Statement of Problem: Rural community mental health clinics face a variety of barriers to patient care, and no-show rates have significant consequences on the clinic's efficiency and fiscal operations (Berigan & Garfield, 1981; Edlund et al., 2002). The current study investigated whether the following factors were predictive of client no-show rates in a rural community mental health clinic within Oregon, USA: client demographics, income bracket, specific diagnosis upon intake, the category of presenting concern, and the number of specified diagnoses notated upon intake.

Subjects Used: A total of 95 individuals were included in the final sample (95 participants: mean age = 32.78, SD = 18.95; 61.1% female; 21.1% ethnic minorities; 45.3% annual income less than $15,000).

Procedures: Archived client data was retrieved from the clinic's electronic record system for the 2016-2017 year. The electronic record included demographic information, annual income bracket, and clinician's diagnostic impressions upon intake.

Results: Stepwise regression results indicate number of client diagnoses (including rule-outs) is predictive of individual no-show rates [$R^2 = 0.087$, $R^2_{adj} = 0.077$, $F(1,93) = 8.848$, $p < 0.004$]. This regression also demonstrated the following factors did not significantly influence no-show rates: gender, ethnicity, and presenting concern. A significant main effect was also found for client income, indicating a significant negative relationship with no-show rates ($r = -0.229$, $p < 0.004$). Furthermore, a significant interaction was found between client income and the number of diagnoses (including rule-outs) on individual no-show rates, $F(6, 68) = 2.869$, $p < 0.015$.

Conclusions: These results suggest low income is associated with client no-show rates, which is consistent with prior research. Furthermore, the number of diagnoses within a client's chart upon intake is predictive of attendance within a community mental health setting.

Factors Impacting No-Show Rates in Rural Community Mental Health

Laurie Meguro, MA, Laura Hoffman, MA, James Kim, MA, Tricha Weeks, MA,
Marie-Christine Goodworth, PhD., and Joel Gregor, PsyD.

Graduate School of Clinical Psychology, George Fox University

Introduction

Rural community mental health clinics face a variety of barriers to patient care, such as accessibility and limited resources within a low-income setting. According to Berrigan and Garfield (1981), low-income based clients tend to have greater rates of missed appointments (i.e. no-shows). As further detailed within prior research, no-show rates have significant consequences on the clinic's scheduling efficiency and fiscal operations (Berigan & Garfield, 1981; Edlund et al., 2002).

The current study hypothesized the following factors would be predictive of individual no-show rates in a rural community mental health clinic located in Oregon, USA:

- Reported Income
- Type and Number of Diagnosis/Presenting Concern at Intake
- Client Demographics (e.g., age, ethnicity, etc.)

Methods

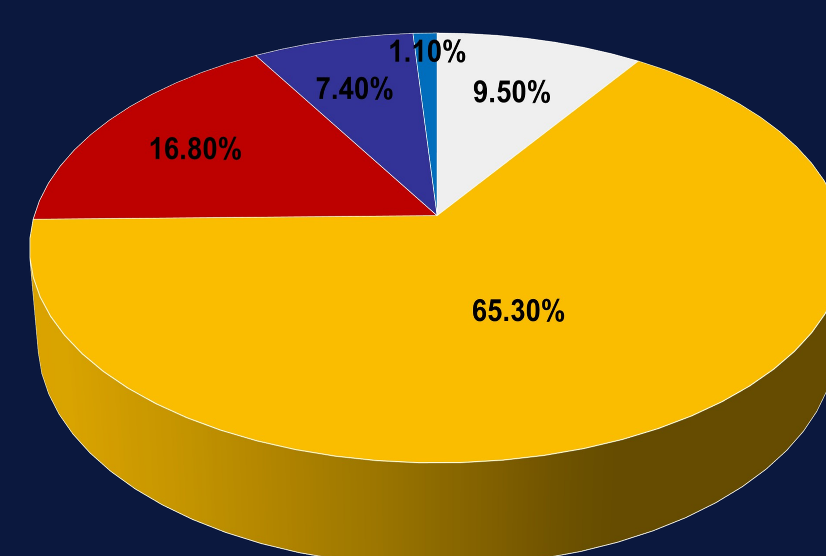
The present study examined client records of 118 individuals enrolled in individual therapy at a community mental health clinic in Oregon for 2016-2017. From this, 23 individuals were excluded due to missing demographic data. The final sample included 95 individuals (95 participants: mean age = 32.78, SD = 18.95; 61.1% female; 21.1% ethnic minorities; 45.3% annual income less than $15,000).

The electronic record included demographic information, annual income bracket, and the clinician's diagnostic impressions upon intake. All diagnostic impressions recorded involved codes specified within the Diagnostic Statistical Manual, 5th Edition (DSM-5). Individuals who used free-session vouchers did not report a level of income and were excluded from certain analyses. Furthermore, individual no-show rates were calculated from the clinic attendance records; intake no-shows were precluded from analysis.

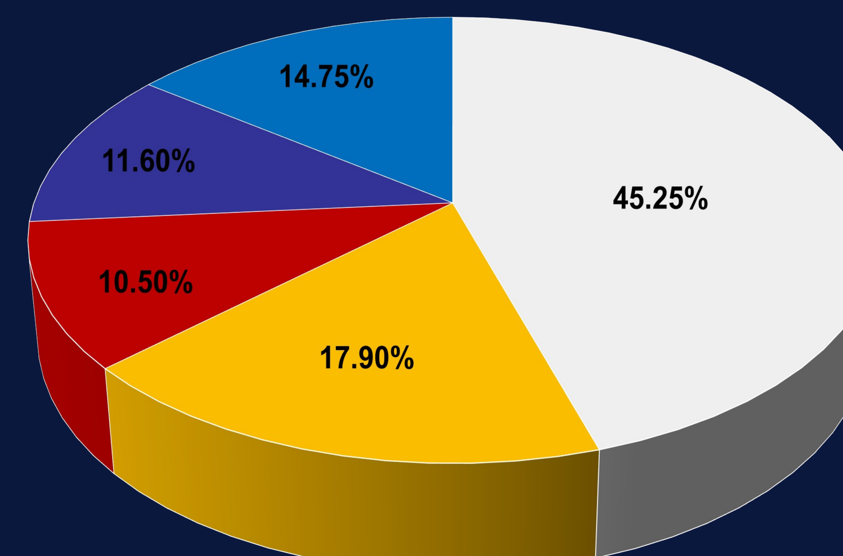
Results

- A stepwise linear regression was calculated to predict no-show rates based on gender, age, ethnicity, income, number of diagnoses/RO diagnoses, and type of diagnosis and presenting concern. A significant regression equation was found, ($F(1,79) = 10.74$, $p < .002$), with an R^2 of 0.12.
- "Number of Diagnoses/RO Diagnoses" significantly predicted no-show rates ($\beta = .346$, $t(81) = 3.28$, $p < .002$). Other variables were not shown to be significant predictors.
- Spearman Rho correlational analysis showed a significant negative relationship between income & no-show rates ($r = -0.229$, $p < 0.04$).
- A general linear model two-way analysis of variance was run to determine the effects of "Number of Diagnoses/RO Diagnoses" and "Income" on no-show rates and discern interaction effects. Significant main effects were found for "Number of Diagnoses/RO Diagnoses", ($F(3, 65) = 3.03$, $p < 0.04$) and "Income" ($F(3, 65) = 3.89$, $p < 0.01$).
- A significant interaction between "Number of Diagnoses/RO Diagnoses" and "Income" was also revealed within this GLM analysis ($R^2 = 0.32$, $R^2_{adj} = 0.251$, $F(1,65) = 2.59$, $p < 0.03$).

Number of Diagnoses Upon Intake



Client Reported Income Distribution



Discussion

These results suggest low-income is associated with client no-show rates, which is consistent with prior research. Even when clinics utilize a sliding scale payment system, lower income is still predictive of greater client no-show rates. Thus, consideration for the role of secondary factors often associated with low-SES, such as transportation issues or stigma, is warranted.

Furthermore, the client's number of diagnoses notated upon intake is predictive of their therapy attendance within a community mental health setting. This suggests clinical issues may impact global functioning, potentially interfering with treatment attendance. In all, clients with both lower income and multiple diagnoses are particularly vulnerable to missing appointments. Community mental health clinics, especially in rural areas, may benefit from targeted administrative interventions to support attendance in this sub-population.

Limitations: While the specific type of diagnosis did not appear to impact no-show rates, various disorder categories, such as neurodevelopmental or substance use disorders, were not examined due to sample limitations. Furthermore, the sample was limited and may not be representative or generalizable to other clinics. Future studies may expand upon these areas.

References

Berrigan, L. P., & Garfield, S. L. (1981). Relationship of missed psychotherapy appointments to premature termination and social class. The British Journal of Clinical Psychology, 20(4), 239-242.

Edlund, M. J., Wang, P. S., Berglund, P. A., Katz, S. J., & Kessler, R. C. (2002). Dropping out of mental health treatment: Patterns and predictors among epidemiological survey respondents in the United States and Ontario. The American Journal of Psychiatry, 159(5), 845-851.

Poster presented at the annual convention of the American Psychological Association, San Francisco, CA, August 2018.

Contact: Laurie Meguro, MA (lmeguro15@georgefox.edu)