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The Picture of Mental Health/Illness in the Printed Media in Three Central European Countries

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Abstract

Even in the era of the internet, printed media are still among the most frequently identified sources of mental health information. Many studies have shown that this information is frequently negative and contributes to stigmatization of people with mental illness. This international comparative study describes the content of media messages about mental health/illness in terms of stigma in three central European countries. The study sample comprised all articles pertaining to the topic of mental health/illness (N=450) identified during five week-long periods in 2007 chosen from the six most widely read newspapers and magazines in each country. Content analysis methods were used to achieve quantitative as well as qualitative objectives. More than half of all articles contained negative statements reflecting stigma towards persons with mental illness. Substance abuse disorders are the most frequent mental conditions covered in all three countries (22%) and psychotic disorders are the most stigmatized. Countries significantly differ in length of articles, the association of aggressive behavior with persons with mental illness, and in the use of a sensationalized style of writing. Coverage of mental health/illness issues differs to some extent across countries, but is generally of poor quality. Based on our findings, practical recommendations for journalists can be tailored specifically for each country.

Broadcast and printed media are considered to be the public's primary source of information regarding mental health/illness (e.g., Anderson, 2003; Hannigan, 1999; Philo, Secker, Platt, Henderson, McLaughlin, & Burnside, 1994). Numerous studies have documented an association between negative media portrayals of people with mental illness and the public's

negative attitudes (e.g., Angermeyer & Matschinger, 1996; Philo, 1996; Wahl, 1992; Wahl & Lefkowitz, 1989), and have concluded that stigmatizing presentations have a direct negative impact on individuals living with mental illness (Grinfeld, 1998) as well as on social policies (Cutcliffe & Hannigan, 2001; Olstead, 2002; Rose, 1998).

Numerous researchers have investigated the representations of mental illnesses in the printed media. Many of them have suggested that depictions of mental illnesses are relatively common in printed media and that these provide a distorted depiction of people with mental illnesses, highlighting their bizarre features (e.g., Coverdale, Nairn, & Claasen, 2002; Day & Page, 1986; Hazelton, 1997). Several studies also repeatedly confirmed that many depictions convey a greatly exaggerated connection between mental illness and aggressive behavior (e.g., Allen & Nairn, 1997; Slopen, Watson, Gracia, & Corrigan, 2007). Those articles were also more often published on the first page of daily newspapers and journals, increasing their potential to influence readers (e.g., Boke, Aker, Sarisoy, & Sahin, 2007; Corrigan, Watson, Gracia, Slopen, Rasinski, & Hall, 2005; Ward, 1997).

Few relevant investigations have been conducted in Central and Eastern Europe. A Serbian study of the representations of mental illness in the press found that depictions of mental illness were considerably negative, presenting people with mental illness as dangerous and as victims of their health conditions (Bilic & Georgaca, 2007). In the Czech Republic, these issues were investigated mainly in relation to the image of drug abuse and drug users in printed media (Grohmannova, 2006; Miovska, Brachova, & Miovsky, 2008; Sivek, Miovska, & Miovsky, 2004).

Situation in the Czech and Slovak Republic

The Czech Republic with population of 10.2 million (Eurostat, 2010) and the Slovak Republic with population of 5.4 million (Eurostat, 2010) once was a single country. The history of psychiatry and mental health care issues is therefore very similar, as is the socio-cultural background. During the communist era of 1948 – 1989, the one-party system with a centralized economy and substantial restrictions of democratic rights influenced all aspects of society (Dragomirecka, Brazinova, Palova, Baudis, & Seleпова, 2008; Vevera, 2004). The health care system was nationalized and patients did not have free choice of a specialist or treatment facility. No civic movements or non-governmental organizations (NGOs) existed to provide advocacy, promotion, or prevention. The communist regime monopolized the media and largely prevented any alternative voices from reaching the public. The main political, social, and administrative changes after the “Velvet Revolution” in November 1989 provided the basis for creation of new mental health policies, which enabled attempts to address stigma (Dragomirecka et al., 2008; Vevera, Hubbard, Vesely, & Papezova, 2005).

In 2004 the Czech Republic joined the World Psychiatric Association (WPA) program entitled “Open the Doors” with the initiative called Zmena (Change). Its survey focused on schizophrenia revealed that there is little knowledge about the disease among the general public and that stereotypes about the dangerousness and unpredictability of patients are widespread (DEMA, 2004). Because mental health literacy was found to be very low in Czech Republic, one of the main priorities of the other initiative Stop stigma is to increase the level of information on mental illness mainly by encouraging media to provide more complete and accurate information (Stop stigma, 2009).

The League for Mental Health is a leading NGO active in mental health promotion and protection in the Slovak Republic (Liga za duševne zdravie, 2008). Its programs include media campaigns on alcohol abuse and schizophrenia. Another Slovak national organization, Otvoreme dvere otvoreme srdcia (Open the door open your hearts), implements the anti-stigma program of the WPA (Sartorius, 2005). In cooperation with the media, this

program included interviews with patients and their relatives appearing in newspapers as well as on television (Nawka, 2005).

Situation in Croatia

Croatia with population of 4.4 million (Eurostat, 2010), has a very similar socio-cultural and historical background of psychiatry and mental health care to the Czech and Slovak Republics. Croatia was part of Yugoslavia, with the communist regime in place until 1991. After the Croatian Parliament declared the independence and sovereignty of the country, by the Yugoslav Army started an open military conflict that lasted until the liberating military events of 1995 marked the end of the war. Since 1991, thorough transitional changes took place and brought vast socioeconomic, political and cultural changes. These changes also affected overall health issues and mental health issues as well. Ten percent of the adult population are war veterans who suffer from psychiatric problems, especially post-traumatic stress disorder (PTSD). Prevalence of PTSD ranges from 18-40% (Komar & Vukusic, 1999) and the suicide rate among war veterans is more than twice as high as for the general population (Suicidi info, 2009). Throughout the 1991 – 2004 period, 1053 war veterans committed suicide (Croatian Government, 2006).

Recent findings report a high level of stigma towards mental illness as reported by the general population, medical staff, and caregivers of patients with mental illness (Arbanas, 2008; Filipic, Marcinko, Grubisin, Begic, Tomac, & Dordevic, 2003), mostly associated with fear and insufficient knowledge about psychiatric patients and mental disorders. A recent study of PTSD and perception of stigma showed that stigma perception depends on social support and intensity of symptoms (Aukst-Margetic, Toic, Furjan Boban, & Margetic, 2009).

Even though the above figures show a dramatic situation, the Croatian government has still not accepted international standards of anti-stigma programs from the World Health Organization (WHO) or WPA. Therefore anti-stigma programs are mostly provided by NGOs or psychiatric associations. Mental health professionals are making efforts to provide anti-stigma programs and some positive results have been already achieved through the establishment of a Center for Mental Health at the Health Centre Zagreb and Croatian Center for Rehabilitation in Community, Vrapce Psychiatric Hospital, as a part of the WHO's and Stability Pact pilot project (Health development action for south-eastern Europe, 2009).

Objectives

Our study aimed to compare the contents and tone of articles on mental health/illness in Czech, Croatian, and Slovak print media. An international comparison should provide comprehensive information on representations of mental illnesses in printed media in each country, which can be a basis for targeted anti-stigma programs with respect to socio-cultural contexts. The main goals of our study were to determine how many articles on mental health/illness issues were published during the defined period and how was the tone of the articles regarding stigmatization of people with mental illness. Who is the source of information, what types of mental disorders are described in the articles, and how violence connected with people who are mentally ill is presented were secondary goals.

Methods

Study sample

Our study sample comprised articles pertaining to the topic of mental illness chosen from the six most widely-read daily newspapers in print and six most widely-read weekly periodicals in print in each country. Articles related to mental health/illness were retrieved by media retrieval agencies. They were taken from four one-week periods randomly selected from every three months throughout 2007 plus one week randomly selected from the year 2007. All parts of the newspapers were searched for the key words covering the topic of mental illness, including news, interviews, columns, and editorials.

To achieve the objectives of this research, we employed content analysis, a quantitative and qualitative research method used for systematic and verifiable description of media content based on scientifically-based questioning (McQuail, 1999; Schulz, Hagen, Scherer, & Reifova, 1998). It is highly structured and intended for processing large amounts of data, thus enabling adequate statistical analysis of the results.

Keywords

Keywords were divided into two groups as follows, neutral terms (e.g. psychiatry, depression, anorexia) and labeling terms (mental illnesses expressions are used as labels, e.g. schizophrenic, alcoholic, neurotic).

Sampling

Out of all articles obtained after setting the keywords, we analyzed only those in which the subject of mental health/illness represented the main content. The initial numbers of articles identified were 102 in Croatia, 1424 in the Czech Republic, and 900 in Slovakia. The selection of articles with mental health/illness as main content enabled us to perform a more comprehensive analysis of the way in which these issues are reported in all three countries.

Coding manual

The coding manual was developed specifically for this study based on the theoretical framework of content analysis (Kerlinger, 1972; Schulz et al., 1998). To further improve codes for this study we conducted a focus group with four mental health professionals and two journalists. Various issues regarding journalistic style and the way of reporting on mental illnesses were discussed.

The coding manual comprises two parts: identifying categories and analytical categories. Identifying categories were used for easy identification of separate items and for finding the links with analytical categories; the latter served as the basis for answering the key research questions. Identifying categories included name of the article, date of issue, name of the media, type of the media, page, and number of words.

The articles were also coded for the types of disorders named and described and for the sources of information about mental illness, e.g. inclusion of perspectives from mental health experts, persons with mental illness, or their families. Disorders that were included generally corresponded to classifications from the International Classification of Diseases (ICD-10, 1993).

All categories were determined a priori by the research team during several workshops and were used as a basis for consensual coding. In determining the analytical categories we tried to cover main issues such as sensationalism, aggression, global impression of the heading, and global impression of the article, all of which have proven crucial in previous studies. In

the category of “sensationalism” we focused both on content and form of the article. The first is based on the focus of the article, includes topics such as celebrity, speculations or scandal. The form reflects the language style (appellative expressions, superlatives or colloquial terms). Likewise, aggression was assessed also by two separate categories. In the category “aggressive behavior”, we focused on whether the person with mental illness was depicted as a perpetrator or a victim of violent acts. In the second category we identified the particular type of aggressive act. In assessing the global impression of the article the items were evaluated according to the presence of positive/negative statements and coded as either negative, positive, mixed, or neutral. Each analytical category included a paragraph-long definition to facilitate coding.

To reflect the overall conclusion or main emphasis of the article, single statements pertaining to the topic of mental health/illness were analyzed using constant comparison of content method (Strauss & Corbin, 1998).

Coding process

Each article was coded by three separate in-country coders. Reliability for the analytical categories among raters in all three countries was assured by their uniform training and regular international meetings in which they discussed possible differences in interpretation. During the pilot study, 30 exemplary articles were translated into all languages and all raters coded them to compare connotations among the languages. Inter-rater reliability among coders was determined for analytical categories of the articles by Average Pair-wise Percent Agreement (APPA). APPA for the categories “aggressive act” and “aggressive behavior” was more than 88% in all three countries; lower APPA scores were determined for categories “sensationalism” and “global impression.” Since these results showed less satisfactory APPA scores, the final coding in these categories was always reached by consensus of all three raters in each country.

Statistical analysis

Descriptive statistics were used to present all data obtained from the total sample. The differences of frequencies among countries were determined using χ^2 tests or with non-parametric tests, as appropriate after testing for distribution. P values less than 0.05 were considered statistically significant. All statistical analyses were carried out with the SPSS 13.0 (SPSS inc., Chicago, IL, USA) statistical software package.

To describe the effect of particular variables on the global impression, we introduced a variable negative/positive ratio (NPR). This variable uses only two clusters (articles coded as positive and negative). Articles coded as neutral and mixed were not included in this analysis. Higher NPR shows a stronger effect on negative global impression.

Results

General information

A total of 450 articles related to mental health issues were identified for the five weeks sampled for the study (Croatia 75, Czech Republic 203 and Slovak Republic 172). Some of the main characteristics (distribution of the articles among different type of print media, articles positioned with headline on cover, and disorders mentioned) are presented in Tables 1 and 2. The mean number of words per article across all three countries was 237. A larger word count was associated with more positive global impression. The mean number of words in articles with positive global impression was 278, whereas the mean number of words in articles with negative global impression was 175 (Kruskal Wallis Test, $p < 0.001$). The most frequently described psychiatric disorders among the articles analyzed were

substance abuse disorders. In a large proportion of the articles no specific psychiatric disorder was mentioned (Croatia 24%, Slovakia 30.2% and Czech Republic 36.5%). The opinion of a mental health professional was sought in one-third of the articles and people with mental illness were quoted in about 10% of all articles. Mental health professionals were listed as a source of information in 61.6% of the positive articles, compared to only 16.3% of the negative articles.

Aggressive behavior and aggressive acts

Aggressive behavior was associated with persons with mental illness in 49.3% of articles in Croatia, 24.6% of articles in Czech Republic and 40.1% of articles in Slovakia (see Table 1). In the “aggressive act” category people with mental illness were predominantly presented as dangerous, involved in crime-related stories such as committing homicide (Croatia 48.7%, Slovakia 30.2% and Czech Republic 27.0%), or physical assault (Croatia 30.8%, Slovakia 25.7% and Czech Republic 20.7%). These items included messages such as “a 59-year old woman attacked her sleeping co-patient in the ward block of a psychiatric department. Without the intervention of a passerby witness, she would have beaten her victim to death with a chair.”

Global impression and sensationalism

Based on the coding manual’s main category of “global impression,” we have coded articles as positive, neutral, mixed, or negative, according to the presence of positive and/or negative statements about mental illness/health. Negative articles were almost equally distributed among all three countries: 37.4% of articles in the Czech Republic, 38.4% of articles in the Slovak Republic, and 40.0% articles in Croatia. Examples included items such as “a furious man was raging in the street, behaving out of control. Police patrol transferred him to the psychiatric department; he suffered from schizophrenia.” Aggressive behavior of a mentally ill person (perpetrator, victim or both) was described in 60.5% of the negative articles, versus only 5% of the positive ones. As for the specific aggressive acts, homicide was found in 24.4% of the negative articles and physical assault in 19.7%. None of the positive articles were associated with aggressive acts committed by mentally ill persons. The largest proportion of articles with sensationalized content as well as form was found in Croatia (Table 1). The majority of these included the use of terms such as “never-ending affliction,” “sad ending,” or “demons in the head.” In all three countries, a neutral tone in headlines was predominant. Positive tone represented the smallest group with 11% in all countries, including titles such as “Prague launches helpline.” A negative tone was found in approximately one-third of the headlines (Table 2); examples included “Mother gone mad” and “Insane man pacified by the police.” Ninety-four percent of articles having a headline that was positive in tone were positive too. Similarly, 80% of those articles with a negative headline were negative as well.

Predictors of negative and positive impression of the article

NPR represents a simple “predictor” of negativity of articles within a particular category. Categories with the highest NPR ratio are: tabloids, stigmatizing headline, the headline of the article on the cover, and psychotic disorders mentioned in the article (Table 2). Positive global impression of the article is more frequently found in the articles from magazines, in the articles about anxiety and eating disorders, and when a mental health professional or scientific survey were used as sources of information. Among all three countries, articles from Croatia have the highest NPR of 5 vs. 1.6 in Czech Republic or 1.4 in Slovakia.

Main message of the article

The positive/negative statements from the articles were grouped accordingly to their common features in order to form meaningful sub-groups and groups, reflecting overall conclusion or main emphasis of the article. Four groups were identified - mental illness as a medical condition, mental illness and society, psychiatric services, and mental illness and aggression. Subsequent sub-groups and examples of the statements are shown in Table 3.

Discussion

This is the first comparative study on mental health/illness issues in the printed media in the three central European countries of Croatia, the Czech Republic and Slovakia. Compared to similar studies, mostly conducted in English speaking countries - Australia (Francis, Pirkis, Blood, Dunt, Burgess, Morley & Stewart, 2005), Canada (Day & Page, 1986; Stuart, 2003), New Zealand (Coverdale et al., 2002), USA (Corrigan et al., 2005), UK (Philo, 1996) and a few others - Serbia (Bilic & Georgaca, 2007), Italy (Carpiniello, Girau, & Orru, 2007), Turkey (Boke et al., 2007), some new observations are worth mentioning. These include the length of the article and its impact on the global impression of the article, the relationship between the coding of the headline and the article itself, and the vast disconnection between the real prevalence of some disorders and their coverage in the printed media.

We collected 450 articles in the study, which amounts to an average of 30 articles with mental health/illness issues each week in each country in the most read newspapers and magazines. In our opinion this is a relatively high number compared to the space devoted to articles related to other medical specialties and their patients. This finding might be promising, suggesting a growing understanding of the importance of mental health/illness in the society, but in the light of the following discussion this hopeful assumption fades.

More important than the absolute numbers of how many articles are represented in each media type (broadsheets: 256, tabloids: 153, and magazines: 41) was the different distribution of articles according to the coding of global impression. Whereas broadsheets and magazines were almost equally represented in all four categories (in positive and neutral as well as in mixed and negative), tabloids clearly dominated in the category of negative articles (89 articles out of 153).

A closer look at the number of articles that were published on the front page reveals another interesting finding. The NPR of 3.7 for the front page articles is higher compared to the later sections where NPR=1.7, thus augmenting the negative impact of the story on the public. The explanation seems clear: negative stories attract more attention and therefore sell the media product better than positive ones (Stuart, 2003). Interestingly, major differences regarding the prevalence of violence are not found among articles from later sections.

The most surprising result was the vast difference in the length of the articles when grouped in positive and negative clusters. "Positive" articles were more than 50% longer than "negative" ones. This finding may be an unfortunate result of today's journalistic practice where space on the page means money. Correct expressions such as "a person with schizophrenia" are replaced with the label "schizophrenic" and facts on therapy and recovery are dispensable. This finding corresponds to articles in magazines having a much better NPR of 0.6 compared with broadsheets (NPR=1.0) and especially tabloids (NPR=6.8). One conclusion could be that longer articles are more positive because the journalist has more room to give accurate details.

A similar study completed in Australia (Francis, Pirkis, Blood, Dunt, Burgess, Morley, Stewart, & Putnis, 2004) found that 19.3% articles in newspapers were related to depression,

a finding comparable to what we have found in all three countries (18.7%). In contrast to Croatia and the Slovak Republic, where the coverage of affective disorder was higher (20.0% and 25.6% respectively), in the Czech Republic we found only 12.3 % of the articles covered these conditions. Although much has been done to raise awareness of depression in the Czech Republic, it seems that more progress is still needed in this sphere. Interestingly, it appears that substance abuse disorders at least seem to be covered according to their real prevalence in the three countries, as the use of alcohol and so-called “soft drugs” is relatively high compared to other regions. All three countries are in the top ten countries in Europe regarding alcohol consumption (WHO, Alcohol consumption and harm, 2009). This is not the case, however, when comparing the correlation of actual rates of mental illness in the populations for other conditions (schizophrenia and eating disorders over-represented, anxiety disorders, dementia, on the other hand, under-represented).

Disturbing to us was that only five articles out of 60 where psychosis was mentioned were coded as positive, with similar results across countries. Psychosis seems to be the most stigmatized mental disorder, a result also found in several similar studies (e.g., Boke et al., 2007; Francis et. al., 2004; Nairn et al., 2001; Stuart, 2003). Building upon the results of recent study among German citizens, even improving mental health literacy about mental illnesses and in particular about schizophrenia does not necessarily lead to improvement of public attitudes toward people with mental illness (Angermeyer, Holzinger, & Matschinger, 2009). Combating the prejudice against this severe mental condition remains one of the biggest challenges for the anti-stigma campaigns in Central Europe also. On the other hand eating disorders achieved the best score from all mental disorders, where NPR=0.3.

Until now, countries in Central Europe have not been well represented in the long list of studies that have found a connection between mental health/illness issues and violence (Allen & Nairn, 1997; Corrigan et al., 2005; Philo et al., 1994; Ward, 1997). The one exception is a Serbian study (Bilic & Georgaca, 2007) that revealed that the topic of dangerousness of individuals with mental disorders was present in approximately one-third of all newspaper articles. A similar study conducted in Great Britain came to the conclusion that 46% of articles contained references to crime (Ward, 1997). These numbers are very close to our findings, although they vary among the countries studied. Notably, the rates of articles dealing with aggression of people with mental illness is much higher in Croatia (49%), which might be related to the recent 1991-1995 war. Even though the suicide rate has decreased in the post-wartime period (Bosnar, Stemberga, Coklo, Zamolo Koncar, Definis-Gojanovic, Sendula-Jengic, & Katic, 2005), cases of suicide attempts and completed suicides among veterans with PTSD are not rare (Loncar, Definis-Gojanovic, Dodig, Jakovljevic, Franic, Marcinko, & Mihanovic, 2004) and significant attention is still paid to these incidents in the Croatian printed media. Nevertheless, in all three countries the level of portrayal of individuals with mental illness as perpetrators of aggressive acts is high even though studies have shown that individuals with mental disorders who are not also using drugs or alcohol are not significantly more likely to commit violent crime than the general population (Steadman, Mulvey, Monahan, Robbins, Appelbaum, Grisso, Roth, & Silver, 1998; Ward, 1997).

In a contrary finding, very little attention is paid to individuals with mental illness as victims of acts of aggression, even though victimization is more common than aggressive behavior by these individuals (Hodgins, Cree, Alderton, & Mak, 2008). When analyzing what kind of aggressive acts are most often connected with individuals with mental illness, we can say that hetero-aggressive acts (homicide, physical assault, and aggression against objects) outnumbered the auto-aggressive ones (committed or attempted suicide, self-harm) almost two-fold in the Czech Republic, three-fold in Slovakia and nine-fold in Croatia.

Interestingly when mixed and negative articles, i.e. those containing at least some negative statements, were collapsed into one category, it included more than half of all articles in the Czech Republic and Slovakia and more than three-quarters in Croatia. As much as these findings may be discouraging for mental health consumers, the more it should encourage all anti-stigma campaigners to continue their efforts. These negative stereotypes result in decreased life opportunities and loss of independent functioning of persons with mental illness (Henderson & Thornicroft, 2009; Hinshaw & Stier, 2008).

Although individuals with mental illness or their families appeared in some articles as sources of information, those articles tended to be negative rather than positive (NPR=1.8). This is in contrast to other studies which showed that presentation of mental illnesses in the form of self-portraits by the affected persons resulted in their positive image accentuating their ability to overcome stigma (Byrne, 2003; Nairn & Coverdale, 2005). This is also in contrast with recommendations for responsible journalism, which suggest that articles that involve individuals with mental illness and their families should focus not only on symptoms or consequences of the illness, but also on therapy and recovery, showing a more positive picture of living with mental illness (Nairn, 1999). It seems not to be the case in the three countries studied. We have also found that 36% of articles had quotes or perspectives of mental health professionals which is significantly higher than the 15% reported by Wahl and coauthors from the USA (Wahl, 2001). In contrast with the negative impact of presenting the patients as a source of information, we have found an association between the presence of a mental health professional in the story and a positive global impression rating (NPR=0.5). This is also consistent with previous research comparing media representations of general medical issues with psychiatric ones. Where general medicine has a “bad doctor” focus, psychiatry has a “bad patient” angle (Byrne, 2000). An even greater predictor of positive outcome than inclusion of a mental health professional is reference to a scientific survey (NPR=0.1).

Our qualitative analysis revealed what topics are dealt with articles related to mental illness. The first group consists of articles describing mental illness as a “medical condition”, including prevention, treatment, as well as its consequences. The biggest group consisted of articles in relation to “society”, in which dominated the issues of stigmatization and politics. “Psychiatric services” group was represented with leading themes; misuse of psychiatry and quality of mental health care. In many articles “aggression” connected with mental illness presented the fundamental motive and was therefore identified as a group.

Several limitations of this study should be mentioned and considered in future research. First, the results relate to five one-week periods, so some stories may have been over-represented or missed completely. Secondly, the sample of the articles could be limited by keywords that we set. Third, the smaller number of articles in Croatia might have resulted from the use of a different type of search service provided by agencies collecting the articles. In contrast to the Czech and Slovak web-based search engines using only key words, the Croatian agency used real people who excluded the articles that did not have mental health/illness as a main topic of the article. Some of the relevant articles could have been overlooked due to this different approach. Finally, our analyses are based on a rater’s interpretation of the articles and on the final joint agreement of all raters in each country. Consensus ratings minimize unreliability for within-country rating but cannot control for unreliability among country ratings. As in almost all other studies in this field, only written materials are analyzed, so important visual information, such as photos, are omitted in the coding process. This might shift the final coding on the axis from positive to negative, or just as likely in the other direction.

The media representations of mental illness reported in this paper show a few common features across the countries that we studied. We report a similarly high level of negative articles and very bad coverage of persons with psychosis in general, as well as a few differences, such as more frequent coverage of aggressive behavior in association with mental illness in Croatia or longer articles on mental health/illness issues published in Slovakia. Not unexpectedly, in many of the characteristics studied the Czech Republic and Slovakia are much closer to each other than to Croatia. This might be explained by a long history of shared journalism practice, similar political, social and economical factors, as well as absence of recent war.

Even though mental health professionals in Croatia have created recommendations for responsible suicide reporting (Suicidi Info, 2006), results of this study show that more effort and productive collaboration has to occur to achieve a more positive picture of mental illness in the Croatian printed media. Since Croatia has a history of joint education of health professionals and health journalists, through the annual “Media and Health” course (Vukusic Rukavina, Brborovic & Harapin, 2007), this joint educational experience could serve as a starting point for the development and implementation of broader recommendations (covering not only suicides) for responsible reporting about mental illnesses. Recently, in the Czech Republic and in the Slovak Republic, press conferences for health journalists have been introduced. Some encouraging changes following these interventions might be tracked, as journalists have been in closer contact with mental health professionals. These new activities, however, are just the initial steps in what must be a longer-term effort at improving mutual collaboration. Moreover, the authors of this study intend to share our findings with students of journalism, who are the primary target group of such campaigns, as they are the future of journalism in all three countries. This study serves as a basis for those educational campaigns and is tailored specifically for each country involved in this study. The ultimate goal of this effort is to improve media coverage of mental health/illness issues, minimize potential discriminatory practices, and increase help-seeking behavior.

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References

- Allen R, Nairn RG. Media depictions of mental illness: An analysis of the use of dangerousness. *Australian and New Zealand Journal of Psychiatry*. 1997; 31:375–381. [PubMed: 9226083]
- Anderson M. One flew over the psychiatric unit: mental illness and the media. *Journal of Psychiatric and Mental Health Nursing*. 2003; 10:297–306. [PubMed: 12755914]
- Angermeyer MC, Holzinger A, Matschinger H. Mental health literacy and attitude towards people with mental illness: A trend analysis based on population surveys in the eastern part of Germany. *European Psychiatry*. 2009; 24:225–232. [PubMed: 19361961]
- Angermeyer MC, Matschinger H. The effect of violent attacks by schizophrenic persons on the attitude of the public toward the mentally ill. *Social Science and Medicine*. 1996; 43(12):1721–1728. [PubMed: 8961416]
- Arbanas G. Adolescents’ attitudes toward schizophrenia, depression and PTSD. *Journal of Psychosocial Nursing and Mental Health Services*. 2008; 46(3):45–51. [PubMed: 18416274]
- Aukst-Margetic B, Toic G, Furjan Boban A, Margetic B. Stigma and posttraumatic stress disorder. *European Psychiatry*. 2009; 24(1):18.

- Bilic B, Georgaca E. Representations of “Mental Illness” in Serbian Newspapers: A Critical Discourse Analysis. *Qualitative Research in Psychology*. 2007; 4:167–186.
- Boke O, Aker S, Aker AA, Sarisoy G, Sahin AR. Schizophrenia in Turkish newspapers. *Social Psychiatry and Psychiatric Epidemiology*. 2007; 42:457–461. [PubMed: 17502973]
- Bosnar A, Stemberga V, Coklo M, Zamolo Koncar G, Definis-Gojanovic M, Sendula-Jengic V, Katic P. Suicide and the war in Croatia. *Forensic Science International*. 2005; 147:13–6. [PubMed: 15541586]
- Byrne P. Stigma of Mental Illness and ways of diminishing it. *Advances in Psychiatric Treatment*. 2000; 6:65–72.
- Byrne P. Psychiatry and the media. *Advances in Psychiatric Treatment*. 2003; 9:135–143.
- Carpiniello B, Girau R, Orru MG. Mass-media, violence and mental illness. Evidence from some Italian newspapers. *Epidemiologia e Psichiatria Sociale*. 2007; 16(3):251–255. [PubMed: 18020199]
- Corrigan PW, Watson AC, Gracia G, Slopen N, Rasinski K, Hall LL. Newspaper stories as a measure of structural stigma. *Psychiatric Services*. 2005; 56(5):551–556. [PubMed: 15872163]
- Coverdale J, Nairn R, Claasen D. Depictions of mental illness in print media: A prospective national sample. *Australian and New Zealand Journal of Psychiatry*. 2002; 36(5):697–700. [PubMed: 12225457]
- Croatian Government – Press release from the round table about suicides of Croatian war veterans. [Retrieved from the Web September 27, 2009] 2006.
http://www.vlada.hr/hr/naslovnica/priopcenja_za_javnost/2006/svibanj/potpredsjednica_vlade_otvorila_okrugli_stol_samoubojstva_hrvatskih_branitelja_i_mogucnosti_porentivnog_djelo_vanja
- Cutcliffe JR, Hannigan B. Mass media, “monsters” and mental health clients: The need for increased lobbying. *Journal of Psychiatric and Mental Health Nursing*. 2001; 8(4):315–321. [PubMed: 11882144]
- Day DM, Page S. Portrayal of mental illness in Canadian newspapers. *Canadian Journal of Psychiatry*. 1986; 31:813–817.
- DEMA. Nazory na schizofrenii [Opinions on Schizophrenia]. Reprezentativni vyzkum v CR; Praha: 2004.
- Dragomirecka, E.; Brazinova, A.; Palova, E.; Baudis, P.; Seleпова, P. The history of mental health care in Czechoslovakia. In: Scheffler, R.; Potucek, M., editors. *Mental Health Care Reform in the Czech and Slovak Republics, 1989 to the Present*. Karolinum Press; Praha: 2008. p. 29
- [Retrieved from the Web January 29, 2010] Eurostat. Total population.
<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&language=en&pcode=tps00001&tableSelection=1&footnotes=yes&labeling=labels&plugin=1>
- Filipic I, Marcinko D, Grubisin J, Begic D, Tomac A, Dordevic V. Attitudes of general population in Croatia towards the psychiatric label “schizophrenic patient” tested by an anti-stigma questionnaire (in Croatian). *Socijalna psihijatrija*. 2003; 31:3–9.
- Francis C, Pirkis J, Blood RW, Dunt D, Burgess P, Morley B, Stewart A, Putnis P. The portrayal of mental health and illness in Australian non-fiction media. *Australian and New Zealand Journal of Psychiatry*. 2004; 38(7):541–546. [PubMed: 15255827]
- Francis C, Pirkis J, Blood RW, Dunt D, Burgess P, Morley B, Stewart A. Portrayal of depression and other mental illnesses in Australian nonfiction media. *Journal of Community Psychology*. 2005; 33(3):283–297.
- Grinfeld MJ. Psychiatry and mental illness: Are they mass media targets? *Psychiatric Times*. 1998; 15(3)
- Grohmannova K. Stimulancia a opioidy z pohledu medii. *Adiktologie*. 2006; 6:242–257.
- Hannigan B. Mental health care in the community: an analysis of contemporary public attitudes towards, and public representations of, mental illness. *Journal of Mental Health*. 1999; 5:431–440.
- Hazelton M. Reporting mental health: a discourse analysis of mental health-related news in two Australian newspapers. *Australian and New Zealand Journal of Mental Health Nursing*. 1997; 6:73–89. [PubMed: 9256656]

- [Retrieved from the Web September 12, 2009] Health development action for south-eastern Europe (SEE) – Mental health project. http://www.euro.who.int/stabilitypact/projects/20040611_3
- Henderson C, Thornicroft G. Stigma and discrimination in mental illness: Time to change. *Lancet*. 2009; 373(9679):1928–1930. [PubMed: 19501729]
- Hinshaw SP, Stier A. Stigma as related to mental disorders. *Annual Review of Clinical Psychology*. 2008; 4:367–393.
- Hodgins S, Cree A, Alderton J, Mak T. From conduct disorder to severe mental illness: associations with aggressive behaviour, crime and victimization. *Psychological Medicine*. 2008; 38(7):975–87. [PubMed: 17988416]
- WHO; Geneva: 1993. ICD-10 Classification of mental and behavioural disorders.
- Kerlinger, FN. *Zaklady vyzkumu chovani*. Academia; Praha: 1972.
- Komar, Z.; Vukusic, H. Post-traumatic stress disorder in Croatian war veterans: Prevalence and psycho-social characteristics. In: Dekaris, Dragan; Sabioncello, Ante, editors. *New insights in post-traumatic stress disorder (PTSD)*. Proceedings (Abstracts, references and illustrations). Croatian Academy of Science and Arts; Zagreb: 1999. p. 42–44.
- [Retrieved from the Web December 3, 2008] Liga za dusevne zdravie. <http://www.dusevnezdravie.sk/odos.html>
- Loncar C, Definis-Gojanovic M, Dodig G, Jakovljevic M, Franic T, Marcinko D, Mihanovic M. War, mental disorder and suicide. *Collegium Antropologicum*. 2004; 28:377–384. [PubMed: 15636097]
- McQuail, D. *Uvod do teorie masove komunikace*. Portal; Praha: 1999.
- Miovska L, Brachova H, Miovsky M. Obsahova analyza medialnich sdeleni o drogach v CR. *Alkoholizmus a drogove zavislosti*. 2008; 43(4):193–204.
- Nairn R. Does the use of psychiatrists as sources of information improve media depictions of mental illness? A pilot study. *Australian and New Zealand Journal of Psychiatry*. 1999; 33:583–589. [PubMed: 10483855]
- Nairn R, Coverdale J. People never see us living well: An appraisal of the personal stories about mental illness in a prospective print media sample. *Australian and New Zealand Journal of Psychiatry*. 2005; 39:281–287. [PubMed: 15777366]
- Nairn R, Coverdale J, Claasen D. From source material to news history in New Zealand print media: A prospective study of the stigmatizing process in depicting mental illness. *Australian and New Zealand Journal of Psychiatry*. 2001; 35:654–659. [PubMed: 11551282]
- Nawka, P. Slovakia. In: Sartorius, N.; Schultze, H., editors. *Reducing the stigma of mental illness. A report from a Global Program of the World Psychiatric Association*. Cambridge University Press; Cambridge: 2005. p. 108
- Olstead R. Contesting the text: Canadian media depictions of the conflation of mental illness and criminality. *Sociology of Health and Illness*. 2002; 24:621–643.
- Philo G, Secker J, Platt S, Henderson L, McLaughlin G, Burnside J. The impact of the mass media on public images of mental illness: Media content and audience belief. *Health Education Journal*. 1994; 53:271–281.
- Philo, G. The media and public belief. In: Philo, G., editor. *Media and Mental Distress*. Addison Wesley Longman; Essex: 1996.
- Rose D. Television, madness and community care. *Journal of Community & Applied Social Psychology*. 1998; 8:213–228.
- Sartorius, N. Developing the programme. In: Sartorius, N.; Schultze, H., editors. *Reducing the stigma of mental illness. A report from a Global Program of the World Psychiatric Association*. Cambridge University Press; Cambridge: 2005. p. 7–12.
- Schulz, W.; Hagen, L.; Scherer, H.; Reifova, I. *Analýza obsahu medialního sdelení*. Karolinum Press; Praha: 1998.
- Sivek V, Miovska L, Miovsky M. Obraz uzivatele a uzivani konopnych drog v ceskych mediich v roce 2003. *Adiktologie*. 2004; 4:474–492.
- Slopen NB, Watson AC, Gracia G, Corrigan PW. Age analysis of newspaper coverage of mental illness. *Journal of Health Communication*. 2007; 12:3–15. [PubMed: 17365345]

- Steadman HJ, Mulvey EP, Monahan J, Robbins PC, Appelbaum PS, Grisso T, Roth LH, Silver E. Violence by people discharged from acute psychiatric inpatient facilities and by others in the same neighborhoods. *Archives of General Psychiatry*. 1998; 55(5):393–401. [PubMed: 9596041]
[Retrieved from the Web January 12, 2010] Stop stigma.
<<http://www.stopstigmapsychiatrie.cz/cile-zmeny.html>>
- Strauss, A.; Corbin, J. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Second Edition. Sage Publications; 1998.
- Stuart H. Stigma and the daily news: Evaluation of a newspaper intervention. *Canadian Journal of Psychiatry*. 2003; 48(10):651–656.
[Retrieved from the Web September 12, 2009] Suicidi info – Portal za prevenciju suicida.
<http://www.suicidi.info/epidemiologija.asp>
- [Retrieved from the Web June 15, 2010] Suicidi info – Portal za prevenciju suicida.
<http://www.suicidi.info/ieNews/clanak.asp?ID=1>
- Vevera J, Hubbard A, Vesely A, Papezova H. Violent behavior in schizophrenia. Retrospective study of four independent samples from Prague 1949 to 2000. *British Journal of Psychiatry*. 2005; 187:426–30. [PubMed: 16260817]
- Vevera J. Problems and goals in the US psychiatry and its application for Czech psychiatric care. *Česká a slovenská psychiatrie*. 2004; 4:134–140.
- Vukusic Rukavina, T.; Brborovic, O.; Harapin, M. Media and Health. In: Donev, D.; Pavlekovic, G.; Kragelj, L. Zaletel, editors. *Health promotion and disease prevention*. Hans Jacobs Publishing Company; Hellweg; 2007. p. 256-67.
- Wahl OF. Commentary. *Current Opinion in Psychiatry*. 2001; 14:530–531.
- Wahl OF. Mass-media images of mental-illness - A review of the literature. *Journal of Community Psychology*. 1992; 20:343–352.
- Wahl OF, Lefkowitz JY. Impact of a television film on attitudes toward mental illness. *American Journal of Community Psychology*. 1989; 17(4):521–528. [PubMed: 2610206]
- Ward, G. *Making headlines. Mental health and the national press*. Health Education Authority; London: 1997.
- World Health Organization. [Retrieved from the Web September 3, 2009] Alcohol consumption and harm. 2009. <http://data.euro.who.int/alcohol/Default.aspx?TabID=4936>

Table 1

Main characteristics of the studied articles

Feature	Total sample N=450 N (%)	Croatia N=75 N (%)	Czech Rep. N=203 N (%)	Slovak Rep. N=172 N (%)	Test (among countries) Pearson Chi-Square
Media type					
Tabloids	153 (34)	0 (0)	75 (37)	78 (45)	
Broadsheets	256 (57)	70 (93)	115 (57)	71 (41)	$\chi^2=62.965, df=4,$ $p<0.001$
Magazines	41 (9)	5 (7)	13 (6)	23 (14)	
Headline on the cover					
Yes	34 (8)	4 (5)	26 (13)	4 (2)	$\chi^2=15.284, df=2,$ $p=0.001$
No	416 (92)	71 (95)	177 (87)	168 (98)	
Disorder mentioned (chosen groups)					
F00.0 – F09.9	16 (4)	0 (0)	6 (3)	10 (6)	
F10.0 – F19.9	118 (26)	32 (43)	53 (26)	33 (19)	
F20.0 – F29.9	60 (13)	12 (16)	19 (9)	29 (17)	$\chi^2=51.718, df=10,$ $p<0.001$
F30.0 – F39.9	84 (19)	15 (20)	25 (12)	44 (26)	
F40.0 – F49.9	38 (8)	14 (19)	8 (4)	16 (9)	
F50.0 – F59.9	37 (8)	5 (7)	19 (9)	13 (8)	
Sensational content					
Yes	160 (36)	36 (48)	57 (28)	67 (39)	$\chi^2=10.888, df=2,$ $p=0.004$
No	290 (64)	39 (52)	146 (72)	105 (61)	
Sensational form					
Yes	139 (31)	55 (73)	50 (25)	34 (20)	$\chi^2=76.983, df=2,$ $p<0.001$
No	294 (69)	20 (27)	153 (75)	138 (80)	
Aggressive behavior					
Perpetrator	115 (26)	31 (41)	32 (16)	52 (30)	
Victim	26 (6)	5 (7)	11 (5)	10 (6)	$\chi^2=5.303, df=6,$ $p=0.258$
Both	15 (3)	1 (1)	7 (4)	7 (4)	
None	294 (65)	38 (51)	153 (75)	103 (60)	
Aggressive act					
Autoaggr.	31 (7)	3 (4)	15 (7)	13 (8)	
Hetero-aggr.	120 (27)	35 (47)	36 (18)	49 (28)	$\chi^2=30.688, df=6,$ $p=0.006$
Both	25 (5)	1 (1)	12 (6)	12 (7)	
None	274 (61)	36 (48)	140 (69)	98 (57)	
Length of the article					
Mean number of words	237	200	239	250	Kruskal Wallis Test $\chi^2=8.325, df=1,$

Feature	Total sample		Croatia		Czech Rep.		Slovak Rep.		Test (among countries) Pearson Chi-Square
	N=450	N (%)	N=75	N (%)	N=203	N (%)	N=172	N (%)	
p=0.004									
F00.0 – F09.9 Organic mental disorders (Dementia)									
F10.0 – F19.9 Mental and behavioral disorders due to psychoactive substance use									
F20.0 – F29.9 Schizophrenia, schizotypal and delusional disorders									
F30.0 – F39.9 Mood [affective] disorders									
F40.0 – F49.9 Neurotic, stress-related and somatoform disorders									
F50.0 – F50.9 Eating disorders									

Table 2

Impact of various variables on the global impression of the article or headline

Feature		Global impression of the article (%)				
		Positive N=99	Neutral N=73	Mixed N=106	Negative N=172 NPR	
Country*	Croatia (N=75)	8	16	36	40	5
	Czech Rep. (N=203)	23	18	22	37	1,6
	Slovak Rep. (N=172)	27	15	20	38	1,4
Type of article	Broadsheets (N=256)	27	19	25	29	1,0
	Tabloids (N=153)	8	12	22	58	6,8
	Magazines (N=41)	39	15	22	24	0,6
Position of the article	Front page (N=34)	9	29	29	33	3,7
	Later sections (N=416)	23	15	23	39	1,7
Disorder mentioned (chosen)	F00.0 – F09.9 (N=16)	31	13	6	50	1,6
	F10.0 – F19.9 (N=118)	20	13	32	35	1,7
	F20.0 – F29.9 (N=60)	8	8	22	62	7,4
	F30.0 – F39.9 (N=84)	29	20	27	24	0,8
	F40.0 – F49.9 (N=38)	37	16	31	16	0,4
	F50.0 – F50.9 (N=37)	38	16	35	11	0,3
Source of information (chosen)	Person with MI/their families (N=95)	23	12	23	42	1,8
	Mental health professional (N=161)	38	17	28	17	0,5
	Scientific survey (N=33)	36	43	18	3	0,1
Key words (chosen)	psychosis (N=25)	12	12	20	56	4,6
	schizophrenia (N=33)	21	3	12	64	3
	psychiatric facility (N=166)	24	5	15	56	2,3
	depression/depressed (N=75)	44	24	3	29	0,7
	anorexia (N=34)	50	6	32	12	0,2
	psychotherapy (N=27)	63	7	26	4	0,1

Global impression of the headline (%)				
	Positive N=49	Neutral N=251	Negative N=150	
Croatia (N=75)	3	65	32	12
Czech Rep. (N=203)	13	56	31	2,3
Slovak Rep. (N=172)	12	52	36	3,2

The percentages add up to 100 across the rows

- * Global impression of the article - $\chi^2=15,236$, $df=6$, $p=0.018$
- ** Global impression of the headline - $\chi^2=18,483$ $df=4$, $p=0.001$
- F00.0 – F09.9 Organic mental disorders (Dementia)
- F10.0 – F19.9 Mental and behavioral disorders due to psychoactive substance use
- F20.0 – F29.9 Schizophrenia, schizotypal and delusional disorders
- F30.0 – F39.9 Mood [affective] disorders
- F40.0 – F49.9 Neurotic, stress-related and somatoform disorders
- F50.0 – F50.9 Eating disorders

Table 3

Statements from the articles grouped in the main message sub-groups and groups

Main message		Statements from the articles (examples)
Group	Sub-group	
Mental illness as a medical condition	Prevention	Everyone can have MI; number of people with MI problems is increasing; prevention of MI is important; life style can contribute to development of MI
	Treatment	Persons with MI can recover with treatment; persons with MI should get treatment; treatment is hard and takes a long time
	Consequences	MI makes life difficult; persons with MI are lonely; accepting the diagnosis is hard; psychiatric diagnosis can be misused by patient
	Specific conditions	Substance abuse disorders endanger young people; alcohol abuse is a serious problem; persons with PTSD are faking their symptoms for secondary gains
Mental illness and health in society	Stigma	People with MI are: strange, unpredictable, irresponsible, incompetent, incapable and unlikely to succeed; people with MI can not take care of themselves; PTSD is used as an excuse for murder
	Responsibility of society	Economical and social conditions can lead to MI; society can provide support for persons with MI; society should do more to help and care for persons with MI; persons with MI can be integrated into society
	Politics	Mental health is not a priority for the government; if people with MI act illegally, they are not punished; NGOs are providing help and support for persons with PTSD; anti-stigma activities are important
	Media	Media headlines can have negative influence on mental health state; media influences prevalence of eating disorders
	Celebrities	Celebrities could serve as positive / negative prototypes for persons with MI; psychiatric diagnosis determines the career of celebrity, persons with MI could be successful despite mental condition, persons with MI can be creative
	Family	Families of patients with MI suffer; relatives can also develop MI; living with a person with MI can be difficult
Psychiatric services	Misuse of psychiatry	Psychiatry can be misused as punishment; psychiatry can be abused by justice system, politicians, authorities; psychiatrists are not providing adequate care
	Psychiatric institutions	There is lack of psychiatrists and other mental health professionals; psychiatric hospitals are perceived as dangerous penalty institutions; psychiatric care is good for patients
	Psychiatric research	Research in psychiatry is making progress; research in psychiatry is important
Mental illness and aggression	People with mental illness as offenders	People with MI behave in a strange and dangerous manner; persons with MI commit criminal offenses; persons with MI are aggressive
	People with mental illness as victims	Persons with MI can not defend themselves; persons with MI are vulnerable; aggression is not associated only with persons with MI

(MI – mental illness)