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Comorbidity among Oxford House residents: A preliminary outcome study

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Abstract

This study used a structured diagnostic interview to investigate the prevalence of psychiatric comorbidity among 29 men and 23 women substance abusers residing in 1 of 11 Oxford House communities located within a Midwestern metropolitan area. The Diagnostic Interview Schedule (DIS) was used to measure current and lifetime DSM-III-R diagnosis in addition to sociodemographic and substance abuse information. Considerable psychiatric comorbidity was present. Antisocial personality (ASP) disorder, affective disorders, and anxiety disorders were the most frequently observed comorbid disorders among these substance abusers, whose drugs of choice were cocaine, alcohol, and cannabis. Chi-square and *t* tests revealed diverse psychiatric diagnoses and variability of client characteristics, demonstrating heterogeneity within this sample of substance abusers. Gender differences were identified on several client characteristics as well. Peer social support was the most common reason why participants entered an Oxford House. Outcome measures at 6 months found that 42% of participants was still residing in an Oxford House while 27% left on good terms, demonstrating a 69% overall success rate among participants in this study. Implications of this study suggest that substance abusers with psychiatric comorbidity are heterogeneous groups that benefit from living in an Oxford House.

Keywords: Comorbidity; Substance abuse; Oxford House; Outcome measure; Heterogeneity

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1. Introduction

Psychiatric comorbidity among substance abusers is widely underappreciated for its prevalence and variety (Weiss, Mirin, & Frances, 1992). The array of substances abused, coexisting disorders, as well as the range of sociodemographic variability within this population profile its heterogeneity (Dixon, McNary, & Lehman, 1997; Flynn, Craddock, Luckey, Hubbard, & Dunteman, 1996; Mowbray, Ribisl, Solomon, Luke, & Kewson, 1997). Effective intervention for comorbid disorders involves treating both the substance abuse and the mental disorder (Dixon et al., 1997; Weiss et al., 1992). One outcome study (Dixon et al., 1997) found that substance abusers with additional psychiatric disorders had less rehospitalization than those with substance-induced psychiatric disorders 1 year after treatment. Clopton, Weddige, Contreras, Fliszar, and Arrendo (1993) documented an abstinence rate of 42% among substance abusers who completed 16 days of inpatient treatment followed by 4 months of intensive outpatient treatment that consisted of professional staff.

Westreich, Galanter, Lifshutz, Metzger, and Silberstein (1996) examined a professionally run, modified therapeutic community program for comorbid substance abusers and found that completers of this 6-month program achieved a 33% abstinence rate. Another modified therapeutic community program for substance abusers with comorbid disorders provided external incentives for patient participation, such as housing placement, assistance in obtaining appropriate entitlements, and professional referrals (Mierlak et al., 1998). One third of 189 substance abusers with comorbid disorders completed the prescribed 6-month treatment program, although incentives did not seem to have a significant impact on treatment outcome.

Oxford House is an alternative to modified therapeutic communities in that it provides communal-living self-help to abstinence from alcohol and substance abuse. The original Oxford House was founded in 1975 by a group of recovering alcoholic men, and has since proliferated to more than 700 Oxford Houses (Jason, Ferrari, Dvorchak, Groessl, & Malloy, 1997). Unlike therapeutic communities, Oxford Houses are communal-living settings that are administered not by professionals or paraprofessionals, but by their residents through peer social support and self-government to provide a drug-free and supportive community without limitations to length of stay. Each house functions by autonomy, operating on an 80% majority rule. Members failing to comply with house rules or engaging in recurrent drug or alcohol use are evicted. Most Oxford Houses are located in middle-class, low-crime, low-drug-traffic neighborhoods. Residents provide for themselves by paying for their own rent, food, utilities, and by sharing house chore duty. Thus, the cost of the Oxford House community to the recipient is no more than one might pay for rent elsewhere.

Psychiatric comorbidity among Oxford Houses residents has not been studied previously. The present study examined a variety of comorbid psychiatric disorders among substance abusers residing in urban Oxford Houses. A certain amount of psychiatric comorbidity was expected based on the known prevalence of psychiatric disorders among substance abusers in general (Clopton et al., 1993; Dixon et al., 1997; Flynn et al., 1996; Reiger et al., 1990; Weiss et al., 1992; Westreich et al., 1996).

2. Materials and methods

2.1. Participants

Participants were 29 men and 23 women (*M* age = 34.4 years) residing in 1 of 11 Oxford Houses located in metropolitan St. Louis, MO, area. The majority of participants reported that they were single (64%), African–American (73%), employed (81%) with an average annual income of US$14,800, and with an average education level of 13 years. Thirty-seven percent of the sample reported having prior technical training, and 50% reported having been previously homeless.

Rates of participation varied across Oxford Houses in the St. Louis area. The total number of Oxford House residents living in each Oxford House within this area was unknown. However, efforts were made to include all residents from each of the 12 Oxford Houses in the St. Louis area as researchers called for volunteer subjects at these residents' monthly business meetings that consisted of representatives for each of the 12 Oxford Houses. As a result, all but one house agreed to partake in this study and rates of individual Oxford House participation varied from 1 to 10 residents. Participants received US$20 for their participation, and informed consent was given to each resident who participated in this study.

2.2. Procedure

Demographic and general information (i.e., age, gender, race, educational and occupational history, marital history, physical health, and residential patterns) was gathered through face-to-face interviews by a female research assistant. In addition, participants were asked about their means of maintaining sobriety and utilization of services. In-person interviews and residential treatment compliance follow-up telephone interviews were conducted between September 1994 and May 1995.

Sections of the NIMH Diagnostic Interview Schedule (DIS) for DSM-III-R (DIS-III-R; Robins, Helzer, Cottler, & Golding, 1989) were administered, including modules on alcohol abuse/dependence, drug abuse/dependence, major depression, dysthymia, generalized anxiety disorder, post-traumatic stress disorder (PTSD), and antisocial personality (ASP) disorder. A structured interview, the DIS elicits current and lifetime DSM-III-R diagnoses. Its wide use over time and in diverse settings has made it possible to compare and contrast rates of different disorders among various populations. Data analysis consisted of chi-square and *t* tests.

3. Results

Sociodemographic information among the 52 Oxford House residents (29 males, 23 females) is presented in Table 1. There were significantly more African–American men (62%) and women (87%) [$\chi^2(df, 1) = 4.04$, $P < .04$] than Caucasians in the sample. There was no significant gender difference for marital status, employment, history of homelessness, years of education, and number of children. Significantly more women than men reported

Table 1
Sociodemographic characteristics of Oxford House sample

Characteristics	%	$M \pm$ S.D.
Sex		
Male	55.8	
Female	44.2	
Age (years)		34.4 ± 5.9
Race		
African–American	73.0	
Caucasian	27.0	
Marital status (%)		
Married	3.8	
Previously married	32.7	
Single	63.5	
Number of children		1.5 ± 1.8
Employment		
Working	80.8	
Looking for work	5.8	
Disabled/other	13.4	
Annual income (M ± S.D. US$)	14,800 ± 9000	
Income group		
< US$7200	15.7	
US$7200–11,999	33.3	
US$12,000–19,999	25.4	
US$20,000–40,800	25.6	
Previously homeless	50.0	
Technical training	37.0	
Years of education		12.5 + 2.1

technical training prior to entering Oxford House (85% vs. 46%) [$\chi^2(df, 1) = 7.32$, $P < .01$], whereas men reported significantly more income than women (US$17,400 ± 9700 vs. US$11,500 ± 6900) [$t(df, 51) = 2.41$, $P < .02$].

Residents' most common reason for having entered an Oxford House was desire for peer social support (34.6%), followed by having nowhere to go (30.7%) and seeking a drug-free environment (25%). The most helpful aspects of the Oxford House experience among residents were having both a drug-free environment and respect for others (26.9%). There were no significant gender differences on the following variables: previous Oxford House experience, number of weeks spent at Oxford House at time of interview, reasons for entering Oxford House, from whom residents learned of Oxford House, and what helped the most while in Oxford House. Men ($M = 3.0$, S.D. = 2.6), compared to women ($M = 1.8$, S.D. = 1.1), however, reported significantly more times in prior residential treatment [$t(df, 51) = 2.17$, $P < .04$]. Men ($M = 2.2$, S.D. = 1.2) also reported attending more weekly Alcoholics Anonymous (AA) meetings than women ($M = 1.2$, S.D. = 0.7) [$t(df, 51) = 2.52$, $P < .02$]. An average of 28.8% of all residents reported that they attended some form of counseling outside of the Oxford House.

A 6-month follow-up survey to assess treatment outcome was completed with 44 (84.6%) of the original 52 respondents by telephone. Among these 44 subjects, 22 (50%) were still residing in an Oxford House, 14 (32%) had left on "good terms," and 8 (18%) had left on "bad terms." Leaving on "good terms" meant residents maintained abstinence and followed house rules throughout their stay in an Oxford House, whereas leaving on "bad terms" meant residents were evicted for relapsing into alcohol/drug use or for not complying with the self-governed rules for house living. The remaining eight subjects (from the original cohort) were not available for the follow-up study because they either relapsed (7.7%) or left for reasons unknown (7.7%). Overall, 42.3% of the original sample was still residing in an Oxford House at 6 months. Although 32% of the follow-up residents ($n = 14$) reported leaving Oxford House on good terms, they were not calculated into our conservative rate of continued abstinence. However, because there are no set minimum time requirements or limitations for length of stay in an Oxford House, combining the number of residents who remained in an Oxford House ($n = 22$) with the number of those residents who left on good terms ($n = 14$) resulted in a 69.2% overall success rate among the original sample ($n = 52$).

Percentages of residents with drug-dependent and psychiatric diagnoses are listed in Table 2. The most frequently used drugs reported by residents were cocaine (84.6%), alcohol

Table 2
Rates of psychiatric diagnoses

Diagnoses	*n*	%
Drug dependence disorders		
Cocaine	44	84.6
Alcohol	37	71.2
Cannabis	36	69.2
Amphetamines	19	37.0
Opioids	13	25.0
Sedative–hypnotics	12	23.1
Phencyclidine	8	15.4
Hallucinogens	8	15.4
Heroin	7	13.7
Inhalants	2	3.9
Any drug dependence	51	98.1
Alcohol dependence (only)	1	1.9
Drug dependence (only)	14	26.9
Dual alcohol and other drug dependence	37	71.2
Other psychiatric disorders		
ASP disorder	30	57.7
Any affective disorder	20	38.5
PTSD	18	34.6
Major depression	14	26.9
Dysthymia	10	19.2
Panic disorder	8	15.4
Generalized anxiety disorder	7	13.5
No psychiatric comorbidity	11	21.2

(71.2%), and marijuana (69.2%). Men were diagnosed for alcohol dependence at a higher rate ($M = 82.7\%$) than women ($M = 56.5\%$) [$\chi^2(df, 1) = 4.30$, $P < .04$]. There was a difference that approaches significance in the frequency of dual alcohol and other drug use with men ($M = 79.3\%$) showing a higher frequency than women ($M = 56.6\%$) [$\chi^2(df, 1) = 3.13$, $P < .07$].

The most prevalent psychiatric disorder among all residents was ASP disorder (57.7%). Affective disorders, PTSD, and major depression were diagnosed in 38.5%, 34.6%, and 26.9% of all residents, respectively. There was a difference that approaches significance in observed panic disorders ($P < .06$) as women ($M = 26.1\%$) were diagnosed more frequently than men ($M = 6.9\%$). Twenty-one percent of the sample did not report any coexisting psychiatric disorder, whereas more than half of the sample (52%) reported having two or more psychiatric disorders. Several key combinations of psychiatric diagnoses were observed. Twenty-five percent of residents was also diagnosed with ASP disorder and PTSD, 15.4% with ASP and major depression, and 11.5% with PTSD and panic disorder. There was a difference that approaches significance in the frequency of the key combination diagnosis, ASP and PTSD ($P < .06$), as women ($M = 43.5\%$) reported this combined diagnosis more frequently than did men ($M = 27.6\%$).

4. Discussion

This study examined characteristics of male and female residents in established Oxford Houses within Midwestern, urban settings. The participants in this study were predominantly African–American men and women. The preponderance of African–Americans in this study was likely a reflection of the ethnicity of the neighborhoods in which the Oxford Houses were located. Despite having more technical training than men, Oxford House women reported significantly lower levels of income similar to those in other studies (Mowbray et al., 1997; Stockfisch, Galanter, & Lifshutz, 1995). Men were reported as having a higher number of prior residential treatments than women, and this difference might reflect the lack of residential services available to women and/or it might be related to affordability due to income differences. Residents' most common reason for having entered an Oxford House was peer social support. This finding is significant because it demonstrates the need for social support among substance abusers seeking treatment in addition to the implication that Oxford House provides a sense of community that fosters recovery (Bishop, Chertok, & Jason, 1997; Jason et al., 1994, 1997).

This preliminary study achieved an 84.6% response rate of 6-month follow-up interviews that assessed treatment outcome in a couple of different ways. First, 42.3% of the original sample maintained *continuous* treatment compliance. It is highly likely that residents remained abstinent during this 6-month period because recurrent alcohol/drug use is strictly prohibited (and easily detected) among residents in an Oxford House. Second, an additional 26.9% of the entire sample benefited by their Oxford House experience because these residents had left their house on "good terms." Leaving on good terms is an important measure of success because it indicates that residents remained abstinent in addition to complying with self-governed house rules throughout their stay. Assessing residents'

discharge status is an important measure when one considers that the length of stay varies for each Oxford House resident because there are no time restrictions for living in an Oxford House.

In terms of drug dependence and psychiatric diagnoses, there was a high prevalence of polysubstance use. The three most commonly used drugs by residents in this study were cocaine, alcohol, and cannabis, which is a finding that has been observed in other reports (Clopton et al., 1993; Mierlak et al., 1998; Mowbray et al., 1997). Male residents reported greater rates of alcohol dependence than female residents, and it is not surprising that male residents also reported more AA attendance.

ASP disorders, affective disorders, and anxiety disorders were the most frequently diagnosed psychiatric disorders among residents. These findings are consistent with those from an Epidemiologic Catchment Area (ECA) study (Reiger et al., 1990). ASP disorder was most frequently diagnosed among Oxford House residents, and although this disorder is generally more common for men, it was possibly observed in women in this study because the risk was greater among low socioeconomic women. Affective disorders were the most prevalent observed Axis I disorders among Oxford House participants, with rates similar to those in other studies (Mierlak et al., 1998; Stockfisch et al., 1995; Weiss et al., 1992). There was no significant difference between men and women for major depression unlike the general population rates where depression rates are higher for women. It is possible that men in this study were experiencing a mood disorder secondary to their substance use, although such a relationship can only be established from a longitudinal, as opposed to a cross-sectional, design. Panic disorder, and the combined diagnosis of ASP and PTSD, was diagnosed more frequently in Oxford House women. Prevalence rates across gender in this study are higher than the population rates, which are equal for both genders for panic disorder and PSTD. It is possible that women who abuse substances are more susceptible to these types of disorders because they are challenged with financial and parenting stressors (Ferrari et al., 1999), in addition to coping with sexual abuse (Ferrari, Curtain, Dvorchak, & Jason, 1997).

Results of this study support the notion that substance abusers with comorbid psychiatric disorders are a heterogeneous group (Flynn et al., 1996; Mowbray et al., 1997; Weiss et al., 1992). Observed sociodemographic, drug-dependent, and psychiatric characteristics of participants in this study are consistent with some findings in the literature, as previously cited. However, some findings in this study were not consistent with other cited studies in the literature. This paradox is fairly common as evidenced by many studies that show different types and rates of psychiatric diagnoses among substance abusers who, to various extents, share similar demographic and substance abuse characteristics.

There were several limitations in the present study. It is possible that some differences in psychiatric diagnoses among substance abusers between the present study and other studies may be because of the design, measures, demographic variables, variability within groups of substance abusers, or a combination of these factors. The results from this study are limited because the sample was not large enough to produce robust levels of significance between some group scores even though the sample size reflects the number of available Oxford House residents within the St. Louis, MO, metropolitan area at the time of data collection.

Furthermore, it is unknown how representative this sample was because the total number of residents living in each Oxford House was not determined. This study is also lacking insofar as it did not account for the total proportion of Oxford House residents with comorbid psychiatric disorders at the 6-month follow-up interval. However, this study does provide a rough, yet conservative, estimate of comorbidity prevalence. Future studies in this area might benefit by assessing prevalence for significant time intervals (e.g., follow-up). Studies that thoroughly account for comorbidity in addition to substance-related and sociodemographic variables seem promising in adding to our knowledge of what is obviously a complex task.

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