

Psychiatrists' opinions on somatic health in patients with schizophrenia – results of a Polish nationwide study.

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Summary

Aim. In view of a growing number of publications indicating that schizophrenia increases the risk of somatic disorders and mortality, a study was undertaken, the objective of which was to analyse the extent to which psychiatrists evaluate the somatic status of their patients suffering from schizophrenia.

Method. A nationwide questionnaire study was ordered by Bristol Myers Squibb and carried out in 2009 with the participation of 404 psychiatrists. Questionnaires were completed by 184 participants during the scientific conference, whereas the remaining number of respondents was requested to complete the questionnaire at their workplaces. The questionnaire used previously in a similar study consisted of ten questions pertaining to various aspects of somatic health, such as control of health parameters and influence of pharmacological treatment on schizophrenic patients' health status and other.

Results. The majority (73.1%) of the respondents considers assessment of somatic health status in their patients a very important element of medical examination. Also, the majority reports that during "nearly every visit" a full physical examination is made and laboratory test results are monitored. According to 70.5% respondents, the occurrence of metabolic disorders is the most significant threat to somatic health in this group of patients. Doctors with private practices paid more attention to sexual dysfunctions and endocrine disorders than physicians working in state-owned hospitals.

Conclusions. The results of the questionnaire survey reveal that somatic examination is of high priority for evaluation of health status in schizophrenia patients and that simultaneously psychiatrists admit to their high involvement in assessment of physical health.

Even though there are no doubts about the reliability of these statements, patients ought to be asked whether their needs in this respect have been adequately met, and should this not be the case, actions ought to be undertaken with the aim of deepened education concerning the ability to select antipsychotic drugs, and in terms of a minimum threat to somatic health.

schizophrenia / somatic disorders / medical examination

INTRODUCTION

According to the data based on literature, the standardised mortality ratio in schizophrenia is more than twice as high as in the general popu-

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lation, and 2/3rd of deaths are by natural causes [1, 2]. This is due to a higher risk of developing somatic disorders. Respiratory system diseases (chronic obstructive pulmonary disease, decreased lung capacity), hypothyroidism, hepatitis C, or electrolyte imbalance seem to be more frequent. Professional literature refers to data on higher risk of developing throat cancer, lung cancer, nipple cancer and colorectal cancer. Frequent cases of short-sightedness and long-sightedness – due to a lack of ophthalmic check-ups [3] have also been emphasised.

In schizophrenia, cases of impaired glucose tolerance and increased resistance to insulin are observed, thus posing a risk of developing diabetes and metabolic syndrome, which occur twice as often than in the general population [4]

Besides the risk of developing somatic diseases directly associated with schizophrenia, numerous disorders resulting from antipsychotic treatment have also been described and confirmed, to name just a few: weight gain, diabetes, metabolic syndrome, hypertension as well as lipid balance disorders [5, 6, 7, 8].

It has been proven, beyond any doubt, that among second generation antipsychotics, the biggest weight gain is caused by clozapine and olanzapine, and moderate or high weight gain is induced by other drugs, too, such as: quetiapine, risperidone, sertindole, zotepine [9].

Metabolic syndrome in patients contributes the three times more frequent incidence of cardiovascular diseases and cardiovascular deaths [4].

Godlewska et al. refers to some interesting observation results in the Framingham Heart Study, in which it has been argued that due to a 10 kg weight gain in the period of 10 years as a result of clozapine treatment, there were reports on death of a similar number of patients to the number of those to whom this medicine assured survival through reduction of suicidal thoughts (416/100 000 vs. 492/100 000 of patients undergoing treatment) [9].

Yet, post-neuroleptic hyperprolactinaemia remains another problem. It is associated with low libido, impotence, fertility impairment, osteoporosis and pertains to even more than 50% men undergoing treatment for schizophrenia [10].

In 2006, a renowned Polish-language journal "Polish Psychiatry" [Psychiatria Polska] published pharmacotherapy standards of the first episode of schizophrenia, whereas in 2008 the guidelines concerning the use of second generation antipsychotic medication were brought to notice [11, 12]. The guidelines emphasise the significance of monitoring the somatic state in patients during their antipsychotic therapy. Prior such treatment, physical examination ought to be carried out, followed by ABP, ECG, laboratory tests and BMI measurement and waist measurement. In the course of treatment, physical examination, ABP, ECG and heart rate ought to be made regularly. Body mass, waist measure-

ment and lab tests (glucose, lipids, electrolytes, liver enzymes, creatinine, electrolytes and the like) should be repeated at specific time intervals with consultations provided by other specialists, if necessary. [12].

Besides the above, it should be mentioned that such guidelines apply not only in Poland. In recommendations for doctors in Australia and New Zealand, attention has been paid to the significance of such an approach, because a low level of prevention and early treatment of somatic disorders have been discovered in the schizophrenic patient care, thus producing premature deaths and significant incidence [13]. Much the same guidelines were published during "The Mount Sinai Conference" held in New York in 2002 [14].

In the medical environment, it appears to be quite a popular view that the number of deaths by somatic causes may be reduced through modification of factors connected with a lifestyle, e.g. diet and physical activity. Monitoring patient's weight, RR, levels of glucose and lipid level in blood enable patient education in the area of lifestyle changes, as well as early therapy of disorders leading to cardiovascular disorders, such as obesity, type 2 diabetes, hypertension, dyslipidaemia. A careful choice of antipsychotic medications appears to be helpful in reducing comorbidity and mortality among patients with schizophrenia [1].

It remains an open question, however, what the relation between the guidelines or recommendations presented as treatment standards, and customary practice of a psychiatrist is. For this purpose a questionnaire survey was carried out to evaluate the practice of monitoring the somatic state of patients undergoing therapy due to schizophrenia.

MATERIALS AND METHODS

A similar study on somatic health had been organised much earlier in 2006 in a number of countries (Austria, Belgium, Denmark, France, Germany, Italy, Holland, Norway, Romania, Spain, Sweden and Great Britain) gathering approximately 54 618 psychiatrists. In the Polish edition of the survey carried out in 2009 by a research agency Quality Audit House and or-

dered by Bristol Myers Squibb, 404 physicians participated. The questionnaires were completed by 184 psychiatrists during the scientific conference, however, the remaining number of specialists were subsequently questioned at their workplaces. The questionnaire consisted of ten questions, which referred to various aspects of somatic health, but also to medical checkups and the effect of pharmacotherapy on schizophrenic patients' health.

RESULTS

Details concerning psychiatrists participating in the survey

Among the respondents, women (58.7%) prevailed. The following institutions have been indicated as the main workplace: hospital (63.5%), out-patient clinic (32.5%), private practice office (9.8%) and counselling clinic at a hospital (4.5%). In terms of seniority, three groups of doctors have been scrutinised: those in the course of residency (26.1%), practicing no more than 10 years from completion of fellowship in psychiatry (29.1%) and those with more than 10 years of experience from completion of fellowship (44.8%).

Significance of somatic health evaluation

To the question: "How important is the evaluation of somatic health in your patients suffer-

ing from schizophrenia?" the respondents have given the following answers: (Fig. 1):

Vast majority (73.1%) of respondents considers evaluation of somatic health of their patients important or very important. Most frequently such options were selected by psychiatrists having their own private offices (53.8%) and those practicing for more than 10 years from completion of fellowship (51.1%).

A lower percentage of answers concerning the importance of somatic health referred to psychiatry specialists employed at hospital wards and those who have not become consultants, yet (Fig. 2 – see page 40, Fig. 3 – see page 41).

The most crucial aspects of somatic health

Respondents, who considered monitoring of somatic health in patients as vital to the comprehensive therapy for schizophrenia, have been asked to list the major complications occurring in this group of patients, the examples being: metabolic disorders (70.5%), extrapyramidal symptoms (64.6%), cardio-vascular symptoms (59%), endocrine symptoms (49%), weight gain (39%) and sexual dysfunctions (approx. 8%) (Tab. 1 – see page 41).

Sexual dysfunctions and endocrine disorders were more often in the centre of attention of doctors having private practices (25%) than those working at hospital wards (8.3%) and in out-patient clinics (10.1%) (Fig. 4 – see page 42).

Figure 1. How important is the somatic health status of your patients diagnosed with schizophrenia?

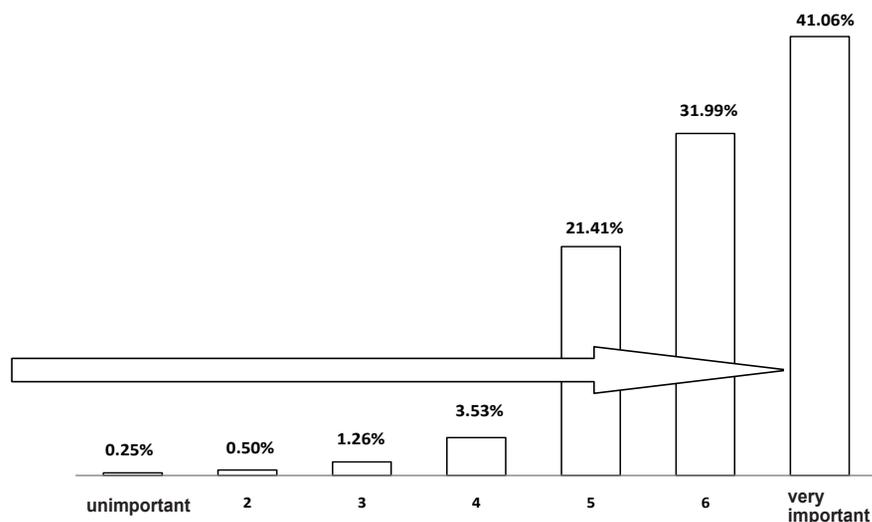
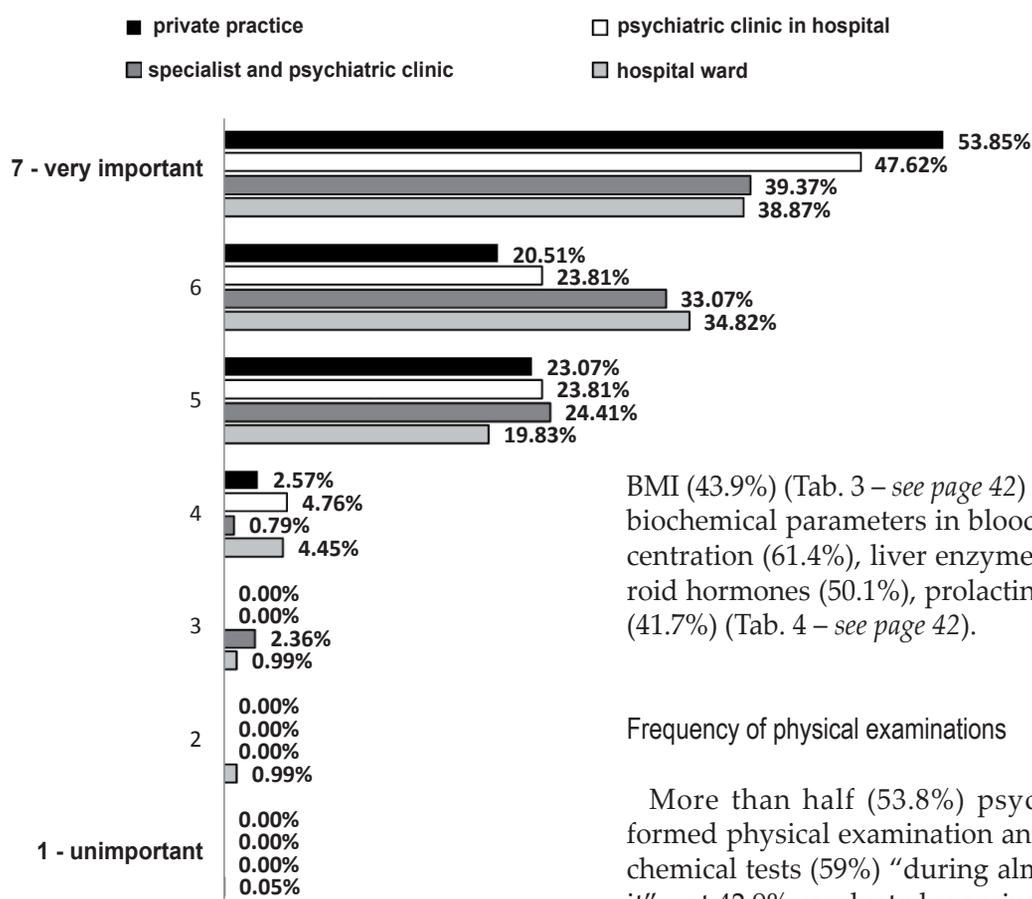


Figure 2. Influence of workplace on evaluation of the role of somatic health of patients with schizophrenia

BMI (43.9%) (Tab. 3 – see page 42) and as regards biochemical parameters in blood: glucose concentration (61.4%), liver enzymes (56.3%), thyroid hormones (50.1%), prolactin concentration (41.7%) (Tab. 4 – see page 42).

Frequency of physical examinations

More than half (53.8%) psychiatrists performed physical examination and ordered biochemical tests (59%) “during almost every visit”, yet 42.9% conducted examination of somatic health status during the first visit, only. (Tab. 5 – see page 42).

Factors affecting somatic health

In the opinion of the participants, the most vital factor affecting patient’s somatic health was collaboration during therapy (47.5%) and the conviction about an increased mortality risk (34.83%). A little percentage (7%) of respondents drew their attention to the importance of self-assessment made by patients in the process of treatment (Tab. 2 – see page 41).

Control of somatic state in patients suffering from schizophrenia.

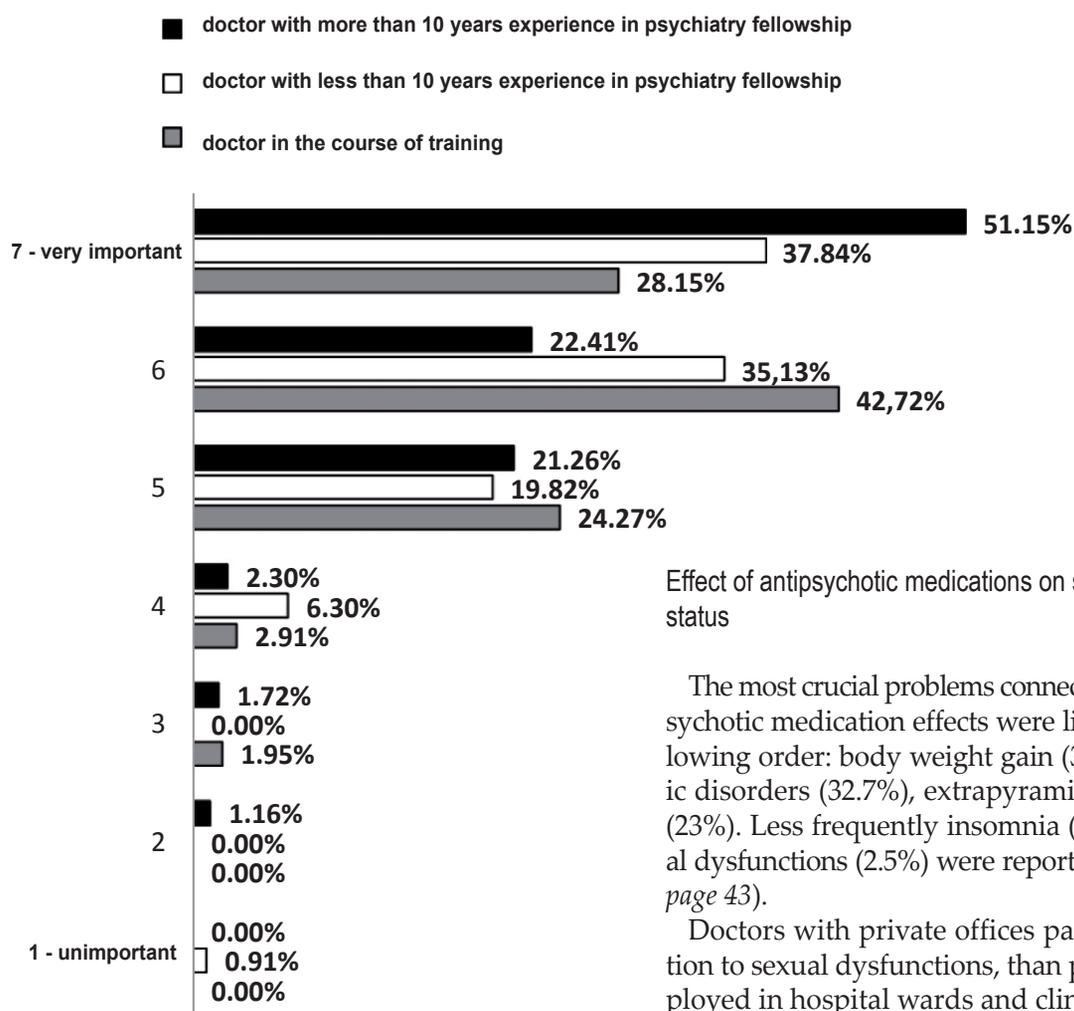
Almost all respondents (93.9%) claimed to perform many of the tests necessary to assess health status in patients with schizophrenia, to name just a few: blood pressure (83.9%), weight (81.8%), ECG (63.8%), lipidogramme (46.9%) and

Consultations for patients by doctors of other specialties

88.4% doctors reported having ordered check-ups to be performed by other specialty doctors. More frequently they were psychiatrists working at hospital wards (91%), than those having private practices (76.3%) (Figure 5 – see page 43).

In 83.5% cases, check-ups made by GP’s were ordered. Psychiatrists conducting private practices more often referred their patients to have check-ups and lab tests made by endocrinologists and diabetes specialists (Tab. 6 – see page 43).

Figure 3. Influence of professional experience of doctors on evaluation of the role of patients' somatic health



Effect of antipsychotic medications on somatic health status

The most crucial problems connected with antipsychotic medication effects were listed in the following order: body weight gain (34%), metabolic disorders (32.7%), extrapyramidal symptoms (23%). Less frequently insomnia (1%) and sexual dysfunctions (2.5%) were reported (Tab. 7 – see page 43).

Doctors with private offices paid more attention to sexual dysfunctions, than physicians employed in hospital wards and clinics (Figure 6 – see page 44).

Table 1.

Which aspects of somatic health of your patients are most important to you? (select three most important aspects).	
Hygiene/self-care	8.17 %
Sexual dysfunctions	8.66 %
Addiction: tobacco, alcohol, drugs	11.39%
Weight gain	39.60%
Endocrine disorders	49.00%
Cardiovascular parameters	59.40%
Extrapyramidal symptoms	64.60%
Metabolic disorders	70.54%

Table 2.

What is most important to you in terms of influence of somatic health status of your patient?	
Cooperation in the area of taking medications/therapy	47.49%
Increased risk of mortality	34.83%
Risk of recurrence /re-hospitalisation	11.08%
Patient's self-assessment	6.60%
What is most important to you in terms of influence of somatic health status of your patient?	
Cooperation in the area of taking medications/therapy	47.49%
Increased risk of mortality	34.83%
Risk of recurrence /re-hospitalisation	11.08%
Patient's self-assessment	6.60%

Figure 4. Most important aspects of somatic health – according to workplace

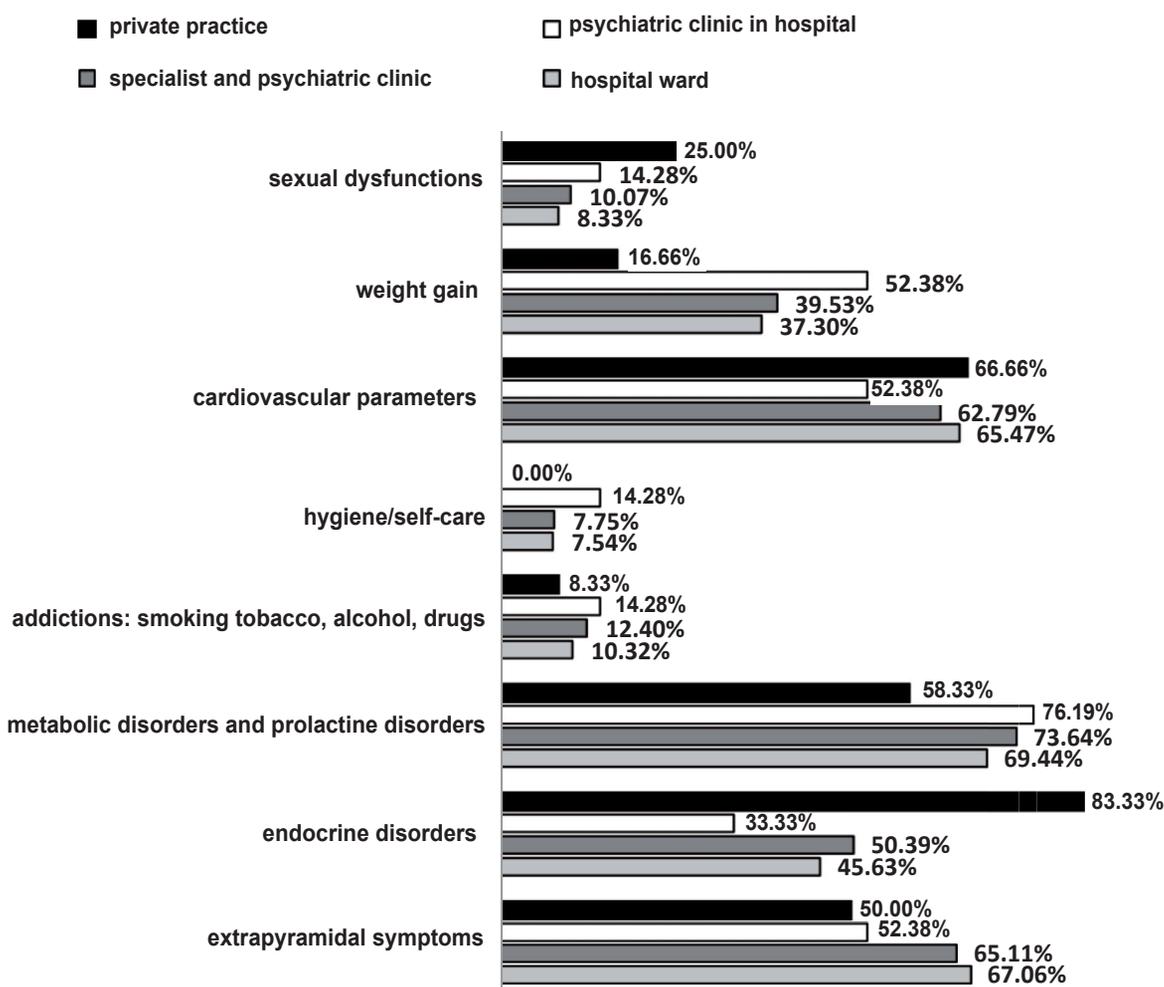


Table 3.

Somatic status examination	
RR	83.91%
Weight measurement	81.77%
EKG	63.81%
Lipidogram	46.92%
BMI	43.97%
Waist measurement	23.32%

Table 4.

Biochemical parameters in blood	
glucose concentration	61.41%
liver function evaluation	56.34%
thyroid hormone	50.14%
prolactine concentration	41.69%

Table 5.

Do you perform any of the following while evaluating the somatic health status of your patients?		
	Physical examination (%)	Tests for biochemical parameters (%)
Never	3.28	2.22
Only during first consultation	42.90	37.84
Nearly during every consultation	53.82	59.94

Weight gain in patients

More than 20% doctors noted that to half of their patients undergoing treatment for schizophrenia, their weight gain appeared to be a problem.

Figure 5. Ordering tests and checkups for patients to physicians of other specialties – according to workplace

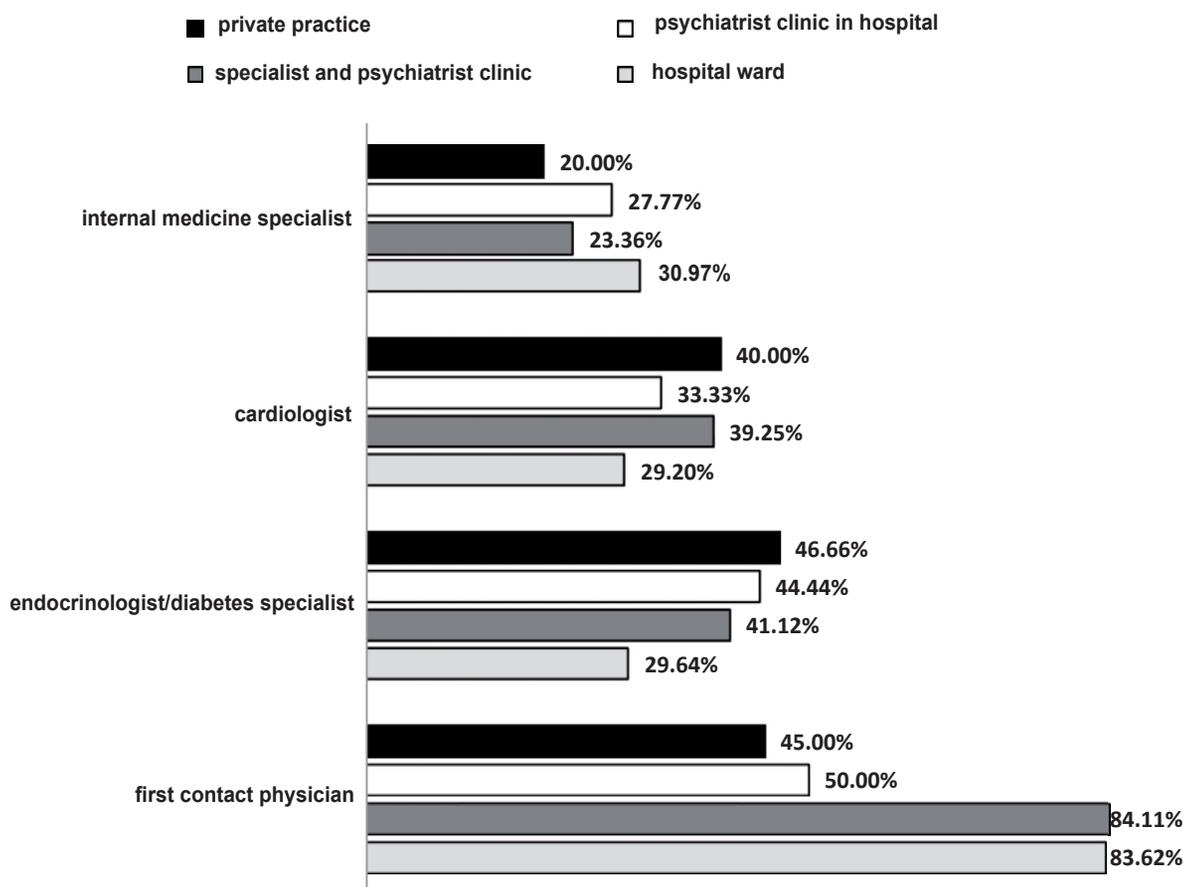
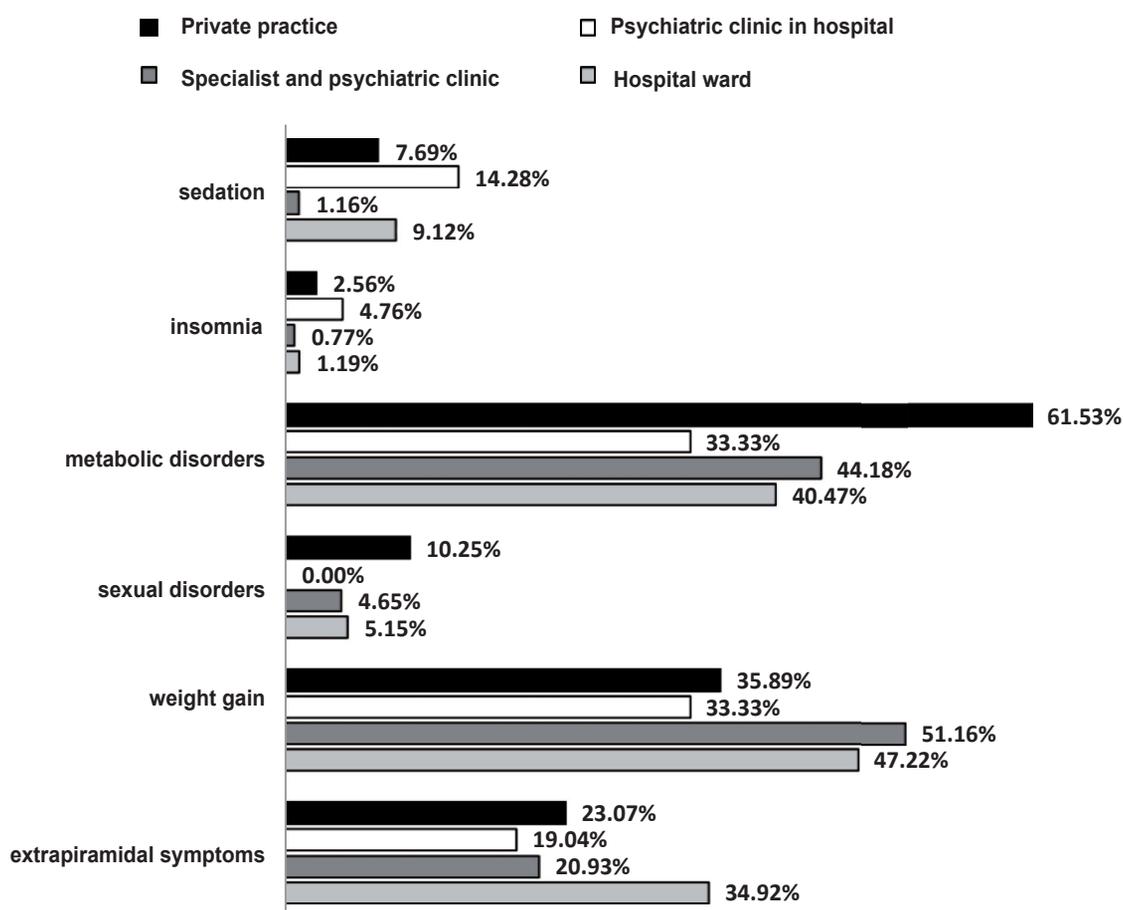


Table 6.

Which doctors are ordered to perform tests/examinations in patients?	
First contact physician	83.54%
Endocrinologist/diabetes specialist	35.97%
Cardiologist	33.54%
Internal medicine specialist	30.18%

Table 7.

Which of the effects of antipsychotic medications most frequently administered to your patients undergoing treatment for schizophrenia, causes most problems in terms of its influence on somatic health? (please, select one option).	
Weight gain	34.01%
Metabolic disorders	32.74%
Extrapyramidal symptoms	22.08%
Sedation	7.61%
Sexual dysfunctions	2.54%
Insomnia	1.02%

Figure 6. Influence of antipsychotic medications on somatic health in patients with schizophrenia – according to workplace**Table 8.**

What actions do you take in relation to weight gain connected with therapy? (select three most important methods).	
Waist measurement	7.23%
Referral to consultant/dietician	10.72%
Employing a carer, if possible.	18.20%
Weight measurement	45.63%
Changing medications	49.87%
Modifying pharmacotherapy	73.07%
Education on lifestyle, diet	87.78%

Almost 88% doctors educated their patients on diet and lifestyle, while 74% considered it proper to modify pharmacotherapy to avoid problems relating to weight gain. In almost half of the cases (49.9%) changes in therapy were introduced (Tab. 8).

DISCUSSION

In conclusion, it seems that a serious approach shown by doctors towards somatic health problems in schizophrenic patients is worth emphasising. This appears to be especially true for psychiatrists with longer professional experience.

Physicians rightly stress the importance of risk of developing metabolic syndrome, yet to a little extent do they take up the subject of sexual problems experienced by their patients, which seems to be a vital aspect of an individual's life, affecting their quality of life. Assessment of physical health in patients was investigated mainly in relation to collaboration in pharmacotherapy, however, the threat of premature mortality appeared to be less important, yet patients' opinions have not been taken into account. The study shows that most psychiatrists control basic life parameters and perform important biochemical tests. The most frequently reported adverse effects and complications of treatment were weight gain and metabolic disorders, whereas the rarest effects appeared to be sexual dysfunctions and, which might appear quite surprising, insomnia. It is also worth noting that the majority of doctors educate their patients on diet and lifestyle. Psychiatry specialists demonstrate a rational approach to therapy and when adverse affects occur, they first modify the therapy only to change the medication subsequently.

Apparently, the lack of random sampling and a little number of participants occurred to be a limitation of the study, as compared with similar studies carried out in other countries. Some critical approach should be taken to certain selected answers, specifically those pertaining to the control of the somatic status and biochemical tests performed during almost every visit. It does not seem to be plausible in practice, for example due to technical, financial reasons or a lack of proper quantity of time. However, such statements made by psychiatrists should be regarded as crucial, for they seem to represent the model of optimum patient care. It should also be noted, that respondents declared participation of family doctors in schizophrenic patient care. It may be supposed that this "level of care" over patients is not prepared well enough to take up such a task. Similarly to the guidelines provided by other authors, one should put special emphasis on organisation of such care [15]. One might also consider following Australian solutions, which put the psychiatrist in the centre of the multi-specialty team of consultants attending patients with schizophrenia [13]. Doctors ought to be reminded of the principles of monitoring the somatic health of patients diagnosed with

schizophrenia, as it may contribute towards a decrease of their prevalence, mortality, and improvement of the quality of their life [16]. Having considered the fact, that the results of the questionnaire indicate a nearly ideal image of "interest" shown by psychiatrists in the somatic state of patients with schizophrenia, it seems quite challenging to take a view from the other side, that is from the patients' point of view, and to see whether their needs, more or less realised, are met properly.

CONCLUSIONS

The majority of the responding psychiatry specialists is convinced about the importance of examining the somatic status in schizophrenia patients and often conducts such an evaluation. Much of the physicians' attention should be paid to increased mortality among patients due to somatic causes and poorer quality of their lives in various aspects, e.g. sexual, which should be taken into account in therapeutic decisions. One should consider extending schizophrenic patient care to family doctors, or even developing such model of multi-specialty care. Also, expanding evaluation of commitment to somatic status monitoring demonstrated by psychiatrists, by opinions given by patients, should be considered, thus enabling its objectivisation.

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