# A comparative analysis of users and non-users of prescribed psychotropic medication among individuals who reported mental health problems

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#### **Abstract**

Objective: The use of psychotropic medication has increased over the years and there are concerns about the inappropriate use and prescribing of such medication. The objective of this study was to compare the characteristics of users and non-users of prescribed psychotropic medication among individuals who report mental health problems. Method: Data from the 2006 Health Research Board, National Psychological Wellbeing and Distress Survey (HRB NPWDS) was used to compare users and non-users of prescribed psychotropic medication among 382 individuals who reported mental health problems. The HRB NPWDS was carried out between December 2005 and April 2006. Results: One-third of respondents who had experienced a mental health problem in the past 12 months had used prescribed psychotropic medication. The majority of the respondents had their medication prescribed by the general practitioner (GP). Those who had used psychotropic medication in the previous year had also used more supports than those who had not used medication. Users were also more likely to have lower weekly income, attend the GP more often and have lower perceived mental health status. Users were not more willing to disclose distressing information and did not have higher levels of psychological distress. Conclusion: The findings highlight the importance of the GP in the treatment and care of common mental health problems. Furthermore, the findings highlight the gap in treatment for those who are experiencing mental health problems.

#### **INTRODUCTION**

Mental health and wellbeing have become important public health issues today given that mental illness accounts for 12% of the global burden of disease (1). A large treatment gap has been identified, meaning that while many individuals may be experiencing mental health problems, few consult formal healthcare services. The European Study of the Epidemiology of Mental Disorders (ESEMeD) estimated that only one in four adults, with a one year prevalence of a mental disorder, had consulted formal healthcare services (2). The Health Research Board National Psychological Wellbeing and Distress Survey (HRB NPWDS) showed that 40% of the Irish population who reported mental health problems in the last year did not seek help from the general practitioner (GP) for their mental health problems (3). The majority of those who do receive treatment do so in primary care with only a small minority consulting more specialised mental health services (4). It is estimated that 90% of mental health problems are dealt with by the GP, while 10% are dealt with by specialised mental

health services (5).

There is a belief, known as the 'medicalisation' of society, that society's problems are becoming increasingly controlled by medication (<sup>8</sup>, <sup>9</sup>). Psychotropic drugs for mental health problems are often cheaper, and more profitable for big business to deliver than labour intensive treatments such as self-help techniques, Stepped Care models and Cognitive Behavioural Therapy (<sup>10</sup>).

Prescribed psychotropic drugs, such as tranquillisers and anti-depressants, are chemical substances that act on the central nervous system and are used to treat different types of mental disorders. The use of psychotropic drugs experienced a rapid growth in the mid 1950s due an increase in research and development in this field (<sup>6</sup>). When the anti-depressant named imipramine was developed, its manufacturer (Geigy) was reluctant to market it because of a belief that there were not enough people with depression to warrant production (<sup>7</sup>). Today, where over one in four will suffer from a mental illness in their lifetime (<sup>1</sup>), questions

have been asked about the increased 'medicalisation' of mental illness, the under use of alternative therapies in primary and inpatient care, and the influence of external agencies on psychotropic drug prescription such as the media and the 'big pharma'.

The use of psychotropic drugs has become a major public health issue due to the increase in mental health problems, the possibility of the 'medicalisation' of society, and the questionable efficacy of these drugs. The Stepped Care model, which is evidence-based, takes a dimensional view of mental health problems. This model of care provides support at five levels ranging from watchful waiting for subclinical patients to specialists services for those with chronic and recurrent mental health problems (<sup>17</sup>). The Stepped Care model argues that medication should only be prescribed for those with moderate to severe mental health problems and only after other interventions such as self-help and talking therapies have failed.

In an Irish context, the latest policy document, A Vision for Change (2006) recommended that 'All individuals should have access to a comprehensive range of interventions in primary care'. However the roll-out of primary care teams and networks has been slow. To date, no research has identified treatment options available for those with mental health problems in the primary care setting, yet policy suggests that the range of treatment options are low and access to allied health professionals is limited (5).

No comprehensive nationwide data relating to the prescription of psychotropic drugs is available in Ireland (5). However, there are details of prescription costs for psychotropic drugs in the General Medical Services (GMS) and other government funded schemes (which covers approximately 29% of the Irish population). Prescriptions for drugs classified as 'nervous system' accounted for 20% of all drug expenditures under the GMS scheme (130m), 15% of drug expenditures under the long-term illness scheme (111m) and 15% of drug expenditures under the drugs payment scheme ([49m) (5). Other more specific figures released in 2005 show that a total of 176,123 medical card holders put in claims for anti-depressant drugs, with a cost to the Irish state of over \( \begin{aligned} 40\text{milllion} \end{aligned} \). This is an underestimation as it only includes those who have access to free medical care and does not include the other two-thirds of the population who pay for healthcare.

A recent Irish study established that 6% of the Irish

population had used sedatives, tranquilisers or antidepressants in the past year, and 4% in the past month (12). Higher use was found in women, older people, those in lower socioeconomic groups, not in paid work, in rented accommodation, with lower levels of education and those who were widowed, separated or divorced. The Eurobarometer 248 studies surveyed drug use for psychological or emotional health problems in the last 12 months in Ireland, and compared the Irish results to 31 European countries (4). On average, 7% of Europeans had taken drugs for psychological or emotional health problems, with Lithuanians indicating the highest use and Cypriots the lowest. Ireland was ranked in the middle, along with the Czech Republic, Spain, Slovenia and Slovakia, with 6% of respondents indicating use. Interestingly, results from the UK showed slightly higher drug usage, with 8% of their respondents using drugs for psychological or emotional problems. Similar to the National Advisory Committee on Drugs (NACD) & Drug and Alcohol Information and Research Unit (DAIRU) survey, the Eurobarometer 248 survey found that women, older people, those living alone, retired, 'house persons', and the unemployed were more frequently using drugs for psychological or emotional health problems than other demographic groups (4, 12). Another large scale European study was carried out between 2001 and 2003 regarding psychotropic drug utilization in Belgium, France, Germany, Italy, the Netherlands and Spain (13). In this study, a much higher rate of use (averaged across the five countries) was found (12.3%) than in the Eurobarometer study.

There is ample evidence that persons from different sociodemographic backgrounds use psychotropic medications at varying rates. Gender, age, socioeconomic level and employment status repeatedly surface as variables which influence differences in psychotropic drug use. Suggested reasons for gender differences in psychotropic drug use have included the increased recognition of illness among women (<sup>14</sup>), increased use of medical professionals by women (<sup>6</sup>), gender role theory (<sup>15</sup>), social support and stress (<sup>16</sup>) and the influence of the media (<sup>15</sup>).

The research above highlights that the prescription of psychotropic medication is not just related to the severity of symptoms, but is also related to many non-clinical factors, such as demographic status and patient preferences (<sup>13, 18</sup>). This study will examine socio-demographic factors, primary care service use and perceived health status in users and non-

users of prescribed psychotropic medication who experienced mental health problems in the previous year. This research adds to previous work by examining sociodemographic, service use and health status variables related to medication use in individuals who self-report mental health problems. Such information is important for the assessment of the factors that impact on the use of medication for mental health problems. Knowledge of the factors associated with prescribed psychotropic medication use can be used to inform mental health policy makers on the extent of psychotropic medication use. Furthermore, awareness of the factors that impact on psychotropic medication use can help service providers identify those who may be more inclined to receive medication and to ensure that it is appropriately prescribed. The findings also have implications in terms of the treatment gap between what care individuals with mental health problems need and what treatment they receive. The specific objectives of the paper are to:

- 1) Investigate the prevalence rates of prescribed psychotropic drug use in those who report mental health problems in the previous year.
- 2) Describe who prescribed the medication.
- 3) Investigate the use of other supports and services by users and non-users.
- 4) Examine the predictors of psychotropic drug use and nonuse including socio-demographic factors, GP service use and health status.

#### METHOD SURVEY SAMPLE

Data from the 2006 Health Research Board, National Psychological Wellbeing and Distress Survey (HRB NPWDS) was used to compare users and non-users of prescribed psychotropic medication among individuals who reported mental health problems. The HRB NPWDS was a telephone survey of a random sample of those aged 18 years and over living in private households in Ireland. The survey was administered to a total of 2,711 participants (the present analysis includes only respondents that reported mental health problems in the previous year (n = 382; see below). The data was collected by the Economic and Social Research Institute (ESRI) on behalf of the Health Research Board (HRB) and formed part of the EU Consumer Survey which is carried out every month by the ESRI. The HRB

NPWDS was designed to investigate the prevalence of psychological well-being and distress in the Irish population. The response rate of the survey was 51%. Fieldwork for the survey was carried out over two-week intervals in December 2005, January 2006 and April 2006.

Telephone numbers were drawn on a random sample using a probability basis. In order to ensure geographic coverage, an initial set of random clusters (or sampling areas) was selected from the GeoDirectory. This is a comprehensive list of private households in the Republic of Ireland; it is compiled jointly by the Ordnance Survey and An Post (the national postal service). The initial sample of areas was then employed to generate a random telephone sample using random digit dialling (RDD). Using this system, different phone numbers for each month were selected. The matching stem of each phone number was marked up on a file, thus ensuring that phone numbers could be used again for at least another two years. As a result, there are no duplicates in the HRB's dataset for this survey.

The survey received ethical approval from the HRB Research Ethics Committee (REC). This committee comprised HRB Board Members who were not employed by the HRB. The study was funded by the Health Service Executive and the Department of Health and Children. All authors work as researchers within the Mental Health Research Unit and are employed by the HRB.

In line with normal survey protocols, the ESRI interviewers stressed to respondents that any information obtained during the interview would be confidential, that it would be used for research purposes only and that the respondent could terminate the telephone interview at any time. In addition, interviewers were provided with protocols in the unlikely event that the respondent became distressed during the interview. This included asking respondents if they had anyone they could talk to and advising the respondent to attend a GP in the event that they were distressed. In addition, the interviewers had a telephone number of one of the clinically trained members of the Mental Health Research Unit of the HRB that they could provide to the respondent in the event of severe distress.

In line with best practice, the completed sample was reweighted or statistically adjusted to ensure that it was representative of the population from which it had been selected. The re-weighting procedure involves adjusting the results to compensate for over-representation or underrepresentation of subgroups within the sample. The completed sample was weighted using a minimum information loss algorithm; this has been used previously in Irish surveys (19). The weighting scheme was designed to adjust the sample distributions for a number of key variables. Thus, it was weighted by age (five age categories); by gender; marital status by age group; region; number of adults in the household; gender by principal economic status; level of education by two age categories. Weightings were applied according to the corresponding population distributions. The population distribution was derived from the Quarterly National Household Survey carried out by the Central Statistics Office; it was based on a sample of approximately 30,000. This re-weighting procedure resulted in a nationally representative sample of persons aged 18 years and over living in private households in the Republic of Ireland.

#### **RESPONDENTS**

The present analysis included only those respondents who reported a mental, nervous or emotional problem in the previous year. Of the 2,711 respondents, 14.3% (n=382) reported experiencing a mental, nervous or emotional problem in the past 12 months. The analysis presented in this paper was carried out on these 382 respondents. The sample (n=382) consisted of 59.4% (n=227) females and 40.6% (n=155) males. A high percentage of the respondents were between 30 and 64 years (73.2%, n=280), with a smaller percentage between 18 to 29 years (15.5%, n=59) and over 65 years (11.3%, n=43).

#### **MEASURES**

# MENTAL, NERVOUS OR EMOTIONAL PROBLEMS

To determine the initial sample, respondents were asked whether they had experienced any mental, nervous or emotional problems (e.g. anxiety or depression) in the last 12 months. Respondents answered with yes or no.

#### PRESCRIBED MEDICATION USE

The respondents were asked whether they had taken prescribed medication for a mental, nervous or emotional problem in the past 12 months. Yes/no responses were provided. They were also asked what type of drugs they had taken: anti-depressants, tranquillisers or 'other'. No further distinction was made between the medications that they were taking (e.g., between major and minor tranquillizers). Respondents were also asked who had prescribed the medication; a list of four options was provided: psychiatrist;

GP; doctor in hospital or clinic; and other.

#### **SOCIO-DEMOGRAPHIC VARIABLES**

Socio-demographic variables included age, gender, employment status, educational level, marital status, income levels and medical card status. Visual binning and theoretical considerations were used to recode variables into smaller number of categories for a more parsimonious solution in the multiple regression analysis. Sociodemographic variables included three age categories (18-49, 40-64, 65+), gender, two marital status categories [married/cohabiting (with partner) versus separated/divorced/widowed/never married (without partner)], three educational levels (primary, secondary or third level), two employment categories (employed or in full time education / training; unemployed or not in full time education / training), two weekly net household income categories (up to \$\mathbb{I}749\$ per week; \$\mathbb{I}750\$ and over per week), and having access to free medical care (Yes/No).

# HEALTH STATUS, LIMITATIONS IN FUNCTIONING AND PSYCHOLOGICAL DISTRESS

Respondents were asked to rate their mental health, physical health and quality of life in the past 12 months on a five-point scale from 'very poor' to 'very good'. These variables were recoded into binary variables, with two categories of 'less than good' and 'good or very good'.

Respondents were also asked if they had experienced limitations in physical and social activities in the previous 12 months because of mental, nervous or emotional problems. Responses were coded into 'no experience of limitations' and 'experience of limitations'.

The General Health Questionnaire 12 (GHQ-12) was used to measure psychological distress in the last few weeks. The GHQ-12 scores ranged from 0 to 36 (Cronbach Alpha = .88). The Distress Disclosure Index (DDI) is a 12-item Likert scale which measures the willingness to disclose distressing personal information to others. The respondents were asked to rate the 12 DDI statements on a five point scale from 'strongly disagree' to 'strongly agree'. Scores range from 12 to 60, with higher scores indicating greater willingness to disclose (Cronbach Alpha = .92).

#### PRIMARY CARE SERVICE USE

Respondents were asked about their frequency of attendance at a GP for physical problems, and the frequency of times

they spoke to a GP about mental problems in the past 12 months. Responses were recoded into two categories – attended the GP versus did not attend the GP.

#### **USE OF SUPPORTS AND SERVICES**

Respondents were also asked about their use of other supports and services including psychiatrist, nurse, psychologist, social worker, counsellor, psychotherapist and clergy.

#### STATISTICAL ANALYSES

Data was analysed using SPSS (Version 14.0). T-tests were used to determine significance levels in continuous variables, and chi square tests were used in the case of categorical variables. Logistic regression analysis was chosen to explore the influence of the variables on the use of prescribed psychotropic medication. Only variables found significant in the bivariate analysis (p<0.05) were used in the multivariate analysis.

#### **RESULTS**

A total of 36.4% (139/382) of respondents who reported mental health problems had used psychotropic medication. Of these respondents, 27.4% (n=105) had taken an anti-depressant, 6.8% (n=26) had taken a tranquilliser and 6% (n=23) had taken some other type of psychotropic medication.

Of the 139 respondents who had used psychotropic medication in the previous year, 73% had been prescribed the medication by the GP, 18% had been prescribed the medication by a psychiatrist and 9% had been prescribed the medication by an unspecified doctor in a hospital or clinic.

There was a significant difference between users and non-users of psychotropic medication in the proportion of respondents who had spoken to a GP about a mental, nervous or emotional problem in the previous year. A significantly greater proportion of users (84.8%; 117 / 138) than non-users (45.0%; 108 / 240) had spoken to a GP in the previous year about a mental health problem ( $\mathbb{P}(1) = 57.5$ , p< 0.001).

A greater proportion of respondents who had used psychotropic medication had used other professionals and supports for mental health problems than those who had not used medication (see Table 1). The only support that did not differ between the groups was the use of psychotherapy. As can be seen from Table 1, the use of other professionals and

supports was low even for those who had used medication in the previous year. The psychiatrist was the most frequently used support followed by the nurse.

#### Figure 2

Table 2: Percentage (n) of users and non-users by sociodemographic variables

Variable	Medication User (n = 139)	Medication Non-User (n = 243)	P Value
Psychiatrist	(= ===)	(= =:=)	0.001
Yes	38.0%	2.9%	
No	62.0%	97.1%	
Nurse			0.001
Yes	24.0%	5.8%	
No	76.0%	94.2%	
Psychologist			0.001
Yes	18.9%	2.1%	
No	81.1%	97.9%	
Social Worker			0.001
Yes	13.1%	2.5%	
No	86.9%	97.5%	
Counsellor			
Yes	18.8%	4.6%	0.001
No	81.3%	95.4%	
Psychotherapist			0.53
Yes	8.5%	3.8%	
No	91.5%	96.3%	
Clergy			0.001
Yes	12.2%	2.5%	
No	87.8%	97.5%	

#### **SOCIO-DEMOGRAPHIC VARIABLES**

There were no significant differences in gender, educational level and marital status between respondents who had used prescribed psychotropic medication, and those who had not (see Table 2). No further analyses were carried out on these variables. However, there were significant differences in age, employment status, household income per week, and access to free medical care. A higher proportion of prescribed psychotropic medication users had access to free medical care, earned less than \$\textstyle{1750}\$ per week and were unemployed. A greater proportion of non-users were aged 18-29 years.

#### Figure 3

Table 3: Logistic regression model predicting psychotropic medication use for those reporting mental health problems in the previous year on the basis of health and sociodemographic variables and attendance at GP services

Variable	Odds Ratio	95% CI	P Value
Attendance at GP (Reference: no attendances)			
One or more attendances at the GP in the previous year	6.88	3.89 – 12.17	0.001
Mental health status (Reference: good or very good mental health)			
Less than good mental health	2.65	1.58 - 4.45	0.001
Weekly income (Reference: €750 and over)			
Under €750	2.25	1.21 - 4.21	0.01

#### PRIMARY CARE SERVICE USE

There were no significant differences in the number of times users and non-users visited a GP for physical problems. However, there were significant differences between users and non-users in the frequency of times they spoke to a GP about mental problems [t (376) = 7.833, p < 0.001]. Users of medication spoke to the GP about mental health problems on average 4.9 times (n=138, SD=5.4) in the past 12 months, compared with only 1.4 times (n=240, SD=3.2) in non-users. Chi-square analysis showed that over half of those who had not been prescribed medication in the previous year did not visit the GP for mental health problems (54.3%; n = 132) while only 15.2% (n = 21) of those on medication had not attended the GP. Just under half of the non-users (45.7%; n = 111) had visited the GP at least once in the previous year for mental health problems while 84.8% (n = 117) of users had done so.

#### GENERAL HEALTH QUESTIONNAIRE (GHQ-12) AND DISTRESS DISCLOSURE INDEX (DDI)

There were no significant differences between users (mean=4.83, SD=4.83) and non-users (mean= 4.09, SD=4.09) by their GHQ-12 levels [t (241.942) = 1.815, p = 0.07].

There were no significant differences in the DDI scores of users (mean=35.39, SD=8.81) and non-users (mean=35.23, SD=9.06) of psychotropic medication [t (380) = 0.174, p = 0.86], suggesting that those who used medication were not more willing to disclose distressing information to others than non-users.

## PERCEIVED MENTAL HEALTH STATUS, PHYSICAL HEALTH STATUS AND QUALITY OF

#### LIFE

There were significant differences in the perceived mental health status of users (mean = 2.85, SD = 1.05) and nonusers (mean = 3.49, SD = 0.95) [t (380) = -6.04, p < 0.001]. Users of psychotropic medication had lower perceived mental health status than non-users. Likewise, users (mean = 3.15, SD = 1.06) of psychotropic medication had lower perceived physical health status than non-users [(mean = 3.43, SD = 0.97); t (377) = -2.61, p = 0.009] and had significantly lower perceived quality of life status [(users mean = 3.14, SD = 1.03; non-users mean = 3.4, SD = 0.92); t (379) = -2.55, p = 0.01].

# LIMITATIONS IN SOCIAL AND PHYSICAL ACTIVITIES

Greater proportion of users (68.3%) had experienced limitations in social activities due to mental health problems than non-users (50.2%;  $\mathbb{P}(1) = 11.85$ , p= 0.001). There were also significant differences in the perceived limitations in physical activities because of mental health problems between users (73.9%) and non-users (51.0%;  $\mathbb{P}(1) = 19.10$ , p < 0.001).

#### **MULTIVARIATE ANALYSIS**

Logistic regression analysis was used to explore the influence of identified health, service use and sociodemographic factors on respondents' use of medication. Health, psychosocial and socio-demographic variables found statistically significant at 0.05 levels in the univariate analyses were included into the multivariate logistic regression analysis. These included age, employment status, income, access to free medical care, attendance at GP, mental health status, physical health status, quality of life, limitations in social activities and limitations in physical activities.

Both automatic (forward selection and backward elimination) and manual enter model building was used for the robustness of the analysis. Likelihood ratio (LR), beta weights and significance level (<sup>20</sup>) were checked for model-building. The Hosmer and Lemeshow tests were used to evaluate the goodness of fit of the models. We tried to find the most parsimonious solutions which explained as much variance as possible, had a good fit and maintained theoretically important variables at significance level not exceeding 0.25 (<sup>21</sup>).

Only three factors stayed in the final model determining use of prescribed psychotropic medication for those who

reported mental health problems in the previous year. These included perceived mental health status, attendance at the GP in the previous year and weekly income. The Nagelkerke  $R^2$  value of 0.300 (Cox & Snell  $R^2$  = 0.221) indicated that 30% of the variance in medication use for those with mental health problems was explained by the combination of the three variables. The Hosmer-Lemeshow test result of 0.586 confirmed that the model had an excellent fit.

Table 2 shows the final logistic regression model of predicting medication use for respondents. Respondents who had one or more visits to the GP in the previous year had odds of almost seven times (OR = 6.88) to have used psychotropic medication than those who had no attendances to the GP. Respondents who perceived their mental health as 'less than good' in the past year had odds of over twice to have used psychotropic medication than those who perceived their mental health as 'good or very good' in the previous year. Finally, those whose weekly household income was less then \$\pi 750\$ had odds of over twice as those with income over \$\pi 750\$ per week to have been prescribed psychotropic medication in the previous year. Overall, out of 343 cases (92.2% of the total sample self-reporting mental health problems included in logistic regression analysis), membership of 73.0% cases was predicted correctly.

{image:3}

#### DISCUSSION

To summarise the findings, over one third of the respondents who had reported mental health problems in the previous twelve months had been prescribed psychotropic medication. The majority of the respondents were prescribed the medication by a GP. As expected a much lower proportion had been prescribed medication by a psychiatrist and less than 10% had been prescribed medication by a doctor at a clinic or hospital. In line with these findings, a greater proportion of those who were prescribed medication had spoken to the GP specifically about a mental, nervous or emotional problem in the previous year. Furthermore a greater proportion of the respondents who were using psychotropic medication also used other professionals and supports compared with those who were not prescribed medication. Multiple regression analysis showed that the only factors that predicted psychotropic medication use were attendance at the GP one or more times in the previous year, level of weekly income and perceived mental health status in the previous year.

The findings showed that those who did seek support from the GP were more likely to have received medication. While it is not clear whether these respondents required such treatment, policy would suggest that there is an overreliance on psychotropic medication in Ireland due to the lack of training of the GPs and, more so, because of a lack of access to other allied health professionals (5). GPs in Ireland have said that they need increased mental health skills training access to counsellors and psychologists, and improved access to mental health providers (<sup>22</sup>). However, these professionals may be better placed to offer interventions more suited to the treatment of common mental health problems such as those recommended in the Stepped Care Model (17). This evidence-based model suggests that medication should only be prescribed for those with moderate to severe problems and only after other interventions have been tried. These findings showed that the users of psychotropic medication had sought more support from others than the respondents who were not using psychotropic medication. While this suggests that there are other forms of supports being used by people, the use of these supports was very low, by both users and non-users of medication. Furthermore the use of the psychiatrist was the highest, followed by the nurse which would suggest that the medical model of mental health is the dominant one in Ireland. A lower proportion of people sought help from a psychologist or counsellor. Whether this is due to the lack of available services or to lack of information on these supports requires further investigation.

In the current survey only three variables significantly predicted medication use. Previous research has shown a number of variables can influence psychotropic medication use in the general population such as gender, age and employment (4). However the current analysis showed that income was the only socioeconomic variable that significantly predicted medication use in people who had experienced mental health problems in the previous year. Two possible explanations for this finding are put forward. Firstly it may be that this sample of respondents who reported mental health problems in the previous year was different from the general population. However this seems unlikely. Secondly, once people are aware of their mental health problems and visit a GP, then fewer factors influence medication use or prescribing. Further research is necessary in this area.

Nevertheless, those with lower income were more likely to

have taken prescribed medication in the previous year. In Ireland there have been reports of an increase in the dosage levels and prescription of certain psychotropic drugs to those with access to free medical care in recent years (23, 24), and reports of higher levels of medication prescription in low income areas (16, 25). This suggests that there may be inappropriate prescribing of medication in lower income areas or/and, a lack of alternative supports. A lack of alternative resources for mental health services in all sociodemographic areas has been highlighted and there is a need to develop these for a more comprehensive and inclusive health service. Finally, lower perceived mental health status also predicted the use of psychotropic medication in the previous year. This finding would suggest that if people are more aware of their mental health status they may be more inclined to seek support. One of the most common reasons for not seeking help could be the stigma surrounding mental illness (27). It has been argued that there is a much more potent stigma that may be more directly related to help seeking (<sup>27</sup>). Self-stigma is thought to be an internal form of stigma whereby the individual perceives the act of seeking professional help for distress as a threat to self-worth and as a weakness of character (28). This highlights the need for the recognition and acknowledgment of distress and mental health problems at the individual level and at the societal level and may address some of the stigma surrounding mental health problems.

As expected, those with self reported mental health problems who had visited their GP were more likely to have taken medication in the previous year. These findings support the importance of the GP in the treatment and care of common mental health problems. The majority of the respondents had been prescribed medication by the GP and were attending the GP more often than those who had not been prescribed medication. It is important that those who are using psychotropic medication attend the GP for review on a regular basis, assuming that the use of medication was appropriate in the first instance. If, as this and other research has highlighted, higher frequency of contacts with GP is associated with recognition of mental health problems and use of psychotropic medication, then it is important to improve the identification of mental health problems in primary care. Although this can be a complicated task which frequently requires more than one consultation, published guidelines and increased training may be useful in helping primary care physicians recognise and diagnose common mental health problems during consultations with patients



An additional finding of note is that there were no significant differences in the number of times users and non-users visited a GP for physical problems, and yet there were significant differences in the times they spoke to a GP about a mental health problem. Non-users were less likely to speak to a GP about mental health problems. A likely explanation is that users have more contact with GPs for repeat prescriptions and will discuss their treatment with them. In contrast, non-users have fewer visits to a GP and therefore less likelihood for discussing mental health problems.

It is important to note a number of limitations with the current survey. This was a telephone survey which only contacted private households. As a result, others such as refugees, homeless people, and people who live in sheltered accommodation may not have been included. Furthermore, no distinction was made between the various types of medication such as major and minor tranquillizers or antipsychotics or anxiolytics, which limits further investigation into factors that predict use of particular medication subgroups. It is possible that certain subgroups of the population may be more likely to be prescribed particular subgroups of psychotropic medication.

In conclusion, the findings showed that almost one third of those with mental heath problems had taken prescribed psychotropic medication in the previous year. This group was more likely to have visited a GP in the previous year and also used a greater range of other supports. While a range of supports were used by individuals, their use was low compared to the use of the medical professionals. The findings highlight the importance of the GP in the treatment and care of the common mental health problems. Furthermore, self-perceived low mental health was associated with medication use as was a lower weekly household income highlighting the factors that may influence medication use.

#### References

- 1. World Health Organisation. Mental health in the WHO European region. 2003; Vienna, Austria.
- 2. Alonso J, Ferrer M, Romera B, Vilagut G, Angermeyer M, Bernert S, et al. The European Study of the Epidemiology of Mental Disorders (ESEMeD/MHEDEA 2000) project: rationale and methods. Int J Methods Psychiatr Res. 2002; 11 (2): 55-67.
- 3. Tedstone Doherty D, Moran R, Kartalova-O'Doherty Y, Walsh D. HRB National Psychological Wellbeing and Distress Survey: Baseline Results. 2007; Dublin, Ireland: Health Research Board.

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- 4. European Commission. Eurobarometer 248: Mental Wellbeing. 2006; Brussels, Belgium: European Commission.5. Department of Health and Children. A Vision for Change: Report of the expert group on mental health policy. 2006; Dublin, Ireland: The Stationary Office.
- 6. Cooperstock R, Parnell P. Research on psychotropic drug use: a review of findings and methods. Soc Sci Med. 1982; 16: 1179-96.
- 7. Healy D. The Antidepressant Era. 1997; MA: Harvard University Press.
- 8. Helman C. Culture, Health and Illness. 1990; Butterworth-Heinemann.
- 9. Conrad P. The Medicalisation of Society. 2007; John Hopkins Press.
- 10. Pilgrim D, Rodgers A. Sociology of Mental Health and Illness. 1999; Open University Press.
- 11. Horan N. Anti-depressants for medical-card holders cost state 40m. 2007; The Sunday Independent.
- 12. National Advisory Committee on Drugs (NACD) & Drug and Alcohol Information and Research Unit (DAIRU). Drug Use in Ireland and Northern Ireland: 2002/2003 Drug Prevalence Survey: Sedatives, Tranquillisers or Anti-Depressants Results: Bulletin 6. 2007; Dublin, Ireland: National Advisory Committee on Drugs (NACD) & Drug and Alcohol Information and Research Unit (DAIRU). 13. Alonso J, Angermeyer M, Bernert S, Bruffaerts R, Brugha D, Bryson H, et al. Psychotropic drug utilization in Europe: Results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project. Acta Psychiatrica Scandinavia. 2004; 109(Suppl. 420): 55-64. 14. Kessler R, Brown R, Broman C. Sex differences in psychiatric help-seeking: evidence from four large-scale surveys. J Health Soc Behav. 1981; 22(1): 49-64. 15. Cafferata G, Meyers S. Pathways to Psychotropic Drugs: Understanding the basis of gender differences. Med Care.
- 16. Ballymun Youth Action Project. Benzodiazepines whose little helper? The role of benzodiazepines in the development of substance misuse problems in Ballymun.

- 2004; Dublin, Ireland: National Advisory Committee on Drugs.
- 17. Stericker S, Shaw A. Treating common mental heath problems through stepped care: themed learning from a review of test sites in the North East. Yorkshire and Humber Region. 2007; UK: CSIP.
- 18. Linden M, Lecrubier Y, Bellantuono C, Benkert O, Kisely S. Psychotropic drug prescription by primary care physicians: an international collaborative study. J Clin Psychopharmacol. 1999; 19: 132-40.
- 19. McGee H, O'Hanlon A, Barker M, Hickey A, Garavan R, Conroy R, et al. One island two systems. 2005; Dublin, Ireland: The Institute of Public Health in Ireland.
- 20. Norusis M. SPSS 15.0: Statistical procedures companion. 2006; New Jersey: Prentice Hall.
- 21. Hosmer D, Lemeshow S. Applied Logistic Regression. 2000; New York: John Wiley and Sons.
- 22. Mental Health Commission. Annual Report. 2005Dublin, Ireland: Mental Health Commission; 200523. National Centre for Pharmaeconomics in Ireland.
- Utilisation and expenditure on antidepressant drugs under the GMS scheme between January 2003 and September 2005. 2006; [cited 25/03/2009]; Available from: http://www.ncpe.ie/u\_docs/doc\_106.pdf
- 24. Department of Health and Children. Report of the Benzodiazepine Committee. 2002 Dublin, Ireland: Department of Health and Children; 2002.
- 25. Quigley P, Usher C, Bennett K, Feely J. Socioeconomic Influences on Benzodiazepine Consuption in an Irish Region. Eur Addict Res. 2006; 12: 145-50.
- 26. Royal College of General Practitioners and the Royal College of Psychiatrists. Patients and antidepressants. 2008; [cited 2008 17/04/2008]; Available from:
- http://www.rcgp.org.uk/news\_and\_events/news\_room/press\_statements\_2008/patients\_and\_anti-depressants.aspx 27. Vogel DL & Wade N. Stigma and help-seeking. The Psychologist. 2009; 22 (1): 20 23.
- 28. Vogel DL, Wade NG & Haake S. Measuring the self-stigma associated with seeking psychological help. J Couns Psychol, 2006; 53: 325 337.

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