Psychiatric symptomatology and personality in a population of primary care patients

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Abstract

Introduction and objective. Psychiatric disorders (and their high rates of prevalence) in primary care have been widely analyzed, but the problem of underdiagnosis remains unresolved. This becomes increasingly more important in rural health centres in the face of lack of epidemiological data from these centres. The aim of this study is focused on the relationship between general health, psychiatric symptomatology and personality characteristics in the context of an adequate diagnosis.

Materials and methods. 518 primary care patients in 6 Polish urban clinical centres were studied using (in order of administration): a sociodemographic questionnaire, the General Health Questionnaire (GHQ-28) and Eysenck Personality Questionnaire (EPQ-R).

Results. The investigated sample was representative for urban primary care patients. The findings confirmed a significant association between neuroticism and general health. The strongest relation with current functioning and mental distress of the patients (GHQ general score) was observed in case of symptoms of anxiety and insomnia. The symptoms of depression may be the most difficult to identify (psychiatric symptoms assessed using GHQ sub-scales).

Conclusions. According to the GHQ assumptions and confirmed by the presented study, sub-threshold psychiatric symptomatology affects the functioning of primary care patients and their general health. This correlates with personality factors. Improving adequacy of diagnosis becomes extremely important, as it may often be the only chance for appropriate therapy of mental problems for people living in rural areas due to lower availability of specialist mental services. Further epidemiological studies concerning rural primary care and prevalence of the spectrum of mental disorders need to be conducted.

Key words
Mental disorders, primary health care

INTRODUCTION

Treatment, and especially the diagnosis of psychiatric disorders in the confines of primary health care has been widely analyzed, even as an official part of WHP projects [1]. 24% of primary care patients suffer from mental disorders and an additional 9% have sub-syndromal disorders [1].

A significant degree of under-diagnosis of mental disorders in primary care is being observed (even up to 75% of patients [2]). The main reasons for this situation include atypical presentation of a clinical picture of disorders in the context of primary health care, as well as an inadequate knowledge and capability of psychiatric diagnostics among general practitioners [2, 3]. Also, sub-threshold disorders require further investigation and studies, as they are clinically significant by increasing the probability of the incidence of mental disorders throughout life, and affecting the quality of life and functioning of patients [4, 5, 6]. The economical aspect is being underlined.

According to data published in the Council of Ministers Regulation on the National Programme for Mental Health Protection in Poland, primary care is much less available in rural areas. The tendency to seek psychiatric care is much lower among the rural population than in the case of urban residents (in 1990 the difference between availability indices reached 81%, and in 2004 – 66% in out-patient care) [7]. In this context, the diagnosis and treatment of mental disorders seems to be more significant.

Between 2008–2011, an epidemiological survey on 10,082 participants (including 4,287 from rural areas) was conducted in Poland: Epidemiology of Mental Disorders and Access to Care – EZOP Poland [8]. This research was aimed at the general population, but the stratification concerning place of residence was included. The response rate from rural areas amounted to 58.1% and was the highest attained. This leads to the conclusion that rural inhabitants were more willing...
The study involved primary health care patients from the 6 above-mentioned centres. The participants (1,000 individuals) were recruited from June 2010 – November 2011. Lack of answers, returning of some of the scales, or ambiguous signing of the consent reduced the number of analyzed sets to 518 (51.8 %).

The analysis will involve the possibility of generalization of the study findings.

MATERIALS AND METHOD

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The current results are based on (in order of administrating): own questionnaire, the General Health Questionnaire (GHQ-28) and Eysenck Personality Questionnaire (EPQ-R). Own questionnaire was prepared for the purposes of the research in order to obtain basic information on the respondents (gender, education, civil status, children, chronic diseases, mental disorders in the respondents and in their families, use of psychoactive substances, etc.).

The GHQ-28 by David Goldberg is a screening tool for evaluating the general mental health condition in adults, and refers to current functioning and psychiatric distress present during the previous 2 weeks. In this context, it differs from the Eysenck personality dimensions, which are constant [15]. In the presented study the 28-item version with Polish validation was used (sensibility 59%, specificity 75%) [15], and comprised of 4 sub-scales: 1) somatic symptoms (GHQ-A); 2) anxiety and insomnia (GHQ-B); 3) social dysfunction (GHQ-C); 4) depression (GHQ-D).

GHQ-28 includes Polish norms for primary care patients. In the presented study, the Likert scaling method (scores 0–3 for every question) was used.

EPQ-R is used to assess basic personality traits according to the theory of Hans Eysenck: neuroticism (N), extraversion (E), and psychoticism (P) [16], which are supposed to be biologically conditioned. The tool also contains the Lie scale (L), which enables evaluation of a tendency to present oneself in a positive light. Polish norms, taking into account gender and age of the respondents, were available; sensibility and specificity of the Polish version of the questionnaire allows its wide use in scientific studies [16].

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Due to the large number of obtained results and editorial limitations, not all the analysed results are mentioned in the presented study, but are available at reviewers’ request. Statistical analyses were performed using a STATISTICA PL version 9.0 computer programme.

RESULTS
According to expectations, the primarily used tests for normality of distribution did not confirm this trait. The authors’ aim was to investigate a group of subjects representative for the population of primary care patients, not for the general population. Thus, the statistical analysis is mainly based on the findings of non-parametric tests.

Table 1. Statistical description of the investigated sample

<table>
<thead>
<tr>
<th>Response rate=51.8%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample size</td>
<td>518; W: 393 (75.80%); M: 125</td>
</tr>
<tr>
<td>Mean age (standard deviation-SD)</td>
<td>42.38 (15.57); W: 42.25 (15.23); M: 42.78 (16.66)</td>
</tr>
<tr>
<td>Minimum, maximum age</td>
<td>18; 89</td>
</tr>
<tr>
<td>% of married participants</td>
<td>55.9% (N=298)</td>
</tr>
<tr>
<td>% of participants with at least secondary education</td>
<td>63.6%, N=339</td>
</tr>
<tr>
<td>% of participants suffering from a chronic somatic disease</td>
<td>21.58% (N=115)</td>
</tr>
<tr>
<td>% of participants diagnosed with a mental disorder (self-reported)</td>
<td>2.25% (N=12)</td>
</tr>
</tbody>
</table>

Statistical description of the investigated sample. The investigated group comprised primary care patients, and 23.22% of the subjects were nurses (no statistically significant differences were found between the 2 groups).

Table 2. Answers given in the General Health Questionnaire (GHQ-28) – mean values (in brackets – standard deviations)

<table>
<thead>
<tr>
<th>Results (WS-Likert)</th>
<th>Primary care patients (investigated sample)</th>
<th>Primary care patients (studies of the authors of GHQ manual[17], healthy vs. ill)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total score</td>
<td>22.69 (11.64)</td>
<td>22.25 (11.12)</td>
</tr>
<tr>
<td>GHQ-A</td>
<td>6.80 (3.81)</td>
<td>8.19 (3.55)</td>
</tr>
<tr>
<td>GHQ-B</td>
<td>6.56 (4.58)</td>
<td>7.26 (4.69)</td>
</tr>
<tr>
<td>GHQ-C</td>
<td>7.18 (2.81)</td>
<td>7.34 (2.46)</td>
</tr>
<tr>
<td>GHQ-D</td>
<td>2.19 (3.46)</td>
<td>1.99 (3.13)</td>
</tr>
</tbody>
</table>

RS-Likert – Raw result obtained in Likert scale, RS-A, B, C, D – Raw score in respective subscale

Answers given by the respondents in the GHQ were affected by gender. Women obtained higher scores, which is consistent with the reports by authors of the manual and other researchers, including foreign researchers [15]. The Z parameter (U Mann-Whitney test) for variable gender was 2.35 in RS-Likert scale (raw score in Likert scale) (p=0.01), for somatic symptoms: 2.84 (p=0.004) and 2.15 for social functioning (p=0.031).

Table 3. Spearman rank-order correlation – statistically significant correlations (p<0.0001)

<table>
<thead>
<tr>
<th>RS-Likert</th>
<th>RS-A</th>
<th>RS-B</th>
<th>RS-C</th>
<th>RS-D</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS-Likert</td>
<td>0.736223</td>
<td>0.795079</td>
<td>0.642284</td>
<td>0.559498</td>
</tr>
<tr>
<td>RS-A</td>
<td>0.736223</td>
<td>0.646671</td>
<td>0.439147</td>
<td>0.309835</td>
</tr>
<tr>
<td>RS-B</td>
<td>0.795079</td>
<td>0.646671</td>
<td>0.543340</td>
<td>0.412007</td>
</tr>
<tr>
<td>RS-C</td>
<td>0.642284</td>
<td>0.439147</td>
<td>0.543340</td>
<td>0.407757</td>
</tr>
<tr>
<td>RS-D</td>
<td>0.559498</td>
<td>0.309835</td>
<td>0.412007</td>
<td>0.407757</td>
</tr>
</tbody>
</table>

RS-Likert – Raw score obtained in Likert scale, RS-A, B, C, D – Raw score in respective subscale

Personality dimensions. Variables which affected statistically significant differences in individual EPQ-R subscales:
- age in the subscales: E and L (at the level of raw scores and stens). Only in the latter case the correlation reached the peak of weak effect: 0.293987 (p<0.0001) for raw scores and 0.266420 (p<0.0001);
- education (middle vs. higher) in the P subscale (Kruskal-Wallis=3.887; p<0.0001);
- civil status of women in the L scale. Married women had higher scores than single women (U Mann-Whitney test): Z=4.346 (p<0.0001) for raw scores and Z= 3.449 for stens (p<0.0001) – fig. 1.

General health condition and symptomatology and personality dimensions.
DISCUSSION

The scores obtained in the general health condition, psychiatric symptomatology and personality traits by the study group in the project 'The dimensions of personality and the level of anxiety in patients with chronic disorders' were similar to available Polish norms. However, the above-mentioned reservations concerning somatic diseases, use of the norms and over-representation of nurses should be taken into consideration.

The findings of presented study confirm a significant association of neuroticism with general health (R=0.6; p<0.0001) in the context of current functioning and mental distress existing for a time shorter than 2 weeks. The findings allow confirmation that the correlation not only in clinical groups, at the level of diagnosis of mental disorders, but also in relation to subthreshold symptoms. Thus, individuals with a higher level of neuroticism tend to be more prone to experience (or report) subsyndromal anxiety and insomnia symptoms (R=0.57; p<0.0001), and subsyndromal depression symptoms (R=0.5; p<0.0001). Neuroticism is not significantly associated with social dysfunction.

Additionally, the presented study provides results which, according to the authors' state of knowledge, have not previously been presented in other reports. Married women may reveal a higher tendency to present themselves in a better light than other women (or may present a bigger need for social approval) [16]). No correlation was found for this symptomatology in general health care, improving the adequacy of diagnosis and making the primary care physicians more aware of the problem among their patients becomes extremely important, especially if any risk factors are observed.

Sub-threshold psychiatric symptomatology affects the functioning of primary care patients and their general health, and correlates with personality factors.

Taking into account the high rates of prevalence of this symptomatology in general health care, improving the adequacy of diagnosis and making the primary care physicians more aware of the problem among their patients becomes extremely important, especially if any risk factors are observed.
The low response rate observed may indicate a deep-rooted dislike for talking aloud about mental health problems, a phenomenon that may be more common in rural areas.

The necessity for informal actions and prevention programmes concerning mental health problems cannot be omitted, especially in rural centers. Improvement in this field may often be the only chance for appropriate therapy of mental problems for a high proportion of the inhabitants of rural areas. The authors therefore call for more psychiatric epidemiological data from rural areas.

REFERENCES


