POVODOM MEĐUNARODNOG DANA MENTALNOG ZDRAVLJA ISTRAŽIVAČKI TIM PROJEKTA *CoV2Soul.RS* IZNOSI PRELIMINARNE PODATKE O DEPRESIVNOSTI U SRBIJI DANAS

PISMO UREDNIKU

LETTER TO THE EDITOR

THE RESEARCH TEAM OF THE *COV2SOUL*.RS PROJECT, REPORTS THE PRELIMINARY RESULTS ON DEPRESSIVENESS IN SERBIA, ON THE OCCASION OF THE WORLD MENTAL HEALTH DAY

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Poštovano uredništvo,

Nacionalno istraživanje psihijatrijskih smetnji u vreme pandemije KOVID-19 infekcije u našoj zemlji (akronim - *Cov2Soul.RS*; finansirano od strane Fonda za nauku Republike Srbije – *www.cov2soul.rs*), u koje su uključeni istraživači sa Univerziteta u Beogradu i Novom Sadu, do sada je prikupilo preko 80,0% materijala neophodnog za konačne analize. Ukupno pedeset dvoje obučenih saradnika (lekari, psiholozi, apsolventi medicine) obavili su preko 1.000 dubinskih kliničkih intervjua, obilazeći celu Srbiju, da bi se postigla reprezentativnost uzorka. Pored obavljanja kliničkih intervjua, prikupljani su i drugi podaci - o jačini kovid stres sindroma u našoj populaciji, o zdravlju uopšte, o upotrebi lekova za smirenje, o usamljenosti, o uverenjima oko nastanka i širenja pandemije, o dobrim i lošim stranama aktuelne situacije, o kvalitetu života, o strukturi ličnosti (više o protokolu istraživanja videti u referenci 1, u spisku literature na kraju rada).

Konačne rezultate, koji će po prvi put pokazati učestalost psihijatrijskih poremećaja prema Međunarod-

Dear Editors,

The national survey on psychiatric disorders at the time of the COVID-19 pandemic in Serbia (acronym - *Cov2Soul.RS*; funded by the Science Fund of the Republic of Serbia - *www.cov2soul.rs*), which is carried out by researchers from the University of Belgrade and the University of Novi Sad, has, so far, gathered more than 80.0% of the material necessary for the final analyses. To achieve a representative sample, a total of 52 trained research assistants (doctors, psychologists, senior medical students) were recruited to perform more than 1,000 in-depth clinical interviews, all over Serbia. In addition to the clinical interviews, other data was also collected – on the intensity of the COVID stress syndrome in the population of Serbia, general health, the use of sedatives, loneliness, beliefs related to the origin and spread of the pandemic, positive and negative aspects of the current situation, the quality of living, and personality structure (see Research protocol (reference 1)).

The final results will, for the first time, show the frequency of psychiatric disorders in the general

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noj klasifikaciji bolesti (MKB-10) u opštoj populaciji Republike Srbije, očekujemo u prvoj polovini 2022. godine. Povodom Međunarodnog dana mentalnog zdravlja, 10. 10. 2021. godine, iznosimo deo preliminarnih podataka - za sada samo o tome koliko smo depresivni u drugoj godini od početka pandemije, upoređujući to sa 2013. i 2019. godinom, kada je istim metodom merena depresivnost opšte populacije (Istraživanje zdravlja stanovništva Srbije je ispitalo preko 10.000 ispitanika starosti 15 i više godina.) [2,3]. Od značaja je to što može da se napravi direktno poređenje, tj. što je i u *CoV2Soul.RS* istraživanju, korišćen isti instrument kao i u prethodnim ispitivanjima – Upitnik o zdravlju (engl. *Patient Health Questionnaire, PHQ-9*) [4]. Ovaj upitnik se koristi širom sveta da bi se merila depresivnost, kao jedan od indikatora opšteg zdravlja, i ima svrhu da proceni intenzitet simptoma, poput: neraspoloženja, pada energije i inicijative, negativnog razmišljanja o sebi, napetosti, nesanice, promena apetita i oscilacija želje za životom, uz napomenu da instrument nije dovoljan da bi se postavila dijagnoza depresivnog poremećaja, već se koristi za početnu orijentaciju, tj. detekciju (engl. *screening*). Pitanja su fokusirana na smetnje u poslednje dve nedelje (pre ispunjavanja upitnika), a rezultat ukazuje na intenzitet depresivnosti (blaga, umerena, jaka). *PHQ* rezultat niži od 10 ukazuje da osoba nije depresivna u meri koja bi bila klinički značajna [1-3], dok rezultat od 10 i više („prag“) je signal da je osobi potreban neki vid podrške – savetovanje, promena stila života, ili psihoterapija, farmakoterapija, dok je u nekim slučajevima potrebno samo oprezno praćenje da ne bi došlo do produbljivanja smetnji.

Prema podacima koje smo obradili, na do sada prikupljenom uzorku od 970 ispitanika iz cele Srbije ispitivanih tokom leta 2021. godine, prosečne starosti od oko 42 godine, procenat osoba sa depresivnošću iznad „praga“ iznosio je 5,7% (odnos žene : muškarci - 1,8 : 1), što u poređenju sa podacima iz 2013. i 2019. godine [2,3] pokazuje da se broj osoba sa depresivnošću iznad „praga“ povećao skoro dva puta (ranije je iznosio do 3,0%, kod odrasle populacije Srbije, uzrasta od 18 do 65 godina). Dodatno, kada je ispitivano koji tip depresivnosti je učestaliji u 2021. godini - da li su to slučajevi blagih/umerenih smetnji ili teških simptoma, pokazalo se da, u doba pandemije KOVID-19 oboljenja, raste samo učestalost blage/umerene depresivnosti, ali ne i teške depresivnosti - simptomi vrlo jakog intenziteta su stabilni u populaciji (0,4%), tj. ne mogu se dovesti u vezu s aktuelnom situacijom, što je i bilo očekivano. Međutim, naši rezultati govore u prilog porasta tzv. „reaktivne“ depresije, odnosno da se zaista radi o reakciji na mnoge aspekte pandemije (medicinski rizici, ali i različite psiho-socijalne promene izazvane pandemijom).

population of Serbia classified according to the ICD-10, and we expect them in the first half of 2022. For World Mental Health Day, October 10, 2021, we are presenting part of the preliminary results – at this moment only related to how depressed we are in the second year of the pandemic, by comparing this data to 2013 and 2019, using the same method to assess depresiveness in general population (The National Health Survey of the Republic of Serbia included more than 10,000 participants, aged 15 years and above.) [2,3]. Importantly, direct comparison is enabled as the same instrument for assessment of depression was used, that is the Patiend HEalth Questionnaire - PHQ9 [4]. This questionnaire is used all over the world to measure depressiveness, as an indicator of general health, and its purpose is to assess the intensity of symptoms, such as: low mood, decline of energy and initiative, negative thoughts about oneself, tension, insomnia, changes in appetite and oscillation in the will to live, with a note that this instrument is not sufficient for establishing the diagnosis of depressive disorder, rather it is used for initial screening. The questions are focused on the complaints experienced in the two weeks prior to survey, and the result indicates the intensity of depressiveness (mild, moderate, severe). PHQ result below 10 indicates that the person is not depressed at a clinically relevant level [1-3], while result above 10 (“threshold”) is a signal that the person is in need of some form of support – counseling, a change in lifestyle, or perhaps psychotherapy or pharmacotherapy, while in some cases, only careful monitoring is necessary to avoid the worsening of the complaints.

Our results obtained on the sample of 970 respondents, average age 42 years, interviewed throughout Serbia during summer 2021, show that the percentage of individuals with the score above threshold is 5.7% (ratio men : women – 1.8 : 1), when compared to the data from 2013 and 2019 [2,3] the number of people with depressiveness score above the "threshold" almost doubled (earlier, it was 3,0% in the adult population of Serbia, aged between 18 and 65 years). Additionally, when analyzing which type of depressiveness is more common in 2021 – whether it is related to cases of mild/moderate complaints or severe symptoms, it was shown that, in the era of the COVID-19 pandemic, only the incidence of mild/moderate depressiveness is on the rise, and not of severe depressiveness – very intensive symptoms are stable in their occurrence in the population (0.4%), i.e., they cannot be linked to the current situation, which is to be expected. However, our results speak in favor of a rise of so called “reactive” depression, i.e., in favor of the fact that there is, indeed, reaction to many aspects of the pandemic (medical

Takođe, iako se moglo očekivati da depresivnost i starost koreliraju, što je bio slučaj 2013. godine [2], u 2021. godini tu korelaciju nismo jasno uočili. To može značiti da je tokom pandemije broj depresivnih među mlađima u porastu, što je zapaženo i u studijama iz drugih zemalja [5,6]. U *Cov2Soul.RS* istraživanju saznali smo i kako ispitanici ocenjuju svoj položaj na društvenoj lestvici (u odnosu na obrazovanje, položaj, prihode, na skali od 1 do 10) [7]. Osobe koje se nalaze u gornjoj trećini lestvice, koje sebe procenjuju kao više obrazovane i višeg socijalno-ekonomskog statusa, prijavile su više depresivnih smetnji. Da li se u tome nazire specifičan efekat pandemije, ostaje pitanje za naredne analize.

Šta konkretno znače procenti koji se odnose na Srbiju? Prevedeno u apsolutne brojeve, to znači da je, tokom leta 2021. godine, za oko 240.000 osoba, starosti od 18 do 65 godina, trebalo naći način da dobiju neku vrstu pomoći u službama za zaštitu mentalnog zdravlja. U nekim slučajevima, tegobe bi se povukle i bez pomoći sa strane, ali nije uvek tako - rizik od pojačavanja simptoma i komplikacija ne treba zanemariti (samolečenje alkoholom, drogama ili lekovima za smirenje, zapuštanje telesnog zdravlja, porodični, socijalni i profesionalni problemi, rizik od suicida), a lečenje je sve teže što se kasnije počne sa njim.

Pet godina pre pandemije, učestalost depresivnosti, merena *PHQ* instrumentom u zemljama EU, bila je oko 6,6%, što se smatra evropskim prosekom (varira od oko 3,0% u Grčkoj do preko 9,0% u Nemačkoj) [8]. Iako se depresivnost za vreme pandemije kod nas praktično duplirala (interesantno je da se dupliranje broja pominje u više studija - Austrija, Velika Britanija, Kanada) [5,6,9], zanimljivo je da je kod našeg stanovništva, čak i sa porastom u pandemiji, depresivnost ostala niža od navedenog evropskog pre-pandemijskog proseka [8]. Poređenje sa drugim zemljama, u kojima su na isti način obavljena merenja na nacionalno reprezentativnim uzorcima, pokazuje da je, u Velikoj Britaniji, procenat depresivnih osoba „iznad praga" bio oko 13,0% [6], što je duplo viši procenat u poređenju sa našom zemljom u ovom trenutku, dok se u Austriji i Australiji pominju procenti od preko 18,0%, odnosno trostruko više nego u Srbiji [5,9]. To se, donekle, ali ne sasvim, može pripisati činjenici da su podaci iz datih studija prikupljani godinu dana ranije od naših, tj. ubrzo nakon šokantnih informacija, izolacije i pojačavanja svake vrste neizvesnosti [10]. Postoje i drugačija objašnjenja. Jedno je da smo otporniji, odnosno da smo psihološki ojačali u toleranciji neizvesnosti tokom decenija nestabilnosti. Potom, tu je i objašnjenje da je osećaj pripadnosti zajednici koji štiti od depresivnosti, ipak očuvan. No, moguće je i da postoje razlike u tzv. „zdravstvenoj pismenosti", odnosno u tome koliko (ne)umemo da se

risks, but also different psychosocial changes caused by the pandemic). Although it was to be expected that depressiveness and age would correlate, which was the case in 2013 [2], in 2021, this correlation was not registered. This could mean that the number of depressed younger persons during the pandemic is rising, which can also be observed in studies from other countries [5,6]. In the *Cov2Soul.RS* survey we have also obtained information on how the respondents assess their position on the social ladder (in relation to education, status, income, on a scale from 1 to 10) [7]. Persons in the top third of the ladder, who evaluate themselves as more educated and of higher socio-economic status, reported more depressive complaints. Whether this may be an indicator of a particular effect of the pandemic remains to be further analyzed in future studies.

What do the percentages related to Serbia specifically mean? Transformed into absolute numbers, this means that, during the summer of 2021, for about 240,000 persons, aged between 18 and 65, there was a need for the provision of the some sort of assistance in mental health care institutions and departments. In some cases, the complaints would have subsided without external assistance, however, this is not always the case – the risk of the symptoms intensifying or complications occurring should not be overlooked (self-treatment with alcohol, illegal drugs or sedatives, neglect of physical health, family, social, and professional problems, suicide risk), as treatment is the more difficult the more it is delayed.

Five years prior to the pandemic, the frequency of depressiveness, measured with the PHQ instrument, in EU countries, was around 6.6%, which is considered to be the European average (it varies from 3.0% in Greece to above 9.0% in Germany) [8]. Although, in Serbia, depressiveness during the pandemic has practically doubled (increase was also reported in studies from Austria, Great Britain and Canada) [5,6,9], it is important to note that, among the population of Serbia, even with the rise during the pandemic, depressiveness has remained lower than the European pre-pandemic average [8]. Comparison with other countries, where measurement was performed in the same way on nationally representative samples, shows that the percentage of depressive persons "above the threshold" in Great Britain was around 13.0% [6], which is double the number found in Serbia at this point, while in Austria and Australia, percentages above 18.0% have been reported, which is three times higher than in Serbia [5,9]. This can partially, but not completely, be attributed to the fact that the data from the above-mentioned studies were gathered a year before the data from our study, i.e., not long after exposure to shocking information, isolation, and intensification of

izrazimo o svom psihičkom stanju („reči za osećanja"), ili koliko to (ne)smemo, zbog stigmatizacije, što takođe može da bude razlog zbog kojeg su zabeležene niže stope ovih duševnih smetnji kod nas.

Šta u ovom trenutku nedvosmisleno znamo? Kao prvo, duševno zdravlje treba smatrati jednim od prioriteta javnog zdravlja – prioriteta, ali i izazova zdravstvene politike. Kao drugo, u ovom trenutku sasvim je jasno da sa podacima prikupljenim putem *online* anketa treba biti oprezan i da se na osnovu njih ne smeju olako donositi zaključci [10]. U medijima su se pojavljivale informacije da je u Srbiji „mesec dana nakon proglašenja vanrednog stanja, 28,9% ispitanika prijavilo umerenu do tešku depresiju, 36,9% anksioznost, a 38,1% umerene do teške simptome stresa". To su izuzetno visoki brojevi. Vrlo je važno da i mediji i javnost pažljivo donose zaključke o zdravlju naše populacije.

Izgleda da u Srbiji na *online* ankete o psihičkom zdravlju odgovara jedna specifična sub-populacija ljudi [11]. Ilustracija o tome koliko se mogu razlikovati podaci iz *online* testiranja u odnosu na kvalitetno uzorkovanje (reprezentativni uzorci) dolazi, između ostalog, i iz pilot istraživanja projekta *CoV2Soul.RS*, gde smo, početkom 2021. godine, zadavali isti instrument - ultra-kratki instrument za detekciju anksioznosti/depresivnosti (*PHQ*-4) [12] prigodnom uzorku od preko 3.000 *online* ispitanika, a zatim opisanom reprezentativnom uzorku populacije Srbije, testiranom na terenu. Razlike u podacima su bile desetostruke - *online* prikupljeni podaci pokazali su da smo deset puta anksiozniji i depresivniji nego što stvarno jesmo.

Naša poruka bi bila da se pri donošenju zaključaka o psihičkom zdravlju i psihičkim bolestima u opštoj populaciji Srbije treba oslanjati na reprezentativne, umesto na prigodne ili pristrasne uzorke, te da treba izbeći senzacionalizam. Reprezentativni uzorci iziskuju veoma zahtevne procedure sprovođenja i velike resurse, zbog čega je sprovođenje istraživanja *CoV2Soul.RS* na terenu, u vreme povećanog epidemiološkog rizika (terenske studije tokom pandemije su retkost i u svetu), bio izazov. No, prema našim saznanjima, to je jedini način da naša zemlja dobije podatke pomoću kojih bi se sagledale stvarne posledice pandemije i izašlo u susret potrebama našeg stanovništva. Nadamo se da će preliminarni podaci izneti u ovom obraćanju poslužiti da se lakše planiraju i sprovode odgovarajuće mere zaštite zdravlja stanovništva ugroženog pandemijom.

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every type of uncertainty [10]. There are other explanations, as well. One would be that, as a people, we are more resilient, i.e., that we have psychologically developed a tolerance to uncertainty during the decades of instability. Then, there is also the explanation that the sense of belonging to a community, which protects people from depressiveness, has been preserved, after all. However, there is also a possibility that there is disparity in so called "health literacy", i.e., the extent to which we are able or unable to describe our psychological state ("words for feelings"), or to which we do or do not feel comfortable to do so, due to the fear of stigma, which may also be the reason why these psychological complaints are registered at a lesser rate in Serbia.

What do we undoubtedly know at this time? Firstly, mental health should be considered one of the priorities of public health – a priority, but also a challenge of health policy. Secondly, at this moment, it is quite clear that data collected in online surveys should be assessed critically and that conclusions must not be made lightly on the basis of such data [10]. Media in Serbia reported that "a month after the state of emergency was declared, 28.9% respondents reported mild to severe depression, 36.9% reported anxiety, while 38.1% stated having severe stress symptoms". These are very high numbers. It is very important that both the media and the public are very careful when drawing conclusions on the health of the population in Serbia.

It seems that, in Serbia, a particular subpopulation responds to online surveys on mental health [11]. An illustration on the extent to which data from online testing can differ from quality sampling (representative samples) can be found, amongst other sources, in the pilot study of the *CoV2Soul.RS* project, where, at the beginning of 2021, we used the same instrument – the ultra short instrument for the detection of anxiety/depressiveness (PHQ-4) [12] to a convenience sample of over 3,000 online respondents, and then to the described representative sample of the population of Serbia, tested in the field. The difference in the data was tenfold – the data collected online showed people in Serbia to be ten times more anxious and depressed than is actually the case.

Our recommendation would be to base conclusions related to the mental health and psychiatric illnesses of the general population on representative, rather than on convenience or biased samples, as well as to avoid sensationalism. Representative samples entail very demanding implementation procedures and a lot of resources, which is why the execution of the *CoV2Soul.RS* study in the field, at the time of increased epidemiological risk (field studies during the pandemic are rare anywhere in the world) was a challenge.

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Nevertheless, to the best of our knowledge, this is the only way for our country to obtain data that would provide insight into the real consequences of the pandemic and help meet the needs of the population. We hope that the preliminary results reported in this paper may be useful in facilitating the planning and execution of appropriate measures for protecting the population health jeopardized by the pandemic.

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