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Résumé

L'usage des tranquillisants chez les femmes suivant un programme de traitement de la toxicomanie

Renée A. Cormier

La surconsommation des tranquillisants (p.ex. Valium, Ativan, Xanax) est une question souvent oubliée dans le traitement de la toxicomanie. Cet article présente des données sur la prévalence et la fréquence de l'usage des tranquillisants et de la consommation simultanée de substances intoxicantes chez les femmes toxicomanes suivant un traitement. Quatre-vingt-dix-huit femmes réparties dans neuf centres de traitement de courte durée en établissement pour femmes seulement, situés dans la province de l'Ontario, au Canada, ont répondu à un questionnaire visant à évaluer leur consommation avant le début du traitement. Quarante-trois répondantes ont rapporté qu'elles avaient consommé des tranquillisants pendant les six mois précédant le début du traitement, 70 % d'entre elles y ayant eu recours au moins deux à quatre fois par semaine. La durée de la consommation variait de un mois à 20 ans, avec une moyenne de quatre ans. La majorité des participantes (86 %) ont rapporté qu'elles prenaient au moins une substance autre que les tranquillisants. Les données obtenues indiquent qu'une proportion significative des femmes toxicomanes en traitement pourraient aussi avoir développé une dépendance à l'égard des tranquillisants. L'article se termine sur une discussion des conséquences de la surconsommation des tranquillisants en milieu de traitement.

Mots clés : femmes, toxicomanie, dépendance, tranquillisants, benzodiazépines, traitement

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Brief

The Use of Tranquillizers Among Women Undergoing Substance-Abuse Treatment

Renée A. Cormier

Overuse of tranquillizers (e.g., Valium, Ativan, Xanax) is frequently overlooked in substance-abuse treatment. This paper presents findings on the prevalence and frequency of tranquillizer use and concurrent substance use in women undergoing substance-abuse treatment. Ninety-eight women in 9 short-term, residential, women-only treatment centres in the province of Ontario, Canada, completed questionnaires assessing their pre-treatment substance use. Forty-three percent reported that they used tranquillizers in the 6 months preceding their treatment, and 70% of these reported using tranquillizers at least 2 to 4 times per week. Duration of use ranged from 1 month to 20 years, with an average of 4 years. The majority of participants (86%) reported using at least 1 other substance in addition to tranquillizers. The findings suggest that a significant proportion of women in substance-abuse treatment may be dependent on tranquillizers in addition to other substances. Implications for the intervention of tranquillizer overuse in substance-abuse treatment settings are discussed.

Keywords: women, substance use, substance abuse, addiction, dependency, tranquillizers, benzodiazepines, treatment

The over-prescription of tranquillizers (benzodiazepines in particular) was first identified as a critical health-care issue among Canadian women through the pioneering work of Ruth Cooperstock and colleagues, who reported that women were prescribed tranquillizers at twice the rate of men (Cooperstock, 1976; Cooperstock & Hill, 1982; Cooperstock & Lennard, 1979). Guidelines specify that minor tranquillizers should be prescribed for 7 days to 4 weeks, but there is evidence that individuals are regularly prescribed these drugs for periods far in excess of 10 days and in some cases as long as 20 years (Ashton, 2002). Prolonged use of tranquillizers results directly in a variety of health problems such as increased risk of hip and femur fractures and impairments in memory and general intelligence (Ashton; www.benzo.org.uk).

The purpose of the present study was to investigate the pervasiveness of tranquillizer use and misuse in a specific population — women undergoing substance-abuse treatment. The following questions guided the research: (1) *What are the prevalence rate and frequency of tranquillizer use among women in substance-abuse treatment?* (2) *What is the average duration of tranquillizer use among women in substance-abuse treatment?* (3) *Do women who have been using tranquillizers longer than 4 weeks (safe prescription levels) perceive their use to be problematic?* (4) *What are the rates of tranquillizer use and concurrent alcohol or other substance use among women in substance-abuse treatment?*

Method

Participants

Twelve treatment centres in the cities of Milton, Port Colborne, St. Thomas, Sudbury, Thamesville, Hamilton (2), Windsor (2), and Toronto (3) were approached by the researcher to participate in the study. These 12 represented all of the treatment centres providing women-only, short-term (21–28 days) residential treatment in the year 1998 in southern Ontario and the city of Sudbury. Three treatment centres declined to participate for various reasons (e.g., conflict with on-going research, too few clients to participate). Participants were recruited from nine substance-abuse treatment centres. All clients undergoing treatment over a 3-month period at six of the participating centres were approached. Due to low response rates, only one group of clients from the remaining three centres was approached to participate.

Informed consent was obtained from 98 of the 112 women in treatment (88.4%) approached by the researcher. Participants ranged in age from 15 to 59 years with an average age of 34 years (SD = 9.67). The majority of participants identified themselves as Caucasian (n = 81; 82.7%) and heterosexual (n = 85; 86.7%). In describing their living situation, the majority of participants indicated that they were either single (n = 46; 46.9%) or married/cohabiting (n = 39; 39.8%). Forty-nine percent of participants (n = 48) indicated that they had a high-school education or less. Forty-seven percent indicated that they were on social assistance (n = 26) or had no income (n = 20). One third (n = 32; 32.6%) of the participants reported that they were employed either full-time, part-time, or occasionally. The remaining 20% (n = 20) reported that they either were collecting disability insurance or employment insurance or were retired. Fifty-nine percent (n = 54) of participants had an annual household income of less than $20,000; a significant minority (n = 19; 20.7%) reported an annual income exceeding $50,000.

Measures

Demographic information for each participant was collected. Participants were asked their age, marital status, ethnicity, sexual orientation, education, and income.

The Pre-treatment Alcohol and Drug Use History form (adapted from Addiction Research Foundation, 1994) was used to determine pre-treatment levels of alcohol and other substance use and to identify multiple substance users. Information collected from this form included frequency of alcohol and other substance use, identification of primary substance of choice, and problematic use of substances. Participants were asked if they used alcohol, marijuana, cocaine, heroin, tranquillizers, opioids/pain medication, inhalants, or any other substances in the 6 months preceding their treatment and how often they used each substance (once a month, twice a month, three to four times a month, two to four times a week, or more than five times a week).

A substance was identified as problematic if it met one of the following criteria: (1) the participant identified it as the primary chemical of choice, (2) the participant indicated using it more than five times per week, or (3) the participant indicated its use as problematic. If more than one substance met these criteria, the participant was identified as using multiple substances.

Procedure

This study was part of a larger longitudinal study investigating factors predicting relapse in women who undergo substance-abuse treatment. Only the procedure and findings relevant to the present study will be presented.

Clients were recruited within 1 week of their treatment discharge date, either during a scheduled "break time" in their treatment program or during a group session. Clients were told by a staff member beforehand that a student researcher from the University of Windsor would be inviting them to participate in a study looking at what happens after women leave substance-abuse treatment. The purpose and general methodology of the study were disclosed by the researcher to all clients without staff present. Clients interested in participating were given a package that included a consent form and the measures. In order to reduce the effects of low literacy, the researcher went over the instructions and consent form with the participants and remained present for questions throughout the study. After written consent was obtained, participants completed the Demographic Information questionnaire and the Pre-treatment Alcohol and Drug Use History in a group setting. Participants returned their signed consent form and completed measures

to the researcher in separate, sealed envelopes. For reasons of confidentiality the participant's name did not appear on the questionnaire. Participants were not remunerated for completing these measures. All procedures conformed to the ethical guidelines of the Canadian Psychological Association and the American Psychological Association. Ethical approval for the study was obtained from the University of Windsor's Research Ethics Board and any relevant institutional boards of the participating treatment centres.

Results

Prevalence and Frequency of Tranquillizer Use

Forty-two of the 98 participants (42.9%) indicated that they had used tranquillizers within the 6 months prior to undergoing substance-abuse treatment. There were no significant differences between the women who reported tranquillizer use and those who did not on any of the demographic variables. The majority (70%) of women reporting tranquillizer use indicated that they used tranquillizers at least twice per week (see Table 1). The duration of reported use ranged from 1 month to 20 years, with an average of 4 years (in months: M = 49.3; SD = 57.7).

Table 1 *Frequency and Duration of Tranquillizer Use*

	Any Tranquillizer Use (n = 42)		Problematic Tranquillizer Use (n = 27)	
Frequency of Use	***N***	**%**	***N***	**%**
Once per month	2	4.8	1	3.7
Twice per month	3	7.1	0	0.0
3 to 4 times per month	6	14.2	3	11.1
2 to 4 times per week	12	29.6	5	18.5
> 5 times per week	17	40.5	17	63.0
Missing	2	4.8	1	3.7
Duration of Use				
1 month or less	1	2.4	0	0.0
2 to 5 months	4	9.5	1	3.7
6 to 11 months	2	4.8	2	7.4
1 to 5 years	15	35.7	10	37.0
> 5 years	5	11.9	9	33.3
Missing	15	35.7	5	18.5

Note: Participants frequently did not provide duration of tranquillizer use if they did not perceive such usage as problematic.

Only one participant reported using tranquillizers within the prescription guidelines (i.e., less than 1 month). Nearly half (48%) of the participants reporting tranquillizer use indicated that they had been using tranquillizers for more than 1 year.

Problematic Use of Tranquillizers

Twenty-seven of the 42 women reporting tranquillizer use (64.3%) met the criteria for problematic use (i.e., identified by participant as a primary substance or problem substance, or indication of daily use). Although none of these women reported using tranquillizers within the prescription guidelines, 63% indicated that their use was not problematic or that it presented a minor problem in their life. While not statistically significant, there was a trend for women who did not regard their tranquillizer use as problematic to have been using tranquillizers for a shorter period of time than women who identified their use as a major or minor problem (no problem: $M = 8.3$, $SD = 10.8$; major problem: $M = 69.4$, $SD = 84.3$; minor problem: $M = 63.7$, $SD = 48.2$, in months), $F(2, 23) = 2.85$, $p = .08$.

Multiple Substance Use

The vast majority ($n = 36$, 85.7%) of the women reporting tranquillizer use indicated that they used at least one other substance in the 6 months preceding their entry into substance-abuse treatment. Alcohol was implicated in all cases ($n = 36$) where tranquillizer use was reported in conjunction with other substance use. The use of marijuana ($n = 28$, 66.7%) or opioids ($n = 27$, 64.3%) was also frequently reported, while the use of cocaine ($n = 16$, 35.7%) or heroin ($n = 7$, 16.7%) was less frequently reported. For women reporting the concurrent use of tranquillizers and at least one other substance, the average duration of problematic alcohol, cocaine, marijuana, or opioid use exceeded the duration of tranquillizer use (see Table 2). All 17 of the participants who identified tranquillizers

Table 2 ***Duration (in Months) of Substance Use Among Multiple Substance Users (n = 36)***

Substance	*M*	*SD*	Minimum	Maximum
Alcohol	172.9	94.8	12	360
Marijuana	159.4	112.6	12	360
Cocaine	77.2	70.6	12	240
Opioids	74.4	62.8	18	264
Tranquillizers	53.2	58.31	2	240
Heroin	52.5	67.8	3	186

as one of their primary substances reported the *problematic use* of at least one other substance. On average, these 17 participants reported the problematic use of three other substances (M = 2.9, SD = 1.3).

Discussion

As anticipated, tranquillizer use and misuse among women in substance-abuse treatment was found to be pervasive. Nearly half of the participants indicated that they used tranquillizers at least once in the 6 months preceding their entry into substance-abuse treatment. Further, only one participant reporting tranquillizer use indicated that she had been using tranquillizers within the recommended prescription guidelines (i.e., less than 4 weeks; Ashton, 2002). The average duration of tranquillizer use in this population (4 years) far exceeded safe prescription levels (less than 1 month), yet a considerable number of the women did not perceive their use as a significant problem.

Another alarming finding was that the vast majority of women reporting tranquillizer use reported concurrent use of at least one other substance. In the majority of cases, alcohol was the substance most likely to be used, but a significant number of the women reported concurrent use of cocaine, marijuana, and opioids. While concurrent use of tranquillizers and alcohol has been documented in previous studies (e.g., Beckman, 1994; Celentano & McQueen, 1984; Corrigall, Israel, Naranjo, & Orrego, 1994), the current study provides evidence of co-addiction to tranquillizers and other substances. In all cases of multiple substance use, the women combined tranquillizers with alcohol — another central nervous system depressant. This combination of substances increases the risk for a variety of negative health effects, including overdose.

Another interesting finding is that the women reporting concurrent use of tranquillizers and other substances had been, on average, consuming the other substances (e.g., alcohol, cocaine, heroin, marijuana, or opioids) longer than tranquillizers. This suggests that, as hypothesized by Celentano and McQueen (1984), tranquillizers are being prescribed by physicians, nurses, psychiatrists, or other health-care providers with prescribing privileges to alleviate symptoms or other manifestations of problematic alcohol and/or other substance use, thus creating multiple substance-use problems among women.

Since a significant number of women in substance-abuse treatment may be dependent on tranquillizers, such treatment represents an opportunity for service providers to identify, educate, and intervene with women who are overusing tranquillizers. Routine screening by substance-abuse therapists for tranquillizer abuse could result in the identification of women requiring intervention. Intervention in the context of

substance-abuse treatment could consist of alternative methods of stress and anxiety management and of education by a nurse or other health-care provider in tranquillizer abuse, tolerance effects, withdrawal effects, and the health consequences of overuse. Additionally, as suggested by Dr. Heather Ashton (2002), a leading expert in benzodiazepine addiction, a withdrawal plan and tapering schedule enlisting the support and expertise of a multidisciplinary team of health professionals (e.g., nurses, physicians, addictions experts, pharmacists) could be developed to assist the client in safely withdrawing from tranquillizers.

While the present study is unique in its exploration of tranquillizer overuse in a sample of women in substance-abuse treatment, some limitations must be acknowledged. Because the sample was very specific (Ontario women in residential substance-abuse treatment), the findings may not generalize to all women who use tranquillizers. Further, the study relied on self-reports of substance use without additional validation. Therefore, the findings should be interpreted with caution. Finally, the participants did not specify which types of tranquillizers they used; therefore, in order to fully understand and intervene with women's overuse of tranquillizers, more information is needed about the specific types of tranquillizers used by participants, the circumstances surrounding the use of tranquillizers, and the conditions under which tranquillizers are being prescribed.

In conclusion, this study found that tranquillizer use is common among women in substance-abuse treatment and is complicated by the concurrent use and abuse of other substances. Routine screening of this population could help identify women who overuse tranquillizers and who should be targeted for further education and intervention by a team of health-care providers.

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Author's Note

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