CHAPTER FOUR - METHODOLOGICAL PROCEDURE AND SUBJECT DATA BANK.

Development has occurred over the past ten years in a range of treatments along with increasing agreement among therapists on the criteria for evaluation. The question of uniform, valid and scientific methodology in relation to evaluative techniques, however, has been neglected, rendering comparison of treatments difficult.

In a review of methodological approaches in the evaluation of alcoholism treatment over the past decade the authors, May and Kuller (1975), comment, "One major shortcoming of alcoholism programmes is the lack of conclusive evidence to substantiate that treatment of any kind alters the natural history of the disease". The review authors clarify evaluative shortcomings, not the least of which is the failure of researchers to take into account and build on previous findings. This thesis attempts to observe the review findings and incorporate its guidelines in the methodology

Hill and Blane (1967) establish necessary criteria for evaluative alcoholism treatment research, for such research to be valid and available for cross treatment comparison. May and Kuller (1975), summarise these criteria under five sections applying them to a broad range of alcohol treatment studies finding serious inadequacies at one or more levels in every study.

The five applied research principles invalidating the studies reviewed by May and Kuller (1975) were as follows:-

1. Lack of an untreated control group drawn from the same population as the treated sample as a control to show that change would not have occurred without treatment.
2. Randomised distribution of patients to treatment and control groups in order to make valid comparisons between groups.
3. Definitive behaviour goals relative to the treatment objectives allowing comparison of behaviour changes, post treatment.
4. Valid and reliable methods of measuring and assessing behaviour changes, post treatment.
5. The accumulation of pre-treatment data banks on patients as well as post-treatment measurements ensuring a valid basis for assessment of behaviour change.

Such assessments to be applied to all subjects included in the original treatment sample and not just those completing the programme avoiding bias in the follow-up sample.

Attempts are made to adhere to these research and evaluation principles within the practical boundaries of budgeting and the generosity of official voluntary support and co-operation.

The co-operation and involvement of a large number of medical, para-medical, nursing staff and lay persons was essential for the effective evaluation of the Alconfrontation model detailed in Chapter Three. On this basis, a somewhat

simple and straightforward research design was formulated, yet one that allowed for the findings of May and Kuller (1975) stated above to be incorporated ensuring a sound experimental foundation. Schedule 1 outlines the methodological approach of the study.

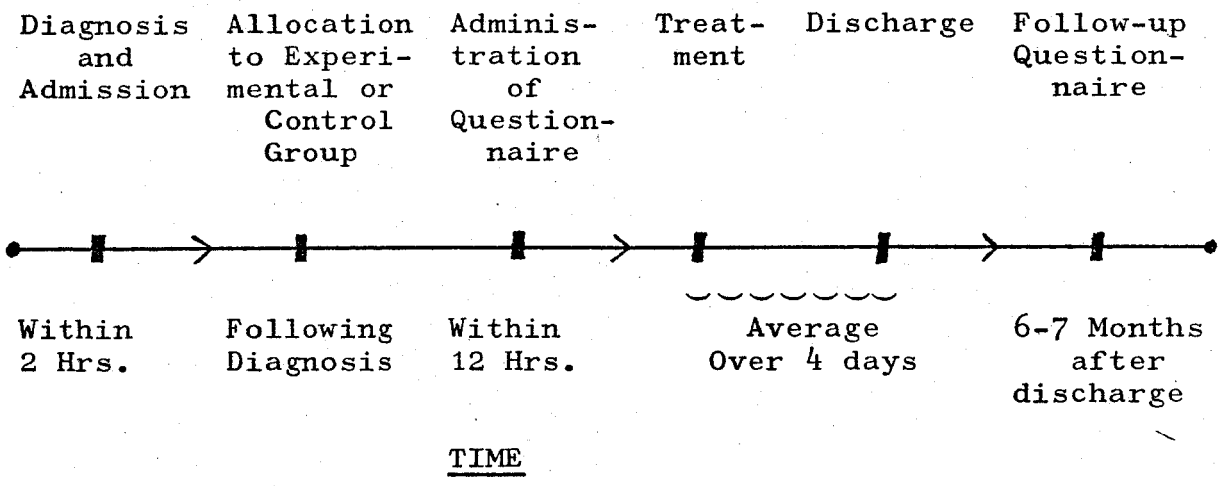
SCHEDULE ONE

Schedule of Experimental Procedures.

1. Planning and preparation meetings with Medical, para-Medical and nursing staff.
2. Diagnosis of consecutive admissions.
3. Random allocation of subjects to experimental or control groups.
4. Administration of Questionnaire.
5. Administration of Group Treatment Programme.
6. Discharge.
7. Training of research aides in follow up.
8. Subject location and administration of follow-up Questionnaire.
9. Data Analysis.

CHART ONE.

Flow Chart of Individual Subjects Through Experiment Procedure



The design consisted of randomly assigning those male persons diagnosed alcoholic and admitted to a Psychiatric Admission Centre during a five week period, to either of two treatment groups or a control group of no treatment. Within twelve hours of admission, the subjects were administered a questionnaire and randomly placed in an assigned treatment or control group. Between six and seven months later the subjects were located and administered a follow-up questionnaire. The data from both questionnaires were analysed to determining the efficacy of the Alconfrontation technique.

The treatment phase took place within a Psychiatric Admission Centre which draws its admissions from a population of approximately 500,000 people, half of whom live in urban areas and half in rural areas. A Schedule V hospital under

the N.S.W. Health Commission with staff catering for a total of two thousand, two hundred and sixty five admissions during the twelve month period; 1973-4. Of this number 41 per cent were male admissions diagnosed alcoholic, with 82 per cent of those admissions, being re-admissions. These figures indicate a large population of male alcoholic admissions without evidence of beneficial change in drinking behaviour over time. Comparison with similar institutions in N.S.W. indicate a significantly higher ratio of first and re-admissions diagnosed alcoholic at the Psychiatric Centre under comment.

Hospital policy which was implemented immediately prior to the study, made it possible for all admissions to be received at one point. This procedure assured that all consecutive male alcoholics presenting could be included in the study. Diagnosis, subject selection, and random assignment to experimental groups were then available for experimental control.

Preparatory Planning and Advisory Meetings.

To ensure experimental control adherence, meetings were held with hospital staff prior to the study commencing. Care was taken to ensure maximum understanding of the experimental programme particularly at the medical and nursing staff levels where critical participation in the procedure was planned. Further meetings were held with staff at individual ward level, and with particular staff involved with management and programme planning for the hospital as a whole.

Consultations with Alcoholics Anonymous members and

with that organization's central co-ordinating committee were held. Their involvement at some stages of the study was as critical as their non-involvement at other stages. The need for non-involvement at certain stages was that A.A. should not participate in any way - holding meetings, individual visiting, etc. with treatment groups not utilizing the A.A. treatment approach in order to avoid contamination of data in relation to treatment procedures.

The diagnostic and evaluative criteria agreed to and adopted by the assessing medical officers participating in the study was that compiled by the Criteria Committee of the National Council of Alcoholism (1972) outlined earlier in this thesis. A chart summarising the criteria was posted in the admission ward for easy reference by medical personnel.

The procedure in distributing subjects to one of the study's three groups fitted the practical situation of admissions occurring on a twenty four-hour basis. Patients arrived at any time of the day or night and following assessment and diagnosis by a medical officer, were randomly assigned immediately to a treatment group.

A counterbalanced system of subject distribution to experimental groups was devised, charted and posted in the admission ward with spaces for names of individual patients to be entered upon arrival and allocation. This procedure ensured a randomised distribution of subjects on a number of criteria, evenly balancing the constitution of each group.

Primarily the study was aimed at incorporating subjects

over and under forty five years of age to note any differences of Alconfrontation on the younger alcoholic. Categories with and without previous admissions to a psychiatric hospital for the treatment of alcoholism were also of interest. The hospital at which the study was undertaken has only a small proportion of first admissions diagnosed alcoholic. As the re-admission category patient tends to be older, subjects in the under forty five year old age group, and those without previous admissions, were not expected to present in large numbers.

Following admission, the subjects were randomly assigned to a ward previously prepared to receive and treat in one of the two active modes or to be held under general nursing care conditions in the control "no treatment" ward. Subjects were isolated from other subjects assigned to different treatment wards during their admission. Reception of subjects into the study was restricted to a five week period because of the practical administrative problems of hospital re-arrangement in catering for the study.

Alcoholics Anonymous was chosen as the alternate treatment mode on the basis of available expertise within and without the hospital. The initial questionnaires were administered by the senior charge nurse on duty at the time of admission, having been instructed previously by the researcher in the administration of the questionnaire. The data were collected from all subjects within twelve hours of admission. At the time of completing the questionnaire, the subject

signed a form permitting follow-up in six to seven months time.

The questionnaire, designed to suit local conditions, incorporated fifty four questions (some of which were open-ended) covering five major topic areas (Appendix C). Data collected were demographic facts on the subject and the subject's family; drinking patterns and behaviour of the subject; legal, social and health data; accommodation and employment matters as well as information on the subject's self-perception. These data appear in quantitative form in Table 1.

TABLE 1.

Demographic Data of Treatment Groups
Alconfrontation (n=19); Alcoholics Anonymous (n=16);
General Ward Management (n=18).

Data	Alc.	A.A.	G.W.M.	Total	%age of Ss responding
Mean age at admission in years	47	51	48		
Previous admissions (n=45)					
1-5 admissions	9	10	10		
5+ admissions	5	5	6		
Marital Status: Single	5	6	7	18	34
Married	3	0	3	6	11
Separated, Divorced, Widowed	11	10	8	29	55
Has children	12	9	10	31	89
Has no children	2	2	3	7	21
Has regular address	8	7	9	24	45
Has no regular address	11	9	9	29	55
Lives alone	12	13	11	36	68
Lives with others	7	3	7	17	32
Lived at present address less than 12 weeks	9	11	8	28	53

Data	Alc.	A.A.	G.W.M.	Total	%age of Ss responding
Lived at present address more than 12 weeks	10	5	10	25	47
School leaving age to 14 years	12	11	9	32	60
School leaving age over 14 years	7	5	9	21	40
Employed	4	2	1	7	13
Unemployed	15	14	17	46	87
Work preference: Blue Collar	11	8	14	33	70
White Collar	5	7	2	14	30
Had difficulty in gaining work	5	8	10	23	50
No difficulty in gaining work	11	5	7	23	50
Father's Occupation: Blue Collar	16	10	15	41	85
White Collar	2	3	2	7	15
Father's Drinking Habits:					
Less than weekly	7	4	6	17	37
More than twice weekly	12	6	11	29	63
Mother's Drinking Habits:					
Rarely or never	18	13	13	44	83
More than weekly	1	3	5	9	17
Parents' use of Sedation: Nil	16	11	14	41	77
Occasionally	3	5	4	12	23
Parents' financial status:					
Well off	3	3	3	9	17
Average	14	10	9	33	62
Poor	2	3	6	11	21
Parents' marital relationship					
Good	15	9	12	36	82
Poor	2	2	4	8	18
Positive relationship with both parents	16	9	12	37	80
Positive relationship with father only	0	0	0	0	0
Positive relationship with mother only	2	1	3	6	13
Positive relationship with neither parent	0	1	2	3	7
Number of Siblings: 1-4	10	5	11	26	59
5-9	7	7	4	18	41
Siblings abuse alcohol	6	2	7	15	35
Siblings non-abuse of alcohol	11	10	7	28	65
Family has knowledge of Ss problem	16	13	16	45	85
Family has no knowledge of Ss problem	3	3	2	8	15
Friends abuse alcohol	13	10	13	36	77
Friends do not abuse alcohol	4	2	5	11	23
Commenced regular drinking (twice weekly): under 20 yrs	14	10	12	36	74

Data	Alc.	A.A.	G.W.M.	Total	%age of Ss responding
Commenced regular drinking (twice weekly): over 20 yrs	5	3	5	13	26
Commenced drinking: at home	6	4	8	18	37
" " : away from home	13	8	10	31	63
Reason began drinking:					
Likes effect	8	5	5	18	36
Family/Peer pressure	8	6	5	19	38
Coping mechanism	3	3	7	13	26
Reason continues to drink:					
To cope	10	6	11	27	53
Other	9	8	7	24	47
Hospital admission: Self	11	8	11	30	57
Other	8	8	7	23	43
Concern over drinking on 7 point rising scale: 1-4	6	4	4	14	28
5-7	13	10	14	37	72
Would like to: abstain	9	11	11	31	61
drink in moderation	10	3	7	20	39
Number of attempts at abstinence: 1-11	8	5	9	22	43
11+	11	9	9	29	57
$\bar{X}$ abstinence period:					
Less than 12 weeks	11	8	10	29	57
More than 12 weeks	8	6	8	22	43
Longest period of abstinence:					
Less than 6 months	10	6	9	25	52
6 months - 12 months	2	1	3	6	13
12 months+	5	7	5	17	35
Alcohol related convictions:					
Nil	6	3	3	12	24
Drink/drive	4	5	9	18	35
Drunk/disorderly	8	3	5	16	31
Other	1	3	1	5	10
Non-alcohol related convictions: Yes	7	9	10	26	51
No	12	5	8	25	49
Help from previous treatment:					
Yes	9	9	9	27	57
No	8	4	8	20	43
Optimistic outlook on life	5	2	2	9	18
Pessimistic outlook on life	14	12	15	41	82
Bored sometimes or often	17	10	14	41	82
Rarely or never bored	2	4	3	9	18
Makes friends: easily	6	7	12	25	51

Data	Alc.	A.A.	G.W.M.	Total	%age of Ss responding
Makes friends: fairly easily	7	4	3	14	29
not easily	6	2	2	10	20
Female relationships: good	13	6	10	29	58
Not good	6	8	7	21	42
Copes with life: well	6	5	5	16	32
not well	13	9	12	34	68
Perception of own intelligence: Above average	1	6	2	9	18
average	18	8	12	38	76
below average	0	0	3	3	6
Employment considered important	16	12	10	38	81
Employment not considered important	3	2	4	9	19
Feelings re future drinking:					
Will drink	0	1	5	6	12
Will not drink	6	2	5	13	26
Uncertain	13	11	7	31	62
Has visited Doctor in past year	13	8	12	33	66
Has not visited Doctor in past year	6	6	5	17	34
Is drinking with same friends as year ago	15	9	11	35	70
Is not drinking with same friends as year ago	4	5	6	15	30
Has difficulty living from pay to pay	11	9	15	35	70
Has no difficulty living from pay to pay	8	5	2	15	30
Daily ethanol intake:					
Less than 200 gms.	7	5	9	21	45
More than 200 gms.	10	8	8	26	55
Current admission period:					
1-4 days	12	10	11	33	62
5-8 days	7	6	7	20	38

N.B. n=53 in Table 1. 5 Ss did not complete the pre-treatment questionnaire or such questionnaires were misplaced in hospital. Some Ss failed to respond to some questions.

No between group differences (Chi-square 2df $p>.05$) on any factor appeared supporting the point that a truly random

distribution of subjects had occurred. This allowed for the devising of a profile representative of subjects in any of the three groups.

Subject Profile.

> "Australian born, aged between forty and fifty years years, stays an average of four days and has had six previous admissions. He is married but separated or divorced and has three children; lives alone in rented rooms and has stayed less than one month at his present address.
>
> Left school at fourteen years of age to help out with family finances though is currently unemployed. Would like a skilled or tradesman's position, but is untrained for either and besides he sees his drinking behaviour as preventing him from securing any position.
>
> His father is or was employed in a skilled or trade position and drinks every day, though his mother does not drink at all and neither parent uses sedatives. The subject's parents were financially secure and got on well together as did the subject with them. There are three other children in the family with a thirty five per cent chance that one or all of them are excessive users of alcohol, while both they and the subject's parents are aware of his drinking problems.
>
> Commenced regular drinking habits away from home as an adolescent under peer pressure, he now says that he keeps drinking with his friends who also abuse alcohol, for reasons of escape and as a coping mechanism.
>
> Self referred to hospital, he is extremely worried about his drinking habits and would like to stop altogether and in fact has tried to do so more than twenty times. When he does stop, it is only for about a week or at the most three months. Has convictions for drink/drive and other crimes and has had numerous forms of treatment for his alcoholism in the past, which strangely in the light of his present predicament, he feels has helped.
>
> The subject assesses himself as being of average intelligence and feels that a successful working life is very important to him.
>
> Expressing general difficulty in coping with life, says he gets on well with both men and women but often feels bored and very uncertain about the future. He does drink with the same mates as he did one year ago, has

> trouble living from pay to pay, drinks well in excess of two hundred grams of ethanol per day and is uncertain as to his ability to stay off alcohol in the future."

This profile is strikingly similar to one developed by Callaghan and Vinson (1976) who in an independent study of the plight of Newcastle (N.S.W.) homeless men drawn up from a random sample of fifty male destitute individuals concluded that (in summary):-

> "He is generally between forty and fifty years of age and is extremely isolated socially. One in three left home by the time they were fifteen....and thereafter one in three had lived out their lives entirely in the context of institutions and impersonal communal housing....only rarely does the homeless man maintain a relationship with a woman....almost without exception their background is in the unskilled or semi-skilled sections of the workforce....they generally have highly unstable work histories....have devastatingly bad health....are grossly over-represented among accident victims and suffer a variety of illnesses related to their excessive drinking, poor housing and nutrition and general neglect."

This same picture occurs with regularity in other studies throughout the country suggesting much in common between the independent samples (de Hoog, 1972; Jordan, 1973; N.S.W. Bureau of Crime Statistics, 1972, 1973).

The detail of ward procedure and treatment approach operating in each of the experimental groups is as follows:-

Alcoholics Anonymous.

Subjects were admitted to the ward, detoxified and administered vitamins and any necessary medication related to delirium tremens or other general health factors. During admission subjects were visited regularly by Alcoholics

Anonymous members, listened to Alcoholics Anonymous tape recordings; were provided with Alcoholics Anonymous literature to read and attended Alcoholics Anonymous meetings outside the hospital each night.

Alconfrontation.

Treatment procedures were carried out in accord with Alconfrontation techniques and principles described in an earlier chapter. Only staff trained in the techniques and committed to the approaches philosophy were utilized. The treatment took place mainly in the ward group settings, with individual confrontation used as additional reinforcement.

General Ward Management.

Subjects in this group, which served as the control group for the study, were given bed and shelter in what could be best described as a detoxification programme, prior to discharge.

General nursing procedures were followed with the necessary medication available, however, no specific treatment was invoked in relation to the subject's alcohol problem. Staff adhered to the policy of restricting their conversation to other than areas relating to alcoholism.

Follow-up of subjects took place over eight weeks, six months from the time of admission. A large number of part-time research aides were assigned to one or more of the subjects after participating in a training scheme related to the follow-up questionnaire designed by the authors (Appendix D).

Each aide attempted to find his assigned subject. Co-operation was sought from charity hostels, police, prisons, general and psychiatric hospitals, addiction agencies, Alcoholics Anonymous members in addition to inter-city and interstate contacts. Last known address and next of kin were also utilised in the attempt to contact subjects included in the study.

Data from the follow-up stage of the study were compared with the original data profiles. Inter-group variances were analysed for significance of treatment effect on a wide scatter of variables.

CHAPTER FIVE - RESULTS.

Sufficient subjects in the under-45 years age group and those without prior admissions did not present during the intake period of the study to allow for valid comparisons. Admission records over previous periods showed a low proportion of patients falling into these categories. The experimental design which was utilized allowed for the possibility that in absorbing consecutive admissions diagnosed alcoholic, sufficient numbers would eventuate; and if not, that the random nature of the subject distribution among the treatment groups would not be disturbed.

Table 2 is a representation of the various categories of subjects presenting and included in the study.

TABLE 2.

Allocation of Consecutive Admissions (5 week period) to Treatment Groups by Age and Previous Admission.

	Alconfrontation	General Ward Management	Alcoh. Anon.
OVER 45 years	n	n	n
With previous admissions	10	11	10
Without previous admissions	5	5	5
UNDER 45 years			
With previous admissions	2	1	2
Without previous admissions	4	1	2
TOTAL n =	21	18	19

Despite wide and vigorous attempts to locate subjects in the follow-up phase, only moderate success was experienced. Difficulty was experienced at two levels. First, there were those who simply could not be located. Second, there were subjects who were located but who refused to co-operate with the experimenters despite their having agreed to do so six months earlier; or who, when located, were intoxicated to the extent that data gathering was impossible.

Table 3 shows the distribution of the subjects in the follow-up phase.

TABLE 3.

Distribution of Subjects in Follow-up Phase (after 6-7 months).

Ss	Alconf.	G.W.M.	A.A.
Located and data gathered by interview	7	7	3
Located and found intoxicated	6	5	10
Unknown	8	6	6
TOTAL n =	21	18	19

Where a subject was found intoxicated to a point where meaningful data gathering was impossible, information that these subjects were still drinking at pathological levels was verified from three independent sources. These sources were a voluntary agency welfare officer in the field of alcohol addiction; an addiction counsellor from a statutory department; and the senior charge nurse supervising the addiction ward at

which the study was originally conducted. All three sources had personal knowledge and contact with the subjects in this category. Before a subject was categorised as "known to be drinking", all three sources provided such information independently.

Table 4 summarises the condition of subjects at follow-up.

TABLE 4.

Condition of Subjects on Follow-up.

Condition	Alconf.		G.W.M.		A.A.	
Known to be drinking	12	(16)	11	(14)	11	(14)
Sober	1	(5)	1	(4)	2	(5)
Unknown	8		6		6	
TOTAL n =	21		18		19	

If the unknown subjects are allocated equally to the "sober" and "known to be drinking" categories, the figures in brackets in columns 1-3 present little evidence that form of treatment differentially influenced outcome.

On this basis 75 per cent of subjects were still drinking at pathological levels with no significant difference between groups (χ^2 = 0.074, df 2, $p > 0.05$/N.S.). At best 24 or 41 per cent were sober on follow-up and at worst, 4 or 7 per cent.

Seventeen subjects of the original sample were located in a condition in which they could provide meaningful data.

Of these seventeen, three had been members of the Alcoholics Anonymous group, while the other fourteen were equally distributed between the Alconfrontation and No Treatment groups. The number of Alcoholics Anonymous subjects located and interviewed was too small for significant statistical comparison. Data therefore appearing in Table 5 represents those subjects allocated to either the Alconfrontation or No Treatment groups only.

No treatment related differences were noted on any variable other than that of bored feelings, where the No Treatment subjects appeared to be more often bored than Alconfrontation subjects. (Federighi's Exact Test, $p>.05$; 1951). A singular significant result in thirty two computations may be expected to arise on a 5 per cent chance basis.

TABLE 5.

Demographic Data - Follow up

Alc. Gp. (n=7) & G.W.M. Gp (n=7).

Data from Follow-up Questionnaire	Alc.	G.W.M.	Total %age
Subject's mean age	50	51	50
In stable married/defacto relationship	0	1	7
Not in stable married/defacto "	7	6	93
Change in marital status over past 7 months	0	1	7
No change in marital status over past 7 months	7	6	93
Previous night in own home/rented room	5	3	57
Previous night not in own home/rented room	2	4	43
Less than 3 months at present address	6	4	71
More than 3 months at present address	1	3	29
Asked to leave address through drinking behaviour	5	2	50

Data from Follow-up Questionnaire	Alc.	G.W.M.	Total %age
Not asked to leave address through drinking behaviour	2	5	50
Has permanent address	4	3	50
Has no permanent address	3	4	50
Slept out over past 7 months	2	5	50
Has not slept out over past 7 months	5	2	50
Accommodation own home/rented room past 7 months	4	4	57
Accommodation not own home/rented room past 7 months	3	3	43
Has travelled out of district over past 7 months	1	2	21
Has not travelled out of district over past 7 months	6	5	79
Currently employed	2	0	14
Pension or unemployed	5	7	86
Would like to be skilled labourer or tradesman	6	6	86
Would like to be self employed	1	1	14
Did not commence drinking after discharge	1	0	7
Did commence drinking after discharge	6	7	93
Would like to abstain altogether	4	4	57
Would like to keep drinking moderately	3	3	43
Considers drinking habits a problem	6	5	79
Does not consider drinking habits a problem	1	2	21
$\bar{X}$ Concern over drinking habits 7 point scale low — high	2.6	3.4	
Has tried to abstain over past 7 months	4	4	57
Has not tried to abstain over past 7 months	3	3	43
Has tried moderating drinking over past 7 months	2	5	50
Has not tried moderating drinking over past 7 months	5	2	50
Alcohol related convictions over past 7 months	1	3	29
No alcohol related convictions over past 7 months	6	4	71
$\bar{X}$ Change in drinking pattern on 7 point scale - much worse to improved a lot	3.7	3.1	
Drinking with same mates as year ago	2	1	21
Not drinking with same mates as year ago	5	6	79
Feel able to live alcohol free future	5	3	57
Feel not able to live alcohol free future	2	4	43

Data from Follow-up Questionnaire	Alc.	G.W.M.	Total %age
Admitted to a hospital in past 7 months	2	3	36
Not admitted to a hospital in past 7 months	5	4	64
$\bar{X}$ Regard for N.P.C. treatment, scale 1 - 8; Useless to excellent	4.7	3.7	
Decided to drink on discharge	4	4	57
Decided not to drink on discharge	3	3	43
Did require admission in past 7 months - not successful	1	2	21
Did not require admission in past 7 months - not successful	6	5	79
Aware of new illness in past 7 months	2	3	36
Not aware of new illness in past 7 months	5	4	64
$\bar{X}$ Medical consultation in past 7 months	2.1	1.4	
Wanted medical consultation but unsuccessful	0	4	29
Not wanted medical consultation but unsuccessful	7	3	71
Feels future health will improve	3	1	29
Feels future health will stay same or deteriorate	4	6	71
Has difficulty living from pay to pay	2	4	43
Has no difficulty living from pay to pay	5	3	57
Has little or no difficulty in coping with life	3	1	29
Has some urgent difficulty in coping with life	4	6	71
Perception of own intelligence - above average	2	0	14
Perception of own intelligence - average or below	5	7	86
Successful working life very to fairly important	5	4	64
Successful working life not important	2	3	36
Fairly to very optimistic	3	1	29
Uncertain to pessimistic	4	6	71
Bored feelings sometimes too often	2	7	64
Bored feelings rarely to never	5	0	36
Makes friends fairly to very easy	5	5	71
Makes friends not easily	2	2	29

Concern over drinking habits scored on a seven point scale from "not concerned" to "extremely concerned" dropped two mean points with both groups on follow-up. This decrease

of expressed concern was not significant for either group of subjects. Table 6 summarises the data on this variable.

TABLE 6.

Subjects Concern over Alcohol Consumption.
(7 Point Scale; 1 = Low concern, 7 = High concern).

	Alconf. (n = 7)	G.W.M. (n = 7)	t
$\bar{X}$ Pre-treatment Rating	4.6	5.43	.72
$\bar{X}$ Post-treatment Rating	2.6	3.43	.70
t	1.6	1.84	

Patients regard for their treatment on an eight point scale ranging from "useless waste of time" to "excellent" ranged around the "fair" mark at a mean score of 4.7 for Alconfrontation and 3.7 for the general ward management subjects. This difference was not significant ($t = 0.455$, 12df, $p > .05$).

In relation to their drinking problem all located subjects felt they had remained in the same position; neither improving nor getting worse. Scored on a seven point scale ranging from "much worse" to "improved a lot", mean Alconfrontation subjects score was 3.7 and general ward management subjects 3.1. This difference was not significant ($t = 0.52$, 12df, $P > .05$ level).

Table 7 represents the accommodation patterns of located subjects over a six month period.

TABLE 7.

Summated Accommodation Patterns of Located Subjects over past 26 Weeks. (n = 17)

	No. of Weeks	%
Full Board	24	5.9
Jail	38	9.3
Rented Rooms	118	29.0
Hospital	32	7.8
Slept Out	22	5.4
Charity Hostel	66	16.2
Own Home	72	17.6
Other	36	8.8
TOTAL	408 man weeks	100.0

Six of the located subjects were found in psychiatric hospitals, four in charity hostels for homeless men, two in cheap rented premises, two in cheap boarding houses and three with their own families.

Schedule 2 represents the circumstances, reported by located subjects, of their first drink after discharge and the reason offered for their continued use of alcohol.

SCHEDULE 2.

Circumstances of First Drink after Discharge and Reason for Continued Use.

First Drink	Reason for Continued Use
1. Got with mates - still sick.	1. Depression - wife's separation plays on mind.
2. Just wanted to have a drink.	2. Easier to drink than face every day problems.
3. Did not start	3. Still abstaining.
4. Daughter's wedding.	4. No offered reason.

First Drink.	Reason for Continued Use.
5. Marital and family trouble	5. No offered reason.
6. Intended to and did	6. Loneliness and boredom.
7. Met friends and relatives	7. No offered reason.
8. Tried moderation	8. Still trying to cut down.
9. Intended to and did.	9. Copes with patchy drinking.
10. No reason offered	10. Has no sober company/loneliness.
11. Domestic attitudes hostile	11. No work/no females/can't cope.
12. Pressure from friends.	12. Wife suervises.
13. Can't remember.	13. No offered reason.
14. Intended to and did.	14. Loneliness.
15. Was upset and nervy.	15. No offered reason.
16. Lonely/no one to talk to.	16. Drinks worries away.
17. Sharing flat with alcoholic.	17. To cope with alcoholic flat mate.

Fifty per cent of those located had no permanent address. Reasons offered for this situation were as follows:-

1. Always on the move because of drinking habits.
2. Awaiting pension then intends getting a room.
3. Can never save enough money.
4. Is a bushman and wants to return to the bush.
5. Likes change and likes to change accommodation frequently.
6. Drinking habits and loss of memory preventative.
7. Still looking for suitable room.
8. Still looking for a suitable room.
9. Drinking habits preventative.

When asked what was needed for alcoholics in the region, eight subjects responded.

Their contributions in this area included the need for longer admissions; an in-patient A.A. programme; a day care centre; occupational therapy and exposure of younger excessive drinkers to chronic alcoholics as a warning.

Four persons were found to be sober or not drinking at pathological levels after a seven month period from admission, representing a known seven per cent positive result for the total sample.

Accepting that patients stay an average of four days at an approximate hospitalization cost of $30 per day, such a result at the Newcastle Psychiatric Admission Centre would represent an annual saving of $15,750 per year on the basis that patients were admitted twice per year. Generalizing this estimate to the state hospitals of N.S.W. would result in a cost saving of $84,000 per year.

Such a saving would need to be viewed in the light of annual increases in alcoholism in the same community, said to be higher than seven per cent. Nevertheless, some attention needs to be paid to the seven per cent figure.

Profile examination of the four subjects found to be sober after the seven months following admission suggests some difference from the sample profile.

Sober subjects were more likely to be living with a permanent friend in stable accommodation over longer periods of time. They were more likely to have been admitted on a schedule II and to have begun drinking under peer pressure rather than as an escape mechanism. These subjects had no criminal history of any kind and had experienced longer periods of abstinence than the total sample.

CHAPTER SIX - DISCUSSION.

Inter-Group Findings.

The Alconfrontation technique is said to make its greatest impact among early symptom bearers: "Among early symptom bearers (after Alconfrontation) it became a staff expectation that this change (conversion from dependence to independence) would occur" (O'Neil, 1976). He goes on, moreover, "and after a while even the less common conversions among the recycled "skid row" group were accepted as routine occurrences".

Results of the present study did not confirm expectations that Alconfrontation techniques would break through denial barriers of alcoholics at a significantly higher frequency than the other techniques used in the control groups. The expectation that this breakthrough would result in a choice by the alcoholic to become independent of alcohol and as a consequence live a more orderly and strife free life was not evidenced.

At discharge equal numbers of subjects in both the experimental and No Treatment group had decided not to use alcohol again. Yet only one subject from either group was found to be living a life free of dependency on alcohol after a six to seven month follow-up period. Numbers of subjects in the experimental group did express a commitment and determination not to use alcohol again. This commitment in all the located subjects, with one exception, was maintained at the most for a few days only. Equal numbers of subjects in the "no

treatment" group made similar commitments with similar results.

The one Alconfrontation subject who was found to be living a life free of dependence on alcohol at follow-up was part of the small sample with no previous admissions. The follow-up interviewer recorded this subject's response to the question: "What do you expect of health services by way of treatment and general facilities for those with drinking problems in the district?" as, "Let people who drink see those that drink too much and what it does to you. I would not believe when I was told about drinking, but when I saw what it does, it frightened hell out of me. I said never again!" For this subject it would appear that being among more deteriorated alcoholics was of sufficient impact to cause him to change his drinking behaviour.

The General Ward Management subject found on follow-up to be living an alcohol dependent free life also had no previous admissions while the two Alcoholics Anonymous subjects in this category had many previous admissions. The outcome in the Alcoholics Anonymous group does not represent a significant difference from that in the other two groups.

The Alconfrontation model is described as essentially a one shot method while the Alcoholics Anonymous programme assesses probability of sobriety against continued input via Alcoholics Anonymous meeting attendance over time. In this sense comparison of approaches immediately following discharge would have been inappropriate as the Alcoholics Anonymous programme states a need for continued reinforcement of its

principles through meeting attendance over a period of time.

Six months was considered a satisfactory follow-up period on the basis of economic feasibility as well as being the period most representative of previous alcohol treatment evaluation studies summarized by May and Kuller (1975). The suggestion that seeds for a much later harvest may have been sown during the treatment period would be equally applicable to both these groups.

Variables affecting subjects either positively or negatively during the period intervening between treatment and follow-up were not controllable in this study. Some subjects did report involvement with treatments during this period either in terms of a further brief admission to a psychiatric hospital or attendance at Alcoholics Anonymous meetings. Of the four subjects found living a dependency-free life on follow-up, only the two Alcoholics Anonymous subjects reported intervening treatments. It is concluded that any intervening treatments experienced by other subjects had not taken any positive effect.

Factors covered in the follow-up questionnaire indicated no significant profile differences between the three groups. Clinical observations by the author of the Alcon. tech. (O'Neil 1976) of conversions from dependence to independence which positively influenced the life style of the subject were not confirmed in the present study.

No noticeable positive effects followed the application of the Alconfrontation technique beyond that which would presumably have occurred had the subjects received no treatment

at all. This finding provides no foundation for a dynamic structure for the model.

To examine for possible negative factors of the Alconfrontation model would require further research. Such research could compare the outcome of randomly selected subjects from an Alconfrontation experience and treated with a technique based on an opposing philosophy of understanding, acceptance and non-judgemental therapy. Control groups of no treatment, accepting, non-judgemental therapy only, and the accepting, non-judgemental therapy followed by Alconfrontation would be necessary.

The conclusion from this study that Alconfrontation did not significantly alter the destructive decline of the alcoholic's life must at present be restricted to the chronic alcoholic. Efficacy of the technique for early symptom bearers has not been determined by this study. Further research on such populations will depend largely on reliable definitions being given of early symptom bearers. At this stage agreement has not been reached in this area of definition.

Overall Sample Findings.

Successful follow-up of chronic alcoholics after lengthy intervals would require the full co-operation of voluntary and statutory agencies in addition to copious research funds. It is doubtful that such expenditure of finance and effort would produce significantly different results from those of the present study given the similarity

of its findings with studies by de Hoog, 1972; Jordan, 1973; N.S.W. Bureau of Crime Statistics 1972,3. Thirty per cent of subjects in the original sample were located in such a condition as to admit them as reliable data sources. Valid conclusions in the strict sense from data collected can only apply to the located subjects.

Significant differences did not appear between group profiles in the pre-treatment phase. Subjects located and able to be interviewed were also undifferentiated in profiles. No changes in drinking behaviour or life styles were noted. It can be assumed that those located and found to be too intoxicated to be interviewed also had no positive change in drinking habits or life style and on this basis the follow-up data from the interviewed subjects could be said to generalize to the wider sample.

The five week intake period of the study presented a similar population to those generally presenting throughout the year (N.S.W. Health Commission 1973-4). It is arguable that the population studied is representative of the total annual alcoholic intake of the hospital.

Subject profiles pre and post treatment did not differ significantly from similar populations investigated elsewhere (de Hoog, 1972; Jordan, 1973; N.S.W. Bureau of Crime Statistics, 1972, 1973). The chronic alcoholics of this study were mainly local men without stable satisfactory accommodation and rarely moving out of the district. They were without stable interpersonal relationships, state supported and rapidly declining in health. Even so, though pessimistic in outlook,

recognised their drinking problem and wanted help. The help they speak of is in the areas of effective treatment, compassionate understanding and a more comfortable existence.

CHAPTER SEVEN - WIDER IMPLICATIONS AND RECOMMENDATIONS.

One of the implications of this study is that services for chronic alcoholics in the Newcastle region extend little beyond the provision of brief detoxification. The vast majority of alcohol detoxification recipients quickly return to established drinking patterns and in time present again for further detoxification.

To date no breakthrough has been made in preventing this revolving door experience for the majority of chronic alcoholics and the process is expensive to the community.

One alarming feature in the present data is that almost all subjects were the unskilled products of economic recession during their adolescent years. The current growing population of unemployed, unskilled young people gives ominous signs of an escalating use of alcohol and this suggests that an even larger proportionate population of chronic alcoholics will exist twenty to thirty years hence. Actions of a socio-political nature appear urgent if such gloomy expectations are not to be fulfilled.

Important though the pursuit of preventative measures is, the area of secondary medical care dominates the subject matter of this thesis and to this end the following major recommendations are made.

This study and others conservatively estimate a population of approximately three hundred homeless chronic alcoholics in the Hunter region. They possess few social

skills, are virtually unemployable, have no stable interpersonal relationships, engage in no daytime activities, have no centre in which to congregate, and exist in substandard housing or impersonal communal hostels.

Beyond this existence, which erodes human worth and destroys personal dignity, is a cost to the community which demands a more effective treatment model. Cost estimates of productivity losses, hospital costs, subsidised housing, social service benefits, state support of dependents, legal expenses and charity handouts for the three hundred chronic alcoholics of the Hunter region conservatively approaches four million dollars annually.

It is recommended that in an attempt to come to grips with the problem in a realistic manner, a two level approach be adopted:-

LEVEL ONE.

Earlier chapters in this thesis established loss of control and lack of motivation for treatment as components of the alcoholic profile. On these considerations and in the absence of effective treatments up to the present time, a population of chronic alcoholics will need caring for in a humanistic and compassionate manner in most western societies.

Level one outlines generally a plan upgrading caring services for chronic alcoholics in the Hunter region. Financing could develop from co-operative efforts between Federal, State and Local Governments in league with local voluntary charities.

a. Accommodation.

As a basic human right, particularly for the ill, available shelter at acceptable community standards is essential. Co-operation with those already operating such hostel centres by way of capital grants and subsidised operational costs could extend present services and accommodate needs in this area.

b. Day Activities Centre.

A common complaint registered by chronic alcoholics is the lack of somewhere to spend the daylight hours. These periods are now spent walking city backstreets, sitting in parks or searching out accommodation for the next night. Provision of a Daytime Activities Centre, shared and supervised by existing charities working in the field of alcoholism, is recommended.

c. Sheltered Workshop.

Perhaps in association with, or separate from, the Day Activities Centre there should be a sheltered workshop where light work of a productive nature could be undertaken. Again such a project with initial capital grants could be undertaken in co-operation with existing charities.

d. Low Key Detoxification Services.

At present, with limited staffing, charity hostels are unable to cope with intoxicated persons seeking temporary accommodation. This situation leads to the alcoholic sleeping out, often in inclement weather, with disastrous effect on the individual's health or his admission to hospital or prison at

great expense to the community.

Several beds within the existing hostels, tended by two or three seconded psychiatric nurses (with medical back-up) could alleviate this problem. Serious medical cases could be transferred to hospital.

It is not accepted that such a programme of caring would increase or unnecessarily prolong the present problem in relation to chronic alcoholics. Current research suggests that the present life style of the alcoholic is not only self perpetuating, but more expensive to the community and rapidly destructive to the individual.

LEVEL TWO.

Treatment Facility.

Treatment facilities around the world are in the early development stages with the most convincing efforts arising out of the total push programmes. On this evidence, it is recommended that such a programme be established in the Newcastle region along the following lines:-

a. Careful selection of candidates through objective assessment by an independent committee to ensure that patients likely to gain maximum benefit from minimum resources would be admitted to the programme. This initial assessment would be sufficiently thorough to form the basis of a highly personalised treatment plan.

This committee could at a later stage be responsible for objective oversight of evaluative research.

b. Programme capacity restricted initially to fifteen persons on a full-time basis over twelve weeks of intensive therapy. High staff-patient ratio is essential to deliver the services envisaged in this first phase of the treatment facility. Three treatment groups per year with low drop out figures would be expected as a result of the detailed work of the assessment committee. Legal commitment or binding contract to the 12 week programme would be facilitative.

c. Staffing to consist of a clinical psychologist, social worker, psychiatric nurse, and two alcohol counsellors, with medical back-up services.

d. Programme content, while utilizing group techniques, to be tailored to individual needs based on assessment. The proposed Day Activities Centre, sheltered workshop and voluntary agencies to be utilized within the programme. Techniques including family therapy, relaxation therapy, social skills training, assertive therapy, and behaviour modification of other kinds would be used in accord with patients need.

e. Volunteer community committees to be formed with the purpose of implementing an aggressive policy of after care and follow-up. Such a committee would not necessarily be made up of sober alcoholics but perhaps revolve around a dinner service club idea which included the programme participants during

their inpatient stay and supported them on discharge.

f. The programme to be centred outside the hospital structure; purchase or rental of a large inner suburban home would be ideal.

g. Ongoing evaluation and research to be built into the programme.

The programme would have as its primary goal the comprehensive resocialization of the individual using a variety of techniques suited to the individual case. Cost of the dual level programme would be expected to compare favourably with the cost of present procedures.

The level two unit would be expected to conduct short term and longitudinal studies designed to modify treatment techniques and contribute to the body of knowledge in relation to alcoholism.