Health and Lifestyle Issues as Risk Factors for Homelessness

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Background: **The objective of this study was to test the hypothesis that there are health and lifestyle issues among homeless persons that differentiate them from other segments of the population and that can be described as risk factors for homelessness.**

Methods: **This case-control study investigated health and lifestyle issues in a panel of patients visiting a health care clinic for homeless persons. The same information was collected from a panel of county indigent patients and an equal number of privately insured patients enrolled in a nearby academic family practice center.**

Results: **We found significant differences among these three groups. Differences in health problems were evident, as significantly more homeless persons reported mental health, drug and alcohol abuse, and smoking problems. There were no differences in the prevalence of other general medical conditions as listed by the patients. Homeless persons were younger than the control group respondents and more likely to be male, a member of a minority group, and unmarried. The childhood experiences of homeless persons were distinctive; they were more likely to have lived in a group home or some other nonfamily situation, considered themselves to have been delinquent, run away from home, been expelled from school, or been placed in reform school. The same held true for having been in jail as an adult. They had significantly less education, their job experiences were in manual and unskilled arenas, and they were more likely to have a gambling problem. A continuum of risk also appeared in that for the most part the characteristics and experiences of the indigent group members ranked in frequency between those of the homeless and insurance groups.**

Conclusions: **Causes of homelessness appear to be multifactorial. Issues related to mental health, alcohol, nicotine, and other drug and substance abuse could be responsible for their medical problems, whereas other lifestyle issues might be regarded as risk factors for homelessness. (J Am Board Fam Pract 1997;10:6-12.)**

Homeless persons live and die with differences in health care needs and lifestyle issues when compared with the general population. Homeless clinics report that their patients most commonly seek care for injuries and symptoms related to the respiratory, digestive, and nervous systems (including psychiatric complaints) and dermatologic conditions. Other common problems are associated with infectious conditions, infestations, circulatory and musculoskeletal complaints, and alcohol and other substance abuse, as well as exposure to inclement weather.[1] These problems differ from the reasons for the most common visits to family physicians, which are for respiratory complaints, hypertension, health maintenance, well-child care, and prenatal visits.[2] Persons who are homeless die an average of 20 years earlier than the normal life expectancy,[3] for they are at increased risk for unintentional injuries, homicides, and suicides, and many are intoxicated or have illegal drugs in their bodies at the time of death.[4]

Lifestyle behaviors could place persons at an increased risk for homelessness and might also have an impact on the health of the individual. A study of risk behaviors among homeless African-American men[5] found that they smoked cigarettes at a rate three times the community rate for African-American men. Eighty-six percent had used alcohol or illicit drugs within a month of the study. Crack cocaine and marijuana were the most commonly used drugs, with the men choosing them 57 percent and 30 percent of the time, respectively, in the preceding 30 days. Thirty-five percent of the men had less than a high-school education, 37 percent were widowed or divorced, and 55 percent had never been married, and there was a high prevalence of risky sexual behaviors. Fifty-five percent of the men had previously had

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gonorrhea, 36 percent had had syphilis, and 11 percent were positive for antibodies to HIV.

Eddins[6] found additional lifestyle issues in a study of homeless families. The heads of these families were single (72 percent), women (95 percent), undereducated (54 percent less than high school), unemployed (85 percent), receiving support from Aid to Families with Dependent Children (91 percent), and had minimal social support (30 percent had none). Forty-five percent had substance abuse problems, 46 percent had psychiatric illnesses, and 27 percent reported medical conditions. The children in these families had developmental delays and subaverage school performance.

Kahn et al[7] studied a homeless and nearly homeless population of mixed ethnicity at a soup kitchen and found similar results. Alcohol or drug use was reported by 93 percent of those studied, severe substance abuse was reported by 39 percent, and severe mental illness occurred in 54 percent. Combined mental illness and substance misuse coexisted in 29 percent.

Metzler[8] indicated that women who were poor and pregnant and women who were victims of domestic violence are also at an increased risk for becoming homeless. Furthermore, when pregnancy occurs in a homeless setting, the women are at increased risk for poor perinatal outcomes. Pennbridge et al[9] found that physical and sexual abuse, depression, previous attempts at suicide, and drug-using behaviors were factors in the lives of young pregnant women who were homeless. Breakey et al[10] also found lifestyle issues, such as a high prevalence of drug and alcohol abuse disorders mixed with a high prevalence of psychiatric disorders among the homeless.

These previous reports of health and lifestyle issues among the homeless within the last 10 years led us to design this study to compare our homeless population with two other groups to determine whether there were differences between them, and if so, whether these differences placed people at risk for becoming homeless. Such a step would be necessary if society is to design programs aimed at the prevention of homelessness.

Methods

Sample Selection

The first group of patients was drawn from the Health Care for the Homeless Clinic, a nonprofit health clinic in downtown Albuquerque where there are many homeless persons. Patients visiting this clinic are self-described as homeless. The clinic is associated with the Department of Family and Community Medicine at The University of New Mexico (UNM) School of Medicine through a faculty appointment for the clinic's medical director. The second group of patients was drawn from the UNM Family Practice Center. This group met county criteria for indigence, which qualified them for subsidized care (Medicaid); they were required to pay nothing or up to $8 per visit. The county's criteria for defining indigence were calculated using a standard formula based on numbers of persons in a family and the income for that family. The third group of patients was also drawn from the UNM Family Practice Center, but these patients had private insurance.

Data Collection

Every fourth patient at the Health Care for the Homeless Clinic was invited to participate. If the patient declined or was excluded, the next patient was invited to participate. At the Family Practice Center every fourth patient was invited to participate by one of the authors (WAH), who at the time either was the attending physician or was seeing his own panel of patients. Data were gathered using a self-administered, author-developed, pilot-tested questionnaire designed to elicit information regarding age, sex, ethnicity, lifestyle, health background, and current health status of the respondent.

Assistance was given to respondents who had problems reading, understanding, or completing the questionnaire, and each questionnaire was reviewed by the nurse or physician for any apparent inconsistency when the patient completed the form. The data collection took place while patients were waiting to be seen or immediately after the visit before they left the facility. All questionnaires were checked for completeness. Data collected involved information regarding marital status; military service; education; medical and psychiatric history; drug, alcohol, or smoking abuse; gambling background; jail and prison incarceration; childhood living and family history; previous occupational experiences; and the patient's perception of factors leading to homelessness.

Patients were excluded who were classified as

self-paying or covered by government programs such as Medicaid and Medicare or other funding programs that did not clearly fall within one of the three study group criteria. Also excluded were patients who were incapable of understanding and answering a questionnaire in either English or Spanish, were inebriated or demented, were below the age of 14 years, or who declined to participate.

Data Analysis

The data gathered from this questionnaire were analyzed using the SAS computer program.[11] Chi-square tests were used to determine significant differences among the three groups for discrete variables. One-way analysis of variance was used to determine significant difference among groups for continuous variables such as age.

Results

Three hundred of the 318 patients (94 percent) invited agreed to participate in the study. Of these, 100 were drawn from the homeless clinic, and 200 were drawn from the population attending the Family Practice Center, 100 of whom were indigent, and 100 of whom were privately insured. Of the 18 patients who declined or were excluded, 10 were from the homeless clinic, 5 were from the county indigent group, and 3 were from the population with private insurance.

Demographics

Demographic data for these patients have previously been reported.[1] Statistical analysis revealed significant differences among the groups: the homeless group was younger than the other two groups, there were more men in the homeless group, there were more women in the indigent group, and the percentage of women in the private insurance group (60 percent) paralleled that found in most private practices of family physicians.[2]

The ethnic distribution for the indigent group was not significantly different from the state population, but the homeless group had a significant overrepresentation of minority groups, and the private insurance group had an overrepresentation of non-Hispanic white patients. There was a highly significant difference in the marital status among the three groups ($\chi^2 = 59.759$, 2 *df*, $P < 0.001$). Seventy percent of the privately insured group was married, whereas 84 percent of the homeless group was not. The indigent group was intermediate with 49 percent married.

Table 1. Percentage of Study Respondents Reporting Childhood Delinquency and Adult Incarceration.

Behavior and Experiences	Homeless	Indigent	Privately Insured
Ran away from home	40	20	8
Expelled from school	33	14	5
Self-reported as delinquent	28	16	9
Reform school	19	3	2
Jail or prison	59	12	11

Childhood Background

A childhood experience of living in a group home or a special nonfamily residence occurred significantly more often among the homeless group. Of the total study sample, 26 (9 percent) had experienced living in such sites at some time during their childhood, 17 of those in the homeless group, 6 in the indigent group, and only 3 in the group of privately insured patients ($\chi^2 = 13.61$, 2 *df*, $P = 0.001$). Interestingly, the number of homeless persons who had been in foster homes was also increased, but no significant differences were found among the three groups.

Table 1 displays several factors for which there were significant differences in the childhood experiences of the three groups. Significantly more homeless persons had run away from home during their childhood when compared with patients in the private insurance group; again, the county indigent group experience fell between the other two ($\chi^2 = 29.014$, 2 *df*, $P < 0.000$). The same finding appeared in the rate of having been expelled from school ($\chi^2 = 27.306$, 2 *df*, $P < 0.000$). When asked whether they considered themselves to have been delinquent in childhood, the homeless participants were three times more likely to report themselves as such than the privately insured participants and more than 1.5 times than the indigent participants ($\chi^2 = 11.480$, 2 *df*, $P = 0.003$).

The homeless group had even more dramatic rates of having been in reform school as juveniles and in jail or prison as adults. The rates for reform school in childhood were less than those for jail in adulthood, but the ratios were similar in that the

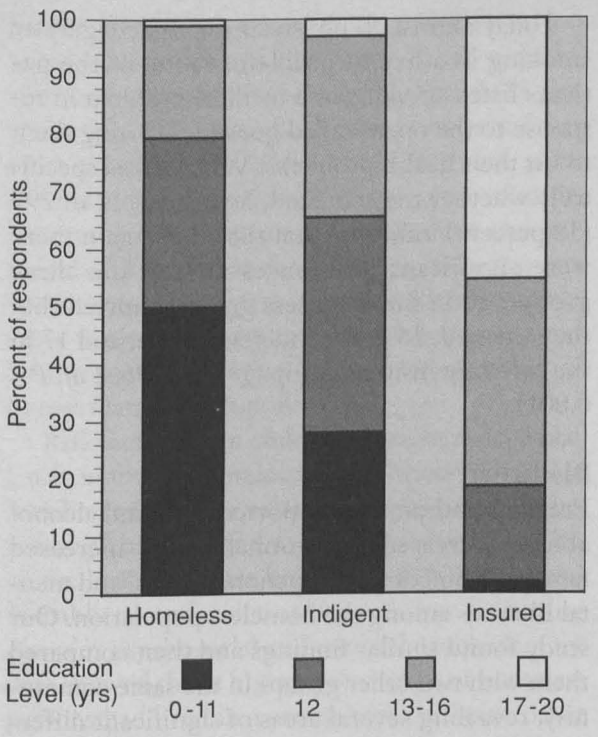

Figure 1. Education levels among the homeless, indigent, and privately insured study respondents.

rates were 9 to 10 times higher for the homeless than the private insurance group. In this instance the indigent group experience very closely approximated that of the private insurance group.

Adult and Lifestyle Issues

The area of greatest discrepancy among the three groups was the amount of formal education. Figure 1 shows that nearly one half of the homeless population had less than a high-school education compared with 2 percent of those who were insured. Conversely, 1 percent of the homeless had more than 16 years of education, whereas 45 percent of the privately insured group did (χ^2 = 124.997, 6 *df*, $P < 0.001$). The indigent group fell between the others at all levels of education.

Respondents reported their primary occupations, which we then divided into four categories: professional, skilled nonmanual, unskilled manual, and none or other means of support (ie, pension, disability, or nonworking spouse). The job categories closely paralleled the education of the study participants. The homeless respondents were significantly overrepresented in the unskilled manual group of workers with 76 percent compared with 10 percent of the private insurance group. Conversely, 75 percent of the private insurance participants were professionals or skilled workers compared with 14 percent of the homeless group (χ^2 = 121.4, 6 *df*, $P < 0.001$). The indigent group again was intermediate to the others in all areas except the category none or other support. This group might have had more participants in this category because they had nonworking spouses or were receiving welfare support that kept them from being homeless.

Another lifestyle issue was history of gambling. The numbers were small; only 12 of 288 participants (9 homeless, 2 indigent, and 1 insured) reported a history of a gambling problem, but the differences were significant (Fisher's exact test, $P = 0.012$).

Self-report of poverty was a significant factor. A total of 68 of 293 participants who responded to this question indicated that they were poor. Interestingly, more indigent patients (39) indicated that they were poor than did those in the homeless (25) and privately insured (4) groups (χ^2 = 38.561, 2 *df*, $P < 0.001$).

Health Issues

Health status was evaluated by asking the participants to list their medical problems. Eighteen percent of the sample indicated that they had no medical problems (no significant differences among the three groups). Of the 82 percent who reported medical problems, only two categories—mental illnesses and conditions related to drug and alcohol abuse—differed significantly among the three groups. Thirteen percent of all the listed medical problems fell within these two categories. Thirty-four (9 percent) of the total group reported a mental diagnosis; of those 17 were homeless, 13 were indigent, and 4 were in the private insurance group (χ^2 = 8.824, 2 *df*, P = 0.012).

A second question asked specifically whether the participants had a diagnosed mental illness. Although a great number of respondents in all three groups answered affirmatively, the differences continued to be significant. Eighty-six (29 percent) of 294 respondents indicated they had a diagnosed mental condition: 41 were homeless, 26 were indigent, and 19 were privately insured (χ^2 = 1.965, 2 *df*, P = 0.003). Of those who reported a diagnosed mental illness, 48 (56 percent) had been hospitalized for that condition, and the

Table 2. Percentage of Study Respondents Reporting Mental Illness.

Mental Illness	Homeless	Indigent	Privately Insured
Yes to mental problems	41	26	19
Hospitalized for mental problems	27	16	5

differences in hospitalization rates among the three groups were even more dramatic (χ^2 = 17.851, 2 *df*, $P < 0.001$). Table 2 shows that the homeless respondents were much more likely to have been hospitalized for their mental illness.

The category of medical conditions related to abuse of drugs and alcohol was found to be significantly different among the three groups. When responding to a question asking them to list their medical conditions, only 10 listed drug and alcohol abuse (9 homeless persons, no indigents, and 1 insurance), though the difference in even these low numbers was significant (Fisher's exact test $P < 0.001$). When asked specifically whether they had abused alcohol or drugs, however, the numbers greatly increased. One third of the total group had abused alcohol and 25 percent had abused drugs. Of those who had abused drugs, 71 percent used marijuana, 32 percent cocaine, 27 percent amphetamines, 22 percent psychedelic drugs, and 13 percent heroin. These percentages exceed 100 percent because many respondents used more than one drug.

When alcohol and drug use was analyzed for significant differences among the three groups, we found highly significant differences between the homeless group and the other two groups. Fifty-three homeless respondents reported alcohol abuse compared with 32 and 14 for the indigent and private insurance groups, respectively (χ^2 = 4.636, 2 *df*, $P < 0.001$); 46 of the homeless respondents, 21 of the indigent, and 9 from the private insurance group reported drug abuse (χ^2 = 7.489, *df* = 2, $P < 0.001$). The privately insured group had the fewest persons using marijuana, psychedelic drugs, cocaine, amphetamines, and heroin, the indigent group had an intermediate number, and the homeless group had the most persons using each drug type, but the differences among the three groups were not significant. Table 3 compares the raw figures for each drug of abuse.

Today almost all physicians include cigarette smoking as a health problem. None of the patients listed smoking as a medical problem in response to the open-ended question inviting them to list their health problems. When asked specifically whether they smoked, however, 112 of 297 (38 percent) indicated that they did. Again there were significant differences among the three groups; 69 in the homeless group reported that they smoked, 26 in the indigent group, and 17 in the privately insured group (χ^2 = 66.596, 2 *df*, $P < 0.001$).

Discussion

Previous authors have reported drug and alcohol abuse, decreased educational levels, increased family dysfunction, occupational status, and mental illnesses among the homeless population. Our study found similar findings and then compared them with two other groups in the same community, revealing several areas of significant difference that can be looked upon as risk factors for homelessness.

Homeless persons were more likely to be younger, male, from an ethnic minority group, and unmarried than were their counterparts in a segment of society that had private medical insurance. The demographics of the indigent patients were intermediate in all of these categories. These data are similar to the demographic findings of other researchers. Powers et al[12] studied runaway and homeless youth in New York who had been mistreated. Most of these youth were girls between 15 and 16 years old, less than 25 percent came from intact homes, and one third were born to single mothers. Sixty percent reported physical abuse, 42 percent emotional abuse, 48 percent neglect, and 21 percent sexual abuse; 33 percent reported that they were "pushed out" of their

Table 3. Percentage of Study Respondents Reporting Drug Abuse.

Drug of Abuse	Homeless	Indigent	Insurance
Alcohol	53	32	14
Marijuana	27	16	6
Cocaine	14	7	1
Amphetamines	12	4	3
Psychedelics	9	4	2
Heroin	9	0	0

homes. Biological mothers were the most frequent perpetrators of maltreatment (63 percent) with biological fathers coming in second (45 percent). Smart[13] pointed out that youth who leave their homes early for various reasons are at increased risk of becoming homeless and are more vulnerable. In Australia, Darnton-Hill and colleagues[14] found that the homeless in Sydney are from comparatively disadvantaged backgrounds, more likely to be migrants, less likely to have ever been married, and more likely to have been in jail or psychiatric institutions.

Risk factors from childhood might indeed play a role in future homelessness.[15] Wood[16] looked at families and issues related to homelessness involving children and found loss of job and income, loss of welfare benefits, and being victims of robbery and eviction in addition to having complex psychosocial and medical problems. Our data showed that a higher percentage of homeless persons had lived in a group home or some other nonfamily residence. A greater proportion of our homeless respondents had also run away from home and characterized themselves as having been delinquent in childhood and more likely to have been in a reform school or other correctional facility.

Adult background and lifestyle issues also provide potential risk factors for homelessness. Eddins[6] found that the heads of single families who were homeless were undereducated, with 54 percent having fewer than 12 years of education. In our study, education accounted for the greatest statistical difference between the homeless group and the other two. Our data show that about one half of the homeless group had completed less than high school, and only 1 percent had more than 16 years of education. Figure 1 displays the dramatic differences in education between the homeless and the privately insured respondents, with the indigent group again ranking in between the two.

A high percentage (77 percent) of the entire group reported a post-high-school education, which might reflect the patient population for the Family Practice Center having been drawn from a university setting with a relatively high percentage of professional and staff employee patients. Because the Family Practice Center is not a university-only facility, however, patients attending the clinic come from the entire community. Education is frequently an indicator of the eventual level of occupation, and our data confirmed that an unskilled work history dominated the homeless respondents' experience, whereas the privately insured respondents largely held skilled or professional positions.

Padgett and Struening[17] found that victimization and several types of injuries in homeless men and women were linked to alcohol, drug, and mental health problems. Susser et al[18] studied the association of schizophrenia-related diagnoses in a state mental hospital population and risk factors for homelessness. Risk factors included being young, black, male, and abusing drugs or alcohol. Forst[19] reported that alcohol and drug abuse were also factors in homeless youths. Harris et al[20] found that those in homeless shelters in Detroit who had a mental illness or substance abuse problems had no differences in their health when compared with shelter residents who did not have these problems. Our data reconfirmed these findings and showed significant differences between the homeless, indigent, and privately insured patients.

Conclusions

Homelessness appears to be caused by many factors. Basic causes related to lifestyle factors that can even begin in childhood appear to be more important than physical health conditions. Risk factors can be described that might distinguish individuals at an increased risk for homelessness. There is also an interesting continuum of risk for homelessness; in most areas studied, indigent patients reported experiences that ranked between those of the homeless and privately insured persons.

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