her childhood. She

remembered that she was sent to live with her grandmother in Macau when she was only three years old. After three years she was brought back to live with her family. Since then she felt that she could hardly communicate with her family members. Moreover the heavy work pressure also made her felt stressful. She was worried to be complained of by customers and thereafter scolded by her supervisor. Once May suffered from coughing and she was given a bottle of cough mixture from the doctor. However she took more amount than she was prescribed. She felt relaxed. From then on she started to seek the relaxed feeling of cough mixture. She bought a bottle of cough mixture from a medical retail shop and finished it in two to three days.

Finally her cough mixture abuse was discovered by her mother and she was then referred by her mother to PS 33. Before May came to PS 33, she thought that unlike heroin, cough mixture was not so dangerous for her. She thought that cough mixture did not do any harm on the human body and she would not be killed because of it. However after the counselling from the social worker of PS 33, she came to know that cough mixture could also be hazardous to health.

May had received services form PS 33 for more than a year. These included individual counselling, interview with family, phone contact, and phone contact with her family.

When May knew of the harmful effects of cough mixture, she then attempted to come off from cough mixture on her own. She decided not to go to see any doctors nor to buy any more cough mixture. May could remember that the detoxification experience was painful. She had withdrawal symptoms and craving. May kept on working during the period of detoxification. She was quick tempered and she often felt tired. She also suffered from insomnia. According to her the withdrawal symptoms lasted for half a year. Once May stepped into a medical retail shop to buy cough mixture. She reminded herself about the concern of her family and she was able to control her craving. She also tried to calm down herself when she was emotional so that it would not affect her work. She would also ask for help from the social worker of PS 33.

Though May had maintained abstinence from cough mixture for more than one year. She also had craving sometimes especially when she saw the beat drug education films on the television. She quoted the example of the film showing adolescents popping pills and cough mixture in the lavatory. May thought that if she continued to take cough mixture she would die. Her attitude towards cough mixture had a great change compared to the time when she first got into contact with PS 33. She attributed this to more knowledge on drugs as provided by the social worker of PS 33. Now she was fully confident that she would not lapse back to cough mixture again.

Through her counselling sessions she felt she could talk with the social worker about everything including her relationship with her family and her work pressure. The worker could help her to solve her problems. Her relationship with her family was improving.

Concerning her leisure activities, May seldom met her friends due to her shift work duties. She met her friends two to three times a month. May also had social gatherings with her colleagues. She also liked to visit her sister and played with her nephew. She did not have any particular future plan at the moment.

Regarding the service for the substance abusers she wished that the authority could increase the number of workers to deal with drug abusers so that they could have more time to work with their clients.

At the initial assessment May had low GHQ score of 4. The GHQ score dropped to 1 at the second assessment and it was 3 at the final assessment. The IHLC was 36, PHLC 19 and CHLC 16 at the first assessment, while at the final assessment they were 27, 18 and 21 respectively. The peer support score was 37 and family support score 30. They changed to 30 and 22 respectively on follow up. Thus there was an overall drop of social support score from 67 to 52. Self Esteem score was 20 initially and 22 on follow up. The Purpose in Life score was 80 initially and increased to 112 at the final assessment. The detoxification score was 48 and the adjusted TEA score was 2.43

Discussion

The case of May illustrates a person coming into contact with an abused substance through the normal prescription of a clinic, in this case the substance being cough mixture. The underlying tension within the person is relieved with cough mixture. This then sets off the vicious cycle of further use and with more amount of cough mixture as a form of self medication inappropriately applied to solve one's emotional problem.

May has a lot of predisposing factors for her depressed mood. The double losses in childhood, the long term distant relationship with her family members, the fear of hostility from her senior at work, and lack of supporting close friends have all contributed to her mood problems. One can see the recurrent pattern in May of rejection by authoritative figure in childhood (being sent away by her family), and fear of rejection by authoritative figure in adulthood (fear of hostility from her senior at work). Clearly psychotherapy is of fundamental importance for her.

May had succeeded in coming off from cough mixture on her own at home. She just tolerated the withdrawal symptoms. She did however still have craving. It is interesting to note that her craving may be triggered off by the beat drug campaign film on the television. One wonders how many more drug abusers might have their craving triggered off by watching the films on TV. May also demonstrates the control of craving by relying on the feeling that the family is concerned and the social worker can help.

As to the help from the social worker of PS 33, this case illustrates that the need is more than just removal from substance abuse and maintenance of abstinence. Indeed May has been helped to have a more appropriate attitude towards the risk of cough mixture. Yet she has also been helped in her relationship problem and her work related problem. she feels that the social worker is someone that she can turn to with her problems. This appears to be an important support that May might not have had all along in her past. With this help she has been able to build up a better relationship with her family.

May also demonstrates the good prognostic factors including the low GHQ score, high IHLC score, high PIL score and an association with high therapeutic elements achievement score.

Discussion

As presented the services of PS 33 to the clients include different modalities. These include individual counselling, family interview, conjoint family interview, phone contact with the subject, phone contact with family members, group counselling, group activities, home visits, escort, and collateral contact. Collateral contact refers to contact with other agencies involved in the care of the subject. Not all subjects receive the same modalities of services as summarised in Table I. The use of the various modalities in an individual subject depend on the conditions of the particular subject, the agreement of the subject, and the availability of the family.

Two of the subjects simply do not go to counselling sessions as they should have. They claim that they have no time or that the time of counselling interfere with their work. The issue of fear of being labelled is also raised by one subject as his reason for not coming. He actually does not feel he has any problem in using cannabis. His contact with PS 33 according to him is an arrangement by his probation officer. No wonder he has little change of his abuse with treatment at PS 33. Thus motivation on the part of the subject is an important factor that may affect the kind of services or treatments that can be accorded to him. The outcome of the overall management of the subject will naturally be dependent on his motivation. Enhancement of motivation in an abuser is clearly an important part of the management of him.

The subjective appraisal of the subjects of what they have benefited from the services provided to them include a wide range of areas as in Table I. Related to substance abuse the benefits cover knowledge of drugs, the appropriate attitude to drug abuse, ability to evaluate the drug addiction behaviour, detoxification, control of craving and maintenance of abstinence. Other areas of benefits on oneself include self understanding, understanding of one's problems, accept oneself, enhance self image, ability to manage

Table 1. Summary of seven cases of substance abusers under treatment at PS 33

	Case One	Case Two	Case Three	Case Four	Case Five	Case Six	Case Seven
Sex/Age	M/23	M/22	M/19	M/21	F/18	M/20	F/34
Primary Substance	Ice	Cough mixture	Thinner sniffing	Cough mixture	Cough mixture	Cannabis	Cough mixture
Other substances abused	Cannabis			Cannabis, ice, Rohypnol	Cannabis, Rohypnol, Dormicum	Cough mixture, romilar	
Problems	1. death of father 2. relationship with girlfriend 3. mood problem	1. family relationship 2. employment problem	1. boredom 2. family relationship 3. mood problem 4. harelip	1. family relationship 2. kill time	1. family relationship 2. kill time 3. work & finance 4. time management		1. family relationship 2. fear of senior
Treatment agencies	PS 33, Probation Office	PS 33, Hospital	PS 33	PS 33, Hospital, Probation Office	PS 33, Hospital	PS 33, Probation Officer	PS 33
Services from PS 33	1. counselling 2. family interview 3. phone contact 4. group activities 5. collateral contacts	1. counselling 2. group counselling 3. group activities	1. counselling 2. phone contact 3. phone to family 4. group counselling 5. group activities 6. escort	1. counselling 2. phone contact 3. home visit 4. collateral contact	1. counselling 2. family interview 3. phone contact 4. phone to family 5. group activities 6. home visits 7. collateral contact	1. counselling 2. phone contact 3. collateral contact	1. counselling 2. family interview 3. phone contact 4. phone to family
Benefits obtained	1. abstinence 2. able to evaluate addictive behaviour 3. understand himself 4. understand problem 5. girlfriend relation 6. arrange leisure 7. life more fruitful 8. social network 9. attitude to abuse	1. detoxification 2. abstinence 3. understand drugs 4. manage emotion 5. arrange leisure 6. kill time through activities 7. life more fruitful	1. accept treatment 2. abstinence 3. accept himself 4. enhance self image 5. work 6. family relationship 7. psychological disturbance	1. try detoxification 2. more relaxed 3. family relationship 4. attitude to abuse	1. try detoxification 2. drug knowledge 3. psychological disturbance 4. learning through group	1. talk & advice 2. attitude to abuse	1. detoxification 2. abstinence 3. drug knowledge 4. attitude to abuse 5. family relationship 6. talk with worker
Factors leading to benefits	1. PS33 social worker 2. family 3. himself	1. PS33 social worker 2. group 3. family 4. himself 5. doctor	1. PS33 social worker 2. himself 3. family 4. work & learning	1. PS33 social worker	1. PS33 social worker 2. group	1. PS33 social worker	1. PS33 social worker
Ways to control craving	1. go to PS 33 2. pressure from probation officer 3. fear of institution	1. previous failure as reminder 2. give money to mother	1. work				1. family concern 2. calm down emotion 3. contact PS 33
Causes of relapse / no response		1. work pressure 2. having money		1. probation extension 2. pending institution 3. work pressure 4. family relationship 5. girlfriend relation 6. brother also abuser	1. family 2. work pressure 3. 'substance is part of my life' 4. no time for treatment	1. 'I can control cannabis', 'no harm' 2. no time for treatment 3. fear of being labelled	

emotion, more relaxed, decrease in psychological disturbance. Benefits on daily living include arrangement of leisure time, kill time through activities, and feeling of life more fruitful. As to the interpersonal areas of benefits they include improvement in relationship with family, improvement in relationship with girlfriend, strengthening of social network and learning through interaction with others. Some report that talking with the social worker of PS 33 and getting their advice have benefited them. These wide range of benefits correlate with the findings in the prospective study in the high scorings in various items of the therapeutic elements achievement scale.

It can be seen from the lists that the benefits are much more than those related to substance abuse alone. It can also be seen that in those three subjects with persistence of their abuse they report benefits from their treatments at PS 33 on drug related area, area related to oneself, and also interpersonal relationship. As reported in the prospective study subjects reported achievements in wide range of areas after treatment in both the group without substance abuse and the group with current abuse although it was the former that had significantly more degree of achievement.

Among the factors leading to the benefits for the subjects the social worker of PS 33 is the only factor rated by all the seven subjects. In general the comments have included that the social worker is someone they can to talk to, they can seek advice, they can learn from, they receive encouragement, and they can turn to with their problems. It is of interest to know what particular behaviour or what assets on the part of the social worker is deemed to be of importance to facilitate the abuser to achieve their benefits. It is likely multiple attributes and behaviour of the social worker are required.

The other factors quoted as leading to benefits in the subjects include family, group, the subject himself, the doctor and work. Family relationship problem has been mentioned by five of the seven subjects as bothering them. The positive change of the relationship with their family and even involvement of their family in supporting and helping them will obviously be of important facilitation to their improvement.

It is interesting to note that the ways employed to control craving include contact with PS 33, pressure from probation officer, fear of institutional treatment, work, thinking of the concern of the family, previous failure as a reminder, calming down one's emotion, and giving money to family.

The reasons for lapses to continual substance abuse include work pressure, family relationship problems, relationship problems with girlfriend, extension of probation, and forced admission to institutional treatment despite alleged earlier detoxification. The comment by one subject that 'substance is part of my life' worth emphasis again, as it reflects the deeply ingrained nature of substance abuse into the everyday life of the abuser. Any successful management for such a subject would need to be in depth and with care.

The concomitant presence of multiple personal and social problems for the two subjects with poor response demonstrate the severe degree of psychosocial pathology in

the subjects. As in the finding of the prospective study, the more the degree of achievement in various areas of problems in one's life the better the outcome of the subject in maintaining abstinence from substance abuse. Their poor outcome in about one year of treatments indicate that possibly much longer duration of treatments are required for the resolution of their underlying psychosocial pathology before they have better chance to come out of the adverse influences of their abused substances.

AN EVALUATION OF SERVICES OF PS 33

FOR PSYCHOACTIVE SUBSTANCE ABUSERS

Dr. Benjamin Lai

In the original proposal by ACAN to do a research on the services of PS33, the following objectives are included (Annex II, Paper 9/94, Research Subcommittee, ACAN),

1. to evaluate the effectiveness of PS 33 in the treatment of psychotropic substance abusers,

2. to design a monitoring system so that the services are provided to the most cost-effective manner, and

3. to analyse the characteristics of its clients with a view to channelling them to different forms of treatment.

In the retrospective and prospective studies of clients of PS 33 subsequently proposed and accepted, the objectives include description of the characteristics of clients of PS 33, treatments provided to them, their outcome, and analysis of the characteristics of the clients to see what factors may be related to the different outcome of the clients. Subsequently a qualitative study on some cases of PS 33 is also raised by the Research Subcommittee. The following is an attempt to discuss on the issues related to the original objectives of ACAN. The discussion will be based on the findings of the studies.

Benefits obtained by clients

The following are the benefits obtained by clients of PS 33 through their treatments,

1. *Detoxification*

1.1 In the findings of the retrospective study, 85.7% of the sample of 49 subjects have had completion of detoxification during their treatment as assessed at the follow up interview on the average duration of 16 months from intake of PS 33.

1.2 In the findings of the prospective study, 61.7% of the sample of 60 subjects have completed detoxification within six months of their intake at PS 33.

2. *Maintenance of abstinence*

2.1 In the findings of the retrospective study, 67% of the sample of the 49 subjects are not abusing any substances at the time of the assessment on an average duration of 16 months after their intake.

2.2 In the findings of the prospective study, 67.6% of the 37 subjects completed detoxification have maintained abstinence from substance abuse on follow up six months after detoxification.

3. *Attitude to drug abuse*

3.1 In the prospective subjects there is significant positive change in the belief that it is dangerous to take non-narcotic substances among the thirty subjects followed up.

3.2 In the qualitative study individual subjects reported they initially believed that they could control the abuse of non-narcotic substances without becoming dependent. After treatment at PS 33, they changed their belief positively that they could not control the abuse without becoming dependent.

4. *Psychological health*

4.1 Of the thirty seven subjects completed detoxification in the prospective study their mean GHQ score decreased from the initial 6.6 to 4.8 after completion of detoxification.

4.2 Of the 30 subjects followed up in the prospective study some nine months after their intake the degree of psychological disturbance has decreased. The mean GHQ score has decreased from 8.17 to 4.27.

4.3 There are decrease in GHQ scores in those who have abstained from substance abuse as well as in those who are still abusing substance over the nine month period of follow up. The mean GHQ score of the non-abuser group has decreased from 5.2 to 1.8. While the mean GHQ score of the abuser group has decreased from 12 to 7.46.

5. *Employment status*

In the prospective study among the thirty subjects followed up over a period of nine months there is increase in the percentage of the subjects getting into employment from 59% to 77%.

6. *Therapeutic elements*

In the subjective evaluation of the thirty subjects followed up in the prospective study there are achievements in wide range of areas. The areas with two-third of the cases rating high degree of achievements include the following.

6.1 appropriate behaviour to prevent the relapse of substance abuse

6.2 motivation to solve psychological problems

6.3 acknowledgement of interpersonal problems

6.4 motivation to solve interpersonal problems

6.5 ability to maintain a stable job

6.6 compliance in social work treatment

6.7 ability to maintain regular sleep-wake cycle

6.8 trust in the therapist-client relationship

7. *Other benefits*

Other benefits not assessed in the quantitative studies but reported by the subjects in the qualitative study include ability to evaluate one's addictive behaviour, accept treatment, control craving, understand oneself, accept oneself, enhance self image, understand one's problems, manage one's emotion, arrange leisure time, kill time activities, life more fruitful, develop social network, and improvement in family relationship.

Evaluation of services by clients

The services provided by the social workers are evaluated by the clients as highly satisfactory and helpful as evidenced by the following findings,

1. In the retrospective study, the all the subjects rated the services from social worker positively with 37% quite satisfactory and 48% very satisfactory. Ninety eight percents rated the social worker as being helpful in solving their problems. Among these 57% rated the help as quite satisfactory and 29% very helpful.

2. In the thirty seven subjects completed detoxification, all rated the services from the social worker satisfactory with 57% very satisfied and 24% quite satisfied. All rated the services as helpful with 30% very helpful and 46 quite helpful.

3. In the thirty subjects followed up some nine months after intake, all rated the services from the social worker as satisfactory with 40% very satisfactory and 47% quite satisfactory. All rated the social worker as helpful with 30% very helpful and 50% quite helpful.

4. In the qualitative study all seven subjects report that the social worker at PS 33 as the important leading to their improvements.

Treatment modalities

As reported in the qualitative study the treatment modalities provided by PS 33 include

1. individual counselling
2. family interview
3. phone contact
4. phone contact with family
5. group activities
6. group counselling
7. home visit
8. arrangement of medical services

According to PS 33, the treatment process for their clients has been developed based on the Donovan and Marlatt's Biopsychosocial Model and Cognitive Behavioural Relapse Prevention Model. The treatment process involves five phases. These include engagement and assessment, detoxification, relapse prevention, lifestyle modification, and consolidation and termination. They help the clients to build up skills in a number of areas, including using non-chemical means to reduce withdrawal symptoms, dealing with high risk situations, developing craving control and relapse prevention skills, reinforcing a health lifestyle, and enhancement of self-efficacy to resist relapse.

As discussed the arrangement of the types of treatment modalities for individual subject depend on the circumstances of the subject, the agreement of the subject, and the

availability of the family. Whether and how individual treatment modalities may be related with the benefits obtained by the subjects as described above cannot be answered with the data currently available. Basing on the data that the abuser usually has multiple psychological and social problems involving oneself and interpersonal relationship as shown in the retrospective study, prospective study and the qualitative study, it is likely that the management of such an individual abuser and the attainment of its success will require a combination of the treatment modalities.

Costs of services in PS 33

PS 33 as a counselling centre for the psychoactive substance abusers provide services for the abusers as well as other services. These include telephone enquiry, drop-in service, and educational program.

The current provision of manpower resources include 2.5 case workers, 0.5 centre-in-charge, 0.5 service supervisor, 1 clerical assistant, 1 half-time workman, and 2 peer counsellors. The total funding for the Centre in the year 1996/1997 is about $2,141,852 including both personal emoluments and other charges.

According to the time analysis of workers of PS 33 the proportion of time spent on case work is 70.5%. It can thus be calculated that the total cost of case work for the year is $1,510,006. The total number of cases handled in the year 1996 is 173. Therefore it can be estimated that the average cost of case work service of PS 33 for a case is about $8,728.

Cost of substance abuse

When a subject abuses a substance, there can be direct costs and indirect costs. With treatment such costs may be reduced. These can include the following,

1. Cost of the abused substance

The amount of money spent of an individual abuser on the abused substance varies from tens of dollars a day to several hundred a day depending on the type of substance abused, the amount abused and the frequency of abuse. Of course it varies even with the same abuser. The cost of cough mixture abused may range from twenty dollars to a hundred dollars a day. The cost of Rohypnol and Dormicum abused can be up to a few hundred dollars a day. The cost of ice abused is highest. It can be several hundred dollars a day. Assuming that the cost of abused substance per subject is $50 per day, the cost of the abused substance per subject would be about $1,500 per month or $18,000 per year.

2. Cost of impaired work production

Work performance of an abuser may be affected to varying degree. It can result in partial loss of work production through slower work performance, being late for work, or absences. Or it can lead to complete loss of work production when the abuser stop from work. In the sample of subjects in the prospective study the employment rate is 59% at intake. For simplicity in this estimation, the partial loss of work production, the percentage of the economic inactive subjects, the degree of impairment of performance at home or at school, and the concurrent unemployment rate of the community are excluded in the consideration. Then the percentage of loss of work production through unemployment is 41%. The monthly income of abusers vary with their particular trade and their years of experience. Assuming the average monthly income of a subject is $7,000, the cost of the monthly loss in work production per subject is about $2,870 per month or $34,440 per year.

3. Cost of psychological and social disabilities

The abuser is often troubled with multiple psychological and social problems. These may be primary or secondary to substance abuse. Substance abuse itself does interfere with the resolution of any underlying psychosocial problem and lead to perpetuation of the problems. The circumstances and degree of psychological disabilities resulting from the psychosocial problems vary from one abuser to another. It is also difficult to estimate the cost of disabilities in monetary terms. These are, however, definite impairments. Their costs need to be taken into consideration.

4. Cost of services and litigation procedures

Substance abuse may lead to increase in the utilisation of medical services directly or indirectly as a result of the substance abuse. Other services may often been utilised too. These include outreach social work services, school social work services, and family services. When litigation is filed against the abuser either simply because of possession of the abused substance or for other drug related offences, costs include those personnel involve in the litigation procedures, the probation officer, and the subsequent penalty. The cost of all these need to be estimated.

5. Cost of family members

Family members could be affected by the presence of an abuser in the family. They may need to spare their time off from work to attend to the abuser, to help him, and to get involved in his treatment. The family members may also be affected psychologically and socially other than just time off work with or without the need to seek treatment on their own right. They may then have some degree of psychological and social disabilities too. The costs of all these need to be taken into account too.

Cost-effectiveness of services of PS 33

The direct cost recovered with success of treatment in a substance abuser would include the money saved from not buying the substance and the increase in work production.

As reported in the prospective study about 42% of the initial sample of 60 subjects have been able to complete detoxification within six months and subsequently remained abstinent from substance abuse. Thus the average reduction of money spent on abused substance per subject in one year is about $18,000 x 0.42, i.e. $7,650.

There has been an increase of employment rate from 59% to 77% over the period of nine months follow up in the thirty subjects with final assessment. Assuming there has been no change in the employment rate in those not assessed, the adjusted increase in employment rate for the whole group of sixty subjects is 9%. The increase of work production per subject in one year amounts to about $7,000 x 12 x 9%, i.e. $7,560.

Thus just based on these direct costs of substance abuse, the estimation of the cost of abused substance towards the lower end of the range of costs, the estimation of monthly income towards the lower end of the range of incomes, the average cost recovered in one year through treatment add up to $15,210 per abuser.

As discussed above the average cost of service of PS 33 to a substance abuser is estimated to be about $8,728 in one year. Thus the average cost recovered per subject through treatment is more than the cost of the service per subject. There is an average saving of $6,482 per case in one year.

As mentioned there are other indirect costs of substance abuse and they may be also saved after successful treatment of the abuse or resolution of his various problems. For abusers without complete abstinence of their substance abuse, they may also have different degrees of reduction of their substance abuse and partial resolution of their psychosocial problems and disabilities. These costs recovered have not been estimated here to simplify the situation. Just based on the comparison of the direct costs recovered per subject with the cost of service per subject as estimated above, the services of PS 33 for substance abusers are very cost-effective.

Further monitoring of services of PS 33

Further monitoring of the services of a treatment agency so that the services may be provided in the most cost-effective manner is a good ideal. One however need to understand the costs involved should helpful services not be provided to the clients in addition to the material costs and otherwise involved in the provision of services required. As discussed above the assessment of the actual costs incurred and financial loss resulted

on the client, the family, and the community at large is another research of its own. Even the costs of other concurrent services to the client paid by the client or by the society need to be assessed. With simple estimation as discussed above, the services of PS 33 provided to its clients are actually saving money for the community.

The other issue to consider in monitoring of a service is what the indicators of effectiveness of the services are. As discussed, detoxification and maintenance of non-abuse may be apparently valid indicators of the effectiveness of services provided. Yet the diversity of the nature of problems and varying degrees of severity of each of those problems in the clients render detoxification and maintenance of non-abuse as over-simplification of the actual need of the clients and treatment goals required by them. As reported in the prospective study and the qualitative study, clients reported improvements in various aspects of their problems irrespective of whether they had stopped their abuse. Some of these subjective improvements may not be so readily measurable.

Furthermore as found in the prospective study, the outcome of clients in detoxification and maintenance of non-abuse are under the influence of and predictable by factors and conditions of the clients at the time when they first come for treatment. Such factors include the severity of the psychiatric condition, internal health locus of control, purpose in life, social support, and the degree of family involvement in treatment. Some of them like the psychiatric condition may be amenable to intervention. Some, however, like the degree of family involvement in treatment, will require much more resources to allow family interventions. The effectiveness of such family intervention will need to be clarified through research. Some of the factors, like belief in the locus of control in health, may not be so readily amenable to interventions.

Any simplification of the complicated situations by choosing some of the measurable factors as indicators so as to make an attempt to measure the cost-effectiveness, to justify the continuation of the service, or to allow for expansion of the service may stand the risk of setting limits to the focus of the services provided. The indicators understandably could only be reflection of parts of the problems and parts of the services required may inadvertently become the total or major goals of the services.

One may also wonder whether helping services can strive for the best cost-effectiveness. One can easily see that the easy way to strive for best effectiveness with the same cost is to select the clients with the best prognostic factors and screen out those with the worst prognostic factors. In such a situation where the poorest ones can turn to for help becomes a problem to be solved by the community.

With the actually existing large number of persons with psychoactive substance abuse, the current limited number of special substance abuse counselling centres and the associated small number of workers can actually provide services to only a small proportion of the substance abusers. The likely tendency of increasing the number of caseloads per worker is likely to limit the development of adequate and effective treatments for the individual clients. It is also likely to hinder the development of skills of

in-depth psychological treatment much required for the severe psychopathology often seen in clients with psychoactive substance abuse, as this form of treatment often takes much time in training and much time to allow effects to be seen.

So maybe it is less a monitoring of the cost-effectiveness of a service but a promotion on the continuous search and development of new treatment modalities, skills and expertise for the care of the clients. The effectiveness and mechanism of such treatment modalities and skills may then be subjected to research and feedback for further development. These effective treatment modalities may then be passed on for other helping professionals working other substance abusers.

It should be considered that development of new and effective treatment modalities and skills, and research on the their mechanism and effectiveness be included as part of the recurrent funding of PS 33. This additional funding can act as a funding for recording and monitoring of basic statistics as well as funding for development of expertise and research. The cost will pay off in time for the betterment and the effectiveness in the care of substance abusers in Hong Kong.

References

Catalano, R. F., Hawkins, J.D., Wells, E. A. and Miller, J. (1990). Evaluation of the Effectiveness of Adolescent Drug Abuse Treatment, Assessment of Risks for Relapse, and Promising Approaches for Relapse Prevention, in the International Journal of the Addiction, Vol 25, p. 1085 - p.1140.

Chan, D.W. (1983). Reliability, validity and the Structure of the General Health Questionnaire in a Chinese Context, in Psychological Medicine, Vol. 13, p. 363 - p. 371..

Hong Kong Christian Service(1993). Annual report of PS 33.

Hong Kong Christian Service(1997). Analysis of PS33's Staff Input and Service Output.

Hong Kong Christian Service(1997). Annual Statistical Report 1996 of PS 33 - Centre for Psychotropic Substance Abusers.

Hong Kong Christian Service(in press). Overview, and Theoretical Backup and Treatment Process, Chapter 1 and Chapter 2 of PS33 - Centre for Psychotropic Substance Abusers.

Hong Kong Government(1994). Report on Survey of Young Drug Abusers, Narcotics Division, Government Secretariat: Hong Kong.

Shek, D. T. L. (1986). The Purpose in Life Questionnaire in a Chinese Context: Some Psychometric and Normative Date, in the Chinese Journal of Psychology, Vol. 28: No. 1, P. 51-60.

Appendix I.

General Health Questionnaire

請仔細閱讀以下的說明：

我們想了解你有沒有醫療方面的問題，以及你在最近幾個星期的健康情形。請在以下每一項問題的四種答案中選出你認爲最能表達你的健康情況的答案，以（✓）表示出來。請記住我們想知道的是你目前和最近的健康情形。以下的問題對我們都很重要，請你答覆每個問題。

謝謝你的合作。

請問你最近是不是：

1.	覺得健康很好？	比平時好一些	和平時一樣	比平時差一些	比平時差很多
2.	覺得需要進補品或服補藥？	一點也不	和平時差不多	比平時多一些	比平時多很多
3.	覺得相當疲倦？	一點也不	和平時差不多	比平時多一些	比平時多很多
4.	覺得身體不適？	一點也不	和平時差不多	比平時多一些	比平時多很多
5.	覺得頭痛？	一點也不	和平時差不多	比平時多一些	比平時多很多
6.	覺得頭部有壓迫感？	一點也不	和平時差不多	比平時多一些	比平時多很多
7.	覺得發熱或發冷？	一點也不	和平時差不多	比平時多一些	比平時多很多
8.	爲擔憂而失眠？	一點也不	和平時差不多	比平時多一些	比平時多很多
9.	很難熟睡？	一點也不	和平時差不多	比平時多一些	比平時多很多
10.	忙著工作而不會感到閒著無聊？	比平時多一些	和平時一樣	比平時少一些	比平時少很多
11.	工作效率比以前慢些？	比平時快一些	和平時一樣	比平時慢一些	比平時慢很多
12.	覺得一般事情自己應付得很好？	比平時好一些	和平時差不多	比平時差一些	比平時好很多

13. 對自己做事的方式感到滿意？較滿意	比平時差不多	和平時較不滿意	比平時更不滿意	比平時
14. 覺得自己在各方面擔當有用的角色？	比平時有　用	和平時差不多	比平時沒　用	比平時更沒用
15. 覺得處事可以拿定主意？	比平時多一些	和平時差不多	比平時少一些	比平時更　少
16. 覺得總是有精神上的壓力？	一點也不差不多	和平時多一些	比平時多很多	比平時
17. 覺得日常生活有趣味？	比平時多一些	和平時差不多	比平時少一些	比平時少很多
18. 覺得自己很易發怒？	一點也不	和平時差不多	比平時多一些	比平時多很多
19. 會無緣無故地害怕或驚慌？	一點也不	和平時差不多	比平時多一些	比平時多很多
20. 覺得每樣事情都難以應付？	一點也不	和平時差不多	比平時多一些	比平時多很多
21. 覺得自己沒用？	一點也不	和平時差不多	比平時多一些	比平時多很多
22. 覺得生活毫無希望？	一點也不	和平時差不多	比平時多一些	比平時多很多
23. 覺得常常精神緊張？	一點也不	和平時差不多	比平時多一些	比平時多很多
24. 覺得不值得繼續生活下去？	一點也不	和平時差不多	比平時多一些	比平時多很多
25. 想到結束自己生命的可能？	絕不會	我想不會	曾經想過	認真想過
26. 覺得有時精神太差而不能做任何事？	一點也不	和平時差不多	比平時多一些	比平時多很多
27. 希望及早死去，提早解脫？	一點也不	和平時差不多	比平時多一些	比平時多很多
28. 覺得自殺的念頭常出現在腦裏？	絕不會	我想不會	曾經想過	認真想過

Appendix II.

Attitude Towards Drugs

請講出你對以下句子的意見：

1)	吸食白粉很危險	1 好同意	2 同意	3 不同意	4 很不同意
2)	食用丸仔、大麻和咳水之類的藥物很危險	1 好同意	2 同意	3 不同意	4 很不同意
3)	濫用藥物的人對社會無用	1 好同意	2 同意	3 不同意	4 很不同意
4)	我可控制我食藥的習慣，因此食用丸仔、大麻和咳水之類的藥物不會令我上癮	1 好同意	2 同意	3 不同意	4 很不同意
5)	我可控制我吸食白粉的習慣，因此吸食白粉不會令我上癮	1 好同意	2 同意	3 不同意	4 很不同意

Appendix III.

Purpose In Life Scale

人生目的

下列句子與人生目的有關，請選出最接近實況的號碼。請注意：這些號碼代表一種情感由極端的程度漸次遞減，以至延伸到與之相反的另一種情感。“中立”代表處於兩極正中的情況；請盡量少用。

1）我通常是：

1	2	3	4	5	6	7
十分煩厭生活	頗爲煩厭生活	略爲煩厭生活	（中立）	有點喜愛生活，有點活力	頗爲喜愛生活，頗有活力	十分熱愛生活，活力充沛

2）生命對我來說，似乎：

1	2	3	4	5	6	7
總是令人興奮和鼓舞	頗爲令人興奮和鼓舞	略爲令人興奮和鼓舞	（中立）	有點刻板	頗爲刻板	十分刻板

3）在我的生命裏，我：

1	2	3	4	5	6	7
完全沒有目標	沒有略爲清楚的目標	沒有頗爲清楚的目標	（中立）	有略爲清楚的目標	有頗爲清楚的目標	有十分清楚的目標

4）我個人的存在是：

1	2	3	4	5	6	7
完全沒有意義和目的	頗爲沒有意義和目的	略爲沒有意義和目的	（中立）	略有意義和目的	頗有意義和目的	十分有意義和目的

5）每一天對我來說：

1	2	3	4	5	6	7
經常都是新的	時常是新的	有時是新的	（中立）	有時是一樣	時常是一樣	完全是一樣

6）如果我可以選擇，我會：

1	2	3	4	5	6	7
選擇從來沒有在這個世界出現	頗不希望曾在這個世界出現	略不希望曾在這個世界出現	（中立）	略希望擁有我現在的生命	頗希望擁有我現在的生命	十分希望擁有我現在的生命

7）當我退休之後，我會：

1	2	3	4	5	6	7
做一些我經常想做而令我興奮的事情	多做一些我經常想做而令我興奮的事情	略爲做一些我經常想做而令我興奮的事情	（中立）	略空閒地渡過我的生命	頗爲空閒地渡過我的生命	空閒地渡過我的生命

8）在達致我生命目標的過程中，我：

1	2	3	4	5	6	7
從來沒有任何進展	經常沒有進展	有時沒有進展	（中立）	已經略爲達成我的理想	已經頗爲達成我的理想	已經完全達成我的理想

9）我的生命是：

1	2	3	4	5	6	7
空虛和充滿著沮喪	頗爲空虛和沮喪	略爲空虛和沮喪	（中立）	略有姿采	頗爲多姿多采	充滿著十分多姿多采的事情

10）如果我今天死了，我會覺得我已經過了的生命是：

1	2	3	4	5	6	7
十分有價值	頗有價值	略有價值	（中立）	不甚有價值	頗沒有價值	十分沒有價值

11 ）當我思索我的生命的時候，我：

1	2	3	4	5	6	7
經常質疑自己爲何存在	時常質疑自己爲何存在	有時質疑自己爲何存在	（中立）	有時確知自己爲何存在	時常確知自己爲何存在	經常確知自己爲何存在

12 ）當我看這個世界與我生命的關係時，這個世界：

1	2	3	4	5	6	7
令我感到十分混亂	令我感到頗爲混亂	令我感到略爲混亂	（中立）	略有意義地與我的生命吻合	頗有意義地與我的生命吻合	很有意義地與我的生命吻合

13 ）我是一個：

1	2	3	4	5	6	7
十分不負責任的人	頗爲不負責任的人	略爲不負責任的人	（中立）	略爲負責的人	頗爲負責的人	十分負責的人

14 ）關於人可以自由抉擇的問題，我相信的人是：

1	2	3	4	5	6	7
完全有自由去做任何有關生命的抉擇	頗有自由去做任何有關生命的抉擇	略有自由去做任何有關生命的抉擇	（中立）	略受遺傳和環境因素所限	頗受遺傳和環境因素所限	完全受遺傳和環境因素所限

15 ）對於死亡，我是：

1	2	3	4	5	6	7
有準備和不懼怕	頗有準備和不甚懼怕	略有準備和不太懼怕	（中立）	沒有太多準備和有點懼怕	沒有很多準備和頗爲懼怕	沒有準備和懼怕

16）對於自殺，我：

1	2	3	4	5	6	7
曾經很嚴肅和認真地認爲它是解決問題的一種方法	曾經頗嚴肅和認真地認爲它是解決問題的一種方法	曾經略嚴肅和認真地認爲它是解決問題的一種方法	（中立）	沒有十分認真考慮過	沒有略爲認真考慮過	完全沒有考慮過

17）我認爲我對於尋找生命的意義、目標或任務的能力是：

1	2	3	4	5	6	7
十分強	頗強	稍強	（中立）	稍弱	頗弱	完全沒有

18）我的生命是：

1	2	3	4	5	6	7
我完全能掌握和控制的	我頗能掌握和控制的	我稍能掌握和控制的	（中立）	我不甚能掌握和控制的	我頗不能掌握和控制的	我完全不能掌握和控制的

19）面對我的日常任務，我感到：

1	2	3	4	5	6	7
極度快樂和滿足	頗爲快樂和滿足	略爲快樂和滿足	（中立）	略爲痛苦和沉悶	頗爲痛苦和沉悶	十分痛苦和沉悶

20）在我的生命裏，我已經發現：

1	2	3	4	5	6	7
完全沒有目標和任務	差不多沒有目標和任務	沒有多少目標和任務	（中立）	有略爲鮮明的目標和令我滿足的生命目的	有頗爲鮮明的目標和令我滿足的生命目的	有十分鮮明的目標和令我滿足的生命目的

Appendix IV.

Self-esteem Scale

請細閱以下句子，並選出你同意的答案。

1)	整體來說，我對自己感滿意。	1 十分同意	2 同意	3 不同意	4 十分不同意
2	有時，我會認爲自己一無可取。	1 十分同意	2 同意	3 不同意	4 十分不同意
3)	我覺得自己有很多優點。	1 十分同意	2 同意	3 不同意	4 十分不同意
4)	別人做得好的事情，我也有能力同樣地做得到。	1 十分同意	2 同意	3 不同意	4 十分不同意
5)	我感到自己沒有甚麼可以自豪。	1 十分同意	2 同意	3 不同意	4 十分不同意
6)	有時，我確實感到自己無用。	1 十分同意	2 同意	3 不同意	4 十分不同意
7)	我感覺自己是有價值的人，最低限度和別人同樣地有價值。	1 十分同意	2 同意	3 不同意	4 十分不同意
8)	我希望我能夠更爲尊重自己。	1 十分同意	2 同意	3 不同意	4 十分不同意
9)	總括來說，我傾向覺得自己是一個失敗者。	1 十分同意	2 同意	3 不同意	4 十分不同意
10)	我是用正面的態度面對自己。	1 十分同意	2 同意	3 不同意	4 十分不同意

Appendix V.

Multi-Dimensional Health Locus of Control Scale

請以 1—6 來表示你對下列句子的反應。

1 極不同意
2 中度不同意
3 少許不同意
4 少許同意
5 中度同意
6 極同意

1)若我生病，我有能力令自己再痊癒。	1	2	3	4	5	6
2)很多時候，我都覺得假若我有生病的跡象，那麼無論我做甚麼，我都會病倒。	1	2	3	4	5	6
3)假若我定期約見一個卓越的醫生，我的健康會較少機會出現問題。	1	2	3	4	5	6
4)我的健康似乎很大程度受意料不到的事所影響。	1	2	3	4	5	6
5)我只可透過諮詢專業護理人員來保持自己的健康。	1	2	3	4	5	6
6)我對自己的健康直接負責。	1	2	3	4	5	6
7)我健康與否，很大程度受其他人的影響。	1	2	3	4	5	6
8)無論我的健康有甚麼不妥，全都是我的錯。	1	2	3	4	5	6
9)當我患病時，我只好聽天尤命。	1	2	3	4	5	6
10)專業護理人員可以令我保持健康。	1	2	3	4	5	6
11)假使我能維持健康的狀態，其實純粹是幸運。	1	2	3	4	5	6
12)我的健康有賴我如何照顧自己。	1	2	3	4	5	6
13)若我生病，我知道是由於我一直沒有正確地照顧自己。	1	2	3	4	5	6
14)我康復的程度視乎我能從其他人得到何種的照顧。	1	2	3	4	5	6
15)縱使我照顧自己，也容易生病。	1	2	3	4	5	6
16)命運叫我病倒。	1	2	3	4	5	6
17)我頗能悉心照顧自己，著以維持一個健康狀態。	1	2	3	4	5	6
18)完全依照醫生的指示是最好的方法去保持我的健康。	1	2	3	4	5	6

Appendix VI.

Provision of Social Relation Scale

請以 1 至 5 來表示以下各句子與你個人經驗相似程度。

1 與我的經驗完全不同
2 與我的經驗不太相同
3 與我的經驗有點相似
4 與我的經驗頗相似
5 與我的經驗很相似

1)當我與朋友在一起， 我感到可以完全鬆馳及自然。	1	2	3	4	5	6
2)我跟很多我的朋友擁有共同的生命方向。	1	2	3	4	5	6
3)認識我的人都信任及尊重我。	1	2	3	4	5	6
4)無論發甚麼事，當我需要我家人的支持，我相信他們一定會與我一面對。	1	2	3	4	5	6
5)當想外出做某些事情，我知道很多我的朋友會樂意陪伴我。	1	2	3	4	5	6
6)我至少有一個朋友，可以傾吐心中任何事情。	1	2	3	4	5	6
7)有時候我不肯定我可否完全依賴我的家人。	1	2	3	4	5	6
8)我的家人讓我知道他們認爲我是個有價值的人。	1	2	3	4	5	6
9)我覺得與一部份朋友很親切。	1	2	3	4	5	6
10)我的家人對我有信心。	1	2	3	4	5	6
11)我的家人給予我幫助去找出解決我的問題的方法。	1	2	3	4	5	6
12)認識我的人認爲我在工作上表現得好。	1	2	3	4	5	6
13)若我願意的話，我的朋友願意付出時間與我傾談我的困難。	1	2	3	4	5	6
14)我知道我的家人會時常支持我。	1	2	3	4	5	6
15)縱然與朋友在一起時，我也會感到孤獨。	1	2	3	4	5	6

Appendix VII.

Detoxification Experience Questionnaire

＊ 請圈出你的選擇

你在脫癮期間的感受

1. 身體不舒服的程度

1 2 3 4 5 6

完全沒有不舒服　　十分不舒服

2. 脫癮徵狀持續的時間

1 2 3 4 5 6

完全不長　　十分長

3. 身體對脫癮徵狀的忍受程度

1 2 3 4 5 6

完全不能忍受　　十分能夠忍受

4. 情緒不安的程度

1 2 3 4 5 6

完全沒有不安　　十分不安

5. 情緒不安持續的時間

1 2 3 4 5 6

完全不長　　十分長

6. 可以忍受情緒不安的程度

1 2 3 4 5 6

完全不能忍受　　十分能夠忍受

7. 對藥物渴求的強烈程度

1 2 3 4 5 6

完全沒有　　十分強烈

8. 對藥物渴求出現的頻密程度

1 2 3 4 5 6

完全沒有　　十分頻密

9. 對藥物渴求的控制能力

1 2 3 4 5 6

完全不能控制　　十分容易控制

10. 相對未開始斷癮前，獲取藥物的容易程度

1 2 3 4 5 6

完全不易 十分容易

11. 與有濫用藥物朋友接觸的頻密程度

1 2 3 4 5 6

完全沒有 十分頻密

12. 有濫用藥物朋友對你脫癮治療的態度

1 2 3 4 5 6

完全不支持 十分支持

13. 與非濫用藥物朋友接觸的頻密程度

1 2 3 4 5 6

完全沒有 十分頻密

14. 非濫用藥物朋友對你接受脫癮治療的態度

1 2 3 4 5 6

完全不支持 十分支持

15. 親人對你接受脫癮治療的支持程度

1 2 3 4 5 6

完全不支持 十分支持

16. 親人最近對你的關心程度

1 2 3 4 5 6

完全不關心 十分關心

17. 親人最近對你曾否再使用藥物的懷疑程度

1 2 3 4 5 6

完全不懷疑 十分懷疑

18. 親人最近對你的憎厭程度

1 2 3 4 5 6

完全不憎厭 十分憎厭

19. 你對維持不再濫用藥物的決心有多大

1 2 3 4 5 6

完全沒有 十分大

20. 你對維持不再濫用藥物的信心有多強

1 2 3 4 5 6

完全沒有 十分強

Appendix VIII.

Therapeutic Elements Achievement Questionnaire

以下部份是了解你接受治療後，覺得下列各項是否能達到你的預期效果， 答案並沒有對或錯之分， 請你依照你自己的感覺圈出答案即可。〔 *"0"爲完全不能達到，"1"爲一點兒達到，"2"爲頗能達到，"3"爲十分能達到，"9"爲不適用。*〕

	完全不能達到	一點兒達到	頗能達到	十分能達到	不適用
1. 正確的行爲以防止再濫用藥物	0	1	2	3	9
2. 承認自己的心理問題	0	1	2	3	9
3. 去改善自己心理問題的動機	0	1	2	3	9
4. 落實去解決自己的心理問題	0	1	2	3	9
5. 承認自己與家人關係問題	0	1	2	3	9
6. 對自己與家人關係作出改善的動機	0	1	2	3	9
7. 落實去改善自己與家人關係	0	1	2	3	9
8. 承認自己與伴侶關係問題	0	1	2	3	9
9. 對自己與伴侶關係作出改善的動機	0	1	2	3	9
10. 落實去改善自己與伴侶關係	0	1	2	3	9
11. 承認自己與其他人的關係問題	0	1	2	3	9
12. 對自己與其他人關係問題作出改善的動機	0	1	2	3	9
13. 落實去解決自己與其他人的關係問題	0	1	2	3	9
14. 處理個人情緒的能力	0	1	2	3	9
15. 處理個人內心激動的能力	0	1	2	3	9
16. 去維持穩定工作的能力	0	1	2	3	9
17. 適當處理個人經濟金錢	0	1	2	3	9
18. 遵從社工指示接受輔導	0	1	2	3	9
19. 遵從醫生指示接受治療	0	1	2	3	9
20. 運用及享受餘閒時間的能力	0	1	2	3	9
21. 選取康樂活動的能力	0	1	2	3	9
22. 與非濫用藥物者建立支持網絡的能力	0	1	2	3	9
23. 維持正常睡眠的習慣	0	1	2	3	9
24. 與社工建立信任關係	0	1	2	3	9