PROCEEDINGS OF THE OPENING OF THE DRUG ADDICTION RESEARCH UNIT OF THE UNIVERSITY OF HONG KONG

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OPENING REMARKS

by The Unit Convenor, Dr. J.R. Day.
Department of Curriculum Studies, The University of Hong Kong.

The University of Hong Kong is pleased to welcome you to this colloquium to set in motion an initiative prompted by the problems of substance abuse in Hong Kong. With the help of the British Council, without which we could not have begun, it has been possible to equip a unit which will allow free exchange, via direct data transfer and facsimile, of information related to drug abuse and addictive behaviours and research into these topics, both within Hong Kong and from international sources. It will also allow us to bring to Hong Kong two or perhaps three experts in fields of substance abuse research. The first of these, Dr. Colin Drummond is here with us over the forthcoming fortnight.

Hong Kong has had programmes of treatment and rehabilitation for its heroin addicts for 30 years. It treats such addicts humanely by allowing them to maintain their addiction yet remain productive through the methadone programme, and it rehabilitates drug-using criminals through the Drug Addiction Treatment Centres within our prisons. In addition such programmes as those of S.A.R.D.A. allow voluntary clients to try to cease their habits.

However, in recent years, and in common with the rest of the world, Hong Kong has experienced a rapid increase in poly-drug abuse, and an increase in use by the young. Prosperity has brought a greater demand for alcohol from younger sections of the community and tobacco, although declining in use amongst older people, is increasing in use by the young, particularly by young women.

There has been no attempt to develop a concerted research programme to investigate problems or to review the reasons behind increasing abuse in Hong Kong. Despite a total of 0.8% of the population who are heroin addicts, no work has been done to

investigate closely the pressures in this society which makes heroin the apparent drug of choice. The reasons for frequent relapses which reduce the effectiveness of rehabilitation programmes have not been investigated.

Therefore, we meet here today to begin the process of establishing lines of research and priorities for such a programme, to be co-ordinated through this Unit, but linking together all of the institutions where research might be carried out in such a way that funding may be applied for in a professional manner, funding sources may be investigated and requests for funded research can be received, to be offered to interested researchers.

It is hoped that this colloquium will have brought together all of those who wish to take an interest in such research, but if you know of others who are not here, please encourage them to attend one of the four seminars which Dr. Drummond, our guest today, will lead during the next two weeks. He will, of course, also be having smaller group meetings with groups from government and the caring professions concerned with substance-abuse matters.

Dr. Drummond has a background of leadership and development in the Addiction Research Unit of the Institute of Psychiatry in London, now established as Britain's National Addiction Research Centre. We welcome him, and all of you to what will be, I hope, the first of a productive series of meetings in the revived area of drug addiction research for Hong Kong.

OPENING ADDRESS
WHAT ARE WE TRYING TO DO?

by Dr. D.C. Drummond, M.D., Ch.B., F.R.C.Psych.

I am delighted to be a part of this important and historic event in HK: the opening of the Drug Addiction Research Unit, (DARU). It is important and historic in a number of respects to which I will return in a moment. But first of all I feel it important to point out that I may not survive this evening's formalities and festivities.

I should explain that I have literally just got off a plane from London and feel somewhat jet lagged. Had it not been for Jeffrey Day's persuasive persistence, which incidentally ought to come in extremely useful in the years to come here, I would have very readily opted for R & R rather than this R & D! That is rest and recreation rather than research and development! Nevertheless, here I am, but if I might be somewhat presumptuous of my hosts, I would be extremely grateful that should I lapse into sleep during this opening address, someone would without too much fuss, place a blanket over me and give me a call for breakfast!

During the remaining time before such an undesirable somnolent state overtakes me I would like to make a few comments by way of introduction to this auspicious opening and also to introduce myself to Hong Kong.

In many ways the DARU here at The University of Hong Kong is retracing some of the early tentative steps taken by the research unit in London to which I belong. Clearly, there are many differences between the two settings which betray any attempts at comparison: this is 1991 and not 1963, this is a bustling cosmopolitan city in the East and not a crumbling Victorian inner city area of London, and the problems which face today's research workers have changed immeasurably from the time that my colleague Griffith Edwards began the pioneering work for which he is so rightly famous.

Nevertheless, there might be some lessons which can be learned from the other side of the world. Having joined the Addiction Research Unit many years after its inception I am probably much less qualified than many to draw such parallels, but tonight I will attempt to ask a difficult question:

What are we trying to do?

This question is not meant in a facetious sense of implying that we in London, or anyone else in the Addiction Research field are devoid of direction or purpose in our endeavours, or indeed to suggest that what we are doing is without substance or merit. But rather, I aim to ask a difficult, but important question which must echo through every discussion, every teaching seminar, every research study and in every encounter with those affected by the devastation brought by addiction. Nor would I claim to have a definitive answer to this question.

What I will say is that, if we are not prepared to really address this question, we are in serious danger of setting off on the wrong tack, of following through our own pet interests and in the process, risk overlooking those issues which society desperately requires us to address. The consequences of such a scenario does not, I am sure require to be rehearsed. It seems, however, we seldom get more than one opportunity to get it right. The most optimistic aspect of the present developments here at the University of Hong Kong which we are here tonight to celebrate is that you have an excellent opportunity to begin a fresh thrust of endeavour in a field which has eluded some of the greatest minds of this and previous centuries.

In attempting to answer my question, I am going to focus on just three areas in which I feel we as a research community in the addictions field have a responsibility to lead the way. I am sure that every person in this room will have an even longer, and probably even more considered and much more worthy list of overriding objectives. But for what it is worth here are my three.

So, what <u>are</u> we trying to do?

1. <u>Achieving Understanding.</u>

Without understanding the nature of the problems related to addictive substances that we are dealing with we will be unable to fulfil any of our obligations. To achieve this we need to bring all the powers of science, reasoning, scholarship, and humility to bear on our chosen field of endeavour. Without this we will be thrashing around in the darkness of bias and personal prejudice. The history of the addictions field is littered with examples of the failings of costly initiatives based on inadequate knowledge.

As scientists we must bring objectivity to the problems brought by drug and alcohol addiction, which attract opinions, some with more merit than others from almost every person in society. If you want to assess this point, ask a London taxi driver. This is where I

obtain a sense of prevailing public attitudes. During recent journeys in central London I have learned that what addicts need is variously punishment, isolation, hypnosis, drug therapy, acupuncture and being sent to Australia. All worthy suggestions I am sure! But while it goes without saying that anyone is entitled to an opinion, if we are going to improve the lot of those affected by drug and alcohol problems we need to rise above the level of prejudice and try to begin to understand the nature of the problems through scientific study.

In formulating a shopping list of what is worthy research we need, however, to be selective. Part of the purpose of my visit here is to in some small way assist you in this process. In doing so I would like to share with you a quotation from a recent publication which discussed the Addiction Research Unit in London's philosophy on this matter, expressed in the eloquent prose of my colleague Griffith Edwards.

> "If a relatively small research team is to have any worthwhile impact in a world where it is competing nationally for scant funds and internationally with far bigger research battalions, it must take the job of determining the selective focus of its research programme with immense seriousness. It is insufficient that a topic should be merely 'interesting' that some member of staff personally likes doing that type of research, or that a question has recently been attracting media or political attention.

With theory based research there is merit in trying to target on issues which are perceived as having central and pervasive qualities of importance, while at the applied level the targeting should be on research which can potentially offer findings which are tangibly applicable to the problems of the real world. A research group should be willing to raise and grapple with these questions of choice, rather than leaving the setting of the research agenda to accident or drift."

So clearly, in Edwards' view, the lure of individual prejudice has to be resisted in deciding what should be researched.

2. Relieving suffering.

My second point is connected with this, namely that we need to make our work applicable to the real world problems. Without applicability to the real world our work will be viewed as being of little value. But I would go further by saying that there is a strong need also to bear in mind the plight of those affected by the problems associated with addiction. What might seem a pragmatic or effective solution to a problem may be a long way from

providing needed relief to the sufferer. Herein lies the lure of unitary, sweeping solutions to complex problems.

To cite two examples:

Raising the tax on alcohol by say 10% may, and indeed probably will, reduce the prevalence of alcohol problems in society. Such is the evidence from numerous epidemiological studies throughout the world. But at the same time it is only too easy to overlook how this measure might affect the very severely dependent alcoholic. While his lighter drinking counterparts have been persuaded by such a measure to reduce their alcohol consumption to a safer level and thus avoid problems, the man who up until now has managed to retain a patina of respectability and acceptance within society may be forced towards crime, the bottle gangs on skid row and further breakdown of his personal standards. By the same token, targeting help for only the small minority of the most severely affected drinkers stands to overlook the substantial benefits of reduced per capita consumption.

Similarly, the increased criminalization of drug use, with, as the London taxi driver would have us accept, the wholesale incarceration of drug takers, might go some way, probably only a very limited way, towards removing the problem from the streets into the prisons, but will have the unwanted effects of breaking up the drug users' social networks, his family, his job and so on, while at the same time exposing him to a greater risk of contracting H.I.V. infection through the increased sharing of scarce injecting equipment in prison.

So, we need at all times to temper our "big ideas" for ridding the world of addiction with an attempt to understand the problem from the affected individual's point of view.

3. Education

Finally, the third on my shopping list of objectives is that of education. We, as a research community, can do little if we overlook this objective. Our research findings, our thoughts, and our aspirations will come to nought and be confined to the dusty shelves of some forgotten part of the library, awaiting rediscovery in another century by historians of ancient history. How excited they will be to find, as has often been the case in my own studies, that the same well-trodden paths are returned to over and over again by subsequent generations oblivious to the findings, as well as of course the mistakes, of our forebears.

Education, however, in this context does not apply to the small and select minority of students who will be fortunate enough to find their way into the esteemed confines of the Universities and colleges on specialized addiction courses. I am referring to dissemination of

knowledge to those who influence society as well as members of that society itself. Until we can make an impact on attitudes towards addiction and its treatment, with that recalcitrant and opinionated London taxi driver, with the person who has the problem themselves, to their family doctor, their employer, their husband or wife, we will not be able to rest content in our efforts.

The next generation of addiction researchers must be able to learn from our achievements as well as our mistakes. But above all there will be no next generation of addiction researchers unless we grasp the nettle and continually be prepared to ask ourselves "what are we trying to do?"

In conclusion

I would like you to accept from both myself and my colleagues in London our warm congratulations on what has been achieved so far in Hong Kong, and I wish you every success in your endeavours here.

Over the next few days I am hoping to assist in any way I can with the planning of this exciting project, and of course my willingness to help extends far beyond this preliminary exchange. You can be assured that the developments here will be followed with great interest from around the world and particularly from London over what I anticipate to be many years of fruitful research.

Moreover I look forward to being able in the years to come to reflect on this event as a bright new dawn for addiction problems in Hong Kong, and indeed further afield.

HOW NOT TO ERADICATE DRUG ADDICTIONS

by Karl Schmidt, M.D., F.R.C.Psych., etc.
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Brunei Darrussalam.

This paper describes the various ways in which drug addictions can remain established in communities forever. It is somewhat cynical. In the first part are described the numerous conferences over the last 21 years which the author has attended both in South-East Asia and European countries as well as in Australia. From over-view it would appear that very little progress has been made towards eradication of drug addictions. It looks as if much of the material presented to the 26 International and National meetings, including psychiatric conferences with sections on drug addictions has been repetitive and, as it were, only nibbling on the subject, certainly as regards eradication of addictions. It is tempting to conclude that eradication of drug addiction has not been a major concern of the many organizations involved, of the presenters of papers nor of the conference organizers since there has not been one single section anywhere, to the author's knowledge, devoted to the subject. A tendency to avoid discussions of the subject of eradication has been palpable, almost as if one is ashamed to mention it.

The principles of <u>preventing</u> eradication of addiction can be classified into methodological and organizational ones.

As regards the first it is necessary, if one wants to avoid eradication of drug addiction not to use programmes which are ECONOMICAL, particularly those that only need an admission period of one month. With long admission periods it can be safely predicted that there will never be enough facilities, personnel and funds available to catch up, as it were, with the problem, "a fairly safe bet".

Equally important is it to avoid programmes which show with presently available experience that a relapse rate within 2 years need not be more than 10%. In other words, EFFECTIVE programmes, with the above criterion for EFFECTIVENESS, were better avoided.

Lastly programmes which show much ACCEPTABILITY are also better avoided. To give two examples in this context, the first is "cold turkey" which might appear to be

unacceptable because it is not very humane to let somebody suffer from 10 -14 days when this is not necessary. Furthermore "cold turkey" safely reinforces the addiction since the mind of the addict is only occupied by "I need a fix".

Secondly, methadone is equally effective in preventing eradication of addictions and therefore quite safe since it comfortably converts one addiction into another one. Methadone would therefore be unacceptable in a program that aims at eradication.

Also COMPREHENSIVE programmes were better avoided, that is those which provide multiple instruments of self-help to the addicts, that is elements which train in life-changes and in contents of thinking.

What has to be avoided most is a systems-approach to addiction; that is one which stands a good chance of changing the treatment-system by an element from outside the present system of addiction management. In other words one which demands "more of the same" is better chosen! We know from strategic psychotherapy that a system cannot be changed by demanding more facilities practising the same treatment elements and techniques which have failed epidemiologically within. In a programme which the writer has been connected with that outside element which is brought to bear on the system in addiction management is Brain Electro-stimulation Transcutaneously (B.E.S.T.).

A systems approach to addiction treatment utilising B.E.S.T. (Brain Electro-Stimulation Transcutaneouly).

Approximately 40 years ago the concept of homoeostasis was proposed with the central concept of negative feed-back or self-righting mechanism.

This systems concept was introduced in due course about 20 years ago also into psychotherapy, largely that brand of it which is called strategic psychotherapy.

Addiction management has, over the 21 years of the author's experience with it, not been able to lead to epidemiological change; that is either reducing or abolishing prevalence.

In fact it appears that most treatment systems, methodologies or strategies have not been designed with the goal of producing epidemiological change. What has been practised is giving "more of the same" that is more treatment facilities, more staff, more funds, more counselling etc. From systems theory and strategic psychotherapy (Erickson; Weakland, Watzlawik and others) we know that a system cannot be changed in this way. It needs an outside element from another plane.

It appears that all presently practised methods of drug addiction management have failed. The reasons are:

1) ECONOMY:

The presently practised methods are uneconomical because they demand an admission-time of more than one month. For that reason alone the prevalence of drug addiction can not be significantly lowered and no eradication can be considered since facilities will never be sufficient to allow this on purely economical grounds. Also where more than one month admission is practised, usually a Drug Culture develops, that is thinking and talking about drugs.

2) EFFECTIVENESS:

The methods practised are ineffective in that relapse rates are usually much above 10% within 2 years; the latter might be considered permissible.

3) ACCEPTABILITY:

The methods practised are unacceptable because they are either converting one addiction into another one such as is the case with methadone and therefore do not really touch problems of drug addiction. Others are also unacceptable for the reason that no treatment is given for the withdrawal symptoms such as is the case where the so called "Cold Turkey" is practised. The so called "Cold Turkey" is non-treatment and unfortunately reinforces the addiction. The relapse rate with this method will always be unacceptably high.

Therefore one looks for alternatives. They appear to be very few. The approach which we have developed abolishes the above 3 restrictions for effective treatment & therefore allows for eradication.

A Method that Allows for Eradication in a given Community.

In the program we have developed there are 12 elements; the outside and new element is B.E.S.T. or Brain Electro-Stimulation Transcutaneously. This is an entirely

physical element without drugs, reducing if not abolishing withdrawal symptoms within hours and thereby making the addict accessible from day one for the other treatment elements. Many of the elements form parts of other treatment systems.

The 12 elements are:

1. Contract
2. B.E.S.T.
3. One hour daily therapeutic counselling
4. Four prescribed readings
5. Religious counselling, so far always accepted
6. 15 physical relaxation exercises twice daily (Yoga-like)
7. Mental relaxation exercises twice daily (Medication-like)
8. "Family" therapy
9. Occupational therapy
10. One to one relationship ("Buddy-system")
11. Anti-Epileptic Medication may be necessary for one week on abrupt drug withdrawal
12. 18 acu-pressure exercises

and, where necessary, anti-ictal drugs (especially after alcohol and diazepines). Follow-up is for 2 years, 3 times weekly with urine drug screening. Admission to this very tightly packed program is for one month only. Our relapse rate within 2 years has been 10%.

The program is characterized by ECONOMY, EFFECTIVENESS, (only 10% percent relapse in 2 years) and ACCEPTABILITY. No "Cold Turkey", methadone or naltrexone are used.

The essential element of our approach is Brain-Electro-Stimulation Transcutaneously or B.E.S.T. It has the advantage to abolish or modify withdrawal symptoms & takes the craving away usually within hours so that the other eleven elements of the program can be started with on day one of admission for treatment of addiction. It's *modus operandi* is mobilization of endorphines suppressed by the drug addiction. Speedy detoxification <u>within hours</u> appears to be occurring allowing for implementation of the other programme elements.

Seminars to Elucidate Research Directions for the Drug Addiction Research Unit.

From 4th October to 11th October, a series of four seminars, led by Dr. Drummond, were given to attempt to elucidate possible lines of research for the Drug Addiction Research Unit. The following notes summarise these seminars.

SEMINAR ON TREATMENT & RELAPSE

FRIDAY 4TH. OCTOBER 1991.

Dr. Colin Drummond of the National Addiction Centre spoke of his work and other international research on the effectiveness of different treatment regimes on recovery outcomes for substance abusers.

Using mainly studies on alcohol abusers as a model, he indicated the scale of economic loss brought to the community in terms of medical expenses, premature death and reduced productivity caused by users of harmful substances. No research was available on losses due to young users who were able to take up only low value work after their addiction episodes, but who might have been more valuable to themselves and the community had problems related to addiction been prevented. While alcohol misuse was taken as the principal model to illustrate his points because of the greater availability of relevant data, Dr. Drummond emphasized the generalizability of the concepts to other substances:

> He reported the cost of alcohol misuse in Britain, (pop. approx. 56 million) as GBP 1.6 billions per year. Costs related to tobacco where a third of the population smoke were reported as GBP312-535 millions depending on method of calculation.
>
> Evidence was also given to show that chronic liver disease had doubled in prevalence between 1965 and 1989 in the U.K.
>
> It was estimated that there were 75,000 severely dependent alcoholics, and that 10% of the population had alcohol-related problems.
>
> In addition, there were estimated to be 100,000 addicted to heroin and other illegal drugs, and 1 million addicts to benzodiazepines.

He likened the problem for all drug abusers to a volcano, with a defined number in the cone of severe addiction to any substance, the majority at the base with no significant problem, but a large, unknown number climbing the slopes and slipping in and out of casual usage, at varying frequencies. The important point is that drinking problems merge imperceptibly into severe addiction, making it difficult to say with any degree of certainty what the true prevalence of addiction is or where the focus for treatment concern should be.

It was suggested that there had been a change in focus from concentrating only on the "cone-dwellers" whose outcome was likely to be generally unfavourable, to trying to identify and treat the "slope-climbers" where treatment effectiveness is considerably more optimistic. The involvement of the General Practitioner to identify and treat the alcohol and nicotine abusers was underway, and studies showed that "quality time" spent by non-specialists with these people was just as effective as time spent in expensive special purpose clinics.

The pattern with illegal abusers was similar, except that they tend to have no General Practitioner(GP). Nevertheless, the setting up of Community Drug Teams has been attempted in many parts of the U.K., and has proved to be successful by reaching the earlier stage problem drug takers while they were still "on the slopes". Outcomes seemed more successful at this stage in the case of problem drinkers. Mortality rate was 2 to 4 times less in problem drinkers identified and treated by GPs, compared to controls, in one Scandinavian study. So treating slope climbers rather than cone-dwellers was effective in reducing mortality also.

Use of a Community Reinforcement Approach for the more severely affected, in which considerable aftercare support is offered, was viewed to be a successful way of reducing relapse, but much more study was necessary to confirm this. In discussion it became apparent that this approach was supported by anecdotal evidence based on the Hong Kong experience.

Dr. Drummond reported barriers to help-seeking as being a significant factor in limiting treatment effectiveness. Even if treatments were effective, it is clear that only a minority (around 10% in the case of severe alcohol problems) avail themselves of such help. Factors which have been identified include:

a) Difficulty in knowing where to ask for help.
b) Access to the help agency was difficult
c) Some people resisted being labelled as an addict.
d) Some people feared hospitals, especially psychiatric hospitals.
e) Women experienced particular difficulties in seeking help.

The concepts of safe and harmful drinking were discussed. In reference to other drugs, the same problem arose, and while some could even use heroin casually, others were quickly clinically dependent. This was hotly disputed in discussion, the dispute centring on the importance of dependence as a limiting factor in recovery.

Conclusions

It was concluded that future research efforts should best be directed towards getting more people into treatment earlier and in helping the greatest number of those in need. Making existing services function more effectively should necessarily involve establishing through research the most appropriate treatment for the individual and a shift in emphasis from the most severely affected to include those at an earlier stage in their drug taking career. There is a tremendous untapped resource of generalists who have been shown to be effective in treating addictions. It will be necessary to find a method in which specialists and generalists can effectively work in partnership.

The following points and suggestions for further research were raised in discussion:

a) Cost/benefit analysis of different kinds of treatment for abusers at different stages of experience should be undertaken.

b) Evidence was gained in relation to the level of severity of addiction in relation to the success of different levels of treatment.

c) The effectiveness of general help versus specialised help needed to be evaluated, particularly in view of the lower cost and greater availability of generalists.

d) The matching of treatment programmes to individual needs requires greater research.

e) The nature and needs of slope-climbers cannot necessarily by inferred from the observation of cone-dwellers.

f) The long term effects of methadone maintenance on quality of life was assessed, especially in relation to its appropriateness for young abusers.

g) Reasons for self-recovery from long term addictions over 10-15 years were studied and more research was needed to identify key elements in successful recovery from addiction, rather than concentrating on reasons for relapse.

h) There was a general consensus regarding the importance of programmes which responded flexibly to individual patients, and which took account of recent research evidence.

EPIDEMIOLOGY OF DRUG ADDICTIONS
MONDAY 7TH, OCTOBER 1991.

The second seminar in the series heard Dr. Drummond of the National Addiction Centre speak of his work and that of other international groups on the epidemiology of drug addictions.

Dr. Drummond asserted that questions were often asked of epidemiologists concerning the value of their work. He suggested that, in common with other medical specialities, work with addictions had begun with attempts at treatment, but that it had been realised only after a long struggle that the application of epidemiology was necessary to assess the extent and nature of the problems faced by treatment services and to evaluate the impact on problems related to substance misuse of public health measures.

1) Epidemiology has led to an understanding of the true scale of the problem which was often distorted by the perceptions of those concerned with treatment and rehabilitation, because those individuals seen in the treatment setting were not necessarily representative of the greater population experiencing problems with a substance.

2) Epidemiological studies could give good measures of the effectiveness of an intervention to reduce the epidemic of a particular substance's use. e.g. the effects of taxation in reduction of tobacco or alcohol use had been monitored by epidemiologists.

4) There were valuable potentials for cross-cultural comparisons through epidemiological research. This might be particularly important in a country such as Hong Kong because affluence and modernisation were leading to changes in substance abuse patterns locally, whilst non-Chinese immigrants were affected by cultural trends here. Thus in dealing with the whole problem, cross-cultural concerns were necessary.

Hence there was a demonstrable need for good epidemiological research.

The statistics available for alcohol were considerably better than that for illicit drug misuse, because collection of these had been long-standing, and surveys were less threatening to respondents as alcohol is a legal substance. Further, in a given country it is

possible to obtain accurate figures of total alcohol consumption for that population over a given time, whereas the same clearly could not be said for illicit drugs.

In Hong Kong, the effective data collection of the Central Registry on Drug Abuse provides evidence concerning the behaviour of those who had come to the notice of reporting agencies, i.e. those who were already addicts; but the epidemiology of non-opiate abuse and the behaviour of those not in contact with treatment agencies could not be ascertained from this source. As suggested in the previous seminar, these groups are of as much concern to helping agencies as those in contact with treatment.

Considering the possibilities of epidemiological research in substance-abuse, the type of work was directly related to its cost, but work at a variety of levels was necessary to obtain as complete a picture as possible.

Lowest costs were attached to studies of existing **official statistics.** However, these presented difficulties of comparability, validity and accuracy. Even mortality statistics are unreliable since substance abuse is often not recognised as a factor contributing to death. Commercial statistics such as alcohol imports are associated with a degree of error which tends not to vary markedly over time, but statistics based on human agencies such as police or social workers might vary as agency behaviour towards clients changed from time to time (e.g. police arrest policies in relation to cannabis users, or for possession of equipment for injection may vary from city to city and from year to year, worldwide). Real outcomes of such policy or behaviour change might be felt only after a variable period of time, so that lag effects were unpredictable.

Official data can be biased by political or other motives, so it was important to obtain the original figures if possible, and to avoid derived material.

Studies of registers of admissions to treatment agencies, hospitals etc. could yield useful information, but were more expensive to conduct than research using public record office statistics. They suffer from the same shortcomings, however. There is the added problem that the number or type of individual presenting for treatment may bear little relation to the wider population of drug takers. Changes in clinic policy may affect prevalence estimates based on such statistics. Further, doctors in general hospitals may be reluctant to record the fact of substance abuse in a patient presenting with a medical problem because of a stigma attached to such behaviours.

Registers are representative only of those presenting for treatment, or being reported for a condition. Those who do not divulge their substance use, or fail to come to the notice of a registration agency are however not included in such data. Such data therefore provide only a rough approximation of activity in the community.

Lag phases exist in all registers due to delay in presentation to the reporting agency. H.I.V. and smoking were examples where a long lag phase, up to 10 years in the case of H.I.V. and 30 years in the case of smoking, might intercede between onset and disease.

Screening of those at high risk from the activity being studied was a valuable investigatory activity. In the case of substance-abuse overdoses, or of substance-abuse related accidents, hospital accident and emergency ward studies and medical ward studies yielded valuable insights, Blood screening for prevalence have yielded valuable results.

Nomination studies where a known addict was asked to identify other addicts or research which involved the employment of addicts as investigators gave greater reliability than simple self-reported anonymous questionnaires. There was potential here for interview studies of a non-threatening nature, where members of the sub-culture acted as interviewers.

Large, general population surveys were expensive to carry out, and without costly interviewing techniques, were of suspect validity. An example in Hong Kong is the general household survey about youth tobacco use which shows a prevalence of 4% whilst local anonymous self-reporting surveys show up to 25% in the same age groups. Elsewhere, alcohol surveys had shown that heavy drinkers tend to underestimate their consumption in comparison to moderate and light drinkers, thus questioning the validity of such data. Such studies are of value, however, particularly in observing longitudinal trends, but one must assume a constant error in reporting.

The value of epidemiology beyond the mere counting of heads was then illustrated. Clinicians and epidemiologists differ in seeing two worlds of drug problems:

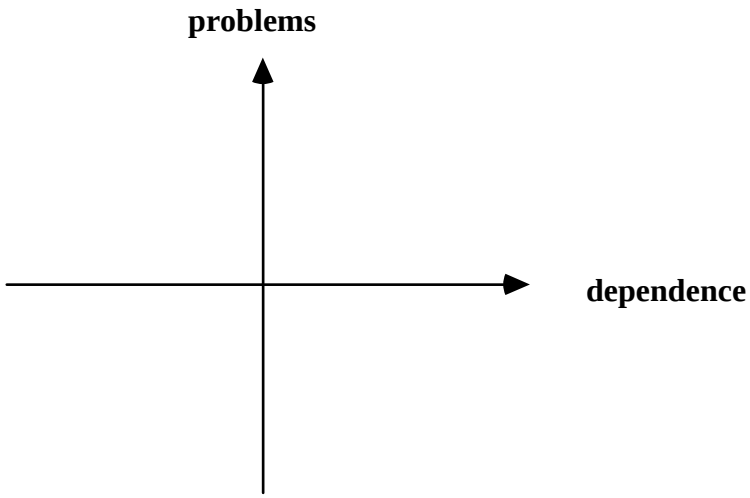
(i) Clinic attenders tend to be severely deteriorated people, giving a particular view of their problems.

(ii) Epidemiologists on the other hand identify mainly transient, less severely problematic individuals.

It was important to understand how these different perspectives could lead to a very different view of the nature of the problems within a population.

A biaxial view of addiction was offered which led to alternative models of alcohol problems and provided a means of understanding the discrepancy in view between these two reporting agencies.

Figure 1.



This model posits that it is possible to experience problems related to a substance without necessarily experiencing a significant degree of dependence. Those who are dependent will most likely experience problems related to their use of a substance, such as marital, social or police problems. But it is possible to be dependent on a drug without experiencing severe problems. An example might include the therapeutic use of nicotine chewing gum in smoking cessation. Thus epidemiologists and clinicians may be investigating two different groups who vary along these two dimensions. The epidemiologist, identifying mainly the non-dependent problem drinker, and the clinician, principally the dependent drinker who also experiences significant problems. The different nature of these two phenomena could account for differences in attitude between these two professional groups as to the needed remedy for the problem.

Dr. Drummond then presented some data obtained from two clinical populations of problem drinkers (in U.K. and Germany) and a general population survey from the U.S. All the studies presented support the view that rather than being completely independent, dependence and problems are highly correlated with one another. He suggested that it was the individual's degree of dependence rather than the amount of alcohol consumed *per se* which determined the extent of drinking problems. The implication is that the altered drive state occasioned by dependence and which leads the drinker into a pattern of drinking designed to maintain a high blood alcohol level is likely to lead the drinker into offending against the prevailing social norms concerning drinking behaviour.

While this finding was in itself of interest, the data was presented to illustrate two important general points:

1) That studying a phenomenon in different population groups (clinical and general) and in different countries (U.K., U.S. and Germany) adds greater weight to the findings, and can lead to the discovery of findings which would not have been possible had only one population group been studied.

2) That until clinicians and epidemiologists begin to examine the evidence from each other's survey research one cannot be certain whether they are referring to the same phenomena when they use the terms 'addiction' and alcohol or drug 'problems'.

In sum, epidemiological research has made a major contribution to our understanding of the nature and prevalence of substance-related problems and will continue to be an essential tool in planning methods of intervention and in assessing their impact on a community. Without epidemiological research the implementation of public health measures will be based on at best, guesswork.

Questions & Comments

Dr. Hind: Treatment agencies tend to report long term recidivist addicts, while law enforcement agencies are more likely to report beginning addicts.

Dr. Drummond: Agreed and said that this supported the 'two views' model of attitudes to addiction referred to above.

CHEMICAL INTERVENTIONS IN ADDICTIONS
WEDNESDAY, 9TH OCTOBER 1991.

Dr. Drummond introduced the topic as a personal view of the field and opportunities for the pharmacological treatment of addiction. He described three areas of opportunity for such a use of drugs, firstly in treating the 'addiction' itself, secondly in treating withdrawal symptoms, and thirdly in treating the complications which arose from substance abuse. This latter use of drug-treatments had been least investigated.

In general in Hong Kong, it seemed likely that opportunities for research in this area might come only within the context of research on other types of interventions and their outcomes. There were problems in pure pharmacological research in that they can be rather narrow in focus, relating only to the addiction, rather than the psychosocial issues of the condition.

It was possible to do valuable work at the cellular level, and into conditioning mechanisms at the receptor level. Such research has made many advances but much remained to be known, for instance it was unclear whether different drugs had different effects on receptors, or whether there were specific receptors for different drugs. Neither was it clear as to how much commonality existed between different substances.

There were large programmes in the United States and elsewhere, looking at these matters; however trials were very difficult to conduct, drug abusing subjects were inherently difficult to study and cross addiction contamination was a constant hazard to research. Subjectivity was always a hazard and costs were very high.

Treating the addiction itself

In the area of chemical interventions there were many historic studies, indeed the story of Heroin itself was based in the search for a non-addictive opioid! There must always be suspicions when interventions were attempted using a drug of the same class as that to which the subjects are already addicted.

There were many cases where alternative treatment had themselves become abused {e.g. Temgesic (Buprenorphine) and Temazepam in Scotland, Methadone in USA and Hong Kong.}

In alcohol research Disulfiram had been used as a sensitising agent, resulting in nausea and vomiting if alcohol is taken in conjunction with a therapeutic dose. Calcium Carbimide has been used in a similar way. In a one year follow up study no difference in abstinence or adjustment was shown between a placebo group of alcoholics and those being given Disulfiram in a large multi-centre U.S. study. It seems likely that reinforcement of abstinent behaviour may be the effective ingredient rather than the drug itself.

Research into opioid antagonists had been carried out. Naloxone, having a double effect of agonist and antagonist had been tried, together with Naltrexone, a closely related compound. The first had led to serious withdrawal discomfort, the second, longer acting, had shown some promise. It blocks the "high" of heroin use, so providing a potential in preventing relapse.

Naltrexone has certain undesirable side effects in a number of patients which may limit its general use, and clearly needs to be taken indefinitely. The patient can be treated by a loading dose of 100mg naltrexone, then giving a daily 25mg dose.

One study showed that, with a large dose of clonidine and tranquillizers to remove withdrawal symptoms, and blocking with naltrexone, patients may be rendered heroin-free in as little as 48 to 72 hours. This study awaits replication however. In one study, only 17% of patients remained drug-free for more than 90 days on naltrexone.

Studies on cocaine dependency treatment with bromocriptine and amantadine have not proved very successful so far.

Work with Buspirone for benzodiazepine dependency had shown some promise. The use of haloperidol, which blocks dopamine which may reinforce nicotine dependence had not proved effective.

The use of 5-HT3 antagonists such as Ondansetron in alcohol dependence has shown some promise at the Addiction Research Foundation in Canada.

Chemical Interventions in Withdrawal

The range of possible withdrawal treatment varies from no intervention, (cold turkey) which is well thought of by some workers, especially if accompanied by intensive personal intervention or counselling. However, most professionals involved in the field would regard such an approach as leading to excessive and unnecessary discomfort.

The role of methadone in heroin withdrawal is well known, but research shows that it is often incorrectly used. Often peak withdrawal from the heroin occurs after the methadone has been stopped. There is room for work to improve treatments by varying the dose and time of prescription. Up to 3 weeks may be the optimum time for withdrawal from heroin through gradually reducing doses of methadone.

It is also reported that, if the patient enters methadone maintenance, then the withdrawal from methadone is often more prolonged than heroin withdrawal itself.

Treatments using sedatives instead of methadone for heroin withdrawal have been tried. Even alcohol substitution has been attempted. Clonidine, which blocks noradrenaline release has been used, but agitation and sleep loss, characteristic of opiate withdrawal are still seen even though pain is reduced.

Some recent use of short term benzodiazepines instead of methadone has shown positive results. A trial with methadone versus chlordiazepoxide at doses of 300-400 mg of chlordiazepoxide per day in a double-blind design led to interesting findings, where, with the combined chlordiazepoxide treatment, peak withdrawal came in the first day, whilst methadone alone showed the well known long withdrawal period with a lower peak of symptoms. This presents the possibility that a short period of detoxification could be preferable in terms of patient retention.

Definition of success in clinical trials such as these is difficult. Physicians may prefer to treat withdrawal as an illness and wish to use medication, others may prefer to think of the problem as a behavioural one and wish to alter the behaviour, and avoid substitution of one habit by another.

Work with neuro-electrical stimulation (N.E.T.) as preferred by Dr. Schmidt, (present) had been subjected to only one randomised clinical trial which showed that those receiving N.E.T. had significantly more withdrawal distress than those on a methadone withdrawal regimen, however two major studies were at present in progress in America. A major problem with N.E.T. for research was that "blind" studies were impossible. Research on use of N.E.T. with obstetric pain was proving to be useful. However, the question of whether it would be helpful in opiate withdrawal is not at present supported by the evidence.

All medication studies were complicated by the beliefs and attitudes of addicts towards such treatments, and by the placebo effect, or by expectations of the addict that

treatment would lead to cure, and disappointment or anger on suffering symptoms from a trial. Addicts were therefore often reluctant to be research subjects.

Treating the complications

The third area was that of treating the consequences of addiction rather than the addiction itself. There were several examples where this has been tried. Antidepressants were often used to treat depressive illness associated with addiction. The same is the case for tranquillizers and anxiety disorders related to addiction. It is often the case, however, that such disorders subside without recourse to medication when the individual stops taking the addictive drug. There was a danger, then, in advocating the widespread use of such medication to treat affective disorders in people who continue to misuse substances. There is also an important place for the use of these drugs in an important minority of cases.

Liver disease represents a significant problem amongst alcohol misusers. There have been no major breakthroughs in this area through pharmacological agents, but liver transplantation is becoming more commonplace.

There is as yet no effective treatment for H.I.V. infection and prevention remains the principal public health approach.

Conclusion

Chemical interventions research was expensive and difficult to carry out without extensive facilities. It required specialised units adequately to conduct such studies. However, there were promising lines opening up.

Questions

Dr. Schmidt: What research was there to compare the effects of oral versus injected methadone?

Dr. Drummond: No study had been done, but a study showed that compliance with prescribed heroin treatment was better than with prescribed methadone, however, heroin recipients tended to be more chaotic in their lives, while the lives of methadone patients tended to be more orderly and effective.

Dr. Drummond went on to say that the low H.I.V. incidence here had not brought about the need, felt elsewhere, to bring addicts into contact with treatment. That only about one-fifth of such addicts were in contact at any time was not a healthy sign if H.I.V. gained a more aggressive hold as appeared to be likely. When H.I.V. becomes a priority concern, addictions treatments or opportunities for contact were offered on the addicts' terms to bring them to counselling and to try to alter their life-styles to reduce the chances of H.I.V. spread.

PREVENTION
FRIDAY 11th OCTOBER 1991.

The aim of this seminar was to describe recent preventive efforts aimed at H.I.V. infection in injecting drug misusers in the U.K., as this represented an key area of current concern and one which through earlier discussion had emerged as one of interest to several seminar attendees.

In the previous seminar on chemical treatments, Dr. Drummond had alluded to the change in attitudes of caring professionals towards controlled prescription of abused substances which had occurred in response to the need to reduce behaviours likely to cause the spread of H.I.V in the United Kingdom. He went on to detail how these were seen to be preventive and how any modality seen to generate greater contact between users and the caring professions was now regarded as the primary aim of treatment.

First, however, more general preventive efforts in the addictions were described to place the current trend in a wider perspective.

The 'market place'

The model offered had been termed the 'market place' model.
Demand and supply were seen as opposite faces of the same coin, to which cost was an effective modifier. Purchase and use led to the problems for the client and the prevalence within society.

Supply factors were: production rates, export/import potential, distribution and retailing factors. Profit margins controlled supply, and the potential for new markets and the brand loyalty of clients modified it. (cf. the tobacco industries' recent targeting of South East Asia)

Demand factors depended on marketing techniques, the target population, the attractiveness of the product in terms of ease of use, benefits from use and its disadvantages. Regulation of supply and the elasticity of price and income were further modifying variables.

It was noted that, for adolescents and younger children, there was a special problem in that their ability to discriminate in the face of persuasive forces was particularly low,

especially if the subject had not been raised by parents or teachers, or discussed amongst peers.

These considerations laid open a number of intervention targets for policy makers and health care professionals.

On the supply side, crop substitution and enforcement controls had been seen to have limited impact. Presently, legalisation was being mooted as a supply and a demand control, in that if presently illegal substances were legalised, many factors in both supply and demand would be modified in one action. Clearly the shortcoming was in the possible uptake of an addictive habit by a significant proportion of the population, so that proposed benefits in terms of undermining the black market and reducing drug-related crime could easily be outweighed by a rapid and costly increase in health and social adverse consequences. This debate remains dominated by inspired guesswork and unsubstantiated dogma rather than hard evidence. Further there is danger in extrapolating from one epoch in history to another or indeed one country to another when parallels are drawn between the past and current drug epidemics.

However, in the light of H.I.V. seroprevalence of 10% amongst intravenous drug users in London, (up to 70% in some parts of the U.K.), it was necessary to try to curtail this route of transmission. The argument has been put forward that decriminalizing drug taking, but strictly controlling availability, might allow greater opportunities for a marginalised group in society to more readily come into contact with health advice and helping agencies. This argument is of course highly speculative and such a policy runs a risk of sending the wrong message to the population that heroin taking is not such a dangerous activity as once believed, so leading to a greater pool potentially at risk of injecting with its attendant risks.

Injecting drug misuse

Meanwhile injecting drug misuse was a key route for transmission of H.I.V. and led, through the unprotected sexual activities of injecting drug misusers to a much increased potential for spread into the non drug-using population; since sexual activity, especially in the young, is much more common than intravenous drug-use.

Hong Kong seems to be in danger of assuming that an epidemic spread of H.I.V. will not happen on the same scale as in other Asian countries and indeed other parts of the world, since present data indicate a low incidence and a slow increase in prevalence. The assumption is that needle sharing is low and promiscuity and homosexuality are also low.

However, with 8,000 cases of sexually transmitted diseases, other than H.I.V., being treated each year in the social hygiene clinics, and with a 20% prevalence of hepatitis B infection, (This virus has an identical method of transmission to H.I.V..) such assumptions seem to be rather optimistic. However, the ready supply of cheap needles and syringes may mean that the prevalence of needle sharing is relatively low and that sharing with a range of partners is probably lower than in some other countries where injecting equipment is less available. Government statistics show, however, that over 30% of the 60% of addicts who use intravenously, have at some time shared needles.

Since the consequences of H.I.V. infection are considerably more serious than that of drug misuse itself it was suggested that H.I.V. transmission reduction should take precedence over other treatment aims.

Thus, the emphasis would be to contact and to try to change the behaviours of particularly high risk groups, including injectors, prostitutes and pregnant women engaging in H.I.V. risk behaviours.

In order to do this, it becomes necessary to widen the net of prevention services in the following areas:

a) Prisons
b) Arrest referral services, i.e. solicitors and social workers attached to police stations who advise on injecting behaviours and other matters.
c) Probation Officers
d) Health Visitors
e) General Practitioners
f) Outreach projects
g) Obstetric services

Goals of Intervention

The goals can be graded in a hierarchy as follows:

Providing health education
Harm Reduction
    -stop sharing
    -safer injecting
    -stop injecting
Stabilisation
    -drug maintenance (e.g. methadone)
Detoxification
Drug-free Maintenance

The underlying principle is to work on the drug-user's terms, not those of the health-care worker. It is necessary to assume that there may be many stages before a drug-free lifestyle can be achieved. Of course, for some individuals rapid progress to a drug-free state may be appropriate from the outset. The key is negotiating with the individual drug taker which requires skill and sensitivity. The principle is 'if you can't be good, be careful'!

Prescription of a drug is controlled, within limits, initially by the demands of the patient so that he is kept in touch with the care agencies and not lost to return to a more chaotic and risky life-style through disaffection with the treatment programme.

The harm reduction policy is to 'capture' the client, to retain them in the programme and to follow up with a gradation of measures to reduce risk behaviour and so to prevent H.I.V. spread.

The evidence suggests that, whilst intravenous drug users are changing their using behaviour to use clean needles and to avoid sharing, their sexual behaviour has not changed to the same extent and unprotected sex is still common.

The development of H.I.V. prevention began originally with **needle exchanges**. These were 'holes in the wall' of a treatment centre where exchange, strictly on a one-for-one basis occurred. Now, they have come more into the open so that users can more readily come into contact with a health-care professional, but can get an adequate supply of clean needles with less overt pressure to detoxify. Many such schemes operate in effect a primary health care service in addition to providing clean needles. This is felt to be an important new development.

It has been found that $^{2}/_{3}$ of people coming to these exchanges have never before been in contact with drug treatment agencies. Of these, $^{1}/_{3}$ had never been in contact with **any** agency. Many, including pregnant drug injectors, are not in routine contact with more conventional medical services.

Syringe exchanges have therefore become providers of health care as well as counselling and injecting equipment supply.

Another form of contact has been provided through pharmacies in some areas of the U.K. These provide additional needle exchange services. One recent study found that only 4% have needle disposal without exchange, however, and this could be improved. Further, some pharmacists point to financial disincentives in attracting this client group.

Methadone and the Reduction of H.I.V. Transmission

The increasing prevalence of H.I.V. infection has altered the attitudes towards opiate prescribing considerably within the past three years. The change is being evaluated, but there is no time to await the results of evaluations. Proceeding on hope is perhaps the best description!

The setting up of out-patient detoxification and day programmes has also become more widespread. In the United States, there has been a slower acceptance of the desirability

of the change in emphasis towards drug prescribing. There is also considerable reluctance there to embrace a harm reduction approach in the form of needle exchange.

Determination of the effectiveness and acceptability of changes in programme provisions

There are important research implications here, and Hong Kong may have some special problems to tackle. In the U.K. the acceptability of the interviewer to the interviewee is an issue. The technique of peer interviewers and 'snowballing' techniques is increasingly being used as a means of contacting those not in touch with helping agencies.

The measurement of hepatitis B prevalence may be useful in providing an index of needle sharing activity. Furthermore, it is possible to use venereal disease clinic statistics as an index of unprotected sexual behaviour. Anonymous screening for H.I.V. seropositivity is also gaining acceptance.

There may be a need to extend the role of the Central Registry for Drug Abuse to try to estimate the prevalence of drug misuse and drug injecting behaviour in those not in contact with services. Outreach workers may be able to provide a useful means of gathering such data.

Compulsory H.I.V. testing cannot be advocated since this is likely to drive users 'underground', but easy access to voluntary testing with appropriate counselling should be assured. It is felt that random blood testing, or testing of all blood samples for H.I.V. would provide further important data but will be limited by cost. Periodic and regular point prevalence studies of this sort could, however, provide a useful means of monitoring trends.

Conclusions

H.I.V. infection in injecting drug misusers poses a considerable threat to public health and deserves to be taken extremely seriously even when current prevalence is low. While the implementation of harm reduction policies such as needle exchange and an expansion in opiate prescribing is still undergoing evaluation, there is a general consensus that treatment approaches based more on the needs and wishes of the drug taker represent a positive step forward. Principally, services which attract those not in contact with 'higher threshold' agencies (such as intensive, specialised treatment which insist on complete abstinence and lengthy programmes) can be seen as providing an ideal method of attracting more people into

treatment with the possibility of progressing towards a drug-free life at an earlier stage. This can only help to reduce the consequences of drug misuse for the individual and society, including, but by no means exclusively, the spread of H.I.V. infection.

At present, Hong Kong is seen as vulnerable for increase in H.I.V. prevalence because contact with users of drugs is low (25% approximately) and the availability of trained workers in the field is limited. Further, Hong Kong is a major trading and tourist centre with neighbouring countries having high H.I.V seroprevalence. However, at present the Territory is an ideal place for prevention work because the seroprevalence remains low. Without further action this desirable situation may well change. A harm reduction approach should therefore be considered as a vital adjunct to existing intensive 'curative' treatment programmes.

OPPORTUNITIES FOR ADDICTION RESEARCH IN HONG KONG

Report on a visit to Hong Kong, October, 1991.

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Introduction

The establishment of the Drug Addiction Research Unit (DARU) at the University of Hong Kong is an important and historic development in the addictions field. It is important, not only for Hong Kong, but also for the international community engaged in the prevention and treatment of the problems brought about by the use of psychoactive substances. I had the opportunity to witness and participate in some of these developments in October 1991. This visit was made possible through a grant from the British Council.

The purpose of my visit was to assist in the development of the DARU by facilitating discussion between interested parties and to help in identifying important new research leads, relevant both to the particular problems faced by Hong Kong as well as being of wider research interest. My formal programme comprised the facilitation of 4 research seminars, meetings with members of university departments, representatives of both Governmental and non-governmental organizations, and visits to several treatment agencies. Several information meetings, 'after hours', with key actors in the addiction research and treatment field helped greatly in forming a broader impression of the Hong Kong situation, as well as allowing the development of many new friendships.

This report represents what must be viewed as only a modest attempt to bring together some of the many thoughts and impressions gained during my brief two week visit. With the wealth of activities and initiatives in the addictions field in Hong Kong, there is a limit to the number of individuals who can be met or centres visited in such a brief period. This report does not aim to provide a definitive review of all the activities taking place in Hong Kong, nor is it an attempt to impose the arguably ill-informed views of the foreign visitor. There are many renowned experts with a wealth of experience of the Hong Kong situation who are much more qualified than I to provide such a review.

Hong Kong is indeed fortunate to have such a wealth of interested and experienced individuals in this field as well as the strong support of so many organizations, both governmental and non-governmental. The aim of this report is to stimulate further activity and collaboration in addiction research, building on an already strong base. The newly formed DARU provides an ideal focus for such future activity.

The report is organized into four sections. A brief discussion of addiction problems in Hong Kong as seen by the foreign visitor is followed by an overview of existing responses to the problems. The potential role of the DARU in future developments is discussed, followed by a section exploring the research opportunities in Hong Kong.

Addiction Problems in Hong Kong: the changing scene

It is clear that the largest problem related to the use of psychoactive substances in Hong Kong is that of opiate addiction. While the exact size of the affected population is unknown, there are estimated to be in excess of 40,000 addicts in Hong Kong (C.R.D.A., 1990). The prevalence of opiate addiction is clearly considerably higher than in most Western countries including the United Kingdom where there are thought to be around 200,000 opiate addicts in a population of approximately 53 millions. According to the Central Registry of Drug Abuse (amongst other sources), however, the scene is changing. The proportion of newly reported individuals attending for treatment who are abusing drugs other than opiates (including cannabis, stimulants and benzodiazepines) has increased considerably in the last decade. Further, in common with the experience of many Western countries, the mean age of the addict population has fallen significantly over the same period. Although the proportion of newly reported addicts who inject opiates has fallen recently, approximately 60% of reported individuals are injectors. This has particular significance for the transmission of infectious diseases (see below).

Another change in Hong Kong has been the increasing recognition of alcohol and tobacco use, particularly in the young. Approximately one third of 14 year-old youths surveyed by the Community Drug Advisory Council in 1990 reported taking alcohol more than once per month. Further there had been a considerable increase in the regular use of tobacco by those 16 and 17 years old, between 1988 and 1990 (from 14% for each group to 22% and 19% respectively) (C.D.A.C., 1991). This latter finding is perhaps not surprising in view of the highly visible advertising and aggressive marketing policies of the tobacco companies in Hong Kong, as well as other parts of South East Asia.

While H.I.V. infection in drug injectors remains low in Hong Kong compared to other Asian countries in close proximity and indeed compared to Western countries, the potential for an epidemic in Hong Kong is considerable. Three factors in particular place Hong Kong at risk for such an epidemic. It is a major trading port which receives many visitors from high prevalence areas with respect to H.I.V. each year. Many drug addicts are engaged in a lucrative sex industry catering for both Hong Kong residents and visitors. Further, as mentioned above, injection is the preferred route of administration of opiates. Even with the high availability of sterile injecting equipment and reputedly low rates of needle sharing activity, the potential for the spread of H.I.V. in Hong Kong is considerable.

Taken together, the information already available suggests that the drug scene in Hong Kong is changing in such a way as to present new challenges for treatment and prevention agencies.

The Response

Hong Kong has a long and internationally distinguished history of treatment and rehabilitation initiatives. I had the opportunity to visit only a small sample of all the agencies listed in the Directory of Drug Abuse Demand Reduction Programmes and Services (Hong Kong Council of Social Services, 1991). But those which I was able to visit represented a broad cross-section of those available. According to official sources (Hong Kong Council of Social Services, (H.K.C.S.S.), 1991) there are currently approximately 13,200 individuals receiving some form of treatment or rehabilitation service each day in Hong Kong: probably a much higher proportion of the total drug taking population than in most Western countries.

i) **The methadone outpatient programme** caters daily for 7,207 drug addicts. Two things are striking to the U.K. visitor about these programmes. Compared to the equivalent centres in the U.K. they have to cope with a considerable larger throughput of patients given the staff complement, and second, the emphasis appears to be more in keeping with the original American concept of methadone maintenance. Given the recent resurgence in interest in maintenance rather than detoxification in Europe in the wake of the H.I.V. epidemic, Hong Kong appears somewhat ahead of the trend. If as seems likely, the H.I.V. epidemic spreads to Hong Kong the widespread availability of this form of treatment will provide an excellent opportunity to investigate methadone maintenance as a public health measure. One would hope however that more trained staff could be recruited into this service. With just one doctor and one social worker in one busy methadone clinic which I visited, to deal with hundreds of registered patients, one wonders how therapies beyond

simply the delivery of basic medical and social care can reasonably be delivered even without an epidemic of AIDS cases to contend with. In sum while the clinics are a tremendous achievement, their popularity compromises their capacity to cope adequately without and expansion in trained personnel.

ii) In-Patient treatment. There are many such services available under the auspices of both Governmental and non-governmental organizations. I was only able to visit a small number of these. The services are provided on both a compulsory and voluntary basis, although to the outsider the element of compulsion appears much more predominant than in the West. Many I spoke to believed that such an approach was essential particularly in dealing with type of problem encountered in Hong Kong. While this argument seemed persuasive it was somewhat at odds with much of the current Western thinking on flexibility of treatment goals (see below). Another striking feature of these services was the relatively limited involvement of specialized psychiatric and clinical psychology personnel.

I understood from several professionals whom I spoke to in these centres that this was mainly due to a shortage of such trained individuals and the relative lack of a suitable career structure for specialists of all types in the addictions field (a problem which seemed to apply equally to the methadone clinics). While many treatment and rehabilitation services can operate perfectly well without psychiatrists or psychologists, many I spoke to indicated that there was an urgent need for expansion in this area. The establishment of greater training opportunities, appropriate incentives, and a more attractive career structure for addiction specialists would, I feel, go a long way towards solving this problem. Of course Hong Kong is not alone in this difficulty.

As an additional point, particular concerns were raised by several professionals that I met concerning the special provision for substance misusers in the non-Chinese population in Hong Kong. I learned that while services catering specifically for the Chinese population were fairly widespread and of high quality, difficulty had been often experienced in obtaining appropriate help within the public sector for non-Chinese residents. Study of the prevalence of problems and demand for services in this group deserves urgent attention.

iii) Aftercare services. Hong Kong appeared particularly strong in its provision of facilities of this type. Resettlement, job placement, and support following discharge are clearly important elements in successful rehabilitation, an issue not often tackled with the same diligence in the U.K.. Again, however, many I spoke to felt that with the number of drug addicts undergoing inpatient treatment there was still further room for expansion in the provision of aftercare services.

iv) Drug-free outpatient treatment services. One of the greatest difference between services in Hong Kong and those in the West, is the relative shortage of outpatient or day patient services which do not involve the provision of prescribed drugs. Many such services have developed in both the U.K. and in the U.S. in recent years. Services in Hong Kong, with the exception of the methadone programmes, tend to employ admission as the preferred mode of treatment. Two important exceptions to this include St. Stephen's Society and the PS33 service run by the Hong Kong Christian Service. Both projects seemed particularly exciting and innovative. St. Stephen's Society operates a range of integrated services from 'low threshold' outreach work up to residential treatment and aftercare. PS33 provides a variety of outpatient and other services, although in contrast to the former, they are targeted at 'psychotropic substance misusers' (meaning non-opiate misusers).

To the foreigner it seems somewhat counter-intuitive to separate different classes of drug misuse in this way, and in doing so deprive certain 'psychotropic substance misusers' (in the form of those who take opiates) from such a valuable service. Experience elsewhere suggests that such an artificial segmentation of services inhibits the capacity to respond quickly to the changing drug scene. Further, such drug free services seem to be particularly effective in attracting opiate and other drug misusers not in convert with 'higher threshold' services such as inpatient treatment and methadone clinics.

v) Outreach services have become an important development in the West, particularly in the wake of H.I.V. Getting more people into treatment earlier has become a higher priority than hitherto. In most countries, at any given time, only a small proportion of drug misusers are in contact with treatment services. Further it may take many years of drug misuse with ensuing harm to the individual and to society before a drug misuser makes his first contact with a treatment agency; it may take many more years of coming in and out of contact with services before a lasting positive change in the behaviour is achieved. Services have conventionally operated on a similar basis to hospital medical services, in which the agency is satisfied to await the individual's presentation for help. In the case of addictive disorders however, there is growing evidence that there is a greater capacity for change than was previously believed and that if an individual can be contacted at an early stage in their drug taking career, even relatively minimal intervention can have important and lasting benefits.

Outreach has become particularly important as a means of getting important health information to those not in contact with services in the prevention of the spread of H.I.V. It has also become clear however that outreach work can help to bring drug misusers into

contact with not only drug treatment services, but also primary health services. Very few such approaches currently operate in Hong Kong, a notable exception being the St. Stephen's Society. The expansion of outreach work by both statutory and non-governmental organizations should be given serious consideration. Such a development will necessarily require a change in treatment philosophy towards being prepared to engage and work with individuals who are not able or prepared to consider complete abstinence as a treatment goal.

vi) Prevention. There are several important preventive measures which have been introduced in Hong Kong. Organizations important in this field include the Action Committee Against Narcotics, the Society for the Aid and Rehabilitation of Drug Abusers and the Community Drug Advisory Council, to name a few. While this subject will be the focus of other reports it is worth making a few observations in the context of the present discussion. Prevention is clearly an important objective in view of the difficulty in helping the established addict towards a drug free existence. In spite of the best preventive programmes, however, there will be individuals who do not respond to such initiatives. Further, the evidence concerning the effectiveness of preventive advertising campaigns form a wide variety of countries has been disappointing.

While this does not provide an adequate reason to abandon such efforts there is danger in assuming that the extremes of, on the one hand, advertising, and on the other, rehabilitation, can adequately address the problems caused by drugs in a community. It seems that the most promising area for future work lies in developing a comprehensive range of initiatives spanning from the treatment setting into the community and in particular reaching those who are beginning to experiment with drugs and those at an early stage of their drug taking career. This necessarily requires greater integration of effort of those involved in preventive education, treatment, outreach work, and including agencies which have not previously seen themselves as having a particular interest in such a preventive role but who are nevertheless in personal, and often, daily contact with drug misusers. Such agencies will naturally include the police, the Courts, the primary health care physicians, the emergency services, teachers, and many others. Drug misuse is a problem for the whole community and requires integration and a common purpose.

The Drug Addiction Research Unit

What should be the role of the DARU within the developing and changing drug scene in Hong Kong?

i) Research Its first and most important function should be that of research. Research in the addiction field is not a mere luxury, to be seen as attracting limited resources away from the important and pressing business of treatment and prevention. Instead it must be viewed as and essential adjunct to such efforts. Without the application of independent scientific analysis to the problems brought about by drugs society will continue to pour considerable, although greatly needed, resources into the problem without a clear understanding of the most appropriate way in which it should be spent. Nor should research in this field be seen as a bureaucratic exercise in data gathering as can so easily be the case. Research must address itself to the important policy issues of the day, and researchers must be prepared to ask difficult questions of even the most established and enshrined methods of dealing with the problem: research should be seen as an essential means to inform debate and to improve our response to the drugs problem. Several crucial issues facing Hong Kong in its efforts to deal with the drug problem have been identified in this brief review. What is the true scale of the problems related to alcohol, tobacco and other psychoactive drugs? What treatments work best for whom? How do we get more people into treatment earlier? Without research, the answer to such questions remains the subject of ill-informed speculation. The DARU has a vital role to play in bringing together and providing a resource for the network of experts in Hong Kong, many of whom have already carried out important pioneering research in this field, as well as attracting young and talented researchers into this important area of social concern.

ii) Education The DARU can also provide an essential resource in disseminating knowledge. Clearly encouraging new people to enter this research field is an important priority. But its educational remit should extend much further. The University of Hong Kong already provides first class education in the teaching, psychology, medical and social work fields, disciplines which have an important role to play in dealing with the drugs problem. The DARU will provide for the first time in Hong Kong, a problem-focused department which could bring together tomorrow's addiction treatment and research professionals, clearly adding strength and legitimacy to the study and treatment of addiction as a worthy area of social and professional concern. But the DARU also has an opportunity positively to influence a wider section of society. Staff in the University already disseminate knowledge through their contact with the media and in their advisory role in governmental and non-governmental organizations.

As the Unit develops it has the potential to expand this role in such a way as to help in increasing public knowledge and awareness of drug related-issues.

iii) Networking While there are many individuals and organizations in Hong Kong closely involved in dealing with the problems of psychoactive substances, there has been

until now no academic establishment to provide a focus for research and training endeavour. Earlier in this report the lack of a suitable career structure for many professionals in the addictions field was identified as an obstacle to recruitment and retention of skilled workers. It was extremely encouraging to witness addiction professionals, who had been working in Hong Kong in this field in many cases for several years, meeting other such individuals for the first time in the seminars which were held at the University during my visit. The need for such a network of support and sharing of experiences between professionals in the field was clearly apparent. Further, research ideas rarely crystallize in a setting of isolation. The DARU will be a vital catalyst for innovative research in Hong Kong.

iv) Independence The status of the DARU as an independent academic group is essential to aid in rational policy development in Hong Kong. Research needs to be developed independently of vested interest or party politics. The advantage of such a status is that while Government or other organizations should be able to approach such a group to commission the research of important policy issues, the core research group and ethos of the Unit will not be subject to short term fluctuations in policy. Thus longer term work which is of more fundamental and of greater international importance than the particular 'flavour of the month' problem of today's administration, may be conducted without interruption.

v) Making International Connections. Research in the addiction field is an international activity. There are now several addiction research centres around the world which would not only benefit by learning from the Hong Kong experience but which could be of potential benefit to Hong Kong. The Unit will be strengthened by establishing a high international profile. The will assist in achieving the aim.

Research Opportunities

It was clear during my visit that there was not only considerable interest in the development of addiction research in Hong Kong, there were many excellent opportunities for innovative projects. In drawing up a potential plan of research it is important to take into account not only the interests and expertise of individuals already working in this field in Hong Kong, but also the needs of Hong Kong and the wider international context. What follows represents some initial proposals for topic areas which were arrived at through discussion during my visit. Clearly, however, any such 'shopping list' must be viewed as very preliminary and time bound to one brief period in 1991. Just as the drug scene is continually changing, so do the needs of research evolve. Nevertheless, these topic areas are of pervasive

and international importance and are unlikely to fade in significance for some time. In listing them no particular order of importance is intended.

i) Prevention. The DARU already has considerable expertise in this area particularly with respect to research in the school setting. Methods of changing the attitudes and behaviour of those experimenting with psychoactive substances including alcohol and tobacco as well as illicit drugs will continue to be an important focus for research. Research into implementing effective early identification and intervention approaches is much needed.

ii) Epidemiology. Basic epidemiological information is needed concerning the prevalence of psychoactive substance misuse. One cannot rely solely on data derived from clinical populations to assess prevalence. In particular the prevalence of alcohol misuse requires investigation. The study of populations not in contact with treatment services will also help in the rational planning and implementation of new treatment initiatives. The foregoing discussion points to the need for the study of outreach work as a means of early intervention as well as using outreach approaches to contact and study drug misusers not in contact with helping agencies.

iii) H.I.V. and drug injecting. While connected with epidemiological methods, H.I.V. is separately identified here as an important topic of research in its own right, given the rapid global spread of the disease. With so many injecting drug misusers already in contact with services there is an ideal opportunity anonymous screening. Further it would be possible to monitor the prevalence of, and changes in, needle sharing activity and other risk behaviours and their relationship to treatment experience.

iv) The penal system. Many psychoactive substance misusers come into contact with the penal system during the course of their drug taking career. Methods of diverting this group from custodial sentences into treatment already exist in Hong Kong. The way in which this system currently operates and ways of improving it could usefully be explored. The effectiveness of methods of treatment for drug offenders which do not necessarily involve lengthy inpatient treatment, particularly in the case of minor offenses or those at an early stage in a drug misusing career could usefully be evaluated by the DARU.

v) Treatment Research. Large scale clinical studies involving lengthy follow-up periods are generally expensive and, unless conducted in a randomized controlled trial design, tend to yield little useful information. The DARU will have to decide whether it will have sufficient resources to make a large commitment to this area. Opportunities exist, however, to study the process of treatment in different treatment settings and to explore the

organization and implementation of treatment systems. Such research might include the study of the attitudes and behaviour of treatment professionals. As a first step there is a pressing need adequately to describe the existing operation of treatment services in Hong Kong. Such an analysis must get beyond the level of the official report or service directory and explore the treatment philosophies, historical influences and comprehensiveness of treatment services, achieving a more qualitative level of analysis.

It was clear during my visit that there were many treatment and research activities taking place in the addictions field in Hong Kong, but no independent or comprehensive reference source to which one could refer. Holding up a mirror to treatment services in this way could prove invaluable in planning further developments.

vi) International Collaboration. A number of possible collaborations already exist with groups in other countries. Developing links with other research groups through such collaboration will strengthen the DARU's experience and standing. Clearly one will need to be selective in such activities: there is a limit to what can be done by one research group, and what may be of interest to one country may be of little or no relevance to the Hong Kong situation. I am sure that several research units would also be interested in such collaboration, including the National Addiction Centre in London.

Conclusions

The establishment of the DARU is an important event for Hong Kong. Such a development is particularly timely in the context of a changing drug scene and the new challenges which this presents for agencies trying to deal with the enormous and costly problems brought about through addiction to psychoactive substances. There are many excellent opportunities for addiction research in Hong Kong and, from what I have witnessed during my brief visit, a wealth of expertise amongst professionals in the field as well as considerable goodwill expertise amongst professionals in the field as well as considerable goodwill and keenness to establish this vital focus for academic endeavour.

What is now needed is funding support to expand the DARU to a capacity where is can reasonably make an impact on the problems faced by Hong Kong. Throughout this report areas have been identified where the DARU, given appropriate support, could help in combatting the problems of psychoactive substance misuse, through research, education, training, and in advising rational policy making. The way in which the DARU could benefit Hong Kong by building on an already strong base of expertise is clear. Without such an important research initiative Hong Kong will miss the opportunity to capitalize on valuable

existing human resources in this field and will have to rely on policy making by trial and error.

I wish the DARU every success in its endeavour. You can be assured of the continuing willingness of myself and my colleagues in London to provide advice and support in any way possible.

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