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DA LI SU MENTALNO OBOLELE OSOBE SKLONIJE NASILNOM PONAŠANJU?

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Apstrakt: Verovanje u povezanost nasilnosti i mentalnih poremećaja živi u narodima različitih kultura od pamtiveka. Paradoksalno je da ovu povezanost stručnjaci ni danas nisu u potpunosti prihvatili, iako istraživanja u poslednjih petnaest godina jasno ukazuju na njenu verodostojnost. U ovom radu dati su mogući argumenti i predstavljene četiri aktuelne perspektive u sagledavanju ove povezanosti. Najveći deo članka sadrži pregled mnogobrojnih istraživanja urađenih na ovu temu u poslednjih petnaest godina, koja su podeljena u tri osnovna metodološka pristupa: ispitivanja učestalosti pomenutog ponašanja među pacijentima koji su lečeni, ili se nalaze na lečenju u psihijatrijskim ustanovama; ispitivanja učestalosti mentalnih poremećaja među osobama koje su počinile krivično delo nasilja i nalaze se u ustanovama zatvorskog tipa i, ispitivanja učestalosti kako mentalnih poremećaja, tako i nasilnog ponašanja u uzorku opšte populacije u određenoj društvenoj zajednici. Rezultati većine istraživanja sva tri pristupa skoro ujednačeno ukazuju na značajno viši rizik od nasilnog ponašanja u populaciji psihijatrijskih pacijenata u odnosu na opštu populaciju, i to posebno kod određenih dijagnostičkih kategorija, kao što su poremećaji povezani sa upotrebom psihoaktivnih supstanci, antisocijalni poremećaj ličnosti, psihotični poremećaji, bipolarni afektivni poremećaj. U zaključku su istaknute manjkavosti dosadašnjih istraživanja i pretočene u predlog jednog kvalitetnog nacrta za sledeća istraživanja na tu temu. Na kraju je naglašena važnost odnosa psihijatara prema ovom osetljivom pitanju, gde bi istraživanje faktora rizika i time preveniranje agresivnosti u ovoj populaciji bili daleko racionalnije od dosadašnjeg neargumentovanog negiranja očiglednog, a opet u službi tih istih pacijenata, jer se upravo prepoznavanjem takvih pojedinaca i pravi razlika u odnosu na većinu drugih koji nisu nasilni.

Ključne reči: *nasilnost, kriminal, mentalni poremećaji, stigma, epidemiologija*

Uvod

Tokom istorije skoro svih poznatih kultura agresivnost i mentalni poremećaji (bolesti) su dovođeni u vezu. Sokrat je u jednoj od svojih rasprava komentarisao da broj mentalno obolelih u Atini mora biti nizak, jer ima vrlo malo nasilja [1]. Strah javnosti od duševnih bolesnika je oduvek prisutan i dobro je dokumentovan [2,3,4]. Telefonska anketa obavljena 1990. godine na području cele Amerike pokazuje da 80% učesnika potvrđuje bar jednu od sledećih izjava: mentalno oboleli su skloniji nasilnim radnjama od drugih ljudi; prirodno je plašiti se nekoga ko je duševni bolesnik; važno je imati na umu da bivši pacijenti duševnih bolnica mogu biti opasni [5]. Nasilni akti mentalno obolelih zastrašuju nas više nego neki drugi oblici nasilja. Običnom čoveku oni deluju bezumno, nelogično, nepredvidivo, smrtonosno. Čudno, možda i ironično, ali ovu vezu koja je ljudima poznata vekovima stručnjaci u oblasti mentalnog zdravlja počinju da prihvataju tek nekih deset do petnaest godina unazad. Na pitanje zašto je to tako postoji nekoliko odgovora.

Prvi se odnosi na nedovoljnu uverljivost istraživanja koja su se bavila ispitivanjem veze nasilnog ponašanja i mentalnih bolesti. Validnost takvih istraživanja često je bila ograničena nestandardizovanim ili nejasnim definicijama agresivnog (violentnog) ponašanja, mentalnih bolesti, ili oboje; oslanjanjem uglavnom na službene podatke, što vodi u posebnu vrstu zastranjivanja (videti dalje u tekstu); poređenjem sa osobama koje nisu mentalno obolele uz izostavljanje ili manjkavo uključivanje demografskih i situacionih činilaca; i vrstom istraživanja, koja su po pravilu bila retrospektivnog karaktera [1,5,6,7].

Drugo, način na koji se društvo postavlja prema mentalno obolelim agresivnim osobama, varira s vremenom, kako u određenoj kulturi, tako i između različitih kultura. Tu možemo naći vrlo šarolike oblike rešavanja problema, od čuvanja u okviru porodice, preko ignorisanja, smeštaja u bolnicu, zatvor, pa čak i egzekucije takvih pojedinaca. Do šezdesetih godina dvadesetog veka, rezultati mnogih istraživanja su, oslanjanjem na službene podatke o stopi hapšenja zbog agresivnog ponašanja, pokazivali da duševno oboleli nisu skloniji nasilnim aktima u odnosu na opštu populaciju [8]. Tada je, međutim, većina pacijenata provodila dobar deo života u raznim ustanovama. Politika deinstitucionalizacije koja je usledila nakon toga, dovela je do značajnog porasta stope. Pritisak koji je tada počeo u smislu otpuštanja pacijenata i smanjivanja kapaciteta, mnogima od njih je učinio medvedju uslugu jer su se našli na ulici. Neka istraživanja u Americi pokazuju da su mentalno obolele osobe i, uz to beskućnici, visoko zastupljene među nasilnim prestupnicima [9]. Osnovnim razlogom smatra se nedostatak adekvatnog psihijatrijskog lečenja, s obzirom da sami ne dolaze na lečenje, a nemaju porodicu, niti ikoga bliskog ko bi se starao o njima.

Treće, tokom proteklih dvadeset godina, upotreba psihoaktivnih supstanci, kao što su kokain, heroin, halucinogeni, sedativi i druge, zajedno sa alkoholom,

ušla je na velika vrata u svakodnevicu i dovela do sveopšteg povećanja stope nasilja. Naravno da se to odrazilo i na stopu kod mentalno obolelih [10].

Četvrto, psihijatri su opravdano bili oprezni u vezi sa daljom stigmatizacijom duševno obolelih, sa nečim što je tada delovalo kao vrlo "tanka" priča [8], a postoji i mogućnost zloupotrebe. Neki autori [11] ukazuju da su mentalno oboleli često bili žrtveni jarci, neko na koga je bilo najlakše baciti krivicu u sredinama u kojima je postojao izražen problem nasilja. Na kraju, pretpostavljena opasnost po druge i jeste osnovni uzrok stigme duševno obolelih, što onda utiče na sve oblasti njihovog življenja.

U proteklih petnaest godina značajno je porastao broj dokaza o verodostojnosti veze duševnih bolesti i nasilnog ponašanja. Oni se ne mogu više ignorisati, niti lako opovrgnuti. Određene nedoumice ipak, još uvek, postoje. S obzirom na nedovoljnu informisanost na tom planu u našim stručnim krugovima i javnosti uopšte, sledi pregled epidemioloških radova koji tretiraju pitanje odnosa nasilnog ponašanja i mentalnih poremećaja.

Možemo reći da, u celini, među istraživačima postoje četiri perspektive u sagledavanju ovog odnosa. Prva, koja danas ima mnogo manje pristalica nego ranije, ne prihvata nikakvu vezu između mentalnih bolesti i nasilja. Druga tu povezanost prihvata, ali je definiše kao lažnu, kao artefakt. Treće viđenje podržava kauzalnu vezu između nasilja i duševnih bolesti i pokušava da utvrdi šta je to što kod ovakvih bolesti dovodi do nasilja. Najzad, četvrta perspektiva takođe podržava kauzalni odnos, ali ga povezuje sa društvenim prilikama.

Pregled epidemioloških istraživanja

Mnogobrojna epidemiološka istraživanja, različito zamišljena, manje ili više uspešno, dokazivala su ili opovrgavala ove stavove. Nijedna istraživačka zamisao nije se pokazala kao idealna. Uopšte uzev, možemo reći da postoje tri osnovna metodološka pristupa u proceni moguće veze između mentalnih poremećaja i nasilničkog ponašanja: *prvi*, ispitivanje učestalosti pomenutog ponašanja među pacijentima koji su lečeni, ili se nalaze na lečenju u psihijatrijskim ustanovama; *drugi*, ispitivanje učestalosti mentalnih poremećaja među osobama koje su počinile krivično delo nasilja i nalaze se u ustanovama zatvorskog tipa; i *treći*, ispitivanje učestalosti kako mentalnih poremećaja, tako i nasilnog ponašanja u uzorku opšte populacije u određenoj društvenoj zajednici [12].

Istraživanja prvog metodološkog pristupa

Što se tiče *prvog* pristupa, korišćene su različite strategije u istraživanju: retrospektivna istraživanja psihijatrijski lečenih pacijenata, istraživanja praćenja otpuštenih psihijatrijskih pacijenata, retrospektivna i prospektivna istraživanja psihijatrijskih pacijenata rođenih u određenom vremenskom periodu. Za procenu nasilnog ponašanja uzimani su podaci pre, za vreme ili posle bolničkog lečenja. Svaki od ovih načina procene ima svoje nedostatke,

i treba ih imati u vidu. Ako su uzimani pre prijema u bolnicu, greška koja često onemogućuje uopštavanje rezultata je upravo to što je razlog prijema uglavnom agitirano ili nasilno ponašanje. Rezultati mogu biti nedostatni i ako se procena vrši za vreme boravka u bolnici, kao i ako se za vreme lečenja agresivno ponašanje koriguje. Sem toga, može se pretpostaviti da se češće leče i hospitalizuju teži duševni poremećaji, kao što je shizofrenija, pa samim tim raste i njihov broj u uzorku. Najzad, validnosti procene nakon otpusta nedostaje to što se pacijenti otpuštaju kada više nisu nasilni. S druge strane, prednost ovakvih istraživanja je što komuniciraju sa zvaničnim podacima pa nisu podložna subjektivnosti. Pored toga, istraživanja rođenih u određenom vremenskom periodu uključuju sve registrovane pacijente, bez obzira na težinu oboljenja i broj bolničkih lečenja, te se smatraju najvrednijima u smislu uopštavanja rezultata.

Većina istraživanja ovog metodološkog pristupa nalazi povećan rizik od nasilnog ponašanja kod određenih psihijatrijskih poremećaja. Tako istraživanja Modestina i Amana [13,14], ispitujući učestalost prekršaja sa nasilničkim ponašanjem na populaciji psihijatrijskih pacijenata univerzitetske bolnice u Bernu, Švajcarska, nalaze tri do četiri puta povećan rizik kod muških pacijenata obolelih od shizofrenije i srodnih bolesti u odnosu na opštu populaciju. Retrospektivno istraživanje shizofrenih pacijenata rođenih u Stokholmu između 1920. i 1959. godine ukazuje na 3.8 puta veći rizik za nasilno ponašanje [15]. Isti rizik nalazi i Vesli sa saradnicima [16] kod muških shizofrenih pacijenata, koji su prvi put psihijatrijski lečeni, u Londonu, u periodu od 1964. do 1984. godine. Najveći porast rizika od agresivnog ponašanja kod shizofrenih pacijenata nalazi Tihonen sa saradnicima [17]. Prateći kohortu rođenih na severu Finske, oni nalaze da se mogućnost osude zbog prestupa vezanih za nasilničko ponašanje uvećava sedam puta u odnosu na osobe bez psihijatrijskih dijagnoza. Kada se procenjivao rizik kod psihotičnih poremećaja u celini, nađeno je povećanje od četiri puta za muškarce, a za žene i više [18]. Sva istraživanja ovog tipa nalaze izrazito povećan rizik od nasilnog ponašanja kod poremećaja vezanih za upotrebu psihoaktivnih supstanci. Hodžinsova u već pomenutoj analizi kohorte 15,117 rođenih u Stokholmu, Švedska, nalazi da relativni rizik kod muškaraca sa ovim problemom iznosi 15.4%, dok je u ženskoj populaciji konzumenata taj rizik prisutan kod čak 54.6 % ispitanika [18]. Vidimo da je ta vrednost znatno veća od one kod psihotičnih poremećaja. Komparativno istraživanje iste autorke sa saradnicima [19], urađeno u Danskoj, na velikoj neselektivnoj kohorti, dalo je slične rezultate. Nalaze približne ovima dobili su i drugi istraživači [13]. Za antisocijalni poremećaj ličnosti nađen je relativni rizik od 7.2 za muškarce i 12.1 za žene, tj. rizik je toliko puta veći u odnosu na opštu populaciju [19]. Zanimljiv je nešto stariji rad Rapkina, s kraja sedamdesetih [20], u kojom je dat pregled sedam istraživanja stope hapšenih (privođenih) psihijatrijskih pacijenata, gde se pokazalo da istraživanja obavljena pre 1965. godine ne ukazuju na povećanu stopu hapšenja psihijatrijskih pacijenata, za razliku od perioda od 1965.

do 1979. godine, kada je u svakom istraživanju dobijen suprotan rezultat. Kada se kasnije objavljena istraživanja istog tipa [21,22,23,24] kombinuju sa Rapkinovim pregledom dobije se odnos 3:1 u odnosu na stopu hapšenja – psihijatrijski pacijenti: opšta populacija [25]. Slede Tabele 1. i 2. sa pregledom značajnijih istraživanja ovog pristupa.

Tabela 1. Retrospektivna istraživanja pacijenata primljenih na psihijatrijsko lečenje (prvih pet) i retrospektivna kohortna istraživanja (poslednje dve)

Autori	Lokacija	Vremenski period	N	Pol	Dg grupa	Definicija agresivnosti
Hamfris i saradnici (1992)	Nortvik Park	?	253	m – ž	Sch (ICD-9)	Životno-ugrožavajuće ponašanje (procena rođaka)
Modestin i Aman (1995)	Bern	1987	1,265	m + ž	Svi poremećaji (ICD-9)	Službeni podaci (policijski)
Modestin i Aman (1996)	Bern	1985-1987	282	m	Sch (RDC)	Službeni podaci (sudski)
Volavka i saradnici (1997)	Češka, Danska, Irska, Japan, VB, SAD, ZND Indija, Nigerija	1987	1,017	m	Sch (ICD-9)	Fizički napadi (procena drugih)
Mantaner i saradnici (1998)	Baltimor	1983-1989	1.670	m + ž	Ppsihoze (DSM-III)	Podaci od ispitanika
Lindkvist i Alebek (1990)	Stokholm	1971-1986	790	m + ž	Sch (ICD-8)	Službeni (sudski)
Weseli i saradnici (1994)	London	1964-1984	538	m + ž	Sch (ICD-9)	Službeni (sudski) i podaci od ispitanika

Tabela 2. Istraživanja praćenja lečenih psihijatrijskih pacijenata (prve tri) i prospektivna istraživanja praćenja kohorte rođenih (poslednja četiri)

Autori	Lokacija	Vremenski period	N	Pol	Dg grupa	Definicija agresivnosti
Svonson i saradnici (1997)	Severna Karolina	1986-1991	169	m + ž	Teški mentalni poremećaji[a]	Službeni (bolnica, sud) i od ispitanika
Stidmen i saradnici (1993, 1998)	Pitsburg, Kanzas Siti Vorčester	1992-1995	1,136	m + ž	Selekcionisani mentalni poremećaj[b]	Podaci od ispitanika
Švarc i saradnici (1998)	Severna Karolina	?	331	m + ž	Teški mentalni poremećaji[a]	Službeni (sud, policija) i od ispitanika
Ortman (1981)	Kopenhagen	1953-1978	11,540	m	Svi poremećaji	Službeni podaci (sudski)
Hodžins (1992)	Stokholm	1953-1983	15,117	m + ž	Svi poremećaji	Službeni (sudski)
Hodžinsi i saradnici (1996)	Danska	1944-1947	358,180	m + ž	Svi poremećaji	Službeni (sudski)
Tiihonen i saradnici (1997)	Severna Finska	1966-1992	12,058	m + ž	Svi poremećaji	Službeni (sudski)

[a] Shizofrenija, paranoidne psihoze, afektivne psihoze
[b] Shizofreni spektar, afektivni spektar, paranoidne psihoze, zloupotreba supstanci

Tabela 3. prikazuje rezultate nekih od pomenutih istraživanja.

Tabela 3. Relativni rizik od nasilničkog ponašanja kod mentalno obolelih (u odnosu na opštu populaciju, gde se uzima da je 1.0)

Autori	Teški mentalni poremećaji	Organski poremećaji	Shizofrenija	Afektivni poremećaj	Anksiozni poremećaj	Poremećaji vezani za upotrebu supstanci	Antisocijalni poremećaj ličnosti
Modestin i Aman, (1995)			m – 3.1	m – 8.8		m – 6.5	
Modestin i Aman, (1996)			m – 3.9				
Lindkvist i Alebck, (1990)			m – 3.9				
Hodžins, (1992)	m – 4.2 ž – 27.4					m – 15.4 ž – 54.6	
Hodžins i saradnici, (1996)	m – 4.5 ž – 8.7	m – 2.6				m – 8.7 ž – 15.1	m – 7.2 ž – 12.1
Tihonen i saradnici, (1997)		m – 5.0	m – 7.2			10.4	
Svonson i saradnici, (1992)			4.1	1.7	1.2		
Stuve i Link, (1997)	3.6[a]/10.1[b] 3.3[a]/6.6[b]			1.4[a]/1.5[b]	1.3[a]/1.2[b]		

[a] Rizik od fizičkog napada; [b] Rizik od korišćenja oružja

Istraživanja drugog metodološkog pristupa

Drugi metodološki pristup je zastupljen uglavnom sa dva tipa istraživanja: onima koja su rađena na prestupnicima koji su počinili ubistvo, i dijagnostička istraživanja reprezentativnog uzorka. Ovako postavljena istraživanja imaju jedan zajednički nedostatak, kao i deo istraživanja prethodnog pristupa, koja analiziraju stopu privođenja psihijatrijskih pacijenata, odnosno da li se psihijatrijski pacijenti ređe ili češće privode tj. hapse. Drugi problem, koji se tiče samo istraživanja ovog tipa, odnosi se na izostavljanje u proceni onog dela psihijatrijskih pacijenata prestupnika kojima je izrečena mera lečenja na slobodi. I jedno i drugo uglavnom zavisi od zemlje i njenog zakonodavstva [26,27]. Treća slabost ovog pristupa je što ne uključuje lakše agresivne nastupe, koji najčešće nisu razlog za smeštaj u zatvorsku ustanovu. Dobra strana ovako osmišljenih istraživanja, slično kao i kod prethodnog pristupa, jeste rad sa službenim podacima.

Prvi primer istraživanja sa prestupnicima koji su počinili ubistvo dolazi iz Finske, koja je posebno pogodna za ovakve tipove istraživanja iz dva razloga. Prvo, procenat razrešenja ubistava kod njih je vrlo visok, iznosi 97%, i drugo, svaki od prestupnika se detaljno psihijatrijski ispituje. U nekoliko objavljenih radova finski autori, na čelu sa Markom Eronenom, nalaze da je rizik od ubistva osam puta veći kod muškaraca koji boluju od shizofrenije u odnosu na normalnu popu-

laciju, kod alkoholičara se uvećava više od deset puta, i više od jedanaest puta kod antisocijalnog poremećaja ličnosti, dok afektivni i anksiozni poremećaji ne uvećavaju relativni rizik [28,29,30]. Tri sledeća istraživanja, dva iz Skandinavije i jedno iz Kanade, takođe ukazuju da među violentnim prestupnicima postoji veliki broj osoba sa težim mentalnim poremećajima. Gotlib i saradnici [31] su, proučavajući ubice u Kopenhagenu između 1959. i 1983. godine, našli da je 20% muškaraca i 44% žena bilo dijagnostikovano kao psihotično. Među njima je 41% muškaraca i 13% žena imalo poremećaj vezan za upotrebu psihoaktivnih supstanci. Rezultati ovog istraživanja pokazuju da se kod psihotičnih osoba rizik od ubistva povećava šest puta za muškarce, i čak šesnaest puta za žene. Sledi Lindkvistovo istraživanje [32] urađeno u Švedskoj na sveukupnoj populaciji osoba koje su počinile ubistvo u periodu od 1970. do 1981. kada je nađeno 53% psihotičnih prestupnika, a među njima 38% poremećaja vezanih za upotrebu psihoaktivnih supstanci. Najzad, kanadsko istraživanje na reprezentativnom uzorku homicidnih prestupnika muškog pola, štićenika zatvora u Kvebeku, ukazuje na značajno veću frekvencu (35%) težih mentalnih poremećaja (psihoze i teži afektivni poremećaji) u odnosu na druge prestupnike iste ustanove. U toj grupi homicidnih prestupnika 83% je imalo predistoriju alkoholičarske, a 63% narkomanske zavisnosti. Interesantna su dalje, u istom kontekstu, istraživanja homicidnih recidivista. Švedsko istraživanje obavljena na uzorku od dvadeset i jedne osobe koje su počinile ponovljeno delo ubistva, nalazi da su oni često bili vinovnici i drugih nasilničkih ponašanja, i da se većina može svrstati u dijagnostičku grupu poremećaja ličnosti. Mnogi od njih su bili zavisnici od droga i alkohola, a 10% je bolovalo od shizofrenije [33]. Tihonen i Hakola [34] su ispitivali trinaest repetitivnih prestupnika ubica, koji su svoj poslednji prestup počinili u poslednje tri godine, i od tada se nalaze u zatvoru ili u nekoj od psihijatrijskih ustanova sa visokim obezbeđenjem. Kod svih ispitanika je dijagnostikovano mentalno oboljenje, i to kod jedanestoro njih težak alkoholizam kombinovan sa poremećajem ličnosti, a kod dvoje shizofreno oboljenje.

Tabela 4. Neka istraživanja prestupnika koji su počinili ubistvo

Autori	Lokacija	Vremenski period	N	Pol	Dijagnostički kriterijum
Lindkvist, (1986)	Severna Švedska	1970-1981	64	m + ž	?
Gotlib i saradnici, (1987)	Kopenhagen	1959-1983	263	m + ž	ICD-8
Kot i Hodžins, (1992)	Kvebek	1988	87	m	DSM-III
Eronen i saradnici, (1996) a, b	Finska	1984-1991	693	m + ž	DSM-III-R

Tabela 5. Rizik od homicidnog ponašanja među psihijatrijskim pacijentima muškog pola u odnosu na opštu populaciju muškaraca

Dijagnoza	Stopa na 100	Relativni rizik	95% interval poverenja
Anksiozni poremećaj	1.5	0.3	0.2-0.5
Distimija	1.4	0.6	0.3-1.1
Mentalna retardacija	1.2	1.2	0.9-2.2
Teška depresivna epizoda	3.0	1.6	1.1-2.4
Shizofrenija bez alkoholizma	3.7	7.2	5.4-9.7
Shizofrenija psihotični spektar	6.4	8.0	6.1-10.4
Alkoholizam	39.2	10.7	9.4-12.2
Antisocijalni poremećaji ličnosti	11.3	11.7	9.5-14.4
Alkoholizam i ranije ubistvo		13.3	8.9-20.0
Shizofrenija sa alkoholizmom	2.9	17.2	12.4-23.7
Shizofrenija i ranije ubistvo		25.8	9.6-69.6

Suprotno do sad navedenim istraživanjima, istraživanja reprezentativnog uzorka opšte populacije štićenika zatvorskih ustanova, tj. učestalosti mentalnih poremećaja u istoj, imaju tu manu što ne prave razliku između nasilnih i nenasilnih prestupa. Uprkos tom ograničenju i preko njih možemo dobiti nekakvu orijentacionu predstavu o odnosu mentalnih oboljenja i nasilnog ponašanja. Kod te zatvorske populacije, posebno ženskog dela, nađena je izrazito povišena stopa alkoholizma, narkomanije i antisocijalnog poremećaja ličnosti u odnosu na opštu populaciju. Često su u komorbiditetu prisutna sva tri poremećaja [35]. O povišenoj stopi za teže mentalne poremećaje, tipa shizofrenije ili težih afektivnih poremećaja, a u odnosu na opštu populaciju, izveštava se u više objavljenih istraživanja na zatvorenicima oba pola [36,37,38]. Za područje naše zemlje ne postoje ovako ozbiljne epidemiološke analize. Može se reći da, po podacima koji su nama bili dostupni, ne samo u ovom nego i drugim pristupima istraživanju ovog problema, praktično nema značajnijih radova u poslednjih dvadeset do trideset godina.

Tabela 6. Dijagnostička istraživanja reprezentativnog uzorka osuđenih prestupnika (zatvorenika)

Autori	Lokacija	Vremenski period	N	Pol	Dijagnostički kriterijum
Tejlor, (1985)	London, VB	?	203	m	
Hajd i Sajter, (1987)	Ohajo, SAD	?	509	m+ž	DSM-
Nejbors i saradnici, (1987)	Mičigen, SAD	1986	1070	m+ž	DSM-III-R
Danijeł i saradnici, (1998)	Misuri, SAD	?	100	ž	DSM-III
Hodžins i Kot, (1990)	Kvebek, Kanada	1988	495	m	DSM-III
Teplin, (1990)	Okrug Kuk, SAD	1983-1984	728	m	DSM-III
Harli i Dan, (1991)	Brizbejn, Australija	1989	92	ž	DSM-III-R
Teplin i saradnici, (1996)	Okrug Kuk, SAD	1991-1993	1272	ž	DSM-III-R
Džordan i saradnici, (1996)	Severna Karolina, SAD	1991-1992	805	ž	DSM-III-R

Tabela 7. Životna učestalost psihijatrijskih poremećaja kod osuđenih prestupnika (zatvorenika) bez selekcije ispitanika po osnovu nasilnost

Dijagnoza	Nejbors (1987)	Hajd i Sajter (1987)	Teplin (1993)	Kot i Hodžins (1990)	Harli i Dan (1991)	Danijel (1991)	Teplin (1996)	Džordan (1996)
	m+ž	m+ž	m	m	ž	ž	ž	ž
Shizofrenija	2.8	1.5	3.7	6.5		7	2.4	
Teška depresija	11.3	12.7	5.7	14.8		19	16.9	13.0
Distimija	6.4	3.0					9.6	7.1
Bipolarni afektivni poremećaj	0.5	0.9		3.4				
Manična epizoda	1.1		2.5			2	2.6	
Agorafobija	12.0					6		
Panični poremećaj	1.6	0.9				2	1.6	5.8
Generalizovani anksiozni poremećaj	22.0						2.5	2.7
Opsesivno kompulzivni poremećaj	5.6					6		
Antisocijalni poremećaj ličnosti	50.1			61.5		29	13.8	11.9
Alkoholizam	46.5	28.6		66.9	zajedno	36	32.3	38.6
Narkomanija		28.7		48.9	sa 55.4	26	63.6	44.2

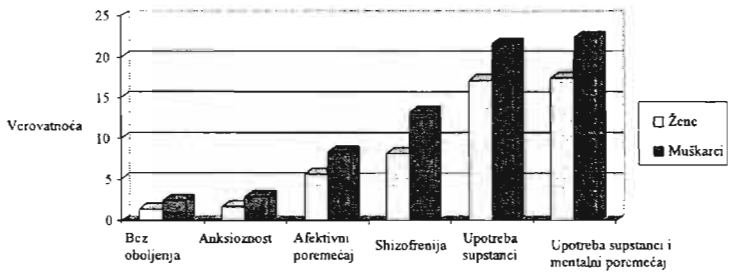
Istraživanja trećeg metodološkog pristupa

Poslednji, *treći* metodološki pristup u istraživanju ove veze, odnosi se na istraživanja u određenoj društvenoj zajednici (opštini, gradu, regionu). Za procenu se mahom koriste instrumenti tipa upitnika, koje najčešće popunjavaju sami ispitanici, a ponekad se kombinuju sa zvaničnim podacima o privođenju zbog agresivnih ispada. Ovi tipovi istraživanja imaju nekoliko prednosti u odnosu na prethodne. Prva se tiče eliminacije tzv. problema "kriminalizacije" psihijatrijskih pacijenata, odnosno, disproporcionalnog upućivanja istih na pravosudni sistem u odnosu na opštu populaciju. Druga je slična prvoj, a odnosi se na tzv. "medikalizaciju" nasilja, tj. na ponekad neadekvatno upućivanje takvih pojedinaca na lečenje, čime se povećava stopa nasilnih pojedinaca među psihijatrijskim pacijentima. I jedna i druga prednost se postižu zahvaljujući nezvaničnim podacima o nasilničkom ponašanju, koji se dobijaju od samih ispitanika. Treća prednost se odnosi na istu sredinu iz koje ispitanici potiču, pa se ne može prigovoriti da je u različitim sredinama takvo ponašanje manje ili više prisutno. Mane ovog pristupa su subjektivnost dobijenih podataka i, u nekim istraživanjima, izostavljanje onih pojedinaca koji se nalaze u institucijama (zatvori ili bolnice) zbog ozbiljnijih bolesti ili prestupa.

Do sad su objavljene tri značajna istraživanja ovog pristupa. Prvo istraživanje o kome ćemo ovde govoriti je urađeno korišćenjem podataka jednog šireg američkog epidemiološkog istraživanja (Epidemiologic Catchment Area Study), koje je urađeno na 20,000 ispitanika u pet regiona u Americi, sa ciljem da se odredi broj nelečenih psihijatrijskih poremećaja. Svonson i sa-

radnici [39] su obrađivali ispitanike iz tri grada: Baltimora, Darama i Los Anđelesa. Evaluirali su podatke dobijene od samih ispitanika, od kojih je traženo da se izjasne da li su u prethodnoj godini (godini koja je prethodila istraživanju) učinili nešto od sledećeg: udarili supružnika ili partnera, udarili dete toliko da se stvorila modrica ili da se moralo ići lekaru, razmenjivali udarce sa nekim ko nije supružnik ili partner, koristili oružje u tuči, ili se fizički obračunavali u pijanom stanju. Osobe sa mentalnim poremećajima su, uopšte uzev, značajno više učestvovale u nekom od pomenutih nasilničkih ponašanja. Za ispitanike sa dijagnozom shizofrenije taj rizik se povećava nešto više od četiri puta (4.1), a najveći rizik od nasilničkog ponašanja nose osobe koje pate od poremećaja vezanih za upotrebu psihoaktivnih supstanci, i on je u ovom istraživanju deset puta veći nego u opštoj populaciji. Grafikon 1. pokazuje pretpostavljenu verovatnoću nasilničkog ponašanja po polu i psihijatrijskim dijagnozama, dobijenu metodom logističke regresije u ovom istraživanju.

Grafikon 1.



Drugo istraživanje, koje su sproveli Link i saradnici [5] poredilo je psihijatrijske pacijente i ostale stanovnike Vašington Hajta, dela Njujorka sa etnički i socio-ekonomski vrlo heterogenim stanovništvom, po osnovu više službenih i neslužbenih podataka. Prvi su dobijeni iz policijske dokumentacije države Njujork, a drugi preko izjava koje su davali sami ispitanici. Tokom formiranja uzorka populacija psihijatrijskih pacijenata podeljena je u tri grupe: oni koji su imali prvi kontakt sa psihijatrijom u godini koja je prethodila intervjuu, oni koji su lečeni ranije, ali su bili na tretmanu i u godini koja je prethodila istraživanju i, najzad, oni koji su lečeni ranije, ali ne i u protekloj godini. Poređenjem sa zdravom populacijom, u grupi psihijatrijskih pacijenata nađena je značajno viša stopa privođenja zbog nasilnog ponašanja, i to kako po zvaničnim, tako i po podacima koje su davali sami ispitanici, zatim viša stopa fizičkih napada na druge, tučâ, korišćenja oružja, teških povreda nanesenih drugima. Vremenske koordinate su bile ili "do sada u životu", ili u "poslednjih pet godina". Dobijene razlike su opstale i posle stroge kontrole sociodemografskih činilaca. Najubedljiviju korelaciju sa nasilničkim ponašanjem kod psihijatrijskih pacijenata pokazala je psihotična simptomatologija. Ovakav rezultat, po mišljenju autora, podržava verodostojnost veze nasilničkog ponašanja i duševnih bolesti.

Trećim istraživanjem [40] autori su pokušali da daju odgovor na neka pitanja koja su ili nedovoljno obrađena, ili su promakla u prethodna dva. Jedno od tih pitanja je da li većina mentalnih oboljenja pozitivno korelira sa nasilničkim ponašanjem ili je ono ograničeno na određene komplekse simptoma ili specifične poremećaje. Sledeće se odnosi na mogućnost da veći deo ove povezanosti može biti pripisan specifičnim kontekstualnim činiocima, npr. da li je u toj određenoj društvenoj zajednici interpersonalna agresivnost u rešavanju sukoba uobičajena ili ne. Poslednja dilema se tiče pretpostavke da se nasilničko ponašanje kod mentalno obolelih može u celini objasniti komorbiditetom sa zloupotrebom psihoaktivnih supstanci i antisocijalnim poremećajem ličnosti. Istraživanje je obavljeno u Izraelu na 2,741 ispitaniku, starosti od 24-33 godine, korišćenjem istih instrumenata procene kao u prethodnom istraživanju. Psihijatrijske dijagnoze su bile raspoređene u sledećih pet kategorija: (1) psihotični poremećaji – shizofrenija, shizoafektivni poremećaj, nespecifične funkcionalne psihoze i teška depresija sa psihotičim simptomima; (2) bipolarni afektivni poremećaj i ciklotimija; (3) teška depresija bez psihotične simptomatologije; (4) generalizovani anksiozni poremećaj; (5) fobije. Uz to je procenjivan i komorbiditet. Dobijeni rezultati su slični onima koje su dobili i drugi autori, i ukazuju na kauzalnu vezu određenih tipova psihijatrijskih poremećaja i nasilničkog ponašanja. Psihotični poremećaji i bipolarni afektivni poremećaj su pokazali snažnu udruženost sa podacima o fizičkim konfliktima (tučama) (rizik se uvećava 3.3 puta) i korišćenjem oružja (rizik uvećan 6.6 puta). Značajnost ostaje i pored kontrole komorbiditeta sa zloupotrebom supstanci, antisocijalnim poremećajem ličnosti, te sociodemografskim parametrima. Ista veza nije potvrđena kod nepsihotičnih depresija, generalizovanog anksioznog poremećaja i fobija. Takođe je pokazano da, iako ne ključni, društveni činioci kao što je niži obrazovni nivo, bitno utiču na ispitivanu povezanost.

Tabela 8. Rizik od nasilničkog ponašanja kod muške psihijatrijske i prestupničke populacije u odnosu na opštu populaciju muškaraca

Dijagnostička kategorija	Broj ispitanika sa tom Dg u uzorku	Relativni rizik	Interval poverenja 95%
Anksiozni poremećaj	14 (1.5%) u uzorku 910 ubica	0.3	0.2-0.5
Distimija	13 (1.4%) u uzorku 910 ubica	0 6	0 3-1 0
Opšta populacija		1	
Mentalna retardacija	11 (1 2%) u uzorku 910 ubica	1.2	0.7-2.2
Teška depresija epizoda	27 (3.0%) u uzorku 910 ubica	1.6	1.1-2.4
Shizofrenija bez alkohola (1)	3 pacijenta sa violentnim prestupima u kohorti rođenih - 11,017	3 6	0.9-12.3
Teški mentalni poremećaji	82 u kohorti rođenih – 7,362	4.16	2.23-7.78
Shizofrenija bez alkohola (2)	48 pacijenata u uzorku 1,302 ubica	7 25	4 7-5.4
Shizofrenija psihot. spektar	58 (6%) u uzorku 910 ubica	8.0	6.1-10.4
Homicid recidivist sa jednim ranijim homicidom	35 između 1,584 ubica	10.4	7 4-14 5
Alkoholizam	357 (39 2%) u uzorku 910 ubica	10.7	9 4-12.2
Antisocijalni poremećaj ličnosti	103 (11.3%) u uzorku 910 ubica	11	9.5-14.4
Shizofrenija sa alkoholom (1)	38 (2.9%) u uzorku 1,302 ubica	17.2	12.4-23.7
Shizofrenija sa alkoholom (2)	4 pacijenta osuđena za violentne prestupe u kohorti rođenih – 11,017	25.2	6 1-97.2
Ubica – prva godina po izlasku iz zatvora	35 između 1,584 ubica	253.8	1,458-441.9
Sudski psihijatrijski pacijent – prva godina po otpustu iz bolnice	Studija praćenja sa srednjim vremenom od 7.8 godina	293.9	119,272.47

Na Tabeli 8. još jednom dajemo pregled rezultata dobijenih u nekim ovde pomenutim istraživanjima, a tiču se rizika od nasilničkog ponašanja kod određenih psihijatrijskih kategorija u odnosu na opštu populaciju.

Naši rezultati

Kako je procena rizika od nasilničkog ponašanja u ovoj populaciji pacijenata nezadovoljavajuća (uspešnost predviđanja 40-72%), u našem istraživanju pokušali smo da utvrdimo pomenute činioce rizika kod obolelih od shizofrenije. Istraživanje je urađeno u Institutu za neuropsihijatrijske poremećaje "Dr Laza Lazarević", gde se psihijatrijski zbrinjavaju pacijenti za oblast Beograda i šire okoline. Ispitanici su bili muški pacijenti sa dijagnozom shizofrenije (ICD-10), stari 18-45 godina, bez težih somatskih bolesti koje bi mogle uticati na rezultate biohemijskih analiza ili neurofizioloških nalaze. U prospektivnom istraživanju odabrano je 138 ispitanika kod kojih su prvo ispitani svi istraživani parametri: sociodemografski (polustrukturisani upitnik – 14 stavki), kliničko-psihopatološki (PANSS skala, Kalgarijska skala depresivnosti za shizofrene pacijente – DSS, Skala prehospitalne agresivnosti u okviru porodice – SPAUOP, pokušaji samoubistva, upotreba PAS), biohemijski (biogeni amini i njihovi metaboliti u plazmi – NA, DA, A, 5-HT, VMA, HVA, MHPG, 5-HIAA – HPLC tehnikom; testosteron u plazmi – RIA-CT metodom; holesterol u plazmi), i neurološko-neurofiziološki (NES skala, EEG). Nakon toga pacijenti su praćeni svo vreme bolničkog lečenja i po osnovu agresivnosti (Skala ispoljene agresivnosti – OAS) izdvojene su dve grupe: I grupa – shizofreni pacijenti koji su pokazali nasilničko ponašanje (nasilni, N = 50), i II grupa – shizofreni pacijenti koji nisu ispoljili agresivnost (nenasilni, N = 40). Ostali pacijenti nisu mogli biti svrstani ni u jednu grupu, jer je ispoljena nasilnost bila tek naznačena. Kod pacijenata grupe nasilnih registrovani su značajno lošiji odnosi u primarnoj porodici, veća učestalost duševnih bolesti u porodici, a tendencija značajnosti nađena je kod parametara "agresivnost u primarnoj porodici" i "lošiji uspeh u školi". Kao najpouzdaniji u predviđanju pokazali su se *kliničko-psihopatološki faktori*, pogotovu stavke PANSS skale. Grupa nasilnih imala je izraženiju psihopatologiju (klaster opšte psihopatologije i ukupni skor PANSS skale) i veće skorove na pozitivnom klasteru, gde je veza sa sumanutim idejama persekutornog tipa posebno naglašena. Istaknuto mesto među prepoznatim prediktivnim činiocima zauzimaju i nedostatak uvida u svoje stanje, uznemirenost, grandioznost, sumnjičavost, hostilnost, nekooperativnost i slabost kontrole impulsa. Hipoteza o koegzistenciji auto- i heteroagresivnosti i ovde je potvrđena u češćim pokušajima samoubistva u predistoriji pacijenata grupe nasilnih. Prediktivni značaj komorbiditeta sa poremećajima vezanim za upotrebu PAS prepoznat je u većoj učestalosti pušenja i zloupotrebe drugih PAS u grupi nasilnih, što je tumačeno na više nivoa, od biološkog do socijalnog. Od *biohemijskih činilaca,* prediktivnim značajem izdvojile su se visoke vrednosti 5-HT, NA, i MHPG u plazmi nasilnih ispitanika, kao i negativna korelacija

nivoa holesterola i fizičke agresivnosti. Kao najmanje ubedljivi pokazali su se *neurološko-neurofiziološki činioci,* što je verovatno vezano za izostanak ekstremnijih oblika nasilnosti kod nasilnih ispitanika, te dobijene značajne razlike nisu imale potreban kvantitet da bi mogle biti tretirane kao validne. Nalazi idu u prilog stavu da je sklonost nasilnom ponašanju rezultat akumulacije činilaca rizika, od kojih nijedan zasebno nije niti neophodan, niti dovoljan za predviđanje. I više od toga, videli smo da je preporučljivo sagledavati različite grupe varijabli, jer ne postoji samo jedan put kojim se može objasniti nasilničko ponašanje.

Zaključak

Na kraju ovog pregleda možemo reći da rezultati većine istraživanja u sva tri metodološka pristupa jasno pozitivno koreliraju. Uprkos različito osmišljenim istraživanjima, kod svih je dobijen značajno veći rizik od nasilničkog ponašanja za populaciju psihijatrijskih pacijenata u odnosu na one koji to nisu. No, opet ne kod svih, nego samo kod određenih dijagnostičkih kategorija, kao što su poremećaji povezani sa upotrebom psihoaktivnih supstanci, antisocijalni poremećaj ličnosti, psihotični poremećaji i bipolarni afektivni poremećaj (Tabela 3, 5, 7, 8). Verovatno je da aktivni psihopatološki sadržaji, posebno oni koji se tiču poremećaja opažanja, mišljenja i afekta, imaju veću važnost u proceni rizika nego dijagnoza sama po sebi. Može se pretpostaviti da je ta veza psihijatrijskih oboljenja i violentnog ponašanja kauzalnog tipa, ali se moraju uzeti u obzir i specifične okolnosti, kontekst u kojem se međusobno prepliću psihopatologija i činioci sredine. Mora se ipak naglasiti da je obim udruženosti mentalnih oboljenja i nasilničkog ponašanja, ma koliko statistički značajan, ipak skroman u odnosu na činioce kao što su pol, starost, obrazovni nivo ili socioekonomski status [11].

Do sad rečeno neizbežno vodi ka odbacivanju prva dva viđenja ovog problema, gde se, da podsetimo, povezanost ova dva entiteta ili negira, ili smatra lažnom. Potrebna su ipak dalja istraživanja koja će otkloniti mane dosadašnjih i rezultate time učiniti validnijim. Po preporuci koju daju Link i Stuve [25], dobro epidemiološko istraživanje ovog problema trebalo bi da bude osmišljeno na sledeći način: (1) specifikovati psihijatrijsko oboljenje ili oboljenja od značaja za istraživanje; (2) pratiti reprezentativni uzorak ljudi koji ne boluju od specifikovanog(nih) oboljenja, i one koji su prvi put oboleli od specifikovanog(nih) oboljenja; (3) upoređivati grupe na osnovu nasilničkog ponašanja (vrstu, učestalost, intenzitet) koje će se u perspektivi pojavljivati. To istraživanje bi dalje trebalo da uključi sveobuhvatni paket pozadinskih varijabli (individualnih i kontekstualnih) koje mogu uticati na rezultate, i da nađe način da operacionalizuje procenu nasilničkog ponašanja koristeći službene i neslužbene podatke.

U zaključku treba reći i to da je vrlo važno gde ćemo mi psihijatri postaviti ovaj odnos mentalnih bolesti i raznih oblika nasilnog ponašanja. Način na koji mi to sagledamo obojiće stavove zvaničnih struktura društva i,

još važnije, uticaće na ukupni odnos drugih ljudi prema psihijatrijskim pacijentima. Ne smemo zaboraviti da većina mentalno obolelih nije nasilna, da su često pre žrtve nego napadači. I kada su nasilni, mnogo je verovatnije da će nasilje biti usmereno prema članovima porodice nego prema ljudima na ulici, na poslu, u školi itd. Na žalost, kako je problem nasilja, videli smo, prisutniji kod njih nego u opštoj populaciji, nužno je prepoznati činioce koji do toga dovode. Time ćemo moći sprečiti ovakva ponašanja, na vreme prepoznati takve pojedince i razlikovati ih od većine drugih koji nisu nasilni.

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ARE THE MENTALLY ILL MORE PRONE TO AGGRESSIVE BEHAVIOR?

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Abstract: Idea of the connection between aggressiveness and mental disorders is present in the people of different cultures since the beginning of time. Paradoxically, this connection is still not fully accepted in professional circles, although the studies conducted in the past fifteen or so years clearly indicate its credibility. This article presents possible arguments and four current perspectives on understanding this connection. Most of the article contains a review of numerous studies conducted on this subject in the past fifteen years, divided according to three basic methodological approaches: studies of prevalence of aggressive behavior among patients who have been or are still treated in psychiatric institutions; studies of prevalence of mental disorders among persons who committed violent criminal acts and were placed in correctional facilities, and studies of prevalence of both mental disorders and violent behavior in the general population sample in a specific community. The results of most studies in each of the approaches almost invariably indicate a significantly higher risk of aggressive behavior in the population of psychiatric patients as compared to the general population, particularly in specific diagnostical categories such as disorders connected with psychoactive substance abuse, psychotic disorders, bipolar affective disorder. In the conclusion, deficiencies of earlier studies are addressed, and a draft proposal is presented for the better quality of future studies on this subject. Finally, the author emphasizes the importance of the psychiatrists' attitude to this delicate issue, where the study of risk factors and consequent prevention of aggressiveness in this population would prove a far more rational option than unsubstantiated denial of the obvious, which was the case so far, and yet, it would also prove beneficial for the patients themselves, since detecting the aggressive individuals would help differentiate them from the majority of patients, who are not aggressive.

Key words: *aggressiveness, criminality, mental disorders, stigma, epidemiology*

Introduction

In almost all known cultures in the course of history, aggressiveness and mental disorders (illnesses) were brought into connection. In one of his discussions, Socrates commented that the number of the mentally ill in Athens had to be very small, since there was very little violence [1]. The public fear of the mentally ill has always been present and well documented [2,3,4]. A phone survey conducted in 1990 covering the entire territory of the USA demonstrated that 80% of participants supported at least one of the following statements: the mentally ill are more prone to acts of violence than other people; it is only natural to be afraid of a mentally ill person; it is important to keep in mind that former patients of mental institutions can be dangerous (Link BG, Columbia University, unpublished manuscript). Violent acts of the mentally ill are more terrifying to us than other forms of violence. To ordinary man, they seem mindless, illogical, unpredictable, deadly. Strangely, perhaps ironically, this connection that men have been aware of for centuries, began to be accepted by the mental health professionals only ten to fifteen years ago. There are several reasons for that.

First of all, the insufficiently conclusive studies examining the connection between aggressive behavior and mental illnesses. Such studies often have limited validity, due to: non-standardized or unclear definitions of aggressive (violent) behavior, mental illness, or both; relying mainly on official data, which causes a specific type of deviation (see the following text); comparisons with persons who are not mentally ill, with the exclusion or partial inclusion of demographic and situational factors, and study designs that were, as a rule, retrospective in character [1,5,6,7].

Secondly, the attitude of a society towards the mentally ill aggressive persons varies in the course of time, both in a specific culture, and between different cultures. There are diverse ways of coping with the problem, from guarding the mentally ill within their families, to ignoring them, placing them in hospitals, prisons, and even executing them. Until 1960's, the results of many studies, relying on the official data on the arrest rate due to aggressive behavior, indicated that the mentally ill are not more prone to violent acts as compared to general population [8]. At that time, however, most patients remained institutionalized for the most of their lives. The subsequent policy of deinstitutionalization led to a significant increase in this rate. The pressure to downsize mental institutions and release the patients has done ill favor to many of them, leaving them at the street. Several studies in America indicate that the mentally ill individuals, who are also homeless, are highly prevalent among violent offenders [9]. The main cause is believed to be the lack of adequate psychiatric treatment, considering that they do not present for treatment on their own, and have no family or close persons to look after them.

Thirdly, in the past two decades, the use of psychoactive substances such as cocaine, heroin, hallucinogens, sedatives and others, together with alcohol,

made a grand entrance in the everyday life and led to the general increase in the rate of violence. It has also affected the rate of violence in the mentally ill [10].

Fourthly, the psychiatrists were right to be cautious about further stigmatization of the mentally ill by a story that at the time seemed highly unlikely [8] and linked with potential misuse. Some authors [11] indicate that the mentally ill have often been scapegoats, the easiest persons to blame in the societies with evident violence problems. The presumed danger to others has always been the basic cause of stigmatization of the mentally ill, which influences all aspects of their life.

In the past fifteen years, the corpus of evidence on the credibility of the connection between mental disorders and violent behavior has significantly increased. This evidence cannot be ignored, nor easily refuted any more. Certain doubts, however, still stand. We will here present a review of epidemiologic articles on the relation between violent behavior and mental disorders, having in mind the lack of information on this issue among the professionals and the general public in our country.

Generally speaking, there are four perspectives among the researchers on comprehending this relation. The first, with far less supporters than before, denies any connection between mental disorders and violence. The second perspective supports this association, but defines it as false, artificial. The third viewpoint supports causal connection between aggression and mental disorders and tries to identify the exact element of such disorders that causes aggressive acts. Finally, the fourth perspective also supports causal relation, but it connects it to social context.

Review of epidemiological studies

Numerous differently designed epidemiological studies have proved or refuted these ideas, with more or less success. Neither one of the study designs proved to be ideal for this area. On the whole, there are three basic methodological approaches in assessing the potential connection between mental disorders and violent behavior: *first*, studies of prevalence of violent behavior among patients who have been or are currently treated in psychiatric institutions; *second*, studies of prevalence of mental disorders among convicted and incarcerated felons and; *third*, studies of prevalence of both mental disorders and violent behavior in the general population sample in a specific community [12].

Studies of the first methodological approach

In view of the *first* approach, different research strategies have been used: retrospective studies of treated psychiatric patients, monitoring studies of released psychiatric patients, retrospective and prospective studies of psychiatric patients born during a specific period of time. For the assessment of violent behavior, the records before, during or after the hospital treatment have been used. Each of these ways of assessment has its flaws that ought to

be taken into account. If the data are collected prior to hospitalization, an error occurs that often makes generalization of the results impossible – agitated or aggressive behavior is the usual reason for hospitalization. Similarly, results can be inconclusive if assessments are made during hospitalization, and also if aggressive behavior is corrected in the course of treatment. In addition, it can be assumed that severe mental disorders, such as schizophrenia, are treated and hospitalized more frequently, which causes their number in the sample to increase. Finally, assessment after the release is lacking in validity since patients are only released when they are no longer aggressive. On the other hand, the advantage of such studies is that they rely on official data, and are not compromised by subjectivity. In addition, studies of persons born during a specified time period include all registered patients, regardless of the severity of the disease and frequency of hospitalization, and for that reason they are considered to have the highest value in the generalization of the results.

A great majority of studies conducted according to the above methodological approach detected the increased risk of violent behavior in specific psychiatric disorders. For example, the studies of Modestin and Amman [13,14], exploring the prevalence of criminal acts linked with violent behavior in the population of psychiatric patients at the University Clinic in Bern, Switzerland, point to the three to four times higher risk in male patients suffering from schizophrenia and related disorders, as compared to general population. The retrospective study of schizophrenic patients born in Stockholm between 1920 and 1959 points to the 3.8 times higher risk of violent behavior [15]. The same result was obtained by Wesley et al. [16] in male schizophrenic patients who received their first psychiatric treatment in London in the period of 1964-1984. The highest increase of the risk of aggressive behavior in schizophrenic patients was discovered by Tiihonen et al. [17]. Monitoring a cohort of persons born in Northern Finland, they found that the probability of convictions for violence-related criminal acts was seven times as high as compared to persons with no psychiatric diagnoses. When assessing the risk in psychotic disorders on the whole, the discovered increase was four times for men, and even higher for women [18]. All studies of this type detected a significantly higher risk of aggressive behavior in disorders related to psychoactive substance abuse. In the cohort analysis of 15,117 persons born in Stockholm, Sweden, Hodgins discovered that the relative risk in men with this problem was 15.4, while in female population of users the risk was present in even up to 54.6% [18]. As we can see, the rate is significantly higher than in psychotic disorders. Comparative study by the same author and her associates [19], conducted in Denmark on a large non-selective birth cohort, provided similar results related to the issue. Approximately equal findings were obtained by other researchers as well [13]. Relative risk for the antisocial personality disorder was found to be 7.2 for men and 12.1 for women, i.e. the risk is that much higher as compared with the general population [19]. A remarkable early paper by Rabkin, from the late 1970's [20],

presenting a review of seven studies of the psychiatric patients' arrest rate, demonstrated that studies conducted before 1965 do not indicate increased arrest rate in psychiatric patients, as opposed to the period of 1965-1979 when every study showed the opposite result. If the later published studies of the same type [21,22,23,24] are combined with Rabkin's review, the result is the ratio of 3:1 related to the arrest rate – psychiatric patients: general population [25]. The following Tables (1, 2) present a review of the more significant studies using this type of approach.

Table 1. Retrospective studies of patients admitted to psychiatric treatment (first five) and retrospective cohort studies (final two)

Authors	Location	Time period	N	Gender	Dg group	Definition of aggressiveness
Humphreys et al. (1992)	Northwick Park	?	253	m + f	Sch (ICD-9)	Life-threatening behavior (estimate of relatives)
Modestin & Amman (1995)	Bern	1987	1,265	m + f	All disorders (ICD-9)	Official data (police)
Modestin & Amman (1996)	Bern	1985-1987	282	m	Sch (RDC)	Official data (court)
Volavka et al. (1997)	Check Republic, Denmark, Ireland, Japan, GB, USA, USSR, India, Nigeria	1987	1,017	m	Sch (ICD-9)	Physical assaults (estimate of others)
Muntaner et al. (1998)	Baltimore	1983-1989	1,670	m +f	Psychoses (DSM-III)	Data obtained from the respondents
Lindquist and Allebeck (1990)	Stockholm	1971-1986	790	m + f	Sch (ICD-8)	Official (court)
Wessely et al. (1994)	London	1964-1984	538	m + f	Sch (ICD-9)	Official (court) and data from the respondents

Table 2. Monitoring studies of treated psychiatric patients (first three) and prospective monitoring birth cohort studies (final four)

Authors	Location	Time period	N	Gender	Dg group	Definition of aggresiveness
Swanson et al. (1997)	North Carolina	1986-1991	169	m + f	Severe mental disorders.[a]	Official (hospital, court) and respondents
Steadman et al. (1993, 1998)	Pittsburgh, Cansas City Worchester	1992-1995	1,136	m + f	Selected mental disorders[b]	Data obtained fom the respondents
Schwartz et al. (1998)	North Carolina	?	331	m + f	Severe mental disorders[a]	Official (court, police) and respondents
Ortmn (1981)	Copenhagen	1953-1978	11,540	m	All disorders	Official data (court)
Hodgins (1992)	Stockholm	1953-1983	15,117	m + f	All disorders	Official (court)
Hodgins et al. (1996)	Denmark	1944-1947	358,180	m + f	All disorders	Official (court)
Tiihonen et al. (1997)	North Finland	1966-1992	12,058	m + f	All disorders	Official (court)

[a] Schizophrenia, paranoid psychoses, affective psychoses
[b] Schizoplrenic spectrum, affective spectrum, paranoid psychoses, substance abuse

Table 3. shows results obtained in some of the above studies.

Table 3. Relative risk of violent behavior in mental patients (as compared to general population, where the assumed risk is 1.0)

Authors	Severe mental disorders	Organic disorders	Sch	Affective disisorders	Anxiety disisorders	Disorders related to substance abuse	Antisocial perersonality disorder
Modestin & Amman, (1995)			m – 3.1	m – 8.8		m – 6.5	
Modestin & Amman, (1996)			m – 3.9				
Lindquist & Allebeck, (1990)			m – 3.9				
Hodgins, (1992)	m – 4.2 f – 27.4					m – 15.4 f – 54.6	
Hodgins et al., (1996)	m – 4.5 f – 8.7	m – 2.6				m – 8.7 f – 15.1	m – 7.2 f – 12.1
Tiihonen et al., (1997)		m – 5.0	m – 7.2			10.4	
Swanson et al., (1992)			4.1	1.7	1.2		
Stueve & Link, (1997)	3.6[a]/10.1[b] 3.3[a]/6.6[b]			1.4[a]/1.5[b]	1.3[a]/1.2[b]		

[a] Risk of physical assault; [b] Risk of using weapons

Studies of the second methodological approach

The second methodological approach is represented by two types of studies: the studies conducted on convicted murderers and diagnostical studies of the representative sample. The studies established on these grounds, as well as a part of studies of the previous approach which analyze the arrest rate of psychiatric patients, have a common weakness: the unsolved dilemma whether the psychiatric patients are arrested more or less frequently. The second problem, affecting only this type of studies, refers to the fact that the evaluation does not include felons-psychiatric patients who were ordered compulsory treatment instead of prison sentence. Both rulings mostly depend on the country and its legislation [26,27]. The third weakness of this type of approach is that it does not include minor aggressive attacks, which are not a sufficient reason for placement in a correctional facility. The advantage of this type of studies, similarly to the previous approach, is working with official data.

The first example of studies conducted on convicted murderers is coming from Finland, a country particularly suitable for this type of research, for two reasons. The first one is a high percentage of solved murders – up to 97%, and the second is that every criminal is obliged to undergo a detailed psychiatric evaluation. In several published articles, the authors from Finland, primarily Mark Eronen, discovered that the risk of commiting murder is eight times higher in men suffering from schizophrenia as compared to the normal population, ten times higher in alcoholics, and even more than eleven times higher in antisocial perso-

nality disorder, while affective and anxiety disorders do not cause the relative risk to increase [28,29,30]. The following three studies, two from Scandinavia and one from Canada, also indicate that among violent offenders there is a large number of persons with severe mental disorders. Gottlieb et al. [31], in their study of murderers in Copenhagen in the period of 1959 and 1983, found that 20% of men and 44% of women were diagnosed as psychotic. Among them, 41% of men and 13% of women suffered from a substance abuse related disorder. The results of this research showed that in psychotic persons, the risk of committing murder increases six times for men and even sixteen times for women. The following study conducted by Lindquist [32] in Sweden, on the overall population of persons who have committed murder in the period of 1970-1981, discovered that the percentage of psychotic criminals was 53%, and that 38% of disorders were related to psychoactive substance abuse. Finally, the Canadian study conducted on the representative sample of male homicidal criminals, convicts of the Quebec prison, points to a significantly higher frequency (35%) of severe mental disorders (psychoses and severe affective disorders) as compared to other offenders imprisoned in the same facility. In the group of homicidal criminals, 83% had a history of alcohol and 63% of drug addiction. The studies of homicidal recidivist, in the same context, were also highly significant. A Swedish study conducted on the sample of twenty-one repeat killers, found that they were also involved in other types of violent behavior, and that the majority fall into the diagnostic group of personality disorders. Many of them were also alcohol and drug addicts, and 10% was suffering from schizophrenia [33]. Tiihonen and Hakola [34] studied 13 repeat killers, who committed their last crime in the last three years and were imprisoned or placed in a high-security psychiatric institution since then. Mental disorders were diagnosed in all subjects, severe alcoholism combined with personality disorder in eleven of them, and schizophrenic disorder in the remaining two.

Table 4. Same studies of homicidal offenders

Authors	Location	Time period	N	Gender	Diagnostic criterion
Lindquist, (1986)	North Sweden	1970-1981	64	m + f	?
Gottlieb et al , (1987)	Copenhagen	1959-1983	263	m + f	ICD-8
Cote & Hodgins, (1992)	Quebec	1988	87	m	DSM-III
Eronen et al., (1996) a, b	Finland	1984-1991	693	m + f	DSM-III-R

Table 5. Risk of homicidal behavior among male psychiatric patients as compared with general male population

Diagnosis	Rate in 100	Relative risk	95% Recidive interval
Anxiety disorder	1.5	0.3	0.2-0.5
Dysthymia	1.4	0.6	0.3-1.1
Mental retardation	1.2	1.2	0.9-2.2
Severe depressive episode	3.0	1.6	1.1-2.4
Sch without alcoholism	3.7	7.2	5.4-9.7
Sch psychotic spectrum	6.4	8.0	6.1-10.4
Alcoholism	39.2	10.7	9.4-12.2
Antisocial personality disorders	11.3	11.7	9.5-14.4
Alcoholism and previous homicide		13.3	8.9-20.0
Sch with alcoholism	2.9	17.2	12.4-23.7
Sch and previous homicide		25.8	9.6-69.6

A major deficiency of the studies of the representative sample of general population of prison inmates, i.e. of prevalence of mental disorders in this population, is that they do not differentiate between violent and non-violent offenses. In spite of this limitation, however, they can help us obtain a general image of the association between mental illnesses and violent behavior. An exceptionally increased rate of alcoholism, substance abuse and antisocial personality disorder was detected in the prison population, especially in female inmates, as compared to general population. The comorbidity of all three disorders is frequent as well [35]. The increased rate of more severe mental disorders, such as schizophrenia or severe affective disorders, as compared to the general population, is reported in a number of published researches conducted on prisoners of both sexes [36, 37,38]. Such serious epidemiological analyses have not been carried out for the territory of our country. We can say that, according to the information available to us, there were practically no significant studies in the last twenty to thirty years, not only considering this one, but also other approaches to this issue.

Table 6. Diagnostical studies of the representative sample of convicted offenders (prison inmates)

Authors	Location	Time period	N	Gender	Diagnostical criteria
Taylor, (1985)	London, GB	?	203	m	
Hyde & Seiter, (1987)	Ohio, USA	?	509	m+f	DSM-
Neighbors et al., (1987)	Michigen, USA	1986	1,070	m+f	DSM-III-R
Danielet al., (1998)	Missouri, USA	?	100	f	DSM-III
Hodgins & Cote, (1990)	Quebec, Canada	1988	495	m	DSM-III
Teplin, (1990)	Cook County, USA	1983-1984	728	m	DSM-III
Hurley & Dune, (1991)	Brisbane, Australia	1989	92	f	DSM-III-R
Teplin et al., (1996)	Cook County, USA	1991-1993	1,272	f	DSM-III-R
Jordan et al., (1996)	North Carolina, USA	1991-1992	805	f	DSM-III-R

Table 7. Lifetime prevalence of psychiatric disorders in convicted offenders (prison inmates) without the aggressiveness-based selection of respondents

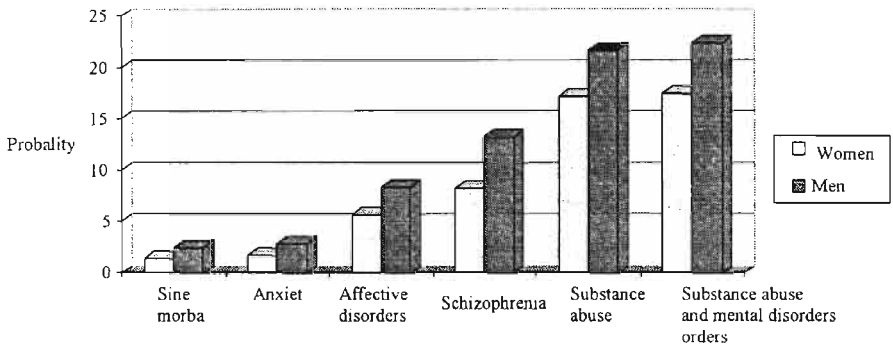
Diagnosis	Neigbors, (1987)	Hyde & Seiter (1987)	Teplin (1993)	Cote & Hodgins (1990)	Hurley & Dune (1991)	Daniel (1991)	Teplin (1996)	Jordan (1996)
	m+f	m+f	m	m	f	f	f	f
Schizophrenia	2.8	1.5	3.7	6.5		7	2.4	
Severe depression	11 3	12.7	5.7	14.8		19	16.9	13.0
Dysthymia	6.4	3.0					9.6	7.1
Bipolar affective disisorders	0.5	0.9		3.4				
Manic episode	1.1		2.5			2	2.6	
Agoraphobia	12.0					6		
Panic disorders	1.6	0.9				2	1.6	5.8
General anxiety disorders	22.0						2.5	2.7
Obssesive compulsive disorders	5.6					6		
Antisocial personality disorders	50.1			61.5		29	13.8	11.9
Alcoholism	46.5	28.6		66.9	Together	36	32.3	38.6
Substance abuse		28.7		48.9	with 55.4	26	63.6	44.2

The studies of the third methodological approach

The final, *third* methodological approach to the research of this association refers to the studies in a selected community (municipality, town, region). The instruments used for assessment are mostly questionnaires filled in by the subjects themselves and sometimes combined with the official data on the arrests due to aggressive outbursts. These types of studies have several advantages over the previous ones. First of all, they eliminate the issue of the so-called "criminalization" of psychiatric patients, i.e. disproportionate referral to the judicial system as compared to the general population. The second advantage, similarly, refers to the so-called "medicalization" of aggressiveness, i.e. to the occasionally inadequate referral of aggressive individuals to treatment, which increases the rate of aggressive individuals among psychiatric patients. Both advantages are achieved by means of unofficial data on violent behavior, obtained from the respondents themselves. The third advantage relates to the fact that all respondents come from the same environment, so it cannot be objected that in different environments aggressive behavior is present to a different extent. The limitations of this approach are the subjectivity of the information obtained and, in certain studies, exclusion of individuals placed in institutions (prisons or hospitals) due to severe illnesses or offenses.

So far, three significant studies with this approach have been published. The first study we will address here was conducted with the use of data obtained in a wider American epidemiologic study (Epidemiologic Catchment Area Study), which included 20,000 respondents in five rgions in America, with the aim to establish the number of untreated psychiatric disorders. Swanson et al. [39] processed the respondents from three cities: Baltimore, Durham and Los Angeles. They evaluated the data obtained from the respondents themselves, who were asked to declare if they had done something of the following in the previous year: hit their spouse or partner, hit the child so hard it bruised or had to see a doctor, fought with someone other than their spouse or partner, used weapons in a fight or resorted to physical violence while intoxicated. Persons with mental disorder were, generally speaking, more frequently involved in the above aggressive behavior. In the respondents diagnosed with schizophrenia, the risk is over four times higher (4.1), and the highest risk of aggressive behavior is detected in persons suffering from disorders related to psychoactive substance abuse, according to this study, ten times higher than in the general population. Fig. 1. shows the presumed probability of aggressive behavior according to gender and psychiatric diagnoses obtained by the method of logistic regression.

Fig. 1.



The second study, conducted by Link et al. [5] made a comparison between the psychiatric patients and other residents of Washington Heights, a part of New York with ethnically and socio-economically highly heterogenous population, based on a number of official and unofficial information. The former were obtained from the state of New York police records, and the latter from the statements obtained from the respondents themselves. In the course of forming the sample, the population of psychiatric patients was divided into three groups: those who had first contact with psychiatry in the year preceding the interview, those who were treated earlier, including the year preceding the interview, and, finally, those who were treated earlier, but not in the previous year. By the comparison with the psychiatrically unburdened part of the population, a significantly higher arrest rate due to aggressive behavior was detected in the psychiatric patients group, both according to official records, and according to the information provided by the respondents, as well as a higher rate of physical assaults on other people, fights, use of weapons, severe injuries to others. Time coordinates were either "so far in my life", or "in the past five years". The differences remained even with the strict control of sociodemographic factors. The most compelling correlation with aggressive behavior in psychiatric patients was observed in psychotic symptomatology. This result, in the authors' opinion, supports the credibility of association between aggressive behavior and mental illnesses.

In the third study [40] the authors attempted to provide answers to the questions that were either insufficiently considered, or omitted from the previous two studies. One of the questions is whether the majority of mental illness has positive correlation with aggressive behavior, or this behavior is limited to specific complexes of symptoms or specific disorders. The following question refers to the possibility that for the most part, this association can be attributed to specific contextual factors, e.g. whether interpersonal aggressiveness is a common way of resolving conflicts in a particular community or not. The final dilemma refers to the assumption that aggressive behavior in the mentally ill can be fully explained by the comorbidity with psychoactive substance abuse and antisocial personality disorder. In Israel, a

study was conducted on 2,741 respondents, 24-33 years of age, with the use of the same assessment instruments as in the previous study. The psychiatric diagnoses were divided in the following five categories: (1) psychotic disorders – schizophrenia, schizo-affective disorder, non-specific functional psychoses and major depression with psychotic symptoms; (2) bipolar affective disorder and cyclothymia; (3) major depression without psychotic symptomatology; (4) generalized anxiety disorder; (5) phobias. Comorbidity was assessed as well. The results were similar to those obtained by the other authors, indicating the causative association between specific types of psychiatric disorders and aggressive behavior. Psychotic disorders and bipolar affective disorder showed a considerable co-occurrence with the data on physical conflicts (fights) (the risk is 3.3 times higher) and the use of weapons (the 6.6 times higher risk). The significance remains even after controlling for comorbidity with substance abuse, antisocial personality disorder, and sociodemographic parameters. The correlation, however, was not confirmed in non-psychotic depressions, generalized anxiety disorder and phobias. It was also demonstrated that certain social factors, such as lower educational level, have significant influence on the explored association.

Table 8 presents an additional review of results obtained in some of the above studies, related to the risk of aggressive behavior in specific psychiatric categories as compared to the general population.

Table 8. Risk of aggressive behavior in male psychiatric and criminal population as compared to the general male population

Diagnostical category	No. of respondents with this Dg in the sample	Relative risk	Recidive interval 95%
Anxiety disorder	14 (1.5%) in the sample of 910 murderers	0.3	0.2-0.5
Dysthymia	13 (1.4%) in the sample of 910 murderers	0.6	0.3-1.0
General population		1	
Mental retardation	11 (1.2%) in the sample of 910 murderers	1.2	0.7-2.2
Severe depressive episode	27 (3.0%) in the sample of 910 murderers	1.6	1.1-2.4
Sch without alcohol (1)	3 birth cohort patients with violent crimes – 11,017	3.6	0.9-12.3
Severe mental disorders	82 in birth cohort – 7,362	4.16	2.23-7.78
Sch without alcohol (2)	48 patients in the sample of 1,302 murderers	7.25	4.7-5.4
Sch psychotic spectrum	58 (6%) in the sample of 910 murderers	8.0	6.1-10.4
Homic recidivists with a prior homicide	35 out of 1,584 murderers	10.4	7.4-14.5
Alcoholism	357 (39.2%) in the sample of 910 murderers	10.7	9.4-12.2
Antisocial disorder I.	103 (11.3%) in the sample of 910 murderers	11	9.5-14.4
Sch with alcoholic (1)	38 (2.9%) in the sample of 1,302 murderers	17.2	12.4-23.7
Sch with alcoholic (2)	4 patatients convicted for violent crimes in the birth cohort – 11,017	25.2	6.1-97.2
Murderer – first year after release from prison	35 out of 1,584 murderers	253.8	145.8-441.9
Forenzic psychiatric patient – first year after release from hospital	Monitoring study with the average duration of 7.8 years	293.9	119.2724.7

Our results

Since the prediction of risk of aggressive behavior in this population of patients is insufficient (40-72% of successful predictions), in our study we have tried to establish the above risk factors in persons suffering from schizophrenia. The study was conducted at the "Dr Laza Lazarevic" Institute of Neuropsychiatric Disorders, where psychiatric care is provided for the patients of this profile for the territory of Belgrade and the surrounding area. The respondents were male patients diagnosed with schizophrenia (ICD-10), 18-45 years of age, with no severe somatic illnesses that could influence the results of biochemical analyses of neurophysiological findings. In the prospective study, 138 respondents were selected and examined for all the tested parameters: sociodemographic (semi-structured questionnaire – 14 items), clinical-psychopathological (PANSS scale, Calgary Depression scale for schizophrenic patients – DSS, Scale of prehospital aggressiveness within family – SPAUOP, sucide attempts, use of PAS), biochemical (biogenic amines and their metabolites in plasma – NA, DA, A, 5-HT, VMA, HVA, MHPG, 5-HIAA – HPLC technique; testosteron in plasma – RIA-CT method; cholesterol in plasma), and neurological-neurophysiological (NES scale, EEG). The patients were subsequently monitored during the entire course of hospital treatment and based on aggressiveness (Overt Aggression Scale – OAS) two groups were differentiated: group I – schizophrenic patients with manifested aggressive behavior (aggressive, N = 50), and group II– schizophrenic patients with no manifest aggressiveness (non-aggressive, N = 40). The remaining patients could not be assigned to any of the groups, since the aggressiveness they manifested was only minor. Significant deterioration of the primary family relations, and higher prevalence of mental illnesses in the family were registered in the group of non-aggressive patients, and the tendency of significance was also detected in the parameters "aggressiveness in the primary family" and "poor school achievement". *Clinical-psychological factors* turned out to be the most reliable predictors, particularly items of the PANSS scale. The group of aggressive patients had a more manifest psychopathology (general psychopathology cluster and total score in the PANSS scale) as well as higher scores in the positive cluster, with a particular emphasis on the correlation with delusional persecutory ideas. Lack of insight in one's own condition, apprehension, grandiosity, suspiciousness, hostility, lack of compliance and poor control of impulses are also to be found among the recognized predictive factors. The hypothesis on the coexistence of auto- and hetero aggressiveness is also confirmed here, by more frequent sucide attempts registered in the history of patients in the aggressive group. Predictive significance of the comorbidity with disorders related to PAS abuse was recognized in the higher prevalence of smoking and abuse of other PAS in the aggressive group, which was interpreted in several levels, from biological to social. Among *biochemical factors*, high values of 5-HT, NA and MHPG in the plasma of aggressive respondents, proved to be

of major predictive significance, as well as the negative correlation of cholesterol level and physical aggressiveness. The least conclusive were *neurological-neurophysiological factors,* which were probably connected with the lack of more extreme forms of violence in aggressive respondents, so the obtained significant differences did not have the required quantity to be treated as valid. The findings speak in favor of the opinion that the tendency toward aggressive behavior is a result of accumulated risk factors, and any of the factors individually is neither a necessary, nor a sufficient predictor. What's more, different groups of variables ought to be taken into consideration, since there is clearly more than one way to explain aggressive behavior.

Conclusion

In the end of this review, we can say that the results of a vast majority of studies with all three methodological approaches have clear positive correlations. In spite of their different designs, all studies indicate a significantly higher risk of aggressive behavior in the population of psychiatric patients as compared to those who are not. However, not in all, but only in specific diagnostic categories, such as disorders related to psychoactive substance abuse, antisocial personality disorder, psychotic disorders, bipolar affective disorder (Tab. 3, 5, 7, 8). It is likely that active psychopathological contents, especially related to disorders of perception, thinking and affect, are of more importance for the assessment of risk than the diagnosis on its own. It can be presumed that the connection between psychiatric disorders and violent behavior is causative, but specific circumstances, context in which psychopathology and situational factors are intertwined, also have to be taken into consideration. Still, we have to emphasize that the scope of co-occurence of mental disorders and aggressive behavior, however statistically significant, is still minor as compared to factors such as gender, age, educational level or socio-economical status [11].

What is presented so far, inevitably leads to dismissal of the first two opinions on this issue, where the association between the two entities was either denied or considered false. However, further studies are needed to correct the deficiencies of the previous ones and make the results more valid. As recommended by Link and Stueve [25], a good epidemiological study of this issue should be designed in the following manner: (1) to specify the psychiatric illness or illnesses of interest to the study; (2) to monitor the representative sample of persons unaffected by the specified illness(es); (3) to compare the groups on the basis of aggressive behavior (type, frequency, intensity) to occur in the perspective. The study should further include a broad set of background variables (individual and contextual) that could influence the results, and to find the way to operationalize the assessment of aggressive behavior by using official and unofficial data.

In conclusion, it should also be noted that it is of major importance where we, the psychiatrists, will position the association between mental ill-

nesses and various forms of aggressive behavior. The way we consider this issue will influence the opinion of official structures of the society, and, more importantly, the overall attitude of other people toward psychiatric patients. We must not forget that the majority of the mentally ill are not aggressive, that they are victims more often than attackers. Even when they are aggressive, it is much more likely that the aggression would be aimed at their family members and not people in the street, at work, in school, etc. Unfortunately, since the problem of violence, as we have seen, is more present in them than in the general population, it is essential to identify such individuals in time and differentiate them from the majority of non-aggressive patients.

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