Are religious delusions related to religiosity in schizophrenia?

Palmira Rudalevičienė[1, 4], Thomas Stompe[2], Andrius Narbekovas[3], Nijolė Raškauskienė[4], Robertas Bunevičius[4]

[1]Vilnius Mental Health Center, Lithuania, [2]University Clinic of Psychiatry, High Security Hospital Gollersdorf, Vienna, Austria, [3]Vytautas Magnus University, [4]Institute of Psychophysiology and Rehabilitation, Kaunas University of Medicine, Lithuania

Key words: *schizophrenia; religiosity; religious delusions; cultural psychiatry.*

Summary. *This article attempts to explore the phenomenology of religious delusions in patients suffering from schizophrenia and to determine parallels between personal religiosity and content of religious delusions. We have studied the content of delusions in patients with schizophrenia looking for religious themes using Fragebogen fur psychotische Symptome (FPS) – a semi-structured questionnaire developed by the Cultural Psychiatry International research group in Vienna. A total of 295 patients suffering from schizophrenia participated in this study at Vilnius Mental Health Center in Lithuania, among whom 63.3% reported religious delusions. The most frequent content of religious delusion in women was their belief that they were saints and in men – that they imagined themselves as God. Univariate multiple logistic regression analyses revealed that four factors such as marital status, birthplace, education, and subjective importance of religion were significantly related to the presence of religious delusions. However, multivariate analyses revealed that marital status (divorced/separated vs. married OR (odds ratio)=2.0; 95% CI, 1.1 to 3.5) and education (postsecondary education vs. no postsecondary education OR=2.3; 95% CI, 1.4 to 3.9), but not personal religiosity, were independent predictors of the religious delusions. We conclude that the religious content of delusions is not influenced by personal religiosity; it is rather related to marital status and education of schizophrenic patients.*

Introduction

Religion is one of the ways we understand the world and give meaning to our lives (1). There are numerous religions in different societies and even within the same society that directly or indirectly shape our lives and influence our thoughts and behavior. In psychiatric patients, religiosity may impact psychopathology and treatment of the patient (1, 2).

Despite the intensive efforts in research that began with Emil Kraepelin (3) and Eugen Bleuler (4, 5), the etiology and pathogenesis of the schizophrenic psychoses have hitherto been only partially clarified (6); thus, many fundamental questions about the phenomenology of delusions remain unanswered (7). Cross-cultural psychiatry studies also tried, by means of its methodological inventory, to analyze the influence of cultural and environmental factors on the pathogenesis and phenomenology of schizophrenia (6). Some events in society may create delusional environment, described by E. Bleuler (4, 5), which could find a reflection in the psychopathology (8).

Data on phenomenology of delusions, hallucinations, or Schneider's first rank symptoms in schizophrenia demonstrate a remarkable influence of culture on content of psychotic symptoms (9). The discussion whether and to which extent the prevalence and content of psychotic symptoms depends on cultural environment has a long-standing tradition. In German psychiatry, Zutt (10) established the term *pathoplasticity* to describe the culture-sensitive part of the symptomatology of mental disorders. However, until today this term has more or less a metaphoric character. Although most psychiatrists would agree that a cultural pattern might influence psychotic features, it is an unsolved question to what extent the variability of psychotic symptoms is caused by cultural factors such as socialization, religion, and believes. A number of case reports published during the last 20 years describe a quick inclusion of new technologies and cultural innovations into schizophrenic delusions (9, 11).

The way a patient expresses his/her illness is influenced by his/her cultural environment (13, 14). The importance of understanding of religious beliefs of psychiatric patient was reported by several studies

Correspondence to P. Rudalevičienė, Vilnius Mental Health Center, Vasaros 5, 10309 Vilnius, Lithuania
E-mail: palmirarudalev@yahoo.com

(15–21). One of the most interesting delusional themes, which were found in almost every culture, was religious content of delusions (9). Schizophrenic religious delusions were described in different cultures (6, 22) and in different times (23). The existence of different phenomenological forms of religious delusions is clinically evident. The term "religious delusions" comprehends such different phenomena like acute apocalyptic ideas as well as chronic ideas of being damned by God or being God (9, 24, 25).

Aim of this study was to evaluate religious delusions determining relationship between personal religiosity and religious content of delusions.

Material and methods

Data for this study were obtained from the research project, entitled "Research in cultural psychiatry. Research of the content of delusions and hallucinations." Protocol of the study was approved by the Lithuanian Bioethics Committee. All patients of the study signed informed consent form. Patients were included into the study if they met following criteria: established clinical diagnosis of schizophrenia, according to the International Statistical Classification of Diseases (ICD-10), age between 18 and 80 years, male and female, who were capable for participating in a productive interview according to their mental state (26). Content of delusions, hallucinations and first rank symptoms were evaluated by means of the "Fragebogen fur psychotische Symptome" (FPS) – a semi-structured questionnaire developed by Cultural Psychiatry International research group in Vienna (27). The FPS was translated into Lithuanian using method of double translation. The FPS consists of Introduction that contains questions on demographic and clinical data; and of three modules describing different symptoms of psychoses as mentioned above. For this study, we used data from the Introduction of the FPS and from the module describing content of delusions. From this module, we took question describing religious content of delusions, "Did you think you were an important personality, a saint, God, the devil, or a demon?" with two possible answers "Yes" or "No." In a case of the positive answer, patient was asked to describe specific content of delusion.

In addition to the FPS interview, all patients were asked about their personal religiosity, asking "Are you religious person?" and "Is your faith personally important for you?"

We examined 295 patients (mean age, 42.4 (SD 9.7) years; women – 51.5%) at the Mental Health Center in Vilnius, Lithuania.

Statistical analysis of the data

The statistical analysis applied a χ^2 test for 2×2 and 2×k tables, Fisher's exact test, Spearman's rank correlation, and logistic regression. Continuous or ordinal data were analyzed using *t* test. The quantitative evaluation of the impact of the studied determinants (age, sex, duration of illness, age at illness onset, education, birthplaces, marital status, and the personal importance of the faith) on the development of religious delusions was performed using logistic regression.

The relationships of the analyzed determinants with the evaluation of religious delusions were calculated in two stages: using the univariate and multivariate (applying Forward LR selection algorithm) logistic regression analysis. The data on male and female subjects were analyzed separately, followed by the analysis of the total contingent of subjects. During the first stage of the analysis, we investigated all separate determinants, taking into consideration the impact of the age, and included separate determinants and age into the logistic regression model. The quantitative evaluation of the impact of the studied determinants on the development of religious delusions was performed using the odds ratio (95% confidence interval (CI)) that shows the increase in the risk of a subject to enter the group of those experiencing religious delusions with respect to the subject's attribution to some of the classification categories of the studied factors with respect to the reference category. After that, the step-wise (Forward LR algorithm) procedure was used to include statistically significant variables into the model (P>0.10 – excluded). Level of statistical significance was set at 5%. Statistical analysis of the data was performed using the statistical software package SPSS 11.5.

Results

Sociodemographic characteristics of 295 surveyed patients with schizophrenia are presented in Table 1. Male and female patients were similar with respect to age, birthplace, duration of illness, age at illness onset, and education. There was a significant difference in the patients' distribution in marital status groups according to sex. Male patients were more likely to be divorced/separated than female patients.

Prevalence

Of 295 respondents, there were 248 (84.1%) patients for whom their faith was of personal importance (Table 1). Men and women differently evaluated the importance of their faith; 89.5% of men

Table 1. **Characteristics of patients with schizophrenia**

Characteristic	All[a] N=295	Men[a] N=143	Women[a] N=152
Age, years (SD) (range)	42.4 (9.7) (20–74)	42.1 (9.9) (20–74)	42.7 (9.5) (22–68)
Duration of illness, years[b]	18 (13)	18 (13)	18.0 (13)
Age at onset, years[b]	25 (6)	25 (5)	25 (6)
Onset:			
Early, ≤20 years	21.0 (62)	17.5 (25)	24.3 (37)
Middle, (21 – <35) years	76.6 (226)	81.8 (117)	71.7 (109)
Late, (35 – <60) years	2.4 (7)	0.7 (1)	3.9 (6)
Marital status[c]			
Married	28.8 (85)	21.7 (31)	35.5 (54)
Single	18.3 (54)	18.9 (27)	17.8 (27)
Separated or divorced	52.9 (156)	59.4 (85)	46.7 (71)
Birthplace of patient			
Urban	76.7 (224)	77.3 (109)	76.2 (115)
Rural	23.3 (68)	22.7 (32)	23.8 (36)
Education			
No postsecondary	32.2 (95)	31.5 (45)	32.9 (50)
Some postsecondary	64.8 (200)	68.5 (98)	67.1 (102)
Religiosity[d]	88.5 (261)	93.7 (134)	83.6 (127)
Faith was of personal importance[e]	84.1 (248)	89.5 (128)	78.9 (120)

[a] Values are given as percent for proportion (absolute number) or as appropriate.
[b] Median (interquartile range).
Statistical significance of the differences between the sexes was calculated by chi-square tests:
[c] (χ^2=7.2, df=2, P<0.05)
[d] (χ^2=7.5, df=1, P<0.05)
[e] (χ^2=6.1, df=1, P<0.05)

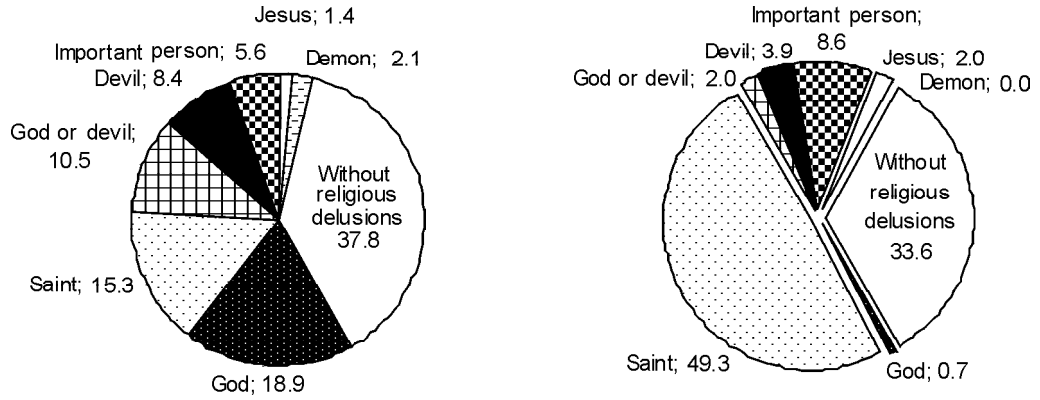
and 78.9% of women reported their faith as important for them (χ^2=6.1, df=1, P<0.05).

The religious delusions were confirmed in 190 (64.4%) patients. There were no significant differences in the frequency of the development of the religious delusions between men and women, 89 (62.2%) and 101 (66.4%), respectively (χ^2=0.57, df=1, P>0.05). However, there was a significant difference in the content of religious delusions between men and women (χ^2=70.03, df=7, P<0.001). The distribution of themes of the religious delusions in patients with schizophrenia according to sex is presented in Fig. 1. Most frequent content of religious delusion in women was belief that they were saint women, and most rare content was that they were God. In contrast to women, in men being God was the most popular theme of delusions, and being saint man was a second popular theme.

Determinants of the development of the religious delusions

A significant but weak correlation has been found between the development of the religious delusions and the personal importance of the faith (Spearmen correlation r=0.12, P<0.05). The religious delusions were reported by 66.9% of those schizophrenia patients for whom their faith was of personal importance and by 51.1% of those schizophrenia patients for whom their faith was not important (sex- and age-adjusted OR=1.9; 95% CI, 1.1 to 3.6). However, there were no significant differences in the occurrence of religious delusions separately in the male patients' group and in the female patients' groups regarding to the importance of their faith (Fig. 2).

Results of univariate multiple logistic regressions. After controlling for age and sex, four independent factors remained significant for the development of



The male patients **The female patients**

Fig. 1. **The distribution (%) of schizophrenia patients according to the content of their religious delusions**

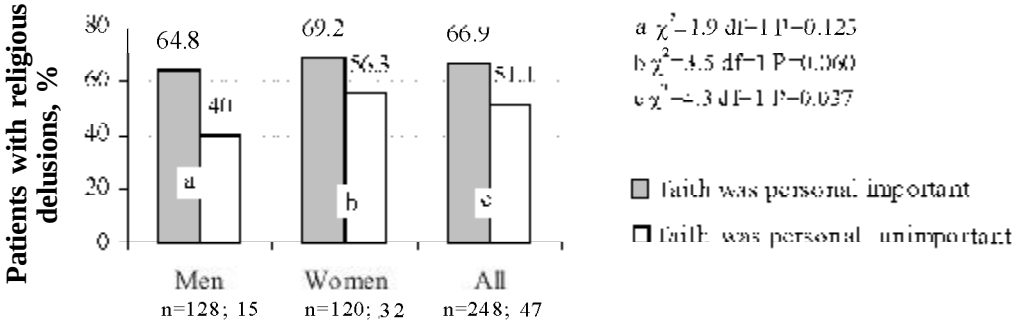


Fig. 2. **The frequencies of religious delusions (%) in patients with schizophrenia according to the personal importance of their faith**

religious delusions: marital status, birthplace, education, and the subjective importance of religion in daily life (Table 2).

The divorced patients independently of the age and sex more frequently experienced the religious delusions compared to married patients (sex- and age-adjusted OR=2.2; 95% CI, 1.3 to 3.9).

Education was also associated with a higher frequency of the development of the religious delusions (some postsecondary education *vs.* no postsecondary education (OR=2.6; 95% CI, 1.5 to 4.3). Patients with rural birthplace had a lower risk of development of religious delusions (rural *vs.* urban OR=0.4; 95% CI, 0.3 to 0.8).

For evaluation of the impact of socio-demographic factors on development of religious delusions, multivariate logistic regression analysis was employed (Table 3). Marital status (divorced/separated *vs.* married OR=2.0; 95% CI, 1.1 to 3.5) and education (some postsecondary education *vs.* no postsecondary education OR=2.3; 95% CI, 1.4 to 3.9) significantly predicted religious content of delusions. In this model, the personal importance of the faith was a statistically insignificant predictor of the religious delusions.

Discussion

Results of our study have demonstrated that religiosity in general as well as personal importance of the faith are not directly related to the religious content of delusions in patients with schizophrenia and are associated with education and family status of the patient. Content of religious delusions is gender specific. Among women prevailed a theme of being saint, and among men prevailed a theme of being God.

The affinity of schizophrenia to religion was recognized and was a topic for intense research already in the 19th century (6). German psychiatrist Spitzer claims that clinically religious delusions can only be diagnosed indirectly. Indirect signs of delusions are the incidence of other symptoms of mental disease, inconsistencies between utterances and behavior, constriction or torpor of thinking, feeling and acting (6,

Table 2. **Logistic regression models for risk of religious delusions in schizophrenia patients**

Factor	Percentage of patients[a]	Age- and sex-adjusted OR (95% CI)[b]	Age-adjusted OR (95% CI)[b]	
	All	All	Men	Women
Age at onset:		$P_{\text{for trend}}$=0.34	$P_{\text{for trend}}$=0.31	$P_{\text{for trend}}$=0.74
Early onset, ≤20 years#	61.3	1	1	1
Middle and late onset, (21 – <60) years	65.2	1.2 (0.7–2.2)	2.0 (0.8–4.8)	0.8 (0.4–1.9)
Marital status		$P_{\text{for trend}}$=0.001	$P_{\text{for trend}}$=0.001	$P_{\text{for trend}}$=0.001
Married#	56.5	1	1	1
Single	48.1	0.7 (0.4–1.4)	1.5 (0.5–4.4)	0.4 (0.2–1.1)
Separated or divorced	74.4	**2.2 (1.3–3.9)****	**2.4 (1.1–5.7)***	**2.6 (1.2–5.8)***
Birthplace of patient				
Urban#	69.2	1	1	1
Rural	50.0	**0.4 (0.3–0.8)****	**0.3 (0.1–0.6)****	0.6 (0.3–1.4)
Education				
No postsecondary#	49.5	1	1	1
Some postsecondary	71.5	**2.6 (1.5–4.3)*****	**2.6 (1.2–5.3)***	**2.5 (1.2–5.2)***
Religiosity				
No#	64.7	1	1	1
Yes	64.4	0.98 (0.5–2.1)	0.8 (0.2–3.4)	1.1 (0.4–2.7)
Faith was of personal importance				
No#	51.1	1	1	1
Yes	66.9	**1.9 (1.08–3.6)***	2.8 (0.9–8.4)	1.7 (0.8–3.8)

[a] Percentage of patients with the religious delusions.
[b] OR – odds ratio, CI – confidence interval, # – reference category.
*P<0.05; **P<0.01; ***P<0.001.

Table 3. **The factors related to the development of the religious delusions in patients with schizophrenia (adjusted for sex, age, age at onset, birthplace, education, personal importance of the faith)**

Factor	Number of subjects	OR (95% CI)[a]	P
Marital status			$P_{\text{for trend}}$=0.002
Married#	85	1	
Single	54	0.7 (0.4–0.5)	0.385
Separated or divorced	156	2.0 (1.1–3.5)	0.019
Education			
No postsecondary#	95	1	
Some postsecondary	200	2.3 (1.4–3.9)	0.002

Model Nagelkerke R^2=0.12
[a]OR – odds ratio, CI – confidence interval, # – reference category.

28). Studies of religious delusions and hallucinations with religious content are of interest because these symptoms may lead to violent behavior (29). The prevalence of delusions and hallucinations with religious content varies between cultures and over time (30). Religious practices have been associated with a higher rate of religious delusions (31), but personal religiosity is not necessary for the development of religious delusions.

Stompe and colleagues (1999) found that neither in Pakistan nor in Austria any connection was established between contents of delusions and social status as well as level of education of patients with schizophrenia (6). A study of mental health status of immig-

rant farm workers in the United States has discovered higher acculturative stress and higher anxiety levels in immigrants who reported lower religiosity and higher education (50). During occupation and isolation, religious roots of the nation were damaged with no other spiritual source offered (51). This long-standing spiritual deprivation might, at least in part, be responsible for the poor mental health situation in Lithuania, including high suicide rate, high alcohol consumption, and high prevalence of psychoses (52).

Cross-sectional design of the study does not allow us to speak about causal relationships between independent factors, such as marital status or education and religious delusions. Another limitation of the study is that we did not verify psychiatric diagnoses with standard diagnostic interviews and relayed on clinical diagnoses; however, these clinical diagnoses were established using standard ICD-10 diagnostic criteria for schizophrenia. Moreover, assessing psychopathology, we used validated structured psychiatric instrument, FPS.

Conclusions

1. Delusions of religious content were reported by males and by females. Male patients most often considered themselves as God, while female patients most often considered themselves as Saints.
2. Religiosity and personal importance of the faith were not confirmed as independent predictors of religious content of delusions in schizophrenic patients.
3. Marital status and educational level independently predicted religious content of delusions in patients with schizophrenia.

Ar religinio turinio kliedesiai yra susiję su šizofrenija sergančių ligonių religingumu?

Palmira Rudalevičienė[1, 4], Thomas Stompe[2], Andrius Narbekovas[3], Nijolė Raškauskienė[4], Robertas Bunevičius[4]

[1]Vilniaus psichikos sveikatos centras,
[2]Universitetine psichiatrijos klinika ir Gollesdorfo sustiprintosios apsaugos ligoninė, Viena, Austija,
[3]Vytauto Didžiojo universitetas, [4]Kauno medicinos universiteto Psichofiziologijos ir reabilitacijos institutas

Raktažodžiai: šizofrenija, religingumas, religiniai kliedesiai, kultūrinė psichiatrija.

Santrauka. Tyrimo tikslas. Ištirti šizofrenija sergančių ligonių religinių kliedesių pobūdį ir nustatyti paraleles tarp religingumo ir religinių kliedesių turinio. Mes išanalizavome šizofrenija sergančių ligonių kliedesių turinį, panaudodami Vienos (Austrija) universiteto Tarptautinės kultūrinės psichiatrijos tyrimo grupės sukurtą klausimyną „Fragebogen fur psychotische Symptome (FPS)“. Tyrime dalyvavo 295 šizofrenija sergantys ligoniai, gydomi Vilniaus psichikos sveikatos centre, iš kurių 63,3 proc. papasakojo religinio turinio kliedesius. Dažniausiai pasitaikantis moterų religinis kliedesys buvo jų tikėjimas, kad jos yra šventosios, o vyrų religinis kliedesys, kad jie manė esantys dievai. Atlikta vienmatės logistinės regresijos analizė parodė, kad religinių kliedesių atsiradimui didelę įtaką turėjo keturi veiksniai: šeimos padėtis, gimimo vieta, išsilavinimas ir subjektyvi religijos reikšmė. Tačiau daugiamatė analizė parodė, jog šeimos padėtis (išsiskyrę, gyvenantys atskirai – ŠS (šansų santykis)=2,0; 95 proc. PI 1,1–3,5) ir išsilavinimas (aukštasis ir vidurinis – ŠS=2,3; 95 proc. PI 1,4–3,9), bet ne asmeninis religingumas yra lemiami religinių kliedesių veiksniai. Mes padarėme išvadą, kad šizofrenija sergančių ligonių kliedesių religinį turinį lemia ne asmeninis religingumas, bet šeimos padėtis ir išsilavinimas.

Adresas susirašinėti: P. Rudalevičienė, Vilniaus psichikos sveikatos centras, Vasaros 5, 10309 Vilnius
El. paštas: palmirarudalev@yahoo.com

References

1. Wen-Shing T. Hand book of cultural psychiatry. San Diego, London, Boston, New York, Sydney, Tokyo, Toronto: Academic Press; 2001.
2. Bartocci G. The influence of religion on psychiatric theories and practices. World Cultural Psychiatry Research Review 2006;3(4):106-13.
3. Littlewood R, Dein S. Cultural psychiatry and medical anthropology: an introduction and reader 13. 1st ed. London and New Brunswick, NJ: The Athlone Press; 2000.
4. Bleuler E. Textbook of psychiatry. New York: Dover Publications, Inc.; 1951.
5. Bleuler E. Textbook of psychiatry. New York: The Macmillan Company; 1924.
6. Stompe T, Friedmann A, Ortwein G, Strobl R, Chaudhry HR, Najam N, et al. Comparison of delusions among schizophrenics in Austria and Pakistan. Psychopathology 1999;32:225-34.

7. Kimhy D, Goetz R, Yale S, Corcoran S, Malaspina D. Delusions in individuals with schizophrenia: factor structure. Clinical correlates and putative neurobiology. Psychopathology 2005;38(4):338-44.
8. Rudaleviciene P, Narbekovas A. Politician's moral values and their impact on the mental health of the people. Mutual interaction of spirituality. Parlamento studijos 2006;A(6):101-22.
9. Stompe T, Karakula H, Rudaleviciene P, Okribelashvili N, Chaudhry HR, Idemudia EE, et al. The pathoplastic effect of culture on psychotic symptoms in schizophrenia. World Cultural Psychiatry Research Review 2006;1(3/4):157-63.
10. Zutt J. Transkulturelle Psychiatric. Nervenarzt 1967;38:6-9.
11. Stompe T, Ortwein-Swoboda G, Ritter K, Schanda H. Old wine in new bottles? Stability and plasticity of the contents of schizophrenic delusions. Psychopathology 2003;36(1):6-12.
12. Kortman F. Communicative universality and communicative relativity-useful theoretical concepts in transcultural psychiatry. Newsletter 2005;23(1):14-7.
13. Kirmayer LJ. Culture, context and experience in psychiatric diagnosis. Psychopathology 2005;38(4):192-6.
14. Bartocci G. Recent advances in cultural and transcultural psychiatry. Newsletter 2006;21(1):24-9.
15. Rudalevičienė P, Narbekovas A. Psichiatro ir kunigo bendradarbiavimas – gydytojo praktikoje iškylanti būtinybė, iniciatyva. (Collaboration between psychiatrist and a priest – a necessity in psychiatric practice.) Sveikatos mokslai 2005; 15(1):62-8.
16. Mohr S, Huguelet P. The relationship between schizophrenia and religion and its implications for care. Swiss Med Wkly 2004;134(25-26):369-76.
17. Boehnlein JK. Religion and spirituality in psychiatric care: looking back, looking ahead. Transcult Psychiatry 2006;43(4): 634-51.
18. Brewerton TD. Hyperreligiosity in psychotic disorders. J Nerv Ment Dis 1994;182(5):302-4.
19. Browning D. Internists of the mind or physicians of the soul: does psychiatry need a public philosophy? Aust N Z J Psychiatry 2003;37(2):131-7.
20. Campbell CS. Religion and the body in medical research. Kennedy Inst Ethics J 1998;8(3):275-305.
21. Cohen M. Convergence: maturation and integration in the course of a religious conversion. J Am Acad Psychoanal 2002; 30(3):383-400.
22. Tateyama M, Asai M, Kamisada M, Hashimoto M, Bartels M, Heimann H. Comparison of schizophrenic delusions between Japan and Germany. Psychopathology 1993;26(3-4):151-8.
23. Ndetei DM, Vadher A. Frequency and clinical significance of delusions across cultures. Acta Psychiatr Scand 1984;70(1): 73-6.
24. Stompe T, Bauer S, Ortwein-Swoboda G, Schanda H, Karakula H, Rudaleviciene P, et al. Delusions of guilt: the attitude of Christian and Islamic confessions toward Good and Evil and the responsibility of men. Journal of Muslim Mental Health 2006;1:43-56.
25. Stompe T, Ortwein-Swoboda G, Chaudhry HR, Friedmann A, Wenzel T, Schanda H. Guilt and depression: a cross-cultural comparative study. Psychopathology 2001;34(6):289-98.
26. International Statistical Classification of diseases and related health problems. Geneva: World Health Organization; 2004. p. 1-807.
27. Stompe T, Inventor. International Study of Psychoatic Symptoms (ISPS). Psychiatric University Clinic, Vienna, Austria patent unpublished manuscript; 2000.
28. Spitzer M. Ein Beitrag zum Wahnproblem. (The problem of delusion.) Nervenarzt 1989;60:95-101.
29. Kraya N, Patric C. Folie a deux in forensic settings. Austr N Z J Psychiatry 1997;31:883-8.
30. Ndetei DM, Vadher A. Frequency and clinical significance of delusions across cultures. Acta Psychiatr Scand 1984;70:73-6.
31. Peters E, Day S, McKenna J, Orbach G. Delusional ideation in religious and psychotic populations. Br J Clin Psychol 1999; 38(Pt 1):83-96.
32. Hovey JD, Magana CG. Cognitive, affective, and psychological expression of anxiety symptomatology among Mexican migrant farm workers: predictors and generational differences. Community Ment Health J 2002;38(3):223-37.
33. Tateyama M. 'Delusion of world destruction' (Wetzel). Comparative study between Japan and West Germany. Psychopathology 1989;22(6):289-94.
34. Tedeschi GF. Religious delusions in schizophrenics; psychopathological observations with regard to the basic aspects of schizophrenic experience in the light of the symbol. Arch Psicol Neurol Psichiatr 1957;18(6):505-17.
35. Kimura B. Zwischen Mensch und Mensch: Strukturen japanischer Subjektivitat. (Structures of Japanese subjectivity.) Darmstadt: Wissenschftliche Buchgesellschaft; 1995.
36. Varma V. Transcultural perspective on Schizophrenia: epidemiology, manifestation and outcome. Newsletter 2000; XVIII(1):17-24.
37. Wilson W. Religion and psychosis. Handbook of religion and mental health. San Diego: Academic Press; 1998. p. 161-73.
38. Ng F. The interface between religion and psychosis. Australas Psychiatry 2007;15(1):62-6.
39. Goldwert M. Religio-egocentricity in reactive schizophrenia. Psychol Rep 1990;67(3 Pt 1):955-9.
40. Thara R, Eaton WW. Outcome of schizophrenia: the Madras longitudinal study. Aust NZJ Psychiatry 1996;30:516-22.
41. Cox J. Transcultural psychiatry. In: Social psychiatry. 1st ed. New Delhi: Macmillan India Limited; 1998.
42. Kaplan HI, Sadock BJ, Grebb JA. Kaplan and Sandock's synopsis of psychiatry behavioural sciences clinical psychiatry. 7th ed. London, Munich, Sydney, Toronto: William & Wilkins; 1994.
43. Šventasis Raštas. (Sacred Scripture.) Vilnius: Vaga; 1990.
44. Katalikų Bažnyčios Katekizmas. (Cathecism of the Catholic Church.) Kaunas: Tarpdiecezinė katechetikos komisijos leidykla; 1997.
45. The New Testament of our Lord and Saviour Jesus Christ. Wetzlar: The Gideon International; 2006.
46. Varma VK. Transcultural psychiatry. In: Vyas JN, Ahuja N, editor. Textbook of postgraduate psychiatry. 2nd ed. New Delhi: Jaypee Brothers Medical Publishers; 1999. p. 945-68.
47. Freud S. Psycho-analytic notes on an autobiographical account of a case of paranoia (dementia paranoides). 1911. p. 1-82.
48. Tsuang MT, Stone WS, Faraone SV. Towards reformulating the diagnosis of schizophrenia. Am J Psychiatry 2000; 147(147):1041-50.
49. Flor-Henry P. Cerebral basis of psychopathology. Boston-Bristol-London: John Wright PSG inc.; 1983.
50. Ratzinger J, Pera M. Without roots. The West, relativism, Christianity, Islam. I ed. New York, NY: Basic Books; 2006.
51. Maceina A. Raštai. T. 10. (Selections, Vol. 10.) Vilnius: Margi raštai; 2005.
52. World health statistics 2007. World Health Organization. Available from: URL: http://www.who.int/whosis/whostat 2007.pdf

Received 5 February 2008, accepted 12 June 2008
Straipsnis gautas 2008 02 05, priimtas 2008 06 12