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<td><strong>Author(s)</strong></td>
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<tr>
<td><strong>Publication Date</strong></td>
<td>2002-04</td>
</tr>
<tr>
<td><strong>Publisher</strong></td>
<td>Irish Medical Organisation</td>
</tr>
<tr>
<td><strong>Link to publisher's version</strong></td>
<td><a href="http://www.imj.ie/">http://www.imj.ie/</a></td>
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<tr>
<td><strong>Item record</strong></td>
<td><a href="http://hdl.handle.net/10379/2549">http://hdl.handle.net/10379/2549</a></td>
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Perceived Quality of Life and Mental Health Status of Irish Female Prisoners

Mooney Maureen, Barry Michael, Friel S, Hannon F, Kelleher CC

Abstract
Mental health status and quality of life of female prisoners, the majority of whom are drug-users, was examined as part of a larger, cross-sectional, general healthcare study of the Irish prisoner population. Comparisons were made with drug-using and non-drug-using male prisoners and females from the general population. Instruments include the GHQ-12 and the WHOQOL-BREF. While their quality of life profile was closer to drug-using male prisoners than other comparison groups, female prisoners still had significantly poorer physical and psychological Quality of Life scores.

Introduction
Mental health status and quality of life of female prisoners were examined as part of a cross-sectional, healthcare study of the Irish prison population. There is evidence that female prisoners have higher levels of mental disorders than their male counterparts1. Drug abuse has become a major problem in female prisons1. In some women poor mental health status and drug-related problems may be inter-related.

Quality of life is an important aspect of mental health. In order to examine the impact of drug use, gender, mental health status and imprisonment on quality of life of Irish female prisoners comparisons were made with drug-using and non-drug-using male prisoners and with women from the general population of the same age and socioeconomic background. Quality of life is conceptualised as the individuals perception of their position in life, in the context of their culture and value systems and in relation to their goals, expectations and standards and modified by their physical and psychological state, social relationships and environmental factors2,3.

Materials and Methods
Sample
A census sample was taken as the female prisoner population forms only 2-3% (60-90 women) of the total Irish prison population. Comparisons were made between women prisoners (the majority reporting hard drug use in the previous 12 months) and both drug-using and non-drug-using male prisoners.

Frequency-matched samples of male prisoners were selected from the overall respondents in the General Healthcare Study of Prisoners in Ireland. Comparisons were also made with females from the general population matched for age and socio-economic status. This sample was selected from the national health and lifestyle (SLN) database.

Health Outcome Measures
The survey instruments comprised two psychometric measures (the WHOQOL-BREF and the GHQ-12), a modified version of the National Survey of Lifestyles, Attitudes and Nutrition, SLN questionnaire7 and a clinical history.

The WHOQOL-BREF
The WHOQOL-BREF (WHO, 1996) is an abbreviated version of the WHOQOL-100 quality of life assessment. The twenty-six individual items in the WHOQOL-BREF are representative of four domains related to quality of life: physical health, psychological well-being, social relationships and environment. Domain scores were found to correlate highly with the WHOQOL-100 domain scores4. A total quality of life score is obtained by summing up the individual scores on each item. Higher scores denote a higher quality of life with the highest possible score in each domain being 100.

The GHQ-12
The GHQ-12, a widely applied instrument to indicate psychological distress, is the short form of the General Health Questionnaire (GHQ) designed by Goldberg9 as a self-administered instrument for use in community settings. Two methods of scoring were used. In the Likert method values of 0−1−2−3 are assigned to the columns (total score range 0−36) with a higher score indicating greater distress. The second method assigns values of 0−1−1−2 to the columns (total score range 0−12) and chooses a cut-off score (2/3 in this study) that dichotomises the population into cases and normals. Caseiness expresses the probability that a respondent might be found to have psychiatric illness at second stage interview.

Statistical analyses
All statistical analyses were carried out using SPSS 9.0 for MS Windows. Socio-demographic characteristics of the sample are reported. In addition to descriptive analyses, tests for differences between the four groups in reported quality of life using the WHOQOL-BREF and total GHQ-12 scores were performed using Analysis of Variance (ANOVA) and Kruskal-Wallis tests as indicated. Comparisons between female prisoners and drug-using male prisoners were carried out using independent t-tests and chi-square statistical procedures.

Results
Socio-demographic, lifestyle and self-reported health characteristics
A total of 59 female prisoners participated in the survey (75% of the total female prison population on the days when the data were collected). The demographic profile for the female and male prisoner samples and for the female sample from the general population is shown in Table 1. The mean length of time served on the current sentence was 4 years (SD 2, range 0−12) and chooses a cut-off score (2/3 in this study) that dichotomises the population into cases and normals.

GHQ-12 scores were significantly poorer in female prisoners than drug-using and non-drug-using male prisoners and with women from the general population. Comparisons were made between women prisoners (the majority reporting hard drug use in the previous 12 months) and both drug-using and non-drug-using male prisoners. In the Likert method values of 0−1−2−3 are assigned to the columns (total score range 0−36) with a higher score indicating greater distress. The second method assigns values of 0−1−1−2 to the columns (total score range 0−12) and chooses a cut-off score (2/3 in this study) that dichotomises the population into cases and normals. Caseiness expresses the probability that a respondent might be found to have psychiatric illness at second stage interview.

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83% of female prisoners (72% of male prisoners) had taken drugs at some stage in their life: 68% reported smoking heroin (38% of males) and 58% injecting drugs (25% of males) in the past 12 months. During the same period, there was frequent use of marijuana, ecstasy and LSD (51%, 32% and 30%) and occasional use of amphetamines (9%), cocaine (5%) and LSD (30%). Thus, poly-drug use is a major feature of drug-using female prisoners. Drug use in the prisoners was much greater than in the general population.

Table 1 Socio-demographic characteristics of Irish prisoners and women from the general population

<table>
<thead>
<tr>
<th></th>
<th>Female prisoners N = 59</th>
<th>Male prisoners N = 106</th>
<th>Drug-using male prisoners N = 59</th>
<th>Women in the general population N = 106</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age (years)</td>
<td>25</td>
<td>26</td>
<td>24</td>
<td>33</td>
</tr>
<tr>
<td>SD</td>
<td>7.05</td>
<td>7.13</td>
<td>5.56</td>
<td>7.47</td>
</tr>
<tr>
<td>Educational level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No schooling</td>
<td>3 (7%)</td>
<td>1 (1%)</td>
<td>2 (3%)</td>
<td>4 (4%)</td>
</tr>
<tr>
<td>Primary only</td>
<td>8 (18%)</td>
<td>15 (23%)</td>
<td>6 (21%)</td>
<td>4 (4%)</td>
</tr>
<tr>
<td>Some/complete secondary</td>
<td>31 (69%)</td>
<td>27 (46%)</td>
<td>23 (77%)</td>
<td>65 (64%)</td>
</tr>
<tr>
<td>3rd level</td>
<td>3 (7%)</td>
<td>6 (9%)</td>
<td>0 (0%)</td>
<td>32 (31%)</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
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<td></td>
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</tbody>
</table>
Quality of Life and Mental Health Status

Table 2 shows the mean domain and overall WHOQOL-BREF scores for the female prisoners, male prisoners, drug-using male prisoners and women from the general population. Using the Kruskal-Wallis Test, significant differences in WHOQOL total mean (SD) scores were found between the four groups (x² = 84.22, df 3, p < 0.001). Significant differences were found between the groups on the physical domain (ANOVA: F = 9.76, df 3, p < 0.001) and on the other three domains (Kruskal-Wallis: psychological [x² = 32.93, df 3, p < 0.001], social [x² = 24.05 df 3, p < 0.001] and environmental [x² = 54.54 df 3, p < 0.001]). Female prisoners had higher total WHOQOL mean scores (see Table 2) than the other three groups and 75% were cases. There were significant differences between the four comparison groups (Kruskal-Wallis Test: x² = 47.22, df 3, p < 0.001) on the GHQ-12 total scores.

Discussion

The findings from the present study clearly indicate that women in Irish prisons have a high level of psychological morbidity and poor quality of life and that this mental health profile is significantly poorer than their male prisoner counterparts and than women in the general population. While their quality of life profile was closer to that of their drug-using male counterparts significant differences remained on the physical and psychological domains of the WHOQOL-BREF between female prisoners and drug-using male prisoners. When compared to drug-using male prisoners who were cases female prisoners still had lower total WHOQOL-BREF quality of life scores (t = 4.67, df = 28, p < 0.001). Quality of life is the product of a variety of determinants. The poorer quality of life of female prisoners and their extremely high levels of psychological distress may be associated in part with their high levels of drug use. If so, one could postulate that female prisoners would have similar quality of life profiles to drug-using male prisoners from similar socioeconomic backgrounds but not to other comparison groups.

Table 2 WHOQOL-BREF domain and total mean (SD) scores for the female prisoners in comparison with male prisoners and with women in the general population

<table>
<thead>
<tr>
<th>WHOQOL-BREF domains</th>
<th>Female prisoners (n=46)</th>
<th>Male prisoners (n=54)</th>
<th>Drug-using male prisoners (n=15)</th>
<th>Women in the general population (n=65)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological (0-100)</td>
<td>50 (22)</td>
<td>66 (20)</td>
<td>78 (14)</td>
<td>67 (14)</td>
</tr>
<tr>
<td>Social (0-100)</td>
<td>64 (25)</td>
<td>63 (24)</td>
<td>58 (24)</td>
<td>73 (20)</td>
</tr>
<tr>
<td>Physical (0-100)</td>
<td>63 (17)</td>
<td>76 (20)</td>
<td>75 (15)</td>
<td>78 (15)</td>
</tr>
<tr>
<td>Environmental (0-100)</td>
<td>44 (17)</td>
<td>49 (22)</td>
<td>51 (17)</td>
<td>65 (13)</td>
</tr>
<tr>
<td>Total WHOQOL (0-120)</td>
<td>51 (8)</td>
<td>66 (15)</td>
<td>60 (6)</td>
<td>69 (14)</td>
</tr>
<tr>
<td>GHQ-12 mean (SD)</td>
<td>18 (8)</td>
<td>13 (7)</td>
<td>13 (8)</td>
<td>18 (4)</td>
</tr>
</tbody>
</table>

The physical domain

- To what extent do you feel that pain prevents you from doing what you need to do?
- How much do you need medical treatment to function in your daily life?
- Do you have enough energy for everyday life?
- How well are you able to get around?
- How much do you enjoy life?
- How satisfied are you with your ability to perform daily living activities?
- How satisfied are you with your quality of work for capacity?

The psychological domain

- How much do you enjoy life?
- To what extent do you feel your life is going to be meaningful?
- How satisfied are you with your ability to perform leisure activities?
- How much do you need medical treatment to function in your daily life?
- How healthy is your physical environment?
- How satisfied are you with the conditions of your living place?
- How often do you have negative feelings, such as blue mood, despair, anxiety, depression?

The social domain

- How satisfied are you with your personal relationships?
- How satisfied are you with your support that you get from your friends?
- How satisfied are you with your sex life?

The environmental domain

- How satisfied are you with your transport?
- How safe do you feel in your daily life?
- How healthy is your physical environment?
- How much do you need medical treatment to meet your needs?
- How available to you is the information that you need in your day-to-day life?
- How satisfied are you with the conditions of your living place?
- How safe are you in your daily life?
- How healthy is your physical environment?
- How satisfied are you with your access to the health services?

Significant proportions of women prisoners in this study reported problems due to other peoples drinking, including physical, verbal and sexual abuse and family difficulties and violence elsewhere (De Laiglesia, 1985). That many forms of violence are common in the lives of women who use alcohol and other drugs. Some consider that drug use by many women is an attempt to cope with violence (De Laiglesia, 1985). Adverse social circumstances, unhealthy lifestyles and negative life experiences undoubtedly contribute to the high levels of distress and poor quality of life in Irish women prisoners which may predate their drug abuse and criminal offences. If women are to be...
in 54 incarcerated a period of imprisonment should be seen as an opportunity to start the process of redressing disadvantage, attempting through an integrated health promoting prison strategy, their social and economic reintegration. Their specific needs must be addressed and their stress modifiers increased. Stress modifiers have been grouped into social networks, social competence and resources within the community and might include increasing female prisoners positive coping skills, personal resources and sense of self-worth. It could also include a variety of agencies initiating and establishing enduring links with members of this vulnerable group while they are in prison. In addition to drug treatment programmes, traumas that may have triggered, complicated and protracted both their drug use, criminality, distress and depression need to be addressed.

In relation to female prisoners provision of more gender-specific knowledge to inform programme and policy decisions is required. Defining quality of life to include the culture and value system of the individual means that future research could include both a longitudinal design and qualitative methodology to further elucidate the determinants of mental health and quality of life.

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References
7. Friel S, Nic Gabhann S, Kelleher C. Study of Lifestyle, Attitudes and Nutrition (SLN). Centre for Health Promotion Studies, National University of Ireland, Galway, 1999