



**UNIWERSYTET  
MIKOŁAJA KOPERNIKA  
W TORUNIU**

Wydział Nauk o Zdrowiu  
Collegium Medicum w Bydgoszczy

**Karolina Filipaska-Blejder**

**Zjawisko występowania aktów przemocy wobec osób  
starszych**

**Rozprawa na stopień doktora nauk medycznych i nauk o zdrowiu w  
dyscyplinie nauki o zdrowiu**

**Promotor:  
prof. dr hab. Robert Ślusarz**

**Bydgoszcz 2022 rok**

## **Spis treści**

Wykaz artykułów włączonych do rozprawy .....	3
Wstęp .....	6
Cel pracy .....	13
Problemy badawcze .....	13
Hipotezy badawcze .....	14
Materiał i metody.....	16
Wyniki.....	21
Podsumowanie .....	31
Wnioski .....	36
Streszczenie .....	37
Abstract .....	42
Bibliografia.....	47
Załączniki .....	53

## **Wykaz artykułów włączonych do rozprawy**

Rozprawę doktorską przygotowano w formie spójnego tematycznie cyklu sześciu publikacji, do którego włączono następujące artykuły:

### **I**

**Karolina Filipka**, Monika Biercewicz, Adam Wiśniewski, Kornelia Kędziora-Kornatowska, Robert Ślusarz. Theoretical basics of the issue of the abuse of the elderly. *Pielęgniarstwo w Opiece Długoterminowej/Long-Term Care Nursing*. 2019;4(4):45-50.

doi: [https://doi.org/10.19251/pwod/2019.4\(5\)](https://doi.org/10.19251/pwod/2019.4(5))

udział: koncepcja pracy, analiza i przegląd piśmiennictwa, pisanie pracy, korespondencja z recenzentami, korekta manuskryptu

Punktacja MNiSW: 40 pkt.

### **II**

**Karolina Filipka**, Monika Biercewicz, Adam Wiśniewski, Kornelia Kędziora-Kornatowska, Robert Ślusarz. Prevalence of elder abuse and neglect: screening in Poland families. *European Geriatric Medicine*. 2019;10(5):817–825.

doi: <https://doi.org/10.1007/s41999-019-00224-x>

udział: koncepcja pracy, analiza piśmiennictwa, opracowanie metodologii, zbieranie danych, interpretacja wyników, pisanie pracy, graficzne przedstawienie wyników, korespondencja z recenzentami, korekta manuskryptu

Punktacja MNiSW: 40 pkt.

Impact Factor: 1.232

### III

**Karolina Filipka**, Monika Biercewicz, Adam Wiśniewski, Kornelia Kędziora-Kornatowska, Robert Ślusarz. Prevalence and associated factors of elder psychological abuse- a cross sectional screening study, based on a hospitalized community from Poland. Archives of Gerontology and Geriatrics. 2020;90:104152.

doi: <https://doi.org/10.1016/j.archger.2020.104152>

udział: koncepcja pracy, analiza piśmiennictwa, opracowanie metodologii, zbieranie danych, interpretacja wyników, pisanie pracy, graficzne przedstawienie wyników, korespondencja z recenzentami, korekta manuskryptu

Punktacja MNiSW: 70 pkt.

Impact Factor: 3.250

### IV

**Karolina Filipka**, Monika Biercewicz, Adam Wiśniewski, Kornelia Kędziora-Kornatowska, Robert Ślusarz. Predictors of self-reported physical abuse among hospitalized older adults. Gerontologia Polska. 2021;29(4):146-157.

doi: <https://doi.org/10.53139/GP.20212925>

udział: koncepcja pracy, analiza piśmiennictwa, opracowanie metodologii, zbieranie danych, interpretacja wyników, pisanie pracy, graficzne przedstawienie wyników, korespondencja z recenzentami, korekta manuskryptu

Punktacja MNiSW: 40 pkt.

### V

**Karolina Filipka**, Monika Biercewicz, Adam Wiśniewski, Renata Jabłońska, Agnieszka Królikowska, Emilia Głowczewska-Siedlecka, Kornelia Kędziora-Kornatowska, Robert Ślusarz. High Rate of Elder Abuse in the Time of

COVID-19- A Cross Sectional Study of Geriatric and Neurology Clinic Patients. Journal of Clinical Medicine. 2021;10(19):4532.

doi: <https://doi.org/10.3390/jcm10194532>

udział: koncepcja pracy, analiza piśmiennictwa, opracowanie metodologii, zbieranie danych, interpretacja wyników, pisanie pracy, graficzne przedstawienie wyników, korespondencja z recenzentami, korekta manuskryptu

Punktacja MNiSW: 140 pkt.

Impact Factor: 4.242

## **VI**

**Karolina Filipka**, Monika Biercewicz, Adam Wiśniewski, Kornelia Kędziora-Kornatowska, Robert Ślusarz. Reliability and validity of the polish version of the vulnerability to Abuse Screening Scale (VASS). Journal of Elder Abuse & Neglect. 2022;34(1):56-69.

doi: <https://doi.org/10.1080/08946566.2021.2024106>.

udział: koncepcja pracy, analiza piśmiennictwa, opracowanie metodologii, zbieranie danych, interpretacja wyników, pisanie pracy, graficzne przedstawienie wyników, korespondencja z recenzentami, korekta manuskryptu

Punktacja MNiSW: 100 pkt.

Impact Factor: 2.205

Sumaryczna wartość punktacji prac wchodzących w skład cyklu publikacji:

**Wskaźnik Impact Factor: 10.929**

**Punktacja MNiSW: 430 pkt.**

## Wstęp

Przemoc wobec osób starszych stanowi istotny problem zdrowia publicznego zarówno w krajach Europy, jak i całego świata. Co więcej, do aktów przemocy dochodzić będzie coraz częściej ze względu na trwający proces starzenia się społeczeństwa [1]. Istnieją prognozy, które świadczą o tym, iż liczba osób starszych w ciągu kolejnych dziesięcioleci znacznie wzrośnie. Według Światowej Organizacji Zdrowia (WHO) w latach 2015-2050 zaobserwujemy prawie dwukrotny wzrost odsetka światowej populacji w wieku powyżej 60 lat, z 12% do 22% [2]. W związku z powyższym przemoc wobec osób starszych coraz częściej jest uznawana za poważny, globalny problem społeczny, który prawdopodobnie będzie się nasilał, biorąc pod uwagę proces starzenia się populacji. Zastanawiający jest fakt, iż pomimo świadomości światowego społeczeństwa akademickiego i naukowego na temat powagi narastającego problemu agresji wobec osób starszych, prowadzenie na szeroką skalę badań epidemiologicznych jest nadal rzadkie [3,4]. Przemoc wobec osób starszych jest przykładem naruszenia praw człowieka i wolności, która prowadzi do poważnej utraty godności ludzkiej, niezależności i szacunku oraz łamie wszelkie zasady i prawa etyczne [5].

W literaturze polskiej oraz światowej można odnaleźć wiele definicji przemocy zarówno w aspekcie ogólnym, jak i tym dotyczącym danej grupy społeczności. Próba określenia, którą definicję przemocy nad osobami starszymi należy zastosować i przyjąć jest złożonym procesem, ponieważ nie ma jednej definicji stosowanej na całym świecie, kraju lub w danej dyscyplinie. Pomimo istniejących nieporozumień, według WHO za przemoc wobec osób starszych należy uznać pojedyncze lub powtarzające się działanie, bądź też niepodjęcie absolutnie żadnego działania przez osoby pozostające w związku lub połączone więziami, w których istnieje oczekiwanie wzajemnego zaufania, co w konsekwencji powoduje krzywdę lub cierpienie osoby starszej [6]. Natomiast *Centers for Disease Control and Prevention* w sposób

podobny do WHO definiuje przemoc jako celowe działanie lub zaniechanie działania przez opiekuna lub inną osobę w związku, w którym oczekuje się zaufania, które powoduje lub stwarza ryzyko wystąpienia krzywdy osoby starszej [7]. Z kolei według *Administration for Community Living* przemoc wobec osób starszych to termin odnoszący się do świadomego, celowego lub niedbałego działania opiekuna lub innej osoby, który powoduje krzywdę lub poważne ryzyko skrzywdzenia wrażliwej osoby dorosłej [8]. W polskim piśmiennictwie często pojawia się definicja Pospiszył określająca przemoc jako „wszelkie nieprzypadkowe akty godzące w osobistą wolność jednostki lub przyczynianie się do fizycznej, a także psychicznej szkody osoby, akty wykraczające poza społeczne zasady wzajemnych relacji” [9]. Zgodnie z definicją Parlamentu Europejskiego „przemoc jest pogwałceniem praw człowieka do życia, bezpieczeństwa osobistego, wolności, godności oraz fizycznej i umysłowej integralności” [10]. W ustawie z dnia 29 lipca 2005r. o przeciwdziałaniu przemocy w rodzinie sformułowano pojęcie przemocy w rodzinie w następujący sposób: „przemoc w rodzinie - to jednorazowe albo powtarzające się umyślne działanie lub zaniechanie naruszające prawa lub dobra osobiste członków rodziny, w szczególności narażające te osoby na niebezpieczeństwo utraty życia, zdrowia, naruszające ich godność, nietykalność cielesną, wolność, w tym seksualną, powodujące szkody na ich zdrowiu fizycznym lub psychicznym, a także wywołujące cierpienia i krzywdy moralne u osób dotkniętych przemocą” [11].

Wyróżnia się różne formy przemocy. Do najczęściej wymienianych zaliczamy: przemoc fizyczną, psychiczną/emocjonalną, seksualną oraz ekonomiczną [12]. Natomiast w odniesieniu do grupy wiekowej seniorów wyróżniono następujące formy przemocy:

- przemoc fizyczna to każde celowe zachowanie lub czyn, który w konsekwencji prowadzi do szkody cielesnej, bólu, zranienia, obrażeń poprzez popychanie, bicie, krępowanie i inne;
- przemoc psychiczna może obejmować różnorodne działania mające na celu zadawanie bólu psychicznego, wyrządzanie przykrości,

poniżanie, dręczenie, uniemożliwianie kontaktów z krewnymi, przyjaciółmi itp. Jest jedną z najczęstszych form przemocy, którą często trudniej udowodnić i wykryć niż pozostałe formy;

- wykorzystanie finansowe to bezprawne lub niewłaściwe, nieuprawnione wykorzystywanie zasobów materialnych seniora przez opiekuna, rodzinę lub inną osobę, która pozostaje w relacji zaufania z osobą starszą. Obejmuje to pozbawienie ofiary prawowitego dostępu do informacji, korzyści lub korzystania z osobistych środków, zasobów, rzeczy. Wykorzystanie finansowe może obejmować przymus lub całkowitą kradzież, ze świadomością ofiary lub bez niej;
- przemoc seksualna dotyczy podejmowania kontaktu seksualnego bez zgody lub przy wymuszonej zgodzie ofiary bądź z osobą niezdolną do wyrażenia świadomej zgody, prowokowanie zachowań seksualnych wbrew woli i chęci osoby starszej;
- zaniedbanie to niezapewnienie przez opiekuna bądź rodzinę niezbędnej opieki medycznej, odżywiania, nawodnienia, podstawowych czynności dnia codziennego, schronienia, co w konsekwencji powoduje zagrożenie zdrowia, życia oraz bezpieczeństwa. Co więcej zaniedbanie występuje stosunkowo często i stanowi najtrudniejszy rodzaj nadużycia, który można udowodnić. Istnieje również wiele przypadków zaniedbań, które nie są zamierzone, ale występują w wyniku braku zasobów lub wiedzy ze strony opiekuna i rodziny [7, 12, 13].

Istnieje wiele czynników, które w sposób istotny mogą wpływać na występowanie przemocy wśród osób starszych. Niepełnosprawność, uzależnienie funkcjonalne, upośledzenie funkcji poznawczych, zaburzenia depresyjne, problemy ekonomiczne, wiek, płeć, edukacja to jedne z głównych czynników, które dotyczą ofiar przemocy [3,14,15]. Upośledzenie funkcji poznawczych w konsekwencji doprowadza do utraty pamięci, czy dezorientacji. Prowadzi to do ograniczenia wydolności osób starszych i pojawienia się deficytów w zakresie samoopieki i samopielęgnacji. Duże



obciążenie, które związane jest z całodobową opieką powoduje pojawienie się u opiekunów nadmiernego stresu oraz wypalenia. Te czynniki w konsekwencji mogą powodować pojawienie się agresji w stosunku do podopiecznego. Co więcej wraz z wiekiem postępuje pogorszenie funkcjonowania psychicznego oraz fizycznego, zanik relacji społecznych oraz utrata pozycji społecznej i autonomii. Wszystkie te czynniki w sposób istotny wpływają na pojawienie się depresji u osób starszych [16-18]. W wielu badaniach odnotowano także, iż osoby z niższym wykształceniem są statystycznie częściej narażone na doświadczenie przemocy. Wynikać to może z kilku powodów. Po pierwsze osoby z niższym wykształceniem być może nie mają świadomości ani wiedzy na temat przemocy i agresywnych zachowań bądź są przekonane, że zachowania te są normalne, ogólnie akceptowalne i powszechne. Po drugie ofiary boją się informować o swojej sytuacji, ponieważ uważają, że problem ten może się wyłącznie nasilić po „złożeniu donosu” [18-20]. Co więcej, prowadzone badania wskazują na występowanie pewnego istotnego trendu, który dotyczy wzmożonego występowania przemocy wobec osób starszych wśród kobiet. Być może wynika to z faktu, iż kobiety częściej ulegają stereotypom, które sprawiają, że mają skłonność do doszukiwania się odpowiedzialności za przemoc po stronie samych ofiar. Możliwe jest także, że kobiety z natury bardziej otwarte, ekspresyjne i chętne do rozmowy, częściej zgłaszają przypadki nadużyć [15,21,22]. Światowe organizacje, takie jak WHO [6] oraz HelpGuide [23] stworzyły listę najbardziej powszechnych czynników ryzyka przemocy wobec osób starszych dotyczących społeczności na całym świecie. Do wiodących okoliczności agresji zaliczono:

- uzależnienie/niepełnosprawność funkcjonalna ofiary,
- zły stan zdrowia fizycznego lub psychicznego seniora,
- upośledzenie funkcji poznawczych osoby starszej,
- choroby psychiczne zarówno u ofiary, jak i sprawcy,
- niski status społeczno-ekonomiczny rodziny,
- nadużywanie substancji psychoaktywnych lub alkoholu przez sprawcę,

- uzależnienie – często finansowe – sprawcy od ofiary,
- ageizm wobec osób starszych,
- brak wsparcia ze strony innych potencjalnych opiekunów,
- postrzeganie przez opiekuna, że opieka nad osobą starszą jest uciążliwa i pozbawiona emocjonalnej satysfakcji oraz nagrody,
- izolacja społeczna — osoba starsza i opiekun prawie cały czas spędzają sami,
- wcześniejsza rola seniora jako agresywnego rodzica lub małżonka,
- historia przemocy domowej w rodzinie.

Szacunek globalnego rozpowszechnienia aktów agresji i zaniedbań według WHO, oszacowany na podstawie zgłaszanych nadużyć przez osoby starsze, wynosi blisko 16%. Uważa się jednak te dane za prawdopodobnie niedoszacowane. Badanie WHO ujawniło również, że 64.2% pracowników (tj. 2 /3) zgłosiło znęcanie się nad starszymi mieszkańcami. W związku z tym, że ofiary często boją się zgłaszać przypadki nadużyć rodzinie, przyjaciołom, władzom, odpowiednim służbom, prezentowane wskaźniki rozpowszechnienia przemocy wobec osób starszych są prawdopodobnie niedoszacowane [6].

Według statystyk *National Center on Elder Abuse* (NCEA) 42.2% osób starszych doświadczyło aktu przemocy. Blisko 23.0% ofiar wskazywało na doświadczenie więcej niż jednego rodzaju przemocy, przy czym najczęściej zgłaszane były nadużycia finansowe (54.9%) oraz przemoc psychiczna (25.7%) [24]. Z kolei w badaniu przeprowadzonym przez Curcio i wsp. [25] 15.1% osób starszych zgłosiło pewien rodzaj nadużycia, a ponad 50% doświadczyło więcej niż jednej formy nadużycia. Również w Europie rośnie obawa dotycząca wzrostu występowania zjawiska przemocy wobec osób starszych. Według ostatniego systematycznego przeglądu i metaanalizy [26], ogólny wskaźnik rozpowszechnienia przemocy wobec osób starszych wyniósł 15,7%. Najczęstszą formą przemocy okazała się przemoc psychiczna (11,6%) i finansowa (4,2%). Kolejne międzynarodowe badanie prowadzone w Europie pokazuje, że częstość wykorzystywania osób starszych wynosi 34% w przypadku przemocy psychicznej, a 11,5% w

przypadku przemocy fizycznej, 18,5% nadużycia finansowego i 5% przemocy seksualnej [27]. Z kolei w badaniu Kołodziejczak i wsp. [28] wykazano, iż przemoc dotyczyła blisko 40% starszych respondentów zamieszkujących tereny wiejskie w Polsce. Najczęstszą formą przemocy okazała się także przemoc psychiczna (36.5%).

Należy podkreślić, iż istnieje niewiele doniesień na temat zjawiska występowania przemocy wobec osób starszych w Polsce. Badania te w grupie osób starszych w Polsce nie są jednak tak powszechne, jak te prowadzone wśród innych grup społecznych. Jest to spowodowane m.in. trudnościami finansowymi (znacznie ograniczone fundusze na prowadzenie badań ankietowych), niewielką liczbą badaczy i naukowców, którzy to zagadnienie podejmują, brak przygotowania teoretycznego i metodologiczne nieścisłości (w tym brak wystandaryzowanego polskiego narzędzia oceniającego występowanie przemocy wobec osób starszych) oraz uznawanie tematu przemocy wśród społeczeństwa za temat tabu. Nielicznie podejmowane badania naukowe pozwalają jedynie na wstępne rozpoznanie problemu i ukazanie go jako zjawiska złożonego. Realizowane badania opinii publicznej wskazują, iż 10-12% osób dorosłych w Polsce doświadczyło w swoim życiu aktu agresji ze strony osób spokrewnionych, czy też najbliższych [29]. Zespół psychologów z Instytutu Psychologii PAN w 2015 roku udostępnił raport z ogólnopolskiego badania dotyczącego przemocy w rodzinie wobec osób starszych i niepełnosprawnych. Przemoc psychiczną wobec osób starszych odnotowano na poziomie 36.5% [30]. W kolejnym ogólnopolskim badaniu PolSenior [31] również zaprezentowano dane dotyczące różnych form przemocy wobec osób starszych. Odsetek osób starszych, które doświadczyły przemocy wyniósł 5,9%. Natomiast w badaniu Grzanki-Tykwińskiej et al. [32] wykazano, iż 48% osób starszych doświadczało przemocy psychicznej, natomiast 10% przemocy fizycznej.

Analizując i śledząc rezultaty prowadzonych badań, zarówno tych na świecie, jak i w Polsce, można zaobserwować duże rozbieżności uzyskanych wyników. Różnice w rozpowszechnieniu przemocy wobec osób starszych mogą być związane z wieloma czynnikami. Jednym z nich są różnice

kulturowe. Istotny wpływ ma także przyjęta definicja przemocy i jej rodzajów, czy stosowanie różnych narzędzi pomiarowych oraz odmienności metodologiczne. Co więcej, przeprowadzanie badań w różnych środowiskach również wpływa na uzyskane wyniki. Kolejnym istotnym czynnikiem, wpływającym na różnice w rozpowszechnieniu przemocy wobec osób starszych jest wielkość i dobór próby. W związku z powyższym przy takiej zmienności ciężko jest porównywać wyniki prowadzonych badań [33,34].

Wyniki badań wskazują, że przede wszystkim to małżonkowie, partnerowie oraz synowie są najczęstszymi sprawcami przemocy wobec osób starszych. W badaniach przeprowadzonych przez Santos i wsp. [35] wykazano, iż współmałżonek lub partner (48.2%) oraz dzieci i wnuki (42.3%) byli najczęstszymi sprawcami przemocy wobec osób starszych. Alexa et al. [36] również w swoich badaniach wskazują syna oraz córkę (33.7%) i partnera życiowego (25.3%) jako najczęstszych sprawców przemocy wobec osób starszych. Z kolei najczęstszymi sprawcami stosowanej przemocy wobec osób starszych w badaniach Patel et al. [37] okazali się synowie (42%) oraz synowe (54%). Natomiast w badaniach Ribot et al. [38] najczęstszymi sprawcami przemocy psychicznej wobec osób starszych okazali się być synowie i córki w 77.3% oraz wnuki w 73.4%. Według statystyk NCEA [24] to właśnie członkowie rodziny byli najczęściej identyfikowanymi sprawcami przemocy wobec osób starszych (46,8%). Najczęstszym podtypem przemocy wobec osób starszych stosowanych przez członków rodziny okazała się przemoc ekonomiczna (61.8%) oraz psychiczna (35%).

Pomimo że przemoc wobec osób starszych nie należy do rzadkiego zjawiska, wypracowano do dnia dzisiejszego zaledwie niewiele strategii jej zapobiegania oraz interwencji. Zatem wyniki badań mogą przysłużyć się do opracowania działań opartych na dowodach. Uzyskane dane mają wpływ na przyszłe projekty badań, programy i interwencje profilaktyczne oraz leczenie. Określenie dokładnych czynników ryzyka przemocy pozwala na tworzenie ukierunkowanych programów oraz interwencji profilaktycznych.

Co więcej, pracownicy służby zdrowia powinni przechodzić okresowe szkolenia i posiadać odpowiednią wiedzę na temat rozpoznawania przemocy wobec osób starszych oraz doboru prawidłowych form interwencji. Wiele krajów, w tym Polska, nie posiada chociażby kwestionariusza, który służyłoby do oceny występowania przemocy wobec osób starszych. Zatem badacze tworzą własne narzędzia. Stosowanie różnych narzędzi pomiarowych w prowadzonych badaniach na świecie nie pozwala w sposób rzetelny porównywać uzyskanych wyników. Biorąc pod uwagę powagę pogłębiającego się zjawiska przemocy wobec osób starszych ujednolicenie metodyki badań w zakresie przemocy byłoby bardzo pomocne.

### **Cel pracy**

Celem głównym pracy jest dokonanie analizy zjawiska występowania przemocy wśród osób w podeszłym wieku.

### **Problemy badawcze**

Opublikowane dotąd wyniki badań wskazują na wiele czynników – zarówno tych socjodemograficznych, jak i klinicznych – wpływających na nasilenie się zjawiska występowania przemocy wśród osób starszych. Jednakże prezentowane rezultaty tych projektów były rozbieżne i niejednoznaczne. Dotychczasowe publikacje koncentrowały się w głównej mierze na ocenie rozpowszechnienia przemocy i jej czynników ryzyka, nie analizowano natomiast ich rozbieżności i zmienności w zależności od rodzaju stosowanej przemocy oraz nie skupiano się na określeniu sprawców przemocy. Stąd też zasadne było prowadzenie badań w tym aspekcie w celu wielopłaszczyznowego scharakteryzowania zjawiska przemocy wobec osób starszych w Polsce.

Problemy badawcze podjęte w niniejszej pracy:

1. Jaki odsetek osób starszych doświadczył aktu przemocy po 60 roku życia?
2. Jakie najczęściej rodzaje przemocy dotyczą osób w podeszłym wieku?
3. Jakie czynniki socjodemograficzne determinują występowanie zjawiska przemocy w badanej populacji?
4. Jakie czynniki kliniczne determinują występowanie zjawiska przemocy w badanej populacji?
5. Czy istnieje związek pomiędzy izolacją społeczną wdrożoną w czasie trwania pandemii COVID-19 a nasileniem się zjawiska przemocy wobec osób starszych?
6. Kto najczęściej jest sprawcą stosowanej przemocy w badanej populacji?
7. Czy kwestionariusz VASS (*Vulnerability to Abuse Screening Scale*) będący narzędziem prognostycznym oraz diagnostycznym, wykorzystywanym globalnie w obszarze przemocy wobec osób starszych, okaże się narzędziem rzetelnym i trafnym w warunkach polskich?

### **Hipotezy badawcze**

Analiza powyższych problemów badawczych pozwoliła na postawienie następujących hipotez badawczych:

1. Około 20% osób starszych doświadczyło przemocy po 60 roku życia.
2. Przemoc psychiczna i fizyczna to najczęstsze i najbardziej powszechne rodzaje przemocy stosowanej wobec osób w podeszłym wieku.
3. Czynniki socjodemograficzne determinujące występowanie zjawiska przemocy w badanej populacji to: płeć, wiek, stan cywilny, status ekonomiczny, miejsce zamieszkania.

4. Czynniki kliniczne determinujące występowanie zjawiska przemocy w badanej populacji to: choroby przewlekłe (głównie nadciśnienie tętnicze, zawał serca, udar mózgu, padaczka), zaburzenia funkcji poznawczych, zaburzenia depresyjne, stan funkcjonalny.
5. Istnieje istotny związek pomiędzy izolacją społeczną wdrożoną w czasie trwania pandemii COVID-19 a nasileniem się zjawiska przemocy wobec osób starszych.
6. Najczęstszymi sprawcami stosowanej przemocy w badanej populacji byli: współmałżonkowie, dzieci (głównie synowie), konkubenci.
7. Kwestionariusz VASS (*Vulnerability to Abuse Screening Scale*) będący narzędziem prognostycznym oraz diagnostycznym, wykorzystywanym globalnie w obszarze przemocy wobec osób starszych, okazał się narzędziem rzetelnym i trafnym w warunkach polskich.

## **Materiał i metody**

Na realizację badania uzyskano zgody Komisji Bioetycznej Collegium Medicum im. Ludwika Rydygiera w Bydgoszczy, Uniwersytetu Mikołaja Kopernika w Toruniu o numerach KB 259/2017 oraz KB 437/2020. Badania miały charakter przekrojowy i dotyczyły pacjentów hospitalizowanych od kwietnia 2017 roku do czerwca 2021 roku w Klinice Geriatrii lub Neurologii Szpitala Uniwersyteckiego nr 1 im. dr Antoniego Jurasza w Bydgoszczy. Kryteria włączenia stanowiły: wiek 60 lat i więcej, zdolność do samodzielnego wypełnienia kwestionariusza ankiety, świadomą zgodę na udział w badaniu, brak zaburzeń funkcji poznawczych, niezdiagnozowana choroba Alzheimera oraz Parkinsona, hospitalizacja w Klinice Geriatrii bądź Klinice Neurologii Szpitala Uniwersyteckiego nr 1 w Bydgoszczy. Kryteria wyłączenia stanowiły: wiek 59 lat lub mniej, brak możliwości samodzielnego wypełnienia ankiety, zdiagnozowane zaburzenia funkcji poznawczych, choroba Alzheimera lub Parkinsona.

Z początkiem rozpoczęcia projektu badaną grupę stanowiło 200 osób starszych. Wraz z kontynuacją badania próba populacji osób w podeszłym wieku ulegała zwiększaniu. Ostatecznie do badania włączono 347 osób w wieku 60 lat i więcej. Najliczniejszą grupę badaną stanowiły osoby do 70 roku życia oraz płęć żeńska.

Projekt rozpoczęto od przeprowadzenia badania pilotażowego, w którym poproszono o przedstawienie krytyki, opinii oraz sprawdzenie zrozumiałości pozycji testowych kwestionariusza ankiety własnej dotyczącego występowania zjawiska przemocy wobec osób starszych. W tym celu zbadano 30 osób hospitalizowanych w Klinice Geriatrii Szpitala Uniwersyteckiego nr 1 im. dr Antoniego Jurasza w Bydgoszczy. Badanie pilotażowe nie zostało uwzględnione w wynikach pracy. Osoby te, po wypełnieniu ankiety, poproszono o wskazanie pozycji, które uważają za niezrozumiałe. W związku z tym pominięto lub zmodyfikowano niektóre niezrozumiałe pytania tak, aby uzyskać ostateczną, łatwą do zrozumienia formę.



Pełna procedura projektu obejmowała głównie wypełnienie kwestionariusza ankiety własnej oraz skali VASS. Przeprowadzone przez nas badanie miało charakter anonimowy. Na początku osoby badane otrzymywały podstawowe informacje na temat przebiegu projektu oraz zasad obowiązujących podczas jego trwania. Poinformowano o tematyce i celu prowadzonego badania. Uzyskano świadomą, pozbawioną jakichkolwiek nacisków zgodę na udział w badaniu oraz zagwarantowano dobrowolność udziału w projekcie oraz zapewniono anonimowość i poufność. Po wypełnieniu ankiet, respondenci umieszczali je w specjalnie przygotowanej, zaplombowanej urnie, znajdującej się w wyznaczonym miejscu, w celu zwiększenia anonimowości i wiarygodności uzyskanych wyników. Ankietowani podczas wypełniania kwestionariusza mogli zawsze zadać pytanie ankieterowi, który był obecny w pobliżu, w innym pomieszczeniu. Osobie badanej przysługiwało prawo odmowy udziału w badaniu. Badający dokładali starań, aby respondenci wypełniali kwestionariusz w samotności bez obecności rodziny, opiekuna, personelu medycznego.

W badaniu określono takie zmienne niezależne jak: czynniki demograficzne, do których zaliczono: płeć, wiek, stan cywilny, status ekonomiczny, miejsce zamieszkania oraz czynniki kliniczne, takie jak występowanie chorób przewlekłych, zaburzenia funkcji poznawczych, zaburzenia depresyjne, stan funkcjonalny. Wraz z realizacją projektu i sytuacją pandemiczną postanowiono wdrożyć kolejną istotną zmienną, czyli wpływ koronawirusa SARS-CoV-2 i pandemii COVID-19.

W badaniach zastosowano metodę sondażu diagnostycznego, a narzędziem badawczym był autorski kwestionariusz ankiety oraz skala VASS. Kwestionariusz ankiety własnej został stworzony specjalnie na potrzeby niniejszego badania, ponieważ w Polsce nie opublikowano do tej pory żadnego narzędzia stanowiącego złoty standard w ocenie przemocy wśród osób starszych. Narzędzie to zostało opracowane na podstawie doświadczenia własnego badaczy w prowadzeniu tego typu badań oraz dostępnej literatury [25,26,39]. Pytania socjodemograficzne zostały

zawarte w 1 części ankiety i dotyczyły one: płci, wieku, stanu cywilnego, statusu ekonomicznego, miejsca zamieszkania. Kolejna część ankiety dotyczyła już m.in. charakterystyki zjawiska przemocy wobec osób starszych oraz zmiennych na nią wpływających. Wiodącym pytaniem było: „Czy w ciągu ostatnich 12 miesięcy doświadczył(a) Pan(i) przemocy (np. kopania, szarpania, uderzenia, wyśmiewania, popychania, obrażania) w miejscu swojego zamieszkania?”. Kolejne pytania dotyczyły, m.in.: rodzajów stosowanej przemocy, sprawców przemocy, dokładnych form stosowanej przemocy, zgłaszania faktu wystąpienia agresji odpowiednim służbom, znajomości ofiar przemocy w swoim otoczeniu, występowania chorób przewlekłych, oceny swojego stanu zdrowia, poczucia samotności, przygnębienia, czy lęku, posiadania dzieci, zachorowania na COVID-19. Pytania zostały poprzedzone instrukcją, która określała cel prowadzonych badań, zachowaną anonimowość uczestnika badania oraz dokładne i odpowiednie wskazania i pouczenia dotyczące zaznaczania odpowiedzi. Odpowiedzi na powyższe pytania dotyczące występowania form przemocy ustaliły 4 wiodące zmienne zależne: przemoc fizyczną, psychiczną, seksualną oraz ekonomiczną. Jako definicje tych zmiennych uznano [2,6,40,41]:

- przemoc psychiczna - rozumiana jako działania ukierunkowane na podważenie poczucia stabilności, obniżenie własnej samooceny poprzez poniżenie i upokorzenie; służyć mają temu wyśmiewanie, izolowanie od otoczenia, wyśmiewanie etc.;
- przemoc fizyczna- najbardziej widoczna, polegająca na zadawaniu bólu fizycznego, urazów, używaniu siły, biciu, szarpaniu, popychaniu, pozostawiająca ślady w postaci zadrapań, sińców, złamań itp.;
- przemoc seksualna- podejmowanie kontaktu seksualnego bez zgody lub przy wymuszonej zgodzie ofiary, prowokowanie zachowań seksualnych wbrew woli i chęci osoby starszej poprzez m.in. gwałt, niechciany dotyk itp.;
- przemoc ekonomiczna- może się ona przejawiać wielopłaszczyznowo od możliwości ograniczania samodzielności finansowej w rozdysponowaniu

własnego świadczenia emerytalnego po zmuszenie do wzięcia długoterminowego kredytu, odmawianie lub ograniczanie dostępu do wspólnych finansów, odbieranie posiadanych pieniędzy, ograniczanie i uniemożliwianie podjęcia pracy lub jej wykonywania, okradanie, niszczenie wartościowych przedmiotów.

Wraz z rozwojem projektu i sytuacją pandemiczną postanowiono przeanalizować kolejną zmienną zależną, jaką okazało się ryzyko wystąpienia przemocy. Zostało ono ocenione za pomocą najbardziej popularnego w innych krajach Europy narzędzia- Skali Podatności na Nadużycia- ang. *The Vulnerability to Abuse Screening Scale* (VASS). Zbudowana ona została z 12 pytań. Pytania zostały ułożone w formie zamkniętej, a opcje odpowiedzi to: "tak" lub "nie". W jej skład wchodzi 4 podskale: uzależnienie (*dependence*), przygnębienie (*dejection*), wrażliwość (*vulnerability*) i przymus (*coercion*). Każda z podskal zawiera 3 itemy. Podskala uzależnienie zawiera: item 4-6; przygnębienie: item 7-9; wrażliwość: 1-3; przymus: 10-12. Jest 9 pytań pozytywnych (1-3, 7-12) oraz 3 negatywne (4-6). Im wyższy wynik, tym większe ryzyko wystąpienia przemocy. Za ryzyko wystąpienia przemocy uznaje się wynik 3 pkt. i więcej [42]. Oprócz skali VASS w badaniu wykorzystano także: Geriatryczną Skalę Oceny Depresji (ang. *the Geriatric Depression Scale*- GDS) [43,44] oraz Skalę Podstawowych Czynności Życia Codziennego (ang. *the Activities of Daily Living Scale*- ADL) [45,46].

Obliczenia przeprowadzono za pomocą pakietu oprogramowania statystycznego Statistica 12.0 w wersji polskiej (StatSoft, Tulsa, Stany Zjednoczone) oraz Statistica 13.0 w wersji polskiej (TIBCO Software Inc, California, Stany Zjednoczone). Analizę statystyczną rozpoczęto od ustalenia za pomocą testu Shapiro-Wilka, że rozkład danych nie odpowiada kryterium dopasowania do rozkładu normalnego. W związku z powyższym zastosowano w pracy testy nieparametryczne. W pierwszym etapie analizie poddano wskaźnik rozpowszechnienia przemocy wobec osób starszych (liczba i procent). Kolejno zastosowano test chi-kwadrat w celu określenia związku między cechami socjodemograficznymi a rozpowszechnieniem

przemocy. Wykonano model regresji logistycznej do oceny związku między zmiennymi niezależnymi a występowaniem przemocy i ryzykiem wystąpienia przemocy. Wyniki analiz regresji logistycznej wyrażono jako ilorazy szans (ang. *odds ratio, OR*) i 95% przedziały ufności (ang. *95% confidence interval, 95% CI*). Do walidacji narzędzia VASS wykorzystano test U Manna-Whitney'a (ocena różnic między pierwszym a drugim pomiarem VASS), korelację rank Spearmana (ocena trafności konstrukt), ważoną kappa Cohena oraz współczynnik korelacji wewnątrzklasowej (ICC) oceniając wiarygodność zarówno między oceniającymi (inter-rater), jak i między pomiarami (intra-rater). Powtarzalność oraz właściwości psychometryczne oceniono na podstawie analizy Bland- Altmana oraz współczynnika alfa Cronbacha. Wyniki statystyczne z wartością  $p < 0,05$  uznano za istotne, a wykonane analizy oceniono w 95% CI.

## **Wyniki**

### **Praca 1 pt. Theoretical basics of the issue of the abuse of the elderly**

Podstawą do postawienia problemów i hipotez badawczych oraz zaprojektowania całego badania naukowego jest dotarcie do najbardziej aktualnej i rzetelnej wiedzy na dany temat. Dlatego też pierwsza praca wchodząca w skład cyklu publikacji miała charakter przeglądu systematycznego i stanowiła punkt wyjścia do dalszych analiz. Zebrano i przeanalizowano w niej aktualne dane z piśmiennictwa i w zwarty oraz syntetyczny sposób zaprezentowano najistotniejsze fakty i doniesienia dotyczące zjawiska przemocy wobec osób starszych. Analizie poddano zasadnicze i znaczące dotychczas opublikowane prace zarówno polskie, jak i zagraniczne, tak by móc ukazać charakterystykę przemocy w sposób różnorodny i wielokierunkowy. W artykule podjęto dyskusję na następujące tematy: definicję przemocy wobec osób starszych, rozpowszechnienie zjawiska przemocy, rodzaje stosowanej przemocy, czynniki ryzyka. W pracy podkreślono dość powszechny problem dotyczący traktowania przemocy jako tematu tabu wśród społeczeństwa oraz braku znajomości i umiejętności rozpoznania przez pielęgniarki symptomów aktów agresji w codziennej pracy wśród swoich starszych podopiecznych. Wyszczególniono ogromną skalę tego zjawiska i przykłady wielu form pod jakimi możemy ją spotkać. Opisano przesłanki naukowe do przeprowadzenia dalszych badań w tym zakresie.

### **Praca 2 pt. Prevalence of elder abuse and neglect: screening in Poland families**

Druga praca wchodząca w skład cyklu publikacji miała charakter badawczy, a głównym celem było oszacowanie częstości występowania zjawiska przemocy wobec osób starszych i identyfikację czynników ryzyka związanych z jej wystąpieniem. Badaną populację stanowiło 112 kobiet

(56.0%) oraz 88 mężczyzn (44.0%) hospitalizowanych w Klinice Geriatrii Szpitala Uniwersyteckiego nr 1 im. dr Antoniego Jurasza w Bydgoszczy. Pełna procedura projektu obejmowała wypełnienie wyłącznie kwestionariusza ankiety własnej. Weryfikację hipotez przeprowadzono w oparciu o testy: test chi-kwadrat, test chi-kwadrat z poprawką na ciągłość. Opracowano modele regresji logistycznej, aby określić związek zmiennych socjodemograficznych z każdym rodzajem zastosowanej formy przemocy. W uzyskanych wynikach własnych spośród 200 respondentów 77 osób (38.5%) doświadczyło w przeciągu ostatnich 12 miesięcy aktów przemocy. Większość badanych (68.8%) doświadczyła różnych form przemocy równocześnie. Wśród tych, którzy doświadczyli przemocy, 75.3% doświadczyło przemocy psychicznej, 68.8% przemocy ekonomicznej, 48.1% przemocy fizycznej, a 22.1% doświadczyło przemocy seksualnej. Wskaźnik przemocy fizycznej (OR 2.48; 95%CI 1.13-5.44;  $p=0.02$ ), psychicznej (OR 1.94; 95%CI 1.02-3.67;  $p=0.04$ ), seksualnej (OR 4.05; 95%CI 1.13-14.5;  $p=0.03$ ) oraz ekonomicznej (OR 1.98; 95%CI 1.02-3.83;  $p=0.04$ ) był istotnie statystycznie wyższy u kobiet niż u mężczyzn. Osoby po 70 roku życia doświadczały 2.97 razy częściej przemocy fizycznej (95%CI 1.11-7.95) niż osoby z najmłodszej kategorii wiekowej 60-65 lat ( $p=0.03$ ). Również najstarsi seniorzy częściej niż osoby „najmłodsze” zgłaszali stosowanie wobec nich przemocy ekonomicznej (OR 3.83; 95%CI 1.51-9.72;  $p<0.01$ ). Poziom wykształcenia w sposób istotny wpływał tylko na występowanie przemocy fizycznej ( $p=0.02$ ). Najwięcej agresji fizycznej zaobserwowano u osób ze średnim wykształceniem tj. 35.1%, a kolejno u osób z podstawowym- 27.0% oraz zawodowym wykształceniem- 27.0%. Największy odsetek osób dotkniętych przemocą dotyczył respondentów z najniższym miesięcznym dochodem tj. <1000 zł oraz 1000-2000 zł. Z przeprowadzonej analizy wynika także, iż osoby mieszkające w mieście są znamienne częściej narażone na występowanie różnych form przemocy. Mieszkańcy miast statystycznie częściej stawali się ofiarami przemocy fizycznej aniżeli mieszkańcy wsi (OR 2.36; 95%CI 1.07- 5.19;  $p= 0.03$ ). Natomiast w odniesieniu do przemocy psychicznej oraz seksualnej również

odnotowano znamienne częstsze jej występowanie u mieszkańców miast, odpowiednio OR 3.23 (95%CI 1.63-6.42;  $p < 0.01$ ) oraz OR 3.87 (95%CI 1.08-13.94;  $p = 0.04$ ). Podsumowując, badanie podkreśliło dość znaczne rozpowszechnienie zjawiska przemocy wśród polskich osób w podeszłym wieku. Tym samym zaakcentowano, że czynniki socjodemograficzne mają istotny wpływ na występowanie przemocy.

**Praca 3 pt. Prevalence and associated factors of elder psychological abuse- a cross sectional screening study, based on a hospitalized community from Poland**

Trzecia praca wchodząca w skład cyklu publikacji przedstawia wyniki analizujące przemoc psychiczną, jako jedną z najczęściej stosowanych oraz najbardziej ukrytych form przemocy wobec osób w podeszłym wieku. Celem pracy było określenie rozpowszechnienia i czynników predykcyjnych przemocy psychicznej wobec osób starszych. Dodatkowo odwołując się do pracy nr 2 określono także najczęstszych sprawców stosowanej przemocy. Próba składała się z 200 osób w wieku  $\geq 60$  lat. Respondentami byli pacjenci hospitalizowani w Klinice Geriatrii Szpitala Uniwersyteckiego nr 1 im. dr Antoniego Jurasza w Bydgoszczy. Pełna procedura projektu obejmowała wypełnienie kwestionariusza ankiety własnej. Dokonując analizy statystycznej posłużono się testem chi-kwadrat oraz modelem regresji logistycznej. Najczęstszymi zgłaszanymi konkretnymi formami przemocy psychologicznej były: aroganckie i wulgarne odzywki (77.6%), obrażanie i krytykowanie (74.1%), wyśmiewanie (51.7%), zamykanie i izolowanie (46.6%), szantaże i groźby (27.6%). Wykonana analiza regresji logistycznej wskazała, iż kobiety ponad 2-krotnie statystycznie częściej niż mężczyźni doświadczali aroganckich, wulgarnych odzywek (95% CI 1.13-4.73;  $p = 0.02$ ), zamykania i izolowania (95%CI 1.01-6.26;  $p = 0.04$ ), obrażania i krytykowania (95%CI 1.61-5.08;  $p = 0.02$ ) oraz wyśmiewania (95%CI 1.22-7.34;  $p = 0.02$ ). Najstarsi respondenci w wieku  $> 70$  lat ponad 3-krotnie

częściej niż osoby z młodszych kategorii wiekowych byli ofiarami aroganckich, wulgarnych odzywek (OR 3.40; 95%CI 1.29-8.93;  $p= 0.01$ ), zamykania i izolowania (OR 3.11; 95%CI 1.04-9.24;  $p= 0.04$ ), obrażania i krytykowania (OR 3.06; 95%CI 1.17-7.97;  $p=0.02$ ) oraz wyśmiewania (OR 3.33; 95%CI 1.18-9.39;  $p=0.02$ ), a ponad 5-krotnie częściej szantażu i gróźb (OR 5.04; 95%CI 1.59-16.04;  $p<0.01$ ). Badani o niższym statusie ekonomicznym istotnie częściej doświadczali aktów przemocy psychicznej. Przedstawione analizy wykazały, że osoby mieszkające w mieście statystycznie częściej doświadczają aroganckich i wulgarnych odzywek oraz wyśmiewania ( $p<0.01$ ). Kolejnym istotnym czynnikiem ryzyka przemocy psychicznej okazały się choroby przewlekłe. Największy odsetek osób dotkniętych przemocą dotyczył chorujących respondentów. Wynik ten okazał się jedynie istotny statystycznie wśród chorych izolowanych i zamykanych ( $p=0.02$ ). Przeprowadzona analiza wykazała, że partnerzy, małżonkowie lub synowie byli najczęstszymi sprawcami przemocy wobec osób starszych. Przemoc fizyczną najczęściej popełniali małżonkowie (48.6%), a następnie partnerzy (45.9%) oraz synowie (45.9%). Z kolei synowie byli najczęstszymi sprawcami przemocy ekonomicznej oraz psychicznej (odpowiednio 34.0% i 25.9%), a następnie partnerzy (30.2% i 19.0%) oraz małżonkowie (28.3% i 12.1%). Przemoc seksualna była popełniana głównie przez partnerów (35.3%). Z kolei w ogólnym zestawieniu wszystkich rodzajów przemocy to synowie okazali się najczęstszymi sprawcami (39.0%), a następnie małżonkowie (27.3%) oraz partnerzy (24.7%). Uzyskane wyniki stanowią potwierdzenie, że przemoc psychiczna jest najczęstszym rodzajem przemocy stosowanej wobec osób starszych w społeczności polskiej. W tym badaniu częstość występowania przemocy psychicznej była stosunkowo wysoka, a osoby starsze doświadczają różnych rodzajów nadużyć. Niewątpliwie przemoc wobec osób starszych jest jednym z najważniejszych problemów społecznych, na który mają wpływ różne czynniki. Podobnie, jak w pracy nr 2 podkreślono, że problem przemocy wobec osób starszych w społeczności międzynarodowej, zwłaszcza w Polsce, jest nowym i nieznanym zjawiskiem,



a często jest wypierany lub zaniedbywany, dlatego też badanie to może być przydatne do wdrażania dalszych niezbędnych projektów dotyczących zjawiska przemocy i jej różnych aspektów, w tym epidemiologii, czynników ryzyka, metod zapobiegania i interwencji.

#### **Praca 4 pt. Predictors of self-reported physical abuse among hospitalized older adults**

Czwarta praca wchodząca w skład cyklu publikacji charakteryzuje przemoc fizyczną, jako jedną z najbardziej brutalnych form stosowanej przemocy wobec osób starszych. Grupa badana zwiększyła się do 250 osób. W celu zachowania spójności prowadzonego cyklu zachowano identyczne kryteria włączenia, jak w pracy nr 2 oraz 3. Stwierdzono, że ogólna częstość występowania przemocy fizycznej w ciągu ostatnich 12 miesięcy wynosiła 21.6%. Do najczęściej zgłaszanych form przemocy fizycznej ofiary zaliczyły: szarpanie (64.8%), uderzenia (44.4%), kopanie (40.7%), popychanie (35.2%). Z przedstawionej analizy, wykonanej za pomocą testu chi-kwadrat wynika, iż do czynników ryzyka przemocy fizycznej zaliczyć możemy: płeć żeńską, wiek >70 lat, niski status społeczno-ekonomiczny, mieszkanie w mieście oraz występowanie chorób przewlekłych. Występowanie przemocy fizycznej było ponad 2-krotnie częstsze u kobiet aniżeli u mężczyzn (OR 2.19; 95%CI 1.12-4.28) oraz ponad 6-krotnie częstsze u osób w wieku >70 roku życia aniżeli u osób z najmłodszej kategorii wiekowej (OR 6.90, 95%CI 3.07-15.52). Również osoby z miesięcznym dochodem 1000-2000 zł oraz >2000 zł statystycznie rzadziej doświadczały przemocy fizycznej aniżeli osoby z dochodem <1000 zł ( $p < 0.01$ ). Respondenci mieszkający w mieście ponad 4-krotnie częściej doświadczaali przemocy fizycznej niż osoby zamieszkujące na terenach wiejskich (OR 4.58, 95%CI 2.18-9.62). Osoby ze zdiagnozowanymi chorobami przewlekłymi również częściej stawali się ofiarami przemocy (OR 2.61, 95%CI 1.24-5.50). Podobnie jak w poprzednich rodzajach

przemocy najczęstszymi sprawcami przemocy fizycznej okazali się być: synowie (42.6%), małżonkowie (33.3%) oraz partnerzy (29.6%). Wyniki tego badania wykazały, że przemoc fizyczna jest ważnym problemem wśród osób starszych. Podkreślono kluczową rolę pracowników ochrony zdrowia w aspekcie zapobiegania i prewencji zjawiska przemocy wśród seniorów. Konieczne są przyszłe badania w celu zbadania mechanizmów przyczynowych między konkretnymi podtypami agresji nad osobami starszymi a korzystaniem z usług opieki zdrowotnej.

**Praca 5 pt. High Rate of Elder Abuse in the Time of COVID-19-A Cross  
Sectional Study of Geriatric and Neurology Clinic Patients**

Piąta praca wchodząca w skład cyklu publikacji przedstawia wpływ pandemii COVID-19 na rozpowszechnienie przemocy wobec osób starszych oraz charakterystykę jej czynników ryzyka. W związku z tym, iż istniało wiele przesłanek i przypuszczeń, że trwająca pandemia COVID-19 spowodowała gwałtowny wzrost występowania przemocy m.in. w wyniku izolacji, dystansu społecznego w połączeniu z wzmożonymi stresorami interpersonalnymi, zdecydowano się na kontynuację badań. Całkowita populacja osób badanych wyniosła 347. Ocenie poddano pacjentów dwóch oddziałów: Kliniki Geriatrii oraz Kliniki Neurologii Szpitala Uniwersyteckiego nr 1 im. dr Antoniego Jurasza w Bydgoszczy. Narzędzia użyte w badaniu to: kwestionariusz ankiety własnej, skala GDS, ADL oraz VASS. Badania prowadzone przez nas w czasie trwania pandemii COVID-19 wykazały, iż blisko 45% osób starszych było ofiarami przemocy. Z kolei uzyskane przez nas wyniki badań z okresu przed wybuchem pandemii wskazują, iż 38.5% osób starszych doświadczyło agresji. Oznacza to wzrost o ponad 6 punktów procentowych. Najczęstszym rodzajem przemocy była przemoc psychiczna (72.3%), następnie fizyczna (39.4%) oraz ekonomiczna (36.8%). W modelu regresji logistycznej wykazano wiele zmiennych, będących istotnymi czynnikami ryzyka przemocy m.in. niski status społeczno-ekonomiczny (OR 3.60, 95%CI 1.93-6.72), choroby przewlekłe (OR 2.06, 95%CI 1.28-3.31),

osłabienie więzi i relacji z rodziną (OR 3.26, 95%CI 1.96-5.43), umiarkowana i ciężka depresja (OR 18.29, 95%CI 10.24-32.69; OR 18.49, 95%CI 3.91-87.30, odpowiednio). W badaniu wykazano także, że umiarkowana niesprawność (3-4 punkty w skali ADL) 5.52 razy częściej i ciężkie upośledzenie funkcjonalne ( $\leq 2$  punkty w skali ADL) 21.07 razy częściej predysponowały do wystąpienia aktów przemocy. Osoby, które chorowały na COVID-19, 1.59 razy częściej były ofiarami przemocy (95%CI 1.03-2.46). W projekcie oceniono także samo ryzyko wystąpienia przemocy za pomocą skali VASS. Wykazano, iż w badanej populacji blisko 46% osób starszych jest narażonych na nadużycia (VASS  $\geq 3$  pkt.). Większość czynników predysponujących do wzmożonej podatności na nadużycia jest podobnych do tych uzyskanych w ocenie występowania przemocy. Wyjątek stanowi wiek oraz miejsce zamieszkania, które według modelu regresji logistycznej nie są istotnymi czynnikami ryzyka nadużyć. Co ciekawe to z kim żyje badany wpływało na samo ryzyko wystąpienia przemocy. Na przykład osoby starsze mieszkające z synem/córką lub konkubentem były bardziej narażone na nadużycia aniżeli osoby mieszkające ze współmałżonkiem (odpowiednio: OR 4.41, 95%CI 2.43-8.02; OR 3.75, 95%CI 1.80-7.81). Odnotowaliśmy umiarkowaną, dodatnią oraz istotną korelację między przemocą a skalą VASS ( $R=0.54$ ;  $p<0.05$ ). Również skala GDS wykazywała istotną statystycznie korelację ze skalą VASS oraz z występowaniem przemocy ( $R=0.68$  i  $R=0.54$ , odpowiednio). Kolejno zaobserwowano, iż skala ADL w sposób istotnie statystycznie ujemny koreluje zarówno z przemocą, jak i z VASS ( $R=-0.46$  and  $R=-0.58$ ). Co więcej, samoocena stanu zdrowia koreluje w sposób istotnie ujemny statystycznie wyłącznie z oceną VASS ( $R=-0.19$ ). Według naszej najlepszej wiedzy jest to pierwsze opublikowane badanie analizujące zjawisko przemocy podczas trwania pandemii COVID-19. Dodatkowo oceniliśmy samo ryzyko wystąpienia przemocy wobec osób starszych z zastosowaniem skali VASS jako pierwsi w Polsce. Nasze doniesienia dodatkowo pokrywają się z ewoluującymi globalnie dowodami na temat gwałtownego wzrostu przemocy w czasie pandemii. Specjaliści służb mundurowych, opieki socjalnej oraz zdrowia

publicznego muszą się jak najlepiej przygotować do poradzenia sobie z tym wzrastającym problemem wśród społeczeństwa.

### **Praca 6 pt. Reliability and validity of the polish version of the vulnerability to Abuse Screening Scale (VASS)**

Szósta praca wchodząca w skład cyklu publikacji ocenia rzetelność i trafność narzędzia VASS w warunkach polskich. Wiele państw uznało VASS za sprawdzone narzędzie służące do oceny ryzyka wystąpienia przemocy. Skala ta została poddana walidacji w wielu krajach, natomiast do tej pory nie opracowano i nie oceniono jej polskiej wersji. Dlatego też celem naszej pracy była ocena właściwości psychometrycznych i rzetelności polskiej wersji skali VASS. Do pracy włączono 228 pacjentów w wieku 65 lat i więcej, hospitalizowanych w Klinice Geriatrii lub Neurologii Szpitala Uniwersyteckiego nr 1 im. dr Antoniego Jurasza w Bydgoszczy. Kwestionariusz ankiety własnej, skala GDS oraz ADL były użyte w celu oceny trafności konstruktów. Dokonano oceny właściwości psychometrycznych (jednorodności, spójności wewnętrznej, skalowalności i wartości korelacji poszczególnych pozycji w stosunku do pozostałych). Określono także rzetelność i powtarzalność. Projekt rozpoczęto od zlecenia tłumaczenia skali VASS dwóm niezależnym tłumaczom. Na podstawie uzyskanych tłumaczeń przyjęto jedną, wstępną wersję skali. Kolejno dokonano retranslacji, czyli odwrotnego tłumaczenia wstępnej polskiej wersji skali z języka polskiego na język angielski (*back translation*), wykonaną przez kolejnego niezależnego tłumacza. Wersję odwrotnie przetłumaczoną przesłano do Pani Professor Margot Schofield (autorki wersji oryginalnej) w celu pozyskania opinii i uwag dotyczących wierności tłumaczenia. Następnie odbyła się analiza uzyskanych uwag i sugestii, naniesienie poprawek zgodnie z otrzymanymi uwagami. Przygotowując polską wersję skali, zastosowano identyczną formę graficzną kwestionariusza skali, przyjęto identyczne kryteria doboru próby badanej,

zastosowano identyczny przebieg procedury badawczej zgodny z instrukcją opracowaną przez autorów wersji oryginalnej. Działania te umożliwiły osiągnięcie dużego stopnia równoważności fasadowej z wersją oryginalną. Współczynnik alfa cronbacha dla skali VASS (12 itemów) wyniósł 0.89, co świadczy o bardzo dobrej spójności wewnętrznej. Z kolei dla poszczególnych podskal współczynnik alfa cronbacha wyniósł odpowiednio: wrażliwość (vulnerability)- 0.89, uzależnienie (dependence)- 0.76, przygnębienie (dejection)- 0.45, przymus (coercion)- 0.74. Średnia i mediana całkowitego wyniku VASS w pierwszej ocenie wyniosła odpowiednio  $3.15 \pm 3.40$  oraz 2, a w drugiej ocenie  $3.21 \pm 3.33$  oraz 2. Nie odnotowano istotnie statystycznej różnicy między pierwszą a drugą oceną ( $p = 0.65$ ). Między wynikami testu i retestu wystąpiła statystycznie istotna bardzo silna korelacja ( $r = 0.98$ ;  $p < 0.0001$ ). Wszystkie analizowane pozycje charakteryzują się doskonałym współczynnikiem korelacji wewnątrzklasowej ( $ICC > 0.9$ ) i ważoną Kappa Cohena ( $\kappa > 0.9$ ). W analizie Bland-Altmana zaobserwowano wysoki współczynnik powtarzalności (CR 0.72; 95% CI 0.66-0.79) i wąskie granice zgodności (górną: 0.6469, 95%CI 0.5657–0.7281 i dolną: -0.7785, 95%CI -0.8597 do -0.6973). Dokonano także analizy Bland-Altmana dla poszczególnych podskal. Najwyższą powtarzalność odnotowano dla podskali uzależnienie (CR 0.4680; 95%CI 0.4287-0.5153), a najniższą dla podskali wrażliwość (CR 0.1836; 95%CI 0.1682-0.2021). Zaobserwowaliśmy bardzo silną, istotną korelację VASS z występowaniem przemocy u osób starszych ( $R = 0.70$ ;  $p < 0.0001$ ). Również wszystkie pojedyncze podskale wykazywały istotną korelację z występowaniem przemocy ( $R > 0.47$ ;  $p < 0.0001$ ). Kolejno wykazano również bardzo silne, istotne korelacje podskali przygnębienie ze skalą GDS ( $R = 0.88$ ;  $p < 0.0001$ ), oraz podskali uzależnienie ze skalą ADL ( $R = -0.85$ ;  $p < 0.0001$ ). Uzyskane w ten sposób wyniki świadczą o dobrej trafności konstruktów. Według naszej wiedzy, jest to pierwsze, nowatorskie badanie opisujące adaptację i walidację polskiej wersji skali VASS. Uzyskane raporty potwierdziły bardzo dobre właściwości psychometryczne nowej polskiej wersji skali VASS. Dokonaliśmy walidacji ważnego narzędzia do oceny

ryzyka wystąpienia przemocy wobec osób starszych w oparciu o wysokie korelacje z innymi powszechnie stosowanymi skalami. W Polsce do tej pory nie opublikowano narzędzia oceniającego występowanie przemocy, czy też ryzyka wystąpienia przemocy, dlatego też prowadzone przez nas badanie można uznać za nowatorskie. Wydaje się zatem jak najbardziej właściwe dostarczenie polskiej wersji narzędzia pochodzącego z innego kraju i innej kultury. Kolejną mocną stroną naszego badania jest spełnienie kryteriów równoważności funkcjonalnej, psychometrycznej i fasadowej polskiej wersji VASS z wersją oryginalną. Dokonano całościowej oceny parametrów psychometrycznych, trafności oraz rzetelności. Wykazano wiarygodność i ważność tego narzędzia dla polskiego społeczeństwa osób starszych. W związku z powyższym wyniki tego projektu mają praktyczne zastosowanie zarówno w ocenie ryzyka, jak i występowania przemocy wobec osób starszych. Wprowadzenie tej skali na rynek polski pozwoli uzupełnić luki metodologiczne w obszarze badań nad przemocą. Wierzymy, że polska wersja skali VASS będzie niezawodną, stabilną i ważną skalą dla osób starszych w Polsce, która powinna być stosowana w rutynowej ocenie społeczeństwa.

## Podsumowanie

Powyższy cykl publikacji, stanowiący oryginalne przedstawienie tematu zgodnie z autorską koncepcją, tworzy zwartą i syntetyczną całość, ma istotny wpływ na stan wiedzy dotyczący zjawiska przemocy wobec osób starszych w Polsce. Koncepcje badań i hipotezy badawcze ewaluowały zgodnie z czasem trwania projektu, analizowanymi systematycznie wynikami oraz dodatkowymi ważnymi czynnikami, jak np. pandemią COVID-19. Początkowo badania koncentrowały się na zjawisku przemocy w charakterze ogólnym. Przeanalizowano, zebrano i usystematyzowano aktualny stan wiedzy dotyczący omawianej problematyki, co umożliwiło sprawne poruszanie się w tym obszarze i zaplanowanie protokołów poszczególnych badań. Na podstawie przeglądu literatury i prowadzonych globalnie badań można zaobserwować, że wskaźnik rozpowszechnienia przemocy wobec osób starszych waha się w szerokim zakresie. Może to być spowodowane m.in. różnicami kulturowymi, przyjętą definicją przemocy, odmiennociami metodologicznymi, czy też stosowaniem różnych narzędzi pomiarowych. Zrozumienie i poznanie skali przemocy wobec osób starszych jest głównym, pierwszym krokiem, mającym na celu zapobieganie aktom agresji. Dlatego też temat przemocy wobec osób starszych został omówiony w sposób kompleksowy i wyczerpujący. Ogólna charakterystyka przemocy pozwoliła ukazać najważniejsze czynniki ryzyka oraz najczęstsze rodzaje stosowanej przemocy, co stanowiło istotny impuls do dalszych analiz. Tym samym podkreślono i zaakcentowano duże rozpowszechnienie i negatywny wydźwięk zjawiska przemocy wśród osób w podeszłym wieku w populacji lokalnej. W kolejnym etapie badań skupiono się na charakterystyce poszczególnych form przemocy tj. psychicznej oraz fizycznej. Dokonano analizy najczęstszych czynników ryzyka, sprawców oraz poszczególnych form przemocy psychicznej oraz fizycznej. W związku z wybuchem pandemii COVID-19 pojawiły się kolejne przypuszczenia, iż trwająca pandemia spowodowała gwałtowny wzrost rozpowszechnienia przemocy wobec osób starszych z powodu zmiany życia codziennego,

utruty pracy, izolacji, dystansu społecznego w połączeniu z wzmożonymi stresorami interpersonalnymi. Zaprojektowano kolejne badania oryginalne, które wykazały nie tylko znaczny wzrost rozpowszechnienia przemocy wobec osób starszych, ale również wzmożonego ryzyka jej wystąpienia. Prowadzone badania wskazały, iż pandemia COVID-19 pogłębiła istniejący już problem przemocy wobec osób starszych. Okazała się ona być wyjątkowo szkodliwa dla osób starszych. Wiele z przedstawionych czynników ryzyka przemocy uległo nasileniu w czasie trwania pandemii. Realizując projekt badania zaobserwowano, że nadal brakuje wystandaryzowanych narzędzi oceniających ryzyko wystąpienia przemocy u osób starszych. Rzetelna ocena ryzyka wystąpienia przemocy oraz charakterystyka czynników ryzyka pomogłyby ukierunkować przyszłe metody zapobiegania, interwencji oraz edukacji społeczeństwa. Dlatego też opracowaliśmy nowatorską, niezawodną i ważną polską wersję VASS do wdrożenia w rutynowej ocenie osób starszych przez personel medyczny czy pracowników socjalnych. Odpowiednie właściwości psychometryczne, łatwość wykonania oraz wysoka powtarzalność pozwalają bez obaw móc zaproponować stosowanie tej skali w codziennej praktyce. Podkreślono konieczność prowadzenia dalszych badań z wykorzystaniem skali VASS w celu ciągłej weryfikacji jej rzetelności i trafności.

Jako główny autor projektu wraz z zespołem badawczym jesteśmy w pełni świadomi pewnych ograniczeń. Po pierwsze, badanie ma charakter przekrojowy, dlatego czynniki ryzyka odzwierciedlają związek, a nie przyczynowość. Po drugie, próba badawcza pochodziła z jednego ośrodka a jej wielkość była umiarkowana. Co więcej osoby badane to pacjenci hospitalizowani. Zatem konieczne jest prowadzenie dalszych wieloośrodkowych badań w celu weryfikacji wyników, zwłaszcza w odniesieniu do właściwości psychometrycznych walidowanej skali. Po trzecie, wielkość próby w tym badaniu można uznać za stosunkowo małą. Niezbędne jest rozszerzenie grupy badanej do osób starszych z różnych środowisk, nie tylko pacjentów hospitalizowanych. Następnie, częstość nadużyć określono na podstawie złożonych oświadczeń przez starszych



respondentów. W związku z tym faktyczne rozpowszechnienie może być wyższe, ponieważ niektórzy respondenci mogli nie chcieć zgłaszać nadużyć. Za kolejne ograniczenie można uznać wykluczenie z badania osób z zaburzeniami komunikacji lub funkcji poznawczych. Osoby z takimi upośledzeniami, według innych wyników badań, mają wysokie ryzyko nadużyć. Niektóre ustalenia nie mogą zatem zostać uogólnione na całą populację osób starszych dotkniętych przemocą. Naszym głównym celem było jednak zidentyfikowanie zmiennych, które odgrywają rolę w doświadczaniu nadużyć. Nie sposób nie zauważyć, że prowadzenie badań na temat przemocy jest trudnym wyzwaniem. Ofiary boją się mówić o przemocy. Zwłaszcza wśród osób starszych przemoc jest tematem tabu w społeczeństwie. W związku z tym, że duża liczba incydentów nie zostaje w ogóle wykryta, udostępniane statystyki są niedoszacowane. Zatem należy zachować szczególną ostrożność przy wyciąganiu wniosków, zwłaszcza w odniesieniu do szacowania wielkości całego zjawiska. Pomimo tych ograniczeń badanie to dostarcza danych na temat rozpowszechnienia i rodzajów złego traktowania, potencjalnych implikacji polityki w zakresie świadomości, strategii interwencji i zapobiegania, ukierunkowanych na starszą populację i ich rodzinę oraz opiekunów.

Przemoc jest zjawiskiem szeroko rozpowszechnionym, a przez to ogromnym i wielowymiarowym problemem społecznym. Zapobieganie przemocy wobec osób starszych jest bardzo ważnym zagadnieniem w starzejącym się społeczeństwie, chociaż dopiero w ostatnich latach zjawisko to zaczęto postrzegać jako ogólnoświatowy problem. W Polsce prowadzonych jest niewiele projektów dotyczących charakterystyki przemocy wobec osób starszych, dlatego też nasze badanie może posłużyć do stworzenia zaleceń dla praktyki pielęgniarstwa, środowiska medycznego oraz akademickiego. Wśród rekomendowanych działań wymienia się w głównej mierze uwrażliwianie oraz podnoszenie świadomości społeczeństwa na temat przemocy wobec osób starszych. Istotne jest również przedstawienie problemów osób starszych i ich potrzeb wśród służb i reszty społeczeństwa poprzez szeroko zakrojone działania medialne,

kampanie, spoty reklamowe oraz integrację międzypokoleniową. Jedyną pomocą w walce o swoje prawa okazują się więc często kampanie społeczne, które mają uświadamiać nie tylko społeczeństwo, a także samych seniorów, iż na przemoc w żadnej ze wspomnianych postaci nie wolno się godzić. Ofiary przemocy powinny uzyskać wsparcie w instytucjach opieki społecznej, gdzie udzielane są specjalistyczne porady prawne, psychologiczne oraz rodzinne. W obszarze działań edukacyjnych istotne jest także uwzględnienie dzieci i młodzieży. Włączenie kwestii rozwiązywania problemów przemocy wobec starszych osób w obowiązkowe szkolenia dla lekarzy, pielęgniarek, pracowników socjalnych czy innych przedstawicieli służb społecznych jest ważnym elementem. Wzrost świadomości wśród pracowników ochrony zdrowia oraz służb zawodowych stanowiłby również istotną kwestię w odpowiedniej reakcji na zgłoszoną lub zaobserwowaną przemoc. Reakcja służb powinna zapewnić wsparcie, ochronę oraz w kolejnym etapie dalsze poszukiwanie pomocy. Rozwiązanie problemu przemocy wobec osób starszych wymaga współpracy różnych instytucji i tworzenia zespołów interdyscyplinarnych złożonych z lekarzy, pielęgniarek, pracowników społecznych i innych. Praca interdyscyplinarnego zespołu daje możliwość wieloaspektowego spojrzenia na problematykę przemocy oraz udzielenia kompleksowej pomocy ofiarom przemocy oraz osobom słabszym. Profilaktyka stanowi największą lukę w wiedzy na temat przemocy wobec osób starszych. Naglące jest dotarcie z działaniami edukacyjnymi do osób starszych mieszkających w środowiskach wiejskich. Brak wiedzy na temat przemocy, mała świadomość problemu, bezradność i niemoc w rozwiązaniu problemu są przyczynami rozwoju przemocy. Kolejną istotną kwestię stanowi prowadzenie różnych strategii pomiarów, oceny lub badań przesiewowych. Ta różnorodność w sposób znaczący utrudnia porównywanie międzynarodowych wyników badań. Istotne jest wprowadzenie znormalizowanych i zwalidowanych narzędzi do oceny występowania przemocy wobec osób starszych, dlatego też dokonaliśmy w swoim projekcie oceny właściwości psychometrycznych skali VASS. Wystandardyzowane narzędzia pozwolą uczyć się na wzajemnej

wiedzy i doświadczeniu. Chcąc osiągnąć wysokie wyniki w zakresie wykrywalności przemocy, należy pomyśleć o barierach, które ograniczają ofiary.

Niezbędne jest prowadzenie dalszych badań w zakresie rozpowszechnienia i czynników ryzyka przemocy wobec osób starszych. Przyszły potencjał badawczy powinien skupiać się na prowadzeniu bardziej szczegółowych badań nad każdym rodzajem przemocy oraz nad cechami potencjalnych sprawców. Istotne jest także ujednoczenie metodyki prowadzonych badań oraz stosowanie wystandaryzowanych narzędzi. Dodatkowo, istnieje pewna złożoność badań nad występowaniem przemocy wśród osób z demencją oraz zaburzeniami funkcji poznawczych. W związku z tym, iż choroby te stanowią czynnik wysokiego ryzyka ważne jest prowadzenie bardziej rygorystycznych badań w tej populacji osób, co pozwoliłoby lepiej zrozumieć ten problem oraz uzyskać wiarygodne i rzetelne dane. Rekomendowane jest także popularyzowanie i upublicznianie prowadzonych badań, analiz, ekspertyz dotyczących charakteru, znaczenia, przyczyn i konsekwencji stosowania form przemocy wobec osób starszych.

## Wnioski

Uzyskane wyniki upoważniły do wysunięcia następujących wniosków:

1. Przemocy domowej doświadczyło 38.5% hospitalizowanych osób starszych.
2. Przemoc psychiczna, ekonomiczna i fizyczna to najczęstsze i najbardziej powszechne rodzaje przemocy stosowanej wobec osób w podeszłym wieku.
3. Czynniki socjodemograficzne determinujące występowanie zjawiska przemocy w badanej populacji to: płeć żeńska, wiek >70 lat, stan cywilny (osoby samotne, rozwiedzione, wdowcy/wdowy), niski status społeczno-ekonomiczny oraz miasto jako główne miejsce zamieszkania.
4. Czynniki kliniczne determinujące występowanie zjawiska przemocy w badanej populacji to: choroby przewlekłe (głównie nadciśnienie tętnicze, zawał serca, udar mózgu, padaczka), zaburzenia funkcji poznawczych, zaburzenia depresyjne, stan funkcjonalny.
5. Odnotowano znamienne istotny wzrost odsetka przemocy wobec osób starszych w czasie trwania pandemii COVID-19- z 38.5% do 45%.
6. Najczęstszymi sprawcami stosowanej przemocy w badanej populacji byli: współmałżonkowie, dzieci (głównie synowie), konkubenci.
7. Walidacja kwestionariusza VASS w warunkach polskich wykazała, iż jest to narzędzie rzetelne, trafne, o odpowiednich właściwościach psychometrycznych, co pozwala wprowadzić go do rutynowej oceny osób starszych w celu wykrywania wczesnych oznak przemocy i zapobiegania jej.

## **Streszczenie**

### **Zjawisko występowania aktów przemocy wobec osób starszych**

#### **Wstęp**

Przemoc wobec osób starszych jest aktualnie uznawana na arenie międzynarodowej za powszechnie wzrastający i wymagający pilnych interwencji i działań problem XXI wieku. Coraz częściej stanowi ona poważny problem społeczny, który prawdopodobnie będzie się nasilał, biorąc pod uwagę proces starzenia się populacji. Zjawisko przemocy jest poważnym problemem zdrowia publicznego na całym świecie, ale prowadzenie na szeroką skalę badań epidemiologicznych jest nadal rzadkie. Jest ona przykładem naruszenia praw człowieka i wolności, która prowadzi do poważnej utraty godności ludzkiej, niezależności i szacunku oraz narusza zasady i prawa etyczne. Dokładna charakterystyka przemocy pozwoli na wdrożenie ukierunkowanych interwencji oraz przeprowadzenie edukacji i szkoleń wśród personelu ochrony zdrowia, opieki społecznej, a także wpłynie na wzrost świadomości społeczeństwa.

#### **Cel pracy**

Celem tego badania jest określenie rozpowszechnienia, identyfikacji najczęstszych czynników ryzyka oraz charakterystyki rodzajów oraz sprawców stosowanej przemocy wobec osób starszych wśród polskiej populacji.

#### **Materiał i metody**

Badania miały charakter przekrojowy i dotyczyły pacjentów hospitalizowanych od kwietnia 2017 roku do czerwca 2021 roku w Klinice Geriatrii lub Neurologii Szpitala Uniwersyteckiego nr 1 im. dr Antoniego Jurasza w Bydgoszczy. Kryteria włączenia stanowiły: wiek 60 lat i więcej,

zdolność do samodzielnego wypełnienia kwestionariusza ankiety, świadoma zgoda na udział w badaniu, brak zaburzeń funkcji poznawczych, niezdiagnozowana choroba Alzheimera oraz Parkinsona, hospitalizacja w Klinice Geriatrii bądź Klinice Neurologii Szpitala Uniwersyteckiego nr 1 w Bydgoszczy. Z początkiem rozpoczęcia projektu badaną grupę stanowiło 200 osób starszych. Ostatecznie do badania włączono 347 osób w wieku 60 lat i więcej. Najliczniejszą grupę badaną stanowiły osoby do 70 roku życia oraz płeć żeńska. W badaniu wykorzystano następujące narzędzia: kwestionariusz ankiety własnej, Vulnerability to Abuse Screening Scale (VASS), Geriatryczną Skalę Oceny Depresji (GDS) oraz Skalę Podstawowych Czynności Życia Codziennego (ADL). Testy statystyczne zastosowane w pracy to: test chi-kwadrat, model regresji logistycznej, test U Manna-Whitney'a, korelacja rank Spearmana, ważona kappa Cohena oraz współczynnik korelacji wewnątrzklasowej zarówno inter-rater, jak i intra-rater, analiza Bland-Altmana oraz współczynnika alfa Cronbacha. Wyniki statystyczne z wartością  $p < 0,05$  uznano za istotne, a wykonane analizy oceniono w 95% przedziale ufności (CI).

## **Wyniki**

Przeprowadzone badania wykazały, iż spośród 200 respondentów 77 osób (38.5%) doświadczyło w przeciągu ostatnich 12 miesięcy aktów przemocy. Większość badanych (68.8%) doświadczyła różnych form przemocy równocześnie. Wśród tych, którzy doświadczyli przemocy, 75.3% doświadczyło przemocy psychicznej, 68.8% przemocy ekonomicznej, 48.1% przemocy fizycznej, a 22.1% doświadczyło przemocy seksualnej. Wskaźnik przemocy fizycznej (OR 2.48; 95%CI 1.13-5.44;  $p=0.02$ ), psychicznej (OR 1.94; 95%CI 1.02-3.67;  $p=0.04$ ), seksualnej (OR 4.05; 95%CI 1.13-14.5;  $p=0.03$ ) oraz ekonomicznej (OR 1.98; 95%CI 1.02-3.83;  $p=0.04$ ) był istotnie statystycznie wyższy u kobiet niż u mężczyzn. Osoby po 70 roku życia doświadczały 2.97 razy częściej przemocy fizycznej (95%CI 1.11-7.95) niż osoby z najmłodszej kategorii wiekowej 60-65 lat ( $p=0.03$ ). Również

najstarsi seniorzy częściej niż osoby „najmłodsze” zgłaszali stosowanie wobec nich przemocy ekonomicznej (OR 3.83; 95%CI 1.51-9.72;  $p < 0.01$ ). Poziom wykształcenia w sposób istotny wpływał tylko na występowanie przemocy fizycznej ( $p = 0.02$ ). Największy odsetek osób dotkniętych przemocą dotyczył respondentów z najniższym miesięcznym dochodem tj.  $< 1000$  zł oraz 1000-2000 zł. Z przeprowadzonej analizy wynika także, iż osoby mieszkające w mieście są znamienne częściej narażone na występowanie różnych form przemocy. Wykazano, że partnerzy, małżonkowie lub synowie są najczęstszymi sprawcami przemocy wobec osób starszych. Przemoc fizyczną najczęściej popełniali małżonkowie (48.6%), a następnie partnerzy (45.9%) oraz synowie (45.9%). Z kolei synowie byli najczęstszymi sprawcami przemocy ekonomicznej oraz psychicznej (odpowiednio 34.0% i 25.9%), a następnie partnerzy (30.2% i 19.0%) oraz małżonkowie (28.3% i 12.1%). Przemoc seksualna była popełniana głównie przez partnerów (35.3%). Z kolei w ogólnym zestawieniu wszystkich rodzajów przemocy to synowie okazali się najczęstszymi sprawcami (39.0%), a następnie małżonkowie (27.3%) oraz partnerzy (24.7%). Najczęstszymi zgłaszanymi konkretnymi formami przemocy psychologicznej były: aroganckie i wulgarne odzywki (77.6%), obrażanie i krytykowanie (74.1%), wyśmiewanie (51.7%), zamykanie i izolowanie (46.6%), szantaże i groźby (27.6%). Do najczęściej zgłaszanych form przemocy fizycznej ofiary zaliczyły: szarpanie (64.8%), uderzenia (44.4%), kopanie (40.7%), popychanie (35.2%). Badania prowadzone przez nas w czasie trwania pandemii COVID-19 wykazały, iż blisko 45% osób starszych było ofiarami przemocy, co oznacza wzrost o ponad 6 punktów procentowych w porównaniu z wynikami uzyskanymi przez nas przed pandemią. W modelu regresji logistycznej wykazano wiele zmiennych, będących istotnymi czynnikami ryzyka przemocy w pandemii COVID-19 m.in. niski status społeczno-ekonomiczny (OR 3.60, 95%CI 1.93-6.72), choroby przewlekłe (OR 2.06, 95%CI 1.28-3.31), osłabienie więzi i relacji z rodziną (OR 3.26, 95%CI 1.96-5.43), umiarkowaną i ciężką depresją (OR 18.29, 95%CI 10.24-32.69; OR 18.49, 95%CI 3.91-87.30, odpowiednio). W

badaniu wykazano także, że umiarkowana niesprawność (3-4 punkty w skali ADL) 5.52 razy częściej i ciężkie upośledzenie funkcjonalne ( $\leq 2$  punkty w skali ADL) 21.07 razy częściej predysponowały do wystąpienia aktów przemocy. Osoby, które chorowały na COVID-19, 1.59 razy częściej były ofiarami przemocy (95%CI 1.03-2.46). W projekcie dokonano także oceny właściwości psychometrycznych, rzetelności i powtarzalności narzędzia VASS, służącego do oceny ryzyka wystąpienia przemocy. Współczynnik alfa cronbacha dla skali VASS (12 itemów) wyniósł 0.89, co świadczy o bardzo dobrej spójności wewnętrznej. Średnia i mediana całkowitego wyniku VASS w pierwszej ocenie wyniosła odpowiednio  $3.15 \pm 3.40$  oraz 2, a w drugiej ocenie  $3.21 \pm 3.33$  oraz 2. Nie odnotowano istotnie statystycznej różnicy między pierwszą a drugą oceną ( $p = 0.65$ ). Między wynikami testu i retestu wystąpiła statystycznie istotna bardzo silna korelacja ( $r = 0.98$ ;  $p < 0.0001$ ). Wszystkie analizowane pozycje charakteryzują się doskonałym współczynnikiem korelacji wewnątrzklasowej ( $ICC > 0.9$ ) i ważoną Kappa Cohena ( $\kappa > 0.9$ ). W analizie Blanda-Altmana zaobserwowano wysoki współczynnik powtarzalności (CR 0.72; 95% CI 0.66-0.79) i wąskie granice zgodności (górnny: 0.6469, 95%CI 0.5657–0.7281 i dolny: -0.7785, 95%CI -0.8597 to -0.6973). Zaobserwowaliśmy bardzo silną, istotną korelację VASS z występowaniem przemocy u osób starszych ( $R = 0.70$ ;  $p < 0.0001$ ).

### **Wnioski**

1. Przemocy domowej doświadczyło 38.5% hospitalizowanych osób starszych.
2. Przemoc psychiczna, ekonomiczna i fizyczna to najczęstsze i najbardziej powszechne rodzaje przemocy stosowanej wobec osób w podeszłym wieku.
3. Czynniki socjodemograficzne determinujące występowanie zjawiska przemocy w badanej populacji to: płeć żeńska, wiek  $>70$  lat, stan cywilny (osoby samotne, rozwiedzione, wdowcy/wdowy), niski status społeczno-ekonomiczny oraz miasto jako główne miejsce zamieszkania.



4. Czynniki kliniczne determinujące występowanie zjawiska przemocy w badanej populacji to: choroby przewlekłe (głównie nadciśnienie tętnicze, zawał serca, udar mózgu, padaczka), zaburzenia funkcji poznawczych, zaburzenia depresyjne, stan funkcjonalny.
5. Odnotowano znamienne istotny wzrost odsetka przemocy wobec osób starszych w czasie trwania pandemii COVID-19- z 38.5% do 45%.
6. Najczęstszymi sprawcami stosowanej przemocy w badanej populacji byli: współmałżonkowie, dzieci (głównie synowie), konkubenci.
7. Walidacja kwestionariusza VASS w warunkach polskich wykazała, iż jest to narzędzie rzetelne, trafne, o odpowiednich właściwościach psychometrycznych, co pozwala wprowadzić go do rutynowej oceny osób starszych w celu wykrywania wczesnych oznak przemocy i zapobiegania jej.

**Słowa kluczowe:** przemoc wobec osób starszych, przemoc psychiczna, przemoc fizyczna, czynniki ryzyka, ofiara przemocy, sprawca przemocy

## **Abstract**

### **The phenomenon of acts of elder abuse**

#### **Introduction**

Elder abuse and neglect is now recognized internationally as a growing problem of the 21<sup>st</sup> century that requires urgent intervention and action. Increasingly, it is a serious social problem that is likely to increase with the aging of the population. The phenomenon of violence is a serious public health problem worldwide, but large-scale epidemiological research is still rare. It is an example of a violation of human rights and freedom that leads to a serious loss of human dignity, independence and respect, and a violation of ethical principles and rights. The exact description of violence will allow for the implementation of targeted interventions and for education and training among health care and social care staff, and will also increase the awareness of the society.

#### **Objective of the work**

The aim of this study is to determine the prevalence, identification of the most common risk factors, characteristics of the types and perpetrators of elder abuse among the Polish population.

#### **Material and methods**

The study was cross-sectional and concerned older adults patients hospitalized from April 2017 to June 2021 in the Department of Geriatrics or Neurology of the University Hospital no. 1 of Dr Antoni Jurasz in Bydgoszcz. At the beginning of the project, the study group consisted of 200 elderly people. Ultimately, 347 people aged 60 and over were enrolled in the study. The most numerous study group were people up to 70 years of age and the female gender. The following tools were used in the study: self-survey questionnaire, Vulnerability to Abuse Screening Scale (VASS), Geriatric Depression Rating Scale (GDS) and Basic Daily Life Scale (ADL). The study was approved by the Bioethics Committee of Collegium Medicum of

Ludwik Rydygier in Bydgoszcz, the Nicolaus Copernicus University in Toruń with the numbers KB 259/2017 and KB 437/2020. The statistical tests used in the work are: chi-square test, logistic regression model, U Mann-Whitney test, Spearman rank correlation, weighted Cohen's kappa and intra-class correlation coefficient both inter-rater and intra-rater, Bland-Altman analysis and the Cronbach's alpha coefficient. Statistical results with the  $p < 0.05$  value were considered significant and the performed analyses were assessed in the 95% confidence interval (CI).

## Results

The conducted research showed that out of 200 respondents, 77 people (38.5%) experienced acts of violence in the last 12 months. Most of the respondents (68.8%) experienced various forms of violence simultaneously. Among those who experienced violence, 75.3% have experienced psychological violence, 68.8% economic violence, 48.1% physical violence, and 22.1% have experienced sexual violence. Rate of physical (OR 2.48; 95%CI 1.13-5.44;  $p=0.02$ ), psychological (OR 1.94; 95%CI 1.02-3.67;  $p=0.04$ ), sexual (OR 4.05; 95%CI 1.13-14.5;  $p=0.03$ ) and economic (OR 1.98; 95%CI 1.02-3.83;  $p=0.04$ ) violence were statistically significantly higher in women than in men. People over 70 years of age experienced 2.97 times more physical violence (95%CI 1.11-7.95) than people from the youngest age category of 60-65 years of age ( $p=0.03$ ). Also, the oldest seniors more often than the "youngest" persons reported using economic violence against them (OR 3.83; 95%CI 1.51-9.72;  $p<0.01$ ). The level of education significantly influenced only the occurrence of physical violence ( $p=0.02$ ). The largest percentage of people affected by violence concerned respondents with the lowest monthly income, i.e. PLN <1000 and PLN 1000-2000. The analysis also shows that people living in the city are significantly more likely to experience various forms of violence. It has been shown that partners, spouses or sons are the most common perpetrators of elder abuse. Physical violence was most often committed

by spouses (48.6%), followed by partners (45.9%) and sons (45.9%). In turn, sons were the most common perpetrators of economic and psychological violence (34.0% and 25.9%, respectively), followed by partners (30.2% and 19.0%) and spouses (28.3% and 12.1%). Sexual violence was mainly committed by partners (35.3%). On the other hand, in the general comparison of all types of violence, it was sons who turned out to be the most frequent perpetrators (39.0%), followed by spouses (27.3%) and partners (24.7%). The most common reported specific forms of psychological abuse, in order of frequency, were: arrogant and vulgar taunts (77.6 %), insulting and criticizing (74.1 %), mocking (51.7 %), closing and isolating (46.6 %), blackmail and threats (27.6 %). The most frequently reported forms of physical violence were: jerking (64.8%), hitting (44.4%), kicking (40.7%), and pushing (35.2%). Our research during the COVID-19 pandemic showed that nearly 45% of the elderly were victims of violence, an increase of over 6 percentage points compared to the results obtained by us before the pandemic. The logistic regression model showed many variables that are important risk factors for violence in the COVID-19 pandemic, including low socioeconomic status (OR 3.60, 95%CI 1.93-6.72), chronic diseases (OR 2.06, 95%CI 1.28-3.31), weakened family ties and relations (OR 3.26, 95%CI 1.96-5.43), moderate and severe depression (OR 18.29, 95%CI 10.24-32.69; OR 18.49, 95%CI 3.91-87.30, respectively). The study also showed that moderate disability (3-4 points on the ADL scale) 5.52 times more often and severe functional impairment ( $\leq 2$  points on the ADL scale) 21.07 times more often predisposed to acts of violence. People who suffered from COVID-19 were 1.59 times more likely to be victims of violence (95%CI 1.03-2.46). The project also assessed the psychometric properties, reliability and repeatability of the VASS tool used to assess the risk of violence. The Cronbach's alpha coefficient for the VASS scale (12 items) was 0.89, which proves a very good internal consistency. The mean and median of the total VASS score in the first assessment was  $3.15 \pm 3.40$  and 2, respectively, and in the second assessment was  $3.21 \pm 3.33$  and 2. There was no statistically significant difference between the first and the

second assessments ( $p= 0.65$ ). There was a statistically significant, very strong correlation between the test and retest results ( $r=0.98$ ;  $p<0.0001$ ). All analysed items are characterized by an excellent intra-class correlation coefficient ( $ICC> 0.9$ ) and a weighted Cohen kappa ( $\kappa> 0.9$ ). In the Bland-Altman analysis, a high rate of repeatability (CR 0.72; 95% CI 0.66-0.79) and narrow limits of agreement (upper: 0.6469, 95%CI 0.5657–0.7281 and lower: -0.7785, 95%CI -0.8597 to -0.6973) were observed. We observed a very strong, significant correlation of VASS with the occurrence in the elderly ( $R= 0.70$ ;  $p<0.0001$ ).

### **Conclusions**

1. Domestic violence was experienced by 38.5% of hospitalized older adults.
2. Psychological, economic and physical violence are the most common and widespread types of elder abuse.
3. Socio-demographic factors determining the occurrence of violence in the studied population are: female gender, age>70, marital status (single, divorced, widowers/widows), low socio-economic status and the city as the main place of residence.
4. Clinical factors determining the occurrence of violence in the studied population are: chronic diseases (mainly arterial hypertension, myocardial infarction, stroke, epilepsy), cognitive disorders, depressive disorders, and functional status.
5. There was a significant increase in the percentage of violence against the elderly during the COVID-19 pandemic – from 38.5% to 45%.
6. The most common perpetrators of the violence used in the study population were: spouses, children (mainly sons), partners.
7. Validation of the VASS questionnaire in Polish conditions has shown that it is a reliable, accurate tool with appropriate psychometric properties, which allows it to be included in the routine assessment

of elderly people in order to detect early signs of violence and prevent it.

**Keywords:** elder abuse, psychological violence, physical violence, risk factors, victim of violence, perpetrator of violence

## Bibliografia

1. Koga C, Tsuji T, Hanazato M, Takasugi T, Kondo K. Types of Elder Abuse and Dementia Onset among Older Adults in Japan: A 6-year Longitudinal Study from the Japan Gerontological Evaluation Study. *Arch Gerontol Geriatr.* 2022;100:104656. doi: 10.1016/j.archger.2022.104656
2. World Health Organization. Ageing and health; 2021. Źródło: <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health> [Dostęp: 27.02.2022].
3. Mehra A, Grover S, Agarwal A, Bashir M, Avasthi A. Prevalence of Elder Abuse and its Association with Psychiatric Morbidity in a Rural Setting. *J Neurosci Rural Pract.* 2019;10(2):218-224. doi: 10.4103/jnrp.jnrp\_338\_18.
4. Koga C, Hanazato M, Tsuji T, Suzuki N, Kondo K. Elder Abuse and Social Capital in Older Adults: The Japan Gerontological Evaluation Study. *Gerontology.* 2020;66(2):149-159. doi: 10.1159/000502544.
5. Naderi Z, Gholamzadeh S, Zarshenas L, Ebadi A. Hospitalized elder abuse in Iran: a qualitative study. *BMC Geriatr.* 2019;19(1):307. doi: 10.1186/s12877-019-1331-8.
6. World Health Organization. Elder Abuse; 2021. Źródło: <https://www.who.int/news-room/fact-sheets/detail/elder-abuse> [Dostęp: 2.03.2022].
7. Centers for Disease Control and Prevention. Elder Abuse. Źródło: <https://www.cdc.gov/violenceprevention/elderabuse/fastfact.html> [Dostęp: 2.03.2022].
8. Administration for Community Living. What is Elder Abuse?; 2019. Źródło: <https://acl.gov/programs/elder-justice/what-elder-abuse> [Dostęp: 2.03.2022].
9. Pospiszyl I. Przemoc w rodzinie. Warszawa: Wydawnictwo Szkolne i Pedagogiczne; 1994.

10. Stożek M. Przemoc w rodzinie: zapobieganie w świetle przepisów prawa. Warszawa: Instytut Psychologii Zdrowia; 2009.
11. Ustawa z dnia 29 lipca 2005 r. o przeciwdziałaniu przemocy w rodzinie. Dz.U. 2005 nr 180 poz. 1493. Źródło: <http://prawo.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20051801493> [Dostęp 2.03.2022].
12. Bajpai N, Kulshreshtha K, Dubey P, Sharma G. Travesty of Life Elders Abuse an Inquiry of Physical and Psychological Abuse. *Ageing Int.* 2022;1-25. doi: 10.1007/s12126-021-09479-x.
13. National Institute of Aging. Elder Abuse, 2020. Źródło: <https://www.nia.nih.gov/health/elder-abuse> [Dostęp: 3.03.2022].
14. Vilar-Compte M, Gaitán-Rossi P. Syndemics of Severity and Frequency of Elder Abuse: A Cross-Sectional Study in Mexican Older Females. *Front Psychiatry.* 2018;9:599. doi: 10.3389/fpsy.2018.00599.
15. Alraddadi K. Prevalence and Risk Factors of Elder Mistreatment in Sheltered Homes. *J Interpers Violence.* 2022;37(3-4):1588-1603. doi: 10.1177/0886260520922354.
16. Piña-Escudero SD, Chodos A, Weinstein CA, Allen IE, Ávila-Funes JA, Ritchie C. Subjective cognitive decline and elder mistreatment in Mexican community-dwelling older adults. *Arch Gerontol Geriatr.* 2021;92:104242. doi: 10.1016/j.archger.2020.104242.
17. Dong X, Simon M, Beck T, Evans D. Decline in cognitive function and elder mistreatment: findings from the Chicago Health and Aging Project. *Am J Geriatr Psychiatry.* 2014;22(6):598-605. doi: 10.1016/j.jagp.2012.11.004.
18. Ahnlund P, Andersson T, Snellman F, Sundström M, Heimer G. Prevalence and Correlates of Sexual, Physical, and Psychological Violence Against Women and Men of 60 to 74 Years in Sweden. *J Interpers Violence.* 2020;35(5-6):1539-1561. doi: 10.1177/0886260517696874.



19. Kulakçı Altıntaş H, Korkmaz Aslan G. Prevalence of elder abuse among community-dwelling older adults in Turkey and its associated factors. *Psychogeriatrics*. 2020;20(1):3-10. doi: 10.1111/psyg.12446.
20. Sudan A, Shahi P, Julka D. Prevalence of Abuse in Elders With Psychiatric Morbidity and Its Sociodemographic Association. *Cureus*. 2020;12(4):e7906. doi: 10.7759/cureus.7906.
21. Du P, Chen Y. Prevalence of elder abuse and victim-related risk factors during the COVID-19 pandemic in China. *BMC Public Health*. 2021;21(1):1096. doi: 10.1186/s12889-021-11175-z.
22. Sembiah S, Dasgupta A, Taklikar CS, Paul B, Bandyopadhyay L, Burman J. Elder abuse and its predictors: a cross-sectional study in a rural area of West Bengal, eastern part of India. *Psychogeriatrics*. 2020;20(5):636-644. doi: 10.1111/psyg.12550.
23. HelpGuide, Elder abuse and neglect. Źródło: <https://www.helpguide.org/articles/abuse/elder-abuse-and-neglect.htm> [Dostęp: 5.04.2022].
24. Weissberger GH, Goodman MC, Mosqueda L, Schoen J, Nguyen AL, Wilber KH, Gassoumis ZD, Nguyen CP, Han SD. Elder Abuse Characteristics Based on Calls to the National Center on Elder Abuse Resource Line. *J Appl Gerontol*. 2019;733464819865685. doi: 10.1177/0733464819865685.
25. Curcio CL, Payán-Villamizar C, Jiménez A, Gómez F. Abuse in Colombian elderly and its association with socioeconomic conditions and functionality. *Colomb Med (Cali)*. 2019;50(2):77-88. doi: 10.25100/cm.v50i2.4013.
26. Yon Y, Mikton CR, Gassoumis ZD, et al. Elder abuse prevalence in community settings: a systematic review and meta-analysis. *Lancet Glob Health*. 2017;5:147–156.
27. Eslami B, Viitasara E, Macassa G, Melchiorre MG, Lindert J, Stankunas M, Torres-Gonzalez F, Barros H, Ioannidi-Kapolou E, Soares JJ. The prevalence of lifetime abuse among older adults in

- seven European countries. *Int J Public Health*. 2016;61:891–901. doi: 10.1007/s00038-016-0816-x.
28. Kołodziejczak S, Terelak A, Balsa M. Domestic violence against seniors in rural areas of West Pomerania, Poland. *Ann Agric Environ Med*. 2019;26(1):92-96. doi: 10.26444/aaem/92208.
29. Centrum Badania Opinii Społecznej. Polacy wobec własnej starości, 2012 rok. Źródło: [https://cbos.pl/SPISKOM.POL/2012/K\\_094\\_12.PDF](https://cbos.pl/SPISKOM.POL/2012/K_094_12.PDF) [Dostęp: 14.05.2022].
30. Korzeniowski K, Radkiewicz P. Przemoc w rodzinie wobec osób starszych i niepełnosprawnych. Raport z badania ogólnopolskiego 2015 r. oraz badania porównawczego z lat 2009-2015. Warszawa: Polska Akademia Nauk Instytut Psychologii; 2015.
31. Halicka M, Halicki J, Ślusarczyk P. Przemoc w stosunku do osób starszych. [w:] Mossakowska M, Więcek A, Błędowski P. (red.): *Aspekty medyczne, psychologiczne, socjologiczne i ekonomiczne starzenia się ludzi w Polsce*. Warszawa: Wydawnictwo Termedia; 2012: 495-530.
32. Grzanka-Tykwińska A, Rzepka A, Chudzińska M, Sygit B, Kusza K, Kędziora-Kornatowska K. Problematyka przemocy wobec osób starszych. *Nowiny Lekarskie*. 2012; 81(1): 44–48.
33. Wong RT, Cafferky BM, Alejandro JP. Chronic disease and elder mistreatment: A meta-analysis. *Int J Geriatr Psychiatry*. 2022;37(1). doi: 10.1002/gps.5640. Epub 2021 Oct 1
34. Brijoux T, Neise M, Zank S. Elder abuse in the oldest old: prevalence, risk factors and consequences. *Z Gerontol Geriatr*. 2021;54(2):132-137. doi: 10.1007/s00391-021-01945-0.
35. Santos AJ, Nunes B, Kislaya I, Gil AP, Ribeiro O. Elder abuse victimization patterns: latent class analysis using perpetrators and abusive behaviours. *BMC Geriatr*. 2019;19(1):117. doi: 10.1186/s12877-019-1111-5.

36. Alexa ID, Ilie AC, Pislaru AI, Dronic A, Gavrilovici O, Alexa-Stratulat T, Stefaniu R, Sandu I, Nuta C, Herghelegiu AM. Elder abuse and associated factors in eastern romania. *Psychogeriatrics*. 2020;20(2):196-205. doi: 10.1111/psyg.12488.
37. Patel VK, Tiwari DS, Shah VR, Patel MG, Raja HH, Patel DS. Prevalence and Predictors of Abuse in Elderly Patients with Depression at a Tertiary Care Centre in Saurashtra, India. *Indian J Psychol Med*. 2018;40(6):528-533. doi: 10.4103/IJPSYM.IJPSYM\_18\_18.
38. Ribot VC, Rousseaux E, García TC, Arteaga E, Ramos M, Alfonso M. Psychological the most common elder abuse in a Havana neighborhood. *MEDICC Rev*. 2015;17(2):39-43. doi: 10.37757/MR2015.V17.N2.9.
39. Pak M. The prevalence and associated risk factors of elder abuse among older people applied to the family health center in the rural district of Turkey. *Soc Work Health Care*. 2020;59(4):236-256, doi:10.1080/00981389.2020.1740377.
40. American Psychological Association. Elder Abuse. Źródło: <https://www.apa.org/pi/prevent-violence/resources/elder-abuse> [Dostęp: 15.05.2022].
41. Centers for Disease Control and Prevention. Preventing Elder Abuse. Źródło: <https://www.cdc.gov/violenceprevention/elderabuse/fastfact.html> [Dostęp: 20.05.2022].
42. Schofield MJ, Mishra GD. Validity of self-report screening scale for elder abuse: Women's Health Australia Study. *Gerontologist*. 2003;43(1):110-120. doi: 10.1093/geront/43.1.110.
43. Yesavage JA, Brink TL, Rose TL, Lum O, Huang V, Adey M, Leirer VO. Development and validation of a geriatric depression screening scale: a preliminary report. *J Psychiatr Res*. 1982-1983;17(1):37-49. doi: 10.1016/0022-3956(82)90033-4.

44. Leshner EL, Berryhill JS. Validation of the Geriatric Depression Scale – Short Form among inpatients. *J Clin Psychol*. 1994;50:256–260. doi: 10.1002/1097-4679(199403)50:2<256::aid-jclp2270500218>3.0.co;2-e.
45. Katz S, Ford AB, Moskowitz RW, Jackson BA, Jaffe MW. Studies of illness in the aged: The Index of ADL: A standardized measure of biological and psychosocial function. *JAMA*. 1963;185:914-919. doi: 10.1001/jama.1963.03060120024016.
46. Katz S, Down TD, Cash HR, Grotz RC. Progress in the development of the index of ADL. *Gerontologist*. 1970;10(1):20–30. doi: 10.1093/geront/10.1\_part\_1.20.

## **Załączniki**

### **Wykaz stosowanych skrótów**

**ADL**- Skala Podstawowych Czynności Życia Codziennego (ang. *the Activities of Daily Living Scale*)

**CI**- Przedział ufności (ang. *confidence interval*)

**GDS**- Geriatryczna Skala Oceny Depresji (ang. *the Geriatric Depression Scale*)

**NCEA**- Krajowe Centrum Przemocy wobec Osób Starszych (ang. oryg. *National Center on Elder Abuse*)

**OR**- Iloraz szans (ang. *odds ratio*)

**VASS**- Skala Podatności na Nadużycia (ang. oryg. *Vulnerability to Abuse Screening Scale*)

**WHO**- Światowa Organizacja Zdrowia (ang. *World Health Organization*)

**prof. dr hab. Robert Ślusarz**

### **Oświadczenie współautora o udziale w publikacji**

#### **I**

Karolina Filipaska, Monika Biercewicz, Adam Wiśniewski, Kornelia Kędziora-Kornatowska, **Robert Ślusarz**. Theoretical basics of the issue of the abuse of the elderly. *Pielęgniarstwo w Opiece Długoterminowej / Long-Term Care Nursing*. 2019;4(4):45-50.

doi: [https://doi.org/10.19251/pwod/2019.4\(5\)](https://doi.org/10.19251/pwod/2019.4(5))

udział: koncepcja pracy, przegląd piśmiennictwa, konsultacja i opieka,  
korekta manuskryptu

#### **II**

Karolina Filipaska, Monika Biercewicz, Adam Wiśniewski, Kornelia Kędziora-Kornatowska, **Robert Ślusarz**. Prevalence of elder abuse and neglect: screening in Poland families. *European Geriatric Medicine*. 2019;10:817–825.

doi: <https://doi.org/10.1007/s41999-019-00224-x>

udział: koncepcja pracy, zaplanowanie badań, wybór metodyki badań,  
przegląd piśmiennictwa, konsultacja i opieka, korekta manuskryptu

#### **III**

Karolina Filipaska, Monika Biercewicz, Adam Wiśniewski, Kornelia Kędziora-Kornatowska, **Robert Ślusarz**. Prevalence and associated factors of elder psychological abuse- a cross sectional screening study, based on a hospitalized community from Poland. *Archives of Gerontology and Geriatrics*. 2020;90:104152.

doi: <https://doi.org/10.1016/j.archger.2020.104152>

udział: wybór metodyki badań, konsultacja, korekta manuskryptu

#### IV

Karolina Filipka, Monika Biercewicz, Adam Wiśniewski, Kornelia Kędziora-Kornatowska, **Robert Ślusarz**. Predictors of self-reported physical abuse among hospitalized older adults. *Gerontologia Polska*. 2021;29:146-157.  
doi: <https://doi.org/10.53139/GP.20212925>

udział: koncepcja pracy, zaplanowanie badań, wybór metodyki badań, przegląd piśmiennictwa, konsultacja i opieka, korekta manuskryptu

#### V

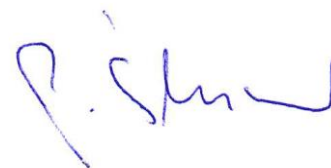
Karolina Filipka, Monika Biercewicz, Adam Wiśniewski, Renata Jabłońska, Agnieszka Królikowska, Emilia Głowczewska-Siedlecka, Kornelia Kędziora-Kornatowska, **Robert Ślusarz**. High Rate of Elder Abuse in the Time of COVID-19-A Cross Sectional Study of Geriatric and Neurology Clinic Patients. *Journal of Clinical Medicine*. 2021;10(19):4532.  
doi: <https://doi.org/10.3390/jcm10194532>

udział: koncepcja pracy, zaplanowanie badań, wybór metodyki badań, przegląd piśmiennictwa, pisanie pracy, konsultacja i opieka

#### VI

Karolina Filipka, Monika Biercewicz, Adam Wiśniewski, Kornelia Kędziora-Kornatowska, **Robert Ślusarz**. Reliability and validity of the polish version of the vulnerability to Abuse Screening Scale (VASS). *Journal of Elder Abuse & Neglect*. 2022;34(1):56-69.  
doi: <https://doi.org/10.1080/08946566.2021.2024106>.

udział: koncepcja pracy, zaplanowanie badań, wybór metodyki badań,  
przegląd piśmiennictwa, konsultacja i opieka, korekta manuskryptu



10.06.2022

.....  
Data i podpis współautora



dr **Monika Biercewicz**

### Oświadczenie współautora o udziale w publikacji

I

Karolina Filipaska, **Monika Biercewicz**, Adam Wiśniewski, Kornelia Kędziora-Kornatowska, Robert Ślusarz. Theoretical basics of the issue of the abuse of the elderly. *Pielęgniarstwo w Opiece Długoterminowej / Long-Term Care Nursing*. 2019;4(4):45-50.

doi: [https://doi.org/10.19251/pwod/2019.4\(5\)](https://doi.org/10.19251/pwod/2019.4(5))

udział: konsultacja, przegląd piśmiennictwa, korekta manuskryptu

II

Karolina Filipaska, **Monika Biercewicz**, Adam Wiśniewski, Kornelia Kędziora-Kornatowska, Robert Ślusarz. Prevalence of elder abuse and neglect: screening in Poland families. *European Geriatric Medicine*. 2019;10:817–825.

doi: <https://doi.org/10.1007/s41999-019-00224-x>

udział: konsultacja, przegląd piśmiennictwa, zbieranie danych, korekta manuskryptu

III

Karolina Filipaska, **Monika Biercewicz**, Adam Wiśniewski, Kornelia Kędziora-Kornatowska, Robert Ślusarz. Prevalence and associated factors of elder psychological abuse- a cross sectional screening study, based on a hospitalized community from Poland. *Archives of Gerontology and Geriatrics*. 2020;90:104152.

doi: <https://doi.org/10.1016/j.archger.2020.104152>

udział: koncepcja pracy, wybór metodyki pracy, zbieranie danych, korekta manuskryptu,  
konsultacja

IV

Karolina Filipaska, **Monika Biercewicz**, Adam Wiśniewski, Kornelia Kędziora-Kornatowska, Robert Ślusarz. Predictors of self-reported physical abuse among hospitalized older adults. *Gerontologia Polska*. 2021;29:146-157.

doi: <https://doi.org/10.53139/GP.20212925>

udział: konsultacja, pisanie pracy, korekta manuskryptu

V

Karolina Filipka, **Monika Biercewicz**, Adam Wiśniewski, Renata Jabłońska, Agnieszka Królikowska, Emilia Głowczewska-Siedlecka, Kornelia Kędziora-Kornatowska, Robert Ślusarz. High Rate of Elder Abuse in the Time of COVID-19-A Cross Sectional Study of Geriatric and Neurology Clinic Patients. Journal of Clinical Medicine. 2021;10(19):4532.

doi: <https://doi.org/10.3390/jcm10194532>

udział: koncepcja pracy, wybór metodologii, zbieranie danych, pisanie pracy, konsultacja

VI

Karolina Filipka, **Monika Biercewicz**, Adam Wiśniewski, Kornelia Kędziora-Kornatowska, Robert Ślusarz. Reliability and validity of the polish version of the vulnerability to Abuse Screening Scale (VASS). Journal of Elder Abuse & Neglect. 2022;34(1):56-69.

doi: <https://doi.org/10.1080/08946566.2021.2024106>.

udział: zbieranie danych, konsultacja, korekta manuskryptu

13.06.2022 *Biercewicz*.....

Data i podpis współautora

**dr Adam Wiśniewski**

### **Oświadczenie współautora o udziale w publikacji**

**I**

Karolina Filipka, Monika Biercewicz, **Adam Wiśniewski**, Kornelia Kędziora-Kornatowska, Robert Ślusarz. Theoretical basics of the issue of the abuse of the elderly. *Pielęgniarstwo w Opiece Długoterminowej / Long-Term Care Nursing*. 2019;4(4):45-50.

doi: [https://doi.org/10.19251/pwod/2019.4\(5\)](https://doi.org/10.19251/pwod/2019.4(5))

udział: przegląd piśmiennictwa, korekta manuskryptu

**II**

Karolina Filipka, Monika Biercewicz, **Adam Wiśniewski**, Kornelia Kędziora-Kornatowska, Robert Ślusarz. Prevalence of elder abuse and neglect: screening in Poland families. *European Geriatric Medicine*. 2019;10:817–825.

doi: <https://doi.org/10.1007/s41999-019-00224-x>

udział: przegląd piśmiennictwa, graficzne przedstawienie wyników, konsultacja, korekta manuskryptu

**III**

Karolina Filipka, Monika Biercewicz, **Adam Wiśniewski**, Kornelia Kędziora-Kornatowska, Robert Ślusarz. Prevalence and associated factors of elder psychological abuse- a cross sectional screening study, based on a hospitalized community from Poland. *Archives of Gerontology and Geriatrics*. 2020;90:104152.

doi: <https://doi.org/10.1016/j.archger.2020.104152>

udział: zaplanowanie badań, wybór metodyki badań, przegląd piśmiennictwa, graficzne przedstawienie wyników, konsultacja, korekta manuskryptu

#### IV

Karolina Filipka, Monika Biercewicz, **Adam Wiśniewski**, Kornelia Kędziora-Kornatowska, Robert Ślusarz. Predictors of self-reported physical abuse among hospitalized older adults. Gerontologia Polska. 2021;29:146-157.

doi: <https://doi.org/10.53139/GP.20212925>

udział: przegląd piśmiennictwa, pisanie pracy, korekta manuskryptu

#### V

Karolina Filipka, Monika Biercewicz, **Adam Wiśniewski**, Renata Jabłońska, Agnieszka Królikowska, Emilia Głowczewska-Siedlecka, Kornelia Kędziora-Kornatowska, Robert Ślusarz. High Rate of Elder Abuse in the Time of COVID-19-A Cross Sectional Study of Geriatric and Neurology Clinic Patients. Journal of Clinical Medicine. 2021;10(19):4532.

doi: <https://doi.org/10.3390/jcm10194532>

udział: zbieranie danych, zaplanowanie badań, przegląd piśmiennictwa, pisanie pracy,  
korekta manuskryptu

#### VI

Karolina Filipka, Monika Biercewicz, **Adam Wiśniewski**, Kornelia Kędziora-Kornatowska, Robert Ślusarz. Reliability and validity of the polish version of the vulnerability to Abuse Screening Scale (VASS). Journal of Elder Abuse & Neglect. 2022;34(1):56-69.

doi: <https://doi.org/10.1080/08946566.2021.2024106>

udział: koncepcja pracy, zaplanowanie badań, wybór metodyki badań, zbieranie danych,  
konsultacja, korekta manuskryptu

14.06.2022. *Wiśniewski Adam*

.....  
Data i podpis współautora

**prof. dr hab. Kornelia Kędziora-Kornatowska**

### **Oświadczenie współautora o udziale w publikacji**

**I**

Karolina Filipka, Monika Biercewicz, Adam Wiśniewski, **Kornelia Kędziora-Kornatowska**, Robert Ślusarz. Theoretical basics of the issue of the abuse of the elderly. *Pielęgniarstwo w Opiece Długoterminowej / Long-Term Care Nursing*. 2019;4(4):45-50.

doi: [https://doi.org/10.19251/pwod/2019.4\(5\)](https://doi.org/10.19251/pwod/2019.4(5))

udział: konsultacja, przegląd piśmiennictwa, korekta manuskryptu

**II**

Karolina Filipka, Monika Biercewicz, Adam Wiśniewski, **Kornelia Kędziora-Kornatowska**, Robert Ślusarz. Prevalence of elder abuse and neglect: screening in Poland families. *European Geriatric Medicine*. 2019;10:817–825.

doi: <https://doi.org/10.1007/s41999-019-00224-x>

udział: konsultacja, przegląd piśmiennictwa, korekta manuskryptu

**III**

Karolina Filipka, Monika Biercewicz, Adam Wiśniewski, **Kornelia Kędziora-Kornatowska**, Robert Ślusarz. Prevalence and associated factors of elder psychological abuse- a cross sectional screening study, based on a hospitalized community from Poland. *Archives of Gerontology and Geriatrics*. 2020;90:104152.

doi: <https://doi.org/10.1016/j.archger.2020.104152>

udział: koncepcja pracy, konsultacja, korekta manuskryptu

**IV**

Karolina Filipka, Monika Biercewicz, Adam Wiśniewski, **Kornelia Kędziora-Kornatowska**, Robert Ślusarz. Predictors of self-reported physical abuse among hospitalized older adults. *Gerontologia Polska*. 2021;29:146-157.

doi: <https://doi.org/10.53139/GP.20212925>

udział: konsultacja, korekta manuskryptu

V

Karolina Filipiska, Monika Biercewicz, Adam Wiśniewski, Renata Jabłońska, Agnieszka Królikowska, Emilia Głowczewska-Siedlecka, **Kornelia Kędziora-Kornatowska**, Robert Ślusarz. High Rate of Elder Abuse in the Time of COVID-19-A Cross Sectional Study of Geriatric and Neurology Clinic Patients. Journal of Clinical Medicine. 2021;10(19):4532.

doi: <https://doi.org/10.3390/jcm10194532>

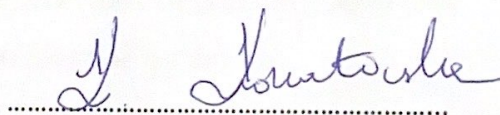
udział: koncepcja pracy, konsultacja, korekta manuskryptu

VI

Karolina Filipiska, Monika Biercewicz, Adam Wiśniewski, **Kornelia Kędziora-Kornatowska**, Robert Ślusarz. Reliability and validity of the polish version of the vulnerability to Abuse Screening Scale (VASS). Journal of Elder Abuse & Neglect. 2022;34(1):56-69.

doi: <https://doi.org/10.1080/08946566.2021.2024106>.

udział: konsultacja, korekta manuskryptu



.....  
Data i podpis współautora

dr Emilia Głowczewska-Siedlecka

**Oświadczenie współautora o udziale w publikacji**

Karolina Filipka, Monika Biercewicz, Adam Wiśniewski, Renata Jabłońska, Agnieszka Królikowska, **Emilia Głowczewska-Siedlecka**, Kornelia Kędziora-Kornatowska, Robert Ślusarz.  
High Rate of Elder Abuse in the Time of COVID-19—A Cross Sectional Study of Geriatric and Neurology Clinic Patients. Journal of Clinical Medicine. 2021;10(19):4532.  
doi:<https://doi.org/10.3390/jcm10194532>

udział: konsultacja, przegląd piśmiennictwa, korekta manuskryptu

08.06.2022 Emilia Głowczewska-Siedlecka  
.....  
Data i podpis współautora

**dr Agnieszka Królikowska**

**Oświadczenie współautora o udziale w publikacji**

I

Karolina Filipaska, Monika Biercewicz, Adam Wiśniewski, Renata Jabłońska, **Agnieszka Królikowska**, Emilia Głowczewska-Siedlecka, Kornelia Kędziora-Kornatowska, Robert Ślusarz.

High Rate of Elder Abuse in the Time of COVID-19-A Cross Sectional Study of Geriatric and Neurology Clinic Patients. Journal of Clinical Medicine. 2021;10(19):4532.

doi: <https://doi.org/10.3390/jcm10194532>

udział: interpretacja wyników, pisanie manuskryptu, korekta manuskryptu

08.06.22 Agnieszka Królikowska

Data i podpis współautora



dr Renata Jabłońska

**Oświadczenie współautora o udziale w publikacji**

I

Karolina Filipka, Monika Biercewicz, Adam Wiśniewski, **Renata Jabłońska**, Agnieszka Królikowska, Emilia Głowczewska-Siedlecka, Kornelia Kędziora-Kornatowska, Robert Ślusarz. High Rate of Elder Abuse in the Time of COVID-19-A Cross Sectional Study of Geriatric and Neurology Clinic Patients. Journal of Clinical Medicine. 2021;10(19):4532.

doi: <https://doi.org/10.3390/jcm10194532>

udział: interpretacja wyników, pisanie manuskryptu, korekta manuskryptu

14.06.2022 R. Jabłońska

Data i podpis współautora

Uniwersytet Mikołaja Kopernika w Toruniu  
Collegium Medicum im L. Rydygiera w Bydgoszczy  
KOMISJA BIOETYCZNA

Ul. M. Skłodowskiej-Curie 9, 85-094 Bydgoszcz, tel.(052) 585-35-63, fax.(052) 585-38-11

KB 259/2017

Bydgoszcz, 21.03.2017r.

Działając na podstawie art.29 Ustawy z dnia 5 grudnia 1996 roku o zawodzie lekarza (Dz.U. z 1997 r. Nr 28 poz. 152 (wraz z późniejszymi zmianami), zarządzenia Ministra Zdrowia i Opieki Społecznej z dnia 11 maja 1999 r. w sprawie szczegółowych zasad powoływania i finansowania oraz trybu działania komisji bioetycznych (Dz.U.Nr 47 poz.480) oraz Zarządzeniem Nr 21 Rektora UMK z dnia 4 marca 2009 r. z późn. zm. w sprawie powołania oraz zasad działania Komisji Bioetycznej Uniwersytetu Mikołaja Kopernika w Toruniu przy Collegium Medicum im Ludwika Rydygiera w Bydgoszczy oraz zgodnie z zasadami zawartymi w ICH – GCP

**Komisja Bioetyczna przy UMK w Toruniu, Collegium Medicum w Bydgoszczy**

(skład podano w załączeniu), na posiedzeniu w dniu 21.03.2017r. przeanalizowała wniosek, który złożyła kierownik badania:

dr n. o zdr. Monika Biercewicz  
Katedra i Klinika Geriatrii  
Collegium Medicum w Bydgoszczy

z zespołem w składzie:

- Karolina Filipaska,

w sprawie badania:

„Zjawisko występowania aktów przemocy wobec osób w podeszłym wieku.”

Po zapoznaniu się ze złożonym wnioskiem i w wyniku przeprowadzonej dyskusji oraz głosowania Komisja podjęła

**Uchwałę o pozytywnym zaopiniowaniu wniosku**

w sprawie przeprowadzenia badań w zakresie określonym we wniosku pod warunkiem zachowania tajemnicy wszystkich danych, w tym danych osobowych badanych umożliwiających ich identyfikację w ewentualnych publikacjach, a także pod warunkiem w pełni anonimowego rozprowadzania i gromadzenia ankiet.

*Zgoda obowiązuje od daty posiedzenia (21.03.2017 r.) do końca 2020 r.*

*Wydana opinia dotyczy tylko rozpatrywanego wniosku z uwzględnieniem przedstawionego projektu; każda zmiana i modyfikacja wymaga uzyskania odrębnej opinii*

Prof. dr hab. med. Karol Śliwka

Przewodniczący Komisji Bioetycznej

Otrzymuje:  
dr n. o zdr. Monika Biercewicz  
Katedra i Klinika Geriatrii  
Collegium Medicum w Bydgoszczy

**Uniwersytet Mikołaja Kopernika w Toruniu**  
**Collegium Medicum im L. Rydygiera w Bydgoszczy**  
**KOMISJA BIOETYCZNA**

Ul. M. Skłodowskiej-Curie 9, 85-094 Bydgoszcz, tel.(052) 585-35-63, fax.(052) 585-38-11

---

**KB 437/2020**

Bydgoszcz, 29.09.2020 r.

Działając na podstawie art.29 ustawy z dnia 5 grudnia 1996 roku o zawodzie lekarza (Dz.U. z 1997 r. Nr 28 poz. 152 (wraz z późniejszymi zmianami), rozporządzenia Ministra Zdrowia i Opieki Społecznej z dnia 11 maja 1999 r. w sprawie szczegółowych zasad powoływania i finansowania oraz trybu działania komisji bioetycznych (Dz.U. Nr 47 poz.480) oraz Zarządzenia Nr 21 Rektora UMK z dnia 4 marca 2009 r. z późn. zm. w sprawie powołania oraz zasad działania Komisji Bioetycznej Uniwersytetu Mikołaja Kopernika w Toruniu przy Collegium Medicum im Ludwika Rydygiera w Bydgoszczy oraz zgodnie z zasadami zawartymi w ICH – GCP

**Komisja Bioetyczna przy UMK w Toruniu, Collegium Medicum w Bydgoszczy**

(skład podano w załączeniu), na posiedzeniu w dniu **29.09.2020 r.** przeanalizowała wniosek, który złożył kierownik badania:

**dr hab. n. o zdr. Robert Ślusarz, prof. UMK**  
**Zakład Pielęgniarstwa Neurologicznego i Neurochirurgicznego**  
**Collegium Medicum w Bydgoszczy**

z zespołem w składzie

- **dr hab. n. o zdr. Robert Ślusarz, prof. UMK, mgr Karolina Filipaska,**  
**dr n. o zdr. Monika Biercewicz, dr n. med. Adam Wiśniewski,**

w sprawie badania:

**„Ocena występowania zjawiska przemocy wobec osób starszych w Polsce.”**

Po zapoznaniu się ze złożonym wnioskiem i w wyniku przeprowadzonej dyskusji oraz głosowania Komisja podjęła

**Uchwałę o pozytywnym zaopiniowaniu wniosku**

w sprawie przeprowadzenia badań w zakresie określonym we wniosku pod warunkiem zachowania tajemnicy wszystkich danych, w tym szczególności potencjalnych danych osobowych badanych umożliwiających ich identyfikację w ewentualnych publikacjach, a także w pełni anonimowego rozprowadzania i gromadzenia ankiet tj. bez możliwości wskazania kto wziął udział w badaniu np. poprzez umieszczenie ankiet w ogólnodostępnym miejscu skąd zainteresowani będą mogli je pobrać, a po wypełnieniu wrzucić do specjalnie przygotowanej w tym celu urny.

**Zgoda obowiązuje od daty podjęcia uchwały (29.09.2020 r.) do końca 2024 r.**

*Wydana opinia dotyczy tylko rozpatrywanego wniosku z uwzględnieniem przedstawionego projektu; każda zmiana i modyfikacja wymaga uzyskania odrębnej opinii.*

Prof. dr hab. med. Karol Śliwka

Przewodniczący Komisji Bioetycznej

Otrzymuje:

dr hab. n. o zdr. Robert Ślusarz, prof. UMK  
Zakład Pielęgniarstwa Neurologicznego i Neurochirurgicznego  
Collegium Medicum w Bydgoszczy

Karolina Filipaska<sup>1</sup>, Monika Biercewicz<sup>2</sup>, Adam Wiśniewski<sup>3</sup>, Kornelia Kędzióra-Kornatowska<sup>2</sup>, Robert Ślusarz<sup>1</sup>

<sup>1</sup>Neurological and Neurosurgical Nursing Department, Faculty of Health Science,  
Collegium Medicum, Nicolaus Copernicus University, Torun, Poland

<sup>2</sup>Clinic of Geriatrics, Faculty of Health Science, Collegium Medicum, Nicolaus Copernicus University, Torun, Poland

<sup>3</sup>Department of Neurology, Collegium Medicum in Bydgoszcz, Nicolaus Copernicus University in Toruń,  
Bydgoszcz, Poland

## THEORETICAL BASICS OF THE ISSUE OF THE ABUSE OF THE ELDERLY

### Teoretyczne podstawy zagadnienia przemocy wobec osób starszych

#### Abstract

##### Introduction

Violence is defined as the deliberate and instrumental action that seeks to enslave the victim, deprive him/her of autonomy and sovereign thoughts and actions, to subordinate his/her needs and requirements to the perpetrator. Due to the rapid ageing of societies, violence against seniors is predicted to be a growing problem.

##### Aim

The purpose of the work is to show the theoretical issues of the phenomenon of the abuse of the elderly.

##### Review

Many works attempt to define elder abuse. A consistent definition is needed to properly monitor cases of the elderly's abuse and to investigate its spread over time. This consistency will help to determine the extent of elder abuse and allow the problem to be compared at different locations around the world. The collected data will finally inform the necessary preventive and intervention measures. The phenomenon of violence against older people is difficult to diagnose. This results from the myths and stereotypes that are widespread in the society and the feeling of embarrassment and intimidation of the victims themselves. This is a hidden but growing problem in the society. There are different forms of violence. With regard to the age group of seniors, the following are mainly distinguished: physical, mental/emotional, sexual violence, financial abuse and neglect.

##### Conclusions

Every year, a significant percentage of people experience a form of violence that causes fear, loneliness, and consequently depression or even suicide. The phenomenon of violence is a very serious problem and its effects are felt by the victim, most often, for the rest of his or her life, which is why research in this area is so important.

**Keywords:** elder abuse, theoretical basics, older adults, risk factors

#### Streszczenie

##### Wstęp

Przemoc definiowana jest jako zamierzone i instrumentalne działanie dążące do zniewolenia ofiary, pozbawienia jej autonomii i suwerennych myśli oraz działań w celu podporządkowania potrzebom i wymaganiom sprawcy. W związku z szybkim starzeniem się społeczeństw szacuje się, że przemoc wobec seniorów będzie coraz większym problemem.

## **Cel**

Celem pracy jest ukazanie teoretycznych zagadnień aspektu zjawiska przemocy wobec osób w podeszłym wieku.

## **Przegląd**

W wielu dziełach dokonuje się próby zdefiniowania przemocy wobec osób starszych. Potrzebna jest spójna definicja, aby we właściwy sposób monitorować przypadki przemocy nad osobami starszymi i badać jej rozpowszechnienie w czasie. Ta spójność pomaga określić skalę znęcania się nad osobami starszymi i umożliwia porównanie problemu w różnych lokalizacjach na całym świecie. To ostatecznie informuje o konieczności podejmowania działań prewencyjnych i interwencyjnych. Zjawisko przemocy wobec osób starszych naznaczone jest trudnościami w diagnozowaniu. Wynika to z rozpowszechnionych w społeczeństwie mitów i stereotypów oraz z poczucia zawstydzenia i zastraszenia samych ofiar. To ukryty, ale narastający problem w społeczeństwie. Wyróżnia się różne formy przemocy. W odniesieniu do grupy wiekowej seniorów wyróżniona się głównie: przemoc fizyczną, psychiczną/emocjonalną, seksualną, wykorzystanie finansowe oraz zaniedbanie.

## **Wnioski**

Co roku znaczny odsetek osób doświadcza jakiegokolwiek formy przemocy, która powoduje strach, osamotnienie, a w konsekwencji depresję i akty samobójcze. Zjawisko przemocy stanowi bardzo poważny problem, a jego skutki są odczuwane przez ofiarę najczęściej do końca życia, dlatego tak istotne jest prowadzenie badań w tym zakresie.

**Słowa kluczowe:** przemoc wobec osób starszych, teoretyczne podstawy, osoby starsze, czynniki ryzyka

## **Introduction**

Elder abuse is increasingly recognized as a global public health and social problem, as countries around the world have been dealing with the problem of an aging society for many years. This process is referred to as a global phenomenon [Markiewicz and Skawina, 2015; Janiszewska, 2015; Hirsch, 2019]. The aging process of the society is articulated by the progressively increasing percentage of older people. The development of this phenomenon is also observed in Poland [Mossakowska, Więcek and Błędowski, 2012]. Due to the rapid aging of societies, it is estimated that elder abuse will be a growing problem. The consequence of the growing number of older adults in the family is a negative impact on physical and mental condition, economic pressure, mental disorders and emotional tensions, lack of responsibility and tolerance, and fatigue and social isolation of family members and their proteges. This situation, as a consequence, may lead to anti-social behaviour and increased violence. Older people are often used in many ways, which has serious and lasting consequences. Elder abuse remains one of the most hidden forms of family conflicts, and it is anticipated that their frequency will increase in many countries where population aging is rapidly increasing [Piri et al., 2018]. Every year, a significant percentage of people experience a form of violence that causes fear, loneliness, and consequently depression and suicide. The phenomenon of violence is a very serious problem and its effects are most often felt by the victim for the rest of his life. Therefore, it is important to pay more attention to the occurrence of this problem by health care professionals, scientists and social assistance workers. Promoted activities should also seek to increase public vigilance and respond appropriately [Pruszyński, 2009; Beach et al., 2010].

## **Aim of the study**

The aim of the work is to show the theoretical issues of the aspect of the phenomenon of elder abuse.

## **Review**

### *Definition of elder abuse*

Many works attempt to define violence. The attempt to determine which definition of elder abuse should be used and adopted is a complex process because there is no single definition used worldwide, in the country or in different disciplines. Despite the existing misunderstandings, according to the World Health Organization, the following should be considered elder abuse: "a single or repeated act or lack of appropriate action, occurring within any relationship where there is an expectation of trust, which causes harm or dis-

gress to an older person. This type of violence constitutes a violation of human rights and includes physical, sexual, psychological, and emotional abuse; financial and material abuse; abandonment; neglect; and serious loss of dignity and respect” [www1]. The Centres for Disease Control and Prevention similarly to WHO defines violence as “an intentional act, or failure to act, by a caregiver or another person in a relationship involving an expectation of trust that causes or creates a risk of harm to an older adult” [www2]. On the other hand, the definition that appears frequently in the Polish literature is the one by Pospiszyl describing violence as all non-accidental acts violating the personal freedom of the individual or contributing to the physical and psychological harm of a person, acts that go beyond the social principles of mutual relations [Pospiszyl, 1994]. According to the definition of the European Parliament, violence is a violation of human rights to life, personal security, freedom, dignity and physical and mental integrity [Stożek, 2009]. The Act of July 29, 2005 on the prevention of domestic violence formulated the concept of domestic violence: “domestic violence – is a one-off or repeated intentional act or omission violating the rights or personal rights of family members, in particular exposing them to the risk of loss of life, health, violating their dignity, physical integrity, freedom, including sexual, causing damage to their physical or mental health, as well as causing suffering and moral harm to people affected by violence” [www3].

The phenomenon of elder abuse is marked by difficulties in diagnosis. This results from the myths and stereotypes that are widespread in the society, and to the feeling of shame and intimidation of the victims themselves. This is a hidden but growing problem in the society. Research estimates that approximately 1 to 10 older adults living in family homes experience different forms of violence every year [www4]. According to the World Health Organization statistics, about 4 million older people in Europe fall victim to physical violence every year, nearly 30 million – experiencing psychological violence, and 2.500 – lose their life [www1]. A meta-analysis of research carried out from 1990 to 2011 prepared by Sooryanarayana, Choo and Hairi [2013], indicates that in developed countries, elder abuse is experienced by 13.5 to 28.8% seniors, and in developing countries by 44.6% of seniors. The most common forms are psychological and financial violence. According to the National Centre on Elder Abuse (NCEA), nearly 7.6-10% of seniors experience violence. Data provided by the State Agency for Adult Services (APS) show an increasing trend in reporting cases of elder abuse [www5]. In turn, the results of the national survey PolSenior indicate that 5.9% of people over 65 experience violence. This group is significantly more often created by women. The authors included nine types of violence in the study. The results indicate that abuses, insults, ridicule or disregard (5.4%) are the most commonly experienced forms of violence. Then, according to frequency, there are intimidation and blackmail (2.1%), removing someone from the apartment (1.1%), taking and using a person’s property without his knowledge (1%) and limiting freedom, e.g. moving, locking in a room” (0.6%), and others [Moszakowska, Więcek and Błądowski, 2012; Yon et al., 2017]. In a study of the Institute of Psychology of the Polish Academy of Sciences regarding elder abuse and disabled people conducted in 2008 on a representative group of 1.000 Poles, more than half of the respondents said that they had encountered the phenomenon of elder abuse outside their own family. In turn, 9-13% of respondents declared the occurrence of violence in their own family [Korzeniowski and Radkiewicz, 2015].

#### *Types of elder abuse*

There are different forms of violence. The most frequently mentioned are: physical, psychological/emotional, sexual violence and financial exploitation [Thomas and Hazif-Thomas, 2019]. However, in relation to the age groups of seniors, individual forms of violence were distinguished:

- Physical violence is any deliberate behaviour or act that, as a consequence, leads to bodily harm, pain, injury, hurt by pushing, beating, restraining and others.
- Psychological violence may include various activities aimed at inflicting mental pain, inflicting unpleasantness, humiliation, harassment, preventing contact with relatives, friends and others. It is one of the most common forms of violence that is often harder to prove than other forms.
- Financial exploitation is the unlawful or improper use of the material resources of a senior by a guardian, family or other person who has a trust relationship with the senior. This includes depriving an older adults of legitimate access to information, benefits or the use of personal re-

sources, means and things. Financial abuse may include coercion or total theft, with or without the victim's awareness.

- Sexual violence refers to engaging in sexual contact without the consent or with the forced consent of the victim or with a person unable to give informed consent, provoking sexual behaviour against the will and desire of an older adults.
- Negligence is the caregiver's or family's failure to provide the necessary medical care, nutrition, hydration, basic everyday activities, shelter, which in consequence causes a threat to health, life and safety. Unfortunately, neglect is very common, but is often the most difficult type of abuse that can be proven. There are also many cases of negligence that are not intentional but occur as a result of a lack of resources or knowledge on the part of the caretaker and the family [www6; www7; Halicka and Halicki, 2010; Baumann, 2006; Durda 2006; Mirczak et al., 2011].

Table 1 presents the forms of violence used, examples thereof, as well as symptoms and effects.

**Table 1. Forms of elder abuse**

Forms of elder abuse	Examples	Symptoms and effects
Physical violence	punching, beating, jerking, pinching, slapping, biting, burning, pushing, non-gently lifting, incapacitation, pulling on the hair, kicking, choking, feeding with the use of force, throwing objects at someone	bruises, discolorations, fractures, wounds, painful places, torn hair, traces of restraint, fear, depression, anxiety
Psychological violence	blaming, swearing, humiliating, intimidating, threatening with force, shouting, criticizing, isolating, infantilizing, verbal aggression, insults, limiting contact with other people	anger, hyperactivity, fear, depression, apathy, embarrassment, loss of appetite, insomnia, reduced self-esteem
Financial exploitation	appropriation of a cash benefit, valuables or property, theft, forcing changes in a will, denying an elderly person the right to own money, forcing a loan	changes in a will, difficulties in paying bills, high unjustified withdrawals from the bank, deprivation of living standards, loss of sense of security
Sexual violence	looking, exposing, sexual jokes, harassment, photographing, rape, forcing to watch pornographic content, touching, suggestive conversations	physical and mental discomfort, venereal disease, pain, bruising of the breasts and/or buttocks, remorse
Neglect	lack of care, no food delivery, no shelter, clothing, medical care, social contacts, poor hygiene	pressure ulcers, malnutrition, apathy, depression, medical problems, weight loss, thirst, hunger
Symbolic violence	forcing to wear a specific outfit, using the right language and choosing words, discrediting your own cultural property	loneliness, violation of rights, isolation

Source: [www6; www7; Halicka and Halicki, 2010; Baumann, 2006; Durda 2006; Mirczak et al., 2011]

#### *Risk factors*

Different theories revolve around individual risk factors that can increase the incidence of aggressive behaviour against older people. According to global data, the majority of victims of abuse are women. The likely targets are older people who have no family or friends nearby[www6]. Elements that determine violence against the elderly can also include: atheism, poverty, social isolation, disability, low level of social support [Brozowski and Hall, 2010; Osiecka-Chojnacka, 2012]. Helplessness of the elderly, poor physical

form and loneliness also play an important role in this aspect. It is often associated with the occurrence of mental disorders [Sygit-Kowalkowska and Kowalkowski, 2008]. Risk factors also include:

- caregiver experiencing a lot of stress in everyday life;
- inability to stop or report abuse by an older adults because of cognitive impairment or physical limitations;
- isolation that is the result of location, cultural or language barriers or health complications;
- a caregiver or an older adults is dealing with an addiction;
- a caregiver or an older adults is dependent on the other person for support, for example financially, socially or physically [www8].

WHO also listed socio-cultural risk factors for elder abuse. They include:

- age stereotypes, in which the elderly are characterized as weak and dependent individuals,
- progressive erosion of intergenerational bonds;
- inheritance systems and rights to land, property and material goods;
- migration of the young generation who leave their elderly relatives alone in society under the care of others;
- lack of money for covering the costs of care [www1].

Elder abuse can occur in various forms. These include domestic or institutional abuse. According to WHO, institutions are more likely to experience violence if:

- standards of health and social care for the elderly are at a low level;
- the employees are improperly trained, remunerated and overworked and professionally burned out;
- insufficient physical environment;
- policies usually operate in the interest of the concerned institutions rather than in the interest of the resident [www1].

### Conclusions

Research on the occurrence of the phenomenon of elder abuse is aimed at identifying those who are potential victims of violence in order to prevent this violence, and in cases where violence already occurs, help its victims. It confirms that the risk of elder abuse increases, although it is still a taboo subject. Public opinion and the public continue to be incredulous and reserved regarding information about ill-treatment or elder abuse. The available data show that only nearly half of the nursing staff can recognize the symptoms of acts of aggression in their daily work among their elderly residents. Therefore, it would be important to participate in trainings and conferences designed to recognize elder abuse [Rinker, 2009; Daly and Coffey, 2010]. One's work should also pay special attention to the possibility of the occurrence of such acts and responding to them. In order to solve the problems of elder abuse, cooperation between institutions should be sought. It is also important to create interdisciplinary teams consisting of all members of the therapeutic team including social workers.

### References

1. Baumann K. 2006. Osoby w okresie późnej dorosłości jako ofiary nadużyć. *Gerontol Pol.* vol. 14, issue 3: 119-124.
2. Beach S.R., Schulz R., Castle N.G., Rosen J. 2010. Financial Exploitation and Psychological Maltreatment Among Older Adults: Differences Between African Americans and Non-African Americans in a Population-Based Survey. *The Gerontologist.* vol. 50, issue 6: 744-757.
3. Brozowski K., Hall D.R. 2010. Aging and risk: physical and sexual abuse of elders in Canada. *J Interpers Violence.* vol. 25, issue 7: 1183-1199.
4. Daly J., Coffey A. 2010. Staff perceptions of elder abuse. *Nurs Older People.* vol. 22, issue 4: 33-37.
5. Durda R. 2006. *Krzywdzeni na starość. Analiza danych telefonu "Niebieskiej Linii".* Niebieska Linia 6.
6. Halicka M., Halicki J. 2010. *Przemoc wobec ludzi starych. Na przykładzie badań środowiskowych w województwie podlaskim.* Białystok: Wydawnictwo Stowarzyszenia Temida 2.



7. Hirsch R.D. 2019. Violence against old people. When you should get suspicious. *MMW Fortschr Med.* vol. 161, issue 13: 40-42.
8. Janiszewska A. 2015. *Jakość życia ludzi starych*. Łódź: Wydział Nauk Geograficznych Uniwersytetu Łódzkiego.
9. Korzeniowski K., Radkiewicz P. 2015. *Przemoc w rodzinie wobec osób starszych i niepełnosprawnych. Raport z badania ogólnopolskiego 2015 r. oraz badania porównawczego z lat 2009-2015*. Warszawa: Polska Akademia Nauk, Instytut Psychologii.
10. Markiewicz E., Skawina I. 2015. Polityczna orientacja państw w zakresie społeczeństw starzejących się. *Gerontol Pol.* vol. 1: 34-40.
11. Mirczak A., Tobiasz-Adamczyk B., Brzyski P., Brzyska M. 2011. Rozpoznawanie zjawiska przemocy wobec osób starszych przez pielęgniarki środowiskowe. *Probl Pielęg.* vol. 19, issue 2: 202-209.
12. Mossakowska M., Więcek A., Błędowski P. 2012. *PolSenior. Aspekty medyczne, psychologiczne, socjologiczne i ekonomiczne starzenia się ludzi w Polsce*. Warszawa: Wydawnictwo Termedia.
13. Osiecka-Chojnacka J. 2012. Społeczne opinie o starości a wdrażanie idei aktywnego starzenia się. *Studia BAS.* vol. 30, issue2: 101-128.
14. Piri N., Tanjani P.T., Khodkarim S., Etemad K. 2018. Domestic elder abuse and associated factors in elderly women in Tehran, Iran. *Epidemiol Health.* vol. 40: e2018055.
15. Pospiszyl I. 1994. *Przemoc w rodzinie*. Warszawa: Wydawnictwo Szkolne i Pedagogiczne.
16. Pruszyński J. 2009. Rozpoznawanie objawów przemocy u pacjentów zgłaszających się do przychodni i oddziałów neurologicznych. *Post Nauk Med.* vol. 11: 894-898.
17. Rinker A.G. Jr. 2009 Recognition and perception of elder abuse by prehospital and hospital-based care providers. *Arch Gerontol Geriatr.* vol. 48: 110-115.
18. Sooryanarayana R., Choo W.Y., Hairi N.N. 2013. A review on the prevalence and measurement of elder abuse in the community. *Trauma Violence Abuse.* vol. 14, issue 4: 316-325.
19. Stożek M. 2009. *Przemoc w rodzinie: zapobieganie w świetle przepisów prawa*. Warszawa: Instytut Psychologii Zdrowia.
20. Sygit-Kowalkowska E., Kowalkowski T. 2008. Nadopiekuńczość i zaniechanie – formy przemocy odczuwane przez osoby starsze. *Med Biol Sci.* vol. 22, issue1: 71-75.
21. Thomas P., Hazif-Thomas C. 2019. Ageing, a hidden form of violence. *Soins Gerontol.* vol. 24, issue 137: 12-14.
22. Yon Y., Mikton C.R., Gassoumis Z.D., Wilber K.H. 2017. Elder abuse prevalence in community settings: a systematic review and meta-analysis. *Lancet Glob Health.* vol. 5, issue 2: e147-e156.
23. [www1] World Health Organization. Elder abuse. <https://www.who.int/news-room/fact-sheets/detail/elder-abuse> (accessed 20.09.2019).
24. [www2] Centers for Disease Control and Prevention. Elder abuse: Definitions. <https://www.cdc.gov/violenceprevention/elderabuse/definitions.html> (accessed 21.09.2019).
25. [www3] *Act on preventing domestic violence*. Dz. U. 2005 nr 180 poz. 1493 <http://prawo.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20051801493> (accessed 22.09.2019).
26. [www4] Elder Abuse: A Growing Problem <https://vawnet.org/sc/elder-abuse-growing-problem> (accessed 23.09.2019)
27. [www5] Elder Abuse and Adult Protective Services <http://www.advancingstates.org/policy/key-issues/elder-abuse-and-adult-protective-services> (accessed 23.09.2019)
28. [www6] National Institute on Aging: Elder Abuse <https://www.nia.nih.gov/health/elder-abuse> (accessed 24.09.2019)
29. [www7] Center for Disease Control and Prevention: Elder Abuse: definitions. <https://www.cdc.gov/violenceprevention/elderabuse/definitions.html> (accessed 24.09.2019)
30. [www8] <https://www.relationships.org.au/relationship-advice/relationship-advice-sheets/what-is-elder-abuse> (accessed 25.09.2019)



# Prevalence of elder abuse and neglect: screening in Poland families

Karolina Filipka<sup>1</sup> · Monika Biercewicz<sup>2</sup> · Adam Wiśniewski<sup>3</sup> · Kornelia Kędziora-Kornatowska<sup>2</sup> · Robert Ślusarz<sup>1</sup>

Received: 13 February 2019 / Accepted: 24 July 2019

© European Geriatric Medicine Society 2019

## Key summary points

**Aim** The aim of this work is to show the incidence of physical, psychological, sexual and economic abuse and neglect among older adults in the last 12 months.

**Findings** The obtained results constitute confirmation that elder abuse and neglect is prevalent in Poland. The results of our own research indicate that the rate of elder abuse and neglect is statistically significantly higher in women than in men. It was also shown that people who have never been married, with the income < 233 EUR and people living in urban areas are most often victims of elder abuse and neglect.

**Message** On the basis of own research and of other authors, it can be stated that abuse is an extremely important problem, and its effects will last a lifetime. Therefore, it deserves more attention from scientists, health care professionals, social welfare representatives and other professionals.

## Abstract

**Purpose** Elder abuse and neglect is one of the most important problems of social and health policy among countries around the world. Making a real and reliable assessment of the occurrence of abuse is difficult to implement. The aim of this work is to show the frequency of physical, psychological, sexual abuse and financial exploitation among older adults.

**Methods** Older adults, who were aged  $\geq 60$  years ( $N=200$ ) were qualified for the study. The studied population consisted of 112 women (56.0%) and 88 men (44.0%). The whole project procedure only included filling in the survey questionnaire. The verification of hypotheses was based on tests: Chi square test, Chi square test with continuity correction and logistic regression models.

**Results** Within the obtained own results, out of 200 older adults, 77 respondents (38.5%) experienced abuse and neglect during the last 12 months. Most of the respondents (68.8%) experienced various forms of abuse simultaneously. Among those who experienced abuse, 75.3% experienced psychological abuse, 68.8% financial exploitation, 48.1% physical abuse, and 22.1% experienced sexual abuse. The rate of physical (OR 2.48; 95% CI 1.13, 5.44;  $p=0.02$ ), verbal (OR 1.94; 95% CI 1.02, 3.67;  $p=0.04$ ), sexual (OR 4.05; 95% CI 1.13, 14.5;  $p=0.03$ ) and economic (OR 1.98; 95% CI 1.02, 3.83;  $p=0.04$ ) abuse is statistically significantly higher, respectively, in women than in men. The level of education is a risk factor for physical abuse ( $p=0.02$ ). It has also been shown that singles, people with the income < 233 EUR and people living in urban areas are most often victims of elder abuse and neglect.

**Conclusions** The results suggest that elder abuse and neglect is a fairly common phenomenon. Our data also provide confirmation of other researches conducted in this area.

**Keywords** Elder abuse · Risk factor models · Epidemiology · Prevention

✉ Karolina Filipka  
karolinafilipskaf@gmail.com

<sup>1</sup> Neurological and Neurosurgical Nursing Department, Faculty of Health Science, Collegium Medicum, Nicolaus Copernicus University, Łukasiewicza 1 Street, 85-821 Bydgoszcz, Toruń, Poland

<sup>2</sup> Clinic of Geriatrics, Faculty of Health Science, Collegium Medicum, Nicolaus Copernicus University, Toruń, Poland

<sup>3</sup> Department of Neurology, Faculty of Medicine, Collegium Medicum, Nicolaus Copernicus University, Toruń, Poland

## Abbreviations

UN United Nations  
WHO World Health Organization

## Introduction

Elder abuse and neglect can include physical, psychological, sexual and economic abuse. The problem of abuse can affect people of all age groups, cultural and socio-economic groups [1]. Very often, this problem affects older adults. It is suggested by evidence that elder abuse and neglect is widespread, costly and sometimes fatal. Elder abuse and neglect is a global public health and human rights problem. [2]. It is one of the most important problems of social policy among countries around the world. Undoubtedly, this issue is still a taboo subject to society, which is why we decided to conduct research on the occurrence of elder abuse and neglect, especially since elder abuse and neglect is still a phenomenon that is too little known. This may also result from the fact that it often takes place without witnesses. Victims often think that violence is their private problem. Elder abuse and neglect can lead to long-term psychosocial consequences and can have serious physical injuries [3, 4].

Combating abuse, especially elder abuse and neglect, is a complex phenomenon, because acts of abuse occur between persons who are in a close relationship. The situation of experiencing abuse is not only a single, difficult event in the life of the person experiencing it, but it has a negative impact on the whole life. Knowledge about the spread of elder abuse and neglect is still insufficient, and this in turn causes failure to notice or incorrect recognition of its consequences and damages. That is why it is so important to conduct research and education on this subject among the public. The aim of the global report on violence and health is to break the taboos and feelings of helplessness associated with this phenomenon and to encourage debate to understand it. The key is not the initiative of individuals, but the cooperation of many people and social groups. The report is directed particularly at people responsible for decisions regarding public health and health policy at the state level, as well as those who work in health care at the local level and are closest to social problems and needs. According to the WHO data, about 1–6 people aged 60 and older has experienced some form of abuse in community settings during the past year [3–5]. The studies conducted by the National Council on Aging [6] showed that about 1 in 10 Americans over 60 years of age experience aggression. In the ABUEL study [7], conducted among 7 European countries (Spain, Italy, Greece, Lithuania, Portugal, Germany, Sweden), among 4467 respondents aged 60–84, an assessment of incidents of elder abuse and neglect was also conducted. It was shown that within 12 months, psychological abuse was experienced by 19.4% of respondents, physical abuse by 2.7%, sexual abuse 0.7% and financial exploitation by 3.8%.

Because the phenomenon of mistreatment of older adults is a complex and multidimensional phenomenon,

this problem should be tackled in a multi-professional and inter-disciplinary manner. Elder abuse and neglect is a growing international problem, which is why research on this subject is so important. This is an under-researched domain in Poland. Raising public awareness is a basic preventive strategy and is an important step towards changing attitudes and behaviours [8].

The aim of this work is to show the incidence of physical, psychological, sexual and economic abuse and neglect among the older adults in the last 12 months. The aim of the research was also to determine the impact of socio-graphic data such as: sex, age, education, marital status, family income and place of residence, on the occurrence of elder abuse and neglect.

## Materials and methods

### Research population

The research was conducted among 200 respondents aged 60–90. The studied population consisted of 112 women (56.0%) and 88 men (44.0%). The in-patients were hospitalized in the Geriatrics Department and Clinic no. 1 of Dr Antoni Jurasz University Hospital in Bydgoszcz. The study was conducted from April 2017 to January 2019. The study group was characterized using the following data: gender, age, education, marital status, assessment of the monthly financial situation, and place of residence. In the category of marital status, we have included categories such as: single, married, in a partnership, divorcee and widow/widower. Single means people who have never been married. We did not ask questions about sexual orientation (Table 1).

### Sampling method

Conducting research began with a pilot study on a group of 30 in-patients hospitalized also in the Geriatrics Department and Clinic no. 1 of Dr Antoni Jurasz University Hospital in Bydgoszcz, who were not included in the results of the work and they were asked to give their critiques and feedbacks based on their cultures and beliefs. Accordingly, we omitted out some senseless questions and modified some adjustable ones to have a final easily understood form.

### Research procedures

Prior to the study, potential responders were examined by a neuropsychologist to rule out dementia and disorders of cognitive functions, which could affect the reliability

**Table 1** Characteristics of the studied group

Characteristics	N (%)
Sex	
Female	112 (56.0)
Male	88 (44.0)
Age	
60–65 years	130 (65.0)
66–70 years	48 (24.0)
> 70 years	22 (11.0)
Education	
Primary	43 (21.5)
Secondary	66 (33.0)
Vocational	74 (37.0)
Higher	17 (8.5)
Marital status	
Single (never married)	28 (14.0)
Married	75 (37.5)
In a partnership	38 (19.0)
Divorcee	27 (13.5)
Widow/widower	32 (16.0)
Family income, EUR	
< 233 EUR	33 (16.5)
233–349 EUR	80 (40.0)
350–465 EUR	78 (39.0)
> 465 EUR	9 (4.5)
Place of residence	
City	114 (57.0)
Village	86 (43.0)

of the results. The neuropsychological assessment was of a diagnostic nature. The full project procedure only included filling in the survey questionnaire. Conducting this research project did not pose a risk to the subjects. During the filling out of the questionnaire, the respondents could always ask questions to a questioner who was present nearby. To increase the credibility of the obtained results after completing the questionnaire, respondents placed it in a specially prepared, sealed urn, located in a designated place.

## Instruments

The research used the diagnostic survey method, and the research tool was the author's questionnaire. It has been structured to learn about the occurrence of acts of abuse against the older adults. The first part of the author's questionnaire consists of six questions in a closed form in the sociodemographic aspect. The next ten questions in the second part, also arranged in a closed, alternative and multiple-choice form, refer to the characterization of the phenomenon of the problem of elder

abuse and neglect. The questions are preceded by an instruction that specifies the appropriate indications and instructions for marking the answer. In addition, it contains information on the anonymity and purpose of the studies. This information also includes a telephone number for the "Blue Emergency Line" service, where it is possible to get help for people experiencing abuse, witnesses of abuse and people seeking information about this phenomenon and methods of counteracting abuse in the family 24 h a day. The role of "Blue Emergency Line" was also explained. The questionnaire used in the work contains questions related to the experience of elder abuse and neglect by the respondents over the past 12 months, perpetrators of abuse, forms of abuse, as well as reporting the occurrence of the phenomenon to relevant services. Answers to these questions about the occurrence of forms of abuse were fixed by four variables: physical, psychological, sexual and economic abuse.

## Data analysis

These four variables of abuse have become our main areas of interest. Our basic predictive variable included: sex, age, education, marital status, family income and place of residence. We recognized abuse as a resultant variable, and variables of sociodemographic data as covariables. For all models, a full case analysis was used, irrespective of statistical significance. Logical regression models were developed to determine the relationship between sociodemographic variables of the subjects with each level of abuse versus no abuse. Verification of hypotheses was performed on the basis of tests adequate to check the relationship between qualitative variables (measured on a nominal or ordinal scale): Chi square test, Chi square test with continuity correction and the Fisher's test. The statistical significance level was set at  $p \leq 0.05$ . All calculations were performed in the Statistica program (version 13.1).

## Results

Out of 200 respondents, 77 people (38.5%) experienced elder abuse and neglect during the last 12 months. Most of the respondents (68.8%) experienced various forms of abuse simultaneously. Among those who experienced elder abuse and neglect, 75.3% experienced psychological abuse, 68.8% financial exploitation, 48.1% physical abuse, and 22.1% sexual abuse. The analysis presented below (Table 2), performed using the Chi square test shows that women were more often victims of abuse, physical, psychological, sexual and economic ( $p < 0.05$ ). Age turned out to be only statistically significant in the group of people experiencing financial exploitation ( $p < 0.01$ ) and in the general indicator of abuse ( $p = 0.04$ ). The group of people aged 60–65 turned

**Table 2** Distribution of types of elder abuse according to sociodemographic features

Characteristic	Physical abuse		Verbal abuse		Sexual abuse		Financial exploitation		Any abuse	
	<i>N</i> (%)	<i>p</i>	<i>N</i> (%)	<i>p</i>	<i>N</i> (%)	<i>p</i>	<i>N</i> (%)	<i>p</i>	<i>N</i> (%)	<i>p</i>
Overall	37 (48.1)		58 (75.3)		17 (22.1)		53 (68.8)		77 (100.0)	
Sex		<i>0.02</i>		<i>0.04</i>		<i>0.02</i>		<i>0.04</i>		<i>0.15</i>
Female	27 (73.0)		39 (67.2)		14 (82.4)		36 (67.9)		48 (62.3)	
Male	10 (27.0)		19 (32.8)		3 (17.6)		17 (32.1)		29 (37.7)	
Age		<i>0.09</i>		<i>0.14</i>		<i>0.49</i>		<i>&lt;0.01</i>		<i>0.04</i>
60–65	21 (56.8)		33 (56.9)		9 (52.9)		31 (58.5)		46 (59.7)	
66–70	8 (21.6)		15 (25.9)		6 (35.3)		10 (18.9)		17 (22.1)	
> 70	8 (21.6)		10 (17.2)		2 (11.8)		12 (22.6)		14 (18.2)	
Education		<i>0.02</i>		<i>0.24</i>		<i>0.84</i>		<i>0.17</i>		<i>0.06</i>
Primary	10 (27.0)		15 (25.9)		4 (23.5)		13 (24.5)		14 (18.2)	
Secondary	13 (35.1)		23 (39.6)		7 (41.2)		22 (41.5)		32 (41.5)	
Vocational	10 (27.0)		17 (29.3)		5 (29.4)		13 (24.5)		22 (28.6)	
Higher	4 (10.9)		3 (5.2)		1 (5.9)		5 (9.5)		9 (11.7)	
Marital status		<i>&lt;0.01</i>		<i>&lt;0.01</i>		<i>0.50</i>		<i>&lt;0.01</i>		<i>0.14</i>
Single (never married)	10 (27.0)		13 (22.4)		3 (17.6)		11 (20.7)		15 (19.4)	
Married	7 (19.0)		19 (32.8)		5 (29.4)		17 (32.1)		23 (29.9)	
In a partnership	10 (27.0)		16 (27.6)		6 (35.4)		16 (30.2)		18 (23.4)	
Divorcee	7 (19.0)		5 (8.6)		3 (17.6)		1 (1.9)		8 (10.4)	
Widower/widow	3 (8.0)		5 (8.6)		0 (0.0)		8 (15.1)		13 (16.9)	
Family income, EUR		<i>&lt;0.01</i>		<i>&lt;0.01</i>		<i>0.21</i>		<i>&lt;0.01</i>		<i>&lt;0.01</i>
< 233	14 (37.9)		15 (25.9)		5 (29.4)		17 (32.1)		26 (33.8)	
233–349	17 (45.9)		29 (50.0)		8 (47.1)		25 (47.2)		32 (41.5)	
350–465	6 (16.2)		13 (22.4)		4 (23.5)		11 (20.7)		18 (23.4)	
> 465	0 (0.0)		1 (1.7)		0 (0.0)		0 (0.0)		1 (1.3)	
Place of residence		<i>0.03</i>		<i>&lt;0.01</i>		<i>0.03</i>		<i>0.22</i>		<i>0.36</i>
City	27 (73.0)		46 (79.3)		14 (82.4)		34 (64.2)		47 (61.0)	
Village	10 (27.0)		12 (20.7)		3 (17.6)		19 (35.8)		30 (39.0)	

Statistically significant results were marked with italics

Percentage do not sum up to 100, because one patient may experience several types of abuse

out to be the most vulnerable to the experience of abuse. In turn, the level of education significantly affects the occurrence of physical abuse ( $p=0.02$ ). The highest number of physical abuse was observed in people with secondary education, i.e., 35.1%, and then, in turn, in people with primary education—27.0% and vocational education—also among 27.0%. The presented analyses showed that the marital status significantly ( $p<0.01$ ) affects the occurrence of physical, emotional/psychological abuse and financial exploitation. In all categories of abuse, the largest number of victims was recorded among singles, married people and those in partnerships. In turn, the marital status statistically significantly influences the occurrence of physical, psychological abuse and financial exploitation, as well as the general indicator of elder abuse and neglect ( $p<0.01$ ). The highest percentage of people affected by abuse concerns respondents with the monthly income < 233 EUR and 233–349 EUR. Analysing

the impact of place of residence on the occurrence of particular forms of elder abuse and neglect, it was observed that people living in the city significantly more often experience physical ( $p=0.03$ ), emotional/psychological ( $p<0.01$ ) and sexual ( $p=0.03$ ) abuse (Table 2).

The presented analysis of the logistic regression model (Table 3) shows that women statistically more often than men experience physical abuse (odds ratio [OR] 2.48; 95% confidence interval [CI] 1.13, 5.44;  $p=0.02$ ), and emotional/psychological abuse (OR 1.94; 95% CI 1.02, 3.67;  $p=0.04$ ), as well as sexual abuse (OR 4.05; 95% CI 1.13, 14.5;  $p=0.03$ ), and also financial exploitation (OR 1.98; 95% CI 1.02, 3.83;  $p=0.04$ ). In turn, people over 70 years of age experience physical abuse 2.97 times more often (95% CI 1.11, 7.95) than people in the youngest age category 60–65 years of age ( $p=0.03$ ). Also, the oldest seniors report the use of financial exploitation against them more

**Table 3** Logistic regression models among sociodemographic characteristics according to elder abuse type

Question	Physical abuse		Verbal abuse		Sexual abuse		Financial exploitation	
	OR (95% CI)	<i>p</i>	OR (95% CI)	<i>p</i>	OR (95% CI)	<i>p</i>	OR (95% CI)	<i>p</i>
Sex (female vs male)	2.48 (1.13, 5.44)	<i>0.02</i>	1.94 (1.02, 3.67)	<i>0.04</i>	4.05 (1.13, 14.5)	<i>0.03</i>	1.98 (1.02, 3.83)	<i>0.04</i>
Age (vs 60–65)								
66–70	1.04 (0.43, 2.53)	0.93	1.34 (0.65, 2.76)	0.43	1.56 (0.50, 4.92)	0.45	0.84 (0.38, 1.88)	0.67
> 70	2.97 (1.11, 7.95)	<i>0.03</i>	2.45 (0.97, 6.19)	0.06	1.34 (0.27, 6.68)	0.72	3.83 (1.51, 9.72)	< <i>0.01</i>
Education (vs primary)								
Secondary	0.81 (0.32, 2.06)	0.66	1.18 (0.53, 2.66)	0.68	1.16 (0.32, 4.22)	0.83	1.23 (0.54, 2.82)	0.62
Vocational	0.52 (0.20, 1.36)	0.18	0.62 (0.27, 1.43)	0.26	0.71 (0.18, 2.79)	0.62	0.49 (0.20, 1.19)	0.12
Higher	1.02 (0.27, 3.82)	0.98	0.44 (0.11, 1.80)	0.26	0.61 (0.06, 5.89)	0.67	0.71 (0.19, 2.59)	0.60
Marital status (vs single)								
Married	0.19 (0.06, 0.55)	< <i>0.01</i>	0.39 (0.16, 0.97)	<i>0.04</i>	0.60 (0.13, 2.67)	0.50	0.45 (0.18, 1.15)	0.10
In a partnership	0.64 (0.22, 1.85)	0.41	0.84 (0.31, 2.24)	0.73	1.56 (0.36, 6.87)	0.55	1.12 (0.42, 3.04)	0.82
Divorcee	0.63 (0.20, 2.00)	0.43	0.26 (0.08, 0.89)	<i>0.03</i>	1.04 (0.19, 5.68)	0.96	0.06 (0.01, 0.50)	< <i>0.01</i>
Widow/widower	0.19 (0.05, 0.77)	<i>0.02</i>	0.21 (0.06, 0.72)	<i>0.01</i>	0.07 (0.003, 1.35)	0.07	0.52 (0.17, 1.55)	0.24
Income, EUR (< 233)								
233–349	0.39 (0.16, 0.96)	<i>0.04</i>	0.73 (0.32, 1.68)	0.46	0.78 (0.22, 2.79)	0.70	0.45 (0.20, 1.05)	0.07
350–465	0.12 (0.04, 0.36)	< <i>0.01</i>	0.26 (0.10, 0.64)	< <i>0.01</i>	0.38 (0.09, 1.62)	0.19	0.16 (0.06, 0.42)	< <i>0.01</i>
> 465	0.07 (0.004, 1.32)	0.08	0.16 (0.02, 1.44)	0.10	0.27 (0.02, 5.41)	0.39	0.05 (0.003, 0.92)	<i>0.04</i>
City (vs village)	2.36 (1.07, 5.19)	<i>0.03</i>	3.23 (1.63, 6.42)	< <i>0.01</i>	3.87 (1.08, 13.94)	<i>0.04</i>	1.50 (0.78, 2.87)	0.22

Statistically significant results were marked with italics

often than the “youngest” people (OR 3.83; 95% CI 1.51, 9.72;  $p < 0.01$ ). In terms of the material status, both married persons (OR 0.19; 95% CI 0.06, 0.55;  $p < 0.01$ ), and widows/widowers (OR 0.19; 95% CI 0.05, 0.77;  $p = 0.02$ ) significantly less often experience physical abuse than singles. In relation to emotional/psychological abuse, married people (OR 0.39; 95% CI 0.16, 0.97;  $p = 0.04$ ), as well as widows/widowers (OR 0.21; 95% CI 0.06, 0.72;  $p = 0.01$ ) and divorced persons (OR 0.26; 95% CI 0.08, 0.89;  $p = 0.03$ ) statistically less often experience it compared to singles. In turn, people with the monthly income of 233–249 EUR significantly less frequently experience physical abuse than people with the income < 233 EUR (OR 0.39; 95% CI 0.16, 0.96;  $p = 0.04$ ). Also in relation to physical abuse, similar data were obtained by comparing a group of people with the income of 350–464 EUR [OR 0.12; 95% CI 0.04, 0.36;  $p < 0.01$ ] with people with the income < 233 EUR. In turn, among victims of emotional/psychological abuse, people with the monthly income of 350–465 EUR statistically less often experience it than people with the lower income (OR 0.26; 95% CI 0.10, 0.64;  $p < 0.01$ ). However, in the aspect of financial exploitation, people with income of 350–465 (OR 0.16; 95% CI 0.06, 0.42;  $p < 0.01$ ) and the income > 465 EUR (OR 0.05; 95% CI 0.003, 0.92;  $p = 0.04$ ) also statistically less often experience it than people with the income < 233 EUR. The analysis presented below also shows that people living in the city are significantly more often exposed to the occurrence of various forms of abuse.

Inhabitants of cities are statistically more often victims of physical abuse than inhabitants of rural areas (OR 2.36; 95% CI 1.07, 5.19;  $p = 0.03$ ). On the other hand, in relation to emotional/psychological and sexual abuse, significantly more frequent occurrence was also observed among urban residents, respectively, OR 3.23 (95% CI 1.63, 6.42;  $p < 0.01$ ) and OR 3.87 (95% CI 1.08, 13.94;  $p = 0.04$ ) (Table 3).

## Discussion

Elder abuse and neglect is among others one of the most important problems of public health and social policy of countries around the world. The problem of abuse can affect people in all age groups, cultural and socio-economic groups. Research on elder abuse and neglect in families is difficult to analyse. A fully real evaluation of this phenomenon is not possible. First of all, people are reluctant to talk about it and second, one should be careful with drawing conclusions, especially in estimating the size of the phenomenon on their basis. A very large number of incidents that are not detected is also an important problem. Conducting research in this area is also associated with a high risk of refusing to participate in the project. However, on the other hand, it raises concerns about the occurrence of hidden and unpublished incidents. Therefore, making a real and reliable assessment of the occurrence of abuse is

difficult to implement [2, 4, 5, 9]. In studies carried out in the United States, it was shown that nearly 80% of abuse phenomena remain undisclosed [10]. According to WHO, only 1 in 24 cases of elder mistreatment is reported, in part because older adults are often afraid to report cases of abuse to family, friends, or to the authorities. As a result, all indicators regarding the prevalence of elder abuse and neglect are understated [5].

The presented work assesses the problem of the occurrence of acts of abuse in the physical, psychological, economic and sexual aspects of the older adults. In the obtained results from among 200 respondents, 77 people, which accounts for 38.5% of the respondents, experienced elder abuse and neglect during the last 12 months. Most of the respondents (68.8%) experienced various forms of abuse simultaneously. Among those who experienced abuse, 75.3% experienced psychological abuse, 68.8% financial exploitation, 48.1% physical abuse, and 22.1% experienced sexual abuse. In turn, in a study conducted by Patel et al. [10], among 100 older adults, the incidence of abuse was 24%. Psychological abuse was also the most common form of abuse, which concerned 50% of victims. 8% of respondents experienced financial exploitation and 4%—physical one. In Nisha et al.'s [11] studies, conducted among 200 older adults hospitalized in a medical college hospital in India, the violence indicator against older adults was recorded at the level of 16%. Psychological abuse was also the most common form of abuse. In the meta-analysis by Yon et al. [12], psychological abuse was the most common form of aggression against the seniors (11.6%), then financial exploitation (6.8%) and neglect (4.2%). Similar results were also obtained in the PolSenior project, where the vast majority of cases concerned psychological abuse and, more rarely, physical abuse and financial exploitation [13]. In turn, according to the UN report [14] from 2017, it appears that there will be a progressive increase in financial exploitation against the older adults. Currently, between 5 and 10% of seniors around the world experience a type of financial exploitation. Fang et al. [15] in their research conducted in a group of 1002 people aged 55 and more, show that in the last 12 months a total of 429 (42.8%) older adults experienced physical or psychological abuse. In turn, the meta-analysis conducted by Abdi et al. [16] shows that the general incidence of abuse against older adults is 48.3%. In older adults with dementia, the risk of abuse may increase to nearly 62–78% [17, 18]. The studies conducted by the National Council on Aging [6] showed that about 1 in 10 Americans over 60 years of age experience aggression. In turn, according to WHO [5], about 1 in 6 people in the world aged 60 and more experience some form of abuse. The research conducted by this organization in 2017 shows that nearly 15.7% of older adults are victims of abuse and neglect. An upward trend was observed, as according to the

2015 report, in elder abuse and neglect which was reported to be at the level of 15%. According to WHO data, the most common forms of abuse reported by victims include: psychological abuse (11.6%), financial exploitation (6.8%) and physical abuse (2.6%) [19]. In the research carried out in the European countries, there are very large discrepancies in the results obtained. In Croatia, the rate of elder abuse and neglect is recorded at the level of 61.1% [20], while in Ireland at 2.2% [21]. The results of research conducted in Poland show that nearly 11% of seniors struggle with the problem of abuse and neglect [22]. In turn, in the results of a nationwide survey of the Public Opinion Research Centre for the Ministry of Labour and Social Policy in 2010, it was shown that almost 34% of the Poles were victims of abuse and neglect. Therefore, in the fight against abuse in Poland, all government units, non-governmental organizations, organizations and foundations are involved. Numerous campaigns on abuse and neglect are conducted. In Poland, there is also the “Blue Emergency Line” service, which offers 24-h assistance to people experiencing domestic violence, witnesses of violence and people seeking information on the phenomenon and ways to counteract domestic violence. The “Blue Card Procedure” has also been introduced, which covers all actions taken and implemented by representatives of organizational units of social assistance, the police, education and health care, in relation to the justified suspicion of the existence of domestic violence. A big role should also be played by educating the community and sensitizing the society to the occurrence of this problem in the environment. Because in Poland, research on elder abuse and neglect is still at a relatively early stage of development, much remains to be done. Previous research has made some significant advances in this direction, but it is necessary to continue these studies and carry them out systematically [23].

Our own research showed that women were more often victims of elder abuse and neglect ( $p < 0.05$ ). In turn, the level of education significantly affects the occurrence of physical abuse ( $p = 0.02$ ). The highest number of physical abuse was observed in people with secondary education, i.e., 35.1%. Many studies indicate that environmental factors significantly affect the incidence of elder abuse and neglect [24]. In the studies conducted by Mouton et al. [25], it was shown that the incidence of abuse among postmenopausal women was 3–10 times more frequent than in the general population. On the other hand, in studies carried out by Jeon et al. [26], significant gender differences in the correlates of elder mistreatment were observed ( $p < 0.0001$ ). 8.8% of men from among 4179 respondents and 10.6% of women from 6005 respondents were victims of abuse. International surveys, including reports from Portugal [27], Ireland [28] and Mexico [29] indicate that women more often than men are victims of elder mistreatment. A research project entitled AVOW [30] was also conducted among five European

countries (Austria, Belgium, Finland, Lithuania and Portugal) to assess the prevalence of abuse and violence against the older women. The study was conducted among 2880 women aged 60–97. It was shown that 28.1% of older women had experienced some kind of violence or abuse. In Portugal, the percentage of older women who experienced abuse in the last 12 months was 39.4%, in Belgium—32.0%, in Finland—25.1%, in Austria—23.8%, and in Lithuania—21.8%. The most common form of abuse was emotional abuse (23.6%), and then financial exploitation (8.8%), violation of rights (6.4%) and neglect (5.4%). Sexual abuse (3.1%) and physical abuse (2.5%) were the least reported forms. In the ABUEL study [7] psychological abuse was experienced by 19.4% of older adults (18.9 women vs 20.0% men), physical abuse by 2.7% (2.6% vs 2.8%), sexual abuse 0.7% (1.0% vs 0.3%) and financial exploitation by 3.8% (3.7% vs 4.1%). There was no statistically significant correlation between gender and the occurrence of abuse.

The obtained own results indicate that age was only statistically significant in the group of people experiencing financial exploitation ( $p < 0.01$ ) and in the summary of all types of violence ( $p = 0.04$ ). The group of people aged 60–65 turned out to be the most vulnerable to the experience of elder abuse and neglect. While the regression analysis showed that people over 70 years of age are more likely to experience physical abuse and financial exploitation. In the nationwide project [31], among 4378 people aged 55 and more, it was also indicated that people from the younger cohort are more prepared to report violence and abuse. The project also drew attention to the fact that the risk of violence applied at least once a year decreases with age. It may be related to changes in the family structure, including the more frequent situation of living alone of the oldest seniors. In the group of people aged 65 and older, the percentage of people living alone ranged from 17.7% in the group of people aged 65–69 to 26.9% in the group of 85–89. Therefore, people from younger age groups may be more exposed to the experience of abuse. Also in the European ABUEL project [30], people aged 60–64 statistically more often experienced psychological abuse than people from older age categories ( $p < 0.001$ ). In the studies conducted in Canada, it was shown that victims of abuse were most often people aged 65–74 [32]. In studies by Dong et al. [33], the average age among people experiencing abuse was 69. Also international research from Mexico [29] and Europe [27, 28] report that older adults are at increased risk of experiencing violence. While the National Centre of Elder mistreatment [34] includes the following, among others, to the risk factors: poor health, female gender, younger age of older people, i.e., 50–60 years of age, bad economic situation, and dementia. The results of the research presented by Yussuf and Baiyewu [35] indicate that older age and the lack of formal education significantly affect the rate of elder abuse and neglect. In

turn, in the studies conducted by Hosseinkhani et al. [36], the main risk factors also included the level of education, place of residence and age. Our own results also indicate that the place of residence significantly influences the occurrence of psychological, physical and sexual abuse. Acts of abuse were most often carried out in urban areas. In turn, in a study conducted by Kaur et al. [37], it was shown that physical abuse was more often experienced in rural areas, and psychological abuse and financial exploitation in cities.

Our own research showed that material status statistically significantly influences the occurrence of physical, psychological abuse and financial exploitation as well as the overall incidence of elder abuse and neglect ( $p < 0.01$ ). The highest percentage of people affected by abuse concerns respondents with the monthly income  $< 233$  EUR and 233–349 EUR. Regression analysis also indicates that people with an income of  $< 233$  EUR are most often the victims of abuse. Also in international surveys, it has been shown that lower incomes have a significant impact on the occurrence of abuse [28, 29, 38]. Burnes et al. [39] indicate that physical and emotional abuse were statistically more frequent in older people living on farms with lower incomes and in separation or after a divorce. In turn, the results of own research show the relationship between marital status and psychological, physical and economic evidence. Singles and people in partnerships more often experience physical abuse, while married persons and people in partnerships are more often exposed to psychological and financial exploitation. On the other hand, regression indicates that singles are the most common victims of abuse. In turn, in studies carried out by Santos et al. [40], single people were more often exposed to financial exploitation. Also studies conducted in the United States, Europe, Mexico and China showed that a higher rate of abuse is recorded among singles or divorces or separated people [27, 28, 41].

## Implications for research and practice

The findings of the status reports on elder abuse and neglect are relevant to national, regional and global abuse prevention efforts. All of these levels allow those involved in the prevention of abuse to organize meetings and training to intensify their activities and investments to a level commensurate with the burden and severity of the problem. It is important to show the extent to which national action plans are driven by collected data on abuse. In turn, these results provide the necessary guidance for governments, regional bodies and international partners involved in the prevention of abuse. A big role should also be played by educating the community and sensitizing the society to the occurrence of this problem in the environment. Often people are not fully aware of how many people experience abuse, which is why it would be so



important to inform the public more frequently about the reports being carried out and their results regarding abuse. Raising awareness within the health sector and other sectors about the health and social burden of elder abuse and neglect is also important, because studies on the mistreatment of the older people is still at a fairly early stage of development, much remains to be done. Previous research has made some significant advances in this direction, but it is necessary to continue these studies and carry them out systematically. It is also important to ensure that prevention programmes and assistance to victims are informed and integrated by evidence and comprehensive. We should also increase collaboration between donor agencies and international organizations. It is worth to enforce existing laws and review their quality and implement and enact and implement laws and policies relevant to multiple types of abuse, build capacity for abuse prevention [5, 23, 34].

## Limitations

Research on elder abuse and neglect is difficult to analyse. First of all, people are reluctant to talk about it and second, one should be careful with drawing conclusions, especially in estimating the size of the phenomenon on their basis. A very large number of incidents are not detected at all. Undoubtedly, this issue is still a taboo subject to society. Conducting research in this area is also associated with a high risk of refusing to participate in the project. However, on the other hand, it raises concerns about the occurrence of hidden and unpublished incidents. Therefore, making a real and reliable assessment of the occurrence of abuse is difficult to implement. The research was conducted among only 200 respondents aged 60–90. Therefore, further study is important for continuous verification of the epidemiology and more accurate conclusions.

## Conclusions

To sum up, the main goal of this paper was to show the incidence of physical, psychological, sexual and economic elder abuse and neglect in the last 12 months. The obtained results constitute confirmation that elder abuse and neglect is prevalent in Poland. It was also shown that the rate of physical, psychological, sexual abuse and financial exploitation is statistically significantly higher in women than in men. The results of own research also indicate that singles, people with the income < 233 EUR and people living in urban areas are most often victims of elder abuse and neglect.

On the basis of our own research and of other authors, it can be stated that abuse is an extremely important problem, and its effects will last a lifetime. Therefore, it deserves more

attention from scientists, health care professionals, social welfare representatives and other professionals. Combating elder abuse and neglect requires integral knowledge and understanding of the patterns and forces underlying it. Because research on elder abuse and neglect is still at a fairly early stage of development, especially with regard to transnational research, much remains to be done. Previous research has made some significant advances in this direction, but it is necessary to continue these studies and carry them out more systematically, especially at the European level, as well as at the international and even global level. Therefore, it is crucial to develop and test evidence-based interventions to prevent elder mistreatment and to provide services to victims of elder mistreatment. We should also remember about the cooperation of such sectors as: criminal justice, health and social services.

## Compliance with ethical standards

**Conflict of interest** The author declared no conflicts of interest with respect to the research, authorship, funding, and/or publication of this article.

**Informed consent** All patients provided informed consent.

**Ethical approval** Informed consent was obtained from all the patients. The study was approved by the Bioethics Commission at Collegium Medicum, Nicolaus Copernicus University, Torun, Poland (KB 259/2017). All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

## References

1. Taylor AK, Gregory A, Feder G, Williamson E (2018) ‘We’re all wounded healers’: a qualitative study to explore the well-being and needs of helpline workers supporting survivors of domestic violence and abuse. *Health Soc Care Community*. <https://doi.org/10.1111/hsc.12699>
2. Dong XQ (2015) Elder mistreatment: systematic review and implications for practice. *J Am Geriatr Soc* 63(6):1214–1238
3. Fearing G, Sheppard CL, McDonald L, Beaulieu M, Hitzig SL (2017) A systematic review on community-based interventions for elder mistreatment and neglect. *J Elder Mistreat Negl* 29(2–3):102–133
4. Pillemer K, Burnes D, Riffin C, Lachs MS (2016) Elder mistreatment: global situation, risk factors, and prevention strategies. *Gerontologist* 56(2):S194–S205
5. <https://www.who.int/news-room/fact-sheets/detail/elder-abuse>. Accessed 27 Jan 2019
6. <https://www.ncoa.org/public-policy-action/elder-justice/elder-abuse-facts/>. Accessed 27 Jan 2019
7. Fraga S, Lindert J, Barros H et al (2014) Elder mistreatment and socioeconomic inequalities: a multilevel study in 7 European countries. *Prev Med* 61:42–47

8. Lowenstein A (2009) Elder mistreatment and neglect—"old phenomenon": new directions for research, legislation, and service developments. *J Elder Mistreat Negl* 21(3):278–287
9. Lindenberg J, Westendorp RG, Kurrle S, Biggs S (2013) Elder mistreatment an international perspective: exploring the context of elder mistreatment. *Int Psychogeriatr* 25(8):1213–1215
10. Patel VK, Tiwari DS, Shah VR, Patel MG, Raja HH, Patel DS (2018) Prevalence and predictors of abuse in elderly patients with depression at a tertiary care centre in Saurashtra, India. *Indian J Psychol Med* 40(6):528–533
11. Nisha C, Manjaly S, Kiran P, Mathew B, Kasturi A (2016) Study on elder abuse and neglect among patients in a medical college hospital, Bangalore, India. *J Elder Abuse Negl* 28(1):4–40
12. Yon Y, Mikton CR, Gassoumis ZD, Wilber KH (2017) Elder mistreatment prevalence in community settings: a systematic review and meta-analysis. *Lancet Glob Health* 5(2):e147–e156
13. Mossakowska M, Więcek A, Błędowski P (2012) PolSenior. Medical, psychological, sociological and economic aspects of aging in Poland. In: Błędowski P (ed) *Aging as a social problem. Perspectives of the demographic aging of the Polish population by 2035*. Termedia, Warszawa, pp 123–136
14. World Elder mistreatment Awareness Day (2017) In: United Nations-Ageing. Department of Economic and Social Affairs. <https://www.un.org/development/desa/ageing/world-elder-abuse-awareness-day/2017-2.html>. Accessed 26 Jan 2019
15. Fang B, Yan E, Chan KL, Ip P (2018) Elder mistreatment and its medical outcomes in older Chinese people with cognitive and physical impairments. *Int J Geriatr Psychiatry* 33(8):1038–1047
16. Abdi A, Tarjoman A, Borji M (2019) Prevalence of elder mistreatment in Iran: a systematic review and meta-analysis. *Asian J Psychiatr* 39:120–127
17. Yan E, Kwok T (2011) Abuse of older Chinese with dementia by family caregivers: an inquiry into the role of caregiver burden. *Int J Geriatr Psychiatry* 26(5):527–535
18. Wang M, Sun H, Zhang J, Ruan J (2019) Prevalence and associated factors of elder mistreatment in family caregivers of older people with dementia in central China cross-sectional study. *Int J Geriatr Psychiatry* 34(2):299–307
19. World Health Organization (2015) *World report on ageing and health*. WHO, p 18
20. Ajdukovic M, Ogresta J, Rusac S (2009) Family violence and health among elderly in Croatia. *J Aggress Maltreat Trauma* 18:261–279
21. Naughton C, Drennan J, Lyons I et al (2012) Elder mistreatment and neglect in Ireland: results from a national prevalence survey. *Age Ageing* 41:98–103
22. Halicka M, Halicki J, Kramkowska E (2010) National report—Poland. IPVoW—intimate partner violence against older women. University of Białystok, Białystok
23. Diagnosis of the phenomenon of domestic violence in Poland towards women and men. Part I—a report on nationwide surveys. TNS OBOP research results for MPiPS 2010
24. Mysyuk Y, Westendiro RG, Lindenberg J (2013) Framing abuse: explaining the incidence, perpetuation, and intervention in elder mistreatment. *Int Psychogeriatr* 25(8):1267–1274
25. Mouton CP, Rodabough RJ, Rovi SL et al (2004) Prevalence and 3-year incidence of abuse among postmenopausal women. *Am J Public Health* 94(4):605–612
26. Jeon GS, Cho SI, Choi K, Jang KS (2019) Gender differences in the prevalence and correlates of elder mistreatment in a community-dwelling older population in Korea. *Int J Environ Res Public Health* 16(1):E100
27. Gil AP, Kislaya I, Santos AJ et al (2015) Elder mistreatment in Portugal: findings from the first national prevalence study. *J Elder Mistreat Negl* 27:174–195
28. Naughton C, Drennan J, Lyons I et al (2010) *Abuse and neglect of older people in Ireland (Report on the National Study of Elder mistreatment and Neglect)*. National Centre for the Protection of Older People, Dublin
29. Giraldo-Rodríguez L, Rosas-Carrasco O (2013) Development and psychometric properties of the Geriatric Mistreatment Scale. *Geriatr Gerontol Inst* 13:466–474
30. Luoma ML, Koivusilta M, Enzenhofer E et al (2011) Prevalence Study of Abuse and Violence against Older Women (AVOW). Results of a multi-cultural survey conducted in Austria, Belgium, Finland, Lithuania, and Portugal. <https://thl.fi/en/web/thlfi-en/research-and-expertwork/projects-and-programmes/avow-study> Accessed 27 April 2019
31. Bledowski P, Mossakowska M, Chudek J et al (2011) Medical, psychological and socioeconomic aspects of aging in Poland: assumptions and objectives of the PolSenior Project. *Exp Gerontol* 46(12):1003–1009
32. Préville M, Mechakra-Tahiri SD, Vasiliadis HM et al (2014) Family violence among older adult patients consulting in primary care clinics: results from the ESA (Enquête sur la santé des aînés) Services Study on Mental Health and Aging. *CanJPsychiatry* 59(8):426–433
33. Dong X, Simon MA, Gorbien M (2007) Elder mistreatment and neglect in an urban chinese population. *J Elder Mistreat Negl* 19(3–4):79–96
34. <https://ncea.acl.gov/resources/publications.html>. Accessed 29 Jan 2019
35. Yussuf AJ, Baiyewu O (2014) Elder mistreatment and neglect in Zaria northern Nigeria. *Niger Postgrad Med J* 21(2):171–176
36. Hosseinkhani Z, Moradi Z, Khodamoradi F (2017) Elder mistreatment: screening in Iranian families. *Med J Islam Repub Iran* 31:126
37. Kaur J, Kaur J, Sujata N (2015) Comparative study on perceived abuse and social neglect among rural and urban geriatric population. *Indian J Psychiatry* 57(4):375–378
38. Chokkanathan S, Lee AE (2005) Elder mistreatment in urban India: a community based study. *J Elder Mistreat Negl* 17:45–46
39. Burnes D, Pillemer K, Caccamise PL et al (2015) Prevalence of and risk factors for elder mistreatment and neglect in the community: a population-based study. *J Am Geriatr Soc* 63(9):1906–1912
40. Santos AMRD, Nolêto RDD, Rodrigues RAP, Andrade EMLR, Bonfim EG, Rodrigues TS (2019) Economic-financial and patrimonial elder mistreatment: a documentary study. *Rev Esc Enferm USP* 53:e03417
41. O’Keeffe M, Hills A, Doyle M et al (2007) UK study of abuse and neglect of older people: prevalence survey report. Department of Health, London

**Publisher’s Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Contents lists available at ScienceDirect

## Archives of Gerontology and Geriatrics

journal homepage: [www.elsevier.com/locate/archger](http://www.elsevier.com/locate/archger)

## Prevalence and associated factors of elder psychological abuse- a cross-sectional screening study, based on a hospitalized community from Poland

Karolina Filipka<sup>a,\*</sup>, Monika Biercewicz<sup>b</sup>, Adam Wiśniewski<sup>c</sup>, Kornelia Kędziora-Kornatowska<sup>b</sup>, Robert Ślusarz<sup>a</sup><sup>a</sup> Neurological and Neurosurgical Nursing Department, Faculty of Health Science, Collegium Medicum, Nicolaus Copernicus University, Toruń, Poland<sup>b</sup> Clinic of Geriatrics, Faculty of Health Science, Collegium Medicum, Nicolaus Copernicus University, Toruń, Poland<sup>c</sup> Department of Neurology, Faculty of Medicine, Collegium Medicum, Nicolaus Copernicus University, Toruń, Poland

## ARTICLE INFO

## Keywords:

Elder abuse  
Psychological abuse  
Prevalence  
Predictors  
Abusers

## ABSTRACT

**Objective:** The aim of the present work was to exploring the prevalence, perpetrators and predictors of elder psychological abuse.**Method:** We conducted the cross-sectional study, based on a hospitalized community. The sample consisted of 200 respondents aged  $\geq 60$ . The Chi-square test and logistic regression models were used.**Results:** A total of 29 % respondents experienced at least one type of psychological abuse in the last 12 months. The percentage of women who statistically more often than men experienced arrogance, isolating, insulting and mocking was 71–77 %. It has been shown that the lower the monthly income, the higher the risk of psychological violence. Statistically, the highest percentage of violence in the form of arrogance, vulgarity and blackmail, threats was recorded in people aged 60–65 (48.9 % and 56.3 %, respectively). On the other hand, logistic regression analysis showed that the oldest respondents aged  $> 70$  more than three times more often than people from the youngest age category are victims of violence. The rate of arrogance, vulgarity (odds ratio (OR) 2.90;  $p < 0.01$ ) and mocking (OR 3.56;  $p < 0.01$ ) is statistically significantly higher, respectively, in people living in towns than in villages. People with chronic diseases are statistically more likely to experience violence in the form of isolation (OR 4.74;  $p = 0.04$ ). Cohabitants, spouses or sons are the most frequent perpetrators of elder abuse and neglect.**Conclusion:** This study reveals that statistically more often, psychological abuse is experienced by women, older adults living in urban areas and people with a low socioeconomic status and chronic disease.

## 1. Introduction

Elder abuse and neglect is increasingly important for intervention and research in the context of global aging of the society. Increasingly, it is considered a serious social problem, which is likely to get worse, given the aging of the population (Gassoumis, Navarro, & Wilber, 2015). It is a major public health problem worldwide, but large scale epidemiological research is still rare (Koga, Hanazato, Tsuji, Suzuki, & Kondo, 2019). Violence is an example of violation of human rights and freedom, which leads to a serious loss of human dignity, independence and respect, and affects ethical principles and rights (Saghafi, Bahramnezhad, Poormollamirza, Dadgari, & Navab, 2019).

Elder abuse and neglect can occur in various forms. Types of violence against the older adults include: physical, psychological, sexual,

economic violence and neglect (Piri, Tanjani, Khodkarim, & Etemad, 2018; Wang et al., 2018; World Health Organization, 2019). A person may experience more than one form of abuse at a time. However, many studies on violence show that psychological abuse is the most common form of violence (Botngård, Eide, Mosqueda, & Malmedal, 2020; Carmona-Torres et al., 2018; Koga et al., 2019; World Health Organization, 2019). At the same time, it is the most elusive and hard to detect and prove form of violence. It is difficult to see the seemingly invisible violence that usually uses words. Only the subsequent effects of long-term psychological abuse are noticeable (Ribot et al., 2015; Rodrigues et al., 2019).

These studies alert us about the occurrence of elder psychological abuse. The whole medical personnel – especially primary care – are required to identify and report abuse and initiate action to eliminate it.

\* Corresponding author at: Neurological and Neurosurgical Nursing Department, Faculty of Health Science, Collegium Medicum, Nicolaus Copernicus University, Łukasiewiczza 1 street, Toruń, 85-821 Bydgoszcz, Poland.

E-mail address: [karolinafilipskaf@gmail.com](mailto:karolinafilipskaf@gmail.com) (K. Filipka).

<https://doi.org/10.1016/j.archger.2020.104152>

Received 3 February 2020; Received in revised form 17 April 2020; Accepted 10 June 2020

Available online 17 June 2020

0167-4943/ © 2020 Elsevier B.V. All rights reserved.

There are very few reports on the phenomenon of elder abuse in Poland. Hence this study was undertaken to identify and describe elder abuse in the sample of hospitalised Polish older adults. However, these studies in the older adults are not as common in Poland as those conducted among other social groups. Scarce scientific research allows only for a preliminary recognition of the problem and showing it as a complex phenomenon. According to public opinion polls carried out in recent years, 10–12 % of adult Poles experience or have experienced violence from their relatives (Public Opinion Research Center, 2012). In turn, a team of psychologists from the Institute of Psychology of the Polish Academy of Sciences in 2015 shared a report from a nationwide study on domestic violence against the older adults and the disabled (Korzeniowski & Radkiewicz, 2015). On average, 36.5 % of respondents reported the existence of elder psychological abuse over the past year outside their own family. The next nationwide PolSenior study also presents data on various forms of elder abuse and neglect. The percentage of older people who experience violence was 5.9 % (Mossakowska, Więcek, & Błędowski, 2012). However, in the study by Grzanka-Tykwińska et al. (2012) it was found that 48 % of the elderly experienced psychological violence, while 10 % experienced physical violence. In turn, the study by Kołodziejczak, Terelak, and Balsa (2019) showed that almost 40 % of respondents living in rural areas were affected by violence.

This study assessed the incidence of psychological abuse among in the sample of hospitalised Polish older adults over the past 12 months. Factors related to the occurrence of psychological violence were also assessed. An additional goal of this study was to determine socio-demographic characteristics and health correlations with the occurrence of violence, and to determine the perpetrators of violence.

## 2. Methods

### 2.1. Sample

The sample of the study consisted of older individuals aged  $\geq 60$  (N = 200). The in-patients were hospitalized in the Geriatrics Department and Clinic no. 1 of Dr Antoni Jurasz University Hospital in Bydgoszcz. Inclusion criteria were a person who: a) age 60 and older, b) hospitalized only in the Geriatrics Department and Clinic no. 1 of Dr Antoni Jurasz University Hospital in Bydgoszcz c) in whom dementia, cognitive impairment were excluded, d) who were able to complete the questionnaire on their own. The study included persons who agreed to participate voluntarily were included in the study. On the other hand, older individuals who refused to give informed consent and were unable to interview due to any cognitive impairment were excluded from the study.

The study group was characterized using the following data: gender, age, education, monthly family income, area of residence, marital status and chronic diseases (Table 1).

### 2.2. Study design and setting

A cross-sectional study was carried out in the period from April 2017 to January 2019. Ethical permission was obtained from the institutional the Bioethics Commission at Collegium Medicum, Nicolaus Copernicus University, Torun, Poland (KB 259/2017). Elder abuse and neglect was measured using author's questionnaire. The project began with a pilot study in which the respondents were asked to present their critiques and feedbacks based on their cultures and beliefs and the intelligibility of study items was checked. For this purpose, 30 people, who were all in-patients in the Geriatrics Department and Clinic no. 1 of Dr Antoni Jurasz University Hospital in Bydgoszcz, were studied. The pilot study was not included in the results of the work. These people, after completing the questionnaire, were asked to indicate positions which they considered incomprehensible. Therefore, we have omitted or modified some incomprehensible questions to obtain a final, easy-to-understand form. The changes consisted mainly of linguistic and

**Table 1**  
Characteristics of the studied group.

Characteristics	Total N = 200 Female (n = 112) N (%)	Male (n = 88) N (%)
Age cohort		
60–65 years	69 (61.6)	61 (69.3)
66–70 years	29 (25.9)	19 (21.6)
> 70 years	14 (12.5)	8 (9.1)
Education		
Primary	28 (25.0)	15 (17.0)
Secondary	39 (34.8)	27 (30.7)
Vocational	36 (32.1)	38 (43.2)
Higher	9 (8.1)	8 (9.1)
Monthly family income, EUR		
< 233 EUR	14 (12.5)	19 (21.6)
233–349 EUR	50 (44.7)	30 (34.1)
350–465 EUR	40 (35.7)	38 (43.2)
> 465 EUR	8 (7.1)	1 (1.1)
Marital Status		
Single (never married)	20 (17.9)	8 (9.1)
Married	48 (42.8)	27 (30.7)
In a partnership	19 (17.0)	19 (21.6)
Divorcee	12 (10.7)	15 (17.0)
Widow/Widower	13 (11.6)	19 (21.6)
Place of residence		
Urban area	81 (72.3)	33 (37.5)
Rural area	31 (27.7)	55 (62.5)
Chronic Disease	85 (75.9)	64 (72.7)

grammatical correction.

Patients qualified for our study were mainly admitted to the ward for a comprehensive geriatric assessment. Thus, the neuro-psychological assessment was diagnostic in nature. Prior to the study, potential respondents were examined by a neuropsychologist to exclude dementia and cognitive impairment that could affect the reliability of the obtained results. Then people meeting the inclusions criteria were offered to participate in the project. Our research was anonymous in nature. The information was provided on the subject and purpose of the conducted research. Informed consent to participate in the study was obtained without any pressure, voluntary participation in the project was guaranteed, and respondents were provided with anonymity and confidentiality. Therefore, the questionnaires were distributed and completed while the patients were alone in the rooms, i.e. without the presence of family, friends, colleagues, medical personnel and other patients. Prior to completing the questionnaire, respondents were instructed how to complete the questionnaire correctly. The average time needed to complete the questionnaire was 30 min. When completing the questionnaire, respondents could always ask a question to an interviewer who was present nearby in another room. The surveyed made every effort to ensure silence, peace and solitude to respondents completing the survey. After completing the survey, respondents placed it in a specially prepared, sealed urn, located in a designated place, in order to increase the anonymity and credibility of the obtained results.

### 2.3. Measures

The research used the diagnostic survey method, and the author's questionnaire was the research tool. In order to carry out a detailed analysis of the phenomenon of violence among hospitalized older adults, a research team was created consisting of specialists dealing with violence, elderly problems and broadly understood old age. Team members met regularly throughout the study. During the meetings, the direction of activities in the area of the research and their further development were determined. At each meeting, the previous arrangements were modified to make the analysis as effective as possible. The

first stage of obtaining qualitative material was the Desk Research literature analysis, i.e. an in-depth analysis of information on the phenomenon of violence. It was carried out by searching for scientific articles available in Polish and international databases dealing with violence, its types and socio-demographic features of victims. National and international reports, statistical studies and legal acts were also analysed. To our knowledge, no standardized instrument exists that has been extensively used to measure all types of elder abuse and neglect in Poland. Therefore, the survey design was a joint effort of several researchers (including a psychologist, social worker, nurse and a doctor). Data on the socio-demographic profile and occurrence of violence were collected using a 16-element questionnaire, developed on the basis of a literature review (Curcio, Payán-Villamizar, Jiménez, & Gómez, 2019; Eslami et al., 2016; Pak, 2020; Yon, Mikton, Gassoumis, & Wilber, 2017). In this study, the questionnaire was designed to identify specific actions applied towards the older adults, among others, such as hitting, violation of their self-esteem, and collection of savings/retirement benefits to confirm the presence or absence of abuse against the elderly. The questions are preceded by instructions that specify the purpose of the research, the anonymity of the study participant, and accurate and appropriate indications and instructions regarding the selection of answers. A survey containing 6 questions in a closed form was used to study socio-demographic and clinical variables. The next part of the survey contained 10 questions, also arranged in a closed, alternative and multiple-choice form, which referred only to the characteristics of the abuse. The survey questionnaire used in the work contains questions related to the experience of violence in the last 12 months by the respondents, perpetrators of abuse, exact forms of abuse, reporting the occurrence of the phenomenon to relevant services, and knowledge of victims of violence. The following single items were served as sub-category for elder psychological abuse, and used to assess each of five types of it: 1) Arrogance, vulgarity", 2) Blackmail, threats", 3) Closing, isolating", 4) Insulting, criticizing", 5) Mocking".

#### 2.4. Statistical analysis

Data was analysed with Statistica 13.1 software package. The distributions of related factors were compared using chi-squared tests (Tables 2 and 4). Logistic regression analysis was performed to reveal the factors associated with elder psychological abuse (Table 3). Our dependent variable was each type of psychological elder abuse. In turn, the socio-demographic data, chronic diseases were considered the qualitative predictors. All predictors entered in the logistic regression model used separately. Logistic regression analysis was performed after multiple imputation to investigate associations between demographic, health, and social factors, and each type of psychological elder abuse. The statistical significance level was set at  $P \leq 0.05$ .

### 3. Results

A total of 77 respondents (38.5 %) have experienced at least one type of abuse in the last 12 months, 43 % women and 33 % men, respectively. The most common type of abuse was psychological, reported by 58 participants, representing 75.3 % of all the forms of elder abuse and neglect. Out of 200 respondents, 29 % experienced elder psychological abuse. The most common reported specific forms of psychological abuse, in order of frequency, were: arrogant and vulgar taunts (77.6 %), insulting and criticizing (74.1 %), mocking (51.7 %), closing and isolating (46.6 %), blackmail and threats (27.6 %).

Table 2 presents the analysis of distribution of types of elder psychological abuse according to socio-demographic feature, made using the chi-square test. The percentage of women who statistically more often than men experienced arrogance, isolating, insulting and mocking was 71–77 %. Age turned out to be only statistically significant in the group of people experiencing arrogant and vulgar taunts ( $p = 0.02$ ) as well as blackmail and threats ( $p < 0.01$ ). Respondents from the

youngest age category, i.e. 60–65 years of age, most often experienced acts of psychological abuse. The most abuses were observed among respondents with a monthly income of < 233 EUR and 233–349 EUR. The presented analyses showed that people living in the city significantly more often experienced arrogant and vulgar taunts and mocking ( $p < 0.01$ ). In addition, chronically ill people experience isolation more often than health people (92.6 %;  $p = 0.02$ ).

Table 3 presents logistic regression analysis related to the risk factors for elder psychological abuse. Women experience arrogant, vulgar taunts more than twice as often as men (odds ratio [OR] 2.31; 95 % confidence interval [CI] 1.13, 4.73;  $p = 0.02$ ), closing and isolating (OR 2.52; 95 %CI 1.01, 6.26;  $p = 0.04$ ), insulting and criticizing (OR 2.42; 95 %CI 1.61, 5.08;  $p = 0.02$ ) and mocking (OR 2.99; 95 %CI 1.22, 7.34;  $p = 0.02$ ). The oldest respondents aged > 70 are more than 3 times more likely than those from younger age categories to be victims of arrogant, vulgar taunts (OR 3.40; 95 %CI 1.29, 8.93;  $p = 0.01$ ), closing and isolating (OR 3.11; 95 %CI 1.04, 9.24;  $p = 0.04$ ), insulting and criticizing (OR 3.06; 95 %CI 1.17, 7.97;  $p = 0.02$ ) and mocking (OR 3.33; 95 %CI 1.18, 9.39;  $p = 0.02$ ), and more than 5 times more often blackmail and threats (OR 5.04; 95 %CI 1.59, 16.04;  $p < 0.01$ ). Logistic regression analysis showed that singles and people with the lowest monthly income of < 233EUR, experienced psychological violence significantly more often than other people. People living in the city are significantly more often exposed to arrogant and vulgar taunts and to closing and isolating than rural residents (OR 2.90; 95 %CI 1.37, 6.13  $p < 0.01$ ; OR = 3.56; 95 %CI = 1.38, 9.14;  $p < 0.01$ , respectively). Chronic diseases have proved to be an important risk factor for containment and isolation. Seniors are more than 4 times more likely to be exposed to this form of abuse than healthy people (OR = 4.74; 95 %CI = 1.08, 20.76;  $p = 0.04$ ).

Table 4 presents the frequency of the different types of perpetrators for each type of mistreatment indicated by the older adults. Overall, physical abuse is most often committed by spouses (48.6 %), followed by cohabitant (45.9 %) and sons (45.9 %). In turn, sons were the most frequent perpetrators of financial exploitation and psychological abuse (respectively 34.0 % and 25.9 %), followed by cohabitant (30.2 % and 19.0 %) and spouses (28.3 % and 12.1 %). Sexual violence was mainly committed by cohabitant (35.3 %). Furthermore, in a general summary of all types of violence, sons proved to be the most common perpetrators (39.0 %), followed by spouses (27.3 %) and cohabitant (24.7 %). The differences between the perpetrators were not statistically significant ( $p > 0.05$ ). However, logistic regression analysis (Table 3) showed that that sons ( $n = 12$ ) significantly less often than spouses ( $n = 16$ ) use arrogant and vulgar forms of violence (OR = 0.21; 95 %CI = 0.06, 0.72;  $p = 0.01$ ). Furthermore, in relation to blackmail and threats, sons ( $n = 10$ ) are 10 times more often than spouses ( $n = 1$ ) perpetrators of violence (OR = 10.00; 95 %CI = 1.17, 85.59;  $p = 0.03$ ).

### 4. Discussion

Elder abuse and neglect is a growing international problem with various manifestations in different countries and cultures. Domestic violence, although widely recognized as a violation of human rights, still remains a hidden form of family conflicts in many societies. The WHO estimate of global prevalence of elder abuse and neglect, estimated on the basis of reported abuse by older people, is close to 16 %, but this data is believed to be underestimated. The WHO study also revealed that 64.2 % of employees or 2 out of 3 employees reported bullying of older residents. Due to the fact that victims are often afraid to report cases of abuse to family, friends, authorities, relevant services, the presented indicators of the prevalence of violence against the older adults are probably underestimated (World Health Organization, 2019). Elder abuse and neglect is a complex and important social problem that is difficult to detect. To date, no specific tool has been identified as the gold standard in detecting elder abuse and neglect. Comparing the

**Table 2**  
Distribution of types of elder psychological abuse according to sociodemographic feature.

Characteristic	Psychological Abuse (N=58)									
	Arrogance, vulgarity		Blackmail, threats		Closing, isolating		Instaling, criticizing		Mocking	
	N (%)	p	N (%)	p	N (%)	p	N (%)	p	N (%)	p
Overall	45 (77.6)		16 (27.6)		27 (46.6)		43 (74.1)		30 (51.7)	
Sex		0.02		0.56		0.04		0.02		0.01
Female	32 (71.1)		10 (62.5)		20 (74.1)		31 (72.1)		23 (76.7)	
Male	13 (28.9)		6 (37.5)		7 (25.9)		12 (27.9)		7 (23.3)	
Age		0.02		< 0.01		0.11		0.60		0.06
60–65	22 (48.9)		9 (56.3)		14 (51.9)		24 (55.8)		16 (53.4)	
66–70	14 (31.1)		1 (6.2)		7 (25.9)		10 (23.3)		7 (23.3)	
> 70	9 (20.0)		6 (37.5)		6 (22.2)		9 (20.9)		7 (23.3)	
Education		0.06		0.66		0.40		0.25		0.13
Primary	13 (28.9)		5 (31.3)		7 (25.9)		12 (27.9)		11 (36.7)	
Secondary	19 (42.2)		4 (25.0)		11 (40.7)		16 (37.2)		10 (33.3)	
Vocational	12 (26.7)		5 (31.3)		6 (22.2)		14 (32.6)		7 (23.3)	
Higher	1 (2.2)		2 (12.4)		3 (11.2)		1 (2.3)		2 (6.7)	
Marital status		< 0.01		< 0.01		0.52		< 0.01		0.04
Single	12 (26.7)		6 (37.5)		8 (29.6)		11 (25.6)		9 (29.9)	
Married	17 (37.8)		1 (6.3)		5 (18.5)		15 (35.0)		11 (36.7)	
In a partnership	11 (24.4)		3 (18.8)		7 (25.9)		13 (30.2)		6 (20.0)	
Divorcee	4 (8.9)		1 (6.2)		3 (11.2)		2 (4.6)		2 (6.7)	
Widower/Widow	1 (2.2)		5 (31.2)		4 (14.8)		2 (4.6)		2 (6.7)	
Family income, EUR		0.04		< 0.01		0.16		0.01		0.02
< 233	10 (22.2)		10 (62.5)		10 (37.0)		12 (27.9)		10 (33.3)	
233–349	24 (53.4)		3 (18.8)		10 (37.0)		21 (48.9)		13 (43.4)	
350–465	10 (22.2)		2 (12.5)		6 (22.2)		9 (20.9)		6 (20.0)	
> 465	1 (2.2)		1 (6.2)		1 (3.8)		1 (2.3)		1 (3.3)	
Place of residence		< 0.01		0.32		0.05		0.06		< 0.01
City	34 (75.6)		11 (68.7)		20 (74.1)		30 (69.8)		24 (80.0)	
Village	11 (24.4)		5 (31.3)		7 (25.9)		13 (30.2)		6 (20.0)	
Chronic disease		0.57		0.52		0.02		0.44		0.23
Yes	35 (77.8)		13 (81.2)		25 (92.6)		34 (79.1)		25 (83.3)	
No	10 (22.2)		3 (18.8)		2 (7.4)		9 (20.9)		5 (16.7)	
Abusers		0.11		0.15		0.16		0.09		0.61
Spouses	16 (35.5)		1 (6.2)		4 (14.8)		14 (32.6)		11 (36.7)	
Siblings	3 (6.7)		1 (6.2)		3 (11.2)		2 (4.6)		2 (6.7)	
Cohabitant	12 (26.7)		3 (18.8)		7 (25.9)		14 (32.6)		6 (20.0)	
Son	12 (26.7)		10 (62.5)		11 (40.7)		11 (25.6)		10 (33.3)	
Doughter	2 (4.4)		1 (6.2)		2 (7.4)		2 (4.6)		1 (3.3)	

chi-square test

frequency of bullying of older people in different studies is difficult due to the differences in the problem definition, the methodology used, different measuring instruments, the environment and the study population (Curcio et al., 2019; Rivara et al., 2019; Stodolska, Parnicka, Tobiasz-Adamczyk, & Grodzicki, 2019).

It should be noted that the prevalence of elder abuse and neglect varies widely due to the lack of a consensus definition of elder abuse and its subtypes and methodological cultural differences. The frequency of abuse in this study (38.5 %) is similar to that reported by the National Centre on Elder Abuse (NCEA). According to the NCEA statistics, 42.2 % of the elderly have experienced the act of violence. Nearly 23.0 % of victims indicated the experience of more than one type of violence, with the most frequently reported financial fraud (54.9 %) and psychological abuse (25.7 %) (Weissberger et al., 2019). In turn, in the study by Curcio et al. (2019), 15.1 % of the elderly reported some type of abuse, and more than 50 % experienced more than one form of abuse. Similarly to our study, it was shown that psychological abuse was the most common form of violence and affected 13.1 % of victims. There is also a growing concern in Europe regarding the occurrence of elder abuse and neglect. According to the latest systematic review and meta-analysis, the overall prevalence rate of elder abuse and neglect was 15.7 %. Psychological abuse (11.6 %) and financial exploitation (4.2 %) proved to be the most common forms of violence (Yon et al., 2017). Another international study conducted in Europe shows that the incidence of the abuse of older adults is 34 % for psychological violence and 11.5 % for physical violence, 18.5 % for fraud and 5% for sexual

violence (Eslami et al., 2016). In turn, the study by Kołodziejczak et al. (2019) showed that violence affected nearly 40 % of older respondents living in rural areas in Poland. Psychological abuse also proved to be the most common form of violence (36.5 %).

The results of the research conducted by us and other authors (Pillemer, Burnes, Riffin, & Lachs, 2016; SA Health, 2020; Sembiah et al., 2020; Sethi et al., 2011; Weissberger et al., 2019; World Health Organization, 2019) indicate that there is a certain coherent trend related to a higher percentage of occurrence of female violence and in persons over 70 years of age. On the one hand, this may indicate that women aged 60 and over are treated differently by their carers or their families. On the other hand, it is possible that women who are more expressive by nature and willing to talk about their suffering may be more likely to report abuse. Furthermore, the oldest adults are more vulnerable, sick, physically weaker, and have more self-care deficits than those in younger age categories, which is why they can become victims of violence more often. Older adults in poor physical condition – with somatic illnesses and/or mental disorders have less ability to seek help in case of experienced violence. As age advances, they showed a greater tendency for being dependent for daily living and financial dependence on others which makes them vulnerable, especially women as they survive longer and become more disabled than men (Dong, Simon, Odwazny, & Gorbien, 2008; Munsur, Ismail, & Rahman, 2010). In our study and various other studies in developing and developed countries showed that poor health was risk factors for abuse. Chronic illness and functional dependency make the caretakers perceive older

**Table 3**  
Logistic regression analysis related to the risk factors for elder psychological abuse.

Question	Arrogance, vulgarity OR (95%CI)	P	Blackmail, threats OR (95%CI)	P	Closing, isolating OR (95%CI)	P	Instilling, criticizing OR (95%CI)	P	Mocking OR (95%CI)	P
Sex (Female vs Male)	2.31 (1.13, 4.73)	0.02	1.34 (0.48, 3.84)	0.59	2.52 (1.01, 6.26)	0.04	2.42 (1.61, 5.08)	0.02	2.99 (1.22, 7.34)	0.02
Age (vs 60–65)										
66–70	2.02 (0.93, 4.38)	0.07	0.29 (0.04, 2.32)	0.24	1.41 (0.53, 3.75)	0.49	1.16 (0.51, 2.65)	0.72	1.22 (0.47, 3.17)	0.69
> 70	3.40 (1.29, 8.93)	0.01	5.04 (1.59, 16.04)	< 0.01	3.11 (1.04, 9.24)	0.04	3.06 (1.17, 7.97)	0.02	3.33 (1.18, 9.39)	0.02
Education (vs primary)										
Secondary	0.93 (0.40, 2.16)	0.87	0.49 (0.12, 1.94)	0.31	1.03 (0.36, 2.90)	0.96	0.83 (0.36, 1.98)	0.67	0.52 (0.20, 1.36)	0.18
Vocational	0.45 (0.18, 1.10)	0.09	0.55 (0.15, 2.02)	0.37	0.45 (0.14, 1.45)	0.18	0.60 (0.25, 1.46)	0.26	0.30 (0.11, 0.86)	0.02
Higher	0.14 (0.02, 1.20)	0.07	1.01 (0.18, 5.80)	0.99	1.10 (0.25, 4.87)	0.90	0.16 (0.02, 1.36)	0.09	0.39 (0.08, 1.97)	0.18
Marital status (vs single)										
Married	0.39 (0.16, 0.98)	0.04	0.05 (0.01, 0.43)	< 0.01	0.18 (0.05, 0.61)	< 0.01	0.39 (0.15, 0.99)	0.04	0.36 (0.13, 1.00)	0.05
In a partnership	0.54 (0.19, 1.51)	0.24	0.31 (0.07, 1.39)	0.13	0.56 (0.18, 1.80)	0.33	0.80 (0.29, 2.21)	0.67	0.40 (0.12, 1.29)	0.12
Divorcee	0.23 (0.06, 0.85)	0.03	0.14 (0.02, 1.26)	0.08	0.31 (0.07, 1.34)	0.12	0.12 (0.02, 0.63)	0.01	0.17 (0.03, 0.87)	0.03
Widow/Widower	0.04 (0.01, 0.36)	< 0.01	0.68 (0.18, 2.53)	0.56	0.36 (0.09, 1.35)	0.13	0.10 (0.02, 0.52)	< 0.01	0.14 (1.03, 0.72)	0.02
Family income, EUR (< 233)										
233–349	0.99 (0.41, 2.38)	0.97	0.09 (0.02, 0.35)	< 0.01	0.33 (0.12, 0.89)	0.03	0.62 (0.26, 1.48)	0.28	0.45 (0.17, 1.15)	0.09
350–465	0.34 (0.12, 0.92)	0.03	0.06 (0.01, 0.30)	< 0.01	0.19 (0.06, 0.58)	< 0.01	0.23 (0.08, 0.62)	< 0.01	0.19 (0.06, 0.58)	< 0.01
> 465	0.29 (0.03, 2.61)	0.27	0.29 (0.03, 2.61)	0.27	0.29 (0.03, 2.61)	0.27	0.22 (0.02, 1.97)	0.18	0.29 (0.03, 2.61)	0.27
City (vs village)	2.90 (1.37, 6.13)	< 0.01	1.73 (0.58, 5.18)	0.33	2.40 (0.97, 5.97)	0.06	2.01 (0.97, 4.13)	0.06	3.56 (1.38, 9.14)	< 0.01
Chronic disease	1.20 (0.54, 2.64)	0.66	1.47 (0.40, 5.37)	0.56	4.74 (1.08, 20.79)	0.04	1.31 (0.58, 2.98)	0.51	1.77 (0.64, 4.92)	0.27
Abusers (vs spouses)										
Siblings	0.94 (0.09, 11.15)	0.96	6.67 (0.32, 137.40)	0.22	4.25 (0.45, 40.01)	0.21	0.50 (0.06, 4.33)	0.53	0.91 (0.12, 7.71)	0.93
Cohabitant	0.56 (0.14, 2.11)	0.37	3.75 (0.36, 39.59)	0.27	2.48 (0.59, 10.39)	0.21	1.40 (0.36, 5.49)	0.63	0.42 (0.12, 1.53)	0.19
Son	0.21 (0.06, 0.72)	0.01	10.00 (1.17, 85.59)	0.03	2.46 (0.66, 9.20)	0.18	0.29 (0.09, 0.93)	0.04	0.45 (0.14, 1.43)	0.18
Daughter	0.63 (0.05, 8.43)	0.72	10.00 (0.44, 228.69)	0.15	8.50 (0.61, 118.64)	0.11	1.00 (0.08, 13.02)	1.00	0.45 (0.04, 5.81)	0.54

**Table 4**  
The frequency of the different types of perpetrators by subtype of elder abuse and neglect.

Characteristic	Any abuse (N = 77)								
	Physical abuse		Verbal abuse		Sexual abuse		Financial exploitation		Any abuse
	N (%)	p	N (%)	p	N (%)	p	N (%)	p	N (%)
Overall	37 (48.1)		58 (75.3)		17 (22.1)		53 (68.8)		77 (100.0)
Abusers		0.09		0.40		0.79		0.19	
Spouses	18 (48.6)		7 (12.1)		5 (29.4)		15 (28.3)		21 (27.3)
Siblings	4 (10.9)		3 (5.2)		1 (5.9)		1 (1.9)		4 (5.2)
Cohabitant	17 (45.9)		11 (19.0)		6 (35.3)		16 (30.2)		19 (24.7)
Son	17 (45.9)		15 (25.9)		5 (29.4)		18 (34.0)		30 (39.0)
Daughter	2 (5.4)		1 (1.7)		0 (0.0)		3 (5.7)		3 (3.9)

chi-square test.

adults as a burden and make them prone to physical abuse (Acierno et al., 2010; Anand, 2016; Dong et al., 2008; Munsur et al., 2010; Faustino, Gandolfi, & Moura, 2014). Our findings also show that older people living in urban areas with low socioeconomic statuses are statistically more likely to experience psychological violence. Systematic research reviews, meta-analyses and research reports highlight the main risk factors for elder abuse and neglect. These include: functional dependence, poor physical or mental health, cognitive impairment, low income, gender, age, financial dependence, isolation (Alexa et al., 2019; Pillemer et al., 2016; SA Health, 2020; Sethi et al., 2011; World Health Organization, 2019).

The results of our research indicate that generally, partners, spouses or sons are the most frequent perpetrators of elder abuse and neglect. Also, studies carried out by Santos, Nunes, Kislaya, Gil, and Ribeiro (2019) showed that the spouse/partner (48.2 %) and children/grandchildren (42.3 %) are the most common perpetrators of elder abuse and neglect. Alexa et al. (2019) in their studies also indicate the daughter/son (33.7 %) and life partner (25.3 %) as the most common perpetrators of elder abuse and neglect. In turn, the most common perpetrators in the studies by Patel et al. (2018) proved to be sons (42 %) and daughter in low (54 %). Furthermore, in the studies by Ribot et al. (2015) sons and daughters proved to be the most common perpetrators of psychological violence against older adults in 77.3 % and grandchildren in 73.4 %. According to NCEA statistics, family members were the most frequently identified perpetrators of elder abuse and neglect (46.8 %). The most common subtype of violence against the elderly used by family members was financial exploitation (61.8 %) and psychological (35 %) violence (Weissberger et al., 2019).

To understand why prevalence rates of elder abuse are so alarmingly high, we need more research on the underlying risk factors. Moreover, public awareness campaigns and educational programs for health care professionals are necessary interventions to reduce and prevent elder abuse, and this can be done in a variety of ways, including training, workshops, educational seminars, scientific meetings and conferences. A number of interventions have been implemented to reduce the number of cases of elder abuse and neglect in both the social and institutional settings, but it is still unclear whether these interventions improve caregivers' knowledge and attitudes, and that future research is justified. Undoubtedly, elder abuse and neglect is one of the most important social problems affected by various factors. Since the problem of elder abuse and neglect in the international community, especially in Poland, is a new and unknown phenomenon, and sometimes is displaced or neglected, this study may be useful for further research on violence against older adults and its various aspects, including epidemiology, related factors, risk factors, methods of prevention and intervention. In addition, due to the presence of various diseases in old age, the number of cases of elder abuse and neglect can be reduced by good disease management and improvement of self-care among the elderly. A multidisciplinary assessment is required in order to establish a therapy and follow-up plan for abused older adults

(Curcio et al., 2019; Rivara et al., 2019; SA Health, 2020; World Health Organization, 2019).

## 5. Limitations

The study has several limitations. First, the sample is small ( $n = 200$ ). Secondly, only those hospitalized were examined. Other older adults communities, such as those living in a nursing home, were not included in this study, which could be included in future studies. Another limitation of this work is the use of a hoc survey instead of a standardized tool. Conducting research on the occurrence of elder abuse and neglect is a challenge for researchers. This is due to the fact that people are reluctant to talk about violence, it is still a taboo topic among the community. Special care should be taken in drawing conclusions, especially in estimating the size of the phenomenon on their basis. A very large number of incidents are not detected at all, and therefore the statistics provided are underestimated. Conducting research in this area is also associated with a high risk of refusing to participate in the project. Therefore, making a reliable and true assessment of the occurrence of elder abuse and neglect is extremely difficult.

## 6. Conclusions

In summary, the main purpose of this article was to analyse the occurrence of elder psychological abuse over the past 12 months. The obtained results confirm that psychological abuse is the most common type of violence in the sample of hospitalised Polish older adults. This study reveals that statistically more often, psychological violence is experienced by women. It has been shown that the lower the monthly income, the higher the risk of psychological violence. Statistically, the highest percentage of violence in the form of arrogance, vulgarity and blackmail, threats was recorded in people aged 60–65. On the other hand, logistic regression analysis showed that the oldest respondents aged > 70 more than three times more often than people from the youngest age category are victims of violence. Also people living in urban territories more often experience violence than people living in the village. Given the complexity of elder abuse and neglect, the small sample size and inclusion criteria, it is necessary to conduct further research with a more diverse population as a need to test the generalization of these results.

## Informed consent

All patients provided informed consent.

## Ethical approval

Informed consent was obtained from all the patients. The study was approved by the Bioethics Commission at Collegium Medicum, Nicolaus



Copernicus University, Torun, Poland (KB 259/2017). All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

### CRedit authorship contribution statement

**Karolina Filipka:** Conceptualization, Formal analysis, Methodology, Visualization, Writing - original draft, Writing - review & editing. **Monika Biercewicz:** Conceptualization, Methodology, Writing - review & editing, Supervision. **Adam Wiśniewski:** Formal analysis, Methodology, Visualization, Writing - review & editing, Supervision. **Kornelia Kędziora-Kornatowska:** Visualization, Writing - review & editing, Supervision. **Robert Ślusarz:** Methodology, Visualization, Writing - review & editing, Supervision.

### Declaration of Competing Interest

The author declared no conflicts of interest with respect to the research, authorship, funding, and/or publication of this article.

### References

- Acierno, R., Hernandez, M. A., Amstadter, A. B., Resnick, H. S., Steve, K., Muzzy, W., ... Kilpatrick, D. G. (2010). Prevalence and correlates of emotional, physical, sexual, and financial abuse and potential neglect in the United States: The national elder mistreatment study. *American Journal of Public Health, 100*(2), 292–297. <https://doi.org/10.2105/AJPH.2009.163089>.
- Alexa, I. D., Ilie, A. C., Pislaru, A. I., Dronic, A., Gavrilovivi, O., Alexa-Stratulat, T., ... Herghelegiu, A. M. (2019). Elder abuse and associated factors in eastern Romania. *Psychogeriatrics, https://doi.org/10.1111/psyg.12488*.
- Anand, A. (2016). Exploring the role of socioeconomic factors in abuse and neglect of elderly population in Maharashtra, India. *Journal of Geriatric Mental Health, 3*, 150–157. <https://doi.org/10.4103/2348-9995.195640>.
- Botngård, A., Eide, A. H., Mosqueda, L., & Malmedal, W. (2020). Elder abuse in Norwegian nursing homes: A cross-sectional exploratory study. *BMC Health Services Research, 20*(1), 9. <https://doi.org/10.1186/s12913-019-4861-z>.
- Carmona-Torres, J. M., López-Soto, P. J., Coimbra-Roca, A. I., Gálvez-Rioja, R. M., Goergen, T., & Rodríguez-Borrego, M. A. (2018). Elder abuse in a developing area in Bolivia. *Journal of Interpersonal Violence, 33*(2), 339–356. <https://doi.org/10.1177/0886260515608803>.
- Curcio, C. L., Payán-Villamizar, C., Jiménez, A., & Gómez, F. (2019). Abuse in Colombian elderly and its association with socioeconomic conditions and functionality. *Colombia Medica (Cali, Colombia), 50*(2), 77–88. <https://doi.org/10.25100/cm.v50i2.4013>.
- Dong, X., Simon, M. A., Odwazny, R., & Gorbien, M. (2008). Depression and elder abuse and neglect among a community-dwelling Chinese elderly population. *Journal of Elder Abuse & Neglect, 20*, 25–41. [https://doi.org/10.1300/J084v20n01\\_02](https://doi.org/10.1300/J084v20n01_02).
- Eslami, B., Viitasara, E., Macassa, G., Melchiorre, M. G., Lindert, J., Stankunas, M., ... Soares, J. J. (2016). The prevalence of lifetime abuse among older adults in seven European countries. *International Journal of Public Health, 61*, 891–901. <https://doi.org/10.1007/s00038-016-0816-x>.
- Faustino, A. M., Gandolfi, L., & Moura, L. B. (2014). Functional capability and violence situations against the elderly. *ACTA Paulista de Enfermagem, 27*, 392–398. <https://doi.org/10.1590/1982-01942014000066>.
- Gassoumis, Z. D., Navarro, A. E., & Wilber, K. H. (2015). Protecting victims of elder financial exploitation: The role of an Elder Abuse Forensic Center in referring victims for conservatorship. *Aging & Mental Health, 19*(9), 790–798. <https://doi.org/10.1080/13607863.2014.962011>.
- Grzanka-Tykwińska, A., Rzepka, A., Chudzińska, M., Sygit, B., Kusza, K., & Kędziora-Kornatowska, K. (2012). The issue of violence against the elderly. *Medical News, 81*(1), 44–48.
- Koga, C., Hanazato, M., Tsuji, T., Suzuki, N., & Kondo, K. (2019). Elder abuse and social capital in older adults: The Japan gerontological evaluation study. *Gerontology, 1–11*. <https://doi.org/10.1159/000502544>.
- Kolodziejczak, S., Terelak, A., & Bulsa, M. (2019). Domestic violence against seniors in rural areas of West Pomerania, Poland. *Annals of Agricultural and Environmental Medicine: AAEM, 26*(1), 92–96. <https://doi.org/10.26444/aaem/92208>.
- Korzeniowski, K., & Radkiewicz, P. (2015). *Domestic violence against the elderly and disabled people. Report from a nationwide survey 2015 and a comparative study from 2009–2015*. Warsaw: Institute of Psychology of the Polish Academy of Sciences.
- Mossakowska, M., Więcek, A., & Błędowski, P. (2012). PolSenior. Medical, psychological, sociological and economic aspects of aging in Poland. In P. Błędowski (Ed.), *Aging as a social problem. Perspectives of the demographic aging of the Polish population by 2035* (pp. 123–136). Warsaw: Termedia.
- Munsur, A. M., Ismail, T., & Rahman, M. K. M. (2010). Determinants of living arrangements, health status and abuse among elderly women: a study of rural Naogaon District, Bangladesh. *Journal of International Women's Studies, 11*, 162–176 25.
- Pak, M. (2020). The prevalence and associated risk factors of elder abuse among older people applied to the family health center in the rural district of Turkey. *Social Work in Health Care, 59*(4), 236–256. <https://doi.org/10.1080/00981389.2020.1740377>.
- Patel, V. K., Tiwari, D. S., Shah, V. R., Patel, M. G., Raja, H. H., & Patel, D. S. (2018). Prevalence and predictors of abuse in elderly patients with depression at a tertiary care centre in Saurashtra, India. *Indian Journal of Psychological Medicine, 40*(6), 528–533. <https://doi.org/10.4103/IJPSYM.IJPSYM.18.18>.
- Pillemer, K., Burnes, D., Riffin, C., & Lachs, M. S. (2016). Elder abuse: Global situation, risk factors, and prevention strategies. *Gerontologist, 56*(2), 194–205. <https://doi.org/10.1093/geront/gnw004>.
- Piri, N., Tanjani, P. T., Khodkarim, S., & Etamad, K. (2018). Domestic elder abuse and associated factors in elderly women in Tehran, Iran. *Epidemiology and Health, 40*, Article e2018055. <https://doi.org/10.4178/epih.e2018055>.
- Public Opinion Research Center (2012). *Poles and their own old age*. Warsaw.
- Ribot, V. C., Rousseaux, E., García, T. C., Arteaga, E., Ramos, M., & Alfonso, M. (2015). Psychological the most common elder abuse in a Havana neighborhood. *MEDICC Review, 17*(2), 39–43.
- Rivara, F., Adhia, A., Lyons, V., Massey, A., Mills, B., Morgan, E., ... Rowhani-Rahbar, A. (2019). The Effects Of Violence On Health. *Health Affairs (Project Hope), 38*(10), 1622–1629. <https://doi.org/10.1377/hlthaff.2019.00480>.
- Rodrigues, R. A. P., Silva, L. M., Seredynskij, F. L., Phon, J. R. S., Bolina, A. F., Miyamura, K., ... Kobayasi, D. Y. (2019). Analysis of violence against older adults in police reports. *Archives of Psychiatric Nursing, 33*(4), 407–413. <https://doi.org/10.1016/j.apnu.2019.05.004>.
- SA Health. <https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/health+topics/health+conditions+prevention+and+treatment/stop+elder+abuse/what+is+elder+abuse/what+is+elder+abuse#Elder%20abuse%20-%20who%20is%20at%20risk?> Accessed January 6, 2020.
- Saghafi, A., Bahramnezhad, F., Poormollamirza, A., Dadgari, A., & Navab, E. (2019). Examining the ethical challenges in managing elder abuse: A systematic review. *Journal of Medical Ethics and History of Medicine, 12*, 7.
- Santos, A. J., Nunes, B., Kislaya, I., Gil, A. P., & Ribeiro, O. (2019). Elder abuse victimization patterns: latent class analysis using perpetrators and abusive behaviours. *BMC Geriatrics, 19*(1), 117. <https://doi.org/10.1186/s12877-019-1111-5>.
- Sembiah, S., Dasgupta, A., Taklikar, C. S., Paul, B., Bandyopadhyay, L., & Burman, J. (2020). Elder abuse and its predictors: A cross-sectional study in a rural area of West Bengal, eastern part of India. *Psychogeriatrics, https://doi.org/10.1111/psyg.12550*.
- Sethi, D., Wood, S., Mitis, F., Bellis, M., Penhale, B., Marmolejo, I. I., ... Karki, U. F. (2011). *European report on preventing elder maltreatment*. Geneva, Switzerland: World Health Organization.
- Stodolska, A., Parnicka, A., Tobiasz-Adamczyk, B., & Grodzicki, T. (2019). Exploring elder neglect: New theoretical perspectives and diagnostic challenges. *Gerontologist, https://doi.org/10.1093/geront/gnz059*.
- Wang, F., Meng, L. R., Zhang, Q., Li, L., Nogueira, B. O. C. L., Ng, C. H., ... Xiang, Y. T. (2018). Elder abuse and its impact on quality of life in nursing homes in China. *Archives of Gerontology and Geriatrics, 78*, 155–159. <https://doi.org/10.1016/j.archger.2018.06.011>.
- Weissberger, G. H., Goodman, M. C., Mosqueda, L., Schoen, J., Nguyen, A. L., Wilber, K. H., ... Han, S. D. (2019). Elder abuse characteristics based on calls to the national center on elder abuse resource line. *Journal of Applied Gerontology : the Official Journal of the Southern Gerontological Society, https://doi.org/10.1177/0733464819865685* 733464819865685.
- World Health Organization (WHO): Elder abuse <https://www.who.int/news-room/factsheets/detail/elder-abuse> Accessed December 1, 2019.
- Yon, Y., Mikton, C. R., Gassoumis, Z. D., & Wilber, K. H. (2017). Elder abuse prevalence in community settings: A systematic review and meta-analysis. *The Lancet Global Health, 5*, 147–156. [https://doi.org/10.1016/S2214-109X\(17\)30006-2](https://doi.org/10.1016/S2214-109X(17)30006-2).

# Predictors of self-reported physical abuse among hospitalized older adults

## Predyktory zgłaszanej przemocy fizycznej wśród hospitalizowanych osób starszych

Karolina Filipka<sup>1</sup>, Monika Biercewicz<sup>2</sup>, Adam Wiśniewski<sup>3</sup>,  
Kornelia Kędziora-Kornatowska<sup>2</sup>, Robert Ślusarz<sup>1</sup>

<sup>1</sup>Neurological and Neurosurgical Nursing Department, Faculty of Health Science, *Collegium Medicum*, Nicolaus Copernicus University, Toruń, Poland

<sup>2</sup>Clinic of Geriatrics, Faculty of Health Science, *Collegium Medicum*, Nicolaus Copernicus University, Toruń, Poland

<sup>3</sup>Department of Neurology, Faculty of Medicine, *Collegium Medicum*, Nicolaus Copernicus University, Toruń, Poland

### Abstract

**Background.** Elder abuse and neglect are global problems. Nevertheless, large-scale epidemiological studies are rare. Thus, this study examined the 12-month prevalence of physical abuse, pertinent risk factors, and abuser characteristics among hospitalized older adults. **Methods.** In this cross-sectional study, 250 older adults (age  $\geq 60$  years) completed a researcher-designed questionnaire. Chi-squared analysis and uni- and multivariate logistic regression models were used. **Results.** Physical abuse was reported by 21.6% of the participants. The following variables emerged as independent predictors (adjusted odds ratio, 95% confidence interval) of physical abuse: age  $\geq 70$  years (4.28, 1.87–9.77), primary education (1.61, 0.44–5.93), female sex (2.50, 1.16–5.40), a low socioeconomic status (6.02, 2.38–15.26), city residence (4.18, 1.66–10.49), and the presence of a chronic disease (2.50, 1.08–5.78). **Conclusions.** Elder abuse is common in Poland. Living in a city, an older age ( $>70$  years), and the presence of chronic diseases are risk factors for most forms of physical abuse. (*Gerontol Pol* 2021; 29; 146-157) doi: 10.53139/GP.20212925

**Keywords:** elder abuse, physical abuse, risk factors, victims, perpetrators

### Streszczenie

**Wstęp.** Przemoc wobec osób starszych to problem globalny. Niemniej jednak prowadzenie na dużą skalę badań epidemiologicznych jest rzadkie. Dlatego w badaniu tym określono częstość występowania przemocy fizycznej w ciągu 12 miesięcy, istotne czynniki ryzyka i charakterystykę sprawców wśród hospitalizowanych osób starszych. **Metody.** W tym badaniu przekrojowym 250 osób starszych (w wieku  $\geq 60$  lat) wypełniło kwestionariusz opracowany przez badaczy. Zastosowano analizę chi-kwadrat oraz jedno i wielowymiarowe modele regresji logistycznej. **Wyniki.** Przemoc fizyczną zgłosiło 21,6% uczestników. Następujące zmienne okazały się niezależnymi predyktorami (skorygowany iloraz szans, 95% przedział ufności) przemocy fizycznej: wiek  $\geq 70$  lat (4,28, 1,87–9,77), wykształcenie podstawowe (1,61, 0,44–5,93), płeć żeńska (2,50, 1,16–5,40), niski status społeczno-ekonomiczny (6,02, 2,38–15,26), mieszkanie w mieście (4,18, 1,66–10,49) oraz obecność choroby przewlekłej (2,50, 1,08–5,78). **Wnioski.** Przemoc wobec osób starszych jest w Polsce powszechna. Mieszkanie w mieście, starszy wiek ( $>70$  lat) oraz obecność chorób przewlekłych są czynnikami ryzyka większości form przemocy fizycznej. (*Gerontol Pol* 2021; 29; 146-157) doi: 10.53139/GP.20212925

**Słowa kluczowe:** przemoc wobec osób starszych, przemoc fizyczna, czynniki ryzyka, ofiary, sprawcy

### Introduction

Elder abuse and neglect are significant and growing problems worldwide. They are global social problems that negatively affect all dimensions of the health of older adults and violate their rights. It is imperative that

social assistance programs, health systems, the general public, and the government pay urgent attention to this issue [1-3]. The global population of individuals aged 60 years and older was projected to more than double from 900 million in 2015 to approximately 2 billion in 2050. Therefore, it can be expected that the number of

Correspondence address: ✉ Karolina Filipka; Neurological and Neurosurgical Nursing Department, Faculty of Health Science, *Collegium Medicum*, Nicolaus Copernicus University, Toruń, Poland, St. Łukasiewicza 1, 85-821 Bydgoszcz, Poland ☎ (+48) 790 322 965 ✉ karolinafilipskaf@gmail.com

victims of violence in this age group will also gradually increase. Reports published by the World Health Organization (WHO), the United Nations, and other international bodies delineate the harmful effects of violence, its risk factors, and proposed preventive actions [3,4].

In this research we focused solely on physical violence. The American Psychological Association definition of physical abuse was adopted: "Use of physical force that may result in bodily injury, physical pain, or impairment" [5]. Furthermore, a lot of worldwide research regarding physical elder abuse was conducted [6-10]. Like psychological abuse, physical violence can also be a disguised form of violence, although its main premise is to cause bodily harm and physical pain. Jerking, shaking, does not have to leave marks in the form of bruises or scratches. Even visible bruises are displaced by the victims and justified by imbalances. Moreover, a detailed understanding of the various forms of physical violence will allow for a more accurate determination of the prevalence of this phenomenon and to specify the most common risk factors. Furthermore, according to WHO [3] elder abuse is likely to have been an underestimation because only 1 in 24 cases of violence had been reported. The National Elder Mistreatment Study conducted in the United States found that only 31% of physical abuse cases were reported to the authorities [11]. There may be several reasons for this trend. First, older adults are afraid to report cases of abuse to the police, friends, family, and health care professionals. Second, they often feel ashamed to admit that they are victims of domestic violence. Finally, they fear that they will lose contact with their family and be left without any form of care. Thus, any indicator of the prevalence of violence within this age group is likely to be inaccurate and a gross underestimate. Physical violence has serious long-term effects: ranging from injuries (both physical and mental), frequent visits to emergency departments, increased admissions to trauma or geriatric wards, and may consequently contribute to an increase in mortality [3,12,13].

There have been no large-scale studies on elder abuse and neglect in Poland. Thus, the empirical literature in this domain is sparse. A nationwide study called PolSenior [14] found that almost 6% of the participating older adults were victims of violence. A 2009 and 2015 report on domestic violence against older adults and individuals with disabilities was published by a team of psychologists from the Institute of Psychology of the National Academy of Sciences. They reported that there was an increase in violence in 2015. Specifically, this percentage had increased from 4% in 2009 to 6% in 2015 [15]. However, Kołodziejczak et al. [16] found that violence

had affected approximately 40% of their respondents who were living in rural areas.

The research carried out both in the United States and Europe was conducted mainly among the general community of the older adults [17-19]. Interestingly, the results obtained in our work, despite being conducted among hospitalized persons, were similar to those obtained in other works. The study of elder abuse and neglect among hospitalized older adults has not been reported in Poland. So we undertook this study to be able to see the difference in terms of the data obtained. A hospital is associated with a safe place where help is obtained. As a result, perhaps the older adults were more likely to report acts of violence and express their opinions. On the other hand, we have strived to obtain the most credible and reliable results. Accordingly, we designed a study that excludes those with dementia or cognitive impairment. Thus, the Geriatrics Department was selected as the research site, where there is a possibility of a neuro-psychological assessment.

There is a group of risk factors that significantly influence violence as a dependent variable. Many studies show that statistically women experience violence more often than men [20-22]. Financial problems turn out to be another important factor [23,24]. Furthermore, people with lower education and people with chronic diseases are more likely to experience violence [20,21,24,25]. Thus, it is so important to conduct research with a special analysis of these independent variables in order to be able to distinguish a group of people particularly exposed to experiencing violence. This will allow to implement prophylaxis directed mainly at high-risk groups.

Elder abuse and neglect remain a major public health problem. Nevertheless, large-scale epidemiological studies are rare. A review of the empirical literature makes it evident that the issue of older adult abuse and neglect is unable to draw substantial attention from researchers. Disseminating information about this issue and publishing pertinent research findings will facilitate the implementation of measures that can counteract these acts of aggression. Indeed, this issue deserves substantial attention from researchers, healthcare professionals, social workers, and other professionals. Despite the possibility of implementing numerous preventive measures, the prevalence of this problem will increase across time because of progressive population aging. Thus, it is necessary to not only determine the prevalence of this problem but also develop effective interventions that can mitigate this issue [1-4,14,15].

This study aimed to determine the incidence of physical abuse during the past 12 months among hospitalized older adults in Poland. The factors that predict the occur-

rence of physical violence were also examined. Another objective of this study was to identify the sociodemographic characteristics and health-related factors that are correlated with the occurrence of physical abuse and delineate abuser characteristics.

## Material and methods

### Study area and period

This cross-sectional study was carried out in the Department of Geriatrics at University Hospital No. 1 in Bydgoszcz. Data collection was undertaken between April 2017 and December 2020.

### Population and setting

The participants were 250 in-patients (99 men, 151 women) aged 60 years or older, who had been hospitalized in the Department of Geriatrics at University Hospital No. 1 in Bydgoszcz. The baseline characteristics of the participants are shown in Table I. The inclu-

sion criteria were as follows: a) aged 60 years or older, b) no diagnosis of dementia or cognitive impairment, c) hospitalized only in the Geriatrics Department and Clinic no. 1 of Dr Antoni Jurasz University Hospital in Bydgoszcz, and c) ability to independently complete the survey questionnaire.

The study was designed in such a way that the results meet the highest credibility and reliability standards. Therefore, potential respondents underwent a neurological and psychological assessment. This allowed us to exclude individuals with dementia and cognitive impairment before the study. The standard tool used by the psychologists in Poland is the MMSE and CDT. Additionally, participant anonymity was ensured. The patients participating in our study were mainly independent people who were admitted to the department for a CGA. Therefore, the above-mentioned neuropsychological assessment was of a diagnostic nature and was performed before the inclusion of patients in the study. Initially, older adults were selected based on inclusion criteria by the main author. In the next steps the authors:

Table 1. Socio-demographic characteristics of participants

Characteristics	Female (n=151)	Male (n=99)	Total (n=250)	Gender difference*
	N (%)	N (%)	N (%)	p
<b>Age</b>				
60-65 years	90 (59.6)	67 (67.7)	157 (62.8)	0.43
66-70 years	39 (25.8)	20 (20.2)	59 (23.6)	
>70 years	22 (14.6)	12 (12.1)	34 (13.6)	
<b>Education</b>				
Primary	40 (26.5)	19 (19.2)	59 (23.6)	0.43
Secondary	45 (29.8)	27 (27.3)	72 (28.8)	
Vocational	57 (37.7)	45 (45.4)	102 (40.8)	
Higher	9 (6.0)	8 (8.1)	17 (6.8)	
<b>Family income, EUR</b>				
<233 EUR	31 (20.5)	27 (27.3)	58 (23.2)	0.06
233-349 EUR	65 (43.0)	33 (33.3)	98 (39.2)	
350-465 EUR	46 (30.5)	38 (38.4)	84 (33.6)	
>465 EUR	9 (6.0)	1 (1.0)	10 (4.0)	
<b>Marital Status</b>				
Single (never married)	34 (22.5)	14 (14.1)	48 (19.2)	0.06
Married	58 (38.4)	31 (31.3)	89 (35.6)	
In a partnership	30 (19.9)	19 (19.2)	49 (19.6)	
Divorcee	12 (7.9)	15 (15.2)	27 (10.8)	
Widow/Widower	17 (11.3)	20 (20.2)	37 (14.8)	
<b>Residency area</b>				
City	103 (68.2)	37 (37.4)	140 (56.0)	<0.01
Village	48 (31.8)	62 (62.6)	110 (44.0)	
<b>Chronic disease</b>				
Yes	100 (66.2)	67 (67.7)	167 (66.8)	0.81
No	51 (33.8)	32 (32.3)	83 (33.2)	

\* chi-square test

a) informed the patient about the subject and purpose of the research, b) obtained informed, verbal consent c) the instructions were given on the correct completion of the questionnaire d) supervised the self-completion of the questionnaire by the respondent. The investigators made every effort to ensure that the participants completed the questionnaire independently (i.e., without the presence of a family member, caregiver, or medical professional). Completed questionnaires were stored in a dedicated box. The entire procedure (including points a-d) of our study took approximately 30 minutes. At any time, the respondents could ask a question to the researchers located in the next room.

### Ethical aspects

Ethical approval was obtained from the Bioethics Committee at Collegium Medicum, Nicolaus Copernicus University, Toruń, Poland (KB 259/2017).

### Measurements

This study adopted the diagnostic survey method. A questionnaire was designed specifically for this study. Before the main study was conducted, a pilot study was conducted using a sample of 50 older adults. The respondents identified questions and answers that were ambiguous, inconsistent, and incomprehensible. Based on their comments, the questionnaire was edited and refined.

The research tool was a questionnaire that was designed specifically for this study. Socio-demographic characteristics and abuse occurrence were assessed using a 16-item questionnaire, which was developed based on literature reviews and approved by several experts, researchers, psychologists, social workers, nurses, and physicians [19,26-28]. The introductory section of the questionnaire contained statements that (a) described the aim of the study, (b) guaranteed participant anonymity, and (c) provided clear instructions about responding to the questionnaire items. The first part of the questionnaire consisted of 6 questions and concerned only socio-demographic data, such as: sex, age, education, marital status, family income, place of residence and also chronic diseases. Another 10 questions assessed participant experience of different forms of elder abuse and neglect during the past 12 months and the characteristics of violence perpetrators. The leading question in the questionnaire was question 1: Have you ever experienced violence (e.g. kicking, pushing and dragging, hitting, mocking, pushing, insulting) in your place of residence during the last 12 months?. The next questions concerned: a) Have you ever been a witness to elder abuse and neglect?, b)

Do you know victims of domestic violence?, c) In your opinion, elder abuse and neglect is a widespread phenomenon?, d) Who was the perpetrator of violence against you?, e) Which of the following forms of violence were used against you?, f) Have you ever reported the cases of violence used against you?, g) Is violence used against another member of your family (if so, please list against whom, indicating your relationship to this person)?. The questions were formulated in a simple and short way in a closed, alternative and multiple-choice form, so that they were fully understandable for the older adults. The structure of the questionnaire we used allowed us to distinguish the various types of physical violence, which were subjected to a detailed analysis in the above study: 1) Jerking/Shaking, 2) Hitting, 3) Kicking, 4) Pushing.

### Data analysis

Statistical analyses were conducted using Statistica (TIBCO, USA) version 13.3. Each type of physical violence was assessed separately. The dependent variables were the different forms of elder physical abuse. Socio-demographic characteristics and the presence of chronic diseases were treated as qualitative predictors. Chi-squared analysis was used to examine the relationship between categorical variables (Tables I and II). As a result, the significance of the relationship between the occurrence of chronic diseases, demographic variables and various forms of physical violence was established. Logistic regression analysis was conducted to examine the association between older adult physical abuse and the other study variables (Table III). All independent variables that reached a P-value less than 0.05 in the chi-square test were examined and included in the multivariate analysis. Thus, we tested multivariate regression models (A–D) to identify the determinants of physical abuse (Table V). The statistical significance level was set as  $P \leq 0.05$ .

### Results

The overall incidence of elder physical abuse during the past 12 months was 21.6%. Further, the most frequently reported forms of physical violence were jerking/shaking (N=35, 64.8%), hitting (N=24, 44.4%), kicking (N=22, 40.7%), and pushing (N=19, 35.2%). Burning (e.g., with a cigarette) and choking were relatively rare (N=7, 13.0% and N=3, 5.6%, respectively). Therefore, these forms of violence were not included in the analysis.

Table II shows that the following variables emerged as risk factors for physical abuse: sex (female), age, edu-

Table II. Twelve month prevalence rate of elder physical abuse and general population estimates

Characteristics	Physical Abuse (n=54)									
	Jerking/Shaking		Hitting		Kicking		Pushing		The all forms of physical abuse	
	N (%)	p	N (%)	p	N (%)	p	N (%)	p	N (%)	p
Overall	35 (64.8)		24 (44.4)		22 (40.7)		19 (35.2)		54 (21.6)	
Sex		0.03		0.02		0.03		0.03		0.02
Female	27 (77.1)		20 (83.3)		18 (81.8)		16 (84.2)		40 (74.1)	
Male	8 (22.9)		4 (16.7)		4 (18.2)		3 (15.8)		14 (25.9)	
Age		<0.02		<0.01		<0.01		0.01		<0.01
60-65 years	13 (37.1)		5 (20.8)		8 (36.4)		7 (36.8)		22 (40.7)	
66-70 years	13 (37.1)		6 (25.0)		7 (31.8)		5 (26.4)		14 (25.9)	
>70 years	9 (25.8)		13 (54.2)		7 (31.8)		7 (36.8)		18 (33.4)	
Education		0.06		<0.01		0.02		0.01		<0.01
Primary	13 (37.1)		18 (75.0)		10 (45.5)		9 (47.4)		24 (44.4)	
Secondary	10 (28.6)		2 (8.3)		7 (31.8)		7 (36.8)		15 (27.8)	
Vocational	8 (22.9)		3 (12.5)		3 (13.6)		1 (5.3)		11 (20.4)	
Higher	4 (11.4)		1 (4.2)		2 (9.1)		2 (10.5)		4 (7.4)	
Family income, EUR		<0.01		<0.01		<0.01		0.04		<0.01
<233 EUR	16 (45.7)		17 (70.8)		12 (54.6)		9 (47.4)		28 (51.9)	
233-349 EUR	14 (40.0)		3 (12.5)		6 (27.3)		7 (36.8)		19 (35.2)	
350-465 EUR	4 (11.4)		3 (12.5)		3 (13.6)		2 (10.5)		6 (11.1)	
>465 EUR	1 (2.9)		1 (4.2)		1 (4.5)		1 (5.3)		1 (1.8)	
Marital Status		0.43		0.36		0.04		0.68		0.37
Single (never married)	4 (11.4)		5 (20.8)		3 (13.6)		4 (21.0)		10 (18.5)	
Married	14 (40.0)		11 (45.8)		5 (22.7)		5 (26.4)		19 (35.2)	
In a partnership	9 (25.8)		6 (25.0)		9 (40.9)		6 (31.6)		14 (25.9)	
Divorcee	5 (14.2)		1 (4.2)		4 (18.3)		2 (10.5)		7 (13.0)	
Widow/Widower	3 (8.6)		1 (4.2)		1 (4.5)		2 (10.5)		4 (7.4)	
Residency area		<0.01		<0.01		0.04		<0.01		<0.01
City	29 (82.9)		21 (87.5)		17 (77.3)		17 (89.5)		44 (81.5)	
Village	6 (17.1)		3 (12.5)		5 (22.7)		2 (10.5)		10 (18.5)	
Chronic disease		0.16		0.02		0.01		0.24		<0.01
Yes	27 (77.1)		21 (87.5)		20 (90.9)		15 (79.0)		44 (81.5)	
No	8 (22.9)		3 (12.5)		2 (9.1)		4 (21.0)		10 (18.5)	

educational level, socioeconomic status (low), city residence, and the presence of chronic diseases. Factors such as sex, age, family income, and place of residence had a statistically significant effect on the occurrence of all types of older adult physical abuse. Nevertheless, educational level was not a risk factor for one form of physical violence, namely, pushing. In contrast, the presence of chronic diseases had a significant effect on the occurrence of two forms of violence, namely, hitting ( $p=0.02$ ) and kicking ( $p=0.01$ ), and all forms of older adult physical abuse ( $p<0.01$ ).

The results of regression analysis, which underscored the risk factors associated with physical abuse and its subtypes, are shown in Table 3. The occurrence of older adult physical abuse was more than twice as common among women than among men (odds ratio [OR]=

2.19, 95% confidence interval [CI]: 1.12-4.28) and more than six times as common among those aged >70 years than among their younger counterparts (OR= 6.90, 95% CI: 3.07-15.52). In addition, individuals with a monthly income of EUR (euro) 233-349 and EUR 350-465 were less likely to have experienced elder physical abuse than those with an income of <EUR 233 ( $p<0.01$ ). The occurrence of older adult physical abuse was more than 4 times as common among those living within the city than among those living in rural areas (OR= 4.58, 95% CI: 2.18-9.62). Individuals with a diagnosis of chronic diseases were also more likely to have been a victim of violence (OR=2.61, 95% CI: 1.24-5.50). Table III presents the results of logistic regression analysis of the socio-demographic predictors of the different types of elder physical abuse.

Table III. Logistic regression analysis of factors associated with types of elder physical abuse

Characteristic	Physical Abuse (n=54)									
	Jerking/Shaking		Hitting		Kicking		Pushing		The all forms of physical abuse	
	OR (95%CI)	p	OR (95%CI)	p	OR (95%CI)	p	OR (95%CI)	p	OR (95%CI)	p
Sex (Female vs Male)	2.45 (1.06-5.64)	0.04	3.63 (1.20-10.95)	0.04	3.21 (1.05-9.80)	0.04	3.79 (1.08-13.38)	0.04	2.19 (1.12-4.28)	0.02
Age (vs 60-65)										
66-70 years	3.11 (1.35-7.18)	<0.01	3.44 (1.01-11.74)	0.05	2.51 (0.87-7.25)	0.09	1.98 (0.60-6.52)	0.26	1.91 (0.90-4.04)	0.09
>70 years	3.96 (1.53-10.24)	<0.01	18.82 (6.09-58.13)	0.00	4.83 (1.62-14.42)	<0.01	5.56 (1.80-17.11)	<0.01	6.90 (3.07-15.52)	<0.01
Education (vs Higher)										
Primary	0.84 (0.23-3.07)	0.80	7.02 (0.86-57.07)	0.07	1.53 (0.30-7.77)	0.61	1.35 (0.26-6.94)	0.72	2.23 (0.65-7.66)	0.20
Secondary	0.48 (0.13-1.80)	0.28	0.46 (0.04-5.36)	0.53	0.80 (0.15-4.29)	0.80	0.81 (0.15-4.29)	0.80	0.86 (0.24-3.01)	0.81
Vocational	0.25 (0.07-0.98)	0.05	0.48 (0.05-4.95)	0.54	0.22 (0.04-1.47)	0.12	0.07 (0.01-0.87)	0.04	0.39 (0.11-1.42)	0.15
Family income, EUR (vs <233)										
233-349 EUR	0.43 (0.19-0.96)	0.04	0.08 (0.02-0.27)	<0.01	0.25 (0.08-0.71)	0.01	0.42 (0.15-1.19)	0.10	0.26 (0.13-0.53)	<0.01
350-465 EUR	0.13 (0.04-0.41)	<0.01	0.09 (0.02-0.32)	<0.01	0.14 (0.04-0.53)	<0.01	0.13 (0.03-0.64)	0.01	0.08 (0.03-0.22)	<0.01
>465 EUR	0.28 (0.03-2.43)	0.25	0.28 (0.03-2.28)	0.23	0.33 (0.03-3.55)	0.36	0.60 (0.07-5.38)	0.65	0.12 (0.01-1.00)	0.05
Marital Status (vs Widow/er)										
Single (never married)	1.00 (0.21-4.78)	1.00	4.19 (0.48-37.49)	0.20	2.40 (0.24-24.06)	0.46	1.59 (0.27-9.20)	0.60	2.17 (0.62-7.58)	0.22
Married	2.05 (0.55-7.63)	0.28	5.08 (0.63-40.84)	0.13	2.14 (0.24-18.99)	0.49	1.04 (0.19-5.63)	0.96	2.24 (0.71-7.11)	0.17
In a partnership	2.48 (0.62-9.89)	0.20	5.02 (0.58-43.68)	0.14	8.10 (0.98-67.11)	0.05	2.44 (0.46-12.86)	0.29	3.30 (0.99-11.05)	0.05
Divorcee	2.50 (0.54-11.54)	0.24	1.38 (0.08-23.17)	0.82	6.26 (0.66-59.57)	0.11	1.40 (0.18-10.62)	0.74	2.89 (0.75-11.12)	0.12
City (vs village)	4.48 (1.79-11.24)	<0.01	6.29 (1.83-21.70)	<0.01	2.90 (1.04-8.13)	0.04	7.46 (1.69-33.04)	<0.01	4.58 (2.18-9.62)	<0.01
Chronic disease	1.82 (0.79-4.21)	0.16	3.84 (1.11-13.26)	0.03	5.51 (1.26-24.14)	0.02	1.94 (0.63-6.07)	0.25	2.61 (1.24-5.50)	0.01

Table IV. Distribution of perpetrators of elder physical abuse

Characteristic	Physical Abuse (n=54)				
	Jerking/Shaking	Hitting	Kicking	Pushing	The all forms of physical abuse
	N (%)	N (%)	N (%)	N (%)	N (%)
Overall	35 (64.8)	24 (44.4)	22 (40.7)	19 (35.2)	54 (100.0)
Abusers					
Spouses	13 (37.1)	11 (45.8)	7 (31.8)	5 (26.3)	18 (33.3)
Siblings	3 (8.6)	2 (8.3)	0 (0.0)	2 (10.5)	4 (7.4)
Cohabitant	11 (31.4)	7 (29.2)	7 (31.8)	7 (36.8)	16 (29.6)
Son	14 (40.0)	10 (41.7)	11 (50.0)	8 (42.1)	23 (42.6)
Daughter	1 (2.9)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.9)

Table V. Multivariate logistic regression analysis models for sociodemographic characteristics of elder

Predictors	Model A		Model B		Model C		Model D	
	AOR (95%CI)	p	AOR (95%CI)	p	AOR (95%CI)	p	AOR (95%CI)	p
Sex, Female	2.01 (0.98, 4.10)	0.05	2.01 (0.98, 4.10)	0.05	2.50 (1.16, 5.40)	0.02*	1.95 (0.86, 4.43)	0.11
Age, >70	4.28 (1.87, 9.77)	<0.01*	4.22 (1.84, 9.68)	<0.01*	1.94 (0.73, 5.18)	0.19	2.04 (0.71, 5.89)	0.19
Education, Primary	1.59 (0.43, 5.84)	0.03*	1.61 (0.44, 5.93)	0.03*	2.06 (0.53, 8.09)	0.06	1.33 (0.31, 5.75)	0.46
Marital Status, Married			0.89 (0.45, 1.77)	0.74	1.17 (0.56, 2.48)	0.68	0.85 (0.39, 1.87)	0.68
Income, <233 EUR					5.53 (2.35, 12.99)	<0.01*	6.02 (2.38, 15.26)	<0.01*
Place of residence, City							4.18 (1.66, 10.49)	<0.01*
Chronic disease							2.50 (1.08, 5.78)	0.03*

\* - significant dependencies

Abbreviations: AOR- adjusted odds ratio

The most commonly reported perpetrators of older adult physical abuse were as follows: sons (42.6%), spouses (33.3%), and cohabitants (29.6%). Furthermore, across all the different forms of physical violence, sons, spouses, and cohabitants were the primary abusers (Table IV).

We developed four multivariate logistic regression models (models A–D), which were adjusted for sex, age, educational level, marital status, monthly income, place of residence, and the presence of chronic diseases. Models A and B included the same independent predictors (e.g., age > 70 years and primary education). However, in model C, female sex and monthly income <EUR 233 were associated with higher vulnerability to older adult physical abuse. Finally, in Model D, a monthly income

<EUR 233, living within the city, and the presence of chronic diseases were retained as independent predictors of physical abuse (Table V).

The emergent interactions between these independent variables (female sex and the presence of chronic diseases; living within the city and socioeconomic status) are illustrated in Figures 1 and 2. Figure 1 shows that older women with chronic diseases were significantly more likely to have experienced physical violence. Similarly, Figure 2 shows that city residents with a significantly lower socioeconomic status were more likely to have experienced violence.

#### Figures for „Predictors of self-reported physical abuse among hospitalized older adults”

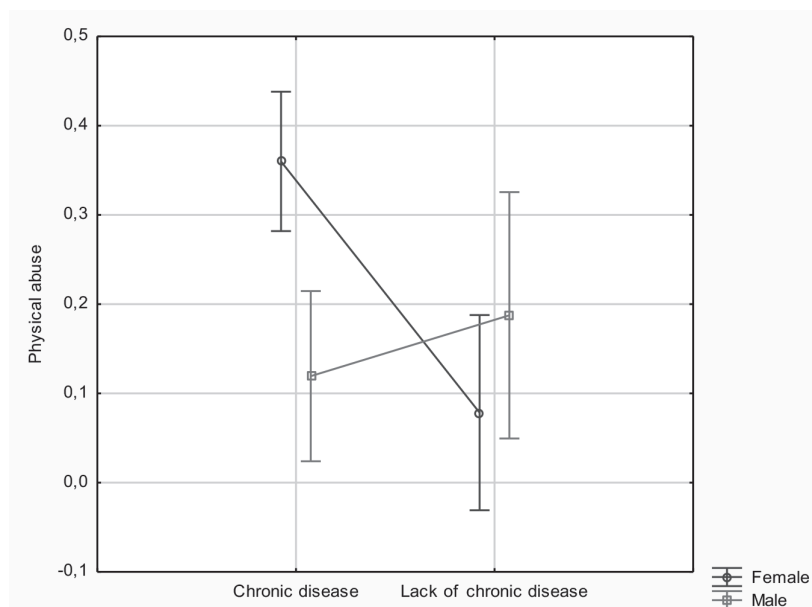


Figure 1. Multivariate analysis between the occurrence of elder physical abuse, chronic disease, sex



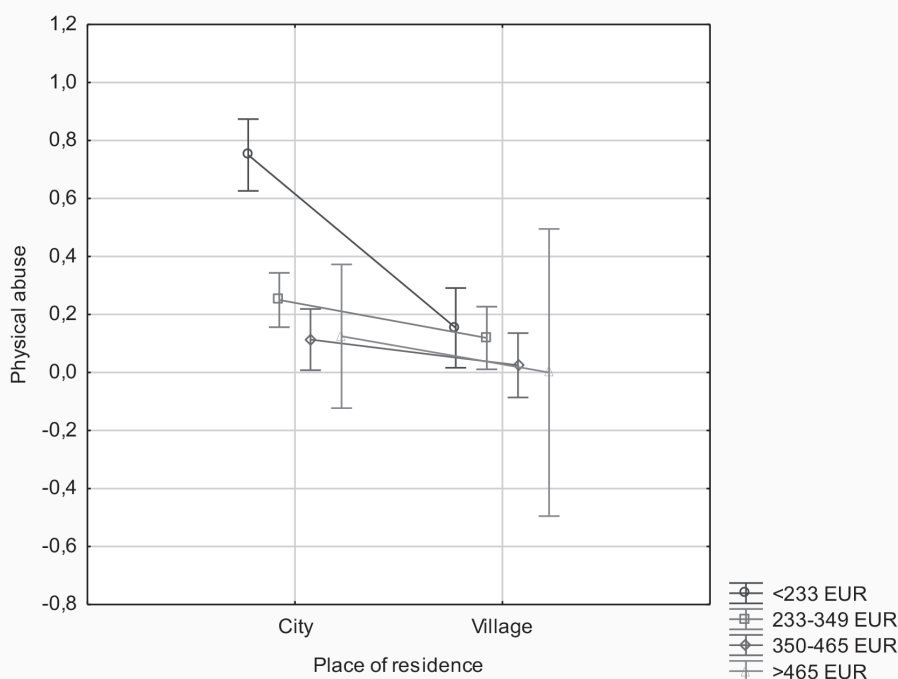


Figure 2. Multivariate analysis between the occurrence of elder physical abuse, monthly family income and place of residence

### Discussion

The addressal of the issue of older adult abuse and neglect by the world’s leading organizations (the WHO, United Nations, and European Commission) undoubtedly proves that it is a serious social problem and a global challenge [3,4]. Nevertheless, the literature on older adult abuse and neglect in Poland is sparse. This is the first population study to have estimated the prevalence of elder physical abuse in Poland. We tested multivariate logistic regression models to identify independent risk factors and eliminate confounding factors. In addition, our study is unique because we used a sample of hospitalized older adults. In this study, the rate of physical aggression was 21.6%. The present findings are consistent with those of past studies [15,19].

The problem of older adult abuse and neglect remains an underacknowledged and underresearched phenomenon. Studies in this area have been conducted in other countries. However, in Poland, this problem has been researched only sporadically. Therefore, the present findings allow us to draw only broad conclusions. Furthermore, no existing tool is regarded as the gold standard for older adult abuse detection. Notably, the methodologies used in such studies differ substantially. Researchers have used a variety of different research tools, because of which meaningful comparisons cannot be undertaken. Thus, it is quite difficult to compare past findings on the prevalence of violence and its risk factors. In addition, such comparisons are difficult because

of differences in the adopted definition of elder abuse and neglect, research methodology, research tools, study environment, and sample characteristics.

A team of psychologists from the Institute of Psychology of the Polish Academy of Sciences found that 59.7% and 30.1% of their respondents had witnessed at least one form of older adult abuse and neglect outside and within their own family, respectively. On average, 43% of the respondents reported that, in recent years, they had witnessed the physical (38.4%), economic (44.9%), and psychological (44.7%) abuse and neglect of older adults outside their family. Further, 17% of them had witnessed instances of physical abuse (15.4%), financial exploitation (18.5%), and psychological abuse (17.5%) in their own family. The most commonly encountered forms of older adult physical abuse were pushing (40.7%) and hitting and beating (38.4%) [15]. On the other hand, the Public Opinion Research Center [29] found that approximately 5% of Poles live in a household in which acts of older adult abuse and neglect are perpetrated. Moreover, the most common forms of abuse were psychological abuse (3%), physical abuse (2%), and financial exploitation (1%). Furthermore, Kołodziejczak et al. [16] found that 40.1% of their older respondents who were living in rural areas had experienced violence. The most frequently reported forms of abuse were psychological violence (36.5%), neglect (21.9%), financial exploitation (8.8%), and physical violence (5.1%).

Large-scale research studies on elder abuse and neglect are being conducted worldwide. The Abuse of

the **Elderly** in the **European** Region (ABUEL) is a study that was conducted across seven European countries (Germany, Italy, Lithuania, Sweden, Portugal, Spain, and Greece). The participants were 4467 respondents aged 60–84 years, and the incidence of older adult abuse and neglect was assessed. Rates of abuse (women vs. men) during the past 12 months were as follows: psychological violence = 19.4% (18.9% vs. 20.0%), physical violence = 2.7% (2.6% vs. 2.8%), sexual violence = 0.7% (1.0% vs. 0.3%), and financial exploitation = 3.8% (3.7% vs. 4.1%) [17]. Another European survey conducted among 2880 60–97-year-old women from five countries (Austria, Belgium, Finland, Lithuania, and Portugal) found that the prevalence of violence was 28.1%. The most common form of violence was emotional violence (23.6%), followed by financial exploitation (8.8%), neglect (5.4%), sexual abuse (3.1%), and physical violence (2.5%) [18]. Additionally, a 2007 study analyzed the best available data generated by 52 studies conducted across 28 countries, which included 12 low- and middle-income countries and represented various world regions. The results showed that 15.7% of individuals aged 60 years and older had experienced some form of violence [19].

In this study, the following variables emerged as independent predictors of physical abuse: age >70 years, primary education, female sex, a low socioeconomic status, city residence, and the presence of chronic diseases. Wu et al. [30] found that depression is an independent risk factor for physical violence. Alraddadi [31] found that widowhood, singlehood, and the presence of chronic diseases are associated with vulnerability to physical violence. However, Kulakçi Altintas and Korkmaz Aslan [25] found that a lack of income was the only independent predictor of physical abuse in their study. On the other hand, in a study by Schiamberg et al. [10] showed that age was the only statistically significant demographic factor. People from younger age categories experienced physical violence more often.

Both the present and past findings indicate that women are significantly more likely to be victims of violence. There are several explanations for this sex difference. First, male violence against women is an expression of historically reinforced unequal power distribution between women and men. In addition, women are more likely to be stereotyped and to identify with the abuser. Further, beliefs that women constitute the weaker sex are prevalent among the general public. Anxiety, economic dependence, worry about the well-being of one's children, and environmental pressure are some of the reasons why women continue to live with their perpetrators and be a victim of violence. Further, be-

cause women express greater empathy and tend to be more expressive and open, they report acts of violence against them more often than their male counterparts [20,21,32,33].

In this study, older adult physical abuse was significantly more likely to have been experienced by individuals with a lower educational level, those with a low socioeconomic status, city residents, and those with chronic diseases. Similar results have been reported by past researchers [34–36]. Well-known risk factors for elder abuse and neglect are helplessness, fragility, dependence on others and loneliness—characteristics of older adults that make them an ideal victim. Furthermore, with age, disability and defenselessness increase, and cognitive functions deteriorate. Therefore, individuals who belong to the oldest age groups are most vulnerable to violence. Older adults often lose their social roles and privileges in their families. Afflicted with somatic diseases and a poor mental and physical state, they may become resigned and not seek help from others. Therefore, perpetrators may perceive them as a vulnerable target [35,36]. Victims of violence consider emotional dependence on their perpetrator and the guilt caused by reporting violence and seeking help to be the most difficult barriers to breaking their silence. Finally, some researchers consider the social status of this group to be a contributor to elder abuse and neglect. In this regard, the factors that trigger violence include an obsession with youth and a focus on the future, which reinforce negative perceptions of aging. Because of the physical decline caused by aging, older adults find it difficult to keep up with a fast-paced world. Systematic literature reviews and meta-analyses have identified the major risk factors for older adult abuse and neglect, which include sex (female), age, socioeconomic status (low), physical and mental health problems, and functional dependence [19–21,25,36].

Analyses of the prevalence of elder abuse and neglect make it evident that they are not rare occurrences. Nevertheless, few evidence-based prevention and intervention strategies have been developed. Interventions and preventive programs include support groups, provide legal and psychological counseling, facilitate care coordination, and promote public education. Changing social attitudes plays a fundamental role in the prevention of elder abuse and neglect. This is a long-term task that should be undertaken by educating the general public, beginning with the youngest demographic groups. Educators play a significant role in such efforts. During didactic and educational processes, they have the opportunity to influence the attitudes of not only their students but also their parents and, consequently, potential caregivers of older adults. Nongovernmental organizations and

the media should also be involved in such efforts. As the setting may be outside of traditional school-settings/audiences, it would be important to introduce media and online campaigns. Furthermore training and education are also important for the workforce (which includes clinical and support staff, social workers, and other key stakeholder groups) that interface with older adults regularly (ie-senior organizational leaders, ombudsmen, neighbors) [36,37].

There are clear health promotion implications as well as educational opportunities in which clinicians can be targeted for enhancing knowledge, screening, and treatment planning concerning the abuse of older adults. Victims of violence often visit health care institutions. Therefore, screening for violence and providing counseling to victims should be practiced in healthcare facilities. Healthcare professionals should undergo training that will equip them to learn about violence and its various forms. Educational programs will enable medical professionals and the general public to recognize acts of aggression and intervene appropriately [21,36-39].

This study has several limitations. First, this was a cross-sectional study. Thus, the emergent risk factors are indicative of an association rather than a causal relationship. Second, the participants represented only hospitalized individuals. Third, individuals with dementia and severe cognitive impairment were excluded. They constitute a large percentage of the target population. However, past studies have found that they are at high risk for abuse and neglect. Therefore, some findings may not be generalizable to the larger population. This study was designed in such a way that the results meet the highest credibility and reliability standards. Thus, potential

respondents underwent a neurological and psychological assessment. Finally, the sample was recruited from only one center. Multicenter studies should be conducted using larger samples. The occurrence of violence is a taboo subject, especially among older adults. Furthermore, victims tend to be afraid and ashamed to talk about their problems. It is especially difficult for them to admit that they are a victim of violence. Because a large number of incidents remain undetected, the reported statistics are underestimates. Therefore, conclusions, especially those pertaining to the prevalence of this problem, should be drawn with caution.

## Conclusion

The present findings suggest that exposure to violence is a significant problem among older adults. Individuals with the following characteristics were more likely to have experienced abuse: age >70 years, a low educational status, a low socioeconomic status, and living within the city. There is a need for further research on perpetrator and victim characteristics and the causal mechanisms that underlie the different types of violence.

## Acknowledgments

We would like to thank Editage ([www.editage.com](http://www.editage.com)) for English language editing.

## Conflict of interest

None

## References

1. Mohd Mydin FH, Yuen CW, Othman S. The Effectiveness of Educational Intervention in Improving Primary Health-Care Service Providers' Knowledge, Identification, and Management of Elder Abuse and Neglect: A Systematic Review. *Trauma Violence Abuse*. 2019;1524838019889359. doi: 10.1177/1524838019889359.
2. Richmond NL, Zimmerman S, Reeve BB, et al. (2020). Ability of Older Adults to Report Elder Abuse: An Emergency Department-Based Cross-Sectional Study. *J Am Geriatr Soc*. 2020;68(1):170-175. doi: 10.1111/jgs.16211.
3. World Health Organization (WHO). Elder Abuse. Available from: <https://www.who.int/news-room/factsheets/detail/elder-abuse>. Accessed April 4, 2021.
4. United Nations. World Elder Abuse Awareness Day 15 June. Available from: <https://www.un.org/en/events/elderabuse/index.shtml>. Accessed April 4, 2021.
5. American Psychological Association. Elder Abuse. Available from: <https://www.apa.org/pi/prevent-violence/resources/elder-abuse>. Accessed April 10, 2021.

6. Agunbiade OM. Explanations around physical abuse, neglect and preventive strategies among older Yoruba people (60+) in urban Ibadan Southwest Nigeria: A qualitative study. *Heliyon*. 2019;5(11):e02888. doi:10.1016/j.heliyon.2019.e02888.
7. Friedman LS, Avila S, Shah M, et al. A description of cases of severe physical abuse in the elderly and 1-year mortality. *J Elder Abuse Negl*. 2014;26(1):1-11. doi:10.1080/08946566.2013.780944.
8. Rosen T, Bao Y, Zhang Y, et al. Identifying patterns of health care utilisation among physical elder abuse victims using Medicare data and legally adjudicated cases: protocol for case-control study using data linkage and machine learning. *BMJ Open*. 2021;11(2):e044768. doi:10.1136/bmjopen-2020-044768.
9. Rosen T, LoFaso VM, Bloemen EM, et al. Identifying Injury Patterns Associated With Physical Elder Abuse: Analysis of Legally Adjudicated Cases. *Ann Emerg Med*. 2020;76(3):266-276. doi:10.1016/j.annemergmed.2020.03.020.
10. Schiamberg LB, Oehmke J, Zhang Z, et al. Physical abuse of older adults in nursing homes: a random sample survey of adults with an elderly family member in a nursing home. *J Elder Abuse Negl*. 2012;24(1):65-83. doi:10.1080/08946566.2011.608056.
11. Acierno R, Hernandez MA, Amstadter AB, et al. Prevalence and correlates of emotional, physical, sexual, and financial abuse and potential neglect in the united states: the national elder mistreatment study. *Am J Public Health*. 2010;100(2):292-297. doi:10.2105/AJPH.2009.163089.
12. Baker MW, LaCroix AZ, Wu C, et al. Mortality risk associated with physical and verbal abuse in women aged 50 to 79. *J Am Geriatr Soc*. 2009;57(10):1799-1809. doi:10.1111/j.1532-5415.2009.02429.x.
13. Rovi S, Chen PH, Vega M, et al. Mapping the elder mistreatment iceberg: U.S. hospitalizations with elder abuse and neglect diagnoses. *J Elder Abuse Negl*. 2009;21(4):346-359. doi:10.1080/08946560903005109.
14. Mossakowska M, Wićcek A, Błędowski P. PolSenior. Medical, psychological, sociological and economic aspects of aging in Poland. In: Błędowski P, editor. *Aging as a social problem. Perspectives of the demographic aging of the Polish population by 2035*. Warsaw: Termedia; 2012:123-136.
15. Korzeniowski K, Radkiewicz P. Domestic violence against the elderly and disabled people. Report from a nationwide survey 2015 and a comparative study from 2009-2015. Warsaw: Institute of Psychology of the Polish Academy of Sciences; 2015.
16. Kołodziejczak S, Terelak A, Balsa M. Domestic violence against seniors in rural areas of West Pomerania, Poland. *Ann Agric Environ Med*. 2019;26(1):92-96. doi:10.26444/aaem/92208.
17. Fraga S, Lindert J, Barros H, et al. Elder abuse and socioeconomic inequalities: a multilevel study in 7 European countries. *Prev Med*. 2014;61:42-47. doi:10.1016/j.ypmed.2014.01.008.
18. Luoma ML, Koivusilta M, Lang G, et al. Prevalence Study of Abuse and Violence against Older Women (AVOW). Results of a multi-cultural survey conducted in Austria, Belgium, Finland, Lithuania, and Portugal; 2011. Available from: <https://repositorium.sdum.uminho.pt/bitstream/1822/16541/1/avow%20study%20-%20final%20report.pdf>. Accessed April 20, 2021.
19. Yon Y, Mikton CR, Gassoumis ZD, et al. Elder abuse prevalence in community settings: a systematic review and meta-analysis. *Lancet Glob Health*. 2017;5(2):147-156. doi:10.1016/S2214-109X(17)30006-2.
20. Jeon GS, Cho SI, Choi K, et al. Gender Differences in the Prevalence and Correlates of Elder Abuse in a Community-Dwelling Older Population in Korea. *Int J Environ Res Public Health*. 2019;16(1):100. doi:10.3390/ijerph16010100.
21. Johannesen M, LoGiudice D. Elder abuse: a systematic review of risk factors in community-dwelling elders. *Age Ageing*. 2013;42(3):292-298. doi:10.1093/ageing/afs195.
22. Sathya T, Premkumar R. Association of functional limitations and disability with elder abuse in India: a cross-sectional study. *BMC Geriatr*. 2020;20(1):220. doi:10.1186/s12877-020-01619-3.
23. Nooritajer M, Hossein R, Haidari S. Models and systems of elderly care: factors associated with abuse in the elderly. *Middle East J Age Ageing*. 2011;83(2263):1-10.
24. Mohseni M, Rashedi V, Iranpour A, et al. Prevalence of elder abuse and associated factors among community-dwelling older adults in Iran. *J Elder Abuse Negl*. 2019;31(4-5):363-372. doi:10.1080/08946566.2019.1682739.
25. Kulakç Altntas H, Korkmaz Aslan G. Prevalence of elder abuse among community-dwelling older adults in Turkey and its associated factors. *Psychogeriatrics*. 2020;20(1):3-10. doi:10.1111/psyg.12446.
26. Curcio CL, Payán-Villamizar C, Jiménez A, et al. Abuse in Colombian elderly and its association with socio economic conditions and functionality. *Colomb Med (Cali)*. 2019;50(2):77-88. doi:10.25100/cm.v50i2.4013.

27. Eslami B, Viitasara E, Macassa G, et al. The prevalence of life time abuse among older adults in seven European countries. *Int J Public Health*. 2016;61(8):891–901. doi:10.1007/s00038-016-0816-x.
28. Pak M. The prevalence and associated risk factors of elder abuse among older people applied to the family health center in the rural district of Turkey. *Soc Work Health Care*. 2020;59(4):236-256. doi:10.1080/00981389.2020.1740377.
29. Public Opinion Research Center (TNS OBOP). Poles in the face of domestic violence and the opinions of victims, perpetrators and witnesses about the occurrence and circumstances of domestic violence; 2007. Available from: [https://archiwum.mpips.gov.pl/gfx/mpips/userfiles/File/Przemoc%20w%20rodzinie/wyniki\\_badan\\_13.11.07.pdf](https://archiwum.mpips.gov.pl/gfx/mpips/userfiles/File/Przemoc%20w%20rodzinie/wyniki_badan_13.11.07.pdf). Accessed May 2, 2021.
30. Wu L, Chen H, Hu Y, et al. Prevalence and associated factors of elder mistreatment in a rural community in People’s Republic of China: a cross-sectional study. *PLoS One*. 2012;7:e33857. doi:10.1371/journal.pone.0033857.
31. Alraddadi K. Prevalence and risk factors of elder mistreatment in sheltered homes. *J Interpers Violence*. 2020;886260520922354. doi:10.1177/0886260520922354.
32. Filipaska K, Biercewicz M, Wiśniewski A, et al. Prevalence of elder abuse and neglect: screening in Poland families. *Eur Geriatr Med*. 2019;10:817–825. doi:10.1007/s41999-019-00224-x.
33. Laumann EO, Leitsch SA, Waite LJ. Elder mistreatment in the United States: prevalence estimates from a nationally representative study. *J Gerontol B Psychol Sci Soc Sci*. 2008;63:248-254. doi:10.1093/geronb/63.4.s248.
34. Chokkanathan S. Factors associated with elder mistreatment in rural Tamil Nadu, India: a cross-sectional survey. *Int J Geriatr Psychiatry*. 2014;29:863–869. doi:10.1002/gps.4073.
35. Dong XQ. Elder Abuse: Systematic Review and Implications for Practice. *J Am Geriatr Soc*. 2015;63(6):1214-1238. doi:10.1111/jgs.13454.
36. Pillemer K, Burnes D, Riffin C, et al. Elder Abuse: Global Situation, Risk Factors, and Prevention Strategies. *Gerontologist*. 2016;56(2):194-205. doi:10.1093/geront/gnw004.
37. Lachs MS, Pillemer KA. Elder Abuse. *N Engl J Med*. 2015;373(20):1947-1956. doi:10.1056/NEJMr1404688.
38. De Donder L, Luoma ML, Penhale B, et al. European map of prevalence rates of elder abuse and its impact for future research. *Eur J Ageing*. 2011;8(2):129. doi:10.1007/s10433-011-0187-3.
39. Dong XQ, Simon MA. Elder abuse as a risk factor for hospitalization in older persons. *JAMA Intern Med*. 2013;173(10):911-917. doi:10.1001/jamainternmed.2013.238.



Article

# High Rate of Elder Abuse in the Time of COVID-19—A Cross Sectional Study of Geriatric and Neurology Clinic Patients

Karolina Filipaska <sup>1,\*</sup> , Monika Biercewicz <sup>2</sup>, Adam Wiśniewski <sup>3</sup> , Renata Jabłońska <sup>1</sup>, Agnieszka Królikowska <sup>1</sup>, Emilia Głowczewska-Siedlecka <sup>2</sup>, Kornelia Kędziora-Kornatowska <sup>2</sup> and Robert Ślusarz <sup>1</sup>

- <sup>1</sup> Neurological and Neurosurgical Nursing Department, Faculty of Health Science, Collegium Medicum in Bydgoszcz, Nicolaus Copernicus University in Toruń, Łukasiewicza 1 Street, 85-821 Bydgoszcz, Poland; renjab\_1@wp.pl (R.J.); agakrolikowska6@wp.pl (A.K.); robert\_slu\_cmumk@wp.pl (R.Ś.)
- <sup>2</sup> Clinic of Geriatrics, Faculty of Health Science, Collegium Medicum in Bydgoszcz, Nicolaus Copernicus University in Toruń, Skłodowskiej 9 Street, 85-094 Bydgoszcz, Poland; monika\_bierc\_cmumk@wp.pl (M.B.); egs@cm.umk.pl (E.G.-S.); kornelia.kornatowska@cm.umk.pl (K.K.-K.)
- <sup>3</sup> Department of Neurology, Faculty of Medicine, Collegium Medicum in Bydgoszcz, Nicolaus Copernicus University in Toruń, Skłodowskiej 9 Street, 85-094 Bydgoszcz, Poland; adam.lek@wp.pl
- \* Correspondence: karolinafilipaskaf@gmail.com



**Citation:** Filipaska, K.; Biercewicz, M.; Wiśniewski, A.; Jabłońska, R.; Królikowska, A.; Głowczewska-Siedlecka, E.; Kędziora-Kornatowska, K.; Ślusarz, R. High Rate of Elder Abuse in the Time of COVID-19—A Cross Sectional Study of Geriatric and Neurology Clinic Patients. *J. Clin. Med.* **2021**, *10*, 4532. <https://doi.org/10.3390/jcm10194532>

Academic Editor: Michele Roccella

Received: 7 September 2021

Accepted: 28 September 2021

Published: 30 September 2021

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

**Abstract:** The ongoing COVID-19 pandemic is believed to have caused a sharp increase in the incidence of elder abuse (EA), including as a result of isolation, social distance combined with increased interpersonal stressors. Thus, the aim of this study is to determine the impact of the COVID-19 pandemic on the elder abuse rates and the characteristics of risk factors. A total of 347 patients hospitalized in the Department of Neurology and Department of Geriatrics at University Hospital No. 1 in Bydgoszcz were selected as subjects for the analysis. The tools used in the study are: Authors-Designed Questionnaire, the Vulnerability to Abuse Screening Scale, the Geriatric Depression Scale and the Activities of Daily Living Scale. Descriptive statistics, chi-squared tests, Spearman's rank correlation test, and logistic regression analyses were used. In the studied population, nearly 45% of the elderly were victims of violence. This represents an increase of more than 6 percent compared to the pre-pandemic. The most common type of EA was psychological abuse (72.3%). In the final models, the risk factors include, among others, low income (OR = 3.60, 95% CI = 1.93–6.72), chronic diseases (OR = 2.06, 95% CI = 1.28–3.31), poor relationship with the family (OR = 3.26, 95% CI = 1.96–5.43), and moderate and severe depression (OR = 18.29, 95% CI = 10.24–32.69; OR = 18.49, 95% CI = 3.91–87.30, respectively). Moreover, moderate functional impairment 5.52 times more often and severe functional impairment 21.07 times more likely to predispose to EA. People who suffered from COVID-19 are 1.59 times more likely to be victims of EA (95% CI = 1.03–2.46). In this study, we saw significant increases in EA rates during the COVID-19 pandemic.

**Keywords:** COVID-19; elder abuse; risk factors; older adults

## 1. Introduction

SARS-CoV-2 is a new single-stranded RNA beta-coronavirus. It first appeared in November 2019 in Wuhan, China. In Poland, the first case was recorded on 4 March 2020. The World Health Organization (WHO) named this disease COVID-19. Moreover, on 11 March 2020, WHO announced the beginning of the COVID-19 pandemic [1]. Coronavirus disease is associated with threats to the health and life of people all over the world, not only because of the disease itself, but also its complications. This pandemic has led to a real revolution in everyday life. In order to limit its spread, it was necessary for the state to introduce isolation, the need to maintain social distance, and also to control the behaviour of citizens. Further more, change in everyday life, economic instability, loss of job, fear of illness, social distance, and complications after illness are factors that may contribute to the occurrence of neuropsychiatric disorders, including symptoms of anxiety

and depression, which has been observed among the society of many countries affected by the pandemic [2,3].

Another important effect of the pandemic is the increase in the rates of violence, including in relation to the elderly [4]. Most of the older adults who become victims of violence are people who require long-term and increased care [4–6]. The stress theory describes caring for the elderly as a difficult and stressful activity [5]. In addition, especially during the COVID-19 pandemic, there are pressures and stresses related to work and life. All these factors contribute to an increase in the rates of violence against the elderly by caregivers. In addition, isolation itself is also a significant risk factor for abuse. Elderly or dependent people can often only interact with their perpetrators or due to quarantine, stay only with them [4–6].

Elder abuse (EA) (also known as mistreatment, older adult abuse or maltreatment) is defined by the WHO as “a single or repeated act or lack of appropriate action, occurring within a relationship of trust, which causes harm or distress to an older person”. According to WHO, we distinguish five types of EA: physical, sexual, psychological, and emotional abuse, financial and material abuse, abandonment, and neglect [7]. On the other hand, the most common form of EA is psychological abuse [7–9]. It should be noted, however, that older adult abuse is a global public health problem, and the estimated total prevalence rate is 15.7% [10]. It is believed, however, that the ongoing COVID-19 pandemic caused a sharp increase in the incidence of EA, including as a result of isolation and social distance in combination with increased interpersonal stressors [11,12]. Our research team has already conducted cross-sectional research on elder abuse from April 2017 to January 2019. It has been shown then that among 200 respondents 38.5% of older people have experienced abuse [13]. Observing the current indicators, it can be easily noticed that there has been a sharp increase in acts of EA during the COVID-19 pandemic. Thus, there is a strong need for research on the scale and severity of the incidence of EA and emotional distress, including symptoms of depression and generalized anxiety, in different countries.

In summary, the aim of this study was to determine the elder abuse rates and identification of the most common risk factors of mistreatment in the Polish population in a hospital setting during the COVID-19 pandemic.

## 2. Materials and Methods

### 2.1. Study Design and Participants

From October 2020 to August 2021, we conducted this cross-sectional study in the Department of Neurology and Department of Geriatrics at University Hospital No. 1 in Bydgoszcz, Poland. The study included people who met the inclusion criteria: aged 65 years and older, voluntarily agreed to participate, with sufficient speech, hearing, and cognitive abilities: no dementia or Alzheimer’s disease diagnosed by a psychologist or physician. The total population of the respondents was 347.

After admission to the ward, each patient underwent psychological and neurological assessment in order to exclude cognitive impairment and dementia. The standard tool used by the psychologists in Poland is the Montreal Cognitive Assessment test and Mini-Mental State Examination and the Clock Drawing Test. All patients who met the inclusion criteria became participants in this study. As scheduled admissions were on hold for a long time during the COVID-19 pandemic, hospitals operated on an ER, and the number of hospitalized patients was very limited. Access to other hospitals was also restricted. Thus, we were able to collect only such a group of respondents.

Due to the fact that the study was conducted during the epidemic, we took special precautions. The subjects were patients of two departments: the Department of Neurology and Department of Geriatrics at University Hospital No. 1 in Bydgoszcz. Consequently, we spoke to each test person alone in a separate room. All test persons prior to admission to the hospital tested negative for SARS-CoV-2. Each of the study participants and the researchers wore masks. During the meeting, a distance of at least 2 meters was kept. In addition, all completed questionnaires were placed in a specially prepared box, where they

had a grace period of about 7 days. Each of the participants completed the questionnaires independently. In the event of any questions or doubts, the researcher was at his disposal.

## 2.2. Variables and Measurements

Before the start of the project, a pilot study was carried out on a group of 46 people in order to obtain information on the understandability of the questions included in the Authors-Designed Questionnaire (ADQ). All comments, opinions and suggested changes have been considered. Therefore, we have removed or changed some text items to the final, easy-to-understand form. The results of the pilot studies were not included in the results of this work.

The dependent variables include: elder abuse: psychological, physical, sexual and economic abuse and the risk of EA. The definitions of these variables were:

- (a) Elder abuse—this research is based on the WHO definition: “a single or repeated act or lack of appropriate action, occurring within a relationship of trust, which causes harm or distress to an older person”. The study used 4 main forms of abuse: Psychological abuse—understood as arrogance, vulgarity; blackmail, threats; closing, isolating; insulting, criticizing; mocking; neglect [7,9]; Physical abuse—the most visible, consisting of inflicting physical pain, injuries, include: jerking, hitting, kicking, pushing, burning (e.g., with a cigarette) and choking [7,13–15]; Sexual abuse—engaging in sexual contact without the consent or with the forced consent of the victim, provoking sexual behaviour against the will and willingness of an elderly person, e.g. rape, unwanted touch, etc. [7,14,15]; Economic abuse—it can manifest itself on many levels, from the possibility of limiting financial independence in the distribution of one’s own retirement benefit to forcing to take a long-term loan, refusing or limiting access to shared finances, taking money away, limiting and preventing work, robbing, and destroying valuable items [7,14,15].
- (b) The risk of EA—has been assessed using the most popular tool in the world, the Vulnerability to Abuse Screening Scale (VASS). It was built of 12 questions. The questions have been arranged in a closed form, and the answer options are: “yes” or “no”. It consists of 4 subscales: dependence, dejection, vulnerability, and coercion. Each subscale contains 3 items. The dependence subscale includes: item 4–6; dejection: item 7–9; vulnerability: 1–3; coercion: 10–12. There are 9 positive questions (1–3, 7–12) and 3 negative ones (4–6). The higher the score, the greater the risk of EA. The risk of abuse is considered to be a score of 3 points and more [16]. In order to conduct this study, the psychometric properties of the VASS tool were verified. The Cronbach’s alpha coefficient for the VASS scale was 0.89.

In addition to the VASS scale, the study also used: ADQ, the Geriatric Depression Scale (GDS) 15 items [17,18] and the Activities of Daily Living (ADL) Scale [19,20]. ADQ was created specifically for the purpose of this study, as no gold standard tool for assessing elder abuse has been published in Poland so far. This tool was developed on the basis of the researcher’s own experience in conducting this type of research and the available literature [9,10,13,21,22]. The reliability of the ADQ was examined by computing internal consistency coefficients. The Cronbach alpha coefficient was 0.91. Sociodemographic questions were included in the 1st part of the questionnaire and concerned: sex, age, education, marital status, family income, and place of residence. The leading question was “During the COVID-19 pandemic, have you experienced any abuse (e.g. kicking, pulling, hitting, ridiculing, pushing, insulting) in your place of residence?”. As for the various forms of EA, the respondents answered the question: “Which of the following forms of elder abuse were used against you?” selecting from the list of the abuses they have experienced. Above, in the definition of each type of violence, we have listed all the acts characteristic of a given sub-type of abuse, which were included in the ADQ. The next questions concerned, among others: the occurrence of chronic diseases, assessment of one’s health condition, feeling lonely, depressed or anxious, and having children.



### 2.3. Ethical Statement

The study was approved by the Bioethics Committee of the Nicolaus Copernicus University in Torun at Collegium Medicum of Ludwik Rydygier in Bydgoszcz, Poland (approval no. 437/2020). The study was conducted according to the Declaration of Helsinki regarding research on humans. All subjects provided informed consent to participate in the study.

### 2.4. Statistical Analysis

The statistical analysis was performed with STATISTICA version 13.1 (Dell Technologies, Round Rock, TX, USA). In the first stage, the EA rates were analysed. The chi-square test was used successively to determine the relationship between sociodemographic characteristics and the rate of older adult abuse. Finally, a logistic regression model was performed to assess the relationship between the independent variables and the incidence and the risk of EA. Statistical results with  $p < 0.05$  were considered significant and the performed analyses were assessed in the 95% confidence interval (CI).

## 3. Results

The overall data of the included patients are shown in Table 1.

During the COVID-19 pandemic, nearly 45% of the elderly in the study population were victims of EA ( $n = 155$ ). The most common type of abuse was psychological (72.3%), followed by neglect (61.9%), physical (39.4%) and economic (36.8%) (Figure 1).

The logistic regression model (Table 2) showed many variables that were important risk factors for EA. For example, women were 1.90 (95% confidence interval (CI) = 1.23–2.93) times more likely to experience acts of abuse than men. Compared to people > 70 years of age, people aged 60–65 and 66–70 were statistically more likely to be victims of EA (odds ratio (OR) = 2.35, 95% CI = 1.28–4.31; OR = 1.98, 95% CI = 1.05–3.75, respectively). It was also shown that people with higher education statistically less frequently experienced EA than people with primary education (OR = 0.32, 95% CI = 0.16–0.64). When it comes to marital status, the acts of EA were more frequent in divorced persons and widows/widowers compared to singles (OR = 4.15, 95% CI = 1.70–10.15; OR = 2.50, 95% CI = 1.20–5.25, respectively). Low income was significantly associated with an increased risk of older adult abuse (OR = 3.60, 95% CI = 1.93–6.72). Moreover, people with chronic diseases were 2.06 times more likely to experience abuse (95% CI = 1.28–3.31). Poor relationship with the family and lack of family was also significantly related to EA (OR = 3.26, 95% CI = 1.96–5.43; OR = 3.32, 95% CI = 1.68–6.56, respectively). One of the leading risk factors also turned out to be moderate and severe depression (OR = 18.29, 95% CI = 10.24–32.69; OR = 18.49, 95% CI = 3.91–87.30, respectively). The study also showed that moderate impairment (3–4 points in ADL scale) was 5.52 times more often and severe functional impairment ( $\leq 2$  points in ADL scale) was 21.07 times more likely to predispose patients to EA. People who suffered from COVID-19 in the past were 1.59 times more likely to be victims of older adult abuse (95% CI = 1.03–2.46).

The project also assessed the risk of EA using the VASS scale. It has been shown that in the study population nearly 46% of the elderly were at risk of abuse (VASS  $\geq 3$  points). Most of the factors predisposing to increased susceptibility to abuse were similar to those obtained in the assessment of the presence of EA. The exception was age and place of residence, which according to the logistic regression model were not significant risk factors for abuse. Interestingly, who the respondent lives with affects the very risk of EA. For example, older people living with a son/daughter or cohabitating partner were more likely to be abused than those living with their spouse (OR = 4.41, 95% CI = 2.43–8.02; OR = 3.75, 95% CI = 1.80–7.81, respectively) (Table 2).

We found moderate, positive and significant correlation between EA and the VASS scale ( $R = 0.54$ ;  $p < 0.05$ ). In addition, the GDS scale showed a statistically significant correlation with the VASS scale and with the occurrence of older adult abuse ( $R = 0.68$  and  $R = 0.54$ , respectively). Subsequently, it was observed that the ADL scale correlated

significantly with both EA and VASS ( $R = -0.46$  and  $R = -0.58$ , respectively). Moreover, the self-assessment of the health condition correlates in a statistically significant negative way only with the VASS assessment ( $R = -0.19$ ) (Table 3).

**Table 1.** Descriptive characteristics.

Characteristics	N (%)
Sex	
Female	194 (55.9)
Male	153 (44.1)
Age	
65–70 years	162 (46.7)
71–85 years	118 (34.0)
>85 years	67 (19.3)
Education	
Primary	87 (25.1)
Secondary	100 (28.8)
Vocational	91 (26.2)
Higher	69 (19.9)
Marital Status	
Single (never married)	45 (13.0)
Married	103 (29.7)
In a partnership	39 (11.2)
Divorcee	43 (12.4)
Widow/Widower	117 (33.7)
Equivalent family income	
Low <233	101 (29.1)
Middle	164 (47.3)
High >465	82 (23.6)
Residency area	
City	223 (64.3)
Village	124 (35.7)
Chronic disease	
Yes	240 (69.2)
No	107 (30.8)
Depression (GDS scale)	
No	216 (62.2)
Moderate	119 (34.3)
Severe	12 (3.5)
Activities of Daily Living (ADL)	
Full function (5–6)	212 (61.1)
Moderate impairment (3–4)	100 (28.8)
Severe functional impairment ( $\leq 2$ )	35 (10.1)
COVID-19 in the past	
Yes	147 (42.4)
No	200 (57.6)

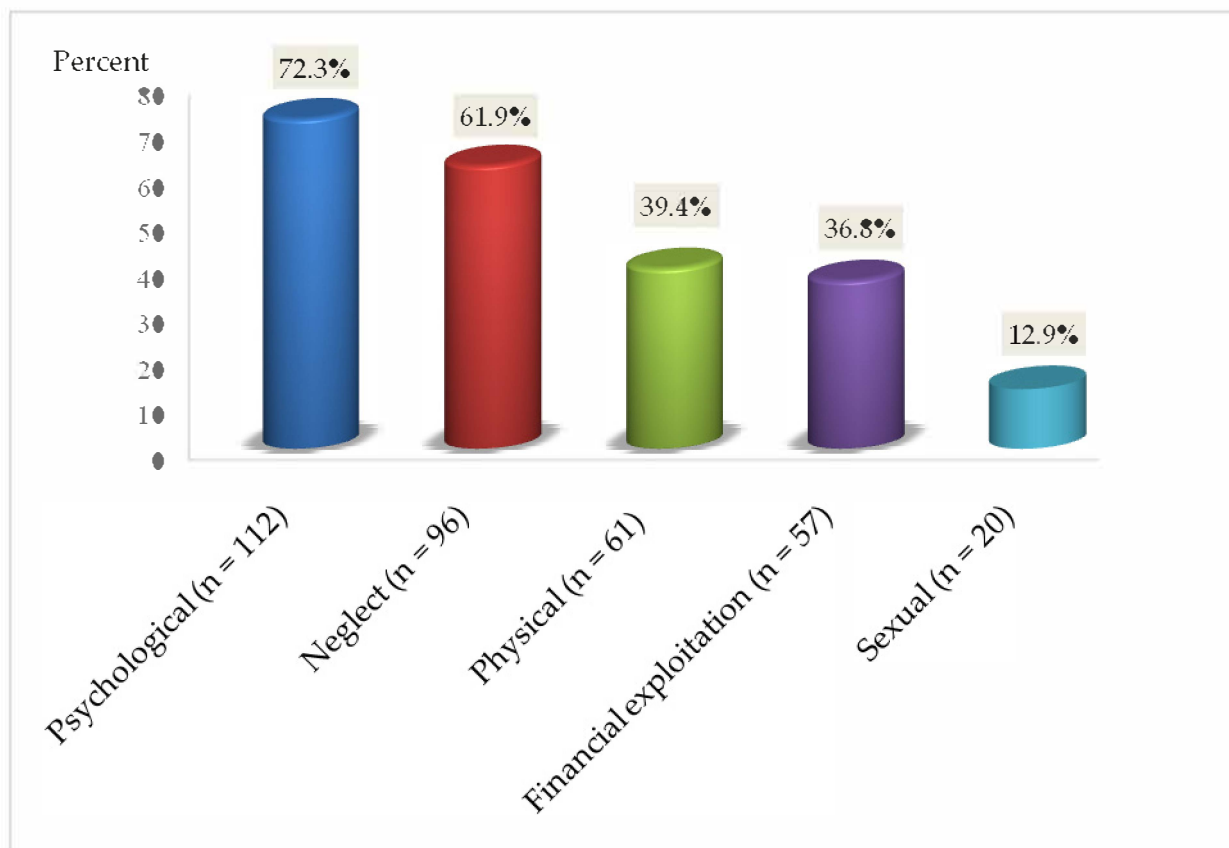


Figure 1. Type of elder abuse.

Table 2. Logistic regression analyses of factors associated with elder abuse and vulnerability to abuse screening scale (VASS).

Characteristic	Elder Abuse			Vulnerability to Abuse Screening Scale (VASS)		
	N (%)	OR (95%CI)	p	N (%)	OR (95%CI)	p
Overall	155 (44.7)	—	—	159 (45.8)	—	—
Sex						
Male	55 (35.5)	1.00		57 (35.8)	1.00	
Female	100 (64.5)	1.90 (1.23–2.93)	0.003 *	102 (64.2)	1.87 (1.21–2.88)	0.004 *
Age						
60–65	81 (52.3)	2.35 (1.28–4.31)	0.005 *	78 (49.1)	1.66 (0.93–2.99)	0.089
66–70	54 (34.8)	1.98 (1.05–3.75)	0.035 *	57 (35.8)	1.67 (0.90–3.10)	0.101
>70	20 (12.9)	1.00		24 (15.1)	1.00	
Education						
Primary	47 (30.3)	1.00		47 (29.6)	1.00	
Secondary	47 (30.3)	0.75 (0.42–1.34)	0.338	47 (29.6)	0.75 (0.42–1.34)	0.338
Vocational	42 (27.1)	0.73 (0.41–1.32)	0.294	51 (32.1)	1.08 (0.60–1.96)	0.786
Higher	19 (12.3)	0.32 (0.16–0.64)	0.001 *	14 (8.7)	0.22 (0.11–0.45)	<0.001 *
Marital status						
Single	13 (8.4)	1.00		15 (9.4)	1.00	
Married	43 (27.7)	1.76 (0.83–3.75)	0.140	30 (18.9)	0.82 (0.39–1.74)	0.609
In a partnership	13 (8.4)	1.23 (0.49–3.11)	0.660	21 (13.2)	2.33 (0.96–5.64)	0.601
Divorcee	27 (17.4)	4.15 (1.70–10.15)	0.002 *	25 (15.7)	2.78 (1.17–6.61)	0.021 *
Widower/Widow	59 (38.1)	2.50 (1.20–5.25)	0.015 *	68 (42.8)	2.78 (1.35–5.70)	0.005 *
Equivalent family income						
Low <233	59 (38.1)	3.60 (1.93–6.72)	<0.001 *	63 (39.6)	6.34 (3.25–12.37)	0.000 *
Middle	73 (47.1)	2.06 (1.16–3.65)	0.013 *	79 (49.7)	3.55 (1.92–6.58)	<0.001 *

Table 2. Cont.

Characteristic	Elder Abuse			Vulnerability to Abuse Screening Scale (VASS)		
	N (%)	OR (95%CI)	p	N (%)	OR (95%CI)	p
High >465	23 (14.8)	1.00		17 (10.7)	1.00	
Place of residence						
City	110 (71.0)	1.71 (1.09–2.68)	0.020 *	105 (66.0)	1.15 (0.74–1.79)	0.526
Village	45 (29.0)	1.00		54 (34.0)	1.00	
Chronic disease						
Yes	120 (77.4)	2.06 (1.28–3.31)	0.003 *	126 (79.2)	2.48 (1.53–4.01)	<0.001 *
No	35 (22.6)	1.00		33 (20.8)	1.00	
Loneliness						
Never or rarely	55 (35.5)	1.00		49 (30.8)	1.00	
Often	74 (47.7)	2.31 (1.45–3.68)	<0.001 *	80 (50.3)	3.27 (2.03–5.25)	<0.001 *
Very often or almost always	26 (16.8)	2.89 (1.46–5.72)	0.002 *	30 (18.9)	5.07 (2.48–10.39)	<0.001 *
Participation in family decisions						
Never or rarely	103 (66.5)	1.00		107 (67.3)	1.00	
Often	33 (21.2)	0.46 (0.28–0.78)	0.003 *	34 (21.4)	0.45 (0.27–0.75)	0.002 *
Very often or almost always	19 (12.3)	0.31 (0.17–0.57)	<0.001 *	18 (11.3)	0.26 (0.14–0.49)	<0.001 *
Relationship with the family						
Good	37 (23.9)	1.00		38 (23.9)	1.00	
Fair	9 (5.8)	0.94 (0.40–2.23)	0.890	5 (3.1)	0.43 (0.15–1.20)	0.106
Poor	80 (51.6)	3.26 (1.96–5.43)	<0.001 *	86 (54.1)	3.76 (2.25–6.27)	0.000 *
Lack of family	29 (18.7)	3.32 (1.68–6.56)	<0.001 *	30 (18.9)	3.47 (1.76–6.87)	<0.001 *
Live with						
Spouse	38 (24.5)	1.00		29 (18.2)	1.00	
Cohabitant	21 (13.5)	1.34 (0.66–2.74)	0.408	28 (17.6)	3.75 (1.80–7.81)	<0.001 *
Son/daughter	51 (32.9)	1.71 (0.97–3.00)	0.064	64 (40.3)	4.41 (2.43–8.02)	<0.001 *
Alone	45 (29.1)	1.24 (0.71–2.18)	0.444	38 (23.9)	1.41 (0.78–2.54)	0.252
Depression (GDS scale)						
No	46 (29.7)	1.00		54 (34.0)	1.00	
Moderate	99 (63.9)	18.29 (10.24–32.69)	<0.001 *	95 (59.7)	11.86 (6.90–20.45)	<0.001 *
Severe	10 (6.4)	18.49 (3.91–87.30)	<0.001 *	10 (6.3)	15.00 (3.19–70.61)	<0.001 *
Activities of Daily Living (ADL)						
Full function (5–6)	57 (36.8)	1.00		49 (30.8)	1.00	
Moderate impairment (3–4)	67 (43.2)	5.52 (3.30–9.25)	<0.001 *	77 (48.4)	11.14 (6.33–19.59)	<0.001 *
Severe functional impairment (≤2)	31 (20.0)	21.07 (7.12–62.35)	<0.001 *	33 (20.8)	54.89 (12.71–236.9)	<0.001 *
COVID-19 in the past						
No	56 (36.1)	1.00		55 (34.6)	1.00	
Yes	99 (63.9)	1.59 (1.03–2.46)	0.035 *	104 (65.4)	1.81 (1.17–2.80)	0.007 *

\*—significant dependencies.

Table 3. Spearman’s rank correlation test.

	Elder Abuse	VASS Assessment
	R p	R p
GDS	0.54 < 0.05	0.68 < 0.05
ADL	−0.46 < 0.05	−0.58 < 0.05
The self-assessment of the health condition	−0.06 > 0.05	−0.19 < 0.05
VASS assessment	0.54 < 0.05	—

#### 4. Discussion

To the best of our knowledge we are the first to highlight the association between COVID-19 and EA's occurrence in Poland in a hospital setting. In our study we confirmed the increase in the experience of abuse by the elderly during the COVID-19 pandemic. We emphasized that women, people aged 60–65, low socioeconomic status, chronic diseases, poor relationship with the family and lack of family, moderate and severe depression, ADL  $\leq 3$  and COVID-19 were factors that predispose mainly to EA and to increased susceptibility to abuse assessed using the VASS scale. Our reports additionally coincide with the evolving evidence of a surge in EA during a pandemic. Thus healthcare professionals must prepare themselves as best as possible to deal with this growing problem among their patients. We enrolled only hospitalized people. Therefore, the results of these studies cannot be strictly generalized to the entire Polish population. Further research is needed in the various settings of older adults. Our research during the COVID-19 pandemic showed that nearly 45% of the hospitalized elderly were victims of EA. On the other hand, in a cross-sectional study conducted by our team in the period before COVID-19 on a group of 200 older adults with similar inclusion criteria, it was shown that 38.5% of respondents had experienced abuse [13]. This means an increase of over six percentage points. Both the present and past findings indicate that psychological abuse is the most common form of EA [9,13]. On the other hand, Chang et al. [4] noted the occurrence of EA during the COVID-19 pandemic among 21.3% of respondents, an 83.6% increase compared to prevalence estimates prior to the pandemic. In addition, in China, a study by Du and Chen [23] found that 15.4% of the older adults were victims of EA. The conducted preliminary analyses of factors indicate an actual large increase in the percentage of victims of older adult abuse [24,25]. So far, however, only a limited number of studies have been published on the occurrence of EA during COVID-19. Therefore, our results could provide relevant and missing information in this area of research in a pandemic.

Before the pandemic, in the ABUEL study, conducted among seven European countries (Germany, Italy, Lithuania, Sweden, Portugal, Spain and Greece) among 4467 respondents aged 60–84 years old, the incidents of elder abuse and neglect was also assessed. It was shown that within 12 months, psychological abuse was experienced by 19.4% of respondents, financial exploitation—3.8%, physical—2.7%, and sexual—0.7% [26]. Interestingly, research conducted in Ireland found that the country has the lowest prevalence of EA—2.2% [27]. In turn, the highest prevalence is found in Croatia—61.1% [28]. These results prove, that the prevalence rate of elder abuse varies widely. From the few studies conducted in Poland, it can be concluded that the EA rates in Poland also remains at a high level. Research conducted by a team of psychologists from the Institute of Psychology of the Polish Academy of Sciences in Poland shows that 59.7% of respondents reported the use of at least one form of EA outside their own family, and 30.1% in their own family [29]. In turn, the study by Kołodziejczak et al. [30] found that abuse affected 40.1% of older respondents living in rural areas. Our results are consistent with those presented by other authors from many different countries. For example, in a study by Hosseinkhan et al. [31] among 683 older adults it was found that 38.5% of the respondents were victims of EA. Subsequently, Anand [32] showed that out of 1435 respondents, 35% had experienced abuse. Torres-Castro et al. [33] reported a violence rate of 35.7%, and the study group was 487. If before the pandemic the EA rates in some countries were high and now increase even more, we will be faced with a serious social problem.

Interestingly, there are some common risk factors for both fraud susceptibility and COVID-19. Certainly, these factors include comorbidities that predispose to EA [34,35] and are associated with a higher mortality rate due to COVID-19 [36]. Following this trail, it can be safely stated that disability is also a significant risk factor for EA [37] and COVID-19 [38]. Moreover, COVID-19 itself predisposes to an increase in abuse among the elderly [4,24,25]. The remaining risk factors for EA during the pandemic do not differ from those that existed before the pandemic. And these include: female gender, younger age, economic problems, city living, comorbidities, depression, disability and dependence. Our results are consistent

with the results presented by other researchers [7,35,39–41]. Our research also indicates that statistically single people were more likely to experience abuse. In addition in the research conducted by Liu et al. [25], victims of older adult abuse reported a feeling of loneliness. Further more, a poor relationship with the family predisposes you to EA in a statistically significant way. Fraga Dominguez et al. [40] also showed that family relationships are a significant risk factor for abuse.

Research shows that the COVID-19 pandemic has added fuel to the fire in terms of EA. It turned out to be extremely harmful to the older adults. Many of the EA risk factors presented have increased during the course of the pandemic. For example, the need for isolation and social distancing have contributed to feelings of loneliness and neglect. In addition, the elderly are aware of the dangers of falling ill with COVID-19, and have experienced a real threat to health (and sometimes life) as a result of infection. It can be assumed that they may therefore be particularly prone to developing depressive and anxiety symptoms. Consequently, it is also associated with an increased risk of EA, as many studies have identified depression as a risk factor for abuse [33,42–46]. Depressive disorders cause further deterioration of mental and physical functioning, loss of social position, autonomy, and, as a result, the disappearance of social relations. All these factors increase the occurrence of acts of EA. Moreover, experiencing abuse aggravates depression and increases anxiety [42,43,45]. Further more, the older adults are a group particularly at risk of complications after contracting COVID-19, which in consequence often leads to increased dependence on other people and disability, which is a significant risk factor for EA [4,12,46]. Another leading factor in fraud is the financial problems that have worsened during the COVID-19 pandemic. Mass dismissals from work, forced leaves and isolation resulted in a decline in social status among the society. Due to the fact that pensions of the elderly in Poland are often insufficient, they require financial assistance from their children or family. The emerging economic pressure, stress and economic problems of the families of the elderly are the main cause of EA [23].

We are fully aware of the limitations. The study was conducted in a limited geographical area, so be careful in drawing conclusions on the entire population. In addition, the subjects are hospitalized people, therefore future research should be extended to include a research group from various environments and different regions.

## 5. Conclusions

Overall, this study saw an increase in EA rates during the COVID-19 pandemic. Factors such as: female gender, younger age, economic problems, living in a city, comorbidities, disability and dependence, loneliness, poor relationship with the family and lack of family, moderate and severe depression,  $ADL \leq 3$ , and COVID-19 in a significant manner influenced the occurrence of abuses. Due to the fact that so far little data on this subject has been published, it is necessary to conduct further detailed research.

**Author Contributions:** Conceptualization, K.F., M.B., R.Ś.; methodology, K.F., M.B., R.Ś.; software, R.Ś., K.F.; validation, K.F., M.B., A.W., R.Ś.; formal analysis, K.F., M.B., A.W., R.Ś.; investigation, K.F., M.B., A.W.; resources, K.F.; data curation, K.F.; writing—original draft preparation, K.F., M.B., A.W., R.J., A.K., E.G.-S., K.K.-K., R.Ś.; writing—review and editing, K.F., A.W.; visualization, K.F., R.J., A.K., E.G.-S.; supervision, M.B., K.K.-K., R.Ś.; project administration, K.F. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** The study was conducted according to the guidelines of the Declaration of Helsinki, and approved by the Institutional Review Board (or Ethics Committee) of Nicolaus Copernicus University in Torun at Collegium Medicum of Ludwik Rydygier in Bydgoszcz (approval no. 437/2020).

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** The data presented in this study are available on request from the corresponding author. The data are not publicly available due to respondents privacy.

**Acknowledgments:** The authors thank all participants, investigators and Collegium Medicum in Bydgoszcz, Nicolaus Copernicus University in Toruń.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

1. Coronavirus Disease (COVID-19) Pandemic. Available online: [https://www.who.int/emergencies/diseases/novel-coronavirus-2019?gclid=EAIaIQobChMIm7jPx4e28gIVks53Ch1tQpuEAAAYASAAEgIuBvD\\_BwE](https://www.who.int/emergencies/diseases/novel-coronavirus-2019?gclid=EAIaIQobChMIm7jPx4e28gIVks53Ch1tQpuEAAAYASAAEgIuBvD_BwE) (accessed on 9 August 2021).
2. Qiu, J.; Shen, B.; Zhao, M.; Wang, Z.; Xie, B.; Xu, Y. A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: Implications and policy recommendations. *Gen. Psychiatry* **2020**, *33*, e100213. [CrossRef] [PubMed]
3. Rajkumar, R.P. COVID-19 and mental health: A review of the existing literature. *Asian J. Psychiatry* **2020**, *52*, 102066. [CrossRef] [PubMed]
4. Chang, E.S.; Levy, B.R. High prevalence of elder abuse during the COVID-19 pandemic: Risk and resilience factors. *Am. J. Geriatr. Psychiatry* **2021**, *14*, 1–14. [CrossRef]
5. Schulz, R.; Beach, S.R.; Czaja, S.J.; Martire, L.M.; Monin, J.K. Family Caregiving for Older Adults. *Annu. Rev. Psychol.* **2020**, *71*, 635–659. [CrossRef]
6. Lund, E.M. Interpersonal violence against people with disabilities: Additional concerns and considerations in the COVID-19 pandemic. *Rehabil. Psychol.* **2020**, *65*, 199–205. [CrossRef]
7. Elder Abuse. Available online: <https://www.who.int/en/news-room/fact-sheets/detail/elder-abuse> (accessed on 14 August 2021).
8. Botngård, A.; Eide, A.H.; Mosqueda, L.; Malmedal, W. Elder abuse in Norwegian nursing homes: A cross-sectional exploratory study. *BMC Health Serv. Res.* **2020**, *20*, 9. [CrossRef]
9. Filipiska, K.; Biercewicz, M.; Wiśniewski, A.; Kędziora-Kornatowska, K.; Ślusarz, R. Prevalence and associated factors of elder psychological abuse- a cross-sectional screening study, based on a hospitalized community from Poland. *Arch. Gerontol. Geriatr.* **2020**, *90*, 104152. [CrossRef]
10. Yon, Y.; Mikton, C.R.; Gassoumis, Z.D.; Wilber, K.H. Elder abuse prevalence in community settings: A systematic review and meta-analysis. *Lancet* **2017**, *5*, 147–156. [CrossRef]
11. Makaroun, L.K.; Bachrach, R.L.; Rosland, A.M. Elder abuse in the time of COVID-19-increased risks for older adults and their caregivers. *Am. J. Geriatr. Psychiatry* **2020**, *28*, 876–880. [CrossRef]
12. Elman, A.; Breckman, R.; Clark, S.; Gottesman, E.; Rachmuth, L.; Reiff, M.; Callahan, J.; Russell, L.A.; Curtis, M.; Solomon, J. Effects of the COVID-19 outbreak on elder mistreatment and response in New York City: Initial lessons. *J. Appl. Gerontol.* **2020**, *39*, 690–699. [CrossRef]
13. Filipiska, K.; Biercewicz, M.; Wiśniewski, A.; Kędziora-Kornatowska, K.; Ślusarz, R. Prevalence of elder abuse and neglect: Screening in Poland families. *Eur. Geriatr. Med.* **2019**, *10*, 817–825. [CrossRef]
14. Elder Abuse-American Psychological Association. Available online: <https://www.apa.org/pi/prevent-violence/resources/elder-abuse> (accessed on 26 August 2021).
15. Preventing Elder Abuse. Available online: <https://www.cdc.gov/violenceprevention/elderabuse/fastfact.html> (accessed on 26 August 2021).
16. Schofield, M.J.; Mishra, G.D. Validity of self-report screening scale for elder abuse: Women’s Health Australia Study. *Gerontology* **2003**, *43*, 110–120. [CrossRef]
17. Yesavage, J.A.; Brink, T.L.; Rose, T.L.; Lum, O.; Huang, V.; Adey, M.; Leirer, V.O. Development and validation of a Geriatric Depression Screening Scale: A preliminary report. *J. Psychiatr. Res.* **1983**, *17*, 37–49. [CrossRef]
18. Leshner, E.L.; Berryhill, J.S. Validation of the Geriatric Depression Scale–Short Form among inpatients. *J. Clin. Psychol.* **1994**, *50*, 256–260. [CrossRef]
19. Katz, S.; Ford, A.B.; Moskowitz, R.W.; Jackson, B.A.; Jaffe, M.W. Studies of illness in the aged: The Index of ADL: A standardized measure of biological and psychosocial function. *JAMA* **1963**, *185*, 914–919. [CrossRef]
20. Katz, S.; Down, T.D.; Cash, H.R.; Grotz, R.C. Progress in the development of the index of ADL. *Gerontology* **1970**, *10*, 20–30. [CrossRef]
21. Curcio, C.L.; Payán-Villamizar, C.; Jiménez, A.; Gómez, F. Abuse in Colombian elderly and its association with socioeconomic conditions and functionality. *Colomb. Med.* **2019**, *50*, 77–88. [CrossRef]
22. Pak, M. The prevalence and associated risk factors of elder abuse among older people applied to the family health center in the rural district of Turkey. *Soc. Work Health Care* **2020**, *59*, 236–256. [CrossRef]
23. Du, P.; Chen, Y. Prevalence of elder abuse and victim-related risk factors during the COVID-19 pandemic in China. *BMC Public Health* **2021**, *21*, 1096. [CrossRef]
24. Han, S.D.; Mosqueda, L. Elder abuse in the COVID-19 era. *J. Am. Geriatr. Soc.* **2020**, *68*, 1386–1387. [CrossRef]
25. Liu, P.J.; Wang, A.; Schwab-Reese, L.M.; Stratton, S.K. Elder Mistreatment Victims during the COVID-19 Pandemic: Administrative Data from San Francisco Adult Protective Services. *J. Fam. Violence* **2021**, *14*, 1–14. [CrossRef]

26. Fraga, S.; Lindert, J.; Barros, H.; Torres-González, F.; Ioannidi-Kapolou, E.; Melchiorre, M.G.; Stankunas, M.; Soares, J.F. Elder abuse and socioeconomic inequalities: A multilevel study in 7 European countries. *Prev. Med.* **2014**, *61*, 42–47. [[CrossRef](#)] [[PubMed](#)]
27. Naughton, C.; Drennan, J.; Lyons, I.; Lafferty, A.; Treacy, M.; Phelan, A.; O'Loughlin, A.; Delaney, L. Elder abuse and neglect in Ireland: Results from a national prevalence survey. *Age Ageing* **2012**, *41*, 98–103. [[CrossRef](#)] [[PubMed](#)]
28. Ajdukovic, M.; Ogresta, J.; Rusac, S. Family violence and health among elderly in Croatia. *J. Aggress. Maltreat Trauma* **2009**, *18*, 261–279. [[CrossRef](#)]
29. Korzeniowski, K.; Radkiewicz, P. *Domestic Violence Against the Elderly and Disabled People; Report from a Nationwide Survey 2015 and a Comparative Study from 2009–2015*; Institute of Psychology of the Polish Academy of Sciences: Warsaw, Poland, 2015.
30. Kołodziejczak, S.; Terelak, A.; Bulsa, M. Domestic violence against seniors in rural areas of West Pomerania, Poland. *Ann. Agric. Env. Med.* **2019**, *26*, 92–96. [[CrossRef](#)]
31. Hosseinkhani, Z.; Moradi, Z.; Khodamoradi, F. Elder abuse: Screening in Iranian families. *Med. J. Islam Repub. Iran.* **2017**, *31*, 126. [[CrossRef](#)]
32. Anand, A. Exploring the role of socioeconomic factors in abuse and neglect of elderly population in Maharashtra, India. *J. Geriatr. Ment. Health* **2016**, *3*, 150–157. [[CrossRef](#)]
33. Torres-Castro, S.; Szejf, C.; Parra-Rodríguez, L.; Rosas-Carrasco, O. Association between frailty and elder abuse in community-dwelling older adults in Mexico city. *J. Am. Geriatr. Soc.* **2018**, *66*, 1773–1778. [[CrossRef](#)]
34. Alexa, I.D.; Ilie, A.C.; Pislaru, A.I.; Dronic, A.; Gavrilovici, O.; Alexa-Stratulat, T.; Stefaniu, R.; Sandu, I.; Nuta, C.; Herghelegiu, A.M. Elder abuse and associated factors in eastern Romania. *Psychogeriatrics* **2020**, *20*, 196–205. [[CrossRef](#)]
35. Brijoux, T.; Neise, M.; Zank, S. Elder abuse in the oldest old: Prevalence, risk factors and consequences. *Z. Für Gerontol. Und Geriatr.* **2021**, 1–6. [[CrossRef](#)]
36. Kuo, C.L.; Pilling, L.C.; Atkins, J.L.; Masoli, J.A.H.; Delgado, J.; Kuchel, G.A.; Melzer, D. APOE e4 genotype predicts severe COVID-19 in the UK biobank community cohort. *J. Gerontol. A Biol. Sci. Med. Sci.* **2020**, *75*, 2231–2232. [[CrossRef](#)]
37. Mahmoudian, A.; Shamsalinia, A.; Alipour, A.; Fotoukian, Z.; Ghaffari, F. Structural equation model of affecting factors on elder abuse to patients under hemodialysis by family caregivers. *BMC Geriatr.* **2021**, *21*, 360. [[CrossRef](#)]
38. Weng, C.C.; Lin, Y.E.; Lin, Y.C.; Chen, W. New Preventative Measures Against Coronavirus Disease 2019 for Home Care Aides in Taiwan. *J. Gerontol. A Biol. Sci. Med. Sci.* **2021**, *76*, e76–e77. [[CrossRef](#)]
39. Acharya, S.R.; Suman, B.K.; Pahari, S.; Shin, Y.C.; Moon, D.H. Prevalence of abuse among the elderly population of Syangja, Nepal. *BMC Public Health* **2021**, *21*, 1348. [[CrossRef](#)]
40. Fraga Dominguez, S.; Ozguler, B.; Storey, J.E.; Rogers, M. Elder Abuse Vulnerability and Risk Factors: Is Financial Abuse Different From Other Subtypes? *J. Appl. Gerontol.* **2021**, 7334648211036402. [[CrossRef](#)]
41. Jeon, G.S.; Cho, S.I.; Choi, K.; Jang, K.S. Gender Differences in the Prevalence and Correlates of Elder Abuse in a Community-Dwelling Older Population in Korea. *Int. J. Environ. Res. Public Health* **2019**, *16*, 100. [[CrossRef](#)]
42. Wu, L.; Chen, H.; Hu, Y.; Xiang, H.; Yu, X.; Zhang, T.; Cao, Z.; Wang, Y. Prevalence and associated factors of elder mistreatment in a rural community in People's Republic of China: A cross-sectional study. *PLoS ONE* **2012**, *7*, e33857. [[CrossRef](#)]
43. Choi, Y.J.; O'Donnell, M.; Choi, H.B.; Jung, H.S.; Cowlshaw, S. Associations among elder abuse, depression and PTSD in South Korean older adults. *Int. J. Environ. Res. Pub. Health* **2018**, *15*, 1948. [[CrossRef](#)]
44. Sembiah, S.; Dasgupta, A.; Taklikar, C.S.; Paul, B.; Bandyopadhyay, L.; Burman, J. Elder abuse and its predictors: A cross-sectional study in a rural area of West Bengal, eastern part of India. *Psychogeriatrics* **2020**, *20*, 636–644. [[CrossRef](#)]
45. Fang, B.; Yan, E. Abuse of older persons with dementia: A review of the literature. *Trauma Violence Abus.* **2018**, *19*, 127–147. [[CrossRef](#)]
46. Arthur-Holmes, F.; Gyasi, R.M. COVID-19 crisis and increased risks of elder abuse in caregiving spaces. *Glob. Pub. Health* **2021**, *16*, 1675–1679. [[CrossRef](#)] [[PubMed](#)]





## Reliability and validity of the polish version of the vulnerability to Abuse Screening Scale (VASS)

Karolina Filipka, Monika Biercewicz, Adam Wiśniewski, Kornelia Kędzióra-Kornatowska & Robert Ślusarz

To cite this article: Karolina Filipka, Monika Biercewicz, Adam Wiśniewski, Kornelia Kędzióra-Kornatowska & Robert Ślusarz (2022): Reliability and validity of the polish version of the vulnerability to Abuse Screening Scale (VASS), Journal of Elder Abuse & Neglect, DOI: [10.1080/08946566.2021.2024106](https://doi.org/10.1080/08946566.2021.2024106)

To link to this article: <https://doi.org/10.1080/08946566.2021.2024106>



Published online: 09 Jan 2022.



Submit your article to this journal [↗](#)



View related articles [↗](#)



View Crossmark data [↗](#)



## Reliability and validity of the polish version of the vulnerability to Abuse Screening Scale (VASS)

Karolina Filipiska<sup>a</sup>, Monika Biercewicz<sup>b</sup>, Adam Wiśniewski<sup>c</sup>, Kornelia Kędziora-Kornatowska<sup>b</sup>, and Robert Ślusarz<sup>a</sup>

<sup>a</sup>Neurological and Neurosurgical Nursing Department, Faculty of Health Science, Collegium Medicum, Nicolaus Copernicus University, Toruń, Poland; <sup>b</sup>Clinic of Geriatrics, Faculty of Health Science, Collegium Medicum, Nicolaus Copernicus University, Toruń, Poland; <sup>c</sup>Department of Neurology, Faculty of Medicine, Collegium Medicum, Nicolaus Copernicus University, Toruń, Poland

### ABSTRACT



Our aim was to assess the psychometric properties and reliability of a Polish version of the VASS. This cross-sectional validation study involved 228 patients above 65 years of age. Authors-Designed Questionnaire, the Geriatric Depression Scale, and the Activities of Daily Living Scale were used to assess construct validity. Psychometric properties, reliability and repeatability were assessed. Cronbach's alpha coefficient for the VASS scale was 0.89. Almost all items showed a high correlation value in relation to the others ( $R > 0.45$ ). A high coefficient of repeatability and narrow limits of agreement were observed in the Bland-Altman analysis. All items analyzed had excellent intraclass correlation coefficient ( $ICC > 0.9$ ) and weighted kappa ( $\kappa > 0.9$ ) scores. Very strong, significant correlations with other tools confirm the accuracy of the VASS scale. Our research shows promising validity and reliability Polish version of the VASS scale to assess the risk of elder abuse and neglect.

### KEYWORDS

Elder abuse; reliability; clinimetrics; validity

## Introduction

Elder abuse is a significant public health problem in European countries and worldwide. Moreover, acts of violence will become more frequent due to the ongoing process of population aging (Berkowsky, 2020). Worldwide, about 16% of older people, or about 141 million people, have been victims of violence at least once in their lives (Yon et al., 2017). Based on the literature review and research conducted, it can be observed that the prevalence rate of violence against the elderly varies widely, i.e. from 2.2 (Naughton et al., 2013) to 81.2% (Alraddadi, 2020). This may be due to, among others, cultural differences, the adopted definition of violence, methodological differences, or the use of different measurement tools. Understanding and knowing the extent of violence against the elderly is the main first step to prevent acts of aggression (Yon et al., 2017).

**CONTACT** Karolina Filipiska  [karolinafilipskaf@gmail.com](mailto:karolinafilipskaf@gmail.com)  Neurological and Neurosurgical Nursing Department, Faculty of Health Science, Collegium Medicum, Nicolaus Copernicus University, Łukasiewiczza 1 Street, Toruń, Bydgoszcz 85-821, Poland

Screening plays an important role in identifying and detecting acts of violence against older people, which is why it is necessary to use validated and standardized screening tools as accepted standards around the world. This will not only allow for early detection of violence, but will also make it possible to standardize the research methodology used, and to compare research results effectively. In the world literature we can find many tools for the detection of violence, such as the Hwalek-Sengstock Elder Abuse Screening Test (H-S/EAST; Hwalek & Sengstock, 1986), Conflict Tactics Scale (CTS; Straus, 1979), and the Brief Abuse Screen for the Elderly (BASE; Reis & Nahmiash, 1995). Large-scale studies have clarified the consequences of violence, and revealed the prevalence of this phenomenon. On the other hand, little is known about the factors and high risk groups particularly exposed to the experience of violence (Berkowsky, 2020). Despite this, there is still a lack of standardized tools to assess the risk of violence in older people. The most popular tool in the world to assess the risk of violence is the Vulnerability to Abuse Screening Scale (Schofield & Mishra, 2003, 2004; Schofield et al., 2002). This scale is simple, consists of dichotomous items, and can be completed independently. Many authors of various nationalities have validated this tool (Dantas et al., 2017; Duru Aşiret et al., 2017; Grenier et al., 2016; Maia Rda & Maia, 2014). Since Poland, however, has no such standard measurement tool to assess the risk of violence, our aim was to assess the psychometric properties and reliability of a Polish version of the Vulnerability to Abuse Screening Scale (VASS).

## **Material and methods**

### ***Study design and participants***

This cross-sectional study was conducted from October 2020 to June 2021 in the Department of Neurology and Department of Geriatrics at University Hospital No. 1 in Bydgoszcz, Poland. The study included 228 patients who met the inclusion criteria: aged 65 years and older, voluntarily agreed to participate, with sufficient speech, hearing, and cognitive abilities, no dementia or Alzheimer's disease diagnosed by a psychologist or physician. The research was conducted during the COVID-19 pandemic. Therefore, there has been a whole reorganization of work in health care. Scheduled admissions were limited for a long time, hospitals operated mainly on an ER, therefore the number of hospitalized patients was very limited. The possibility of cooperation with other hospitals was also very difficult and limited due to safety regulations and rules. Hence, we managed to gather only such a group of respondents. Moreover simple size was calculated based on the prevalence of elder abuse (related to

rigorous inclusion criteria used in the manuscript) in the general older adults population of Kuyavian-Pomeranian Voivodeship using an available sample size calculator. The recommended (estimated) sample size was 195 subjects with a confidence level of 95%.

Prior to the commencement of the study, cooperation was established, and consent was obtained from the authors (Professor Margot Schofield) of the original version of the VASS for its adaptation in Poland. Two independent translators were then commissioned to translate the VASS scale. On the basis of these translations, an initial version of the scale was developed. This was subsequently retranslated from Polish to English (back translation) by another independent translator. The retranslated version was sent to Professor Margot Schofield for her opinion and comments on the accuracy of the translation. Following an analysis of the comments and suggestions received, and corrections made accordingly, a Polish version of the VASS scale was accepted. During the preparation of the Polish version, an identical graphic form of the questionnaire was used, identical sampling criteria was applied, and identical research procedure was followed in accordance with the instruction prepared by the authors of the original version. These actions made it possible to achieve a high degree of face validity with the original version.

In addition to the VASS scale, a socio-demographic data questionnaire, Authors-Designed Questionnaire (ADQ), the Geriatric Depression Scale (GDS), and the Activities of Daily Living (ADL) Scale were used in the study. Patients were assessed within 24 hours of hospital admission. Five investigators, including two physicians (a neurologist and a geriatrician) and three research nurses (two neurological and one geriatric) assessed the patients; each had at least several years of experience working on a neurological or geriatric ward. We chose the GDS and ADL scale because they are commonly used in Poland and in hospitals. They are included in the patient evaluation procedures. Both the GDS scale and the ADL scale are recommended for the assessment of geriatric patients, therefore they were used in our study. The first assessment using the VASS scale was performed by two randomly selected investigators to assess inter-rater reliability. Differences in assessment did not exceed four hours. Then, one of the investigators (randomly selected) assessed the patients with the other scales to estimate construct validity. After approximately five hours, one of the two investigators was randomly selected to reassess with the VASS (test-retest) to estimate reproducibility. Differences in the summed VASS values between the two randomly selected investigators were used to assess the reproducibility of the tool.

### **Measurements**

The Vulnerability to Abuse Screening Scale (VASS)

The VASS scale was developed by Schofield and Mishra in 2002 (Schofield & Mishra, 2003, 2004; Schofield et al., 2002) to assess the risk of elder abuse, consisting of 12 items. Ten of these are from the Hwalek-Sengstock Elder Abuse Screening Test (H-S/EAST) scale (Hwalek & Sengstock, 1986; Neale et al., 1991). The question, “Has anyone close to you called you names or put you down or made you feel bad recently?” is from the Conflict Tactics Scale (Straus, 1979), and the question, “Are you afraid of anyone in your family?” was taken from a study by McFarlane et al. (1992). The questions were arranged in a closed form, and the response options were “yes” or “no.” The scale contains four subscales: dependence, dejection, vulnerability, and coercion, and each subscale consists of three items. The dependence subscale contains: items 4–6; dejection: 7–9; vulnerability: 1–3; coercion: 10–12. There are nine positive questions (1–3, 7–12), and three negative (4–6). The higher the score, the higher the risk of violence. For the original version of the VASS scale, Cronbach’s alpha coefficients were determined as 0.31–0.74 (Schofield & Mishra, 2003, 2004; Schofield et al., 2002).

#### The Geriatric Depression Scale (GDS)

The GDS scale was developed by Yesavage et al. (1983) to screen for depressive disorders in the elderly. In our study we used a 15-point GDS scale. Questions 1,5,7,11 and 13 are positive questions, while the rest are negative questions. The point range of the GDS scale is as follows: 0–5 points indicates no depression, while a score of 6 or more indicates the presence of depressive disorders. The aforementioned cutoff points are characterized by optimal sensitivity (84%) and specificity (95%) of the scale (Yesavage et al., 1983). According to studies, both the 15-point version of the GDS scale, as well as the 30-point version, are reliable and accurate (Leshner & Berryhill, 1994).

#### The Activities of Daily Living (ADL)

The ADL scale was developed by Katz et al. (1963, 1970) in 1959 to assess functional capacity for simple activities of daily living. In comprehensive geriatric assessment, it is the most commonly used tool for functional patient assessment. It is used to assess the patient’s independence in performing activities such as bathing, dressing, going to the bathroom, transferring, continence, and feeding. For each answer: “performs independently” 1 point is awarded. Thus, the respondents can obtain from 0–6 points. The scale allows for distinguishing three groups of efficiency: 5–6 points – full efficiency, 3–4 points – moderate disability, 0–2 points – severe disability.

#### The Authors-Designed Questionnaire (ADQ)

In order to compare the risk of violence assessed with the VAS scale with the occurrence of violence, the ADQ scale was included in the analysis. Therefore, it was possible to assess whether the risk of violence is actually related to the increased occurrence of acts of aggression. Thus, in the study we conducted, we used the author’s questionnaire survey assessing the occurrence of violent acts among the elderly in the last 12 months. This tool was

developed based on the literature and the authors' experience in conducting this type of research (Curcio et al., 2019; Filipaska et al., 2020; Pak, 2020; Yon et al., 2017). There has been no tool so far in Poland that could be the gold standard in assessing violence among the elderly.

The first part of the questionnaire dealt with sociodemographic questions such as sex, age, education, marital status, family income, place of residence. For the purpose of this article, a single leading question was used: "In the last 12 months, have you experienced violence (e.g., kicking, jerking, hitting, ridiculing, pushing, insulting) in your place of residence?" The next questions concerned, among other things, knowing the victims of violence, using violence against another member of the family, the perpetrator of violence, alcohol abuse by the family, the presence of chronic diseases, the feeling of loneliness, depression or fear, and evaluation of one's health condition. The reliability of the ADQ was also examined. The Cronbach alpha coefficient was 0.91.

### **Ethical statement**

The study protocol was approved by the Bioethics Committee of the Nicolaus Copernicus University in Torun at Collegium Medicum of Ludwik Rydygier in Bydgoszcz (KB number 437/2020). The study was conducted according to the Declaration of Helsinki regarding research on humans. All subjects provided informed consent to participate in the study.

### **Statistical analysis**

The statistical analysis was performed with STATISTICA version 13.1 (Dell Technologies, Round Rock, TX, USA). Using the Shapiro-Wilk test, it was determined that the distribution of the data did not meet the criterion of fitting a normal distribution. Therefore, non-parametric tests were used in this study, such as the Mann-Whitney U test (to assess differences between the first and second VASS measurements), Spearman's rank correlation test (to assess construct validity), Cohen's weighted kappa and intraclass correlation coefficient in both inter-rater and intra-rater assessments. Replicability and psychometric properties were assessed by Bland-Altman analysis and Cronbach's alpha coefficient (0.6–0.7 indicates an acceptable level of reliability). A p-level <0.05 was considered statistically significant.

### **Results**

The baseline characteristics of the participants are shown in [Table 1](#). In turn, [Table 2](#) shows the comparison of the original and Polish versions of the VASS. Cronbach's alpha coefficient for the VASS scale (12 items) was 0.89, which

**Table 1.** Socio-demographic characteristics of participants (N = 228).

Characteristics	N (%)
Sex	
Female	143 (62.7)
Male	85 (37.3)
Age	
65–70 years	101 (44.3)
71–85 years	94 (41.2)
>85 years	33 (14.5)
Education	
Primary	58 (25.4)
Secondary	63 (27.6)
Vocational	56 (24.6)
Higher	51 (22.4)
Marital Status	
Single (never married)	24 (10.5)
Married	94 (41.2)
In a partnership	16 (7.0)
Divorcee	24 (10.6)
Widow/Widower	70 (30.7)
Residency area	
City	145 (63.6)
Village	83 (36.4)

**Table 2.** Comparison of original and Polish version of the Vulnerability to Abuse Screening Scale (VASS).

Original version of VASS (Schofield et al., 2002; Schofield & Mishra, 2003; Schofield & Mishra, 2004)	Polish version of VASS
1. Are you afraid of anyone in your family?	1. Czy boisz się kogoś z Twojej rodziny?
2. Has anyone close to you tried to hurt you or harm you recently?	2. Czy ktoś z Twoich bliskich próbował ostatnio Cię skrzywdzić lub zranić?
3. Has anyone close to you called you names or put you down or made you feel bad recently?	3. Czy ktoś z Twoich bliskich ostatnio wyzywał Cię, poniżał lub sprawił, że czułaś się źle?
4. Do you have enough privacy at home?	4. Czy w domu masz wystarczająco prywatności?
5. Do you trust most of the people in your family?	5. Czy ufasz większości osobom w Twojej rodzinie?
6. Can you take your own medication and get around by yourself?	6. Czy jesteś w stanie samodzielnie brać swoje leki i poruszać się samemu?
7. Are you sad or lonely often?	7. Czy często czujesz się smutna lub samotna?
8. Do you feel that nobody wants you around?	8. Czy miewasz poczucie, że nikt cię nie chce w pobliżu?
9. Do you feel uncomfortable with anyone in your family?	9. Czy czujesz się niezręcznie przy kimkolwiek z Twojej rodziny?
10. Does someone in your family make you stay in bed or tell you you're sick when you know you're not?	10. Czy ktokolwiek z Twojej rodziny zmusza cię do zostawania w łóżku lub mówi ci, że jesteś chora, kiedy wiesz, że tak nie jest?
11. Has anyone forced you to do things you didn't want to do?	11. Czy ktokolwiek zmuszał Cię do robienia rzeczy, których nie chciałaś robić?
12. Has anyone taken things that belong to you without your OK?	12. Czy ktoś zabrał rzeczy, które należą do Ciebie bez Twojej zgody?

indicates very good internal consistency. In turn, for individual subscales the alpha coefficient was respectively: Vulnerability- 0.89, Dependence- 0.76, Dejection- 0.45, Coercion- 0.74. The analysis of the reliability assessment of the scale showed that an increase in the value of Cronbach's alpha coefficient is possible when test item No. 5 is eliminated ( $\alpha = 0.90$ ). Moreover, the remaining items show high correlation value with respect to the others ( $R > 0.45$ ). If

**Table 3.** Cronbach’s alpha and correlation with other items of the Polish version of the Vulnerability to Abuse Screening Scale (VASS).

Number of item	Correlation with other items (discrimatory power of item)	Cronbach’s alpha when item was removed
Item 1	0.70	0.87
Item 2	0.62	0.87
Item 3	0.36	0.89
Item 4	0.48	0.88
Item 5	-0.10	0.90
Item 6	0.66	0.87
Item 7	0.78	0.86
Item 8	0.75	0.87
Item 9	0.72	0.87
Item 10	0.47	0.88
Item 11	0.69	0.87
Item 12	0.66	0.87
Overall Cronbach Alpha value for the VASS (12 items): 0.89		
Cronbach Alpha value for the scale’s subscales:		
Vulnerability- 0.89		
Dependence- 0.76		
Dejection- 0.45		
Coercion- 0.74		

The dependence subscale contains: items 4–6; dejection: 7–9; vulnerability: 1–3; coercion: 10–12.

any of these items are removed, the value of Cronbach’s alpha coefficient will either remain the same or decrease, with the lowest value obtained in this way being 0.86. The statistics of each item of the scale are presented in Table 3.

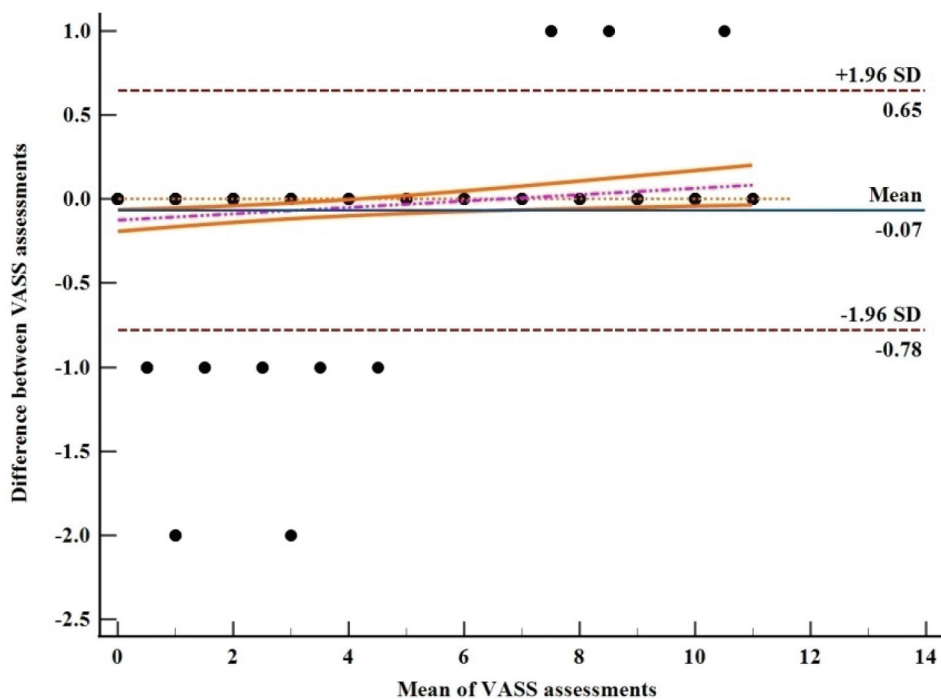
The mean and median total VASS score in the first assessment was  $3.15 \pm 3.40$  and 2, respectively, and in the second assessment was  $3.21 \pm 3.33$  and 2. There was no significant statistical difference between the first and second assessment ( $p = .65$ ). There was a statistically significant correlation between the test and retest scores ( $r = 0.98$ ;  $p < .0001$ ).

**Table 4.** Inter-rater and intra-rater of the Polish version of the Vulnerability to Abuse Screening Scale (VASS).

Number of item	Inter-Rater reliability				Intra-Rater reliability			
	ICC	95%CI	Weighted K	95%CI	ICC	95%CI	Weighted K	95%CI
Item 1	0.98	0.98–0.99	0.97	0.93–1.00	0.97	0.96–0.97	0.94	0.89–0.98
Item 2	0.99	0.98–0.99	0.97	0.94–1.00	0.96	0.95–0.97	0.92	0.86–0.98
Item 3	0.97	0.97–0.98	0.95	0.91–0.99	0.96	0.95–0.97	0.92	0.87–0.98
Item 4	0.97	0.96–0.98	0.94	0.90–0.99	0.98	0.97–0.99	0.96	0.92–1.00
Item 5	0.98	0.98–0.99	0.97	0.95–1.00	0.99	0.99–1.00	0.98	0.97–1.00
Item 6	0.95	0.93–0.96	0.90	0.82–0.97	0.97	0.96–0.98	0.95	0.89–1.00
Item 7	0.97	0.96–0.98	0.95	0.91–0.98	0.98	0.98–0.99	0.96	0.93–0.99
Item 8	0.94	0.92–0.95	0.88	0.73–1.00	0.97	0.96–0.98	0.94	0.82–1.00
Item 9	0.98	0.97–0.98	0.95	0.91–0.99	0.98	0.98–0.99	0.97	0.94–1.00
Item 10	0.97	0.96–0.97	0.93	0.87–0.99	0.98	0.97–0.98	0.95	0.90–1.00
Item 11	0.96	0.95–0.97	0.93	0.87–0.97	0.97	0.96–0.98	0.95	0.90–0.99
Item 12	0.99	0.98–0.99	0.98	0.95–1.00	0.98	0.98–0.99	0.97	0.93–1.00

ICC – intraclass correlation coefficient; CI – Confidence Interval;  $\kappa$  – Cohen’s kappa value.

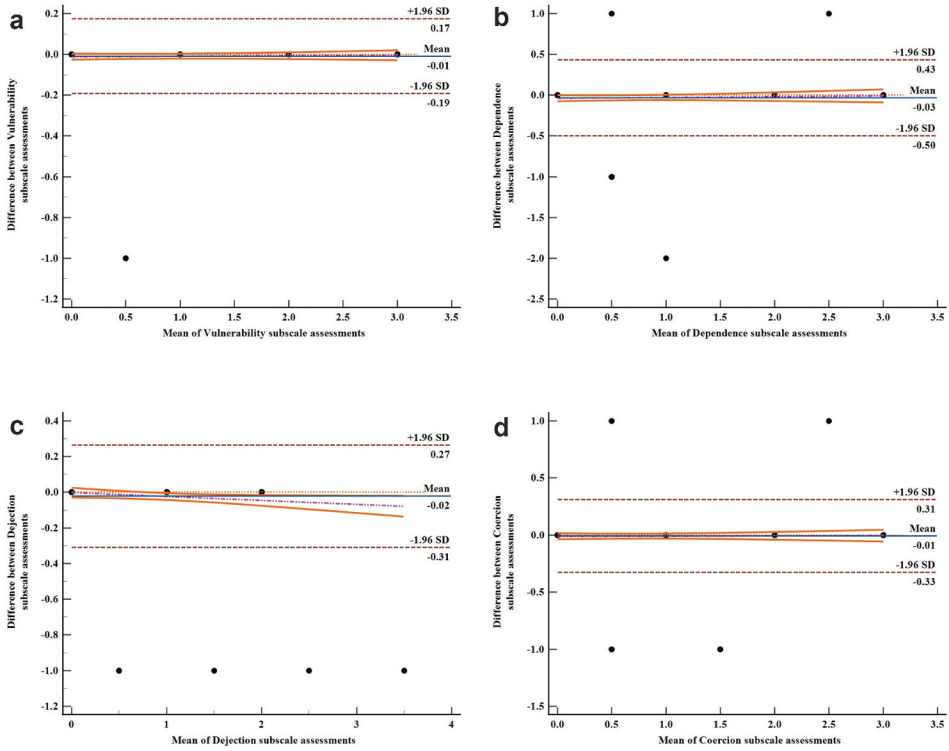




**Figure 1.** Bland–Altman diagram indicating the repeatability of the Polish version of the Vulnerability to Abuse Screening Scale (VASS). The score distribution (black plots) is based on the mean and the difference to the total VASS score obtained by two randomly selected investigators. The area between the dashed red lines shows the boundaries of the agreement. The mean of the compliance limits is shown as a blue line. The area between the solid orange lines represents the 95% confidence interval of the regression line (red dot line).

Table 4 shows the results of the inter-rater and intra-rater reliability. All analyzed items have excellent intraclass correlation coefficient ( $ICC > 0.9$ ) and weighted kappa ( $\kappa > 0.9$ ) scores. The Bland-Altman analysis (Figure 1) found a high coefficient of repeatability ( $CR = 0.72$ ; 95% confidence interval [CI] =  $0.66$ – $0.79$ ) and narrow limits of agreement (upper:  $0.6469$ , 95%CI =  $0.5657$ – $0.7281$  and lower:  $-0.7785$ , 95%CI =  $-0.8597$  to  $-0.6973$ ). Bland-Altman analysis for individual subscales was also performed. The highest repeatability was observed for the Dependence subscale ( $CR = 0.4680$ ; 95% CI =  $0.4287$ – $0.5153$ ), and the lowest for the Vulnerability subscale ( $CR = 0.1836$ ; 95%CI =  $0.1682$ – $0.2021$ ) (Figure 2).

We observed a very strong, significant correlation of VASS with the occurrence of violence in elderly people ( $R = 0.70$ ;  $p < .0001$ ). Also, all individual subscales showed a significant correlation with the occurrence of violence ( $R > 0.47$ ;  $p < .0001$ ). Subsequently, very strong, significant correlations of Dejection subscale with GDS scale ( $R = 0.88$ ;  $p < .0001$ ), and Dependence subscale with ADL scale ( $R = -0.85$ ;  $p < .0001$ ) were also demonstrated. The results thus demonstrate good construct validity (Table 5, Figure 3).



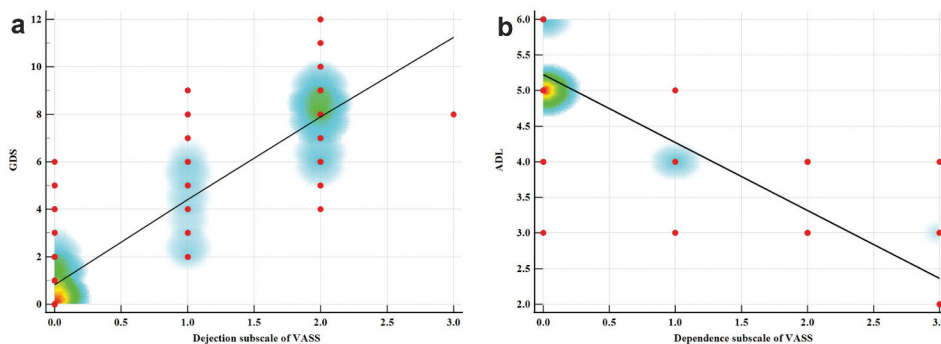
**Figure 2.** Bland–Altman diagram indicating the repeatability of the scale’s subscales of the Vulnerability to Abuse Screening Scale (VASS).

**Table 5.** Spearman’s rank correlation test- evaluation of construct validity of Polish version of the Vulnerability to Abuse Screening Scale (VASS).

Number of item	Elder abuse		GDS		ADL	
	R	p	R	p	R	p
Dejection subscale	0.55	<.0001	0.88	<.0001	—	—
Dependence subscale	0.48	<.0001	—	—	-0.85	<.0001
Vulnerability subscale	0.66	<.0001	—	—	—	—
Coercion subscale	0.60	<.0001	—	—	—	—
VASS assessment	0.70	<.0001	—	—	—	—

## Discussion

To our knowledge, this is the first novel study describing adaptation and validation of the Polish version of the VASS scale. The obtained reports confirmed very good psychometric properties of the Polish VASS Scale. Moreover, a high repeatability index, above 0.70, was demonstrated thanks



**Figure 3.** Construct validity of the Polish version of the of the Vulnerability to Abuse Screening Scale (VASS).

to the Bland-Altman analysis. Excellent ICC values ( $>0.90$ ) were obtained for all items in both inter-rater and intra-rater assessments. As such, the results confirm the reliability and stability of the Polish scale.

According to Nunnally's principle, Cronbach's alpha coefficient greater than 0.70 indicates acceptable internal consistency of the scale (Nunnally & Bernstein, 2010). In our study, Cronbach's alpha coefficient for the VASS scale was 0.89. Moreover, almost all items, except item 5, showed a high correlation value exceeding 0.45 in relation to the remaining ones (according to the accepted principles, the power of discrimination in relation to other items should be higher than 0.3) (Kline, 2014). Cronbach's alpha coefficient for individual subscales of the scale ranged from 0.45 to 0.89. Similar results were obtained for the original version of the VASS scale, where Cronbach's alpha coefficients reached values of 0.31–0.74 (Schofield & Mishra, 2003). On the other hand, in Maia and Maia's study (Maia Rda & Maia, 2014), the Cronbach's alpha coefficient for the VASS scale was 0.69, while in Buri et al.'s study (Buri et al., 2009) it was 0.71. On the other hand, the Cronbach's alpha coefficient for the VASS scale in Duru Aşiret et al.'s study (Duru Aşiret et al., 2017) was set at 0.82, and for individual subscales at 0.48–0.74. The highest value was obtained for the Vulnerability subscale, which is consistent with our results. On the other hand, the lowest value was obtained for the Dejection subscale- 0.45. Dejection seems to refer to social isolation or depressive disorders. Consequently, this may lead to an increased risk of elder abuse. Moreover, the dejection subscale was positively correlation with other items and showed high correlation with the GDS and ADQ scales. This may suggest that this subscale is more of a measure of depression. On the other hand, it may be caused by the negative influence of violence on the human psyche. It is worth noting that, according to many studies, depression is an important risk factor for elder abuse (Johannesen & LoGiudice, 2013; Mawar et al., 2018; Şen & Meriç, 2020). On the other hand, the next Dependence

Subscale seems to mean a lack of autonomy and is more related to neglect. What's more, it is also associated with the need to help with everyday activities (Schofield et al., 2002). Schofield and Mishra (2003) found that vulnerability and coercion factors showed the highest face validity for elder abuse. It should be emphasized that absolutely none of the subscales used should be considered separately as a measure of violence. Therefore, we suggest using the overall result of the VASS scale to assess the risk of elder abuse. Finally, we were able to validate an important tool for assessing risk of elder abuse based on high correlations with other commonly used scales. We found a strong, significant correlation of the VASS with the occurrence of elder abuse. Subsequently, significant correlations of the Dejection subscale with the GDS scale, and the Dependence subscale with the ADL scale were also demonstrated. These results confirm the high construct validity. Moreover, Duru Aşiret et al. (2017) noted a relationship between depressive disorders and the VASS scale. It was shown that depressive symptoms are an indicator of the presence of violence. Similar findings were published by Dyer et al. (2000).

This work is the first attempt to validate the Polish VASS questionnaire. The data obtained in the course of our research could not be compared with the results of the "gold standard," accepted and adopted standard tool. Since no tool assessing the occurrence of violence or the risk of violence has been published in Poland so far, our study can be considered as innovative and novel. Furthermore, it seems appropriate to provide a Polish version of a tool coming from another country and culture. Another strong point of our study is the fulfillment of the criteria of functional, psychometric, and face validity of the Polish version of the VASS with the original one. A comprehensive assessment of psychometric parameters, accuracy, and reliability was performed. Moreover, the study confirmed very good psychometric properties of the Polish version of the VASS. The reliability and validity of this tool for the Polish elderly population was demonstrated. The results of this project therefore have a practical application both in the assessment of risk, and incidence of violence against the elderly. Not only will our study help close the gap in the area of research on violence, which is difficult to implement and evaluate, but the introduction of this scale in the Polish market will also help to fill methodological gaps in the field. We believe that the Polish version of the VASS scale is a reliable, stable, and valid scale for older people in Poland, which should be used in routine community assessment. Moreover, the scale is easy to use by medical personnel and social care workers. Introducing the VASS scale as a gold standard will allow us to obtain more reliable research results by standardizing the measurement tools used. This will enable comparison of research results across the world more effectively. This scale is also very important from the point of view of prevention. Early detection and intervention are likely to delay or prevent older adult abuse. The implementation of appropriate and (most importantly) effective prevention is associated with continuous interprofessional care

provision and cooperation. Such community-based interventions require substantial resources. The discussion of health marketing and communications to raise awareness and create campaigns within the community to identify, respond, and react to abuse of older adults could be tremendously valuable beyond the training opportunities. Therefore it is very important to conduct research in this aspect and disseminate their results. The introduction of special advertisements containing information about violence and social campaigns on television, radio or the Internet will help raise public awareness of this problem.

While novel, our study has certain limitations. The study sample came from a single center, and its size was moderate. Moreover, the subjects were hospitalized patients. Thus, it is necessary to conduct further multi-center studies to verify the results, especially with regard to psychometric properties. It is necessary to extend the study group to elderly people from different backgrounds, not only hospitalized patients. Due to bioethical, formal rules, patients with sufficient speech, hearing, and cognitive abilities were included in the study.

## **Conclusion**

Finally, we found promising validity and reliability Polish version of the VASS for implementation in routine assessment of older people by medical personnel or social workers. Appropriate psychometric properties, ease of implementation, and high reproducibility allow us to propose the use of this scale in daily practice. It is necessary to conduct further research using the VASS scale in order to continuously verify its reliability and accuracy.

## **Acknowledgments**

We would like to thank Editage ([www.editage.com](http://www.editage.com)) for English language translation. We also would like to thank Professor Margot Schofield for invaluable help and support at every stage of the research.

## **Disclosure statement**

No potential conflict of interest was reported by the author(s).

## **Data availability statement**

The data that support the findings of this study are available from the corresponding author, (KF), upon reasonable request.

## **Funding**

The author(s) reported there is no funding associated with the work featured in this article.

**ORCID**

Karolina Filipiska  <http://orcid.org/0000-0003-4138-535X>

**References**

- Alraddadi, K. (2020). Prevalence and risk factors of elder mistreatment in sheltered homes. *Journal of Interpersonal Violence*, 886260520922354. <https://doi.org/10.1177/0886260520922354>
- Berkowsky, R. W. (2020). Elder mistreatment and psychological well-being among older Americans. *International Journal of Environmental Research and Public Health*, 17(20), 7525. <https://doi.org/10.3390/ijerph17207525>
- Buri, H. M., Daly, J. M., & Jogerst, G. J. (2009). Elder abuse telephone screen reliability and validity. *Journal of Elder Abuse & Neglect*, 21(1), 58–73. <https://doi.org/10.1080/08946560802571912>
- Curcio, C. L., Payán-Villamizar, C., Jiménez, A., & Gómez, F. (2019). Abuse in Colombian elderly and its association with socioeconomic conditions and functionality. *Colomb Med (Cali)*, 50(2), 77–88. <https://doi.org/10.25100/cm.v50i2.4013>
- Dantas, R. B., Oliveira, G. L., & Silveira, A. M. (2017). Psychometric properties of the vulnerability to abuse screening scale for screening abuse of older adults. *Revista de Saúde Pública*, 51, 31. <https://doi.org/10.1590/S1518-8787.2017051006839>
- Duru Aşiret, G., Bağcıvan, G., Özcan, M., Başak Eröksüz, B., Akbayrak, N., & Akdemir, N. (2017). Cross-cultural adaptation and psychometric assessment of the Turkish version of the Vulnerability to Abuse Screening Scale. *Turkish Journal of Medical Sciences*, 47(4), 1223–1228. <https://doi.org/10.3906/sag-1609-11>
- Dyer, C. B., Pavlik, V. N., Murphy, K. P., & Hyman, D. J. (2000). The high prevalence of depression and dementia in elder abuse or neglect. *Journal of American Geriatrics Society*, 48(2), 205–208. <https://doi.org/10.1111/j.1532-5415.2000.tb03913.x>
- Filipska, K., Biercewicz, M., Wiśniewski, A., Kędziora-Kornatowska, K., & Ślusarz, R. (2020). Prevalence and associated factors of elder psychological abuse- a cross-sectional screening study, based on a hospitalized community from Poland. *Archives of Gerontology and Geriatrics*, 90, 104152. <https://doi.org/10.1016/j.archger.2020.104152>
- Grenier, F., Capriz, F., Lacroix-Hugues, V., Paysant, F., Pradier, C., & Franco, A. (2016). Evaluation of French version of the vulnerability to abuse screen scale (VASS), an elder abuse screening tool. *Geriatric et Psychologie Neuropsychiatrie du Vieillessement*, 14(2), 142–150. <https://doi.org/10.1684/pnv.2016.0595>
- Hwalek, M. A., & Sengstock, M. C. (1986). Assessing the probability of abuse of the elderly: Toward development of a clinical screening instrument. *Journal of Applied Gerontology*, 5(2), 153–173. <https://doi.org/10.1177/073346488600500205>
- Johannesen, M., & LoGiudice, D. (2013). Elder abuse: A systematic review of risk factors in community-dwelling elders. *Age and Ageing*, 42(3), 292–298. <https://doi.org/10.1093/ageing/afs195>
- Katz, S., Down, T. D., Cash, H. R., & Grotz, R. C. (1970). Progress in the development of the index of ADL. *The Gerontologist*, 10(1), 20–30. [https://doi.org/10.1093/geront/10.1\\_Part\\_1.20](https://doi.org/10.1093/geront/10.1_Part_1.20)
- Katz, S., Ford, A. B., Moskowitz, R. W., Jackson, B. A., & Jaffe, M. W. (1963). Studies of illness in the aged: The Index of ADL: A standardized measure of biological and psychosocial function. *Journal of American Medical Association*, 185(12), 914–919. <https://doi.org/10.1001/jama.1963.03060120024016>
- Kline, P. (2014). *An easy guide to factor analysis*. Routledge.

- Leshner, E. L., & Berryhill, J. S. (1994). Validation of the geriatric depression scale - short form among inpatients. *Journal of Clinical Psychology, 50*(2), 256–260. [https://doi.org/10.1002/1097-4679\(199403\)50:2<256::AID-JCLP2270500218>3.0.CO;2-E](https://doi.org/10.1002/1097-4679(199403)50:2<256::AID-JCLP2270500218>3.0.CO;2-E)
- Maia Rda, S., & Maia, E. M. (2014). Brazilian Portuguese cross-cultural adaptation of the vulnerability to Abuse Screening Scale (VASS) for screening of violence against the elderly. *Cad Saude Publica, 30*(7), 1379–1384. <https://doi.org/10.1590/0102-311X00014814>
- Mawar, S., Koul, P., Das, S., & Gupta, S. (2018). Association of physical problems and depression with elder abuse in an urban community of North India. *Indian Journal of Community Medicine, 43*(3), 165–169. [https://doi.org/10.4103/ijcm.IJCM\\_249\\_17](https://doi.org/10.4103/ijcm.IJCM_249_17)
- McFarlane, J., Parker, B., Soeker, K., & Bullock, L. (1992). Assessing for abuse during pregnancy. *Journal of the American Medical Association, 17* (23) , 3176–3178. <https://doi.org/10.1001/jama.1992.03480230068030>
- Naughton, C., Drennan, J., Lyons, I., & Lafferty, A. (2013). The relationship between older people’s awareness of the term elder abuse and actual experiences of elder abuse. *International Psychogeriatrics, 25* (8) , 1257–1266. <https://doi.org/10.1017/S1041610213000513>
- Neale, A. V., Hwalek, M. A., Scott, R. O., Sengstock, M. C., & Stahl, C. (1991). Validation of the Hwalek-Sengstock elder abuse screening test. *Journal of Applied Gerontology, 10*(4), 406–418. <https://doi.org/10.1177/073346489101000403>
- Nunnally, J. C., & Bernstein, I. H. (2010). *Psychometric theory*. Mc-Graw-Hill.
- Pak, M. (2020). The prevalence and associated risk factors of elder abuse among older people applied to the family health center in the rural district of Turkey. *Soc Work Health Care, 59* (4), 236–256. <https://doi.org/10.1080/00981389.2020.1740377>
- Reis, M., & Nahmiash, D. (1995). When seniors are abused: An intervention model. *The Gerontologist, 35*(5), 666–671. <https://doi.org/10.1093/geront/35.5.666>
- Schofield, M. J., & Mishra, G. D. (2004). Three year health outcomes among older women at risk of elder abuse: Women’s health Australia. *Quality of Life Research, 13*(6), 1043–1052. <https://doi.org/10.1023/B:QURE.0000031343.15372.a5>
- Schofield, M. J., & Mishra, G. T. (2003). Validity of self-report screening scale for elder abuse. *Women’s Health Australia Study. The Gerontologist, 43*(1), 110–120. <https://doi.org/10.1093/geront/43.1.110>
- Schofield, M. J., Reynolds, R., Mishra, G. D., Powers, J. R., & Dobson, A. J. (2002). Screening for vulnerability to abuse among older women: Women’s health australia study. *Journal of Applied Gerontology, 21* (1) , 24–39. <https://doi.org/10.1177/0733464802021001002>
- Şen, F., & Meriç, M. (2020). Determination of abuse and depression in the elderly. *Journal of Elder Abuse and Neglect, 32*(1), 60–71. <https://doi.org/10.1080/08946566.2019.1691697>
- Straus, M. (1979). Measuring intrafamily conflict and violence: The conflict tactics (CT) scales. *Journal of Marriage and Family, 41*(1), 75–88. <https://doi.org/10.2307/351733>
- Yesavage, J. A., Brink, T. L., Rose, T. L., Lum, O., Huang, V., Adey, M., & Leirer, V. O. (1983). Development and validation of a geriatric depression screening scale: A preliminary report. *Journal of Psychiatric Research, 17*(1), 37–49. [https://doi.org/10.1016/0022-3956\(82\)90033-4](https://doi.org/10.1016/0022-3956(82)90033-4)
- Yon, M. Y., Mikton, C. R., Gassoumis, Z. D., & Wilber, K. H. (2017). Elder abuse prevalence in community settings: A systematic review and meta-analysis. *Lancet Global Health, 5* (2) , e147–e156. [https://doi.org/10.1016/S2214-109X\(17\)30006-2](https://doi.org/10.1016/S2214-109X(17)30006-2)