The Relationship Between Clinical Diagnosis and Length of Treatment

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Abstract
Clinicians with a busy schedule or high caseload sometimes have problems determining if they will be available to assist new and future clients, based on their current workload. If Social Workers could determine how many therapeutic sessions a client with a specific diagnosis, on average, needs, then a clinician could determine if, and when they will be available for new and future clients. This helps the clients by helping a clinician focus on only a certain amount of clients at one time, and helps the clinician schedule incoming clients without the risk of becoming too overwhelmed with too many clients. While the literature on this subject is minimal, some studies, like one conducted by Asay, Lambert, Gregersen and Goates (2002) do suggest that certain disorders do require a specific number of therapeutic visits with a client in order to make significant progress.

Introduction

Description of the Problem

Without the evidence-based knowledge of the relationship between clinical diagnosis and treatment length, it is impossible for practicing clinicians to schedule clients accordingly or to set time-based treatment goals.

Questions to Be Explored

1. Based on an individual's diagnosis, can the number of therapeutic sessions a client requires with a clinician be discerned through diagnosis?
2. How often are Partnership Counseling Center's clients referred to other agencies?
Significance of the Problem

According to Wang (2002), serious mental illness has been estimated to impact the lives of 5.4% of the adult population in the United States each year (p. 92). As mental illness affects so many citizens in the United States, it is important to research treatment duration to better prepare clinicians and clients for their journey through therapy, to set appropriate treatment goals, and to research agency treatment outcomes.

Literature Review

Theoretical and Historical Perspectives

The research regarding treatment duration and outcomes is narrow in scope and confusing, at best. However, because there is, and has been, a growing trend in Social Work towards evidenced-based practice, an emphasis on topics like treatment duration, effectiveness and outcomes has been especially present during the past decade and a half. Even as early as 1991, an article written by Mirin and Namerow shows evidence of the then-growing concerns about the duration of treatment and ultimately, treatment outcomes. Citing mental health care costs as the sole reason why clinicians should study treatment outcomes, the authors make a solid case for these types of studies (p. 1007).

In 1995, Seligman published a peer-reviewed study based on the effectiveness of psychotherapy which included information about treatment outcomes and the length of treatment. Although the researchers involved in this study collected information about clinical diagnosis, this information was not used to determine treatment outcomes. In
regards to an overall analysis of the entire sample, and excluding clinical diagnosis information, Seligman found that 60% of the sample (N=2,846) abandoned treatment in less than one month's time because they had resolved their problem (p. 971).

Research conducted more recently shows varying results and is sometimes dependent on the treatment modality or other variable. Lutz (2003) found that the length of therapy generally suggested, for clients with differing diagnoses, was between “ten and 20 hours over six to nine months” (p. 745). Forde et al. (2005) found that in regards to clients experiencing depression, “six to eight sessions offers more benefit than one to five sessions, but having more than eight sessions does not confer any additional benefit,” (p. 36). Further suggestions for treatment duration regarding various mental illnesses is based on treatment methods, the use of prescription medication, or other variables.

**Identified Gaps in Literature**

Generally, the information about treatment length or duration is very specialized; that is, literature about treatment length and duration is often published with a specific medication or mode of treatment in mind. For example, there is a plethora of literature regarding dual-diagnosis and the length of treatment, or treatment outcomes based on Solution Focused Brief Therapy. The literature concerning the simple relationship between a diagnosis and length of treatment is sometimes difficult to find; as noted by Perry, Bond, and Roy, “Systematic knowledge about patient characteristics that predict the duration of long-term psychotherapy is largely absent” (2007, p. 221).

In addition, sometimes the literature does not provide specific information; for an
example, a study conducted by Asay, Lambert, Gregerson, and Goates (2002) compared treatment length in youth and adults without providing information in regards to other variables aside from age. Some of the other research-based literature found is absent of valuable information that could obviously skew research results; these missing variables sometimes include household income or the availability of insurance.

Reiteration of Purpose of the Evaluation

These studies are at the heart of Social Work practice today; that is, they are moving towards a more evidence-based practice approach.

On the micro level, these studies provide the tools for clinicians to manage their time better, and in essence, are able to assist more clients without being concerned about becoming overwhelmed with client overload. In addition, these studies provide a measurement tool for clinicians to assess their client's progress. Clinicians, by utilizing this studies, can ask themselves where their client stands in regards to progress.

On the macro level, these studies, in conjunction with agency statistical data and research, assist agencies in determining their clinicians' levels of effectiveness. Agencies can compare their clinicians individual treatment outcomes and determine why one clinician may be more effective than another. Armed with information about successful treatment outcomes, agencies can advocate and request more funds through grants.

Methodology

Quantitative Methodology and Rationale

Data was collected on clients (ages 18 and older), from 50 case files, at the
Partnership Counseling Center; a combination of Systematic and Disproportionate Stratified Sampling was used to collect the data. The data collected included demographic information: age, ethnicity, gender, marital status and income. Additionally, clinical diagnosis information was collected, as well as the number of times a client attended counseling.

Data Analysis Plan

This study is of quantitative nature (a secondary data analysis). Below are the steps for analyzing the data:

Relationship between clinical diagnosis and length of treatment.

1. Data was collected and entered into SPSS.
2. Descriptive statistics were ran to check for data distribution and skewness.
3. A regression analysis was ran to examine the relationship between the diagnoses and the therapeutic sessions. T-tests were ran to ascertain for differences (ethnic, marital, age range, etc.) between the groups among a specific diagnosis. Frequencies were ran to determine range of scores, mean scores, and standard deviations.

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**Sampling Design**

Systematic Sampling, at every 5th interval, was used because it is an easy yet efficient way to obtain a sample. Because Systematic Sampling has a high probability of bias, Disproportionate Stratified Sampling was later used in an attempt to eliminate bias, therefore ensuring that the sample of the various strata (male, female, Caucasian, African-American, etc.) are close in number.

**Description of Subjects**

The sample consisted of clients, ages 18 and older, of the Partnership Counseling Center whose case files were closed during the year 2007. African-American, European-American and Asian ethnicities were represented in this study as well as both male and female genders.

**Use of Procedures to Ensure Adherence to Human Subject Protection Guidelines**

All NASW code of ethics guidelines were followed during this study. Data obtained was stored on a personal laptop and password protected. Permission was received by the Partnership Counseling Center to review case files and confidentiality was of utmost importance during all phases of this study.

**Description of Instrumentation**

Research variables were collected from client case files using the following forms: client information form, comprehensive health history questionnaire, service plan, and closing summary. The data was collected and immediately recorded in SPSS.

**Statistical Procedures Used for Analyzing Data**

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collected and recorded in SPSS. Descriptive statistics were ran to check for data distribution and skewness. A regress analysis was ran to examine the relationship between the clinical diagnosis and the number of therapeutic sessions. T Tests were ran to look for differences (age range, ethnic, marital, etc.) between the groups among a specific diagnosis. Frequencies were ran to determine the range of scores, mean scores and standard deviations.

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**Results**

*Description of Study Sample*

An analysis of the overall sample (N=50) revealed that the mean age of study participants was 35.8 years (11.62) and ranged from 18 years to 62 years. Furthermore, 36 percent of the sample participants were male and 64 of sample participants were female. In regards to marital status, 62 percent of participants were married and 38 percent were single. Additionally, 21 of the participants were African-American, 24 participants were Caucasian, one participant was Asian, one participant classified themself as “other,” and three participants did not disclose their ethnicity. Income among sample participants ranged from $0 to $90,000 with 56 percent of participants falling within the income range of $0 to $10,001. An assessment of the prescription medication taken by sample participants revealed that six percent of the overall sample was taking medication prescribed by a doctor to treat a physical ailment and 34 percent
of the overall sample was taking medication prescribed to treat a mental illness; only eight percent of the sample acknowledged taking prescription medication to treat both mental and physical ailments while four percent of the sample did not disclose if they were taking any medication.

The most commonly diagnosed mental illness was depressed mood, which represents 22 percent of the overall sample. Other diagnoses include relational problem (18 percent), bipolar disorder (six percent), adjustment disorder (14 percent), major depressive disorder (ten percent), phase of life problem (six percent), occupational problem (two percent), drug dependence (two percent), dysthymic disorder (four percent), alcohol dependence (two percent), and oppositional defiant disorder (two percent). Furthermore, two percent of the sample received court ordered anger management treatment, while eight percent were not diagnosed.

Number of sessions varied greatly among the overall sample with a range of one to 23. Most frequently, sample participants only attended one session (46 percent). Furthermore, 76 percent of sample participants abandoned treatment, four percent were referred elsewhere, and 20 percent of sample participants successfully completed treatment.
Differences Between Groups

An independent-samples t test compared the mean age of sample participants and their gender. No significant difference was found ($t(48) = .122$, $p > .05$). The mean age of females was not significantly higher ($M = 36.22$, $SD = 11.48$) than the mean age of males ($M = 35.06$, $SD = 12.18$).

An independent-samples t test compared the participants’ mean number of sessions to their gender. No significant difference was found ($t(48) = -.710$, $p > .05$). The mean number of sessions for males was not significantly higher ($M = 3.22$,
An independent-samples $t$ test compared the participants’ mean number of sessions to their ethnicity. No significant difference was found ($t(43) = -0.307, p > .05$). The mean number of sessions for African-American clients was not significantly higher ($M=3.05, SD=3.39$) when compared to Caucasian clients ($M=4.46, SD=5.38$).

An independent-samples $t$ test compared the participants’ mean number of sessions to their marital status. No significant difference was found ($t(48) = -0.415, p > .05$). The mean number of sessions for married clients was not significantly higher ($M=4.23, SD=5.03$) when compared to single clients ($M=3.16, SD=3.27$).

**Results of Research Questions**

A simple linear regression was calculated predicting the relationship between a client’s clinical diagnosis and the number of sessions required to meet treatment goals. The regression equation was not significant ($f(1,48)=.054, p > .05$) with an $r^2$ of .001. Clinical diagnosis cannot be used to predict the number of sessions required to meet treatment goals. One percent of the variance in length of treatment can be attributed to differences in diagnosis. Clinical diagnosis is not a significant variable in determining length of treatment. Four percent ($n=2$) of the entire sample ($N=50$) were referred to other services either inside or outside of the agency.
Discussion

Explanation of Findings

The primary objective of this study was to research the relationship between a client's clinical diagnosis and their length of treatment. While the literature suggests that there is a definite relationship between a client's clinical diagnosis and their length of treatment, the results of this study do not support the literature. Research based on this study revealed that there was no significant relationship between a client's clinical diagnosis and their length of treatment. When a simple linear regression was calculated for the two variables clinical diagnosis and the number of sessions completed, it revealed that only one percent of the variance in length of treatment can be attributed to differences in clinical diagnosis between clients.

When comparing groups using independent samples t tests, no differences were found, in regards to the number of sessions completed, between groups within the
gender, ethnicity and relationship status variables.

The secondary objective of this study was to research how many times clinicians at the Partnership Counseling services made referrals to community-based resources. A review of the case files indicated that only two clients received referrals to other resources outside the agency. This may be due to the fact that Partnership offers a host of resources including credit counseling, adoption services, parent education, crisis and emergency services, and services for specific client groups like teenage mothers, the deaf and hard of hearing, victims of domestic abuse and the elderly.

**Application to Practice**

1. As 76 percent of clients abandoned treatment, Social Workers should learn about and incorporate alternative ways to empower clients to complete therapy goals.
2. As 76 percent of clients abandoned treatment, Social Workers should research why clients often fail to complete treatment objectives.
3. As only four percent of clients were given referrals for other community resources, Social workers should utilize community resources to make appropriate referrals. Utilizing community-based resources ensures clients receive more thorough care.
4. Because depressed mood was the most frequently occurring diagnosis, Social Workers should research alternative interventions to better assist clients in treatment.
5. Social Workers should not make assumptions that differences between ethnicity, or marital status impact treatment outcomes as there was no significant difference found between the above groups in terms of completing treatment.

*Weaknesses and Limitations of the Evaluation*
In retrospect, a thorough assessment of the research design reveals several weaknesses and limitations of this study. To begin, the sample only included fifty clients. Furthermore, the small sampling of clients does not allow for a thorough and accurate comparison of the various groups diagnosed with different disorders. Because only 24 percent of the sample completed treatment, this further compounds the issue of evaluating the number of sessions needed to successfully complete treatment when compared to a clinical diagnosis.

In addition, the sample was derived from the case files of three different clinicians who use varying approaches in treatment. Because divergent treatment methods often produce different results, it is difficult to ascertain treatment effectiveness which subsequently affects the number of sessions needed to reach treatment goals.

**Recommendations**

This type of study does have a place within the realm of the evidence-based practice. It is recommended that future studies of this nature use a more broad sampling base to strengthen results. Furthermore, studies completed to ascertain whether the clinical diagnosis has a relationship to the number of sessions should ensure that the sampling base is inclusive only of clients who have completed treatment successfully or provide a means to ascertain why clients abandoned treatment.

This type of research could be used to determine which treatment methods are the most time effective; I recommend that future research in this area be completed on various treatments separately and then compared with research on other treatment methods to ascertain differences in effectiveness.
Furthermore, a research study in similar design could be used to compare treatment outcomes of a smaller scale. I recommend that this type of study be used within an agency setting (however, with a larger sample) to compare treatment rates to those reported in peer-reviewed literature. Additionally, this type of study could be used to compare individual effectiveness within a group of clinicians. For an example, if in this study the clinicians who were responsible for treatment was recorded and reported, perhaps one could have assessed which clinician had better treatment outcomes and further, which clinician had better treatment results with various populations.
References


West, J. C. et al. (2005). Patterns and quality of treatment for patients with major