Quality Of Life And Disability In Alcohol And Drug Dependent Patients Undergoing Treatment At Depaul House

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Quality of life and disability are important indices that may help change the perception, treatment and care of those with alcohol or drug dependence problem. A cross-sectional survey was done among 25 drug and 25 alcohol dependents consecutively admitted to a community based residential withdrawal service in Melbourne, Australia to assess their quality of life and disabilities using the World Health Organisation Quality of Life (WHOQoL)-Bref and the World Health Organisation Disability Assessment Scale (WHODAS) questionnaires. The quality of life of the sample population was found to be significantly poorer than the general population. The scores on quality of life and disability measurements in the group of patients with alcohol dependence were similar to the other drug dependent group.

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Drug and alcohol dependence are chronic relapsing disorders. There are many harmful and disabling effects from these disorders, not only to the users but also to their families and to the society in general. For some patients, entry into treatment occurs at a time of withdrawal from drugs following the development of dependence. Individuals admitted to a withdrawal service have often been using drugs for many years and are frequently ill.

In 1997, over 3,600 Australians died due to the effects of alcohol. Males (59%) were more likely to drink regularly than females (39%). Using the National Health and Medical Research Council guidelines (1992) and the data from the 1998 National Drug Strategy Household Survey (NDSHS), it was suggested that at least 7% of males and 4% of females were drinking at hazardous or harmful levels in Australia.[1,2]

Results from the 1998 NDHS suggest that 46% of the Australian population had used an illicit drug sometime, while 23% had used at least one illicit drug in the preceding 12 months. Marijuana was the most widely used illicit drug followed by the non-medical use of pain-killers / analgesics and hallucinogens. With regard to heroin use, those aged between 20 and 29 years have the highest rate of lifetime use with males more likely to use than females. In 1997, 2.8% of all drug-related deaths were due to opiates. The majority of opiate attributed deaths (79%) were in the 20 to 39 year age group.[2]

Drug and alcohol dependence is thought to cause considerable disability and changes to the quality of life of an individual. These are important indices that may help change the perception, treatment and care of those with a dependence problem. Muldoon et al., describe that there are over 1000 new articles indexed annually under the heading "Quality of Life" (QOL).[3] However, QOL of alcohol and drug dependents is scarcely researched. QOL measurement can be seen as one way of providing a more accurate assessment of the broad range of health changes in drug and alcohol dependents. They could be used to measure the benefits and costs that may result from treatment. Several studies show that doctor's perception of QOL differs substantially from those of patients.[4,5] Thus it is important to take the patient's perspective into account when assessing QOL.

Chaturvedi et al. suggested that improvement in QOL might influence long-term recovery among alcohol dependents.[6] QOL is also thought to play a strong role as a prognostic indicator for relapse of alcohol dependence.[7] If follow-up treatment is not provided or accepted as recommended, rapid relapse is the rule.

Disability has various descriptions. Nagi describes it as, "the inability or limitations in performing social roles and activities such as in relation to work, family or to independent living".[8] Multiple relapses and sustained drug use frequently lead to disability and loss of quality of life. Disabilities and quality of life issues may differ from individuals depending on the type of substance used or other individual demographic characteristics.

The Depaul house is a community based residential drug and alcohol withdrawal unit with 12 beds. It is a medicated withdrawal unit and is part of the drug and alcohol service of St. Vincent's Hospital serving the

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east, north and western regions of metropolitan Melbourne as well as other parts of the state of Victoria in Australia. Depaul house admits both male and female patients who are above the age of eighteen and who are medically and mentally stable. The average length of stay for most patients is 5 days. The treatment staff of the unit, include a part-time resident medical officer, a nurse manager, nurses, welfare workers and volunteers.

The aim of this study was to assess the quality of life and disabilities of alcohol and drug dependents compared with the general population as well as to compare these variables between the substances.

Materials and Methods

The study was conducted over a three month period from December, 2002 to March, 2003. Prior to this, the interviewer familiarized himself with the instruments to be used. Approval for the study was obtained from the St. Vincent's Hospital (Melbourne) Human Research Ethics Committee in concordance with the requirements of the National Statement for the Ethical Conduct in research involving humans (1999). Patients were informed of the research on admission and were approached on the second or third day of their admission by the researcher, when they were given more information verbally and invited to participate. A total of 54 patients were approached and 50 agreed to participate after reading the participation information and signing the informed consent. The four who refused to participate explained that they had court cases pending and that in the participation information, it was stipulated that the research files may be subpoened by the court.

Demographic data was collected from each participant with regards to their age, gender, marital status, type of accommodation, occupation (if any), educational level, drug use including primary drug of dependence and other drugs of dependence (if more than one is used), duration of use, route of administration, and quantity used per day in the month prior to admission. Enquiry was also made into the number of previous treatments for drug or alcohol withdrawal and the nature of this treatment, as well as the presence of any physical and / or mental illnesses and any prescribed medication including the indications for this medication.

Participants were then administered a Leeds dependence scale. The Leeds Dependence Questionnaire (LDQ) is a 10 item, multiple choice, self-completion questionnaire, designed to measure dependence upon a variety of substances with a high reliability and validity. Raistrick et al suggest that an LDQ score of 20 or more would approximate to severity of alcohol dependence questionnaire (SADQ)'s 'severe dependence'.[9]

Participants also answered the *Australian* WHOQOL-BREF which is a WHO brief quality of life instrument. It contains 26 items comprising one item from each of the 24 facets contained in the WHOQOL-100, plus two items from the overall quality of life and general health facet. The questions reflect four domains, namely, the physical and independence domain, the environment domain, the psychological domain and finally the social relationship and body image domain. There are also two items that are examined separately: question 1 asks about an individual's overall perception of quality of life and question 2 asks about an individual's overall perception of their health. The reliability and validity of the WHOQOL has been studied and found to be high in an Australian population.[10]

A General Health Questionnaire (GHQ-12), which is a self-administered screening test designed to identify short-term changes in mental health (depression, anxiety, social dysfunction and somatic symptoms) was also administered. The GHQ-12 has a sensitivity of 89% and a specificity of 80%.[11]

Disabilities were measured using the WHO Disability assessment schedule (WHODAS). The version used was the 36-item interviewer-administered version. The WHODAS is devised to assess the activity limitations and participant restrictions experienced by patients irrespective of their diagnosis. Difficulties are assessed in the domains of understanding and communicating, getting around, self-care, getting along with people, life activities and participation in society.[12]

Results

A database containing demographic information, quality of life, and level of disability measured was constructed using SPSS files. Analysis utilizing chi-square and t-test was performed comparing the outcome variables (QOL and Disability) in those with alcohol dependence and those with other primary drug dependence. A total of 50 patients were recruited, 25 were alcohol dependents and 25 had history of drug dependence. Of the 50 interviewed, 16 were female and 34 male. This reflects the admission pattern and bed distribution of the Depaul house The overall mean age of the total population studied was 36.3 (SD: 8.8). The mean age of the alcohol group was 39.8 (SD: 7.8) and the drug dependent 32.8 (SD: 8.6). The distribution according to type of drug abused is as in Table 1. All those who used heroin or amphetamines reported using it intravenously. There were considerable numbers who were polydrug users but reported one primary drug that their admission was related to.

The overall mean age of first abuse of drug or alcohol for the entire group was 18.5 years. The mean for the alcohol group was noticeably younger at 17.7 and for the drug group at 19.2. Ninety four percent (n=47) of the sample scored more than or equal to 12 on the GHQ suggesting caseness. Twenty four were from the alcohol group and 23 from the drug group. Seventy eight percent (n=39) of the total sample scored more than 20 on the LDQ suggesting severe dependence and again there was no significant difference between the two groups (alcohol n=18 vs drug n=21).

The overall mean disability score derived from the WHODAS was 2.81. The overall mean disability score for the alcohol dependent group (2.81) and the drug dependent group (2.82) showed no statistical difference. A comparison was made in respect to functioning across the six domains of the Disability Assessment Schedule. The results of this are depicted in Table 2 and show no statistical difference between the two subject groups in any of the domains.

The overall mean scores for WHOQOL-Bref were also not statistically significant between the alcohol (38.83) and the drug (38.33) dependent groups. The mean score of each domain of the WHOQOL-Bref was then compared with results from the community sample studied in the Victorian Validation Study.[10] This comparison is described in Table 3.

A comparison of the domains between the two groups (alcohol and drug dependents) showed no statistical difference in the individual domains or factors measuring quality of life as is shown in Table 4. A cross comparison was done using chi square for the two groups in relation to the GHQ and LDQ scores with the overall scores of the WHODAS and the WHOQOL-bref. No significant difference was found between the two groups (P>0.05).

Discussion

Health and social problems related to substance use are often not identified until they have become chronic and interfere significantly with the health and life of individuals and their families. Most treatment resources are concentrated on management of withdrawals and dependence but little focus on the quality of life and disabilities of those with a dependence. The assessment of disability is an essential part of clinical assessment complementing the diagnostic formulation.[13]

The results of this study have managed to show that those with dependence to drug or alcohol have a significantly poorer quality of life compared to the general public, as the first hypothesis suggested. However the alcohol and drug groups are similar in their levels of disability and quality of life disproving the second hypothesis. This was true for each individual domain or factor of the Quality of Life measure and the Disability measure used. Although not significant, the drug dependent group seemed to score higher in the domains of getting around, getting along with others in the disability scale and social relations of the Quality of Life questionnaire. This might be explained by the need of drug dependents to maintain contact with others in order to obtain their drugs and often use it in the company of others.

Cross comparison studies showed no relationship between severity of dependence or psychological

caseness (suggested by GHQ scores more or equal to 12) with quality of life or disability for both groups. Reiger et al. showed that among those with an alcohol disorder, 37% have a comorbid mental disorder and for those with a drug disorder (other than alcohol), 50% had at least one other mental disorder.[14] A study done at the Depaul house using the Mini-SCID questionnaire to derive DSM-IV diagnosis found 57% of drug and alcohol dependents in treatment had a past history of an Axis 1 diagnosis [Shaw J: unpublished data].

Although there is a lack of research into disabilities of those with a dependence disorder, Adlaf et al. in their study on substance use and work disabilities among a general population suggest that there is a significant association between work limitation and substance use.[15]

Quality of life and disability measurement can be viewed as a broader assessment of patients with a drug and alcohol dependence. As has been reported earlier, doctor's perception of quality of life differs substantially from those of patients.[4,5] Quality of life and disability measure should be combined with traditional clinical and biochemical assessments. This small study has shown that the WHOQOL-bref and the WHODAS are useful tools in these assessments for a population with a dependence problem.

Cheyne A and Kinn S suggested that quality of life measure is useful tool in addictions treatment. They found that it enhanced communication between counsellor and service user and provided a constructive focus for the counselling process of those with an addiction.[16] Limitation of this study is that it is a single cross-sectional assessment. A longitudinal assessment may provide a better assessment of the quality of life and functioning. The number of subjects interviewed was small and was partly due to the fact that the primary researcher was only at the location for a total of six months. Also, normative results on disabilities using the WHODAS were not available and thus a comparison of disabilities between the sample and the general population was not done.

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REFERENCES

1. 1992 National Health and Medical Research Council guidelines. Available at: nhmrc.gov.au/ethics/human/conduct/guidelines. Accessed 15 February 2003.
2. 1998 National Drug Strategy Household Survey. Available at: http://www.aihw.gov.au/publications/health/ndshs98/ndshs98.pdf. Accessed 30 July 2006.
3. Muldoon M, Barger S, Flory J, Manuck S. What are quality of life measurements measuring? British Medical Journal 1998: 316: 542-545.
4. Slevin M, Plant H, Lynch D, Drinkwater J, Gregory WM. Who should measure quality of life, the doctor or the patient? British Journal of Cancer 1988; 57: 109-112.
5. Pearlman R, Uhlmann R. Patient and physician perceptions of patient quality of life across chronic diseases. Journal of Gerontology 1988; 43: 25-30.
6. Chaturvedi S, Kirthana R, Desai M. Quality of life and alcoholism: what aspects are perceived as important? [abstract] Quality of Life Research 1997; 6: 632.
7. Foster JH, Powell JE, Marshall EJ. Peters TJ. Quality of life in alcohol dependent subjects – a review. Quality of Life Research 1999; 8: 255-261.
8. Nagi SJ. An epidemiology of disability among adults in the United States. Millbank Memorial Fund Quarterly 1976; 54: 439-467.
9. Raistrick D, Bradshaw J, Tober G, Weiner J, Allison J, and Healey C. Development of the Leeds Dependence Questionnaire (LDQ). A questionnaire to measure alcohol and opiate dependence in the context of a treatment evaluation package. Addiction 1994; 89: 563-572.
10. Australian WHOQoL- Bref. Available at: http://www.ncptsd.unimelb.edu.au/whoqol/chapter4.htm. Accessed 17 February 2003.
11. Goldberg D, Williams PA. User's Guide to the General Health Questionnaire. NFER-NELSON Publishing Co. Ltd. Windsor, Berkshire, UK, 1988.
12. World Health Organization. Development of the WHO Disability Assessment Schedule II (WHODAS II), 2001.
13. Chopra P, Couper J, Herrman H. The assessment of disability in patients with psychotic disorders: an application of the ICIDH-2. Australian and New Zealand Journal of Psychiatry 2002; 36: 127-132.

14. Regier DA, Farmer ME, Rae DS, Locke BZ, Keith SJ, Judd LL, Goodwin FK. Comorbidity of Mental Disorders with Alcohol and Other Drug Abuse. Results from the Epidemiologic Catchment Area (ECA Study). Journal of American Medical Association 1990; 19: 2511-2518.
15. Adlaf EM, Smart RG, Walsh GW. Substance Use and Work Disabilities among a General Population. American Journal of Drug and Alcohol Abuse 1992; 18: 371-387.
16. Cheyne A, Kinn S. A pilot study for a randomised controlled trial of the use of the schedule for the evaluation of individual quality of life (SEIQoL) in an alcohol counselling setting. Addiction Research and Theory 2001; 9: 165-178.

Table 1. Type of Drug Used

	Frequency (n)	Percentage (%)	Cummulative %
Alcohol	25	50%	50%
Heroin	13	26%	76%
Marijuana	9	18%	94%
Amphetamines	3	6%	100%
Total	50	100%	

Table 2. Comparison of Domains of the WHODAS

	Alcohol sample	Drug sample	Significance
Domain 1 (Understanding & communicating)	2.81	2.73	p>0.005
Domain 2 (getting around)	2.36	2.45	p>0.05
Domain 3 (self-care)	2.60	2.44	p>0.005
Domain 4 (getting along with others)	2.62	2.69	p>0.005
Domain 5 (household & work activities)	2.77	2.87	p>0.005
Domain 6 (participation in society)	3.68	3.77	p>0.005

Table 3. Domain Scores of the WHOQOL Compared with Results of the VVS Community Group

Domains	Community (VVS)	Drug & Alcohol dependents	Significance
Physical	79.00	41.35	P<0.005
Psychological	72.63	34.83	P<0.005
Social relations	72.15	34.83	P<0.005
Environment	74.83	43.31	P<0.005
Item 1 (QOL)	4.31	2.28	P<0.005
Item 2 (health)	3.64	2.20	P<0.005

Table 4. Comparison of the Domains of the WHOQOL-bref

Domains	Alcohol group	Drug group	Significance
Physical	43.00	39.71	p>0.005
Psychological	34.16	35.50	p>0.005
Social relations	33.66	36.00	p>0.005
Environment	44.50	42.12	p>0.005
Item 1 (QOL)	2.21	2.24	p>0.005
Item 2 (health)	2.18	2.25	p>0.005