AN IMPACT ASSESSMENT OF A CURRENT INPATIENT ALCOHOL REHABILITATION PROGRAMME IN THE WESTERN CAPE

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DECLARATION

I the undersigned, hereby declare that the work contained in this assignment is my own original work and has not previously, in its entirety or in part, been submitted at any university for a degree

ABSTRACT

In the South African context, research on the impact of alcohol rehabilitation is particularly limited. This study aimed at describing the impact of the alcohol rehabilitation programme offered at Neuro Clinic D, Stikland Hospital. Outcome was assessed at 12-15 months with the objective of exploring the perceptions and experiences of the ex-patients to ascertain whether there has been an improvement in psychological well-being and positive lifestyle changes. The study was motivated by a request made by the staff at Neuro Clinic D; as such an investigation has never been conducted. Both quantitative and qualitative methodologies were used to gather data from 44 out of the 166 ex-patients admitted to Neuro Clinic D between January and June 2002. The relationships between the rate of relapse and age, gender, marital status, employment status, previous rehabilitation, health problems, police contact, aftercare attendance, participation in the 3- or 4- week programme and other medication/substance abuse were explored. While no statistically significant relationships were found between any of the variables, some evidence of interaction emerged with regards to the relationships between relapse status and participation in the 3- or 4-week programme, aftercare attendance, employment and marital status. The qualitative analysis revealed four central themes, namely coping mechanisms; responses to specific components of the programme; confounding factors and the impact of the programme. An integration of the quantitative and qualitative data supports the conclusion that while there was a low rate of consistent abstinence, the respondents reported an overall post-treatment improvement in psychological well-being and positive lifestyle changes.

OPSOMMING

Navorsing op die impak van alcohol rehabilitasie is besonder beperk in die Suid-Afrikaanse konteks. Hierdie studie het ten doel om die impak van die alcohol rehabilitasie program, gebied deur Neuro Kliniek D, Stikland Hospitaal, te beskryf. Die uitkoms is bepaal na 12-15 maande deur die persepsies en envaringe van eks-pasiente te ondersoek om sodoende vas te stel of daar verbetering was in sielkundige welstand en of positiewe leefstyle veranderinge aangegaan is. Die betrokke studie is gemotiveer deur 'n versoek gerig deur die personeel van Neuro Kliniek D, aangesien so 'n ondersoek nog nooit vantevore gedoen is nie. Beide kwantitatiewe en kwalitatiewe metodologieë is gebruik om data in te samel van 44 die 166 eks-pasiente toegelaat tot Neuro Kliniek D tussen Januarie en Junie 2002. Die korrelasie/verhouding tussen die terugvalkoers en ouderdom, geslag, huwelikstatus, werkstatus, vorige rehabilitasie, gesondheidsprobleme, polisie kontak, nasorg bywoning, deelname in die 3- of 4-week program en ander medikasie/substans misbruik is ondersoek. Terwyl geen statisties beduidende verhoudinge gevind is tussen enige van die veranderlikes nie, is daar wel aanduidings van interaksie met betrekking tot die verhouding tussen terugvalstatus en deelname aan die 3- of 4-week program, nasorg bywoning, werkstatus en huwelikstatus. Die kwalitatiewe analise het 4 sentrale temas onthul, naamlik, hanteringsmeganismes; response tot spesifieke komponente van die program; verydelende faktore en die impak van die program. 'n Integrasie van die kwalitatiewe en kwantitatiewe data steun die gevolgtrekking dat alhoewel daar 'n lae voorkoms was van volgehoue onthouding, die respondente wel 'n algemene verbetering in sielkundige welstand en postiewe leefstyle veranderinge na behandeling gerapporteer het.

The article format of this assignment is in accordance with the requirements of the Department of Psychology

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INTRODUCTION

The first section of this paper introduces the main theoretical considerations underlying this research project. It explores the current literature on alcohol rehabilitation, specifically programme and outcomes evaluation. It also summaries related studies both internationally and within the South African context. This is followed by a discussion of the research methodology in section two. The results of the study are presented in section three, followed by a discussion of these results, together with a look at the limitations of the study and recommendations for future research.

Alcohol abuse has wide-ranging effects on society and individuals and is one of South Africa's major psychosocial concerns (Viviers, 1993; Visser & Flett, 1998; Clifford, Maisto, Franzke et al., 2000; Greenwood, Woods, Guydish et al., 2001). Treatment options include psycho-education, individual counseling, alcohol support groups (e.g. Alcoholics Anonymous, Employee Assistance Programs); in- or outpatient rehabilitation programmes and long-term committal to institutions by court order. In South Africa, however, high costs may make inpatient programmes unsuitable for many individuals. Thus, the quantification of outcome following alcohol rehabilitation has become increasingly important as treatment funds have decreased (Schuckit, Morrison & Gold, 1984; Visser & Flett, 1998).

Despite increasing attention to the problems of alcoholism and its treatment, successful outcome in terms of abstinence remains elusive (Moos, 1994; Miller, 1996). The success rates and predictors of success of in-patient programmes, therefore, need to be assessed. In addition, experiences and perceptions of treatment need to be explored in order to gain an understanding from the patients' perspective of the impact of the programmes offered.

Before embarking on a study of the impact of alcohol rehabilitation, it is essential to distinguish between the short-term goals of treatment versus outcome. The goals of treatment include detoxification; the reduction or elimination of alcohol use; the resolution of related medical, psychological and social problems and a modification in attitude toward drinking behaviour leading to a commitment to abstinence. The outcome of treatment, however, has to do with the maintenance of these goals over a longer period of time, in other words, whether the commitment to abstinence has been realised and there has been a sustained improvement

in psychological well-being and a change in lifestyle (Institute of Medicine, 1990; Visser & Flett, 1998).

A review of the literature reveals research looking specifically at successful versus unsuccessful outcome (i.e. abstinence or not). Successful outcomes varied greatly between studies. Six-month abstinence rates were found to be between 37% and 75% (Denzin, 1987; Miller, Millman & Keskinen, 1990; Shaw, Walter, McDougall et al., 1990; Greenwood, Woods, Guydish et al., 2001). Abstinence rates at 12-month follow up varied between 48%, 56% and 71% (Miller et al., 1990; Shaw et al., 1990; Long, William & Hollin, 1998). Miller and Sanchez-Craig (1996) quote a more realistic abstinence rate of around 30% in unselected populations. According to the literature (Denzin, 1987; De Silva, Peiris, Samasinghe et al., 1992; Miller, Brown, Simpson et al., 1995; Moos, Finney & Moos, 2000; Maisto, Clifford, Longabaugh & Beattie, 2002), relapse is most likely to occur within the first year of treatment and often within six months.

Predictors of outcome have been determined by several studies. The presence of a comorbid psychiatric disorder, number of prior arrests, previous rehabilitation, unemployment; severity of the problem and being single or divorced/separated have been associated with poor outcome (De Silva et al., 1992; McLellan, Alterman, Metzger et al., 1994; Moos, 1994; Campbell, Gabrielli, Laster & Liskow, 1997; Messina, Wish & Nemes, 2000; Moos et al., 2000; Greenwood et al., 2001). On the other hand, higher success rates have been found to be associated with social stability, having a life partner; high intelligence, regular employment, affluence, time spent in treatment, and less severe problems accompanied by fewer symptoms (MacLachlan & Stein, 1982; Howden-Chapman & Huygens, 1988; Institute of Medicine, 1990; De Silva et al., 1992; Tucker & Akiko Gladsho, 1993; Miller & Sanchez-Craig, 1996; Guydish, Werdegar, Sorensen et al., 1998; Greenwood et al., 2001). Such predictors have been associated with high success rates regardless of the treatment method utilized (Miller & Sanchez-Craig, 1996). Women have also been found to achieve more successful outcomes than men (Miller & Sanchez-Craig, 1996; Moos & Moos, 2003). Interestingly, age, duration of dependency and type of employment have been shown not to be related to outcome (De Silva et al., 1992).

In South Africa, there have been few studies in this field. A literature search rendered nine studies in total, of which only three were outcome related studies. None of these studies used qualitative measures as a means of assessing outcome.

Viviers (1993) conducted an evaluation of a rehabilitation programme in Bloemfontein. The focus was on the specific services and facilities of this centre in relation to polysubstance abuse and as such the results cannot be generalised to all rehabilitation centers in South Africa. Of relevance to this study was the finding that unemployment negatively influenced rehabilitation.

Visser and Flett (1998) measured the effectiveness of a rehabilitation centre in Pretoria by conducting an outcomes evaluation using 77 in-patients over a 4-month period. A structured inventory was utilized to measure psychological well-being pre- and post-treatment as well as at three month follow-up. They found that the treatment programme being evaluated had a significant effect on the enhancing of psychological well-being for patients. A major limitation mentioned in Visser and Flett's (1998) study is that they did not give the patients the opportunity to express what they found to be meaningful in the programme and what aspects they felt to be important.

Botha (1986) conducted a follow-up assessment on 129 patients. He questioned them regarding their treatment and found that 71% reported that communication with their family had improved and 86% reported an increase in self-esteem and self-respect.

In a South African outcomes-based national study, it was found that between 11% and 28% of all the individuals who had attended rehabilitation between June 1996 and June 1998 had already received previous rehabilitation (Medical Research Council, 1998).

A number of issues make effective outcome research in this area problematic. Firstly, the research on alcohol treatment programmes is restricted due to the problem of tracking patients for follow-up. It has been found that those who could not be traced are often those that have relapsed (Walton, Ramamathan & Reishcl, 1998).

Secondly, from the outset, there is great diversity in the lifestyle and characteristics of the individuals when they first start treatment and as such one might expect differences in

patterns of treatment outcome (Isenhart, 1997; Miller et al., 1995). It has been shown consistently that this diversity before and after treatment is a strong predictor of outcome and often exceeds the impact of the treatment itself (Miller & Sanchez-Craig, 1996). Thus, outcome evaluation has a significant limitation in that it does not necessarily follow that the outcomes observed post-treatment are the result of the treatment provided. Treatment outcomes occur within the context of many other aspects of the individual's life and are profoundly affected by the social environment (Institute of Medicine, 1990; Moos et al., 2000). Thus, the impact of treatment on an individual's subsequent drinking behaviour is influenced by a multitude of intrapersonal and interpersonal circumstances (Isenhart, 1997). It is for this reason that any study on outcome evaluation needs to take into consideration confounding variables (Zusman & Wurster, 1975; McLellan et al., 1994).

Thirdly, the course of alcohol use after treatment is highly variable and by taking the number of people who have been continuously abstinent divided by the total number who entered treatment as an outcome criterion seems far too simplistic. Post-treatment drinking appears to be the norm and there is no single model that can adequately account for 'relapse events' (Miller, 1996). Denzin (1987) contends that recovery cannot be understood until relapse is placed within proper perspective.

Thus, it is necessary to consider whether abstinence is the only useful indicator of success. In this regard, Miller (1996) highlights an important consideration:

> "Binary thinking has often guided research and practice in the addiction filed. For example, emphasis has been given to identifying whether an individual is 'alcoholic' or not and the dichotomous judgment that a client is either drinking or abstinent has been used to judge treatment effectiveness. Research on the nature of alcohol problems, however, indicates that they lie along several modestly interrelated continuous dimensions of severity, rather than occurring as a single syndrome... Similarly changes in addictive behaviours in general, and treatment outcomes in particular, are complex phenomena not readily captured by dichotomous classification. The term 'relapse' is itself seriously problematic in various ways and its definition elusive.... Further it implicitly pathologises what is in fact a rather common event in the course of behaviour change." (p.15).

Miller et al. (1995) conducted a 4-year follow-up study and found that only 9% of patients had sustained continuous abstinence, although at least half were currently abstinent, and 30% were infrequent drinkers or low quantity drinkers. Studies from the Relapse Replication and Extension Project (Miller, 1996) indicate the complexity in treatment outcomes. The results illustrate that average consumption had decreased and at any given time about 30% had been continuously abstinent for 2 months or more. These results show that the participants were drinking much less often, for shorter periods of time and consuming far less when they did

drink. Drinking behaviour, therefore, fluctuates markedly, indicating that the dichotomous classification is not adequate enough in measuring treatment success. More common is that over time, periods of abstinence increase and adverse consequences diminish. Researchers in this field (Miller, 1996; Moos et al., 2000) have found that the common course is for drinking periods to become shorter and less severe over time rather than a sudden and permanent termination.

Thus, the conceptulisation of 'relapse' as an indicator of outcome success is problematic and open to a variety of interpretations, including the individual's own definition of the term. Throughout the literature on alcoholism, there is no consistent definition of relapse. Traditional conceptions of relapse have defined any drinking as unacceptable. Others, however, distinguish between a lapse and a relapse (Fureman, Parikh, Bragg et al., 1990). This distinction implies that a relapse "lies above some drinking threshold higher than zero" (Tucker & Akiko Gladsjo, 1993, p. 530). In his attempt to define 'relapse', Denzin (1987) explains that a relapse can only occur after some attempt has been made to remain sober for a period of time. He states that being dry for a few days and then drinking is not a relapse but rather a return to drinking. These definitions depend on a dichotomous evaluative judgment and imply a discrete shift from desirable to undesirable status (Miller, 1996). In his discussion, Miller (1996) clearly shows the difficulties in quantifying relapse and argues for the necessity of using qualitative research designs in order to determine outcome success more efficiently.

In addition, the relapse construct may focus attention too narrowly on drinking behaviour as such. Both alcohol problems and post-treatment drinking are closely related to a larger spectrum of social adjustment dimensions (Moos et al., 2000). Some treatment modalities with the strongest evidence of efficacy focus not exclusively or even primarily on drinking but aim to improve the patient's psychological well-being and bring about a change in lifestyle by improving relationships, increasing self-esteem and self-efficacy and social support networks (Miller & Sanchez-Craig, 1996; Visser & Flett, 1998; Maisto et al., 2002). Thus, to use the relapse concept as a measure of outcome success is a simplification of the complexity and flow of post-treatment drinking behaviour and behavioural change (Prochaska, DiClemente & Norcross, 1992; Visser & Flett, 1998). In this regard, abstinence is clearly *not* the only criteria for determining whether successful rehabilitation has taken place.

Thus, an evaluation of a patient's 'outcome' needs to include measures of employment, health, family status, social and other psychological factors in the overall determination of 'success' and not rely purely on whether the patient is abstinent or not (McLellan et al., 1994). The 'psychosocial' adjustment of alcoholics has been considered to be an appropriate evaluation domain because of its effect on the severity of the dependence and its relation to post-treatment relapse (Miller & Sanchez-Craig, 1996). Evaluating the patients' perception of their subjectively experienced psychosocial improvement is, therefore, an important outcome measurement tool.

This raises the question of how best to describe and understand outcomes. Given the difficulties in defining and measuring the impact of services rendered and the apparent lack of research in this area, the voices of the patients and their perspectives take on primary value. The significance and centrality of the client perspective in informing practice has been increasingly recognised (St Leger, Schnieden & Walsworth-Bell, 1992; Malterud, 2001).

In contrast to research in general, one of the characteristic features of impact studies is that they do not strive to formulate generalisations. They focus on explaining and interpreting a particular situation and on reporting data, which is useful for the service provider in the selection of alternatives (Cronbach, 1980).

Context and Motivation for the Study

Neuro Clinic D (NCD) at Stikland Hospital is one of the main alcohol rehabilitation centers in the Western Cape. More than 250 patients are admitted every year to an inpatient programme run by a medical doctor, a psychiatrist, clinical psychologists, a social worker, an occupational therapist and psychiatric nurses. Two different programmes are run simultaneously. A three-week programme is aimed at those individuals with a below Grade 10 education and a four-week programme is designed for those with above Grade 10 education. There are usually 28-30 patients at any given time. The patient population includes both males and females between the ages of 18 and 60 years, with the average age of 39 years. Almost half of the patients are currently employed and 66% of patients are semi-skilled and unskilled labourers, with an average education level of Grade 8.

The programme consists of a number of different group activities aimed at modifying attitudes and behaviours, increasing self-awareness, stress and conflict management and developing coping skills. These include: an occupational group, pastoral group, nurse group and for the 4-week programme, a therapeutic psychology group. Psycho-education stressing the impact of alcohol abuse and dependency is also given by one of the head psychiatrists.

The current programme has been active for approximately 20 years and a follow-up study of this nature has not yet been conducted. The overarching aim of this study is, therefore, to conduct an impact assessment so as to determine whether the rehabilitation programme is achieving its goal of improving psychological well-being and bringing about a positive change in lifestyle. Specifically, the aim is two-fold. Quantitatively, the study aims to examine relationships between relapse rate and certain variables (age, gender, employment, marital status, aftercare attendance, previous rehabilitation, participation in the 3- or 4-week programme, police contact, health problems and other substance/medication abuse). Secondly, the study focuses on the experiences and perceptions of the respondents as a means of describing what they have gained from the programme, what they found to be helpful and their subjective perspective of improvement subsequent to discharge. By hearing the patients' voices, feelings, opinions and ideas, the researcher hopes to be able to supply the service provider with information regarding the programme that they offer. This study, therefore, aims to answer the question of whether a potential patient given his or her problem, his or her characteristics and his or her circumstances, can reasonably expect to achieve a positive result from this programme at this time with these staff (Institute of Medicine, 1990).

METHODOLOGY

Methodological Perspective

Applied research is characterized by the fact that it emanates from needs voiced by the broader community (Hendrick, Bickman & Rog, 1993). The current study falls within the rubric of applied research as it is in direct response to a need voiced by the staff at NCD for research aimed at investigating the impact of their services and ensuring that their services are experienced as both appropriate and effective by their patients. Applied research can be viewed as a continuous process where a person's experience or ideas can be used by others to develop and improve service delivery (McNiff, 1988).

Although quantitative research is useful, it has a number of shortcomings. The main one being that it provides a limited means for exploring a person's subjective experience, which is essential when attempting to investigate the impact of a programme. In this regard, qualitative studies can be added to quantitative ones so as to gain a better understanding of the meanings people attach to events and processes (Miles & Huberman, 1994; Malterud, 2001).

Study population and sampling

The study population includes all patients admitted to NCD between January and June 2002 (January and June included). This includes both males and females between the ages of 18 and 60 years old.

Inclusion Criteria

All patients meeting NCD's admission criteria were eligible for this study. These include: 1) cognitive functioning and memory should not be impaired to such a degree that group therapy cannot take place effectively; 2) individuals must be able to care for themselves independently; 3) alcohol abuse (and not drug abuse) should be considered by the patient to be the main problem; 4) patients are admitted voluntarily and should be in touch with reality i.e. apsychotic; 5) motivation: although some patients have been coerced into admission by family member, employers or court order (and therefore not fully motivated for rehabilitation), patients should not actively deny the presence of a drinking problem; 6) pending court cases: apart from divorce and maintenance cases, patients are admitted after their court cases have been concluded. An additional criteria is that the patient must be contactable via telephone

Sampling

The ex-patients were contacted in a sequential manner so as to ensure that the 12-15 month time period was maintained. Thus, starting from January 2002, each consecutive patient was contacted. The intention was to include the entire sampling frame in the study.

Sample size

All the ex-patients from January up to and including June 2002 (166 patients) were included. Relapse status was elicited for 57 ex-patients and for various reasons, to be discussed below, interviews were conducted with 44 of these patients.

Data collection

Semi-structured telephonic interviews were conducted. The researcher completed all the interviews herself so as to avoid inter-rater variability. In an attempt to enhance reliability and validity, at the start of the interview, it was explained explicitly to the respondents that the purpose of the interview was not a personal evaluation of their behaviour but rather an evaluation of the programme. In addition, anonymity and confidentiality were guaranteed.

Description of questionnaire

In the absence of appropriate measures, a self-constructed questionnaire, consisting of 15 questions (seven collecting quantitative data and eight designed to elicit qualitative information), was developed and used for the purpose of this study (see Appendix A).

The quantitative data collection was designed in accordance with the scales developed by Schuckit, Morrison and Gold (1984), Long, William and Hollin (1998) and Shaw, Walter, McDougall et al. (1990) who recognised the lack of adequate, valid and objective measures of outcome related to abstinence. As a result, they developed comprehensive alcoholism outcome scales, measuring not only the frequency of alcohol intake but also descriptive data, social functioning, other treatments for alcohol dependence, employment, police contacts, health problems and the use of drugs. This study was unable to utilise these scales directly as they were designed to be answered in a face-to-face interview. Therefore, for the purpose of this study, the scales were adapted for telephonic use.

Thus, the seven quantitative questions of this study aimed to investigate the following variables in relationship to rate of relapse: age, gender, marital status, previous rehabilitation, participation in the 3- or 4-week programme, employment status, police contact, health problems, other substance/medication abuse and aftercare attendance.

The eight qualitative questions focused on gathering data regarding the respondents' perceptions and experiences of the programme: what they found to be useful/disappointing; what they had learned from the programme; precipitants of relapse; supportive factors and their overall impression of the impact of the programme in terms of psychological well-being and positive lifestyle changes.

Definition of terms used:

Regarding the definition of drinking behaviour, it has been pointed out that using the term 'relapse' to determine outcome success is problematic. Despite this, some level of quantification needed to be determined for the purpose of this study. In accordance with the literature regarding time periods for relapse, a relapse has been defined as alcohol intake for more than fifteen days over a six-month period (Fureman et al., 1990). The scale used in this study extrapolated Fureman, Parikh, Bragg et al.'s (1990) definition to a one-year period, defining a relapse as alcohol intake for more than thirty days over the past year.

Employment status is measured according to: full time employment; dismissed – alcohol related; dismissed – not alcohol related and unemployed unrelated to alcohol.

Involvement in an alcohol support group (aftercare attendance) is defined as at least one visit per month.

Both health problems and police contact are quantified by whether they were related to alcohol or not.

Psychological well-being as a measure of the impact of the programme is defined as the ability to enjoy life satisfactorily in an ever-changing environment. This includes a feeling of happiness, satisfaction with oneself and others with an emphasis on a positive attitude (Denzin, 1987; Visser & Flett, 1998). Due to the number of different perspectives on the concept of psychological well-being, Bar-On (1988 in Visser & Flett, 1998) identified a number of dimensions along which the concept can be measured. These include: self-concept, relationships with others, social responsibility, stress management, impulse control, reality testing, problem-solving ability and ways of dealing with and expressing emotions.

Time Perspective

The literature distinguishes between two different phases within which outcome should be assessed. The first is during treatment and the second is post treatment. During treatment assessment is useful to evaluate the achievement of treatment goals whereas post treatment assessment is necessary to evaluate outcome effectiveness (Zusman & Wurster, 1975; Institute of Medicine, 1990; St Leger et al., 1992). The particular time period for follow-up (12-15 months) was selected as it received support in the literature (Howden-Chapman &

Huygens, 1988; Walsch, Hingson, Merrigan et al., 1991; Guydish et al., 1998). Zusman and Wurster (1975) point out that the time period should be long enough after programme completion to "allow the individuals to function independently, but as early as possible to minimize confounding influences ... This may be within one to two years." (p.69). Furthermore, there is some consensus that outcome at one year is closely related to outcome in the longer term (Shaw et al., 1990; Miller et al., 1995; Long et al., 1998; Messina et al., 2000; Maisto et al., 2002).

Logistics

The time period for data collection was from May to July 2003. Phone calls were be made in the evenings between 17:00 and 20:00 so as to reach the respondents after work. If only work numbers were provided, attempts were made to contact the individual whilst at work. If he or she was unavailable, attempts were made to gain information as to his/her whereabouts and means of contacting him/her.

Ethical and Legal considerations

Due to the fact that telephonic interviews were conducted, informed written consent was not possible. Consent was given verbally over the telephone at the beginning of the interview. Participation was voluntary. In addition, at any time during the interview the individual could choose not to continue without compromising further treatment at Stikland Hospital. Both confidentiality and anonymity were explained to the respondent at the beginning of the interview (See Appendix A). In terms of confidentiality, the Medical Research Council of South Africa has outlined in its Guidelines on Ethics for Medical Research (2002) that "privacy is at stake only when the bearer of the right can be identified through the private information divulged" (p.24). Thus, because the information used in this study does not include any personal details, the privacy of the individual was not infringed upon.

Data Analysis

A descriptive study was conducted in that it describes the impact of the NCD programme by providing descriptive statistics in relation to relapse rate as well as illustrating the respondent's perceptions and experiences of the programme. Chi-squares were conducted to determine the nature of the relationship between the variables and rate of relapse. Chi-square as a statistical method of analysis was used as it tests for relationships between two categorical variables. The computer programme Statistica was used to analyze the data.

The qualitative data was examined using a thematic analysis. The transcriptions were divided into two categories: those who had relapsed and those who were still sober. Initially each question was analysed for general and specific themes and direct quotations were used to illustrate the emerging views. After the initial analysis, it became evident that there were few differences between the sober and relapse category. In addition, the themes that emerged overlapped between questions. Thus, categories and questions were not regarded as mutually exclusive and a number of quotations were applicable to more than one theme. Exceptions were included in order to provide a more accurate and comprehensive representation of the findings. The selection of themes was based on the initial aims of the study. The transcriptions were read several times and were coded according to these themes. Sentences, phrases and paragraphs were marked, copied from the text and grouped together in themes. Quotations which could best illustrate the particular view were selected. The different experiences and perceptions were interpreted and discussed in relation to the programme.

RESULTS

Of the 166 anticipated participants, interviews were conducted with 44 ex-patients in total (26.5% response rate). The following obstacles were encountered in tracing the respondents: 19.3% could not be contacted due to problems with the telephone number given (e.g. the number was continuously engaged, ringing or could not be connected); 18.7% were no longer contactable at the number on the discharge summary record; for 12% no phone numbers were available; 10% were not eligible for the study as they did not complete the full programme due to early discharge; 3.6% were not contactable and information regarding relapse status was gathered from collateral sources; 3.6% did not want to participate in the study; 3% were back in rehabilitation; for 2.4% messages were left but not returned.

The relapse status of 34% (n=57) of the population was determined whilst the full interview was conducted on 26.5% (n=44) of the population. This is because 3.6% (n=6) were no longer contactable at the number given but their relapse status was given by collateral sources; 3% (n=5) were back in rehabilitation, thus it was possible to deduce that they had relapsed; 1.2% (n=2) did not want to participate in the study but provided information regarding their relapse status. The group of 44 respondents who were interviewed will be referred to as the sample group.

Fifty-two percent of the respondents were from the 3-week group and 48% from the 4-week group.

Population group:

77% (n=128) are male. The mean age is 41.7 years. 51% (n=84) participated in the 4-week program; 49% (n=82) participated in the 3-week program. 39% (n=64) are married and living with their partners; 33% (n=54) are single; 24% (n=40) are divorced or separated. 54% (n=89) are employed; 37% (n=61) are unemployed; 7% (n=12) are on a disability grant. 60% (n=99) had no previous rehabilitation; 31% (n=51) had been to rehabilitation before and 9% had been to rehabilitation on an outpatient basis (for example at SANCA).

Sample group:

72% (n=41) are male. The mean age of the sample group is 43.9 years. 51 % (n=29) participated in the 3-week program; 49% (n=28) participated in the 4-week program. 23% (n=13) are single; 39% (n=22) are divorced or separated [11% (n=6) were separated/divorced since discharge]; 37% (n=21) are married and living with their partners. 53% (n=30) are employed [19% (n=11) were employed subsequent to discharge]; 42% (n=24) are unemployed [3.5% (n=2) were unemployed subsequent to discharge]; 5% (n=3) are on a disability grant. 58% (n=33) had no previous rehabilitation; 32% (n=18) had previously attended rehabilitation; 11% (n=6) attended rehabilitation on an outpatient basis.

TABLE 1: Comparison of sample group to population

		Population	**Sample**
Age		41.7	43.9
Gender	Male: Female:	77% 23%	72% 28%
Program	3-week: 4-week:	49% 51%	51% 49%
Marital Status	Single: Divorced: Married:	33% 24% 39%	23% 39% 37%
Employed	Yes: No: Disability Grant:	54% 37% 7%	53% 42% 5%
Previous Rehabilitation	No: Yes: Out-Patient:	60% 31% 9%	58% 32% 11%

Note: Variable frequencies do not total to 166 in all cases due to missing data

On demographic characteristics, the sample group corresponds to that of the population group, except for a higher rate of divorce present and lower rate of being single in the sample group.

Quantitative results:

Whilst none of the results were statistically significant, some evidence of interaction among certain variables did emerge. However, a larger sample size is needed to verify these suggestions of significance.

Rate of Relapse:

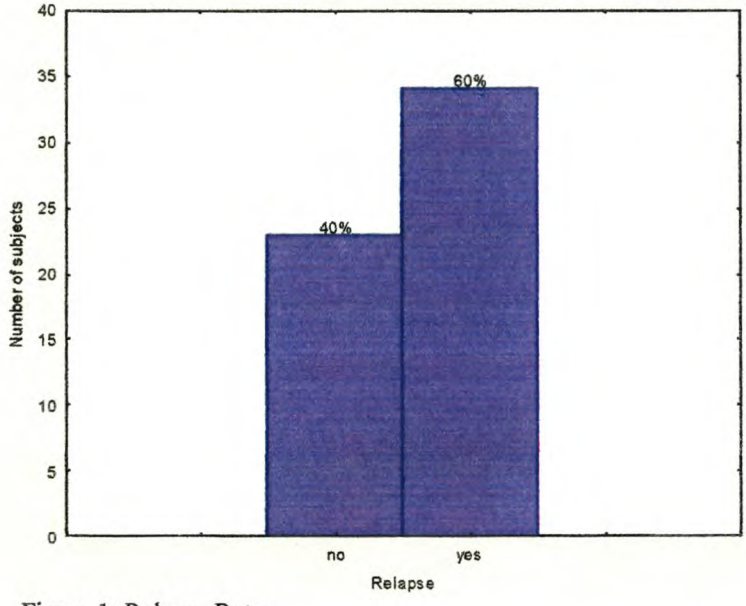

Figure 1: Relapse Rate

Of the 57 respondents, 59.6% (n=34) had relapsed and 40.3% (n=23) had maintained continuous abstinence. Of the 34 respondents who had relapsed according to the criteria used to define relapse, 15% (n=5) had been through significant periods of abstinence and were currently sober and 18% (n=10) were infrequent drinkers or low quantity drinkers.

The mean age of those who had relapsed was 42 years whereas the mean age of those who remained sober was 46 years. There was no statistically significant difference between the two ages.

Participation in 3- or 4- week programme:

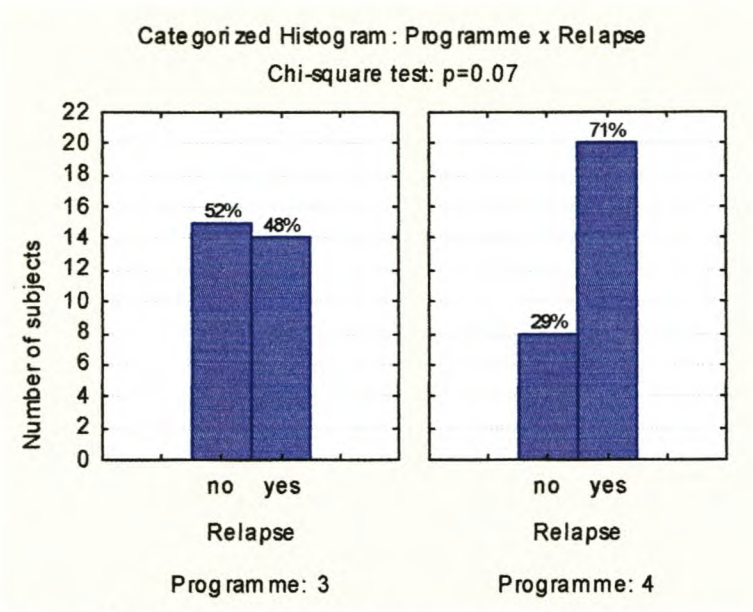

Figure 2: Relationship between programme and rate of relapse

Of those who participated in the 3-week programme, 48% had relapsed compared to 71% of those who participated in the 4-week programme.

Of those who participated in the 3-week programme, 26% had attended aftercare compared to 19% of those in the 4-week program.

No statistically significant relationship was found between age, gender, marital status, employment and previous rehabilitation in the 3- or 4-week programme.

Marital status:

From the results, it seems that being single or divorced/separated may be related to relapse with 64% of divorced/separated respondents and 69% of the single respondents having relapsed, although the results are not statistically significant. No significant relationship was found between those who were married and their tendency towards relapsing.

Employment status:

Some evidence of interaction emerged between employment status and relapse. Although not statistically significant, it seems that employment rate may be related to relapse with 68% of

those who are unemployed having relapsed. Sixty-four percent of those who were employed since discharge still relapsed despite being employed.

Aftercare attendance:

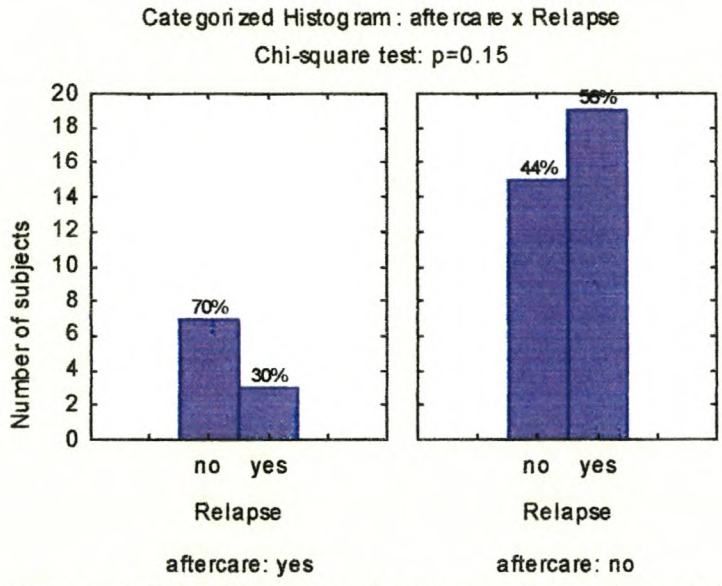

Figure 3: Relationship between aftercare attendance and rate of relapse.

There seems to be a link between aftercare attendance and relapse, although not statistically significant. Of these who attended aftercare, only 30% had relapsed compared to 56% of those who did not attend any aftercare support groups.

Other quasi- independent variables:

Age, gender, previous rehabilitation, police contact, alcohol-related health problems and other medication/substance abuse did not prove to have any statistical significance in relation to rate of relapse.

Impact of programme:

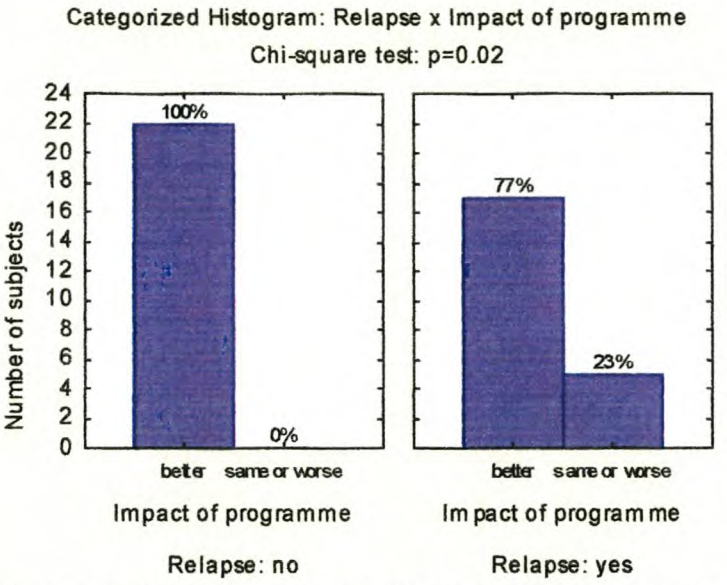

Figure 4: Relationship between the impact of programme and relapse status

Overall, 68.4% (n=39) of the 44 respondents interviewed experienced life as being better subsequent to discharge than it was prior to admission. Seventy-seven percent of the respondents who had relapsed reported an improvement subsequent to admission to NCD.

Qualitative Results:

Across all questions, four main themes emerged each with various sub-themes.

Coping:

'Coping' emerged as a main theme. Thirty-nine percent of the respondents referred to the need to be strong and to have increased willpower in order to cope with their drinking problems. This theme differed slightly between the sober and the relapse group in that the relapse group felt that they were not as strong as they would like to be in dealing with their drinking problem or they felt that they did not have the strength to deal with their alcohol problem anymore whereas the sober group felt they had gained the strength and were feeling strong enough to cope.

A sub-theme emerged in relation to aftercare attendance. The belief of being strong enough to cope on one's own emerged as a barrier to attending aftercare, as 23% of the respondents believed they were able to manage on their own without support.

- "A lot of guys who come from rehab but don't go to support groups and then start drinking again. They feel they can do it on their own. Maybe it's got to do with pride or that they are embarrassed to be labeled".

Forty-five percent of the respondents found it difficult to manage the logistical problems involved in attending aftercare problems (transport and/or work commitments being the main difficulties), which forced them to cope on their own. Fourteen percent of the respondents reported not attending aftercare due to the type of aftercare support service that was being provided in the community (namely, Alcoholics Anonymous). They explained that they did not find this service beneficial and would rather attempt to cope on their own than attend this aftercare programme. Of the 14% who responded in this way, 50% admitted that they would prefer to attend the aftercare service provided at NCD but were unable to due to transport problems and work commitments.

Responses to specific components of the programme:

The next theme centered on the respondents' perceptions of the specific components of the programme – what they found to be helpful and what they have learned from the programme. These results are ranked in order from most to least useful in table 2.

Group cohesion (the experience of being part of a group) and universality (realising that one is not alone) were reported by 41% of the respondents to be extremely beneficial. Specifically, respondents reported that sharing their stories with others in a similar situation; realising that others are experiencing similar difficulties; feeling that they belonged to a group; being supported and experiencing new parts of themselves were beneficial aspects. Being given the opportunity to open up and express one's feelings was reported to have added to the benefits of the programme (20%).

- "The group was great. Different cultures and people come together in one group. We got to know each other well and talk about things I wouldn't even talk about to my best friend. To a total stranger. I got to speak about my fears and things that bother me and not worry that they will speak to anyone else. This gave me peace of mind and it allowed me to open up".
- "Because being an alcoholic you don't want to verbalize your feelings. To be in a group I had to be open. It makes you feel empowered".

The psycho-educational lectures given by the head psychiatrist of NCD (39%), the occupational therapy groups (41%) and the therapeutic psychology groups (25%) were reported to be helpful components. In particular, learning about stress, anger and time management was reported to be useful (21%). The support from the staff in general was also reported to be of value (16%).

TABLE 2: Beneficial Components of Programme

Component	
Group cohesion and universality	41%
Occupational Therapy groups	41%
Psycho-educational lectures	39%
Therapeutic psychology groups	25%
Opportunity to express feelings	20%
Support of staff	16%

Forty- percent of the respondents also found the handouts and notes that were given during the various groups to be of great value in their current life in that they often refer back to them in times of crisis.

A sub-theme centered around aspects of the programme that were disappointing. In general, respondents did not report any aspect that was found to be disappointing. In the sober group, none of the respondents had any complaints whereas 18% of the relapse group found some parts disagreeable. Although these responses were exceptions, the complaints that were made are a valuable contribution in determining the impact of the programme and therefore need to be reported.

Three respondents found it difficult to apply what they had learned in the programme to real life outside: "But, I was shaky when I got out and it was difficult to apply it all in real life because you don't think about it on the spot. In the programme you have time to think and analyse but in life there is no time to stop, you just react on the spot. You feel confident in the programme". "But when I came out I was a little confused. Facing reality. Stikland is a safe environment and it was difficult to adjust".

One respondent felt strongly that individual therapy was required: "I drink because my problems have never been resolved. I needed more in-depth help – to get to the root of my problems. This felt like just putting a plaster on and now the sore is festering. My problems lie deep..."

Four respondents felt that the duration of the programme was not long enough and that going home on weekends was not helpful: "We should not have been allowed out on weekends. To go home was not good. I need to kept away from alcohol totally and get used to being sober. Three weeks is not long enough. The weekends are an opportunity for you to drink. It is not enough time to get used to being sober".

Another sub-theme related to respondents' perceptions and experiences of the programme focuses on the stigma that emerged among 18% of the respondents who had relapsed around returning to NCD for further rehabilitation. Feelings of guilt and shame became evident. These respondents reported being afraid that the staff at NCD would be disappointed and that others would look down on them. "I can't just rock up there and tell them I have relapsed. What will they think?"

Confounding variables:

The third main theme focuses on confounding variables that affect current functioning but are unrelated to the direct impact of the programme. This was divided into two sub-themes. The one focuses on factors precipitating a relapse, which include: family and social problems (41%), unemployment (36%) and stress (23%). Of the family and social problems, divorce and marital problems were reported as the highest precipitant of relapse. An exception emerged whereby 7% reported that they relapsed when they were feeling good, as this is when they felt they were able to drink again. The other confounding variable outlines supportive factors contributing to improved psychological well-being and abstinence. These include: support from family and friends (73%); God and prayer (23%); employment (18%); hobbies (16%); aftercare attendance (14%) and being readmitted to rehabilitation (9%).

Impact of the programme:

The final theme focuses on the overall impact of the programme in terms of increased psychological well-being and a change in lifestyle. Table 3 presents these results in ranked order from most to least reported improvement.

Respondents reported increased self-control (34%), self-esteem (32%) and self-understanding (23%). Improvements in relationships (34%) were also expressed. Specifically, this included better communication and more open, supportive relationships.

- " I could see with my own eyes what alcohol does. I was blind before. The programme opened my eyes"
- " I feel like I can conquer small things now. When I was in the frame of mind of alcohol, the least hassle would make me turn to booze. Now I can think things through rationally".
- "People trust and respect me. They are proud of me"
- " I am at ease with myself".

In addition, a need to teach others and share with them what they had learned also emerged among 14% of the respondents.

Respondents also reported a change in lifestyle. For respondents who were sober this included: increased appetite; increase in exercise; feeling healthier; calmer/not as stressed and taking more responsibility for life (32%).

- "Life has changed totally for me".
- "I have gone through a complete change over".

For those who had relapsed, drinking behaviour was reported to be more manageable (77%). This included: feeling more in control of their drinking; being able to deal with relapses better; being able to pick oneself up again; not drinking at work or during the week; social drinking only; not being "addicted" anymore; the 'downs' being more manageable and not drinking "the strong stuff" anymore. "I am not drinking as much and I feel like I have a bit of control. Before the programme I was not able to go anytime without drinking". "Before I would drink everyday. I had to get hold of alcohol. Now sometimes I don't even feel like it. I am not addicted".

TABLE 3: Impact of programme

Increased self-control	34%
Improvements in relationships	34%
Increased self-esteem	32%
Increased self-understanding	23%
Change in lifestyle (sober)	32%
Change in lifestyle (relapsed) - drinking behaviour more manageable	77%

DISCUSSION

The finding that 60% of the respondents had relapsed confirms the rate of relapse found in previous research (Miller et al., 1990; Shaw et al., 1990; Long, William & Hollin, 1998) . Whilst no statistically significant relationships emerged among any of the variables, suggestions of interactions emerged in the relationships between relapse rate and marital status, aftercare attendance, unemployment and participation in the 3- or 4-week programme. No significant relationships were found between relapse rate and age, gender, police contact, alcohol-related health problems, previous rehabilitation and other substance/medication abuse. For the most part, these findings are consistent with those of previous studies (De Silva et al., 1992; Tucker & Akiko-Gladsho, 1993; McLellan et al., 1994; Miller & Sanchez-Craig, 1996; Campbell et al., 1997; Messina et al., 2000; Moos et al., 2000; Greenwood et al., 2001).

However, with regards to the relationship between gender and relapse, Miller and Sanchez-Craig (1996) and Moos and Moos (2003) did find a gender difference in that women tended to display more positive outcomes than men. The reason for this difference in findings may be due to the small sample size in this study, particularly with regards to women in that only 28% of the sample was women. In addition, prior rehabilitation has been found in previous research to be associated with relapse (McLellan et al., 1994; Medical Research Council, 1998; Messina et al., 2000; Greenwood et al., 2001), whereas in this study, no significant relationship was found. This difference in findings may, however, also be due to the small sample size.

A few of the quantitative findings require further discussion. In accordance with previous research, this study found that being single, divorced or separated is associated with relapse. This confirms the finding that having a life partner contributes to a positive outcome following treatment (Tucker & Akiko-Gladsho, 1993; Miller & Sanchez-Craig, 1996; Greenwood et al., 2001).

Although not statistically significant, unemployment was found to be related to relapse. This was confirmed qualitatively, with many of respondents reporting that being unemployed was a major precipitant of a relapse. This finding is consistent with that of Viviers (1993). However, a number of those who were employed since discharge still relapsed despite being

employed. A possible explanation for this phenomenon is that individuals who have to enter employment following discharge do not have adequate time to integrate the changes initiated during treatment. Work-related difficulties, combined with the stress and obstacles involved in the early stages of recovery may have overwhelmed the individual's ability to cope, thus leading to relapse (Greenwood et al., 2001).

Over half of the respondents in this study who had relapsed did not attend aftercare. This finding echoes those of previous studies, which have explored the relationship between aftercare and treatment outcome, with the majority of these studies reporting beneficial effects of aftercare (Denzin, 1987; Isenhart, 1997; McKellar, Stewart and Humphreys, 2003). These studies report that individuals who have relapsed do not attend aftercare programmes as often as those who are abstinent, if they attend any aftercare at all. They have found that aftercare attendance does cause subsequent decreases in alcohol consumption and other related problems. All the literature on alcohol treatment stresses the importance of aftercare attendance as a means of ensuring continued sobriety and improvements in well-being (Denzin, 1987; De Silva et al., 1992; Moos, 1994; Miller et al., 1995; Campbell, 1996; Visser & Flett, 1998; Messina et al., 2000; Greenwood et al., 2001).

The relationship between the rate of relapse and participation in the 3- or 4-week programme is of interest in that those in the 4-week group appeared to have a higher relapse rate than those in the 3-week group. This finding was somewhat unexpected as those in the 4-week programme have a higher standard of education and also receive longer treatment. These are both variables that according to the literature (Miller & Sanchez-Craig, 1996; Guydish et al., 1998; Greenwood et al., 2001) are predictors of successful outcome. A possible explanation for this difference may lie in the differing rates of aftercare attendance whereby more of those who participated in the 3-week programme had been attending aftercare on a regular basis compared those who participated in the 4-week programme. However, this relationship is not statistically significant and as such a larger sample size would be needed to verify this hypothesis.

Qualitatively, four major themes emerged, each with sub-themes. The four main themes centered on coping mechanisms, responses to specific components of the programme, confounding variables and the impact of the programme. Each of these will be discussed separately.

The first theme focuses on coping mechanisms. This includes the respondents' need to be strong, cope on their own and have increased willpower in order to deal with their drinking problem. This theme emerged in a number of contexts with those who have relapsed reporting that they were not as strong as they would like to be in dealing with their drinking problem whereas the those who were sober reported an increase in strength and willpower.

Denzin's (1987) 'thesis of self-control' may provide some explanation for the emergence of this theme. He purports that the alcoholic believes that he/she is in control of him/herself and the world he/she lives in. Within this belief of self-control lies the denial of alcoholism. The alcoholic drinks as a way of asserting control over his/her world. Thus, relapse occurs when the drinker has tried to take control over his/her life and/or has not surrendered to alcoholism. Drinking, therefore, becomes a symbol of being in control (Denzin, 1987). This philosophy highlights the fact that alcoholics are not in control of their lives and as soon as they fall into the belief that they can control their drinking on their own, they set themselves up for a relapse. Thus, the perception that emerged in this study of 'being strong enough to cope' seems to stem from this need to be in control, thereby enhancing resistance to seeking help and the feeling that aftercare attendance is not necessary. This finding, therefore, supports Denzin's (1987) hypothesis and is found in research conducted by Long et al. (1998); George and Tucker (1996) and Tucker and Akiko Gladsjo (1993).

Barriers to aftercare attendance emerged as a sub-theme. Despite the benefits of aftercare, the problem of getting patients to comply with an aftercare program has been well documented in the literature (Gilbert, 1988; George & Tucker, 1996; Visser & Flett; 1998; Messina et al., 2000; Greenwood et al., 2001; Maisto et al., 2002) and is echoed in this study in that the majority of the respondents did not attend aftercare.

A major barrier to aftercare attendance that emerged was the belief that one is strong enough to cope on one's own. These findings are consistent with those of Long, William and Hollin (1998) where 94.4% of the respondents in their study on barriers to aftercare attendance expressed the belief that they could solve their problems on their own and therefore, did not need to attend aftercare.

In addition, various logistical problems were reported as obstacles to attending aftercare. Many of the respondents reported not being able to attend aftercare due to work commitments and/or transport problems . This finding differs from that of George and Tucker (1996) who found that barriers to aftercare attendance are usually more strongly related to functional (e.g. social influences) rather than structural (e.g. economic, geographic factors) variables. This difference may be due to the fact that George and Tucker's (1996) study was conducted in the Unites States of America where conditions differ to those in South Africa in terms of availability of transport and resources.

The most common form of available aftercare in the community is Alcoholics Anonymous (AA). However, some respondents reported that certain aspects of the AA programme were preventing them from attending meetings and that they did not find this service to be useful. They reported that they would prefer to attend aftercare at Neuro Clinic D but were unable to due to various logistical problems (transport and work commitments). This finding needs to be taken into consideration as it is denying potential aftercare attenders the opportunity of continued support and thus, possibly contributing to the low rate of abstinence.

The second theme that emerged deals with the responses to the specific aspects of the programme that were found to be of value.

Respondents reported the overall experience of belonging to a group to be of great value to them. In particular, group cohesiveness, universality and the opportunity to open up and express emotions were reported to have contributed to a positive experience. Group cohesiveness has been defined by Yalom (1995) as a sense of belonging, acceptance, caring and support within a group context. Because alcoholics usually experience difficulty in expressing emotion, they often suppress and deny emotionality (Denzin, 1987; Moos, 1994; Miller et al., 1995). Thus, a cohesive group allows for self-exposure as members feels safe to explore these intense and painful emotions (Smith, 1996). Respondents reported that they were asked to share their experiences in ways that they have never learned or experienced before and as such they experienced new parts of themselves. In addition, according to many respondents, universality brought about great relief as they realised that their conflicts and problems were shared by others, thereby decreasing their sense of isolation and shame. This realisation is often a powerful incentive for recovery (Yalom, 1995).

A large portion of the respondents found the psycho-educational lectures given by the head psychiatrist of the unit to be extremely valuable. This is consistent with previous research which found psycho-education to be a powerful factor contributing to improved drinking behaviour, increased psychological well-being and a change in lifestyle (Denzin, 1987; Flores & Mahon, 1993). Respondents also found the occupational therapy and therapeutic psychology groups to be beneficial and reported that the support of the staff in general contributed to a positive experience of the programme.

Although criticisms of the programme were the exception, it is interesting to note that those who complained were from the group of respondents who had relapsed. This is possibly due to the tendency of alcoholics to externalise their problems thus, blaming their relapse on deficiencies in the programme (Denzin, 1987).

The third theme includes confounding factors - those that were precipitants of relapse or supportive of abstinence and improved psychological well-being but were unrelated to the direct impact of treatment.

In this study, problematic situations, which set the context for a return to drinking, appeared to fall into areas of family and social relationships, unemployment and stress. The majority of respondents who had relapsed reported starting drinking following a particular stressful event in one of these areas. Most respondents reported drinking as a means of escaping the fears and anxieties associated with the particular problematic situation. Some respondents reported drinking again once they felt positive and that their life was in order. The findings of this study are in accordance with those of previous research (Denzin, 1987; Moos, 1994; Miller, 1996).

It appears that two main factors underlie precipitants of relapse. Firstly, the belief that one can once again control one's life and therefore, one's drinking behaviour and secondly, a craving for alcohol when coupled with stressful situations, which in the past was managed through using alcohol as a means of reducing anxiety and stress. The reason for this is possibly because the individual has not committed him/herself to the identity of being a non-drinker but rather stills identifies with being a 'problem drinker' (Denzin, 1987). Thus, upon discharge from treatment, when confronted with a stressful situation, the likelihood of drinking as a means of coping is high.

In accordance with the literature (De Silva et al., 1992; Tucker & Akiko-Gladsho, 1993; Miller & Sanchez-Craig, 1996; Greenwood et al., 2001), the supportive factors contributing to improved psychological well-being and a change in lifestyle found in this study included: support from family and friends, employment, aftercare attendance, religion and increased self-esteem.

The final theme deals with the overall impact of the programme in terms of psychological well-being and positive lifestyle changes. Overall, 68.4% reported an improvement in the quality of their lives subsequent to discharge. Of particular interest to this study is the fact that 77% of the respondents who had relapsed reported an improvement in psychological well-being subsequent to discharge. Overall, increased self control, self-esteem and self-understanding together with improvements in relationships and coping abilities were reported to be positive outcomes of participation in the programme. These reports are in accordance with the definition of psychological well-being outlined by Bar-On (1988 in Visser & Flett, 1998) outlined above and are consistent with those found by previous studies (MacLachlan & Stein, 1982; Botha, 1986; Denzin, 1987; Shaw et al., 1990; Flores and Mahon,1993; Smith, 1996).

Respondents who were sober reported a change in lifestyle in terms of increases in appetite and exercise, decreased stress and taking more responsibility for their lives. Change of lifestyle for respondents who had relapsed included drinking behaviour that was more manageable. Fifteen percent of the respondents were currently sober although according to the definition of relapse used for this study, they were recorded to have relapsed. Eighteen percent were infrequent or low quantity drinkers. This is consistent with the findings of the Relapse Replication and Extension Project (Miller, 1996) and of Moos and Moos (2003) where it was found that participants were drinking less often, for shorter periods of time and drinking far less when they did drink.

As outlined in the review of the literature, relapse versus abstinence is not sufficient in measuring outcome. This was found in the results of this study whereby 60% had relapsed yet of those who had relapsed, 77% reported improved psychological well-being. This is a significant portion and thus conclusions can be drawn in terms of the overall impact of the

programme on the respondents' subjective experience in terms of psychological well-being and positive lifestyle changes.

This finding highlights the value of the qualitative component of this study because without this additional information regarding perceived improvements following discharge, one would only see a 60% relapse rate which proves not to be a true indication of how the respondents are *feeling* about themselves and their lives at present. This finding, therefore, is consistent with those in the literature in terms of the complexity of defining outcome success solely on the dichotomous classification of relapse versus abstinence (Denzin, 1987; Miller, 1996; Visser & Flett, 1998; Moos et al., 2002) .

An unexpected outcome emerged from the study in that many respondents reported that a follow-up phone call after discharge was extremely valuable. Many of the respondents were grateful for the contact, had the opportunity to have their mistaken beliefs regarding returning to NCD dispelled and felt motivated to return to aftercare. This is consistent with the findings of Clifford et al. (2000) who investigated the relationship between research follow-up assessment interviews and subsequent drinking behaviour. They found a positive relationship whereby subjects who received regular follow-up interviews exhibited better drinking outcomes. It is suggested that discrepancies between current behaviours and desired goals may be highlighted during the follow-up assessment and as a result the respondent may recognise the need to reinstate behavioural change and make a plan for action (Clifford et al., 2000). However, further research is required in order to verify this hypothesis.

Although the quantitative results did not prove to be statistically significant, indications of relationships did emerge which are consistent with previous studies of this nature. Of particular importance, however, was the qualitative data that was collected which has provided an insight into the perceptions and experiences of the respondents. From these findings, it is possible to conclude that despite a relatively low rate of continued abstinence, the programme offered at Neuro Clinic D had a meaningful impact on the general psychological well-being of the respondents and brought about positive lifestyle changes. However, a number of limitations with this study do exist.

Limitations:

Firstly, all the data was gathered via the respondents' self-reports. Collateral information was not obtained and, as such, the data is dependent purely on the respondents' subjective perceptions. The limitations of self-report measures are widely reported in the literature (Shaw et al., 1990; De Silva et al., 1992; McLellan et al., 1994; Miller & Sanchez-Craig, 1996; Long et al., 1998; Visser & Flett, 1998; Greenwood et al., 2001; Maisto et al., 2002; McKellar, Stewart & Humphreys, 2003). In addition, the information collected regarding the respondents' experience of the programme was based on retrospective self-report, which meant that they were required to recall events that could have occurred up to 15 months previously. The data collected, therefore, relies on the respondents' memory and thus, may include distortions or blurring. However, according to Shaw et al. (1990), Guydish et al. (1998) and Moos and Moos (2003), self-reported alcohol-related outcome measures appear to be reasonably valid with the assurance of confidentiality and when the specific amount of alcohol consumed is not the main focus of attention, as was the case in this study.

However, because the researcher was affiliated with Neuro Clinic D, there may have been a tendency for the respondents to report more favorable outcomes than may actually exist and they may have been reluctant to admit that the treatment received has not been effective (Institute of Medicine, 1990). Furthermore, respondents may have been reluctant to criticise the programme if they expected future contact. Thus, the reliability and validity of the responses still need to be approached with caution.

Secondly, a pretreatment measure was not obtained, thus rendering the post-treatment results questionable. As McLellan et al. (1994) point out "patient variables at the start of treatment ... have been considered the most important predictors of patient status after treatment" (p.1141). In addition, knowledge of an individual's status after completing treatment is much more meaningful if it can be compared closely with his or her status prior to treatment (Institute of Medicine, 1990). Thus, because a base line measure was not obtained, it is not possible to compare the respondents' level of functioning prior to treatment with functioning at 12-15 month follow-up. This further limits the reliability, validity and generalisability of the results.

Another limitation of the study is the definition of relapse used, which was a specific threshold imposed for the purpose of the study. This was problematic as it did not take into account the complexity of such a quantification. In this way, a number of respondents who were currently sober but had had periods of drinking which exceeded four weeks had to be classified as having relapsed even if they had been sober for five or six months subsequently. The results, therefore, do not give a clear indication of who is currently abstinent or not. Thus, the results cannot be used to make conclusive statements about the impact of the programme in terms of aiding patients to achieve abstinence.

In addition, follow-up studies of this nature provide a particular challenge in that many of the ex-patients cannot be traced. The researcher experienced the same difficulties as reported in many other studies in contacting the ex-patients of NCD (Gilbert, 1988; Shaw et al., 1990; Campbell et al., 1992; De Silva et al., 1992; Miller et al., 1995; Visser & Flett, 1998; Moos et al., 2000; Greenwood et al., 2001), resulting in a response rate of 26.5%. This small sample size prevents the generalisablity of the results to all patients who have participated in the programme at NCD. Thus, a larger sample is required to verify the suggestion of relationships that emerged and therefore, to enhance generalisability.

Finally, because of the multitude of confounding variables that may have influenced drinking behaviour since time of discharge, it is not possible to claim outright that positive results were due solely to the effectiveness of the programme. In addition, because a control group was not used in this study, any inference regarding the role of treatment in bringing about change cannot reliably be made.

In light of the abovementioned limitations, various recommendations for future research will be presented.

Recommendations:

Although the results of this study suggest that for the respondents interviewed the programme offered at Neuro Clinic D did enhance psychological well-being and bring about a change in lifestyle, overall the programme did not assist the majority to remain abstinent. Thus, if any improvements to the programme need to be made, they should be along the lines of assisting individuals to avoid relapse. It would appear that to do this it would be necessary to

challenge the individual's belief of being able to cope on his or her own and focus on the importance of regular aftercare attendance.

With regards to future research in this area, due to the problems with the conceptualisations of relapse, the focus should instead be on "concepts and models that are more descriptive of the normal course of human behaviour change" (Miller, 1996, p.26). Thus, future research can make use of four clusters of drinking behaviour: mostly abstainers; regular moderate drinkers; occasional heavy (binge) drinkers and high frequency, high quantity unremited drinkers (Miller, 1996). Other scales that can be used could be: sober; transitory relapse but currently sober and total relapse (Visser & Flett, 1998) or abstinent; non-problem drinker; drinking but improved and unimproved (Long et al., 1998).

In addition, the literature shows that the stage of behavioural change that an alcoholic is at influences his or her treatment outcome. Progress following treatment has been found to be directly related to the individual's pretreatment stage of change (Prochaska, DiClemente & Norcross, 1992; Isenhart, 1997). Thus, this impact needs to be considered when investigating outcomes of alcohol rehabilitation and future research should include measures on stage of change, prior to treatment so as to account for this confounding variable (McKellar, Stewart & Humphreys, 2003).

Furthermore, standardized, structured quality of life questionnaires should be used, for example the Psychological Functioning Inventory (Maisto et al., 2002) and the Emotional Quotient Inventory (Bar-On, 1988 in Visser & Flett, 1996) so as to be able to quantify the extent of psychological change. However, qualitative descriptions should always be included to expand on the quantitative results. All of the above measures should be conducted both pre- and post-treatment so that the necessary comparisons can be made. In addition, collateral interviews should be conducted so as to enhance the validity and reliability of the responses

Finally, it is also recommended that a larger sample size be utilised as well as comparative studies of different alcohol rehabilitation programmes be conducted, as this would be highly beneficial in determining the generalisability of the results.

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APPENDIX A – QUESTIONNAIRE

Hello, my name is Lauren Davis from Neuro Clinic D at Stikland Hospital. Do you have a few moments? *(if yes)*. I am a clinical psychology intern doing research on behalf of the hospital. The clinical team at Neuro D is interested in improving the service it delivers and the most important source of information is the people who have been through the programme. Your views are therefore very valuable in helping to improve our service. I would like to ask you a few questions but before I start with the questions I want to explain some things to you.

Firstly, all the information discussed will be reported on an anonymous basis. This means that after this phone call, your name and personal details will be kept totally confidential and will not appear on any documentation.

Your participation is voluntary and if at any time you do not want to continue, you are free to stop the interview without compromising any further treatment at Stikland Hospital. In addition, there will be no further follow-ups/interference from our side unless you specifically request it.

Finally, it is important to bear in mind that this is not intended as an evaluation of you personally but rather an evaluation of our programme - of whether or not we are achieving our goals and providing the best service we can. Do you have any questions?

Are you willing to participate?

How have things been for you since you left the program?

1) Since discharge from Neuro Clinic D, have you used any alcohol?
   (If yes) For how long? How much?
   - less than 30 days altogether
   - more than 30 days
   - do not know how much

2) Have you attended an alcohol support group after discharge?

(If yes) How often?

- at least once a month
- less than once a month
- do not know how much

(if not) Why have you not attended?

3) Do you have a full time job?

(If yes)

- Have you been in that job for more than 2 months?

(If no)

- Why did you change jobs?
- Were you dismissed from your job due to alcohol related problems?
- Have you been dismissed from your job but not due to alcohol related problems?
- Have you had difficulty finding work since discharge not related to alcohol problems?

4) Are you married?

(If married at time of admission) Are you still married?

(If no) Do you think alcohol played a role in your separation/divorce?

5) Since discharge, have you had any contact with the police?

(If yes) What happened?

- was the contact alcohol related?
- what was the offence?

6) Since discharge, have you had any health problems?

(If yes)

- were they alcohol related?

7) Since discharge, have you used any other kinds of drugs or medication (including prescription/nonprescription medication)?
   (*If yes*)
   - what did you use?

8) What about the programme did you find most helpful?
   (*then ask about the different parts)*
- Psychology group
- Occupational Therapy group
- Pastoral group
- Social work group
- Nurses group
- Professor Pienaar's lectures

9) In what ways specifically did you find it helpful?

10) Did anything in the programme disappoint you?
    (*if yes)* What was it? Why?

11) What is the thing that you remember most about the programme? Why?

12) What are the things you have learned/gained from the programme that has contributed to your well-being?

13) Do you use parts of the programme now when you are experiencing difficulties? If so, what do you use?

14) (*Depending on answer to question 1)*
    a. Were there other factors that have helped you to stay sober e.g. new supportive relationship, individual therapy, new job etc. that were not necessarily related to the programme? (*To what to you give credit for staying sober?)*

OR

b. Were there other factors that precipitated a relapse e.g. work stress, death of loved one or other life stressors that were not necessarily related to the programme? (*The times that you did use alcohol, why was that?)*

15) Would you say you are feeling better/worse/same **after** the programme than you were **before** you came to Neuro Clinic D? In what way are you feeling better/worse/same?