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Problem severity profiles of substance abusing women in European Therapeutic Communities: Influence of psychiatric problems

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Abstract

This article aims to search for a specific female, psychiatric profile based on a large European sample of substance dependent clients (828) entering therapeutic communities. First, all six areas of functioning of the EuropASI were included, using the composite scores to search for gender differences. Next, the 'psychiatric' status section was selected for further study. A binary logistic regression was performed with gender as the dependent variable, and nine individual psychiatric items, country, and age as predictors. According to this model a number of problem variables could be identified as being reported more often by women than by men in therapeutic community treatment. Women are more likely to report serious depression, problems in understanding, concentrating or remembering, being prescribed medication, and serious thoughts about suicide; they have also attempted suicide more often than men. Women find treatment for these psychological problems more important than their male counterparts. They also have a more severe history of abuse. Women in therapeutic communities may need specific treatment interventions for their more severe psychiatric needs. © 2004 Elsevier Inc. All rights reserved.

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1. Introduction

Women are gaining more attention as a subgroup in the treatment of substance abuse. More studies report on the nature and severity of psychological and psychiatric problems of women in treatment (De Leon & Jainchill, 1991; Ravndal, 1994). In the European Therapeutic Communities (TC), a culture of psychiatric assessment and research has been slowly but surely developing (Broekaert, Haack et al., 2002). This changing culture opens possibilities to investigate whether women in mainstream TC treatment suffer from underestimated psychiatric problems that may impair their recovery process. This article tries to provide empirical evidence for this issue by constructing a specific psychiatric profile for women in TCs. The severity of psychiatric

problems in women entering drug-free substance abuse treatment is considered and some suggestions for more targeted treatment are proposed.

1.1. Psychiatric status of female residents in European Therapeutic Communities

1.1.1. Psychiatric status

The European TC for substance abusers started its development and expansion in the early 1970s as a direct offspring of the American drug-free, hierarchic or concept TC (Broekaert, Vanderplasschen, Temmerman, Ottenberg, & Kaplan, 2000), which, in turn, was based on the Synanon-model (Rawlings & Yates, 2001). Over many years and even today, there is continuous interaction and influence between the American and European TC. This is evidenced not only by the treatment methodologies used in the TC, but also in research. In the past, TC research depended mainly on American researchers, such as G. De Leon, V. Biase, N. Jainchill, H. Barr and S. Holland (Broekaert, Raes, Kaplan,

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& Coletti, 1999). Jainchill was considered to be the leading scientist in the field of women and their psychiatric problems (Broekaert, Raes, et al., 1999). Consequently, the study of European TCs can only take place by including the American research.

At the start of the TC movement in Europe (Broekaert & Slater, 2001), little attention was paid to the psychiatric status or the psychopathology of the residents. Addicts were considered to be ‘dope fiends,’ or “character disordered” people who needed to “change their behavior first and deal with social-psychological issues later” (Janzen, 2001, p. 1). Influenced by the “anti-psychiatric” and “human potential movement”, it was believed that a psychiatric diagnosis was a label that interfered in the process of self-development and self-reliance (Broekaert, Vandevelde, Vanderplasschen, Soye, & Poppe, 2002). Residents were described as “frozen personalities, disconnected from their deepest-level emotions, damaged through deprivation during infancy and childhood” (Casriel, 1972, p. 3). The psychological and pathological characteristics of residents were already beginning to be studied during the 1970s, primarily to determine personality changes and the success of TC treatment (De Leon & Jainchill, 1985).

Psychiatric assessment was not the first interest in those early years. Until the 1980s it was limited to a differential diagnosis between neurosis, antisocial personality, and character disorder on one hand, and psychosis, mental retardation, and brain damage on the other (Kooyman, 1992). Persons diagnosed as suffering from psychosis were excluded from the TC, as the method was considered to be too direct and too confrontational. Borderline personalities were in the center of the discussion, since it was difficult to determine whether or not they belonged to the TC.

But the situation changed in the mid-1980s, when the European TC was confronted with a rapidly growing drug epidemic, the spread of AIDS, new popular drugs, and petty delinquency. Emerging harm reduction approaches, including substitute prescription, forced the TC to reconsider its position (Broekaert & Vanderplasschen, 2003). The TC reacted by enlarging its method to include psychiatric patients and other new target groups such as homeless persons, prisoners, immigrants, ethnic minorities, women, and mothers with small children. The influence of research increased, the importance of social networks and family members became more prominent, and harsh encounter groups evolved into meetings in which dialogue became quintessential (Bracke, 1997a; Broekaert, D’Oosterlinck, Kooyman, & Van Der Straten, 1999; Vandevelde & Broekaert, 2003).

Despite some remaining skepticism (Ravndal, 1994), this treatment differentiation and expansion of the method was the impetus for a more pronounced attention to the diagnosis of residents. Greater interest in psychopathology, psychiatric conditions, dual diagnosis, or comorbidity was stimulated by the emerging influence of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III; American

Psychiatric Association, 1980) and the Addiction Severity Index (ASI; McLellan, Luborsky, Woody, & O’Brien, 1980), which was adapted to European standards (Hendriks, 1986). The proliferation of new managed care, and the emphasis on integrated treatment systems based on the coordination and continuity of care, provided a further impetus for the differentiation of pathology, needs and demands of substance abusing clients (Vanderplasschen, De Bourdeaudhuij, & Van Oost, 2002). Under the influence of American researchers it became increasingly clear that the drug problem was not an isolated problem, but a complex constellation of intervening factors (Carroll & McGinley, 1998; De Leon & Jainchill, 1991). The reciprocal influence of medical (Brown, Melchior, Waite-O’Brien, & Huba, 2002), social and psychological problems (Jainchill, Hawke, & Yagelka, 2000), and comorbid psychiatric disorders (Brown et al., 2002; Carroll & McGinley, 1998) became generally accepted and further investigated by European researchers (Broekaert, Haack et al., 2002; Kaplan, Broekaert, & Morival, 2001; Ravndal & Vaglum, 1994). In turn, TC staff members gained awareness of the high rate of psychiatric comorbidity among the substance-abusing population seeking treatment and learned that the nature and severity of the problems differ greatly between major subgroups.

1.1.2. Psychiatric status of women

In the “Old Synanon” days, Chuck Dederich—Synanon’s leader—had subtly placed women in an inferior position. His “Father Principle” suggested that character disordered people had “too strong a dose of mother love” and had never been properly “housebroken by father” (Janzen, 2001, p. 94). Early TC studies indicate that special rules were applied concerning the relation between the sexes. The residents were supposed to act as ‘brothers’ and ‘sisters’ in a large family. Engagement in sexual activities was forbidden (Sugerman, 1974, p. 23), primarily because this was seen as a ‘negative contract’. The daily structure of the TC, the chain of command, and the harsh confrontation groups were extremely male-oriented. While those practices have changed over the years, women still experience difficulties today. According to an observation report by Martha Ottenberg,¹ based on discussions with women at the Centro Italiano di Solidarietà di Roma, men in TCs often send out a strong underlying message, “Be good, be nice and you will be OK—I will protect you and no one will hurt you” (Ottenberg, 2000, p. 125).

On the other hand, according to M. Ottenberg, women tend to be in competition with each other. They have difficulties exposing themselves to each other with regard to their sexual problems, fears, and anxieties, because they

¹ The maiden name of the late Martha Ottenberg is Martha Moldauer. Her statements should not be confused with those of her husband Dr. Donald J. Ottenberg, the former director of Eagleview Hospital in Pennsylvania and author of several papers on the TC.

are afraid to be judged as unwomanly (Ottenberg, 2000). Occasionally, these issues have caught the attention of (mainly female) researchers or staff members. Several of them agree that women have specific characteristics and treatment needs (Broekaert, Vandevelde et al., 2002, p. 374; De Leon & Jainchill, 1991; Martens, 1999; Ravndal & Vaglum, 1994).

As a result, an increasing number of residential TCs have tried to address the specific needs of women and to expand their programs to serve substance-abusing women in general (De Leon, 1997; Martens, 1999). They have set up special female groups and activities and have established specific programs for substance-abusing mothers and their children (Bracke, 1997b, p. 60). However, despite these efforts, still too few treatment modalities are tailored specifically for female substance abusers (De Leon & Jainchill, 1991); women are still under the supervision of predominantly male staff members, and they are still outnumbered by men. Both in the United States and in Europe, the male-to-female ratio of admission to therapeutic communities is approximately 3:1 (De Leon & Jainchill, 1991).

Suffering from severe psychological, emotional, and psychiatric problems may be one of the most important reasons that substance-abusing women enter treatment (Brown et al., 2002; De Leon & Jainchill, 1982, 1991; Jainchill et al., 2000). They show lower levels of self-esteem (Carroll & McGinley, 1998) and have a “triple negative self-image”: as a person with a character disorder, as a person with an addiction problem, and as a woman in society (Martens, 1999). They feel guilty because they have failed as mother, partner, and woman (Van Damme, 1998). Furthermore, women accept the conventional view that their drug abuse is ‘sicker’ or more deviant when compared to substance abuse by men. Women manifest significantly more psychiatric problems (Carroll & McGinley, 1998; Jainchill et al., 2000), they contemplate and attempt suicide more often than men (Ravndal, 1994). Women also seem to be diagnosed with additional DSM Axis I and II disorders more often: they tend to produce higher levels of depression and anxiety (De Leon & Jainchill, 1991). They suffer more from a phobia or from post-traumatic stress disorder (PTSD; Van Damme, 1998). With respect to PTSD, several authors (Jainchill et al., 2000; Ravndal, Lauritzen, Frank, Jansson, & Larsson, 2001) have concluded that psychopathology and substance abuse problems are significantly related to physical and sexual abuse: women have significantly higher rates of abuse than men, the difference is especially large for sexual abuse (Jainchill et al., 2000). They are also often victims of domestic violence in later life (Jainchill et al., 2000).

In Europe the psychiatric status of women is rarely researched and to our knowledge no large European studies on this subject exist. The multi-site research of the BIOMED II IPTRP project provides us with a large quantity of data, of women in treatment as well as men. This article seeks to contribute to this research by searching for a

specific psychiatric profile of women TC residents based on a large European sample.

2. Materials and methods

2.1. The BIOMED II IPTRP project

2.1.1. Data collection and instruments

The data analyzed in this article were collected for a major European research project entitled ‘Improving Psychiatric Treatment in Residential Programs for Emerging Dependency Groups’ (IPTRP). The Statistical Program for Social Sciences (SPSS) was used for all statistical analyses: (SPSS Inc., Chicago, IL, USA). The project, subsidized by the Fourth Framework Program of the European Commission BIOMED II (Biomedicine and Health Research), was coordinated by Maastricht University in the Netherlands in close collaboration with Ghent University in Belgium. The first results of the IPTRP project have now been published (Broekaert, Haack et al., 2002; Broekaert et al., 2001; Frank et al., 2001; Kaplan et al., 2001; Ravndal et al., 2001; Reichmann, Kaplan, & Jansson, 2001, Segraeus et al., in press).

The main objective of the project was to identify and address the needs of “emerging dependency groups” in Europe. The project also aimed at setting up an international database with client data from substance abuse treatment centers in several European countries. Universities and or research centers from eight European Union (EU) Member States (Belgium, France, Germany, Greece, Italy, Spain, Sweden and Scotland), and Norway as a non-EU partner, participated in this multi-site trial, which involved 33 residential treatment centers across Europe. National representatives in each country chose the different treatment centers. It was not their goal to reach a representative, random sample; rather they made use of techniques that involve targeted sample selection (Watters & Biernacki, 1989), using BioMAPS (described below in section 2.2.2). This means that they selected the TCs on the basis of the number available in the country, their accessibility, their willingness to participate and the use of ‘community as method’ as the main approach in treatment. This approach, which was introduced by George De Leon, refers to the use of community as the quintessential element of the therapeutic community. “Community is both the context and method in the change process. It is the element of community that distinguishes the TC from all other treatment or rehabilitative approaches to substance abuse and related disorders. It is the use of community as method that distinguishes the TC from other forms of community” (De Leon, 2000, p. 85).

Each client entering a participating treatment center between May 1, 1997, and October 31, 1998, was asked to provide informed consent to participate in the project. The European Addiction Severity Index (EuropASI; Kok-

kevi & Hartgers, 1995), the Structured Clinical Interview for Diagnosis (Spitzer, Williams, & Gibbon, 1992), the Maastricht Social Network Analysis (Baars & Verschuren-Schoutissen, 1998), the Monitoring Area and Phase Systems (BioMAPS; Öberg, Gerdner, Sallmén, Jansson, & Segraeus, n.d.), the Video Addiction Challenge Test (Broekaert & Soye, 1997), and the Childhood Trauma Questionnaire (Bernstein & Fink, 1988; Bernstein et al., 1994) were selected for implementation.

2.2. Study sample and instruments

2.2.1. Study sample

The EuropASI intake interview was conducted on 96% of all clients (Kaplan, Broekaert, & Frank, 1999) and was the only instrument that could be successfully implemented in all countries (Broekaert, Haack et al., 2002). For this reason, only information on this instrument was used for further analysis. Most of the clients were administered the EuropASI about 4 weeks after being admitted to the program. This was to eliminate people in crisis from the sample.

In traditional long-term residential TCs, there are three main program stages: introduction, primary treatment and re-entry. In order to obtain the most homogeneous study sample possible, it was decided to involve the clients taking part in the first and the second phase of the program, clients in the re-entry phase were not selected for our study. According to the EuropASI criteria, these program stages are respectively labeled as 'detoxification residential (first phase)' and 'drug free residential (second phase).' Only centers focusing on drug free treatment were retained. Programs labeled as 'outpatient programs,' 'substitution programs,' and 'psychiatric hospitals' were eliminated from this study.

The final database contains data on 828 subjects in 30 different TCs, spread over Belgium, France, Germany, Greece, Italy, Spain, Sweden, Scotland and Norway.

2.2.2. Instruments

The BioMAPS was an important tool in the selection of the participating treatment centers. Consisting of a unit form

and a client form, the instrument was designed specifically for the IPTRP-project and aims to measure treatment setting characteristics as well as complementary data on intake, discharge, and followup of each client (Öberg et al., n.d.).

The EuropASI (Kokkevi & Hartgers, 1995) is the European adaptation of the fifth edition of the Addiction Severity Index (McLellan et al., 1992). Its validity and reliability have been established in European resident populations (Hendriks, Kaplan, Vanlimbeek, & Geerlings, 1989; McLellan et al., 1985). The instrument produces a multidimensional profile of clients by examining the frequency, duration, and severity of problem symptoms in six areas of functioning (medical, employment/support, alcohol/drugs, legal, family/social relationships and psychiatric) over the person's lifetime and, more recently, during the 30 days prior to the interview. Completion time is approximately 60 min.

2.3. Profile development

Although the authors are mainly interested in psychological/psychiatric characteristics, they initially included all six areas of functioning of the EuropASI in their analysis. The first concern was to look for those areas of functioning where significant gender differences might be found. For this analysis, the authors used the ASI *composite scores* for the different areas of functioning. Although these give a rather crude measure of the severity of the problems in each area, they have the advantage of being well-defined, continuous, and based on objective information (Alterman, Brown, Zaballero, & McKay, 1994; McLellan et al., 1992). In any case, they seem to reflect the severity of problems in a more objective fashion than the so-called 'severity ratings' which are based on an interviewer's subjective perception (Alterman et al., 1994). However, one drawback of these composite scores is that they include only 'past 30 days' items. Especially for the psychiatric problem area, these items are less relevant, given that several authors have warned that most clients are generally anxious, depressed, and confused during the beginning of treatment (Brown et al., 2002; Carroll & McGinley, 1998; De Leon & Jainchill, 1982). Therefore, for this psychiatric

Table 1

The raw and exponentiated regression coefficients, and the Wald tests for predictors in the logistic regression model with gender as the dependent variable

Psychiatric items	B	Wald	df	sign.	Exp (B)
3. Experienced serious depression in your life?	0.268	1.290	1	0.256	1.308
4. Experienced serious anxiety or tension in your life?	−0.258	1.152	1	0.283	0.772
5. Experienced trouble understanding, concentrating in your life?	0.049	0.052	1	0.820	1.050
6. Experienced hallucination in your life?	−0.090	0.118	1	0.731	0.914
7. Experienced trouble controlling violent behavior in your life?	−0.647	9.059	1	0.003	0.523
8. Been prescribed medication for any psychological problem in your life?	0.694	9.562	1	0.002	2.001
9. Experienced serious thoughts of suicide in your life?	0.031	0.014	1	0.905	1.032
10. Attempted suicide in your life?	0.819	10.820	1	0.001	2.269
Age	−0.080	23.447	1	0.000	0.923
Country	/	48.947	8	0.000	/
13. How important to you now is treatment for these psychological problems?	0.073	1.157	1	0.282	1.076

section, the authors constructed a ‘lifetime’ version of the composite score where all “past 30 day” items were replaced by their ‘lifetime’ alternatives (the specific items used are given in Table 1).

Following these overall analyses, the authors looked for specific EuropASI variables that significantly ($p < 0.05$) differentiated women from men. By combining these “female-specific” variables, the authors attempted to construct a profile of women in therapeutic communities.

3. Results

Data on 828 subjects were included in the final analysis; 76% of the residents were male, 24% female. The mean age was 30.2 years for men and 29.5 for women, which is not significantly different. Twenty-two percent of all residents had no diploma.

In terms of alcohol and drug use, there were no important differences between men and women for lifetime use of alcohol and or drugs. Most of the clients were poly-drug users: 79.7% of the men and 75.0% of the women. Eighty-two percent of the men and 72% of the women injected drugs at least once.

3.1. Gender differences based on the composite scores

For each of the six problem areas in the EuropASI, composite scores were computed following the guidelines of Koeter and Hartgers (1996). For some areas, two composite scores were used to capture the different aspects of a problem area (e.g., for the area of Family/Social Relationships, a different composite score is used for the family and non-family relationships respectively). In addition, for the psychiatric problem area, a new composite score was constructed by replacing the ‘past 30 days’ items by their ‘lifetime’ equivalents. For each problem area, an appropriate linear model is fitted with the corresponding composite score(s) as the dependent variable(s), and the following selection of predictors: Age, Country, Gender and the interaction between Country and Gender. Both Country and Gender were considered as fixed factors with nine and two levels respectively.² Note that, for this paper, the authors are especially interested in significant main effects of the factor Gender, but *not* for (significant) interaction effects between Country and Gender. In the latter case, the possible differences between genders may differ from country to country. Although these patterns may be interesting in their own right, in this paper the authors only seek differences between genders across countries. In the following, they summarize the main results for each problem area. To

improve readability, the F -values of non-significant effects will not be reported.

3.1.1. Medical status

For the medical problem area, significant effects were found for Age and Country, $F(1,756) = 6.8$, $p = 0.009$ and $F(8,756) = 2.7$, $p = 0.005$. Neither the effects of Gender nor the interaction effect between Country and Gender were found significant. The finding that there were no gender differences for the medical problem area may seem surprising, but note that only items used in the composite score are reflected.

3.1.2. Employment and support status

For this problem area, two composite scores were available (i.e., one for the economic situation, and one for satisfaction in the work situation). The correlation between the two scores is fairly low ($r = 0.042$) and not significant ($p = 0.28$). Therefore, the scores were analyzed separately. For both scores, the effect of Gender was significant: $F(1,802) = 6.5$, $p = 0.011$ and $F(1,648) = 4.831$, $p = 0.028$. The trend is clear: women in TC reported more employment problems less satisfaction with their work situation than men in TC. Apparently, this is true for most countries, since the interaction with Country was not significant.

3.1.3. Alcohol and drug use

The two problem areas were treated together since the results exhibited a similar pattern. The only significant variable was Country: $F(8,749) = 13.6$, $p < 0.001$ for alcohol use and $F(8,596) = 32.7$, $p < 0.001$ for drugs use. No gender differences were found in either area.

3.1.4. Legal status

For the legal problem area, several interesting patterns were found. Age had a significant effect on the composite score, $F(1,756) = 7.0$, $p = 0.008$. The younger the residents, the higher their score for legal problems. The main effect of Country was also significant, $F(8,756) = 10.1$, $p < 0.001$. The main effect of gender was not significant, but the interaction between Country and Gender was, $F(8,756) = 2.2$, $p = 0.025$.

3.1.5. Family and social relationships

Two composite scores are available for this domain (one for family and one for non-family relationships). This time, the correlation between the two scores was fairly high ($r = 0.374$) and significant ($p < 0.001$), so consequently a multivariate test was conducted with the two composite scores as dependent variables. A significant effect was found for Country, $F(16,1382) = 5.3$, $p < 0.001$.³ The interaction

² Note that the authors do not consider the country variable as a random factor. The selection of the countries was not random, but very much restricted by several criteria.

³ All multivariate F-tests reported in this paper are based on Wilks' Lambda.

between Country and Gender was also significant, $F(16, 1382)=1.8$, $p=0.025$.

3.1.6. Psychiatric status

The main effect of Country was significant, $F(8, 733)=6.4$, $p<0.001$. The main effect of Gender was also significant, $F(1, 733)=5.9$, $p=0.015$. The interaction between Country and Gender fell just short of significance, $F(8, 733)=1.9$, $p=0.05$. Interestingly, when using the lifetime version of the psychiatric composite score as a dependent variable, the main effect of gender remains, $F(1, 727)=16.5$, $p<0.001$, but the interaction between country and gender disappears, $F(8, 727)=1.6$, $p=0.134$.

In summary, significant main effects of gender were found in four areas: employment, legal status, family status and psychiatric status. In two cases (legal status and family status), the main effect of Gender was accompanied by an interaction effect between Country and Gender. The authors were mainly interested in gender differences that can be observed across all countries in a similar fashion; that is a main effect of Gender, but no interaction between Country and Gender. This pattern was found for two problem areas: the employment and the psychiatric area. The former area is clinically less important, because during treatment it is recommended that psychiatric problems be dealt with after the addiction is handled (De Leon, 2003), usually during the last phase (re-entry) of the program. The authors thus turned their attention to an examination of the psychiatric area, looking at the individual variables that have been used to construct the (lifetime version of the) composite score.

3.2. Gender differences based on the psychiatric items

To find out which of the psychiatric variables were responsible for the main effect of gender, the authors performed a binary logistic regression with gender as the dependent variable, and with nine individual psychiatric items as the main predictors. They also included the variables country and age in the model. The overall fit of the model was significant $\chi^2(18)=120.6$, $p<0.001$ (Nagelkerke $R^2=.222$). The individual regression parameters together with the Wald tests for each predictor are summarized in Table 1.

Clearly, it was necessary to include Age and Country: both had a significant effect within the model. Variables with exponentiated regression coefficients higher than 1.0 are more typical for women than for men in TC. In other words, according to this model, women in TC treatment were more likely to report serious depression, trouble understanding, concentrating or, remembering, being prescribed medication, serious thoughts of suicide, and they also have attempted suicide more often than men. Women also found treatment for these psychological problems more important. When controlling for all other items, only the medical and suicide items were significant. From

all psychiatric items, these two items may be considered the best indicators to differentiate between genders.

3.3. Additional variables related to gender differences

It appears from the literature that psychopathology and substance abuse problems are significantly related to physical and sexual abuse. Therefore, the authors repeated the same logistic regression as in the previous section, but they included an additional three items in the model: sexual abuse, physical abuse, and emotional abuse (during their life, not only in the past 30 days). Adding these three variables improved the fit of the model significantly, $\chi^2(3)=101.0$, $p<0.001$. For the other variables in the model, the parameters and p -values were almost identical as in Table 1, so they are not repeated here.

The direction of the effects of these variables is not surprising: women TC residents were significantly more likely to report that they have been victims of abuse, especially sexual, than men TC residents. Moreover, when controlling for all other variables, the effect of “sexual abuse” and “physical abuse” was significant, Wald (1)=40.4, $p<0.001$ and Wald (1)=12.5, $p<0.001$ respectively. The effect of emotional abuse was almost significant, Wald (1)=3.3, $p=0.068$.

3.4. Psychiatric profile of women in therapeutic communities

The above analyses identified five problem variables (available in the EuropASI) that are reported significantly more often by women than by men in TC treatment, which are listed below in decreasing order of importance as determined by the magnitude of the exponentiated regression coefficients as reported in Table 1.

1. Sexually abused in lifetime
2. Physically abused in lifetime
3. Attempted suicide in lifetime
4. Being prescribed medication for any psychological or emotional problem in lifetime

Five other “lifetime” variables also showed a trend ($p>0.05$) toward being reported more often by women (Emotionally abused; serious depression; importance of treatment for psychological problems; trouble understanding, concentrating, or remembering; and serious thoughts of suicide).

4. Discussion

Results from this European study indicate that there are important differences in the psychiatric status of men and women in Therapeutic Community treatment. These results are consistent with past research (Fridell in Ravndal,

1994). American and European studies indicate that women in mainstream TC treatment have more psychological and emotional problems (Brown et al., 2002). They are more depressed (De Leon & Jainchill, 1991), have more trouble understanding, concentrating and remembering, have been prescribed more medications for their psychological and emotional problems and they have more serious thoughts of suicide and have attempted suicide more often (Ravndal, 1994).

Many women also have histories of emotional, physical, and sexual abuse. These findings suggest that women in TC treatment have special and pronounced needs.

Previous studies have demonstrated that residents receiving treatment specifically tailored to their clinical needs are more likely to complete the program (McLellan, Luborsky, O'Brien, & Druley, 1983; McLellan et al., 1997; McLellan, Woody, Winick & Evans, 1997). Ravndal and Vaglum (1994) illustrated that women who are able to finish TC treatment had close contacts with other women, were less involved with men, found warmth and emotional support in their peer groups, and experienced positive identification with strong mothers who were not subordinated to their partners. Women who report more deviance among their friends, who didn't complete high school, and who had been arrested in the 6 months before admission were less likely to complete treatment (Knight, Logan, & Simpson, 2001).

Additional treatment modifications may be needed in order to construct a more female-friendly environment. Bride (2001) found that to improve treatment outcomes for substance-abusing women, gender-specific treatment must provide more than traditional treatment in a single-gender environment. A treatment that accepts more medication, includes more dialogue instead of confrontation, employs more individual psychotherapy, and places a stronger accent on the creation of a milieu with less hierarchy may be more appropriate for women in TC settings.

Furthermore, women may need to have the opportunity to share their experiences related to gender abuse in special female groups, through which women can examine their negative experiences of abuse in relationships and discover current changes in their perceptions and attitudes (De Leon, 2000). Women and men appear to deal with trauma in different ways: women tend to internalize the trauma associated with abusive experience(s), while males externalize it (De Leon & Jainchill, 1982; Jainchill et al., 2000). This suggests that there might be some evidence for a modified approach for women during the initial stages of treatment. However, such a proposition has to be balanced with the traditional TC belief that, during the first stages of treatment, the addiction problem itself should be the center of treat-

ment and women as well as men should not get involved with inner, often self-defeating, thoughts and emotions.

To further resolve these questions it is important to have a better understanding of the specificity of the problems women have when entering a TC, and it is important that diagnosis and assessment receive a more central place.

5. Conclusions

This study has limitations, such as the unequal distribution of residents over the various countries and the lack of specific knowledge of the content of the different centers using 'community as method.' Nevertheless, it may be concluded that the results generally supported the study's assumptions. Women in TC treatment were characterized by a generally more severe psychiatric profile than their male counterparts. This more severe profile may require specific treatment interventions and services focused on these symptoms. Many options still remain open concerning the requirements of this treatment and further research is clearly indicated. It would be interesting to investigate whether these 'European findings' are transferable to the United States and other countries and cultures.

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