Homelessness is a significant social problem in the United States and it has been estimated that there may be as many as 2.5 million homeless people in this country today. For these people, poverty, substance abuse, and harsh living conditions may further contribute to the development of physical and mental health problems. A study was conducted to evaluate the mental and physical health needs of the homeless, with future goals of using the results in policy development by state agencies. Residents (N=75) of four temporary shelters in a large urban area were given a non-intrusive physical exam by a nurse. Nurses also gathered information on health-related behaviors, self-reported problems, and psychiatric hospitalization history. A social worker administered a self-report psychological symptom scale and gathered background and demographic information. The results indicated that the homeless, while a very heterogeneous population, suffered from significant health problems which were compounded by a limited access to adequate and affordable health care. Many reported significant histories of psychiatric problems or current psychological distress. Mental and physical health problems may be exacerbated by alcohol or drug dependencies, environmental stresses, and victimization by criminals. These findings suggest the prevalence of a wide range of health problems among this homeless group. It is likely that the hard-core homeless, who live on the street and do not use shelters, experience even more extensive health problems. (NB)
An Examination of Physical and Mental Health Problems of the Homeless

by

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Homelessness in America is not a new problem. However, the often romanticized hobos and boxcar adventurers of yesteryear have been replaced by a different picture today; that of the homeless "new poor," deinstitutionalized mental patients, and "street people." In the 1980's, homelessness has emerged as a significant social problem, and it has been estimated that there may be as many as 2.5 million homeless in this country today (Bassuk, 1984). It is generally agreed by researchers that substantial numbers of the homeless are experiencing significant mental health problems (e.g. Bassuk, et al., 1984). In fact, the mental health system is often "blamed" for creating the problem of homelessness after deinstitutionalization policies resulted in the release of mental patients into community settings. In addition to psychiatric problems, the homeless may also suffer from a number of physical health problems (e.g. Green, 1985; Nobel et al., 1985; McBride and Mulcare; 1985). Indeed, psychiatric problems and physical health problems are often intertwined. For the homeless, poverty, substance abuse, and harsh living conditions may further contribute to the development of physical as well as mental health problems (Brickner, 1985; Flynn, 1985).

In 1983, the Michigan Department of Mental Health received funding from the National Institute of Mental Health to conduct a study of the chronically mentally ill homeless. The goal of the research was to examine relationships between homelessness and deinstitutionalization among the chronically mentally ill, to gather information on the psychiatric and physical health problems experienced by the homeless, and to look at how homelessness may contribute to psychiatric hospitalization and/or psychiatric symptoms.

The following study was conducted to evaluate the mental and physical health needs of this population, with future goals of using the results in policy development by state agencies. In the sections below, the research methods will be described, followed by a brief review of the results.
METHOD

In this study, guests of four temporary shelter agencies in a large urban area were given a non-intrusive physical exam by a nurse. The nurses also gathered information on health related behaviors, self-reported problems, and psychiatric hospitalization history. In addition, a social worker administered a self-report psychological symptom scale and gathered information on a number of background and demographic characteristics.

Participants in the study were randomly sampled from nightly rosters of shelter guests. Informed consent was obtained from all participants.

RESULTS

Results from the study are presented briefly below. First the sample will be described, followed by a discussion of results related to physical health and results related to mental health.

Sample

A total of 75 participants were interviewed in the study. Of these, 72 completed both the indepth interview and the physical exam. Of the remaining three, two did not complete the indepth interview portion of the survey, and one did not complete the physical exam. However, the responses from these participants are included in the results where appropriate.

Seventy-one percent of the participants in the study were men, and 29 percent were women. The majority of participants were Black (73.0%). Approximately a quarter (25.7%) of the participants were white, and the remaining 1.4 percent were of other racial background.

The mean age of the participants was 35.3 years. The mean age for women in the study was 29.5 years compared to a mean age of 37.5 years for men (significant at p ≤ .05).
Table 1
Summary of Demographic Characteristics

<table>
<thead>
<tr>
<th>Gender</th>
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<tbody>
<tr>
<td>Males</td>
<td>72.0%</td>
<td></td>
</tr>
<tr>
<td>Females</td>
<td>28.0%</td>
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<table>
<thead>
<tr>
<th>Race</th>
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<tbody>
<tr>
<td>Black</td>
<td>73.0%</td>
</tr>
<tr>
<td>White</td>
<td>25.7%</td>
</tr>
<tr>
<td>Other</td>
<td>1.4%</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Age</th>
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</tr>
</thead>
<tbody>
<tr>
<td>X = 35.3 years old (Total)</td>
<td></td>
</tr>
<tr>
<td>X = 37.5 years old (men)</td>
<td></td>
</tr>
<tr>
<td>X = 29.5 years old (women)</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th></th>
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<tbody>
<tr>
<td>8th grade or less</td>
<td>13.5%</td>
</tr>
<tr>
<td>Some high school</td>
<td>43.2%</td>
</tr>
<tr>
<td>High school grad</td>
<td>25.7%</td>
</tr>
<tr>
<td>Some college</td>
<td>17.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marital Status</th>
<th></th>
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<tbody>
<tr>
<td>Single, never married</td>
<td>50.7%</td>
</tr>
<tr>
<td>Divorced or widowed</td>
<td>23.3%</td>
</tr>
<tr>
<td>Separated</td>
<td>20.5%</td>
</tr>
<tr>
<td>Married, living with spouse</td>
<td>5.5%</td>
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</tbody>
</table>
Approximately one quarter (26.4%) of the participants were veterans. Nearly all of these (94.7%) were men. Thus, a total of 36.0% of the men in the study were veterans. Just over a quarter (26.3%) of the veterans had served in active combat, with most of those (60.0%) having served in Vietnam.

See Table 1 for a summary of the demographic characteristics of the sample.

Physical Health Status

Physical health status was assessed both from self-reported information and through the physical exam. In this section, information will be presented on general health status, on alcohol and drug use, and on the presence of certain physical symptoms.

General Health Status

This population had a high level of contact with the medical system. Over seventy percent (71.6%) had seen a doctor within the last year. A large minority, almost a third (30.1%), had been hospitalized during the past year for an illness or injury.

Over a quarter (27.0%) reported that they had taken prescription medicines during the previous month, although only a third of those (31.8%) indicated that they were currently taking their medicines as prescribed. Of those who were no longer following their prescription, 42.9% reported that their medicine had run out. In addition, twenty percent of the participants indicated that there were medicines prescribed for them within the last six months which they were no longer taking.

While just over half of the participants (53.4%) rated their health as good or excellent compared to other people their age, another 34.2 percent rated their health as fair, and 12.3 percent rated their health as poor. Half felt that their health had not changed over the past two years, while 27
percent believed that their health had improved, and 23 percent felt that
their health had gotten worse.

Alcohol Use

There was a high level of alcohol use in this group. Most of the parti-
cipants (62.2%) admitted to using alcohol within the last month. Of these,
one-third used alcohol daily, and two-thirds used alcohol at least several
times a week. A total of 31.1% of all participants had been through some type
of alcohol treatment program at some time. Of these, 63.6% had been in treat-
ment within the previous six months. The heaviest users of alcohol, those who
were daily drinkers, were also those who were most likely to have been in
alcohol treatment programs. Over half (58%) of these individuals had received
treatment for their drinking problems.

Drug Use

A large minority of participants were current drug users. Thirty-one
percent had used marijuana within the past month. Of those, 50 percent smoked
marijuana at least several times a week. Drugs other than marijuana (such as
cocaine or heroin) were used by 11 percent of all participants (or 32% of the
drug users) during the previous month. Fifteen percent of all participants
reported that they had been in a drug treatment program at some time. Twenty-
eight percent of all current drug users reported that they had previously
participated in drug treatment programs. Although men were not more likely
than women to have smoked marijuana or to have used other drugs in the last
month, they were significantly more likely to have undergone treatment for
drug problems at some time (p ≤ .01).

Physical Symptoms

Assessments of physical health status were obtained through the non-
intrusive physical exam as well as from self-report of specific symptoms. The
physical exam assessed current status, while self-reported information was gathered about problems experienced over the past year.

Self-reported health items and physical exam items were combined into the following scales based on body systems: musculoskeletal, eyes and vision, cardiovascular, respiratory, nervous system, dental, gastrointestinal, female reproductive system, endocrine, urinary, integumentary, ears and hearing, and immune system.

For the most part, there were no differences in physical symptom scale scores for men and women. As an exception, men were somewhat more likely to have problems with their eyes and vision than were women (p < .05).

Information related to the Nervous System Scale will be included in the discussion of psychiatric status. Results from the remaining assessments are presented below.

**Musculoskeletal.** The Musculoskeletal Scale assessed general flexibility and range of motion, as well as muscle strength. Over a third of the participants (38.0%) experienced at least one of the ten assessed problems, with 22.5% experiencing at least two symptoms.

**Vision.** Participants were given a Snellen eye test, and were examined for eye infections or other eye problems. Nearly two-thirds of the participants (62.1%) experienced some type of vision problem, with over forty percent (43.8%) having poor vision as assessed by the Snellen eye exam. In addition, 45.9 percent of those in the study reported that they were supposed to wear glasses. However, only 27.5 percent of those indicated that they actually did wear their glasses. The great majority of those who did not wear their glasses (69.6%) reported that they had lost or broken their glasses. Most of them (69.6%) said that they could not afford to purchase another pair.
Cardiovascular. Several aspects of cardiovascular health were assessed, including blood pressure, heart rhythm, and pulse. Over forty percent (42.4%) of the participants were experiencing at least one of the measured symptoms. Approximately 16 percent of the participants reported that they had experienced problems with high blood pressure during the past year, and thirteen percent of those in the study were assessed as currently having high blood pressure during the physical exam. In at least one case, the examining nurse felt that an individual's blood pressure was high enough to be considered life threatening.

Respiratory. Information was gathered on respiration and on recent experience with respiratory problems such as asthma, pneumonia, bronchitis, and frequent colds. Forty percent of the participants had experienced at least one respiratory problem within the past year, and twenty percent had experienced at least two symptoms.

Dental Health. An estimated 63.4% of the participants had noticeable existing dental problems. In addition, over three-quarters (75.7%) reported that they had lost adult teeth. Of those, 22.2% indicated that they had lost more than 15 adult teeth. Another 17.6% of the participants reported that they had loose teeth at the time of the interview.

Gastrointestinal. The Gastrointestinal Scale assessed gastrointestinal problems; including bowel disorders, nausea or vomiting, abdominal pain, ulcers, and liver disorders. Over half (53.5%) of all participants were found to be experiencing at least one of these problems, or to have experienced them during the previous year. One quarter (25.4%) reported experiencing at least two of these symptoms.

Female Reproductive System. Information was obtained from female participants about their menstrual periods. Half of the female participants reported experiencing missed or irregular periods, and/or painful menstrual
Approximately ten percent of the women in the sample were menopausal. Abnormal breast tissue was detected in one participant.

Miscellaneous. Problems related to ears and hearing, such as ear infections or impaired hearing, were found in one-third of the participants (33.8%). Skin or hair problems were found in 30.3% of the participants, and problems related to the immune system (e.g. allergies, swollen lymphnodes) were noted in 15.5% of the participants. Problems related to the endocrine system, such as diabetes and symptoms related to diabetes, were reported by 20.5% of the respondents. Over ten percent (12.3%) reported experiencing urinary problems during the past year.

Psychiatric History and Status

Several types of information were gathered on mental health status. These included information on psychiatric hospitalization history, scores on a psychiatric symptom inventory, experience of various neurological symptoms, and the use of psychotropic medications. Information on these factors is presented below.

Hospitalization History

Information on history of hospitalization for emotional problems or mental illness was obtained through self-report and from official State Department of Mental Health data. Where conflicts between these data sources occurred, it was assumed that information that indicated a past history of hospitalization was accurate. A significant minority (26.0%) of the participants had a past history of psychiatric hospitalization. Of these individuals, over a quarter (26.3%) had been in the hospital within the past year, and 57.9% had been in the hospital within the past two years. The remaining 42.1% had not been in the hospital for from three to 18 years. Approximately half of those who had been in the hospital had been hospitalized only once.
The mean age of first hospitalization was approximately 28 years old, with just over a third having their first hospitalization before the age of 21.

**Brief Symptom Inventory**

The Brief Symptom Inventory (BSI) is a 53-item self-report symptom inventory designed to assess psychological symptom status (Derogatis and Melisaratos, 1983). Respondents are asked to indicate how much they have been distressed by each of the 53 symptoms or problems over the past week. The instrument consists of a number of subscales which indicate different areas of psychological distress. In addition, a global measure of distress can be computed. Scores can then be compared to normative scores established for non-patient men and women.

The following subscales have been identified on the BSI: somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. The mean subscale scores for participants in this study fell between the 58th and 63rd percentiles on all subscales for both men and women. Mean scores for the Global Symptom Inventory (GSI), the global summary of distress fell at approximately the 90th percentile for women, and the 95th percentile for men as compared to normative scores developed on non-patient samples. Thus, BSI scores indicate that these individuals were experiencing a significant amount of psychological distress. GSI scores were significantly correlated with having a history of psychiatric hospitalization ($r = .23; p < .05$). There were no significant differences between the scores of men and women on any of the subscales or summary measures of the BSI.

An examination of several individual items in the BSI is also informative. For example, 59.2% of the respondents had been bothered some by feeling lonely during the past week, 60.5% had been bothered by feeling blue, 60.5%
had been bothered by feeling tense or keyed up, and 56.6% reported being bothered by feeling lonely even when they were with people.

Medications

Information was gathered on whether or not respondents had received prescriptions for psychotropic medicines (e.g. Thorazine, Elavil) within the past six months. Fifteen percent of the participants reported that they had received prescriptions for these types of medications within the past six months. Of those with current prescriptions for psychotropic medicines, 63.6% had a history of psychiatric hospitalization.

Neurological Symptoms

Many participants reported experiencing neurological symptoms. Almost a third (31.1%) had problems with headaches during the past year. In addition, 24.3% reported shakiness of the hands, 26.0% experienced numbness or tingling of the extremities, 20.3% reported experiencing dizziness, 16.4% indicated that they had blacked out or lost consciousness, and 5.2% reported having seizures(s) at some time during the past year. A high number of participants (61.1%) reported that they had experienced at least one of these problems during the past year, and one-third indicated that they had experienced at least two of these health problems during the past year.

The symptoms of blackouts, shakiness of the hands, dizziness, and numbness or tingling tended to be highly intercorrelated, with the exception of the correlation between dizziness and numbness or tingling (r = .19; p ≤ .10). Significant correlations ranged from a low of .24 (shakiness of the hands with numbness or tingling) to a high of .45 (shakiness of the hands with dizziness). These correlations were significant at a level of at least p ≤ .05.

Given the method by which these data were gathered, it was not possible to determine the specific cause(s) of these symptoms. For example, they could be related to substance abuse or withdrawal, to some type of neurological
disorder, or to the use of psychotropic medications. Relationships between the presence of these symptoms and several of these factors were examined.

Nervous System Symptom Scale scores were not related to whether or not respondents had used alcohol during the previous month. However, these scores were related to how often one reported getting drunk, and to having previously received treatment for alcohol problems ($p \leq .05$). Thus, it appears that heavy users of alcohol were also more likely to experience these types of symptoms.

Participants who were taking prescribed psychotropic medications were also more likely to report experiencing these neurological symptoms ($r = .38; p \leq .001$) than were those who did not take these kinds of medicines. For some, these symptoms were likely side-effects to their medical treatment.

**DISCUSSION**

Clearly, the homeless are a multi-problem group. While there are some universal problems (such as the lack of immediate housing), it is also clear that this is a very heterogeneous population. As a group, they suffer from significant health problems, which are compounded by a limited access to adequate and/or affordable health care. Many have significant histories of psychiatric problems or may be experiencing current psychological distress due to the situational crisis of homelessness. Both mental and physical health problems may be exacerbated by alcohol and/or drug dependencies. Environmental stresses associated with homelessness may further contribute to the development and continuation of both physical and mental health problems. (In this study, twenty percent of the participants had spent the night before coming to the shelter either on the street or in another shelter.) They are also often prey to criminal victimization.
This study was limited by the extent to which physical health status may be assessed by self-report information and a non-intrusive physical exam, and the extent to which mental health status may be measured by psychiatric history and self-report of current psychological symptoms. Nonetheless, the study indicates the prevalence of a wide range of health problems among this homeless group. It is likely that the hard-core homeless, i.e. those actually living on the street rather than those utilizing a shelter, experience even more extensive health problems.
REFERENCES


