

A preliminary review of an outpatient dual diagnosis recovery group programme

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Abstract: *The complexities of providing services suited to meet the needs of people with dual diagnoses are familiar to most professionals across mental health, substance usage and medical settings. This article discusses an ongoing recovery group therapy programme designed to address the psycho-educational and therapeutic needs associated with dual diagnoses among a diverse and complex outpatient population. As a means of addressing the multifaceted needs that characterise dual diagnoses, outpatient groups have been provided over the course of 18 months. This article presents some initial considerations resulting from observations of the therapeutic benefits of the groupwork for this challenging and often-overlooked population. Benefits of groupwork among this population and implications for good practice are discussed.*

Keywords: *dual diagnosis; groupwork; recovery; harm reduction; integrated treatment.*

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Introduction

Current estimates in the UK suggest that one third of service users with serious mental illness (SMI) have concurrent substance misuse conditions or 'dual diagnoses' (Department of Health (DoH), 2002). Although implying homogeneity, the term 'dual diagnosis' embraces a complex and varied range of experiences and histories, meaning that these conditions are rarely 'dual', but more characteristically 'poly', with people experiencing multiple complex needs.

Services for this group have often been disjointed and ill designed to address their multifaceted circumstances (Bellack et al, 2005). Often the traditional practice of treating dual disorders separately has proven ineffective, regardless of whether substances or mental health concerns were given priority (Minkoff, 2002). Substance use, often beginning at a young age, also compounds some of the relevant prognostic factors (Bellack et al, 2006; Daley et al, 1992; Kessler, 2004). Consequently, service users with dual diagnoses are frequently perceived as complicated and treatment-resistant, making them a challenging, and sometimes an avoided patient population (Moore and Rassool, 2006). A fundamental challenge facing the array of professionals working with people with dual diagnoses involves the integration of both mental health and substance-related practice in order to provide meaningful services to meet the complex spectrum of needs that characterise dual diagnoses.

A consensus on elements essential for effective dual diagnosis treatment appears to support the integration of mental health and substance misuse interventions; that is mental health and substance misuse problems being treated at the same time, in one setting, by one team (Mueser et al, 1992; Cleary et al, 2008; Weiss and Griffin, 2007; Ziedonis et al; 2008). Research data suggest that those who receive integrated treatment have better clinical outcomes (Drake et al, 1993; Drake et al, 2001; IOM, 2005; SAMHSA, 2005). A primary challenge facing the health care community working with people with dual diagnoses is, then, to deliver integrated mental health and substance misuse practice in a clinically effective way in an era of diminishing funding. With this in mind, the authors have embarked on providing integrated services for dual diagnoses through a ten-week outpatient recovery group programme for service users with dual diagnoses.

Much of the focus of dual diagnosis work has been on interventions

delivered at the individual level. Evidence from community samples in the USA and Canada suggests that group therapy programmes can be successfully utilised in the treatment of dual diagnosis service users. These programmes, which tend to rely on an abstinence model, have demonstrated positive outcomes with long term reductions of actual harm (to self and others) and symptoms of SMI (Weiss et al, 2007; Bellack et al, 2006).

Therapeutic groups have a long tradition in both mental health and substance misuse treatment. Groupwork has long been regarded as an important means of facilitating interactions among vulnerable populations for whom such outcomes might not otherwise occur (Yalom, 2005). While various types of groupwork have been evaluated, such as mental health (Baker, 1995), 'mindfulness' (Chadwick et al, 2005) 'hearing voices' groups (Coupland et al, 2002), and 'recovery groups' (Morgan and Carson, 2009), evidence for the effectiveness of dual diagnosis groups in the UK is lacking.

This article presents a contextual and clinical consideration of the process of providing a ten-week group therapy programme for people with dual diagnoses. The group is based on the concept of recovery, and utilises a harm-reduction model. Preliminary observations and patterns will be discussed.

The concept of recovery

The term 'recovery' has historical routes in the Twelve Step tradition of recovering from addiction and has focused on abstinence. Attainment of recovery/abstinence is seen as an idiosyncratic and spiritual process linked with an emphasis on sharing the lived experience of hardship and resilience, rather than being a medical treatment or didactic or taught process (Kurtz et al, 1992). In the UK, the concept of recovery has a different meaning for mental health service users (Anderson et al, 2003). Rather than attaining diagnostic or other medically derived criteria it focuses on personal ('lived') experiences (Shepherd et al, 2008; Slade et al, 2008).

Deegan (1998), a mental health 'consumer' defined recovery as both a process and an outcome:

Recovery is a process, a way of life, an attitude, and a way of approaching the day's challenges. It is not a perfectly linear process. At times our course is erratic and we falter, slide back, regroup again...The need is to meet the challenge of the disability and to re-establish a new and valued sense of integrity and purpose within and beyond the limits of the disability; the aspiration is to live, work, and love in a community in which one makes a significant contribution. (p. 15)

The application of 'recovery' may thus pose some potentially confusing and confounding expectations when applied to clinical work involving both mental health and substance-related outcomes. Despite the consensus on the value of integrated treatment for dual diagnoses discussed earlier, there is a lack of compelling support for any single psychosocial treatment model (Barrowclough, 2010; Clearly et al, 2008). The DOH (2002) and Ziedonis et al, (2005) suggest that psychosocial treatment should emphasise and aim to reduce substance use which should result in a consequent improvement in mental health outcomes. In keeping with the mental health service user conceptualisation of recovery, the dual diagnosis recovery programme is not about 'cure' or necessarily achieving abstinence, as espoused in the 12 Step Tradition (although that can be a welcomed outcome). It is about attaining the four key concepts of recovery identified by Anderson et al, (2003): hope, self determination, meaning in life and responsibility. The programme does draw on the 12 step recovery approach by emphasising the sharing of lived experience but rather than a focus on abstinence it is underpinned by a harm reduction approach.

The harm reduction approach focuses on individual rights and self-determination, rather than abstinence as a primary focus of treatment (Des Jarlais, 1995; Riley and O'Hare, 2000). The aim then, is for service users to be fully informed regarding potential risks associated with usage, and for them to reduce or manage their substance use when abstinence is not among their objectives. The DoH (2002) asserts that an approach based on engagement, harm reduction and motivation enhancement is an appropriate initial goal when working with people with a dual diagnosis.

Within the recovery group programme context this approach has the potential to provide service users with the opportunity to view the inconsistencies between their behaviours and beliefs in a non-threatening environment. Unlike some group programmes

underpinned by an abstinence model, the harm reduction approach allows for continued group participation regardless of current substance use (Riley and O'Hare, 2000). This has proven congruent with the therapeutic nature of the dual diagnosis group programme, which aims to provide participants with support and an impetus for change with a view to reducing their substance use and mental health symptoms.

Recovery principles have been applied in ways that emphasise autonomy and wellness as they are defined by the individuals involved. Positive regard and empowerment are essential elements of each session (Anthony, 1993; Mechan et al, 2008; Morgan and Carson, 2009). Participants' wellness was more emphasized than compliance with medical treatment as an end in itself.

Eligibility and recruitment for the Recovery Group Programme

Eligibility for group participation included adults (ages 18-65) receiving mental health treatment for a severe mental illness and also misusing substances within two cities accessing services from a NHS Mental Health Care Trust. However to ensure that robust evaluation was possible more stringent criteria were required: Participants are required to meet DSM IV criteria for co-morbid serious mental illness (SMI) and alcohol and/or drug abuse or dependence. Participants needed to be able to read and speak English to the level necessary for completion of consent procedures and to participate meaningfully in group discussions. Research with the Group Programme was designed and conducted in compliance with NHS Ethics Committee authorisation.

Mental health practitioners in the study area were made aware of the group recovery programme, which is an aspect of standard care for dual diagnoses, and they were asked to identify service users meeting the eligibility criteria on their caseloads who might be interested in participating in the groups.

Potential participants were provided with written information about the group programme itself – its objectives and details of how it would work (for example, time, location, contact details). They were informed of the group's participation in a research study involving evaluation and explicit consent, in addition to its therapeutic function. Individual

participation was strictly voluntary. They were also made aware of their prerogative to withdraw from group treatment at any time they wished.

For those who chose to join the group programme and were willing to be part of the evaluation project, signed consent was obtained (by the Chief Investigator). Those who chose to participate in the evaluation process were then asked to complete the following four screening instruments:

- The Brief Psychiatric Rating Scale (Overall and Gorham, 1962)
- The Hospital Anxiety and Depression Scale (Zigmond et al, 1983)
- The Maudsley Addiction Profile (Marsden et al, 1998)
- The Warwick-Edinburgh Mental Well-Being Scale to measure an overall quality of life (Tennant, Hiller, Fishwick et al, 2007).

The screening instruments used were chosen in order to measure changes pre- and post-group treatment by way of ascertaining participants' symptomatology in both mental health and substance-related realms. The Mental Well-Being Scale was chosen in order to determine participants' perceptions of their overall quality of life pre- and post-group treatment.

Participants may enter therapeutic groups upon being referred and after completing the screening instruments. Ideally, they commence with newly formed groups for the entire ten-week programme. If necessary, they may join an ongoing group, and switch to another ongoing group in order to continue participation for the intended ten week duration if they had not yet attended ten sessions.

Recovery Groupwork with Service Users with Dual Diagnosis

The group programme, which is ongoing, is based on protocols from existing clinical manuals (Bellack et al, 2006). Each hour-long session follows a broadly consistent structure and includes the following topics:

- Discussion of relevant harm reduction strategies, including individual goal-setting
- Establishing realistic and specific goals for decreasing substance use between sessions
- Discussion of relevant mental health difficulties and strategies
- Acknowledgement of incremental changes to promote affirmation among group members

'Life line work' (Roberts et al, 1999), incorporating activities such as affirmation cards, constructing life lines and life story telling. This aimed to provide a means of enhancing insight and understanding of individuals' personal experiences, including mental health, life events, trauma, and substance use histories.

Group sessions are facilitated by mental health nurses trained in group therapy. Group co-facilitators are mental health clinicians or mental health nurses. Through the combined cognitive, behavioural and psycho-educational content of group discussions, sessions are intended to provide both support and an impetus for change for participants. For example, in keeping with harm reduction principles, if participants choose to continue using substances during the group treatment, then that does not preclude their inclusion or participation, unless their behaviour is so impaired as to prove detrimental to the group's function.

The findings presented in the remainder of this article relate to the first twenty participants who completed the first programme. Table 1 provides an overview of the demographic and clinical characteristics of participants who completed the first group programme. Fourteen out of twenty participants completed the programme, an attrition rate of 30%. Attrition rates from group participation appeared to be primarily linked with factors relating to high rates of usage-related relapses, and social issues such as unstable housing, criminal charges, and chaotic lifestyles.

Table 1
Demographics of Group 1 Participants (N=20)

Male	60% n=12
Female	40% n=8
Average Age of Males	44 yrs Range: 22-63
Average Age of Females	37 yrs Range: 25-60

The group participants represent a range of ages and conditions. Not only are their lifestyles diverse, but their mental health and substance-related conditions are also typically complex. For example, groups sometime comprised members with unmedicated psychotic conditions as well as active alcohol or illicit substance usage. Mood disorders were prevalent among group participants, including both depression and bipolar disorder. This is congruent with current mental health profiles

(Graham et al, 2003; Krishnan, 2005; Meuser et al, 1992). Table 2 provides information relevant to the patterns of group participants' dual diagnoses. As noted, the majority of participants' substance usage was typically complex, in that multiple substances were typically involved.

Group participants presented with a complex array of mental health conditions, substance use patterns and other associated social difficulties. For most, substance use had begun early, and involved an array of substances as well as early problems resulting from use. For many, use served as a means of self-medication. A noteworthy pattern emerged in which approximately 15% of the participants disclosed histories of childhood traumas that had not been previously addressed in mental health or substance use treatment. Disclosures were from both male and female participants. These histories appeared particularly relevant to use of substances for self-medication. While overlooked in members' previous treatment, these disclosures are congruent with the literature on substance use and serious mental illness (Triffleman, 2003; Sadock & Sadock, 2007; Parrish, 2010).

Table 2
Pattern of group participants' dual diagnosis

	%	n
<i>Primary psychiatric diagnoses</i>		
Schizophrenia & related psychotic disorders	60	12
Mood Disorders	25	5
Anxiety Disorders	15	3
<i>Common Single Substances</i>		
Alcohol	15	3
55	11	
Cannabis	40	8
Opiates	30	6
Stimulants	15	3
<i>Common Substance Combinations</i>		
Alcohol & cannabis	35	7
Cannabis & stimulants	25	5
Opiates & stimulants	15	3
Alcohol & benzodiazepines	25	5

Discussion

Throughout the ten-week group process, the development of relationships between group members proved a powerful influence for positive change. From both verbal and written feedback, participants consistently valued the level of trust and emotional safety they experienced within the group. In keeping with the values of groupwork (Doel and Sawdon, 1999; Yalom, 2005), participants consistently commented on the benefits of feelings of belonging and affiliation with the group. Particularly in relation to the social exclusion often experienced by people with mental health and substance-related conditions, the benefits of a sense of inclusion and safety are noteworthy.

A number of benefits resulted from the dual diagnosis recovery group. For many service users, the actual experience of speaking in front of the group was a major achievement. They were able to share their experiences, knowledge and wisdom with fellow group members in ways that were affirming and empowering. A secondary benefit is that clinical practitioners were in positions to appreciate service users' ability to articulate within the group setting in ways that were congruent with self-determination and positive change. The recovery group provided an opportunity to experience a positive, hope-filled supportive network for individuals with serious mental illness and substance use issues.

While statistical analysis of data is ongoing, several noteworthy patterns emerged from the group treatment programme.

- Retention rates for participation remained high at around 60%
- Participants developed a positive and cohesive group dynamic across the process
- Participants reported improved mental health functions during the group treatment process
- Participants reported diminished reliance on substances during group treatment

This group experience provided a forum to examine the antecedents, behaviours and consequences of related dual diagnosis issues. As the group gained cohesion, participants were increasingly able and willing to discuss activating events, the associated thoughts, feelings, images or beliefs, and how each individual constructs their associated

emotional and behavioural consequences of their substance usage and mental health difficulties. More effective ways of coping with substance use/misuse and mental health issues were discovered and discussed within the group. Personal goal setting and plans for the future are also introduced in the group process. The beliefs about the use of substances in relationship to mental health were examined. This required considerable clinical sensitivity, as very complex beliefs had often developed over years of multiple substance use/misuse. However, an empathic discussion about a matter of concern tended to bring about changes much more quickly than a challenge from a group facilitator.

Conclusions

The integration of mental health and substance misuse interventions to meet the complex needs of individuals with serious mental health problems who use alcohol and drugs represents an ongoing challenge for service providers. Negative experiences of ineffective treatments further complicate service users' approaches and expectation of treatment outcomes (Drake et al, 2001). Both mental health and substance misuse treatment services have tended to address only those clinical priorities specific to one or the other problem area. Referrals for substance use treatment have sometimes been restricted only to those service users perceived as being sufficiently engaged and deemed 'worthy' of such essential services. Likewise, substance misuse services have typically required service users to be sufficiently 'motivated' for change as a prerequisite for providing mental health treatment, thus creating something of a clinical 'Catch-22' for all concerned.

Integrated treatment for dual diagnoses should be consistent and comprehensive, where both the mental illness and the substance use disorder are treated simultaneously in a coordinated manner with interventions that address both illnesses (Drake et al, 2001). Ideally, in this model of care, health care professionals working in one clinical setting provide appropriate treatment for both disorders simultaneously. Furthermore, groupwork provides an innately coherent means of providing this objective.

The disclosures of early trauma among group members, and the safety in which those disclosures were discussed appears a particularly

noteworthy outcome of the Dual Diagnosis Group Programme thus far. The group process offers a means of approaching this outcome in a way that appears to have been effective for this group of service users with complex needs, and to lend itself to improved practice in the future. For that reason, the authors considered the relevance of the group participants' trauma histories sufficiently important that the preliminary discussion of these findings appeared worthwhile for research as well as clinical purposes. Meanwhile, the Dual Diagnosis Group Programme will continue to develop and the programme is currently considering expanding the groupwork initiative with active service user involvement in that planning process.

References

- Anderson, R., Caputi, P. and Oades, L. (2003) The experience of recovery from Schizophrenia: towards an empirically validated stage model. *Australian and New Zealand Journal of Psychiatry*, 37, 586-594
- Anthony, W, A (1993) Recovery from mental illness: the guiding vision for the mental health service system in the 1990s. *Psychiatric Rehabilitation Journal*, 16, 11-23
- Baker, A., Lewin, T., Reichler, H., Clancy, R., Carr, V. and Garrett, R. (2002) Evaluation of a motivational interview for substance use within psychiatric in-patient services. *Addiction*, 97, 1329-37
- Barrowclough, C., Haddock, G., Tarrier, N., Lewis, S. W., Moring, J. and O'Brien, R. (2001) Randomised controlled trial of cognitive behavioural therapy plus motivational intervention for Schizophrenia and substance use. *American Journal of Psychiatry*, 158, 1706-13
- Barrowclough, C., Haddock, G., Beardmore, R., Conrod, P., Craig, T. and Davies, L. (2009) Evaluating integrated MI and CBT for people with psychosis and substance misuse; recruitment, retention and sample characteristics of the MIDAS trial. *Addiction Behaviours*, 34, 859-66
- Bellack, A.S., Bennett, M., Gearon, J.S., Brown, C. and Yang, Y. (2006) A Randomized clinical trial of a new behavioural treatment for drug abuse in people with severe and persistent mental illness. *Archives of General Psychiatry*, 63, 426-432
- Chadwick, P. (1995) *Understanding Paranoia: What causes it, how it feels and what to do about it?* London: Thorsons

- Cleary, M., Hunt, G.E., Matheson, S.L., Siegfried, N. and Walter, G. (2008) *Psychosocial interventions for people with both severe mental illness and substance misuse*. Cochrane Database syst Rev 1: CD001088
- Coupland, K., Macdougall, V. and Davis, E. (2002) Group work for Psychosis. *Mental Health Nursing*, 22, 6, 6-9
- Daley, D. and Campbell, F. (1993) *Coping with dual disorders (2nd Ed)*. Centre City, Minnesota: Hazelden
- Deegan, P. (1996) Recovery as a journey of the heart. *Psychiatric Rehabilitation Journal*, 19, 91-7
- Department of Health (DoH) (2002) *Dual Diagnosis. Mental health policy implementation guide. Dual diagnosis good practice guide*. London: Department of Health
- DesJarlais, D. (1995) Editorial: Harm Reduction – A Framework for incorporating science into drug policy. *American Journal of Public Health*, 85, 10-12.
- Doel, M. and Sawdon, C. (1999) *The Essential Groupworker: Teaching and learning creative groupwork*. London: Jessica Kingsley.
- Drake, R. E., Essock, S. M. and Shaner, A. (2001) Implementing dual diagnosis services for clients with severe mental health problems. *Psychiatric Services*, 52, 469-476
- Drake, R. E., Bebout, R. R. and Roach, J. P. (1993) A research evaluation of social network case management for homeless persons with dual disorders. in M. Harris and H. C Bergman (Eds) *Case management for mentally ill patients-Theory and Practice* (pp. 83-98). Pennsylvania: Harwood Academic Publishers
- Graham, H. L., Copello, A., Birchwood, M, J. and Meuser, K. T. (2003) *Substance Misuse in Psychosis. Approaches to treatment and service delivery*. Chichester: Wiley
- Institute of Medicine (IOM) (2005) *Improving the Quality of Health Care for Mental and Substance Use Conditions: Quality Chasm Series*. Washington, DC: National Academy Press
- Kessler, R. (2004) The Epidemiology of dual diagnoses. *Biological Psychiatry*, 56, 730-737
- Krishnan, K.R.R. (2005) Psychiatric and medical co morbidities of bipolar disorder. *Psychosomatic Medicine*, 67, 1-8
- Kurtz, E. and Ketcham, K. (1992) *The Spirituality of Imperfection: Storytelling and the Journey to Wholeness*. New York: Bantam
- Marsden, J., Grossop, M., Stewart, D., Best, D., Farrell, M., Lehmann, P., Edwards, C. and Strong, J. (1998) Maudsley Addiction Profile. *Addiction*, 93, 12, 1857-1868

- Mechan, T. J., King, R. J., Beaves, P. H., Robinson, J. D. (2008) Recovery based practice: Do we know what we mean or mean what we know? *Australian and New Zealand Journal of Psychiatry*, 42, 3, 177-82
- Meuser, K. T., Yarnold, P. R. and Bellock, A. S. (1992) Diagnostic and demographic correlates of substance abuse in Schizophrenia and major affective disorder. *Acta Psychiatr Scand.*, 85, 48-55
- Minkoff, K. (2002) *CCISC model – Comprehensive, continuous, integrated system of care model*. www.kenminkoff.com.html accessed 4 March 2002
- Moore, K. and Rassool, G.H. (2006) Addiction and mental health nursing: A Synthesis of role and care in the community. in G.H. Rassool (Ed) *Dual Diagnosis: Nursing management* (pp.119-129). Oxford: Blackwell
- Morgan, S. and Carson, J. (2009) The Recovery Group: A Service user and professional perspective. *Groupwork*, 19, 1, 26-39
- National Institute for Health and Clinical Excellence (NICE) (2011) *Schizophrenia; Core interventions in the treatment and management of schizophrenia in adults in primary and secondary care*. Clinical guideline number 82. London: NICE.
- Overall, J. and Gorham, D. (1962) Brief Psychiatric Rating Scale. *Psychological Reports*, 10, 799-812
- Parrish, M. (2010) *Social Work Perspectives on Human Behaviour*. Maidenhead : McGraw-Hill
- Riley, D. and O'Hare, P. (2000) Harm reduction: History, definition and practice. in J. Incardia and L. Harrison (Eds) *Harm Reduction: National and International Perspectives*. Thousand Oaks, CA: Sage
- Roberts, G. and Holmes, J. (1999) *Hearing stories: Narrative in Psychiatry and Psychotherapy*. Oxford: Oxford University Press.
- Sadock, B. and Sadock, V. (2007) *Kaplan and Sadock's Synopsis of Psychiatry: Behavioural Sciences/Clinical Psychiatry, 10th ed*. Philadelphia PA: Lippincott, Williams and Wilkins
- SAMHSA (Substance Abuse and Health Services Administration) (2005) *Transforming Mental Health Care in America: The Federal Action Agenda: First Steps*. Retrieved 10.4.2008 from www.samhsa.gov/federalactionagenda/NFCTOC.aspx
- Shepherd, G., Boardman, J. and Slade, M. (2008) *Making recovery a reality*. London: Sainsbury Centre for Mental Health
- Slade, M., Amering, M. and Oades, L. (2008) Recovery: an international perspective. *Epidemiologica e Psichiatria sociale*, 17, 2, 128-37
- Tenant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Parkinson, J., Secker, J. and Stewart-Brown, S. (2007) Warwick-Edinburgh Well-being

- Scale. *Health and Quality of Life Outcomes*, 5, 63
- Triffleman, E. (2003) Issues in implementing posttraumatic stress disorder treatment outcome research in community based treatment programmes. in J.L. Sorenson, R. A. Rawson, J. Guydish, J. E. Zweben (Eds) *Drug abuse treatment through collaboration: Practice and research partnerships that work* (pp. 227-247). Washington, DC: American Psychological Association
- Weaver, T., Rutter, D., Madden, P., Ward, J., Stimson, G. and Renton, A. (2001) Results of a screening survey for co-morbid substance misuse amongst patients in treatment for psychotic disorders: Prevalence and service needs in an inner London borough. *Soc Psychiatry Psychiatr Epidemiol*, 36, 399-406
- Weiss, R. and Griffin, M. (2007) A randomised trial of integrated group therapy versus group drug counselling for patients with bi polar disorder and substance dependence. *American Journal of Psychiatry*, 164, 100-107.
- Yalom, I. D (2005) *The Theory and Practice Of Group Psychotherapy*, 5th ed. New York: Basic Books
- Ziedonis, D. M., Smelson, D., Rosenthal, R. N., Batki, S. L., Green, A. L. and Henry, R. J. (2008) Improving the care of individuals with Schizophrenia and substance use disorders: Consensus recommendations. *Journal of Psychiatric Practice*, 11, 315-406
- Zigmand A, S. and Snaith, R.P. (1983) The Hospital Anxiety and Depression Scale. *Acta Scandinavica*, 67, 361-370