

Tendency towards stigmatization of families of a person with autistic spectrum disorders

International Journal of
Social Psychiatry
2014, Vol. 60(1) 63–70
© The Author(s) 2012
Reprints and permissions:
sagepub.co.uk/journalsPermissions.nav
DOI: 10.1177/0020764012463298
isp.sagepub.com


Ivona Milačić-Vidojević, Milica Gligorović and Nada Dragojević

Abstract

Background: Family members experience stigma via their connection with the affected member. Family stigma contains stereotypes of blame, shame and contamination.

Aim: To establish the tendency towards stigmatization of family members of a person with autistic spectrum disorders (ASD) by a sample of the general public of Belgrade.

Methods: The sample encompassed 181 participants, of various ages and levels of education, and of different, self-assessed levels of knowledge about autism. The structure of stigmatization of family members of a person with ASD was explored applying the Family Stigma Questionnaire (FSQ) and the Level of Familiarity Questionnaire (LFQ).

Results: Analysis of the obtained results established that scores indicating the tendency towards stigmatization were most pronounced for variables connected to blame for deterioration of the condition of the person with autism, contamination of the individual family members by the condition, and to feeling pity for family members of a person with ASD. Statistically significant differences were established when the FSQ scores stigmatizing parents and siblings were compared. Significant differences in stigmatizing stereotypes were established according to gender and level of education, and according to the self-assessment of knowledge about autism and the level of previous contact to persons with mental disorders.

Conclusion: Anti-stigma programmes are important especially bearing in mind that participants who self-evaluated as having the least knowledge about ASD demonstrated the highest tendency towards stigmatizing the parents of a person suffering from ASD, and those of lower education demonstrated the highest tendency towards stigmatizing the family members.

Keywords

Autistic spectrum disorder, family stigma, attitudes towards persons with disabilities

Introduction

Autistic spectrum disorder (ASD) describes developmental disorders diagnosed in early childhood and characterized by damaged social interactions, communication and the existence of a narrow spectrum of interests and behaviours. In adulthood, persons with the ASD diagnosis can exhibit non-adaptive behaviours, such as withdrawal, aggression, auto-aggression and self-stimulating behaviours, and may experience difficulties expressing sexual desires in a socially acceptable manner. Due to the insufficiently developed services for the care of adults with ASD, parents still remain the main caregivers for their children. However, the role of the family is still frequently undermined by stigma, which is not limited only to the affected family member.

Primary public stigma refers to the impact of prevalent negative attitudes and behaviours that members of the public have and direct towards persons with disabilities and mental illnesses, while courtesy stigma (Goffman, 1963),

or stigma by association (Mehta & Farina, 1988), refers to the negative effects due to association with a person who is marked by a stigma. Family members experience stigma via their connection with the affected member. Stigma by association spreads to all who are in contact with a person suffering from a mental illness; thus, victims of stigmatization are not only persons with the disability, but also their family, friends, neighbours and doctors. The environment experiences them as different, as people who are in contact

Faculty of Special Education and Rehabilitation, University of Belgrade, Belgrade, Serbia

Corresponding author:

Ivona Milačić-Vidojević, Faculty of Special Education and Rehabilitation, University of Belgrade, Visokog Stevana 2, 11 000 Belgrade, Serbia
House postal address: Podgorička 5, 11 000 Belgrade, Serbia.
Email: mivona@sbb.rs

with mental illness and have experiences differing from those of the majority (George, 2002).

Family stigma, that is stereotype opinions and discriminating behaviours towards relatives of a person with mental illness, includes blaming the relatives for the onset of illness and its relapse, expectation that they should be ashamed, that the illness could somehow rub off onto them, that they are incompetent in performing their family roles and that they should be avoided and pitied. Blaming the relatives of an affected member and holding the stereotype opinion that they should be ashamed seem to lead to discrimination in the form of social avoidance (Corrigan, Watson & Miller, 2006).

Family stigma negatively impacts family members in numerous ways and may consequently disrupt the structural and dynamic framework of these families. Family members of a person with mental illness or disability may avoid social situations, spend time and energy hiding the condition, or may experience discrimination at work, or connected to housing (Larson & Corrigan, 2008). The findings of several studies show that approximately one third of the members of families assessed reported about impoverished relationships with friends and the extended family because of the mental illness or disability of a family member (Dragojević, 2007; Milačić-Vidojević, 2008; Ostman & Kjellin, 2002; Shibre et al., 2001; Struening et al., 2001; Tsang, Tarn, Chan & Cheung, 2003). Family members may feel anxious about the possibility of being blamed for the condition of their relative (Shibre et al., 2001), or may believe that the condition is a source of shame for the family (Angermeyer, Schulze & Dietrich, 2003; Phelan, Link, Stueve & Pescosolido, 1998; Phillips, Pearson, Li, Xu & Yang, 2002; Shibre et al., 2001). Parents of autistic children often talk about perceived stigmatization (Gray, 2002; Milačić-Vidojević, 2007).

Results of relevant studies

Although stigma research today has again begun to take an important place in publications within the elevated interest of society to protect persons with special needs, research of family stigma relevant to persons with ASD is sporadic, while in Serbia it is very rare (Milačić-Vidojević, 2007). By association, the topic of stigma is present in research on the stigmatization of families with a member suffering from AIDS (Schuster, 2008), a mental illness (Corrigan, 1998; Dragojević, Gligorović & Milačić-Vidojević, 2011), Alzheimer's disease (MacRae, 1999), intellectual disability (Birenbaum, 1992), autism (Gray, 2002), attention deficit hyperactivity disorder (ADHD) (Norvilitis, Scime & Lee, 2002), epilepsy (Li et al., 2010), schizophrenia, drug dependence and emphysema (Corrigan et al., 2006).

Survey results point to statistically significant differences in the stigmatization of different family roles (Corrigan et al., 2006). Parents and spouses were viewed

to be more responsible for the onset of a person's schizophrenia, drug dependence and emphysema than children and siblings. Schizophrenia, emphysema and drug dependence were likely to contaminate children more than other family members. Parents were viewed as more responsible for the person's schizophrenia or drug dependence relapse than children. Generally, siblings were the least pitied of the four groups and mothers may be stigmatized more harshly than fathers (Corrigan & Miller, 2004; Lefley, 1992).

Surveys concerning family stigma have found four especially common stereotypes (Corrigan & Miller, 2004; Corrigan et al., 2006; Greenberg, Kim & Greenley, 1997; Shibre et al., 2001; Struening et al., 2001).

1. Blame for onset: Behaviour of family members caused the relative to contract his or her mental illness.
2. Incompetence: Bad family skills (e.g. bad parenting or being a poor sibling) caused the relative's mental illness.
3. Blame for offset: The members of family are blamed if the relative with mental illness fails to adhere to the treatment regimen or relapses.
4. Contamination: Family members who regularly associate with relatives with mental illness contract some of their symptoms and disabilities.

Study objectives

The study goals were to establish: (1) the tendency towards stigmatization of family members of a person with ASD in the sample of the general public of Belgrade; (2) the correlation between constructs of the family stigma scale; (3) differences in the tendency towards stigmatization of various family roles; and (4) correlations between the constructs of the scale with demographic variables, with self-assessment of knowledge about autism and the level of previous contact with persons having mental disorders.

Method

Sample and procedure

During 2010, fourth-semester students of the Faculty of Special Education and Rehabilitation in Belgrade, during the course Psychology of Disability, were each given instructions to apply the Family Stigma Questionnaire (FSQ) and the Level of Familiarity Questionnaire (LFQ) to four participants from the general public of Belgrade, after being taught the issues of psychological assessment, the construction and application of questionnaires and the factors required for successful communication. They had to obey strict criteria for selecting the participants, to inform them about the aim of the study and to obtain their consent. After rigorous checking and elimination of incomplete

Table 1. Sample structure according to gender, age and education.

	Gender		Age			Education		
	F	M	18–24	25–45	46–65	Elementary	Secondary	University
<i>n</i>	108	73	72	59	59	12	100	69
%	59.7	40.3	39.8	32.6	27.6	6.6	55.2	38.2

questionnaires, a sample comprising 181 respondents was obtained. The characteristics of the sample are shown in Table 1.

The χ^2 test established no significant differences between gender and age ($p = .282$), education ($p = .588$) and knowledge ($p = .089$).

Instruments

Two questionnaires were applied to establish the intensity of stigmatization of family members of a person suffering from ASD and the amount of previous contact with persons with mental illness.

The FSQ (Corrigan & Miller, 2004) was originally designed to measure stigma aimed at family members of a person with mental illness. The original instrument was applied to a sample of 968 participants of different age, gender, level of education and ethnicity. In this study, the FSQ was applied to explore stigma aimed at family members of a person with ASD. Each participant had to read four vignettes presenting various family members (father, mother, sister, brother) of a person with ASD.

The vignette for the tendency towards father stigmatization read:

Predrag is Nikola's father. Nikola is 30 years old and suffers from autism. Nikola lives with his family and works in a nearby shop. A few times his state deteriorated, when hospitalization was required to define his medication therapy. The deteriorations which appeared severely disrupted his life.

The text in the other three vignettes was the same, only instead of the father, the mother, brother or sister was mentioned.

After reading the vignettes, respondents were asked if they blame family members for the onset or for the relapse of illness, if they think family members should be ashamed, pitied or avoided, if they could be contaminated by the condition and if the family member is assumed to be competent to fulfil the demands of his/her family role. These themes are based on the list of items reflecting perceived stigma expressed by a focus group of relatives of persons with mental illness (Corrigan & Miller, 2004) and they were formulated after consulting extensive literature. Thus, the model comprised seven constructs: blame for onset of illness; blame for deterioration of illness; contamination; shame; lack of competence; pity; and avoidance. It is

assumed that attitudes towards family members would vary depending on the role they play in relation to the affected person. For each of the seven items, a score indicating the intensity of the relevant construct was calculated.

The FSQ is based on a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree, 4 = neutral response). A higher score in each item indicates a higher level of parent or sibling stigmatization.

The LFQ (Holmes, Corrigan, Williams, Canar & Kubiak, 1999) measures the level of contact with a person having a mental illness. It contains 11 questions that indicate various degrees of contact, and the respondents were required to state whether they had had encounters as described in the questionnaire. Each item was ranked on a scale of 1–11, where 11 means the highest and 1 the lowest level of contact. For the requirements of the present study, the scores were divided into two categories. Category 1 was contacts that were not personal (e.g. I watched a TV programme describing a person with a mental illness); category 2 contained personal contacts with a person with a mental illness. Ranks from 1 (I never saw a person that I knew who was mentally ill) to 5 (I have often observed persons with a mental illness) were in category 1; ranks from 6 (I have worked with a person with a mental illness) to 11 (I have a mental illness) were in category 2. Although this questionnaire pertains to knowledge about mental illness in general, it was selected due to a lack of structured and research-tested forms of investigating the level of knowledge about persons with autism.

Together with general socio-demographic data about the respondents, data concerning the self-assessment of the participants relevant to their level of knowledge about autism were also gathered.

Based on results of the LFQ for familiarity with persons having a mental illness, 50.3% of the participants had experienced direct contact and 49.2% only indirect contact.

The questionnaires applied were translated into the Serbian language and as a control, back-translated by an independent translator.

According to their self-assessment about their level of knowledge about autism, the participants were divided into three groups: 35.4% claiming to have little knowledge, 42.5% claiming to have medium knowledge and 21.7% claiming to have considerable knowledge about autism.

Table 2. FSQ scores for items of contamination, blame for deterioration of the state and pity.

Score		1		2		3		4		5		6		7	
		fr	%	fr	%	fr	%	fr	%	fr	%	fr	%	fr	%
2	Father	10	5.5	17	9.4	18	9.9	20	11	29	16	49	27.1	38	21
	Mother	13	7.2	21	11.6	14	7.7	17	9.4	27	14.9	40	22.1	49	27.1
	Sister	21	11.6	15	8.3	10	5.5	18	9.9	30	16.6	41	22.7	45	24.9
	Brother	21	11.6	12	6.6	14	7.7	14	7.7	35	19.3	48	26.5	37	20.4
3	Father	30	16.6	25	13.8	22	12.2	34	18.8	38	21	23	12.7	9	5
	Mother	35	19.3	27	14.9	22	12.2	29	16	32	17.7	26	14.4	10	5.5
	Sister	53	29.3	20	11	26	14.4	29	16	32	17.7	12	6.6	8	4.4
	Brother	49	27.1	19	10.5	24	13.3	37	20.4	32	17.7	11	6.1	9	5
7	Father	20	11	21	11.6	14	7.7	37	20.4	26	14.4	22	12.2	40	22.1
	Mother	23	12.7	18	9.9	12	6.6	31	17.1	22	12.2	28	15.5	46	25.4
	Sister	26	14.4	16	8.8	7	3.9	32	17.7	25	13.8	33	18.2	42	23.2
	Brother	30	16.6	13	7.2	8	4.4	28	15.5	27	14.9	33	18.2	42	23.2

2 = contamination; 3 = blame for deterioration of state; 7 = pity.
fr = frequency.

Data analyses

Statistical data processing involved the calculation of the non-parametric correlation coefficient, the Wilcoxon rank sum test, non-parametric analysis of variance (Kruskal–Wallis test) and the χ^2 test.

Results

Constructs related to the intensity of stigmatization

The overall score, as the sum of all items of the FSQ, indicated that the respondents had a relatively low tendency to stigmatize all the family members together ($M = 3.10$) or each family member separately ($M = 3.00$ – 3.21). However, scores for the seven items of the scale considered separately showed that the highest mean values were attained by the answers to items related to the constructs of contamination ($M = 4.78$ – 4.88), pity ($M = 4.41$ – 4.55) and blame for deterioration of the condition ($M = 3.19$ – 3.72), while the values for the other items (responsibility for the onset of illness, shame, competence and avoidance) showed lower levels of agreement with offered statements ($M = 1.68$ – 2.69). The score distributions for the items with the most distinct statements are presented in Table 2.

Differences in stigmatization of various family roles

Significance analysis of the FSQ rank between the various family roles gave no statistically significant correlations between either the attitudes towards mother and father or between the attitudes towards sister and brother. Statistically significant differences were established between the FSQ scores for parents and siblings (Table 3).

Table 3. Statistically significant values of rank significance analysis (Wilcoxon test).

		F/S	F/B	M/S	M/B
Responsibility for the condition	Z	−4.344	−4.904	−4.319	−4.741
	p	.000	.000	.000	.000
Blame for deterioration	Z	−4.197	−3.461	−3.458	−2.630
	p	.000	.001	.001	.035
Competence	Z	−3.024	−2.114	−2.183	−2.183
	p	.002	.035	.029	.029

F/S = father/sister; F/B = father/brother; M/S = mother/sister; M/B = mother/brother.

According to data presented in Table 3, attitudes directly connected to the construct of blaming family members (for onset of disability and for deterioration of the condition) were statistically significantly more intensive when evaluating parents than when evaluating siblings. In addition, it was significantly more frequently stated that the father and mother were less competent (they were not a good father/mother to their child) than a brother or a sister of a person with autism.

Inter-correlations of FSQ variables

Highly significant positive correlations ($p < .000$ – $.002$) were present between the constructs of responsibility for the condition, blame for deterioration of the condition, shame, competence and avoidance. Such correlations indicate that participants who consider family members responsible for the condition and incompetent in their family roles, at the same time hold the opinion that they should be ashamed and avoided. Positive correlations also existed between the constructs of contamination and pity ($p = .001$ – $.023$),

indicating the opinion that family members should be pitied because of the possibility of contamination by the condition of their relative.

Interaction of FSQ constructs and socio-demographic variables

Differences according to gender were established for the items of contamination, shame and avoidance. The mean rank values were significantly higher for male subjects for the items of shame ($H = 4.208$, $df = 1$, $p = .040$) and avoidance ($H = 7.300$, $df = 1$, $p = .007$) when evaluating the father, shame ($H = 6.852$, $df = 1$, $p = .009$) and avoidance ($H = 7.955$, $df = 1$, $p = .005$) when evaluating the mother, as well as for the item of avoidance when evaluating the sister ($H = 6.835$, $df = 1$, $p = .009$) and brother ($H = 9.068$, $df = 1$, $p = .003$). The mean rank values were significantly higher for female subjects concerning the item of mother's contamination ($H = 4.281$, $df = 1$, $p = .028$).

Differences according to age were established on the item pity. The mean rank values for the item of pity for all family members ($p = .006-.050$) were the highest in respondents over 45 years of age.

Differences according to level of education were established for the items of father's responsibility for the illness ($H = 7.315$, $df = 2$, $p = .026$), shame of the father ($H = 9.567$, $df = 2$, $p = .008$), of the mother ($H = 6.912$, $df = 2$, $p = .032$) and of the sister ($H = 6.723$, $df = 2$, $p = .035$). The mean rank values grew progressively with decreasing level of education.

Interaction of FSQ constructs and self-assessment of knowledge about autism

Differences according to self-assessment of knowledge about autism were established on the item of shame when evaluating the father ($H = 11.253$, $df = 2$, $p = .004$) and the mother ($H = 10.196$, $df = 2$, $p = .006$), while the other parameters were non-significant. The mean rank values were significantly higher for respondents with the least knowledge, while there was no difference between respondents with moderate or higher levels of knowledge.

Interaction of FSQ constructs and level of contact with persons with mental disorders

Differences according to the level of contact with persons with mental disorders were established on the items of shame when evaluating the father ($H = 7.092$, $df = 1$, $p = .008$), the mother ($H = 5.969$, $df = 1$, $p = .015$) and the sister ($H = 6.270$, $df = 1$, $p = .012$), and the item evaluating the lack of the father's competence ($H = 4.039$, $df = 1$, $p = .044$). The mean rank values were significantly higher for respondents who had had no direct contact

with persons with mental illness, having acquired information indirectly.

Discussion

The tendency to stigmatize a family with a member with ASD and of each individual family member in the sample of Belgrade participants is low, bearing in mind that the overall mean value (that is the mean score for all seven items) was below 4, which is the neutral point on the seven-point scale, indicating that the participants neither agreed nor disagreed with the statement. This is in accordance with previous study results that suggested that the ratio of stigmatizing/non-stigmatizing answers given by participants from the general public indicates that family stigma related to mental illness is not highly endorsed (Corrigan et al., 2006). This may point to the influence of social desirability on the tendency to hide real, implicit attitudes. It seems that, to avoid social disapproval, participants of the study do not wish to publicly support family stigma, because even though the test was anonymous, it involved direct contact with the examiner. In addition, the high percentage of neutral answers (18.2%–33.8%) for three items (blame for deterioration of the condition, evaluation of competences, and the tendency of avoidance) may put into doubt the relatively low scores for these items. The high percentage of neutral answers may actually point to a tendency of hiding socially undesirable attitudes.

Nevertheless, the separate scores for each of the seven constructs of the FSQ scale indicate that tendencies towards stigmatization concerning the constructs of contamination, deterioration and pity exist. The item exploring contamination could be understood as the effect of the symptoms of autism on family dynamics, but also by the possibility that certain ASD symptoms could 'rub off on' or 'graze' family members. The pity construct can also be interpreted ambiguously, as pity for family members because of their difficult situation or as sympathy, that is a deeper empathy with family members. A more detailed explanation of these findings would require expanding the questionnaire with control variables to avoid ambiguity. If contamination is understood as a reflection of symptoms on family members, and pity as empathy with family members, these items would not indicate a tendency towards stigmatization. Another indicator of the ambiguity of the emotion of pity comes from findings of a study (Dragojević, Milačić-Vidojević & Hanak, 2010) that indicated that pity does not lead to pro-social forms of behaviour. Such an ambivalent interpretation of pity could lead to scores that approach the median value on the Likert scales (Corrigan, Markowitz, Watson, Rowan & Kubiak, 2003).

The presence of high scores for the construct of attributing responsibility to family members for the deterioration of the condition of the person with ASD is important

in the context of stigmatization. Compared to the results of this study, the study results of Corrigan et al. (2006), exploring stigma towards relatives of a person suffering from schizophrenia by FSQ application, showed the highest tendencies towards stigmatization for the constructs of withholding pity, of viewing the family members as incompetent and of a tendency to avoid family members. In a study conducted in Serbia (Dragojević, Gligorović, Milačić-Vidojević, 2011), exploring stigma towards relatives of persons suffering from schizophrenia by FSQ application to a sample of the general public ($N = 808$), the most outstanding tendency of stigmatization was found to be in domains of feeling pity for family members ($M = 4.807$) and of holding the opinion that close contact with the stigmatized person could cause a reflection of symptoms on family members ($M = 5.365$).

The results of the present study suggest that the participants differentially attributed stigmatizing stereotypes to various family roles. The participants showed fewer stigmatizing attitudes towards siblings than towards parents. Greater blame for the onset of the condition was attributed to parents, a result that is in accordance with research implemented in other countries. The findings of the American National Representative Study on family stigma indicated that the structure of stigma for various family roles was not the same (Corrigan, Watson & Miller, 2007). Parents were frequently blamed for the onset of mental illness in children, as well as for insufficient assistance for the affected member to respect the recommended treatment. The research also showed that when the public blames a family member for the onset of a relative's mental illness, it reduces pity and withholds assistance to family members (Corrigan et al., 2007).

The results of this study point to a significant difference between men and women in attributing the feeling of shame and in the tendency to avoid parents of children with ASD. Compared to women, men have higher scores for the constructs of shame and avoidance when evaluating the parents, and higher scores for the construct of avoiding when evaluating siblings. In the present study, shame was connected with blaming family members for the onset of illness or its deterioration. Blame and shame lead to discrimination, which is reflected primarily in avoiding family members. In this study, women have higher scores for the construct of contamination when evaluating the mother, which indicates that women are more prone to understand the position of the mother and that they attribute more responsibility to her for child care. Differences according to gender can reflect more the caregiving role of women, described in studies exploring attitudes towards people with disabilities (Dragojević et al., 2010; Findler, Vilchinsky & Werner, 2007).

According to the present results, participants with a lower level of education showed a more pronounced tendency towards stigmatization of individual family

members in the domains of responsibility, shame and avoidance, confirming that level of education is one factor of stigmatization. Other studies also found that participants with higher levels of education have less-stigmatizing attitudes than persons with lower levels (Cook & Wang, 2010). When studying the attitudes of the general public towards persons with Alzheimer's disease, less-educated persons stigmatized persons with Alzheimer's twice as frequently as those with a higher education (Blay & Peluso, 2010).

Differences between ages were established for the item of pity. Participants in the age category of over 45 years were significantly more prone to pity. Probably, due to their having more life experience, older individuals have a deeper understanding of the problems and burdens that family members may suffer.

For self-assessment of knowledge about autism, it was noted that persons who assessed themselves as having the least knowledge about ASD attributed more feelings of shame when evaluating the father and the mother, that is persons with the least knowledge showed the highest tendency towards stigmatization of parents in the mentioned field.

Studies of factors contributing to the stigmatization of persons with mental illness indicated that one of the most significant factors is the level of knowledge about the person with a mental illness. In the present study, significant differences in the tendency towards stigmatization were established between participants who had had direct and those who had had only indirect contact with persons with mental disorders. The intensity of attitudes in the domains of shame attributed to family members and parental incompetence of the father was more pronounced in participants who had had no direct contact with persons suffering from mental illness. Research by Couture and Penn (2003) confirmed that the level of familiarity with a person with a mental illness was inversely proportional to the level of stigma attributed to that person. There are also contrary findings: that the closeness of contact with a person with a mental illness increases the social distance and perception of danger of close contact (Alexander & Link, 2003). The results of the present study do not support this previous finding.

The participants of the present study showed a pronounced tendency to give neutral answers (neither agree nor disagree) on items for evaluating competence, avoidance tendency and pity towards family members. No statistically significant correlations between knowledge and these areas of evaluation were established, while the level of contact was significantly correlated only with the item evaluating the incompetence of family members. These findings could be viewed as an expression of a tendency to give politically correct answers, that is to avoid publicly stating a stigmatizing attitude, which makes the consideration of the presence of stigmatization in these domains more complex.

Inter-correlations of FSQ constructs could contribute to a more precise definition of the constructs. Further research is required to explore the structure of stigma, to reveal factors that support stigma as well as possible etiological factors.

Limitations

The research results cannot be generalized to the general public due to the relatively small number of participants resulting from a paramount need to check the questionnaires on a limited sample in order to form a basis for future research. The reliability level of the data gathered by students was increased by prior student training. The possibility of ambiguous interpretation of certain items has already been mentioned. The ambiguity was due to the specificity of the source questionnaire, as well as to different uses of certain terms in English and in Serbian. By performing back-translation, an attempt was made to neutralize the language disagreements. Bearing in mind the limitations of this study, future studies should be performed with a larger number of respondents, in smaller and rural environments and should compare stigma perception of parents of persons with ASD with stigma endorsed by the general public, compare family stigma to primary stigma, and introduce a control scale for the social desirability of the responses.

Conclusions

The results of this study offer a certain understanding about stigmatization by a sample of the general public of Belgrade towards family members of a person with ASD. Anti-stigma programmes are important for the future education of the public, especially bearing in mind the finding that persons self-evaluated as having the least knowledge about ASD demonstrated the highest tendency towards stigmatizing parents.

Blaming family members for the deterioration of the condition, holding the attitude that they could be contaminated and that they should be pitied are the most pronounced attitudes leading to stigmatization. Participants of the study differentiated between family roles, stigmatizing parents more than siblings. Compared to women, men showed a higher tendency to avoid all family members and to support feelings of shame in parents, while women showed more understanding for the mother's position. Participants with a lower level of education demonstrated a more pronounced tendency towards stigmatization of individual family members in domains of responsibility, shame and avoidance, which confirms that the level of education is one of the endorsing stigma factors. Participants belonging to the over-45 age category were significantly more prone to pity all family members. Relevant to the self-assessment of knowledge about autism, it was noted that persons with the lowest evaluation of their own knowledge

about ASD demonstrated the highest tendency towards stigmatization of parents within the mentioned field. Participants who had had no personal contact with persons with mental illnesses supported the feeling of shame in family members and poorer parenting skills of the father to a greater extent than those who had had contact.

Three strategies for reducing public stigmatization of persons with mental illness are highlighted (Corrigan & Penn, 1999): (1) protest against incorrect information about persons with mental illness; (2) education aimed at the correct presentation of these persons; and (3) personal contact with persons with mental illness. The changes in attitudes and in behaviour could be more stable and more pronounced if all three strategies to reduce stigmatization are implemented, as well as when the programme is targeted at specific groups of persons. It would be beneficial to target autism education at experts who are professionally engaged in direct contact with persons with ASD, with the goal of a deeper understanding of the problems faced by their families.

Funding

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

References

- Alexander, L. A., & Link, B. G. (2003). The impact on stigmatizing attitudes toward people with mental illness. *Journal of Mental Health, 12*, 271–89.
- Angermeyer, M. C., Schulze, B., & Dietrich, S. (2003). Courtesy stigma: A focus group study of relatives of schizophrenia patients. *Social Psychiatry and Psychiatric Epidemiology, 38*, 593–602.
- Birenbaum, A. (1992). Courtesy stigma revisited. *Mental Retardation, 30*, 265–268.
- Blay, S. L., & Peluso, E. T. P. (2010). Public stigma: The community's tolerance of Alzheimer illness. *American Journal of Geriatric Psychiatry, 18*, 163–171.
- Cook, T. M., & Wang, J. L. (2010). Descriptive epidemiology of stigma against depression in a general population sample in Alberta. *BMC Psychiatry, 10*, 29–36.
- Corrigan, P. W. (1998). The impact of stigma on severe mental illness. *Cognitive and Behavior Practice, 5*, 201–222.
- Corrigan, P. W., Markowitz, F. E., Watson, A. C., Rowan, D., & Kubiak, M. A. (2003). An attribution model of public discrimination towards persons with mental illness. *Journal of Health and Social Behavior, 44*, 162–179.
- Corrigan, P. W., & Miller, F. E. (2004). Shame, blame and contamination: A review of the impact of mental illness stigma on family members. *Journal of Mental Health, 13*, 537–548.
- Corrigan, P. W., & Penn, D. L. (1999). Lessons from social psychology on discrediting psychiatric stigma. *American Journal of Psychology, 54*, 765–776.
- Corrigan, P. W., Watson, A. C., & Miller, F. E. (2006). Blame, shame and contamination: The impact of mental illness and drug dependence stigma of family members. *Journal of Family Psychology, 20*, 239–246.

- Corrigan, P. W., Watson, A. C., & Miller, F. E. (2007). The stigma of psychiatric disorders and the gender, ethnicity, and education of the perceiver. *Community Mental Health Journal*, 43, 439–458.
- Couture, S. M., & Penn, D. L. (2003). Interpersonal contact and the stigma of mental illness: A review of the literature. *Journal of Mental Health*, 12, 291–305.
- Dragojević, N. (2007). Vulnerabilnost porodica sa autističnim detetom. *Beogradska defektološka škola*, 2, 161–72.
- Dragojević, N., Milačić-Vidojević, I., & Hanak, N. (2010). Attitudes toward people with physical disabilities, their structure and correlating variables. *Special Education and Rehabilitation Science and/or Practice*, 29–51.
- Dragojević, N., Gligorović, M., & Milačić-Vidojević, I. (2011). Endorsement of stigma about families with member suffering from schizophrenia. *Psychology Matters*, 5, 24–33 [in Russian].
- Findler, L., Vilchinsky, N., & Werner, S. (2007). The multidimensional attitudes scale toward persons with disabilities (MAS): Construction and validation. *Rehabilitation Counseling Bulletin*, 51, 166–176.
- George, T. B. (2002). Care meanings, expressions, and experiences of those with chronic mental illness. *Archives of Psychiatric Nursing*, 16, 25–31.
- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Englewood Cliffs, NJ: Prentice Hall.
- Gray, D. (2002). Everybody just freezes. Everybody is just embarrassed: Felt and enacted stigma among parents of children with high functioning autism. *Sociology of Health and Illness*, 24, 734–749.
- Greenberg, J. S., Kim, H. W., & Greenley, J. R. (1997). Factors associated with subjective burden in siblings of adults with severe mental illness. *American Journal of Orthopsychiatry*, 67, 231–241.
- Holmes, E. P., Corrigan, P. W., Williams, P., Canar, J., & Kubiak, M. A. (1999). Changing attitudes about schizophrenia. *Schizophrenia Bulletin*, 25, 447–456.
- Larson, J. E., & Corrigan, P. W. (2008). The stigma of families with mental illness. *Journal of the American Academy of Psychiatry*, 32, 87–91.
- Lefley, H. P. (1992). The stigmatized family. In P. J. Fink & A. Tasman (eds) *Stigma and mental illness* (pp. 127–138). Washington DC: American Psychiatric Press.
- Li, S., Wu, J., Wang, W., Jacobyc, A., de Boerd, H., & Sanderd, J. W. (2010). Stigma and epilepsy: The Chinese perspective. *Epilepsy & Behavior*, 17, 242–245.
- MacRae, H. (1999). Managing courtesy stigma: The case of Alzheimer's disease. *Sociology of Health and Illness*, 21, 54–70.
- Mehta, S. I., & Farina, A. (1988). Associative stigma: Perceptions of the difficulties of college-aged children of stigmatized fathers. *Journal of Social and Clinical Psychology*, 7, 192–202.
- Milačić-Vidojević, I. (2007). "Stigma iz učtivosti" u porodici deca sa ometenošću. *Nove tendencije u specijalnoj edukaciji i rehabilitaciji* [New Trends in Special Education and Rehabilitation], 243–263.
- Milačić-Vidojević, I. (2008). *Autizam – dijagnoza i tretman*. Beograd: Fasper.
- Norvilitis, J. M., Scime, M., & Lee, J. S. (2002). Courtesy stigma in mothers of children with attention-deficit/hyperactivity disorder: A preliminary investigation. *Journal of Attention Disorders*, 6, 61–68.
- Ostman, M. L., & Kjellin, J. S. (2002). Stigma by association: Psychological factors in relatives of people with mental illness. *British Journal of Psychiatry*, 181, 494–498.
- Phelan, J. C., Link, B. G., Stueve, A., & Pescosolido, B. A. (1998). Public conceptions of mental illness in 1950 and 1996: What is mental illness and is it to be feared? *Journal of Health and Social Behavior*, 41, 188–207.
- Phillips, M. R., Pearson, V., Li, F., Xu, M., & Yang, L. (2002). Stigma and expressed emotion: A study of people with schizophrenia and their family members in China. *British Journal of Psychiatry*, 181, 488–493.
- Schuster, M. A. (2008). HIV-related stigma among people with HIV and their families: A qualitative analysis. *AIDS and Behavior*, 12, 244–254.
- Shibre, T., Negash, A., Kullgren, D., Kebede, D., Alem, A., Fekadu, G., & Jacobsson, L. (2001). Perception of stigma among family members of individuals with schizophrenia and major affective disorders in rural Ethiopia. *Social Psychiatry and Psychiatric Epidemiology*, 36, 299–303.
- Struening, E. L., Perlick, D. A., Link, B. G., Hellman, F., Herman, D., & Sirey, J. A. (2001). Stigma as a barrier to recovery: The extent to which caregivers believe most people devalue consumers and their families. *Psychiatric Services*, 52, 1633–1638.
- Tsang, H. W., Tarn, P. K., Chan, F., & Cheung, W. M. (2003). Sources of family burden of individuals with mental illness. *International Journal of Rehabilitation Research*, 26, 123–130.