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THE EFFECTS OF HOUSING ON THE BIOLOGICAL, PSYCHOLOGICAL,

AND SOCIOLOGICAL FUNCTIONING OF HOMELESS PERSONS WITH

HUMAN IMMUNO DEFICIENCY VIRUS/ACQUIRED IMMUNO DEFICIENCY

SYNDROME

_____

A Project

Presented to the

Faculty of

California State University,

San Bernardino

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In Partial Fulfillment

of the Requirements for the Degree

Master of Social Work

_____

by

Jason Wayne Colby
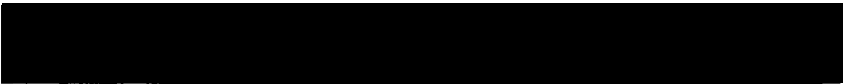
June 2003

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Approved by:

_____   _____
Dr. Laurie Smith, Faculty Supervisor   Date   June 4/03
Social Work

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Dr. Rosemary McCaslin,
M.S.W. Research Coordinator

ABSTRACT

Increasing numbers of HIV/AIDS diagnoses are found within low-income communities, and many among the homeless population have HIV/AIDS. This study assessed the bio-psycho-social functioning of homeless individuals with HIV/AIDS once they were placed into supportive housing. Secondary data analysis was used to collect data for a pre-test post-test design from acuity scales at intake and the designated follow up period. The sample of 20 indicated no significant improvements in bio-psycho-social functioning since entering the program. However, given the progressive nature of HIV disease, this likely indicated positive effects of being housed. The research shows a more comprehensive system of care and services is needed.

ACKNOWLEDGMENTS

DEDICATION

Dedicated to my family and friends for their love and never-ending support over the last two years. Thank you.

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CHAPTER ONE

INTRODUCTION

Problem Statement

HIV/AIDS is a deadly disease that continues to affect hundreds of thousands of people in this country, while affecting millions worldwide (CDC, 2001). Whether contracting HIV/AIDS through unsafe sexual practices or intravenous drug use, there are over 650,000 people living with AIDS nationwide (CDC, 2001). This figure does not include the number of people diagnosed with HIV. It can be safely assumed that by adding the number of HIV infected people to the number now diagnosed with AIDS, the country is experiencing a health crisis of immense proportions with over a million infected.

One of the many issues faced by people with HIV/AIDS is that of financial instability. A low socio-economic status (SES) alone has been shown to be associated with an increased risk of HIV infection (Murrain & Barker, 1997). Murrain and Barker also relate that a relationship between HIV and low SES exists when looking at geographic data. In their study, Murrin and Baker show through a zip code analysis that areas of poverty within their study had four

times the number of HIV/AIDS cases than that of high-income areas (1997).

If low socio-economic status is related to higher rates of HIV infection, then it is reasonable to look at HIV/AIDS infection in relation to the homeless population. It is estimated that as many as one-third to one-half of people living with HIV/AIDS are homeless (Bonuck, 2001). If an impoverished area, which houses low SES and homeless populations, has more HIV infected members, then in all likelihood the rates of infection increase as well (Rotheram-Borus et al., 1991).

Research also shows that the homeless have high rates of unsafe behaviors in relation to HIV/AIDS risk. Alcohol abuse, drug abuse, intravenous drug use, and unsafe sexual behaviors (i.e. unprotected sex, trading sex for money or drugs, and sex-industry work) are frequent practices within the homeless community (Giannetti & Freyder, 1998; Gillman & Newman, 1996; Marks, Taylor, Burrows, Qayad, & Miller, 2000; Rotheram-Borus et al., 1991; Somlai, Kelly, Wagstaff, & Whitson, 1998; St. Lawrence & Brasfield, 1995; Stoner, 1995). Behaviors that help to stop the spread of HIV/AIDS, such as the use of safe sex practices and safe intravenous drug use practices, are not generally enacted

by the homeless (Giannetti & Freyder, 1998; Rotheram-Borus et al., 1991).

Clearly a need for social service action is warranted for the homeless HIV/AIDS community. Current services for the homeless population may not include care to assist with HIV/AIDS issues. It has been shown that people who are diagnosed with HIV/AIDS and report it may be denied services based solely on their HIV/AIDS status (Rotheram-Borus, Koopman, & Ehrhardt, 1991). Homeless people with HIV/AIDS may be denied services from shelters, which in turn places them on the street with a chance for more opportunistic infections (Smith & Pynoos, 2002). Research shows that programs for homeless people with HIV/AIDS are lacking in both funding and service diversity (Bonuck, 2001; Gillman & Newman, 1996; Marks et al., 2000; Rotheram-Borus et. al., 1991; Somlai et al., 1998; St. Lawrence & Brasfield, 1995).

Purpose of the Study

The purpose of the study was to assess the impact of housing services on the bio-psycho-social functioning of homeless persons with HIV/AIDS. Ideally, taking a homeless person with HIV/AIDS and returning them to a healthy state would be a goal of any social service intervention. It is

a goal, however, that may be difficult to attain. The problem not only lies in the individual's HIV/AIDS or homeless status, but in other bio-psycho-social areas, such as social support and legal issues, that are related to HIV/AIDS and being homeless. Problems such as mental illness and drug use are common within the homeless population (Giannetti & Freyder, 1998; Gillman & Newman, 1996; Rotheram-Borus et al., 1991). These other issues, when compounded with being homeless and HIV/AIDS positive, create a situation in which multiple issues impede progress to an improved state of bio-psycho-social health.

Using a person-in-the-environment perspective, it is imperative to create a stable housing situation for homeless clientele. How are clients who have no address or stability in their living situation able to receive adequate services? It was posited that providing a home for someone who is homeless will provide the stability needed by clients to gain better access to healthcare and other service needs. A client who is living on the streets may not give high priority to healthcare if their main focus is finding a place to sleep and eat. Stabilizing the living situation of the homeless persons with HIV/AIDS would also be more beneficial than just allocating funds to providing them with medications (Bonuck, 2001).

Medications may be able to increase the length of life for an individual, but they do not increase the quality of life, especially for someone who is homeless. Once a stable living environment is attained, work on other health issues within the homeless population, such as mental health, drug addiction, and alcohol abuse could begin which furthers the development of the individual (Bonuck, 2001; Rotheram-Borus et al., 1991).

Once the homeless are housed, then they can begin to reclaim pieces of their lives, and make efforts to control their health issues. What is needed are housing programs designed to provide housing and services specifically to homeless people with HIV/AIDS. Central City Lutheran Mission (CCLM) has developed a supportive housing project known as the Windows project. The CCLM Windows project provides homeless individuals with HIV/AIDS stable shelter within a supportive housing program, which in turn provides the individual with opportunities to get their various health and bio-psycho-social issues under control.

By reviewing the data collected at the organization for those clients, both past and present, who accessed the services enough to reach a second review period, the effectiveness of housing homeless clients with HIV/AIDS can be assessed. The records may reflect client issues

with regards to their bio-psycho-social functioning, such as drug & alcohol abuse, mental health status, social support, and cultural barriers, which may have been resolved and led to better overall health status and quality of life.

Significance of the Project
for Social Work

The significance of the project for social work had three major components. First, this project focused on a marginalized population. People who suffer from homelessness face a very harsh and stigmatized life. To couple that with a debilitating and stigmatized disease like HIV/AIDS provides even greater rationale for social work intervention. This is a marginalized population that has a higher risk element of spreading HIV/AIDS infection. At risk populations should be targeted for social work intervention.

Second, by looking at this population only from a medical standpoint, the spread of HIV/AIDS was being allowed to rise among the disenfranchised (Rotheram-Borus et al., 1991; Somlai et al., 1998; St. Lawrence & Brasfield, 1995). Numerous services are provided for HIV/AIDS patients, but not many deal with the unique issues of homelessness. Homeless people spend more time in

the emergency room due to lack of preventative care (Marks et al., 2000). In addition, since they are less likely to have third-party insurance, homeless people are only seeking emergency treatment, which requires longer hospitalization and leads to a larger medical bill that the public sector ends up paying (Marks et al., 2000). Social work intervention at early stages could lead to reduced hospitalization time and less emergency room visits. This would have a trickle down affect and the public sector would be able to save on funding that could be allocated elsewhere.

Last, there has already been a relationship determined between persons with HIV/AIDS and problems with housing (Bonuck, 2001; Gillman & Newman, 1996; Murrain & Barker, 1997; St. Lawrence & Brasfield, 1995). The data support that more comprehensive housing care is needed, but there is little data on those that have been housed and their bio-psycho-social functioning status. A need has been determined, and social work must be called to action to assist a population in great need of services. Social work is an advocate for populations needing assistance with such services. It is with these important concerns in mind that this study seeks to determine if providing

housing services to HIV/AIDS people will improve their
bio-psycho-social health status.

CHAPTER TWO

LITERATURE REVIEW

Introduction

Chapter Two consists of a discussion of the relevant
literature. Specifically, the risk factors for HIV/AIDS to
which homeless people are exposed, including their own
behavior, will be discussed. The homeless population with
HIV/AIDS, and the housing services that are provided to
them, are examined to provide a clear picture of the
current situation regarding HIV/AIDS homeless population
and the desperate need for more services

Homelessness and HIV/AIDS Risk
Factors

To be homeless in this society is to be an ostracized
and ignored member of society. The homeless population
suffers from many different problems aside from stigma.
One of the more prevalent problems is their individual
safety. Homeless people experience a plethora of issues
when it comes to personal safety, one of which is risky
behavior associated with infection of the HIV virus. Data
show that HIV/AIDS is on the rise within this population,
because homeless people are not taking the appropriate
measures to protect themselves (Somlai et al., 1998).

One of the ways HIV is passed on to people is through the use of intravenous drugs; AIDS is the leading known killer of this population (Giannetti & Freyder, 1998). Drugs, both intravenous and other types, are a major problem within the homeless population. In the study by Gianetti and Freyder, it was noted that 71% of their homeless sample had used some form of drug within a week of the interview (1998). In another study by Gillman and Newman, 73% of their sample had a drug use history (1996).

Aside from the direct IV drug use known to spread HIV/AIDS, there are other high-risk behaviors associated with drug use. Cocaine and crack have been reported to not only increase sexual behavior, but to be the reward for the exchange of sexual favors (Giannetti & Freyder, 1998). When in the "high" state, it has been shown that homeless people are having sex, due to the breakdown of inhibition, which may also cloud rational judgment to the point of people participating in unprotected sex (Somlai et al., 1998). With unprotected sex being another major way HIV is spread, the fact that behaviors such as condom use and safe sexual practices are atypical within the homeless population presents a clear need for intervention (St. Lawrence & Brasfield, 1995).

Sex among the homeless can take on new meanings and intentions. For example, survival sex is when sex is traded for a place to stay or food (Somlai et al., 1998). Sex can also be used to barter for these things as well as drugs and/or money (Giannetti & Freyder, 1998; Rotheram-Borus et al., 1991; Somlai et al., 1998; St. Lawrence & Brasfield, 1995). When using sex this way, with the number of partners increases, and the chance of not only catching, but also spreading, HIV drastically increases (Somlai et al., 1998; St. Lawrence & Brasfield, 1995; Stoner, 1995). These figures do not include the incidence of rape and coercive sex, which when added, are likely to raise the risk even further.

HIV/AIDS and SES

When poverty itself is viewed as a risk factor for HIV/AIDS, it is hard to ignore the economic aspects of the disease (Murrain & Barker, 1997). It is widely known that the medications for HIV are numerous and expensive, but what is the economic status of the people who need them? It has been noted that many people with HIV/AIDS seek forms of public assistance (Bonuck, 2001; Gillman & Newman, 1996). Bonuck's reported that 64% of her sample required food or meal assistance, 59% needed assistance to

live independently, and that 65% need help finding housing with rent and utility benefits (2001).

<center>Housing the Homeless HIV/AIDS
Population.</center>

A large proportion of people with HIV/AIDS are in danger of losing their housing, if they are not already homeless (Bonuck, 2001). Sadly enough this figure is increasing and housing services are beginning to diminish (Bonuck, 2001; Rotheram-Borus et al., 1991; Smith & Pynoos, 2002). The housing situation for any homeless person is difficult, but when coupled with HIV/AIDS the fact of not having a home can be extremely detrimental to both the physical and emotional health of the individual (Smith & Pynoos, 2002).

A hopeful solution lies in housing the homeless HIV/AIDS population. Once off the street and in housing, they will not be as susceptible to the numerous opportunistic infections that one could get from living the homeless lifestyle (Smith & Pynoos, 2002). Stable housing for this population can be viewed as vital because it increases their ability to participate in their medical health (Bonuck, 2001; Smith & Pynoos, 2002). The CDC reports that people with AIDS are living longer and, if studies are accurate, then about one-third to one-half of

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this HIV/AIDS population are living on the streets (Smith & Pynoos, 2002) Non-participation in medical health care by homeless persons has been linked to higher rates of emergency room treatment with longer hospital stays which in turn costs the public sector more money (Marks et al., 2000).

Once clientele are in housing and can access medical care, other more comprehensive steps can be taken to aid in their overall recovery. Studies show that a more comprehensive care system can begin once a stable living environment is arranged and the need for basic street survival is gone (Bonuck, 2001; Rotheram-Borus et al., 1991; Smith & Pynoos, 2002; Somlai et al., 1998; St. Lawrence & Brasfield, 1995). Once in the housing, client needs can be assessed and an individualized service plan can be created. Client issues can be addressed and the proper services delivered (Rotheram-Borus et al., 1991). Since a large number of homeless people have issues associated with drug and alcohol abuse, these issues can also be addressed (Giannetti & Freyder, 1998). Bangsberg, Tulsky, Hecht, and Moss (1997), noted that the life expectancy of the homeless population infected with HIV/AIDS was more likely to increase when monies are spent on housing rather than just antiretroviral therapies.

Theories Guiding
Conceptualization

Systems theory requires that one look to the interacting systems that an individual is involved with order to see the strength of relationships between the individual and those systems (Zastrow and Kirst-Ashman, 2001). If an individual is within a culture of homelessness, then it is logical to assume that the homeless culture has some relationship to who the individual is. While systems theory begins to provide an adequate overall picture of an individual within other systems, more attention should be paid to the individual's reactions and adaptations to their environment.

Prior studies clearly suggest that the person-in-the-environment model is an appropriate guide to studying these issues. Geographically, HIV/AIDS cases are more prevalent in low-income areas as opposed to high-income areas (Murrain & Barker, 1997). Campbell's study indicates that 73% of the subjects within his study were from low-income areas. Estimates from about one-third to one-half of the New York homeless population having HIV/AIDS, also suggest a socio-economic environment focus (Bonuck, 2001). Environment seems to be a key issue, so what happens when an individual is removed from their environment?

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By admitting a homeless individual into a supportive housing program, you are removing the person from their established environment and placing them in a more structured one. Systems theory relates the important significance of the relationship an individual has with their environment. Person-in-the-environment theory looks to the individual and their reactions to their environment. In essence, this study focuses on the environment as an influential factor within the individual's life structure, and seeks to show how the change of environment will affect the individuals bio-psycho-social functioning.

Summary

The literature important to the project was presented in Chapter Two. It was shown that with HIV/AIDS infection rates on the rise, unsafe behaviors, and environmental factors that lead to high risk for HIV/AIDS infection among the homeless, action is desperately needed to address the housing needs of the homeless with HIV/AIDS (St. Lawrence & Brasfield, 1995). This population suffers from severe poverty issues that make basic living needs, such as shelter and food, take precedence over accessing

health care (Gillman & Newman, 1996; Rotheram-Borus et al., 1991). The studies show that housing this underserved population is a great need, yet services needed continue to decrease (Bonuck, 2001; Somlai et al., 1998). Programs for HIV/AIDS clientele need to be assessed so that more funding can be allocated to this area. Specifically, data on the effects of housing on the bio-psycho-social functioning will strengthen this effort, and this is the major research question of this study.

the stigma of being homeless, the use of secondary data analysis is appropriate for data collection. Secondary data analysis of this sample allowed for high levels of client anonymity and confidentiality. This type of data collection also has no interaction with clients, which eliminates the emotional pain a client may experience in an interview situation.

Case files were reviewed in a pretest-posttest design. Data acuity scales filled out at the time of intake and during scheduled follow-up interviews were transferred to a data collection sheet (Appendix A). These data provide an overall view of the bio-psycho-social functioning of the client before the program, and will show any improvements and/or setbacks after being in the program. Analysis of the acuity scale data will indicate whether or not housing homeless people with HIV/AIDS leads to improved bio-psycho-social functioning.

Sampling

The sample consisted of clients who have used since 1998, or are currently using the services provided by the Central City Lutheran Mission (CCLM). To gain entry into the CCLM program, a client must be homeless and have HIV, AIDS, and/or Hepatitis C. Only those clients with a

diagnosis of HIV/AIDS, Hepatitis C and/or HIV/AIDS with Hepatitis C were used. In order for the case file to be used, the client must have been administered at least two acuity scales. The first acuity scale is completed at intake, while the second is a follow-up of the initial intake, usually taking place between 30 to 90 days later, dependent on the initial score. Of the 61 residents serviced within the study time period, 20 had both an intake acuity assessment and at least one follow-up acuity assessment.

Data Collection and Instruments

The data was collected from acuity scales administered to the clients. The acuity scale is designed to ascertain the service level need of clients entering the program, and at a designated follow-up period (Appendix A). It assesses eleven bio-psycho-social factors. The areas are 1) basic needs, 2) HIV disease progression, 3) other medical needs, 4) support systems, 5) living situation, 6) substance abuse, 7) mental health, 8) financial/benefits, 9) transportation, 10) legal assistance, and 11) culture/language. It is hypothesized that all of these variables will be affected by providing housing, the independent variable.

Each of the eleven items is ranked with a three-point rating (1, 2, or 3), with 1 indicating the least need and 3 indicating the most need. Once an individual score is given on all eleven items, the resident is given an overall rating based on the sum of all the items. A description of each point rating is provided on the sheet next to each variable. This may assist in increasing reliability. However, some of the descriptions are general which may, conversely, hinder the reliability of the scale.

Procedures

The data were gathered through secondary data analysis. Permission was given by the CCLM to access active and non-active client files in the office to review acuity scales. Data from eligible files was transferred onto data extraction sheets with numbers substituted for client names to protect confidentiality. These data were then processed in a password-protected computer. The data was recorded and processed solely by the author. Data collection began in February of 2003 and was completed by March of 2003.

Protection of Human Subjects

In order to protect the confidentiality of the clients of the agency, the data from eligible files were coded with a random four-digit number. The first scale used was coded with the number, and the second scale used had the same code with a letter at the end of number. The code number was assigned to a case and the coding scheme is being kept on a password protected computer disk. The code number will physically identify hard copies of the acuity scales only. The hard copies of the acuity scales, as well as the computer disk with the coding scheme, are being kept in separate secret locked places.

Data Analysis

Analysis of the data was directed towards finding the effect of living situation on HIV/AIDS disease progression. Demographic data was analyzed to show the sample's ethnicity, gender, substance abuse and disease status. Frequency data were produced to show fluctuations of acuity scale scores from intake to the follow-up period for trend analysis of increased bio-psycho-social functioning. Multivariate statistics, such as chi-squares, were used to assess any changes in bio-psycho-social functioning while in the supportive housing program.

Summary

Secondary data analysis of pre-housing and post-housing bio-psycho-social functioning will show whether or not housing homeless people who are diagnosed with HIV/AIDS is effective in increasing their bio-psycho-social functioning. Basic needs, HIV disease progression, other medical needs, support systems, living situation, substance abuse, mental health, financial benefits, transportation, legal issues, and culture/language were the variables that were assessed for statistical significance.

CHAPTER FOUR

RESULTS

Introduction

Included in Chapter Four is a presentation of the results from data analysis. Demographic data is presented to note any observable trends with regards to ethnicity, gender, medical status at intake, and drug use at intake. A breakdown of significant findings from each acuity scale variable is also presented. Lastly, the Chapter concludes with a summary of the findings

Presentation of the Findings

There were 61 case files in the agency from 1998 to 2003. Of the 61 files, 20 case files had both the acuity scale at intake and its time allotted follow-up acuity scale, giving the study a sample of 20 (N=20). Case files that were not used had one acuity scale, or were not fully completed. A complete demographic breakdown can be found in Table 1.

Of this sample, 50% of the sample reported being African American while 45% reported as Caucasian. There was one case where no ethnicity was reported. There were more imbalances in gender than in ethnicity with 65% of the population being male and 30% female. One

Table 1. Frequency Distribution of Demographic Statistics

Resident Demographics	Number Totals	Cumulative Totals	Percentage Totals	Cumulative Percentages
Ethnicity of Residents				
African American	10	10	50%	50%
Latino/Hispanic	0	10	0%	50%
Caucasian	9	19	45%	95%
Asian/Pacific Islander	0	19	0%	95%
Other	0	19	0%	95%
Total		19*		95%*
Gender of Residents				
Male	13	13	65%	65%
Female	6	19	30%	95%
Transgender	1	20	5%	100%
Total		20		100%
Medical Status				
HIV	13	13	65%	65%
AIDS	4	17	20%	85%
Hepatitis C	2	19	10%	95%
Dual Diagnosis	1	20	5%	100%
Total		20		100%
Substance Abuse				
Yes	19	19	95%	95%
No	1	20	5%	100%
Total		20		100%

*One data file missing ethnicity data.

resident identified as transgender.

Residents medical status at intake revealed most entered the program with an HIV diagnosis. 65% of the case files had HIV diagnoses, while 20% of the residents had a full AIDS diagnosis at intake. 10% of the cases were Hepatitis C diagnosed and one case had a dual diagnosis of HIV and Hepatitis C.

A significant trend was that 95% of the population reported to using illegal drugs and having substance abuse issues.

A comparative analysis of the acuity scale was run. Twenty case files (N=20) contained an acuity scale at intake and an acuity scale at the proper follow up period. Percentage totals of the acuity ratings can be viewed in Table 2.

General Client Needs- There was an observable decrease in the number of residents feeling their general needs were met at the time of intake than at the follow up acuity scale. The 25% fluctuation increased into level 2 where clients reported their primary needs were occasionally not met. Chi-square analysis showed no significant statistics X^2=.058, df=1, p<.05.

Disease Progression- There were no significant findings relating to disease progression in both frequency and chi-squares analysis, X^2=.795, df=2, p<.05.

Other Medical Needs- An important finding showed a 30% increase of clients having stable health (Non HIV/AIDS related) at the second acuity scale. The finding showed a 25% decrease from a level 2 rating, where clients may need some medication, and a 5% decrease from a level 3 in which there is the presence of a non-HIV related health

Table 2. Percentage Totals of Residents Acuity Ratings at
Intake and Follow Up

Acuity Scale	Level 1	Level 2	Level 3
General Client Needs			
Follow Up Acuity (B)	10%	90%	0%
Intake Acuity (A)	35%	65%	0%
Disease Progression			
Intake Acuity (A)	35%	50%	15%
Follow Up Acuity (B)	30%	60%	10%
Other Medical Needs			
Intake Acuity (A)	30%	65%	5%
Follow Up Acuity (B)	60%	40%	0%
Client Support Systems			
Intake Acuity (A)	10%	75%	15%
Follow Up Acuity (B)	0%	75%	25%
Current Living Situation			
Intake Acuity (A)	20%	40%	40%
Follow Up Acuity (B)	30%	40%	30%
Substance Abuse Issues			
Intake Acuity (A)	40%	55%	5%
Follow Up Acuity (B)	40%	50%	10%
Mental Health Status			
Intake Acuity (A)	50%	45%	5%
Follow Up Acuity (B)	30%	65%	5%
Financial Situation			
Intake Acuity (A)	25%	55%	20%
Follow Up Acuity (B)	5%	85%	10%
Transportation Issues			
Intake Acuity (A)	30%	25%	45%
Follow Up Acuity (B)	25%	10%	65%
Legal Issues			
Intake Acuity (A)	65%	35%	0%
Follow Up Acuity (B)	70%	30%	0%
Cultural Barriers			
Intake Acuity (A)	95%	5%	0%
Follow Up Acuity (B)	90%	10%	0%
Total Acuity Levels			
Intake Acuity (A)	25%	70%	5%
Follow Up Acuity (B)	20%	80%	0%

emergency. Chi-square analysis showed no significance, $X^2 = .123$, df=2, p<.05.

Client Support Systems– There were no significant findings in client support systems. A 10% fluctuation was noticed from residents reporting stable support systems at intake, into a 10% increase in the resident's claming no stable support systems at follow up. Chi-square analysis revealed no significant findings, $X^2 = .287$, df=2, p<.05.

Current Living Situation– A 10% fluctuation occurred showing no real significance in residents living situations. There were no significant findings from a chi-square analysis, $X^2 = .710$, df=2, p<.05.

Substance Abuse Issues– There was no significant findings in substance abuse issues of residents between the intake and follow up session. There were also no significant findings from a chi-square test $X^2 = .827$, df=2, p<.05.

Mental Health Status– A 20% increase of residents stabilizing their mental health issues was discovered. Interestingly enough, this increase came from 20% of the residents in the no current mental health (level 1) category. Chi-square analysis showed no significant results, $X^2 = .422$, df=2, p<.05.

Financial Situation- Observable data found a 30%
increase of residents feeling they were having some
financial difficulties. The increase came from 10% of the
residents who previously had no income and from 20% of the
residents who claimed to have stable income. There were no
significant findings from chi-square analysis, X^2=.099,
df=2, p<.05.

Transportation Issues- A 20% increase in residents
lacking transportation was noted. Fifteen percent of the
increase came from residents already claiming some
transportation issues at time of intake. No significant
results were found in a chi-square analysis, X^2=.349,
df=2, p<.05.

Legal Issues- There were no significant findings in
resident's legal issues in both frequency data and chi-
square analysis, X^2=.736, df=1, p<.05.

Cultural Barriers- There were also no significant
findings in cultural barriers to providing services. Chi-
square analysis also had no significant findings, X^2=.548,
df=1, p<.05.

Total Acuity Levels- There were no major trends
comparing the first acuity level rating with the second. A
10% increase was noted in level 2 ratings, with 5% of that
coming from level 1 and the other 5% coming from the level

28

3 category. There were also no significant results from chi-square analysis, $X^2=.193$, df=11, p<.05.

Summary

Chapter Four reviewed the results extracted from the project. The demographic breakdown of residents at intake revealed most all of the residents had some form of drug use history at the time of intake. Observable trends in the data showed positive trends in relation to the increase of residents having no other medical needs after being in the program for a period of time. There were some fluctuating data showing more needs by residents in relation to general needs, finances, and transportation issues, while other areas had little to no fluctuation. Chi-square analysis produced no significant findings. The data, while not indicating statistically significant changes, poses further questions on the effects of housing services on this population.

CHAPTER FIVE

DISCUSSION

Introduction

Included in Chapter Five is a presentation of the conclusions gleaned as a result of completing the project. While the provision of housing had some positive effect on the medical health of the individual, other bio-psycho-social concerns showed no significant results. It was noted that the population being studied enters the program with many issues, such as substance abuse, that require more direct interventions. Further, the recommendations extracted from the project show a need for a more comprehensive system of care rather than just removal from homelessness. The Chapter concludes with a summary of the recommendations based on the research project.

Discussion

Health is a major issue when it comes to HIV/AIDS, due to the weakened immune system functioning. The weakened immune system allows for opportunistic infections to invade the body. Yet one of the more significant trend results was discovered within the other medical needs variable. With a 30% increase in clients reporting no other medical concerns, these data shows that by removing

homeless people from the streets, their overall health is improving. Perhaps by removing individuals from their homeless situation, we are able to increase a portion of the biological functioning of the individual.

It was also posited that with the individual housed and having less chance for opportunistic infection, the progression of the HIV/AIDS virus would slow. In the disease progression variable within the study, analysis showed disease progression remained stable from the time of intake to the follow up period. This stability may not be significant in of itself, yet coupled with the other medical needs variable it may be possible to conclude that the HIV/AIDS disease has stabilized since individuals were removed from the streets. HIV/AIDS is a degenerative disease that actively destroys the immune system. With fewer opportunities for the immune system to be weakened by opportunistic infections, and more stable living to access entitlements and medication regimens, the housing of homeless individuals likely has a positive effect on the medical status of the individual.

The literature has shown that homeless individuals have minimal concerns for their health care, especially when food and shelter may be more immediate concerns. If health care is consistently ranked low within this

population, then should we expect to find significant results on mental health issues if the residents are not even aware they may have them? A resident may have entered the program and discovered some mental health issues previously unknown or undiagnosed due to lack of appropriate health care. There was a trend in the data that showed a 20% shift into the moderate concerns category (level 2) from the minimal concerns category (level 1). Now that residents are living in a home and receiving entitlements, perhaps they are finally able to deal with these issues for the first time. The structured environment and staff of a supportive housing program may make referrals for services that could lead to the identification and treatment of such mental health issues. Once identified, the adjustment period and/or treatment may begin. This period may be difficult thus explaining the trend of residents reporting that they now have some mental health issues when they had reported none at intake.

Another significant trend uncovered within the demographic statistics was that 95% of the clientele reported to abusing substances at intake. Residents may enter the program with severe substance abuse issues, which may hinder any treatment. While the acuity scales

show no significant changes while residents were in the

program, issues of substance abuse and the homeless

population warrant some attention. Research shows that the

drug problem amongst the homeless population is severe,

and that AIDS is the leading killer of IV drug users

(Giannetti & Freyder, 1998). These data show that a

possible key issue in increasing the bio-psycho-social

functioning of this population is to attack the issue of

substance abuse from the beginning.

A plethora of non-significant or marginal

fluctuations were discovered in other variables such as

general client needs, client support systems, current

living situations, financial situation, transportation,

legal issues, and cultural barriers. In grouping all of

these issues together, they can be viewed as life

situations within the social realm. These are life

situations that most non-homeless persons deal with on an

everyday basis.

Most of the marginal shifting of numbers within these

variables shifted to the level 2 category in which there

was moderate concern for these issues. These data posit

interesting questions. How much of these everyday life

situations do homeless individuals deal with? Do homeless

people worry about their transportation needs if they do

not have a car? As with mental health concerns, these life

situations possibly begin when the individual is placed in

supportive housing, and they begin to reclaim

entitlements. Now that the individual receives

entitlements and lives in a home, they must begin to worry

about their finances, transportation, legal issues, and/or

their basic needs. These data, though non-significant for

the study purposes, may show insight that homeless

individuals are dealing with these social issues when in

the process of reclaiming their lives.

Limitations

The major limitation of this study is its small

sample size of only 20 cases. With such a small sample it

is very difficult to not only find quantitative

significances, but also difficult to have external

validity. The reason for the small sample size can be

determined by examining the original 61 case files

assessed for acuity scales. Of these original 61 case

files, over one-third of them indicated that residents

were removed from the program within the first three

months. Some residents were removed from the program, some

self-removed, while others left without any notice. This

shows a high turnover rate of residents that do not even

make it to the second acuity period. This will also affect data collection and program evaluation on the part of the agency.

Agency data collection of the acuity scale measurement tool also added to the limitations to the study. Each acuity scale is given at intake and based upon the initial score; a second acuity assessment is completed at a later date. A resident in the more severe stage 3 should be given the acuity follow-up no later than 30 days after the initial acuity scale, while a resident at level one at intake will not need another acuity rating for 90 days. Most of the second acuity scales were completed later than the scheduled follow-up times. Some scales were completed later than six months after intake. These lapses in time for follow-up acuity may lead to inaccurate data and may have corrupted the results of the study. The lack of accurate reporting times may taint accurate responses because a client may have felt fine at the initial second reporting period, yet since a portion of time has gone by, the client may now be experiencing issues in a specific area that may or may not have been reported.

Recommendations for Social Work
Practice, Policy and Research

The provision of adequate services to assist homeless individuals with HIV into self-sufficiency is desperately needed. Homeless persons with HIV/AIDS may not be able to acquire services from a shelter if their HIV/AIDS status is disclosed, due to fear and medical concerns that may arise (Rotheram-Borus et al., 1991). It is within the best interest of this population to create housing programs focusing specifically on homelessness and HIV/AIDS in order for the homeless population suffering from HIV/AIDS to regain control over their life. This research has shown that it is not just the provision of housing this population needs. Though the data collected within this study shows an increase in health issues from being in a housing program, trends with in the data convey the need for a comprehensive service package consisting of life skill development, substance abuse counseling, and HIV/AIDS specific services in order for this population to move into self-sufficiency.

Currently, one-on-one counseling and behavior modification programs are the dominant models of intervention (Weeks, Clair, Singer, Radda, Schensul, Wilson, Martinez, Scott, & Knight, 2001). Using a case

management model, social workers can work one-on-one with residents to assess the individual's current need levels and develop individualized service plans. These plans can include goals for substance abuse reduction, mental health treatment, and legal issues such as entitlements. Services to meeting goals can be both in-house and outside referrals. With a case manager handling the coordination of outside agencies, enacting these service plans under a case management model seeks to create a centralized locus of services. The literature reflects the need for there to be more comprehensive services and for a case manager to coordinate services across agencies (Rotheram-Borus et al., 1991).

The data collected in this project stimulates thoughts for practice and service delivery, yet the exploratory nature of this study also seeks to create ideas for future research topics. This study suffered from a limitation of small sample size. What if the study was conducted with larger numbers of residents from a much larger supportive housing program? Would the results that were noted as trends be more likely to have a statistical significance? Significant statistical findings could be used to bolster development of programs based on needs and

also used to develop funding sources for non-profit
agencies working with this population

This study used an acuity scale to test for baseline
readings at intake and at a follow-up reporting session.
Perhaps a study looking at bio-psycho-social functioning
should be more in-depth using the small sample size and a
qualitative means of data collection other than the
quantitative style used. This format would allow for more
personalized answers on what the individual resident might
regard as their current functioning. This method may also
remove some of the confounding trends showing fluctuations
from a no concerns (level 1) status up to the moderate
concern status (level 2). Qualitative analysis can be
beneficial in also discovering further trends and issues
that may require attention or further research.

This research project was completed at an agency that
has the only supportive housing program for homeless
persons with HIV/AIDS within the CDC defined Emergency
Metropolitan Area (EMA), yet the EMA has a relatively high
rate of 11.5 HIV/AIDS cases per 100,000 people. This
research project, and future similar or expansion
projects, should seek to affect policies that affect this
population. Policies and measures that target the homeless
population with HIV/AIDS can be used to further develop

programs. Perhaps if future research continued in this area, there would be more services to assist this population.

Policies that create services to specific populations are much needed, but programs are active today and a portion of these programs is non-profit. Future policy work in this population should seek out new and diversified funding sources. This research indicated that 95% of the population had substance abuse issues at intake. Clearly there is a need for substance abuse services among this population. Further research on this issue could lead to the development of funding for a new substance abuse program, or funding to develop a substance abuse component that deals specifically with the HIV/AIDS population. While there are some funding stream developments specifically for this population, like HOPWA-Housing Opportunities for People With AIDS, there is still a need for funding that develops services that cater to populations with HIV/AIDS.

Conclusions

To accommodate to being diagnosed with HIV/AIDS is a difficult enough life task for individuals to face. When coupled with homelessness, it creates a potentially deadly

and lonely experience for the individual. If one was given a diagnosis of a positive HIV status, it used to be compared to being given a 'death sentence' (Cherry & Smith, 1993). This diagnosis of a 'death sentence' has changed somewhat in lieu of new drug treatments and therapies (Kobayashi, 1997), but what is being done about the quality of life now that people are living longer?

This research project set out to discover if housing had any effect on the bio-psycho-social functioning of the homeless person with HIV/AIDS. No significant statistics were found, but trends in the data indicated emerging patterns about how housing reduces the other medical needs of the resident. Trend data also showed how a large portion of the population has issues with substance abuse. This data shows us that there is a positive effect on residents other health issues, while also showing us that more services are needed to move this population into self-sufficiency.

What is needed is a comprehensive care plan that provides treatment for all of these issues within a case management model. Once this population moves from homelessness into stable housing, the healing process can begin. The process can hopefully increase the quality of life for those homeless with HIV/AIDS and move them into a

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place where they can once again become a contributing element within society.

APPENDIX A

ACUITY SCALE

Central City Lutheran Mission Case Management/St. Martin's House

Service Level

Client/Date _____

Level I _____ Level II _____ Level III _____

CLIENT ACUITY SCALE	Level I (1 point)	Level II (2 points)	Level III (3 points)
Basic Needs ☐ score	Primary needs are met; able to meet ADL	Primary needs occasionally not met; needs assistance with accessing service/benefits	Primary needs not met consistently; needs assistance with ADL
HIV Disease Progression ☐ score	Asymptomatic	One or more significant symptoms, side effects from medication; medication non-compliance	Advanced HIV disease; debilitating symptoms; medical emergency related to HIV disease
Other Medical Needs ☐ score	Stable health	Some need for treatment/medication for non-HIV medical condition	Non-HIV related medical emergency
Support System ☐ score	Consistent, healthy support system	Inconsistent support network	No stable support system other than professional caregivers; client has ineffective coping skills
Living Situation ☐ score	Stable, clean housing	Needs short-term assistance with rent/mortgage/utilities to maintain stable housing	Homeless; imminent eviction; extreme safety hazards in home
Substance Abuse ☐ score	No current difficulties with alcohol or drugs; long-term sobriety maintenance	Problems with drugs, alcohol; expresses desire to enter substance abuse treatment; immediate family has substance abuse problems	Major impairment due to alcohol/substance abuse
Mental Health ☐ score	No current mental health problem; no need for counseling referrals	Mental health problem currently under treatment is stabilizing	Incapacitating mental health problem which requires on-going psychiatry intervention
Financial/Benefits ☐ score	Steady source of income which is not in jeopardy; able to meet monthly financial obligations	Inconsistent income or insufficient income to meet primary needs consistently	No income; current financial crisis
Transportation ☐ score	Has one or other means of transportation consistently available; can drive self; can afford private or public transportation	Has occasional minimal access to private transportation; needs occasional assistance with finances for transportation	Lack of transportation
Legal ☐ score	No recent or current legal problems; all pertinent legal documents completed	Wants assistance completing standard legal documents; possible recent or current legal problems	Involvement in civil or criminal matters; incarcerated
Culture/Language ☐ score	Understands service system; language is not a barrier to accessing other services	Needs interpretation services/understands service system; family needs education/interpretation to provide support	Lack of understanding of service system/language creates state of fear/anxiety and distrust in client sand/or family; crisis intervention is necessary

Acuity Scoring

Level I 11-17   Level II 18-25   Level III 26-33

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