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Ocena psychometryczna osób zgłaszających się po poradę z zakresu dermatologii estetycznej

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ROZPRAWA DOKTORSKA

Cykl publikacji powiązanych tematycznie

PROMOTOR:

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Składam serdeczne podziękowania Promotorowi mojej pracy,
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1.5. To inject or to reject? The body image perception among aesthetic dermatology patients.

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2. WYKAZ SKRÓTÓW

AAI Inwentarz Niepokoju o Wygląd (ang. Apperance Anxiety Inventory)

BAS-2 Skala Doceniania Własnego ciała (ang. Body Appreciation Scale-2)

BDD zaburzenia dysmorficzne (ang. body dysmorphic disorder)

BIQLI Inwentarz Jakości Życia Obrazu Ciała (ang. Body Image Quality of Life Inventory

BMI wskaźnik masy ciała (ang. body mass index)

BSQ Kwestionariusz Oceny Sylwetki (ang. Body Shape Questionnaire)

COPS Przesiewowy Kwestionariusz Procedur Kosmetycznych (ang. Cosmetic Procedures Screening Questionnaire)

FAS Skala Uznania Funkcjonalności Ciała (ang. Funcionality Apreciation Scale)

HADS Szpitalna Skala Lęku i Depresji (ang. Hospital Anxiety and Depression Scale)

RSES Skala samooceny (ang. Rosenberg Self-Esteem Scale)

2. OMÓWIENIE ROZPRAWY DOKTORSKIEJ

2.2. Wstęp

Rosnąca popularność zabiegów z zakresu dermatologii estetycznej oraz łatwa dostępność do rynku estetycznego doprowadziły do sytuacji, gdzie zabiegi estetyczne stały się nie tylko procedurami upiększającymi, ale także pewnym rodzajem psychoterapii dla niektórych pacjentów.

Z raportu przeprowadzonego w 2018 roku przez instytut badawczy wynika, że w Polsce z zabiegów dermatologii estetycznej korzysta nawet 600 tysięcy osób. Główne motywy raportowane przez respondentów to: chęć poprawy samopoczucia i wzrostu atrakcyjności, pewności siebie czy samoakceptacji. Podczas gdy większość kobiet napędza do działania niezadowolenie ze swojego wyglądu, jedna trzecia mężczyzn poddaje się zabiegom za namową bliskiej osoby. Jak podaje instytut badawczy 96% pacjentów jest zadowolonych z wykonywanych zabiegów. Jednakże liczba niezadowolonych osób po zabiegach dermatologii estetycznej stale wzrasta. Czy wykonana procedura się nie udała, czy też pierwotne oczekiwania były nierealne? Gdzie przebiega granica między niewinnymi zabiegami upiększającymi, a niezdrowymi modyfikacjami własnego ciała? Czy badanie w kierunku zaburzeń oceny własnego ciała nie byłoby rozsądnym rozwiązaniem przed wykonaniem procedur iniekcyjnych?

Obraz ciała definiowany jest jako wielowymiarowy konstrukt, na który składa się postrzeganie siebie oraz nastawienie do swojej osoby. Możemy rozróżnić dwa aspekty obrazu ciała: niezadowolenie ze swojego ciała, czyli negatywny obraz ciała (z angielskiego poor body image) oraz docenianie ciała, postrzegane jako obraz pozytywny. Negatywny obraz ciała pojmowany jest jako nadmierne zaabsorbowanie własnym ciałem, wstyd oraz niedocenianie swojego ciała. Takie negatywne postrzeganie siebie może wpływać niekorzystnie na samoocenę i jakość życia, prowadząc do depresji, zaburzeń odżywiania, zaburzeń seksualnych oraz niestabilności emocjonalnej. Z kolei pozytywny obraz ciała można rozumieć jako szacunek, akceptację oraz przychylne nastawienie do swojego ciała.

Zaburzenia dysmorficzne ciała (z angielskiego body dysmorphic disorder, BDD) to zaburzenia psychiczne, w którym wymyślona wada wyglądu fizycznego upośledza codzienne funkcjonowanie, powodując nieustanne zaabsorbowanie myśleniem i zachowaniami połączonymi z obawą o wygląd. Termin dysmorfofobia po raz pierwszy użyty został przez włoskiego psychiatrę, Enrico Morselli'ego w 1891 roku, który odniósł się od do greckiego słowa „dysmorfia", oznaczającego ohydę. BDD jest skorelowane z ciężkim cierpieniem, ciągłymi natrętnymi myślami, wstydem, depresją, niska jakością życia, dystansem społecznym

i podwyższonym ryzykiem samobójstwa. W populacji ogólnej częstość występowania BDD oceniana jest na 1,9%. Znacznie częściej ta jednostka chorobowa występuje wśród pacjentów dermatologii estetycznej (około 9%) i chirurgii plastycznej (ok 13%).

Warto podkreślić, że około 76% pacjentów cierpiących na BDD poddaje się zabiegom estetycznym w celu uzyskania rzekomej poprawy wyimaginowanych defektów w ich wyglądzie fizycznym. niewątpliwie, większość pacjentów z BDD zgłaszających się do specjalistów dermatologii estetycznej nie rozpoznaje siebie jako cierpiących na jakiekolwiek zaburzenie zdrowia psychicznego. Niestety BDD wśród pacjentów estetycznych jest zazwyczaj błędnie zdiagnozowane lub niezdiagnozowanie, co prowadzi nie tylko do zwiększonego ryzyka niezadowolenia z zabiegu, ale też opóźnienia wdrożenie niezbędnego leczenia psychiatrycznego.

Niektóre środowiska chirurgów plastycznych, biorąc pod uwagę aspekt psychologiczny, stworzyły specjalne programy przedoperacyjne, mające na celu weryfikację prawdziwych potrzeb pacjentów, co niestety nie jest powszechnie praktykowane w środowisku polskiej dermatologii estetycznej czy chirurgii plastycznej.

2.3. Cel główny pracy

Zasadniczym celem pracy było przeprowadzenie szeroko pojętej oceny obrazu ciała oraz zaburzeń dysmorficznych wśród pacjentów poddawanych zabiegom z zakresu dermatologii estetycznej.

2.4. Cele szczegółowe pracy

1. Wybór odpowiednich narzędzi diagnostycznych, służących do oceny postrzegania własnego ciała (COPS, AAI, FAS, BAS-2, BSQ-34, RSES)
2. Stworzenie polskiej wersji językowej Przesiewowego Kwestionariusza Procedur Kosmetycznych (COPS – Cosmetic Procedures Screening Questionnaire)
3. Stworzenie polskiej wersji językowej Inwentarza Niepokoju o Wygląd (AAI – Apperance Anxiety Inventory)
4. Stworzenie polskiej wersji językowej Kwestionariusza Oceny Sylwetki (BSQ – Body Shape Questionnaire)
5. Stworzenie polskiej wersji językowej Skali Uznania Funkcjonalności Ciała (FAS – Funcionality Apreciation Scale)
6. Ocena częstotliwości występowania zaburzeń dysmorficznych u osób poddających się zabiegom estetycznym
7. Określenie zależności między występowaniem zaburzeń dysmorficznych, a takimi

czynnikami jak: wiek, płeć, BMI, wcześniejsze zabiegi, historia leczenia psychiatrycznego, status finansowy czy stopień edukacji.

8. Ocena poziomu doceniania własnego ciała u osób poddających się zabiegom estetycznym
9. Określenie zależności między poziomem doceniania własnego ciała, a takimi czynnikami jak: wiek, płeć, BMI, wcześniejsze zabiegi estetyczne, historia leczenia psychiatrycznego, status finansowy czy stopień edukacji.
10. Ocena obrazu ciała u osób poddających się zabiegom estetycznym
11. Określenie zależności między obrazem ciała, a takimi czynnikami jak: wiek, płeć, BMI, wcześniejsze zabiegi estetyczne, historia leczenia psychiatrycznego, status finansowy czy stopień edukacji.
12. Ocena samooceny u osób poddających się zabiegom estetycznym.
13. Określenie zależności między samooceną, a takimi czynnikami jak: wiek, płeć, BMI, wcześniejsze zabiegi estetyczne, historia leczenia psychiatrycznego, status finansowy, stopień edukacji.

2.5. Materiał i metody

W pierwszym etapie pracy badawczej przeprowadzono proces tłumaczenia i walidacji czterech obcojęzycznych skal, kolejno:

Przesiewowy Kwestionariusz Procedur Kosmetycznych - COPS – Cosmetic Procedures Screening Questionnaire – kwestionariusz stworzony stricte w celu wstępnej oceny zaburzeń dysmorficznych u pacjentów poddających się zabiegom estetycznym. Ocenia subiektywnie nieatrakcyjne cechy wyglądu badanych, uwzględniając kryteria diagnostyczne BDD. Kwestionariusz zawiera 9 pozycji, od 0 do 8 punktów (gdzie 0 – świadczy o najmniejszym zaburzeniu, a 8 o największym). Maksymalny wynik, czyli 72 punkty, jest sumą pytań 2 do 10. Pozycje 2, 3 i 5 są odwrócone. Wyższe wyniki wskazują na większe prawdopodobieństwo występowania zaburzeń postrzegania własnego ciała. Wynik 40 uprawnia do wysunięcia podejrzenia BDD;

Inwentarz Niepokoju o Wygląd - AAI – Apperance Anxiety Inventory – skala, służąca do oceny poznawczych i behawioralnych aspektów lęku o szeroko pojęty obraz własnego ciała, w szczególności przydatna do wstępnej selekcji w kierunku zaburzeń dysmorficznych. AAI został opracowany przede wszystkim jako miara używana do identyfikacji procesów poznawczych i zachowań, które mogą wpływać na wyniki terapii u osób z zaburzeniem dysmorficznym ciała (BDD). Skala może służyć do oceny postępów pacjentów w trakcie terapii. Skala obejmuje 10 pozycji. Każda pozycja jest oceniana na 5-punktowej skali Likerta,

od 0 – „wcale” do 4 – „cały czas”. Maksymalny wynik to 40 punktów, wyższe wyniki odzwierciedlają większe zaburzenie oceny własnego ciała. Całkowity wynik uzyskuje się poprzez zsumowanie wszystkich elementów. Punkt odcięcia dla BDD nie został ustalony. Osoby, które uzyskały 14-15 lub więcej punktów, prawdopodobnie mają większy niepokój o wygląd, ale kwestionariusz powinien być używany raczej do oceny nasilenia objawów niż do badania przesiewowego w kierunku zaburzeń dysmorficznych. Na potrzeby pracy badawczej przyjęto punkt odcięcia dla grupy wysokiego ryzyka istnienia BDD jako 20.

Kwestionariusza Oceny Sylwetki-34 – BSQ-34 – Body Shape Questionnaire-34 – kwestionariusz służący do przesiewowej oceny zaburzeń odżywiania. BSQ-34 służy do subiektywnego pomiaru oceny obrazu ciała typowego dla bulimii czy jadłowstrętu psychicznego. Kwestionariusz składa się z 34 pozycji ocenianych w skali od 0 do 6 punktów (odpowiednio najmniej i najbardziej zaburzonych) z sumą pytań w zakresie od 0 do 204 punktów. Wyższy wynik wskazuje na większe zaburzenie oceny obrazu ciała z wartością graniczną 80, sugerującą łagodną zaburzenia oceny kształtu ciała. Kwestionariusz pierwotnie został zaprojektowany dla kobiet, ale może być używany dla mężczyzn po niewielkich zmianach sugerowanych przez autora;

Skali Uznania Funkcjonalności - FAS – Funcionality Apreciation Scale – skala oceniająca poziom doceniania własnego ciała. Skala została opracowana w celu odzwierciedlenia uznania funkcjonalności ciała: szacunku oraz doceniania ciała za jego możliwości oraz doskonalenia świadomości przydatności ciała. Zawiera 7 pytań punktowanych od 0 punktów (brak doceniania własnego ciała) do 5 punktów (maksymalne docenianie własnego ciała), a wynik jest średnią ocen o zakresie 0–5 punktów. Wyższe wynikami wskazują na wyższe docenienie funkcjonalności ciała.

Proces walidacji każdego z narzędzi diagnostycznych przebiegł zgodnie z ogólnie przyjętymi międzynarodowymi standardami. Początkowo, każda skala, w niezależnym procesie, została przetłumaczona na język polski przez dwóch niezależnych tłumaczy, następnie trzeci biegły ekspert dwujęzyczny w tym zakresie stworzył ujednoliconą wersję obu tłumaczeń. Następnie dokonano zwrotnego tłumaczenia ujednoliconej polskiej wersji językowej przez innego niezależnego tłumacza na język oryginalny. Tłumaczenie każdej ze skal z osobna zostało przedstawione oraz zaakceptowane przez twórców oryginalnych wersji. Proces walidacji każdego z narzędzi diagnostycznych przebiegł na odpowiednio dobranej grupie osób, umożliwiającej ocenę zrozumiałości, spójności i powtarzalności, tj. COPS – 33 osoby, AAI – 49 osób, FAS – 103 osoby, BSQ-34 – 89 osób. W celu określenia powtarzalności odpowiedzi respondentów poproszono o wypełnienie kwestionariusza dwa razy w odstępie 3 – 6 dni, co jest wystarczająco długim okresem, aby nie pamiętać poprzednich

odpowiedzi. Ponadto przeprowadzono trafność zbieżną z narzędziami używanymi w pracach oryginalnych przez twórców skal.

W kolejnym etapie badania, oceniano częstotliwość i nasilenie występowania zaburzeń samo-postrzegania, u osób poddających się zabiegom dermatologii estetycznej. Badaniem została objęta grupa 412 pacjentów, pozostających pod opieką klinik estetycznych. Pacjenci zostali poddani badaniu psychometrycznemu za pomocą przygotowanych wcześniej polskojęzycznych skal (COPS, AAI, FAS, BSQ). Ponadto wykorzystano istniejące już w języku polskim narzędzia:

Skala samooceny - RSES – Rosenberg Self-Esteem Scale – jeden z najbardziej popularnych na świecie kwestionariuszy, pozwalających na zobrazowanie ogólnego poziomu samooceny. Składa się z 10 pozycji, ocenianych na 4-stopniowej skali Likerta (zdecydowanie się zgadzam, zgadzam się, nie zgadzam się, zdecydowanie się nie zgadzam). Pozycje 1, 2, 4, 6 i 7 są odwrócone. Wynik mieści się w przedziale od 10 do 40 punktów i zostaje uzyskany przez zsumowanie wszystkich punktów. Wynik poniżej 15 punktów wskazuje na niską samoocenę;

Skala Doceniania Własnego ciała - BAS-2 – Body Appreciation Scale-2 - mająca podobnie jak FAS ocenić poziom doceniania ciała przez pacjentów. Zawiera 10 pytań punktowanych od 0 punktów (brak doceniania własnego ciała) do 5 punktów (maksymalne docenianie własnego ciała), a wynik jest średnią ocen o zakresie 0–5 punktów. Wyższe wynikami wskazują na wyższe docenienie funkcjonalności ciała.

Analiza statystyczna została przeprowadzona za pomocą oprogramowania Statistica 13.3 (StatSoft [Europa] GmbH, Hamburg, Niemcy) dla systemu Windows. Uzyskane wyniki zostały uznane za istotne statystycznie przy $p < 0,05$. Badanie zostało zatwierdzone przez Komisję Bioetyczną przy Uniwersytecie Medycznym we Wrocławiu (KB-335/2020).

2.6. Wyniki

W pracy pt. „Cosmetic Procedure Screening Questionnaire (COPS): creation and validation of the Polish language version" dokonano walidacji kwestionariusza COPS uzyskane wyniki wykazały zadowalającą spójność (Cronbach $\alpha = 0.76$) i powtarzalność (ICC = 0.79) przetłumaczonej wersji kwestionariusza. Ankietowani podali dobrą zrozumiałość pytań. W celu ustalenia trafności zbieżnej przeprowadzono korelację kwestionariusza COPS z dwoma innymi narzędziami, które zastosowane były przy tworzeniu oryginalnej wersji językowej. Wykazano silną ujemną korelację COPS z Inwentarzem Jakości Życia Obrazu Ciała (ang. Body Image Quality of Life Inventory – BIQLI; $r = –0,66$, $p < 0,01$), co wskazało, że wyższe wyniki COPS były związane z niższą jakością życia zależną od obrazu ciała. Ponadto COPS korelował z obiema podskalami Szpitalnej Skali Lęku i Depresji (ang.

Hospital Anxiety and Depression Scale - HADS), odpowiednio dla podskali lęku r wynosiło 0,68, $p < 0,01$ oraz dla podskali depresji r wynosiło 0,66, $p < 0,01$.

W kolejnej pracy pt. "Appearance Anxiety Inventory (AAI): creation and validation of the Polish language version", dokonano walidacji kwestionariusza AAI wykazano bardzo dobrą spójność (Cronbach α=0.91) oraz zadowalającą powtarzalność (ICC = 0.78) przetłumaczonej wersji kwestionariusza. Trafność zbieżną ustalono przeprowadzając korelację kwestionariusza AAI z dwoma innymi ankietami, tj. COPS i RSES. AAI silnie korelowało z COPS ($r = 0,67$, $p <0,0001$), wskazując, że wyższe wyniki AAI były związane z wyższym prawdopodobieństwem BDD, a także silnie ujemnie korelowało z RSES ($r=–0,57$, $p < 0,0001$), co wskazywało na związek wyższego niepokoju o wygląd z niższą samooceną. Ponadto respondenci podali dobrą zrozumiałość pytań.

Trzecia praca pt. "Body Shape Questionnaire-34 (BSQ) and Functionality Appreciation Scale (FAS) - pertinent body image screening tools: creation and validation of Polish language versions.", miała na celu przeprowadzenie walidacji dwóch kwestionariuszy BSQ-34 oraz FAS. Ankietowani nie zgłaszali uwag dotyczących problemów ze zrozumieniem pytań. Współczynnik α Cronbacha dla BSQ wynosił 0,97 i 0,88 dla FAS, wskazując odpowiednio na bardzo dobrą i dobrą spójność kwestionariuszy. Powtarzalność, oceniana za pomocą współczynnika ICC, wynosiła odpowiednio 0,95 dla BSQ i 0,85 dla FAS. Ponadto wykazano umiarkowaną ujemną korelację BSQ-34 z BIQLI ($r= -0,30$, $p=0,01$), wskazując, że wyższe wyniki w BSQ wiązały się z niższą jakością życia związaną z obrazem własnego ciała. Trafność zbieżna dla FAS i BAS-2 wynosiła $r=0,73$, $p < 0,001$.

Ostatnia praca pt. "To inject or to reject? The body image perception among aesthetic dermatology patients" wykorzystała cztery wcześniej zwalidowane narzędzia, tj. COPS, AAI, FAS i skróconą wersję kwestionariusza BSQ-34, czyli BSQ-16, a także dwa dodatkowe, wcześniej dostępne, zwalidowane w języku polskim narzędzia, tj. BAS-2 oraz RSES w celu oceny psychometrycznej pacjentów, poddających się zabiegom estetycznym. Wyniki podzielono na trzy sekcje – zaburzenia dysmorficzne (BDD), docenianie własnego ciała, obraz ciała oraz samoocena. W każdej sekcji oceniono grupę badaną pod kątem zależności występowania zaburzeń dysmorficznych, poziomu doceniania własnego ciała, poziomu oceny własnego ciała czy samooceny od takich czynników jak płeć, wiek, BMI, status socjoekonomiczny, wcześniejsze zabiegi estetyczne oraz historia leczenia psychiatrycznego. Dodatkowo badano korelacje pomiędzy zmiennymi analizowanymi w poszczególnych sekcjach.

Do oceny częstości BDD wśród uczestników wykorzystano dwa różne kwestionariusze, tj. COPS i AAI. Częstotliwość występowania BDD wahała się od 7,28% do 11,17%

w zależności od użytej skali. Na potrzeby interpretacji wyników badane osoby podzielono na dwie grupy - grupę z BDD i bez BDD. Pacjenci z wysokim ryzykiem rozpoznania BDD byli istotnie młodsi od osób bez podejrzenia BDD, według AAI było to odpowiednio 33,50±8,03 lat vs. 36,06±7,47 lat (p = 0,02) oraz według COPS 33,97±7,45 lat vs. 35,92±7,57 lat (trend) BMI pacjentów z podejrzeniem BDD było wyższe niż pacjentów bez podejrzenia BDD (24 kg/m^2 vs. 22 kg/m^2; p=0,02 dla obu kwestionariuszy). Biorąc pod uwagę status społeczno-ekonomiczny, zarówno według COPS, jak i AAI, stosunek wykształcenia wyższego do średniego był istotnie niższy w grupie z BDD niż w grupie bez BDD (odpowiednio, 60% vs. 93,46% i 80,43% vs. 92,35%); ponadto status materialny określono jako wyższy u osób bez podejrzenia BDD. Warto zauważyć, że historia leczenia psychiatrycznego zgłaszana była istotnie częściej w grupie z podejrzeniem zaburzeń dysmorficznych niż w grupie bez takich podejrzeń. Co zaskakujące, satysfakcję ze wcześniejszego leczenia estetycznego podawał podobny odsetek pacjentów w obu grupach.

Docenianie własnego ciała oszacowano za pomocą dwóch skal, tj. FAS i BAS-2, które dały porównywalne wyniki. Interesującym był fakt, że nie wykazano korelacji wieku osób badanych z docenianiem ich własnego ciała. Z kolei zaobserwowano występowanie wyższego BMI u osób z niższym poziomem doceniania własnego ciała (r=-0,2, p<0,01). Pacjenci, u których stwierdzono wyższy poziom doceniania ciała mieli istotnie lepszy status materialny. Historia leczenia psychiatrycznego w wywiadzie oraz obserwacja w kierunku BDD wiązała się z niższym poziomem doceniania własnego ciała (p<0,001). Co ciekawe, historia zabiegów estetycznych i zadowolenie z nich nie wpłynęły na docenianie własnego ciała.

Do oceny obrazu własnego ciała zastosowano kwestionariusz BSQ-16. Niewielkie zaniepokojenie kształtem zaobserwowano u 120 osób (29,13%), umiarkowane zaniepokojenie u 72 osób (17,48%), a wyraźne zaniepokojenie 39 osób (9,47%). Uczestnicy z wyższym BMI uzyskali wyższe wyniki całkowite BSQ-16 (r=0,3, p<0,001). Przebyte leczenie psychiatryczne wpływało negatywnie na obraz ciała oceniany w skali BSQ-16. Co więcej, gorszy status materialny istotnie częściej zgłaszali pacjenci z większym ryzykiem problemów postrzegania swojej sylwetki (p<0,01). Ponownie, historia zabiegów kosmetycznych i zadowolenie z zabiegów nie miały wpływu na postrzeganie obrazu własnego ciała. Należy podkreślić, że osoby, u których stwierdzono wyraźne zaniepokojenie o kształt ciała były podejrzewane istotnie częściej o występowanie BDD (51,28% osób według COPS [p<0,001] i 74,36% osób według AAI [p<0,001]).

Do oceny stopnia samooceny została wykorzystano RSES. Stwierdzono, że niższa samoocena była zależna od historii leczenia psychiatrycznego. Ponadto, im wyższy był

status materialny, tym wyższa była samoocena (p<0,001). Zadowolenie z poprzednich zabiegów estetycznych ani BMI nie wpływały na samoocenę. Warto podkreślić, że osoby z niską samooceną były podejrzewane o BDD istotnie częściej (według COPS 14 z 48 osób - 29,17% [p<0,001], a według AAI 18 z 48 osób - 37,5% [p<0,001]).

Ponadto, analizując poszczególne zmienne, wykazano następujące istotne statystycznie korelacje: pacjenci z wyższym ryzykiem BDD mieli niższy obraz oraz poziom doceniania własnego ciała i niższą samoocenę niż osoby z niższym ryzykiem tego zaburzenia; niższy poziom doceniania własnego ciała zaobserwowano u osób z gorszym obrazem ciała, niższą samooceną i większym ryzykiem wystąpienia BBD; wyższa samoocena była zależna od lepszego obrazu własnego ciała, wyższego poziomu doceniania ciała i mniejszego ryzyka potencjalnego BBD; zły obraz własnego ciała był związany z niższym poziomem doceniania ciała, niższą samooceną i wyższym ryzykiem wystąpienia BDD.

2.7. Wnioski

1. Stworzone i zwalidowane polskie wersje językowe kwestionariuszy COPS, AAI, BSQ-34 i FAS są przydatnymi instrumentami do oceny psychometrycznej polskojęzycznych pacjentów.
2. Duży odsetek pacjentów poddających się zabiegom estetycznym (7,28%-11,1%) wykazuje objawy BDD, przy czym brak jest różnic w częstości występowania BDD pomiędzy płciami.
3. U około 10% osób poddających się zabiegom estetycznym stwierdza się wyraźne zaniepokojenie obrazem własnego ciała, jak i niską samoocenę.
4. Istotne korelacje pomiędzy zaburzeniami dysmorficznymi, obrazem ciała, docenianiem własnego ciała oraz samooceną wskazują na liczne powiązania powyższych elementów.
5. Osoby z wyższym BMI charakteryzują się większym ryzykiem rozwoju BDD, częstszym niezadowoleniem z własnego ciała i gorszym obrazem własnego ciała.
6. Niższy status materialny ma związek z podatnością na BDD, niskim docenianiem i gorszym obrazem własnego ciała oraz niską samooceną.
7. Wcześniejsze leczenie psychiatryczne łączy się z większym ryzykiem wystąpienia BDD, brakiem satysfakcji z obrazu własnego ciała, niższym poziomem doceniania własnego ciała i niską samooceną.

4. PUBLIKACJE WCHODZĄCE W SKŁAD CYKLU POWIĄZANEGO TEMATYCZNIE

4.1 ARTYKUŁ PIERWSZY:

Cosmetic Procedure Screening Questionnaire (COPS): creation and validation of Polish language version

Original paper

Cosmetic Procedure Screening Questionnaire (COPS): creation and validation of the Polish language version

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Abstract

Introduction: Body dysmorphic disorder (BDD) is a disabling mental disorder characterized by excessive preoccupation with appearance. Trying to fix imagined defects many individuals with BDD search for aesthetic dermatology treatments. Due to omitting preliminary evaluation for BDD in subjects undergoing cosmetic procedures and lack of proper diagnostic tools among this group of individuals, the results of such interventions may face their disapproval and disappointment.

Aim: To translate and validate the Polish version of a Cosmetic Procedure Screening Questionnaire (COPS), which can be used in a cosmetic procedure setting to screen patients suspected to be suffering from BDD.

Material and methods: Both forward and backward translations of the original English version of the questionnaire to Polish were performed in accordance with international standards. The validation was conducted on 33 individuals undergoing aesthetic procedures, who completed the questionnaire twice with 3–6 days' interval. Moreover, the subjects were also asked to fill the Polish versions of BIQLI (Body Image Quality of Life Inventory) and HADS (Hospital Anxiety and Depression Scale) for convergent validity procedure.

Results: The Polish version of COPS demonstrated good internal consistency (Cronbach α coefficient value of 0.76) and reproducibility (Intraclass Correlation Coefficient, ICC, of 0.79). COPS correlated strongly with BIQLI ($r = -0.66$, $p < 0.01$) as well as with HADS, in both depression and anxiety subscales ($r = 0.68$, $p < 0.01$ and $r = 0.66$, $p < 0.01$, respectively).

Conclusions: The Polish version of the COPS questionnaire showed sufficient internal consistency and reliability. It can be used for BDD screening among the Polish speaking subjects undergoing aesthetic dermatology procedures.

Key words: COPS questionnaire, validation, body dysmorphic disorder.

Introduction

Body dysmorphic disorder (BDD) was first described in 1891 by Italian psychiatrist Enrico Morselli. He introduced the term "dysmorphophobia" which refers to the Greek word "dysmorphia" meaning hideousness [1]. According to the Diagnostic and Statistical Manual of Mental Disorders-5 (DSM-5), BDD is an excessive concern with perceived appearance defect, associated with meaningful discomfort and deterioration of everyday life functioning [2]. World Health Organization's International Classification of Diseases-11 (ICD-11) characterizes BDD as 'preoccupation with a slight or imagined defect in appearance that causes significant distress or impairment in social, occupational, or other areas of functioning' or 'preoccupations with appearance or self-image causing significant distress or impairment in important areas of functioning'[3].

The prevalence of BDD in general population is estimated as 1.9%. It is more common among cosmetic dermatology (9.2%) and cosmetic surgery (13.2%) patients [1, 4]. That is why it is so important to screen subjects before aesthetic procedures for potential symptoms of BDD, as it may be one of the reasons for treatment dissatisfaction and disapproval. There is a limited number of screening instruments for BDD, most commonly the scales proposed by Phillips *et al.* [5, 6] in mid 1990s. The Cosmetic Procedure Screening Questionnaire (COPS) is an instrument developed by Veale *et al.* [7] in 2012 to

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search for BDD symptoms especially in subjects prior to cosmetic procedures.

Aim

As COPS was created in English this study was undertaken to translate and validate its Polish language version. This will enable the use of COPS in clinical practice in subjects speaking Polish.

Material and methods

The Polish language version of the COPS questionnaire was translated and validated according to international standards. The permission to translate the questionnaire was provided by the copyright holders. The COPS questionnaire evaluates the features unattractive for the subjects with regard to diagnostic criteria of BDD. The questionnaire encompasses 9 items which are scored from 0 points (least impaired) to 8 points (most impaired), range 0–72 points. The score is a sum of questions 2 to 10. Items 2, 3 and 5 are reversed. The higher score indicates greater impairment. Individuals who score 40 or more are likely to have a diagnosis of BDD [7, 8].

Translation and validation process

Firstly, the original English version of the COPS questionnaire was translated into Polish by two independent translators. Then the translated versions were compared in terms of inconformity by a third bilingual consultant who is expert in the field and a unified version was created. Subsequently, another independent translator, who was not familiar with the original version of the COPS questionnaire, conducted reverse translation from Polish to English. The reverse translation was sent to the author of the original English version of COPS, who recommended minor changes. The required corrections were implemented accordingly. Finally, the Polish version of the COPS questionnaire was obtained.

After the translation process, the validation was performed. The questionnaire was tested on a group of 33 individuals to assess the level of translation perspicuity, consistency and reproducibility. We recruited a group of subjects who reported to the aesthetic dermatology clinic in order to have an aesthetic procedure in the nearest future (hyaluronic acid fillers and mesotherapy, botulinum toxin, skin resurfacing, vascular laser treatment and rich platelet plasma). The questionnaire was completed by 32 women and 1 man aged 24–50 years (mean age: 35.7 ±7.6 years). In order to determine test-retest reliability the responders were asked to complete the questionnaire twice with a 3–6 days' interval, which is considered sufficiently long to prevent the individuals from remembering previous answers.

To conduct convergent validity, the subjects were also asked to fill the Polish versions of HADS (Hospital Anxiety and Depression Scale) [9] and BIQLI (Body Image Quality of Life Inventory) [10], the same instruments used for the development of original COPS. HADS consists of two 7-item subscales, one measuring anxiety and another measuring depression, which score separately. Each item is answered on a 4-point (0–3) scale, so the possible scores range from 0 to 21 for each of the two subscales. Using the HADS definitions, the subjects could be grouped as those without symptoms of depression/anxiety (0–10 points) or individuals with symptoms of depression/anxiety (11–21 points). BIQLI uses a 7-point bipolar scale, from highly negative impact to highly positive impact (from –3 to +3). It examines 19 contexts or life domains where body image plays a significant role. The overall body image-related quality of life is calculated as a mean of the 19 life domains of the questionnaire, resulting in a mean BIQLI score. A negative score indicates a negative influence of an individual's body image on their quality of life, while a positive score may indicate a positive influence.

Statistical analysis

The statistical analysis of the obtained results was performed with the use of Statistica 13 (Dell, Inc., Tulsa, USA) software. Cronbach α coefficient was used to evaluate the internal consistency of the questionnaire. The Cronbach α coefficient of at least 0.7 indicates for sufficient questionnaire internal consistency, while the value above 0.9 stands for very good internal consistency [11]. The intraclass correlation coefficient (ICC) was used to assess the questionnaire reproducibility (test-retest reliability). Adequate reproducibility of the questionnaire can be acknowledged if ICC is at least 0.7 [12]. The correlation between the answers from a single completion to each question and to the total score was obtained with Spearman correlation test. Pearson's correlation coefficient was used to measure the dependences between COPS and other instruments (i.e. HADS and BIQLI) used for convergent validity. Furthermore, responses to each question from the first and the second completion were compared with Wilcoxon test in a search for significant differences, with p-value ≤ 0.05 considered as statistically significant.

Results

The estimation of internal consistency of the Polish language version of COPS demonstrated that the different items of the questionnaire are interrelated. Cronbach α coefficient value for the questionnaire was assessed as 0.76, which indicated good internal consistency for the translated version of the instrument. Highly significant correlations ($p < 0.01$) were found between the results obtained for each item and the total score of the questionnaire (Table 1). The reproducibility of analysed questionnaire was determined using ICC and assessed

as 0.79 for the whole COPS. Moreover, no statistically significant differences were found for each particular question (except for one, i.e. question 2) and COPS total score between the first and second completion (on day 0 and day 3–6) (Table 2). A highly statistically significant, strong positive correlation ($r = 0.76$, $p < 0.0001$) was found between the results obtained for total score when filling out the questionnaire twice. Similarly, moderate-to-strong correlations were also found for each particular question ($p < 0.01$) (detailed data not shown). COPS correlated strongly with BIQLI ($r = –0.66$, $p < 0.01$), indicating that higher scores on COPS were associated with lower body image quality of life, as well as with HADS, both depression and anxiety subscales ($r = 0.68$, $p < 0.01$ and $r = 0.66$, $p < 0.01$, respectively) (Figure 1).

The results presented above proved satisfactory convergent validity, consistency and reproducibility of the translated version of the questionnaire. The individuals reported good intelligibility of the questions and completing of the questionnaire took 3–5 min. The Polish version of COPS is shown in Appendix 1.

Table 1. Correlation of each item (Q) score with total score of COPS

Correlations	*N*	*R* Spearman	*P*-value
Q2 and total score	33	0.58	0.001
Q3 and total score	33	0.63	0.0001
Q4 and total score	33	0.64	0.0001
Q5 and total score	33	0.72	0.0001
Q6 and total score	33	0.68	0.0001
Q7 and total score	33	0.68	0.0001
Q8 and total score	33	0.51	< 0.01
Q9 and total score	33	0.49	< 0.01
Q10 and total score	33	0.51	< 0.01

Table 2. Reproducibility of results

Questions	1st assessment (points)	2nd assessment (points)	*P*-value
Q2	2.85 ±1.89	3.21 ±1.95	0.02
Q3	3.36 ±1.85	3.21 ±1.90	0.50
Q4	3.09±1.74	2.94 ±1.87	0.66
Q5	1.52 ±2.02	1.91 ±2.26	0.21
Q6	2.70 ±1.38	2.79 ±1.95	0.98
Q7	1.21 ±1.90	1.39 ±1.94	0.27
Q8	0.58 ±1.12	0.61 ±1.22	0.87
Q9	0.76 ±1.30	0.88 ±1.34	0.48
Q10	2.79 ±2.12	2.58 ±2.05	0.14
Total score	18.85 ±9.11	19.51 ±10.16	0.68

Discussion

Body dysmorphic disorder is characterized by preoccupation with thinking and behaviours related to appearance concerns. It is a disabling mental health disorder where a perceived defect in physical outlook impairs everyday life functioning [1, 13–15]. BDD is associated with severe suffering, constant intrusive thoughts, shame, depression, social distancing and poor quality of life [1, 13, 14]. Suicidal ideation and attempts are also more frequent comparing to general population [12]. It should be highlighted that approximately 76% of patients with BDD undergo both cosmetic and surgical treatments in an attempt to 'fix' perceived defects in physical outlook [13]. BDD is commonly underdiagnosed or misdiagnosed as physicians are often not confident to diagnose and treat such entity [13]. Moreover, a large proportion of patients with BDD presenting to non-psychiatrist specialists (including aesthetic dermatology professionals) may not identify themselves as suffering from a mental disorder [1]. Many BDD patients seek for dermatological, surgical or cosmetic interventions trying to repair their imagined defect and instead of the psychiatric help that they actually need, they receive treatments, which usually leads to lack of satisfaction with the performed procedure [13]. It is important to improve recognition of BDD which could be achieved by screening subjects before aesthetic treatment. The psychometric assessment could play a significant role in the preliminary selection of aesthetic dermatology patients and choosing the appropriate approach. It is important to implement psychological evaluation in aesthetic medicine clinics as BDD may be not only one of the reasons for treatment dissatisfaction but also increased risk of suffering, depression and suicide [13].

Among the other questionnaires assessing BDD symptoms the COPS questionnaire is the one created for patients undergoing cosmetic procedures [5–7]. This study describes the process of development and validation of the Polish language version of the COPS questionnaire. Comparing to the original version of the COPS questionnaire, the translated Polish language version showed similar, good test-retest reliability ($r = 0.87$, $p < 0.01$ vs. $r = 0.76$, $p < 0.0001$, respectively) and a lower, however sufficient, value of Cronbach α coefficient (0.91 vs. 0.76, respectively) [7]. Nonetheless, the results of convergent validity revealed very similar results to those obtained in the original paper showing a significant relationship with different standardized measures of body image and psychological distress [7]. Some insignificantly different results of the validation of the Polish language version could be caused by an attempt to keep the very exact meaning of questions from the original questionnaire. It is important to conduct proper validation of every questionnaire used in clinical practice and

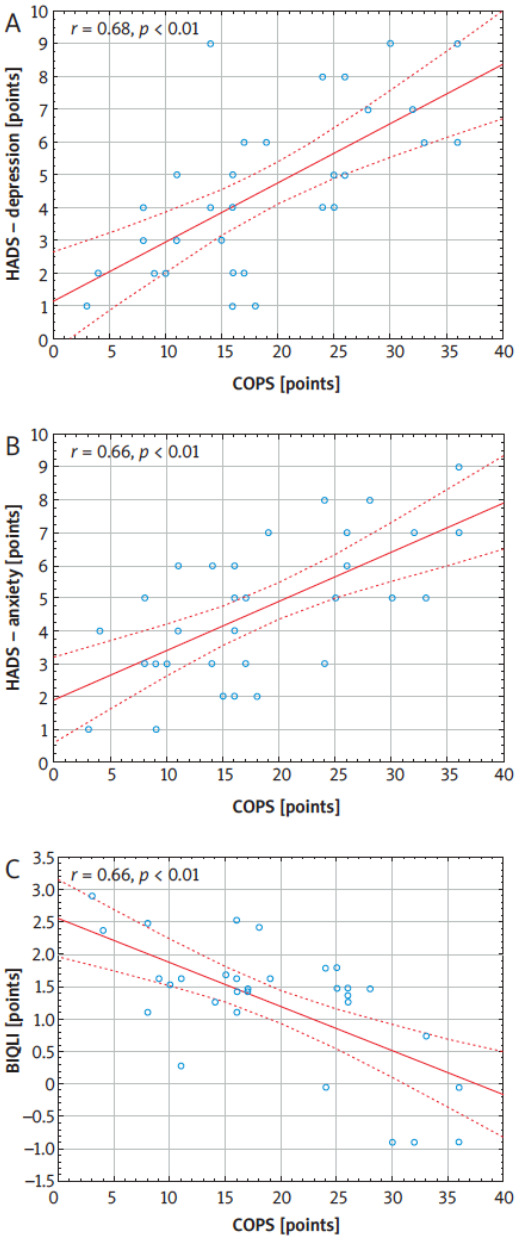


Figure 1. The correlations between COPS (Cosmetic Procedure Screening Questionnaire) and HADS (Hospital Anxiety and Depression Scale) subscales and BIQLI (Body Image Quality of Life Inventory)

that is why we attempted to show a detailed and appropriate way of translation and validation of the original questionnaire.

Conclusions

Our results indicate that this version of the instrument may be used for BDD screening in aesthetic dermatology clinics. It could be beneficial in the evaluation of mental health status in cosmetic dermatology subjects and in choosing the proper approach.

Conflict of interest

The authors declare no conflict of interest.

References

1. Singh AR, Veale D. Understanding and treating body dysmorphic disorder. Indian J Psychiatry 2019; 61 (Suppl 1): 131-5.
2. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. Text Revision. 5th ed. Washington, DC: American Psychiatric Association 2017.
3. World Health Organisation. ICD-11 International Classification of Diseases for Mortality and Morbidity Statistics. Eleventh Revision. World Health Organisation 2018.
4. Veale D, Gledhill L, Christodolou P, et al. Prevalence of body dysmorphic disorder in different settings. Body Image 2016; 18: 168-86.
5. Phillips KA, Atala KD, Pope HG. Diagnostic instruments for body dysmorphic disorder. In American Psychiatric Association (Ed.), New research program and abstracts. 148th annual meeting of the American Psychiatric Association. Miami: American Psychiatric Association.
6. Phillips KA, Hollander E, Rasmussen SA, et al. A severity rating scale for body dysmorphic disorder: development, reliability, and validity of a modified version of the Yale-Brown Obsessive Compulsive Scale. Psychopharmacol Bull 1997; 33: 17-22.
7. Veale D, Ellison N, Werner TG, et al. Development of a Cosmetic Procedure Screening Questionnaire (COPS) for body dysmorphic disorder. J Plast Reconstr Aesthet Surg 2012; 65: 530-2.
8. Veale D, Eshkevari E, Ellison N, et al. Validation of genital appearance satisfaction scale and the cosmetic procedure screening scale for women seeking labiaplasty. J Psychosom Obstet Gynaecol 2013; 34: 46-52.
9. Zigmond AS, Snaith RP. The Hospital Anxiety And Depression Scale. Acta Psychiatr Scand 1983; 67: 361-70.
10. Cash TF, Fleming EC. The impact of body image experiences: development of the body image quality of life inventory. Int J Eat Disord 2002; 31: 455-60.
11. Cronbach LJ. Coefficient alpha and the internal structure of tests. Psychometrika 1951; 16: 297-334.
12. Shrout PE, Fleiss JL. Intraclass correlations: uses in assessing rater reliability. Psychol Bull 1979; 86: 420-8.
13. Bowyer L, Krebs G, Mataix-Cols D, et al. A critical review of cosmetic treatment outcomes in body dysmorphic disorder. Body Image 2016; 19: 1-8.
14. Szepietowski JC, Salomon J, Pacan P, et al. Body dysmorphic disorder and dermatologists, J Eur Acad Dermatol Venereol 2008; 22: 795-9.
15. Sjorgen M. The diagnostic work up for body dismorfic disorder. J EC Psychol Psychiatry 2019; 8: 72-6.

Appendix

Przesiewowy Kwestionariusz Procedur Kosmetycznych (COPS)

Celem tego kwestionariusza jest zrozumienie, co sądzisz o swoim wyglądzie przed zabiegiem kosmetycznym. Wszystkie uzyskane informacje będą ściśle poufne.

Przed udzieleniem odpowiedzi na pytanie numer 1 proszę zapoznać się z przykładem.

Za chwilę poprosimy Cię o opisanie tych cech Twojego wyglądu, których nie lubisz lub które chciałabyś (chciałbyś) poprawić. Jeśli chcesz poprawić więcej niż jedną cechę swojego wyglądu, proszę wymienić je wszystkie w przewidzianym miejscu. Jako pierwszą proszę wpisać tę cechę, która stanowi Twoje największe zmartwienie.

Oto przykład kobiety, której głównym zmartwieniem był jej nos i która w mniejszym stopniu była zaniepokojona swoją skórą i pośladkami.

I) Cechy Twojego wyglądu, które Cię martwią

Proszę opisać te cechy Twojego wyglądu, których nie lubisz lub chciałabyś/(chciałabyś) poprawić.

1. Cecha wyglądu

Nos jest zbyt krzywy i garbaty.

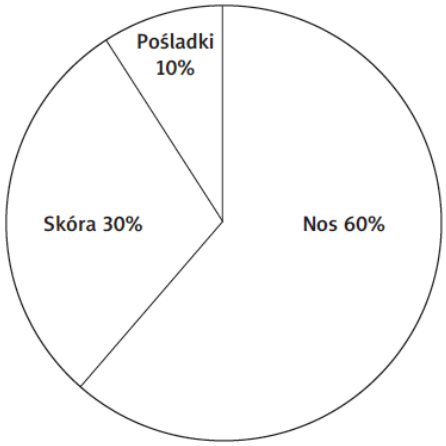
2. Cecha wyglądu

Plamy i blizny potrądzikowe na twarzy.

3. Cecha wyglądu

Pośladki są zbyt duże.

Następnie poprosimy Cię o narysowanie wykresu kołowego i oszacowanie, jaki procent Twojego niepokoju przypisany jest dla każdej cechy Twojego wyglądu. Osoba powyżej przedstawiła swój wykres kołowy w ten sposób.



1. Cechy Twojego wyglądu, które Cię martwią

Proszę opisać te cechy Twojego wyglądu, których nie lubisz lub chciałabyś (chciałbyś) poprawić.

A. Cecha wyglądu (cecha wyglądu, która najbardziej Cię martwi)

.....

.....

B. Cecha wyglądu

.....

.....

C. Cecha wyglądu

.....

.....

D. Cecha wyglądu

.....

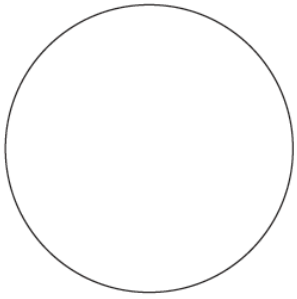
.....

E. Cecha wyglądu

.....

.....

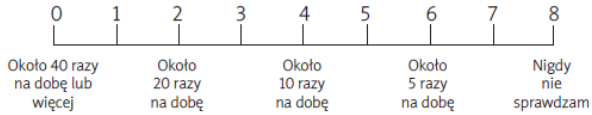
Teraz proszę narysować wykres kołowy i oszacować, jaki procent Twojego niepokoju przypisany jest dla każdej cechy Twojego wyglądu. Proszę się upewnić, czy suma równa jest 100%!



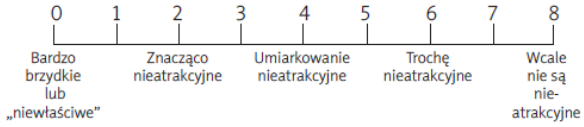
Odtąd będziemy traktować te składowe jako „cechy Twojego wyglądu".

Proszę uważnie przeczytać poniższy zestaw pytań i zakreślić cyfrę, która najlepiej opisuje sposób, w jaki myślisz o wybranych cechach swojego wyglądu. **Przeczytaj uważnie oznaczenia, aby upewnić się, że zakreślasz cyfrę odzwierciedlającą Twoje odczucia, ponieważ niektóre odpowiedzi są napisane w odwrotnej kolejności.**

2. Jak często **celowo** sprawdzasz cechy swojego wyglądu? **Nieprzypadkowo zatrzymujesz na nich wzrok.** Proszę uwzględnić spoglądanie na ich odbicie w lustrze lub innych powierzchniach, takich jak witryny sklepowe, bezpośrednie patrzenie na nie lub sprawdzanie dotykiem.

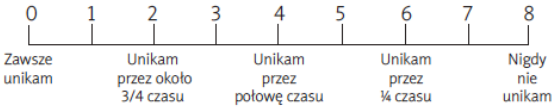


3. Jak bardzo uważasz cechy Twojego wyglądu **obecnie** za brzydkie, nieatrakcyjne lub „niewłaściwe"?

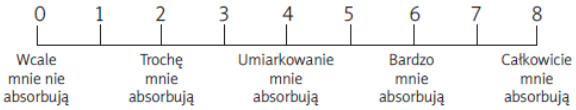


4. Jak bardzo cechy Twojego wyglądu są **obecnie** dla Ciebie przykre?

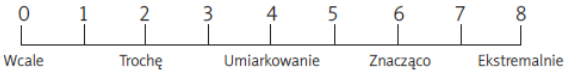
5. Jak często cechy Twojego wyglądu prowadzą **obecnie** do unikania przez Ciebie pewnych sytuacji lub aktywności?



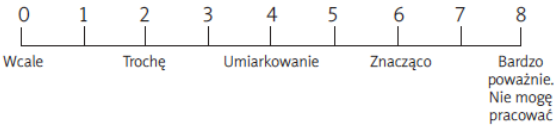
6. Jak bardzo cechy Twojego wyglądu **obecnie** Cię absorbują? Czy dużo o nich myślisz i ciężko Ci przestać o nich myśleć?



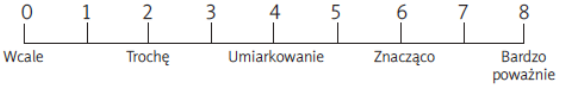
7. **Jeśli masz partnera,** jak bardzo cechy Twojego wyglądu wpływają **obecnie** na Wasz związek? **Jeśli nie masz partnera,** jak bardzo wpływają na randkowanie lub tworzenie związku?



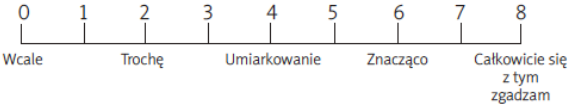
8. Jak bardzo cechy Twojego wyglądu wpływają **obecnie** na Twoją zdolność do pracy, nauki lub prowadzenia domu? (Proszę odpowiedzieć na pytanie nawet, jeśli nie pracujesz i nie uczysz się, interesuje nas Twoja zdolność do pracy lub nauki.)



9. Jak bardzo cechy Twojego wyglądu wpływają **obecnie** na Twoje życie towarzyskie?



10. Jak bardzo odczuwasz, że Twój wygląd jest najważniejszym aspektem tego kim jesteś?



4.2 ARTYKUŁ DRUGI:

Appearance Anxiety Inventory (AAI): creation and validation of Polish language version

Original paper

Appearance Anxiety Inventory (AAI): creation and validation of the Polish language version

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Abstract

Introduction: Body dysmorphic disorder (BDD) is a disabling mental disorder characterized by preoccupation with appearance concerns. Due to lack of awareness of BDD among medical professionals and a limited number of proper diagnostic tools, the diagnosis is frequently missed. Among sparse diagnostic instruments, there is Appearance Anxiety Inventory (AAI), which was developed not only to search for BDD symptoms, but also to assess the progress of patients throughout the therapy.
Aim: To translate and validate the Polish version of AAI.
Material and methods: Both forward and backward translation of the original English version of AAI questionnaire was performed in accordance with international standards. The validation of AAI was conducted on 49 individuals. They completed the questionnaires twice with a 3–6 days' interval. Moreover, the subjects were also asked to fill the Polish versions of COPS (Cosmetic Procedure Screening Questionnaire) and RSES (Rosenberg Self Esteem Scale) for the convergent validity.
Results: The Polish version of AAI demonstrated very good internal consistency (Cronbach α coefficient value of 0.91) and good reproducibility (Intraclass Correlation Coefficient (ICC) of 0.78). Convergent validity indicated a strong correlation between AAI and COPS and a strong negative correlation between AAI and RSES ($r = 0.67$, $p < 0.0001$ and $r = -0.57$, $p < 0.0001$, respectively).
Conclusions: The Polish version of the AAI questionnaire showed sufficient or better psychometric properties to support its use in clinical and research work with Polish speakers.

Key words: body dysmorphic disorder, anxiety appearance inventory, validation.

Introduction

Body dysmorphic disorder (BDD), or dysmorphophobia, is a disabling mental condition with a distressing or impairing preoccupation with slight or imagined defects in appearance, resulting in painful, repetitive behaviours (e.g., mirror checking) or mental acts (e.g., comparing own appearance to others) [1]. The Diagnostic and Statistical Manual of Mental Disorders-5 (DSM-5) defines BDD as an excessive concern about a perceived appearance defect, associated with meaningful discomfort and deterioration of everyday life functioning [2]. According to World Health Organization's International Classification of Diseases-11 (ICD-11) BDD is 'preoccupation with appearance or self-image causing significant distress or impairment in important areas of functioning' or 'preoccupation with a slight or imagined defect in appearance that causes significant distress or impairment in social, occupational, or other areas of functioning' or 'compare body image disturbances' [3].

Although BDD is comparatively common (the prevalence of BDD in general population is assessed as 1.9%), worldwide prevalent and results in everyday functioning impairment, high levels of distress, and a risk of suicide, the diagnosis is disturbingly, frequently missed [1, 4]. This may be a result of a limited number of screening instruments for BDD (most commonly the scales proposed by

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Phillips *et al.* [5, 6] in mid '90s), unacquaintance of available diagnostic tools among medical personnel or lack of potentiality to measure severity of BDD or treatment outcomes [7]. Appearance Anxiety Inventory (AAI) is an instrument developed by Veale *et al.* in 2014 not only to assess the severity of BDD symptoms, but also as a process measure during any therapy [7].

Aim

Originally AAI was created in English. As there is no Polish version available, this study was created to translate and validate the questionnaire. This will enable the use of AAI in further research or clinical practice in subjects speaking Polish.

Material and methods

The translation and validation process of the Polish version of the AAI questionnaire was conducted according to international standards. The permission to translate the questionnaire was acquired from the copyright holders. The AAI was primarily developed as a measure used to identify the cognitive processes and behaviours that might mediate the outcome of any therapy in people with Body Dysmorphic Disorder (BDD). It can be used to assess the progress of patients throughout the therapy. The scale encompasses 10 items. Each item is scored on a 5-point Likert scale ranging from 0 for "not at all" to 4 for "all the time". The maximum score is 40, and higher scores reflect greater frequency of a process. The total score is obtained by summing all the items. Individuals who score 14–15 or more are likely to have a diagnosis of BDD, but the questionnaire should be used rather to assess severity of symptoms than to screen for BDD [7].

Translation and validation process

At first, the original English version of the AAI questionnaire was translated into Polish language by two independent translators. Then, the translated versions were compared in terms of incompatibility by a third bilingual expert and a unified, third version was created. Next, another independent translator, who was not acquainted with the original version of the AAI questionnaire, carried out reverse translation from Polish to English. The author of the original English version of AAI recommended minor changes after checking reversed translation. The required corrections were implemented accordingly. Finally, the Polish version of COPS questionnaire was obtained.

After the translation process, the validation was performed. The questionnaire was tested on a group of 49 individuals to assess the level of translation consistency and reproducibility. The group of subjects was recruited from individuals who reported to the dermatology clinic. The questionnaire was completed by 28 females and 21 males aged 26–55 years. In order to determine test-retest reliability, the responders were asked to complete the questionnaire twice with a 3–6 days' interval, which is considered sufficiently long to prevent the individuals from remembering previous answers.

To conduct convergent validity, the subjects were also asked to fill the Polish versions of COPS (Cosmetic Procedure Screening Questionnaire – also used in the original validation paper) [8, 9] and RSES (Rosenberg Self Esteem Scale) [10]. The COPS questionnaire evaluates the features unattractive for the subjects with regard to diagnostic criteria of BDD. The questionnaire encompasses 9 items which are scored from 0 points (least impaired) to 8 points (most impaired), range 0–72 points. The score is a sum of questions 2 to 10. Items 2, 3 and 5 are reversed. The higher score indicates greater impairment. Individuals who score 40 or more are likely to have a diagnosis of BDD [8, 9].

The RSES [10] is one of the most recognized and widely used measures of self-esteem. It comprises 10 items, on a 4-point Likert scale each (strongly agree, agree, disagree, and strongly disagree). Items 1, 2, 4, 6 and 7 are reversed – with a positive impact. Total possible scores range from 10 to 40; the higher scores indicate the higher level of self-esteem.

Statistical analysis

The statistical analysis of the acquired results was performed with the use of Statistica 13 (Dell, Inc., Tulsa, USA) software. The internal consistency of the questionnaire was evaluated with Cronbach α coefficient, which value of at least 0.7 indicates for sufficient questionnaire internal consistency, while the value above 0.9 stands for very good internal consistency [11]. Intraclass correlation coefficient (ICC) was used to assess the questionnaire reproducibility (test-retest reliability). Adequate reproducibility of the questionnaire is recognized if ICC is at least 0.7 [12]. The correlation between the answers from a single completion to each question and to the total score was obtained with Spearman correlation test. The same test was used to measure the dependences between AAI and other instruments (i.e. COPS and RSES) used for convergent validity. Furthermore, responses to each question from the first and second completion were compared with Wilcoxon test in a search for important differences, with p-value ≤ 0.05 considered as statistically significant.

Results

The estimation of internal consistency of the Polish language version of AAI demonstrated that the different items of the questionnaire are interrelated. Cronbach α coefficient value for the questionnaire was assessed as 0.91, which indicated very good internal consistency for the translated version of the instrument. Highly

Table 1. Correlation of each item (Q) score with a total score of AAI

Correlations	*N*	R Spearman	*P*-value
Q1 and total score	49	0.66	< 0.0001
Q2 and total score	49	0.39	< 0.01
Q3 and total score	49	0.55	< 0.0001
Q4 and total score	49	0.59	< 0.0001
Q5 and total score	49	0.78	< 0.0001
Q6 and total score	49	0.81	< 0.0001
Q7 and total score	49	0.65	< 0.0001
Q8 and total score	49	0.52	< 0.001
Q9 and total score	49	0.75	< 0.0001
Q10 and total score	49	0.78	< 0.0001

Table 2. Reproducibility of results of AAI

Questions	1st assessment	2nd assessment	*P*-value
Q1	1.18 ±0.75	1.35 ±0.69	0.17
Q2	1.41 ±0.81	1.42 ±0.68	0.96
Q3	0.35 ±0.69	0.41 ±0.79	0.31
Q4	0.69 ±0.94	0.67 ±0.94	0.83
Q5	1.10 ±0.87	1.14 ±0.71	0.76
Q6	0.61 ±0.76	0.76 ±0.88	0.2
Q7	0.98 ±1.28	0.73 ±1.04	0.18
Q8	0.94 ±0.72	0.80 ±0.64	0.18
Q9	1.24 ±0.75	1.39 ±0.73	0.27
Q10	0.94 ±0.88	0.99 ±0.90	0.68
Total score	9.45 ±6.38	9.65 ±5.89	0.86

significant correlations ($p < 0.01$) were found between the results obtained for each item and the total score of the questionnaire (Table 1). The reproducibility of the analysed questionnaire was determined using ICC and assessed as 0.78 for the whole AAI. Moreover, no statistically significant differences were found for each particular question of AAI and AAI total scores between the first and second completion (on day 0 and day 3–6) (Table 2). A highly statistically significant, strong positive correlation ($r = 0.67$, $p < 0.0001$) were found between the results obtained for total score when filling out the questionnaire twice. Similarly, moderate-to-strong correlations were also found for each particular question ($p < 0.05$) (detailed data not shown). AAI correlated strongly with COPS ($r = 0.67$, $p < 0.0001$), indicating that higher scores on AAI were associated with higher possibility of BDD (Figure 1), and revealed a strong negative correlation with RSES ($r = –0.57$, $p < 0.0001$), which indicated that the higher the appearance anxiety, the lower the self-esteem is (Figure 2).

The results presented above proved satisfactory convergent validity, consistency and reproducibility of the translated version of the questionnaire. The individuals reported good intelligibility of the questions and completing of the questionnaire took 3–5 min. The Polish version of AAI is available on request from the corresponding author.

Discussion

Body dysmorphic disorder is characterized by preoccupation with thinking and behaviours related to appearance concerns. It is a disabling mental health disorder where a perceived defect in physical outlook impairs everyday life functioning [1, 7, 13, 14]. As mentioned above, although BDD is associated with a very negative impact on quality of life (severe suffering, constant intrusive thoughts, shame, depression, social distancing) and it is a rather common mental disease, prevalent around the world, the diagnosis is often missed [7]. Because there is

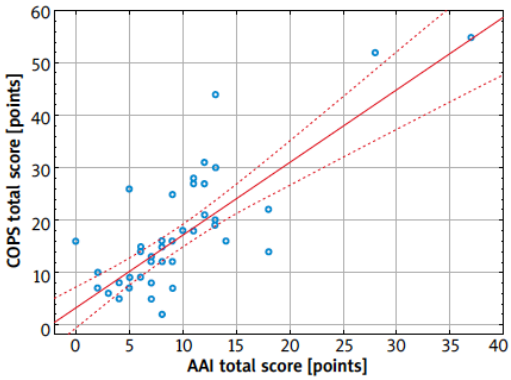

Figure 1. Correlations between AAI and COPS

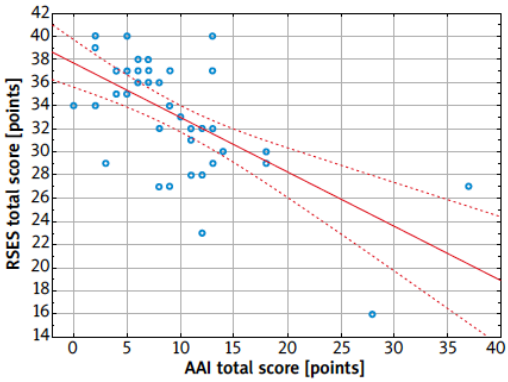

Figure 2. Correlations between AAI and RSES

a limited number of instruments screening for BDD and measuring its severity, especially available in the Polish language, we decided to conduct the validation process on the one with high evaluating potential (in our opinion) – Appearance Anxiety Inventory (AAI). The scale is brief, sensitive to change, and suitable for weekly assessment during treatment. AAI may be used to assist clinicians to choose the best therapeutic option [7].

This study describes the detailed and adequate process of development and validation of the Polish language version of the AAI questionnaire. Comparing to the original version of the AAI questionnaire, the translated Polish language version showed similar, good test-retest reliability (ICC = 0.87 vs. ICC = 0.78, respectively) and an identical value of Cronbach α coefficient (0.91) [7]. Moreover, convergent validity of AAI and COPS (as used in the original paper) revealed identical results, showing a significant relationship of body image and psychological distress (i.e. $r = 0.67$) [7].

The main limitations were that the AAI was validated in a population that did not have BDD and the results may be different in a clinical population.

It is very important to improve recognition of BDD which could be achieved by increasing awareness of this disease among medical professionals. Understanding the nature and symptoms of BDD especially by non-psychiatric medical specialists and rising availability of diagnostic tools could lead to more accurate diagnoses. The psychometric assessment of each patient could play a significant role in choosing the appropriate approach. It is important to implement psychological evaluation in non-psychiatric clinics and familiarize medical environment with proper diagnostic and evaluating instruments.

Conclusions

Our results indicate that this version of the instrument may be used for screening and evaluation of the severity of BDD among Polish speaking patients. It is important to encourage using accurate diagnostic tools especially by non-psychiatrists.

Conflict of interest

The authors declare no conflict of interest.

References

1. Singh AR, Veale D. Understanding and treating body dysmorphic disorder. Indian J Psychiatry 2019; 61 (Suppl 1): 131-5.
2. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. Text Revision. 5th ed. Washington, DC: American Psychiatric Association. 2017.
3. World Health Organisation. ICD-11 International Classification of Diseases for Mortality and Morbidity Statistics. Eleventh Revision. World Health Organisation 2018.
4. Veale D, Gledhill L, Christodolou P, et al. Prevalence of body dysmorphic disorder in different settings. Body Image 2016; 18: 168-86.
5. Phillips KA, Atala KD, Pope HG. Diagnostic instruments for body dysmorphic disorder. In: American Psychiatric Association (Ed.). New research program and abstracts. 148th annual meeting of the American Psychiatric Association. Miami: American Psychiatric Association.
6. Phillips KA, Hollander E, Rasmussen SA, et al. A severity rating scale for body dysmorphic disorder: development, reliability, and validity of a modified version of the Yale-Brown Obsessive Compulsive Scale. Psychopharmacol Bull 1997; 33: 17-22.
7. Veale D, Eshkevari E, Kanakam N, et al. The Appearance Anxiety Inventory: validation of a process measure in the treatment of body dysmorphic disorder. Behav Cogn Psych 2014; 42: 605-16.
8. Veale D, Ellison N, Werner TG, et al. Development of a Cosmetic Procedure Screening Questionnaire (COPS) for body dysmorphic disorder. J Plast Reconstr Aesthet Surg 2012; 65: 530-2.
9. Yurtsever I, Matusiak Ł, Szepietowska M, et al. Cosmetic Procedure Screening Questionnaire (COPS): creation and validation of the Polish language version. Adv Dermatol Allergol 2021; 38: 881-6.
10. Rosenberg M. Society and adolescent self-image. Princeton University Press, New Jersey 1965.
11. Cronbach LJ. Coefficient alpha and the internal structure of tests. Psychometrika 1951; 16: 297-334.
12. Shrout PE, Fleiss JL. Intraclass correlations: uses in assessing rater reliability. Psychol Bull 1979; 86: 420-8.
13. Szepietowski JC, Salomon J, Pacan P, et al. Body dysmorphic disorder and dermatologists, J Eur Acad Dermatol Venereol 2008; 22: 795-9.
14. Sjorgen M. The diagnostic work up for body dismorfic disorder. J EC Psychol Psychiatry 2019; 8: 72-6.

4.3 ARTYKUŁ TRZECI:

Body Shape Questionnaire-34 (BSQ) and Functionality Appreciation Scale (FAS) - pertinent body image screening tools: Creation and validation of Polish language versions

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Body Shape Questionnaire-34 (BSQ) and Functionality Appreciation Scale (FAS) - pertinent body image screening tools: Creation and validation of Polish language versions

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Abstract

Objective: Body image is defined as the perception of one's own body. While positive body image has a positive impact on quality of life, self-dissatisfaction may lead to depression, anxiety and low self-esteem. Body image might be quantified and evaluated: relevant instruments include the Body Shape Questionnaire (BSQ) and the Functionality Appreciation Scale (FAS).

This study was designed to translate and evaluate the psychometric properties of the Polish versions of these instruments.

Methods: Translation (both forward and backward) from the original English versions of the questionnaires met international standards. Internal consistency and test-retest reliability are reported from 89 participants for the BSQ and 103 for the FAS. The participants also completed the Polish versions of the Body Image Quality of Life Inventory (BIQLI) and the Body Appreciation Scale-2 (BAS-2) to explore convergent validity.

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Results: Both, Polish versions of the BSQ and the FAS demonstrated good internal consistency and reproducibility. Convergent validity revealed a moderate relationship between the BSQ and the BIQLI scores, and a strong one between the FAS and the BAS-2 scores.
Conclusion: Polish versions of both BSQ and FAS questionnaires showed sufficiently strong psychometric properties to support their use in clinical and research work with Polish speaking patients.

Keywords
Body image, validation, BSQ, FAS

Introduction

Body image is a multidimensional construct, consisting of perceptions of the individual's body and attitudes toward the self, mostly concerning physical appearance. Body image in general can be separated into two aspects: body dissatisfaction, often conceptualized as poor body image or negative body image, with damaging impacts on life generally; *versus* positive body image, with positive life impact.[1] Negative body image includes body dissatisfaction, body preoccupation and body shame. There are certain cognitive and behavioural functions associated with negative body image, including eating behaviours, sexual behaviours and emotional stability, and body image may also directly influence the quality of life and self-esteem.[2,3] Body dissatisfaction has negative impacts such as depression, anxiety and poor self-esteem. Research on body image has traditionally focused on negative body image, however, this has been changing with increased interest in positive body image. Positive body image can be defined as accepting, holding favourable opinions toward, and respecting the body.[1]

Body image nowadays is one of the most important parts of self-being. Social media, particularly in Europe and Northern America has created a 'body aware' population.

Body image is generally considered a stable trait but amenable to change in relation to interventions, rather than as a situational variable. It can be measured and it is relevant to quantify the effects of body image on various self-experiences and life contexts.[2,4] Body image consists of at least two axes: the attitudinal axis – evaluation of satisfaction with the appearance, and the self-perception axis – cognitive-behavioural emphasis on individual appearance.[3,4]

There are several instruments for the assessment of body image, among them the Body Shape Questionnaire (BSQ), assessing negative body image, developed by Cooper et al. in 1987, mostly concentrated on excessive concern about the body shape typical of eating disorders;[5,6] and the Functionality Appreciation Scale (FAS), measuring positive body image, developed by Alleva et al. in 2017, evaluating body functionality, defined as a multifaceted feature, including not only aspects such as internal processes and physical abilities, but also creativity, bodily senses, ability to communicate with others, and self-care.[7,8] The BSQ and the FAS original versions are in English, but not only both are widely used in various languages to evaluate body satisfaction, but also both can be used free of charge. These factors led us to choose these measures for translation.

Although a few tools measuring body image are available in the Polish language, e.g., the Body Appreciation Scale-2 (BAS-2),[9] the Body Image Quality of Life

Inventory (BIQLI; both used for the convergent validity in our work),[10] the Multidimensional Body-Self

Relations Questionnaire (MBSRQ),[11] the Body Esteem Scale (BES),[12] the Appearance Appreciation Index (AAI),[13] the Cosmetic Procedures Screening Questionnaire (COPS; the last two validated lately by our team),[14] we chose to translate and conduct preliminary psychometric exploration of the BSQ and the FAS to expand the diversity of the body image assessment tools, deliver possibilities for the measurement of both negative and positive body image and equal the means accessible worldwide. This paper reports these translations and preliminary psychometric explorations.

Materials and methods

The BSQ is a self-reported measurement of the body shape concerns typical of bulimia nervosa and anorexia nervosa. The questionnaire has 34 items scored from 0 to 6 points (least and most impaired respectively) with the sum of the questions giving a range from 0 to 204. The higher score indicates greater impairment with a cut-off point from the original UK studies of 80 suggesting mild concern with shape. The questionnaire was designed for women but can be used for men with slight wording changes following the author's guidelines.[6]

The FAS was developed to reflect recognition of body functionality: respecting, appreciating and honouring the body for its capability, and improving the awareness of body usefulness. It contains 7 questions scored from 0 points (no appreciation) to 5 points (maximal appreciation) and the score is the average of the item scores: range 0–5 points with higher scores indicating greater appreciation of body functionality. The questionnaire was designed for both men and women.[7]

The project was approved by the Bioethical Committee of the Medical University of Wroclaw - KB number 325/2020. The study was conducted following the principles of Good Clinical Practice and the principles of the Helsinki Declaration of the World Medical Association.

Translation and preliminary validation process

The translations of both BSQ and FAS questionnaires followed an established international standard[15] involving permissions to translate from copyright holders. Following this, the original English versions of both questionnaires were each translated into the Polish language by two independent translators. Then the translated versions of both the BSQ and the FAS were compared by bilingual experts in the field and final, unified versions were created. Next, other independent translators, who were not familiar with the original versions of BSQ or FAS questionnaires, performed reverse translations from Polish to English. The reverse translations were sent to the copyright holders of the original versions of the BSQ and the FAS, who advised about changes to create the final Polish versions. For the BSQ a teleconference ran through all items, for the FAS online correspondence was sufficient.

After the translation process, the psychometric exploration was performed. We recruited participants via social media i.e., Facebook, Messenger and Instagram using

posts inviting completion of a Google Forms survey. The only motivation invited was to contribute to knowledge, no other incentive was offered. The participants were asked to complete the questionnaires twice with a 3–6-day interval (which is considered sufficiently long to prevent the individuals from remembering previous answers) to ascertain test-retest reliability.[16] No participants had undergone aesthetic procedures during this interval.

The BSQ was initially completed by 137 participants and a second completion by 89 participants (64.96%), whereas the FAS was primarily completed by 153 participants and secondarily by 103 (67.32%). No reminders were given for the second completion.

The forms described the study and obtained informed consent and the participants were asked to complete the questionnaires, whether they were understandable and how long completion took.

To examine convergent validity respondents completing the BSQ also completed the Polish version of BIQLI (the Body Image Quality of Life Inventory)[17] and those undertaking the FAS filled in the Polish version of BAS-2 (the Body Appreciation Scale-2).[3] The BIQLI addresses 19 contexts or life realms where body image has a significant role. Responses rate body image from highly negative to highly positive impact on a 7-point bipolar scale (–3 to + 3). The quality of life-related to body image is calculated as a mean of the 19 life spheres of the questionnaire. The BAS-2 consists of 10 items each answered on a 6-point (0–5) scale and scored as the mean of the items scores where higher scores indicate body appreciation. These scoring rules predict a negative correlation between the BSQ and BIQLI and a positive correlation between the FAS and BAS-2, as found in previous papers on body image.[1,7]

For the BSQ the sample consisted of 89 women, aged between 22–57 years old (mean, 36.18 with standard deviation [SD] 9.13) and that of the FAS involved a sample of 22 men (36.1 ± 8.89) and 81 women aged between 22–57 years old (35.03 ± 8.69). All participants were identified as white and employed, the majority had high socioeconomic status (73.03% and 68.93% for BSQ and FAS validation sub-studies respectively), the lowest education level was high school diploma (4.49% and 5.83%) and the highest postgraduate degree (11.23% and 6.79%). These samples were consistent with those of the original papers on the BSQ and the FAS in the terms of population scope, age and gender.[5,7]

Statistical analysis

The statistical analysis was performed using Statistica 13 (Dell, Inc., Tulsa, USA) software. The internal consistency of the questionnaire was evaluated with the Cronbach α coefficient, where a value of at least 0.7 is often labelled "sufficient" questionnaire internal consistency and values above 0.9 labelled "very good".[18] The intraclass correlation coefficient (ICC) assesses general linear agreement between scores, therefore it was used to assess the questionnaire reproducibility (test-retest reliability). An ICC of at least 0.7 has been deemed adequate.[19] In addition, Spearman correlation coefficients are reported as scores were not Gaussian in distribution. The Spearman coefficient also does not assume linearity, only measuring rank correlation.

Scores from the first and second completions were compared with the Wilcoxon test to detect central location shift with p-value ≤ 0.05 considered statistically significant. The

Holm-Bonferroni correction for multiple comparisons was used to minimize the risk of spuriously statistically significant findings arising from the number of tests (number of tests used for this correction: 34 and 7 for the BSQ and the FAS, respectively).

Results

There were no comments on problems understanding the questions and completion took between three and five minutes for the BSQ and one to two minutes for the FAS. The overall average scores obtained for the BSQ and the FAS were 79.60 ± 33.47 (range, 34–177) and 4.38 ± 0.61 (range, 2.29–5), respectively. Cronbach's α for the BSQ was 0.97 (95% parametric CI: 0.96 to 0.98) and 0.88 for the FAS (95% CI: 0.84 to 0.91). The ICC for test-retest reliability was 0.95 (95% CI: 0.93 to 0.96) for the BSQ and 0.85 for the FAS (95% CI: 0.80 to 0.89). Similarly, highly statistically significant and strong positive Spearman correlations were found (BSQ $R_S = 0.94$, $p < 0.001$, 95% CI: 0.91 to 0.96; FAS $R_S = 0.86$, $p < 0.001$, 95% CI: 0.81 to 0.90).

No statistically significant mean changes with repeat completion were found for the total score nor any particular question (on day 0 and day 3–6) for either questionnaire (Tables 1 and 2).

The convergent validity procedure revealed that the BSQ correlated moderately negatively with the BIQLI ($R_S = -0.30$, $p = 0.01$ 95% CI: −0.48 to −0.10), indicating that higher scores on the BSQ were associated with a lower body image quality of life. The convergent validity of the FAS and the BAS-2 was stronger ($R_S = 0.73$, $p < 0.001$, 95% CI: 0.62 to 0.81) (Figure 1 & 2).

Discussion

Research on body image has significantly expanded over the past years resulting in the creation of multiple instruments to assess body image; similarly, as body image is multidimensional, numerous measures exist to rate its various components such as perceptual, evaluative, affective, cognitive and behavioural aspects.[4,20] Among these instruments, the BSQ and the FAS have proved useful for a primary evaluation of body image

Table 1. Reproducibility of results of the Functionality Appreciation Scale (FAS).

Question	1st assessment	2nd assessment	p-value	z-score
Q1	4.16 ± 0.92	4.21 ± 0.78	0.73	0.34
Q2	4.47 ± 0.78	4.46 ± 0.70	0.83	0.21
Q3	4.35 ± 0.77	4.34 ± 0.73	0.83	0.22
Q4	4.64 ± 0.60	4.56 ± 0.66	0.17	1.36
Q5	4.57 ± 0.70	4.57 ± 0.58	0.91	0.11
Q6	4.09 ± 1.02	4.03 ± 1.04	0.57	0.57
Q7	4.37 ± 0.77	4.29 ± 0.85	0.38	0.87
TOTAL SCORE	4.38 ± 0.61	4.35 ± 0.62	0.48	0.71

Table 2. Reproducibility of results of the Body Shape Questionnaire (BSQ).

Question	1st assessment	2nd assessment	p-value	z-score
Q1	2.74 ± 1.39	2.64 ± 1.45	0.41	0.83
Q2	3.15 ± 1.53	3.19 ± 1.50	0.74	0.34
Q3	2.49 ± 1.49	2.38 ± 1.53	0.35	0.93
Q4	3.49 ± 1.64	3.17 ± 1.66	0.02*	2.31
Q5	3.43 ± 1.49	3.04 ± 1.53	0.01*	2.50
Q6	2.79 ± 1.59	2.64 ± 1.58	0.25	1.16
Q7	1.83 ± 1.19	1.78 ± 1.19	0.58	0.55
Q8	1.45 ± 0.97	1.38 ± 0.82	0.50	0.67
Q9	2.23 ± 1.31	2.09 ± 1.16	0.21	1.24
Q10	2.00 ± 1.46	1.79 ± 1.28	0.20	1.29
Q11	1.57 ± 1.02	1.85 ± 1.16	0.03*	2.17
Q12	2.70 ± 1.35	2.79 ± 1.37	0.67	0.43
Q13	1.77 ± 1.00	1.68 ± 1.02	0.31	1.02
Q14	2.26 ± 1.36	2.13 ± 1.31	0.37	0.90
Q15	2.51 ± 1.40	2.47 ± 1.25	0.91	0.11
Q16	2.04 ± 1.50	2.11 ± 1.59	0.61	0.51
Q17	2.70 ± 1.68	2.74 ± 1.52	0.73	0.35
Q18	1.34 ± 0.76	1.32 ± 0.69	0.81	0.24
Q19	2.17 ± 1.22	2.13 ± 1.41	0.63	0.48
Q20	2.28 ± 1.12	2.21 ± 1.20	0.49	0.69
Q21	2.98 ± 1.57	2.98 ± 1.61	0.97	0.03
Q22	2.79 ± 1.74	2.79 ± 1.61	0.83	0.21
Q23	2.60 ± 1.69	2.60 ± 1.61	1.00	0.00
Q24	2.57 ± 1.64	2.46 ± 1.46	0.51	0.66
Q25	2.17 ± 1.48	2.19 ± 1.42	0.94	0.07
Q26	1.15 ± 0.66	1.19 ± 0.68	0.18	1.34
Q27	1.19 ± 0.77	1.23 ± 0.79	0.36	0.91
Q28	2.79 ± 1.56	2.66 ± 1.54	0.25	1.16
Q29	2.28 ± 1.23	2.33 ± 1.25	0.67	0.43
Q30	2.94 ± 1.61	2.96 ± 1.49	0.83	0.21
Q31	2.38 ± 1.45	2.38 ± 1.38	0.85	0.19
Q32	1.23 ± 0.70	1.26 ± 0.74	0.69	0.40
Q33	1.83 ± 1.05	1.96 ± 1.16	0.18	1.33
Q34	3.77 ± 1.62	3.70 ± 1.63	0.55	0.60
TOTAL SCORE	79.60 ± 33.47	77.98 ± 33.97	0.07	1.79

Note: *$p < 0.05$.

disturbances with the BSQ addressing the body shape preoccupations typical for bulimia nervosa and anorexia nervosa[5,6] while the FAS reflects body functionality appreciation.[7]

The aims of this report were to document that a thorough translation process was used and to report basic psychometric properties for the Polish version of the BSQ and the FAS in non-clinical samples, as such information is necessary before translated questionnaires are used in clinical practice. Evaluation of the Polish version of the BSQ revealed very good internal consistency and test-retest reliability. It was not possible to compare these results with those from the 1987 original paper as no such statistical analysis was reported there.[5] However, our results were similar to those obtained in other

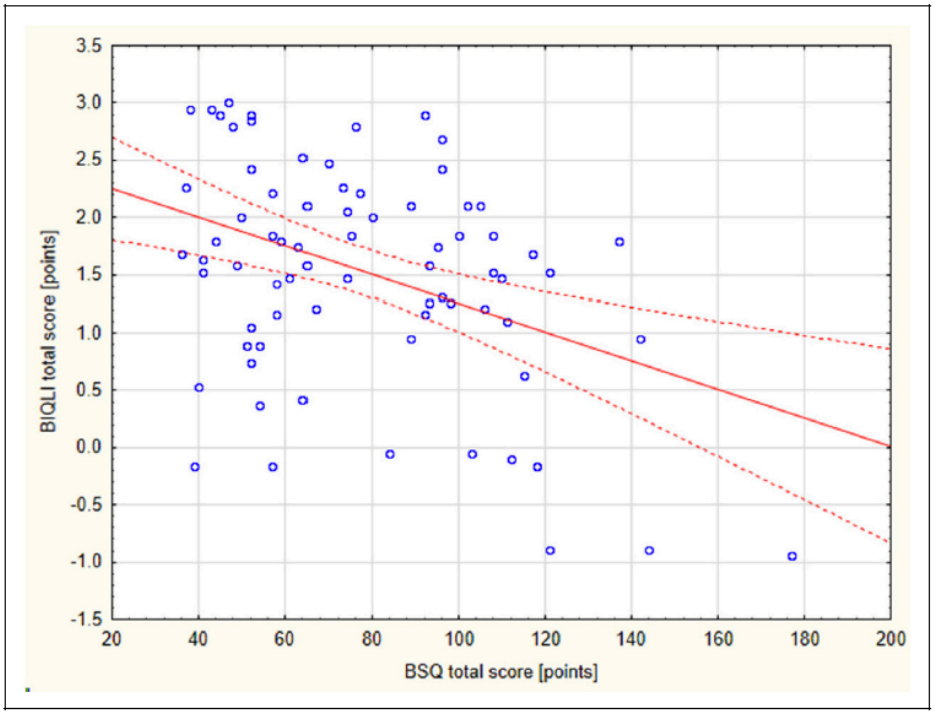

Figure 1. The correlation between total scores of the Body Shape Questionnaire (BSQ) and the Body Image Quality of Life Inventory (BIQLI).

validation works conducted on general populations by: Taylor in 1987,[21] Probst et al. in 2008,[22] Conti et al. in 2009[23] (overall average score 81.5 ± 28.4, Cronbach α coefficient 0.97 for work by Taylor; Cronbach α coefficient 0.97, ICC 0.88 for work by Probst et al.; overall average score 73.9 ± 34.6, Cronbach α coefficient 0.96, ICC 0.91 for work by Conti et al.; compared to overall average score 79.60 ± 33.47, Cronbach α coefficient 0.97 and ICC 0.95 for our data).

Compared to the original version of the FAS questionnaire (conducted on the general population), the translated Polish language version showed a similar, overall average score (4.18 ± 0.63 in the original paper [s.3] vs. 4.38 ± 0.61 here), good test-retest reliability measured with ICC (0.81 in original paper vs. 0.85 in translated one) and internal consistency (Cronbach α coefficient 0.86 in original paper vs. 0.88 in these data).[7]

In addition to these very encouraging reliability findings, both questionnaires showed statistically significant convergent validity relationships with other accepted measures of body image (the BSQ correlated moderately, negatively with the BIQLI and the FAS correlated strongly with the BAS-2).

Of course, this study has limitations. Firstly, it was conducted 100% online due to pandemic restrictions which, with the fact that it is an unfunded project, restricted sample size and clarity about the sampling frame. Moreover, the sample is a general population sample, not a clinical sample. The test-retest follow-up period used is shorter than what has been employed for some other psychometric evaluations, but a 3 to 6 days interval is considered sufficiently long, as no statistical differences are observed between such

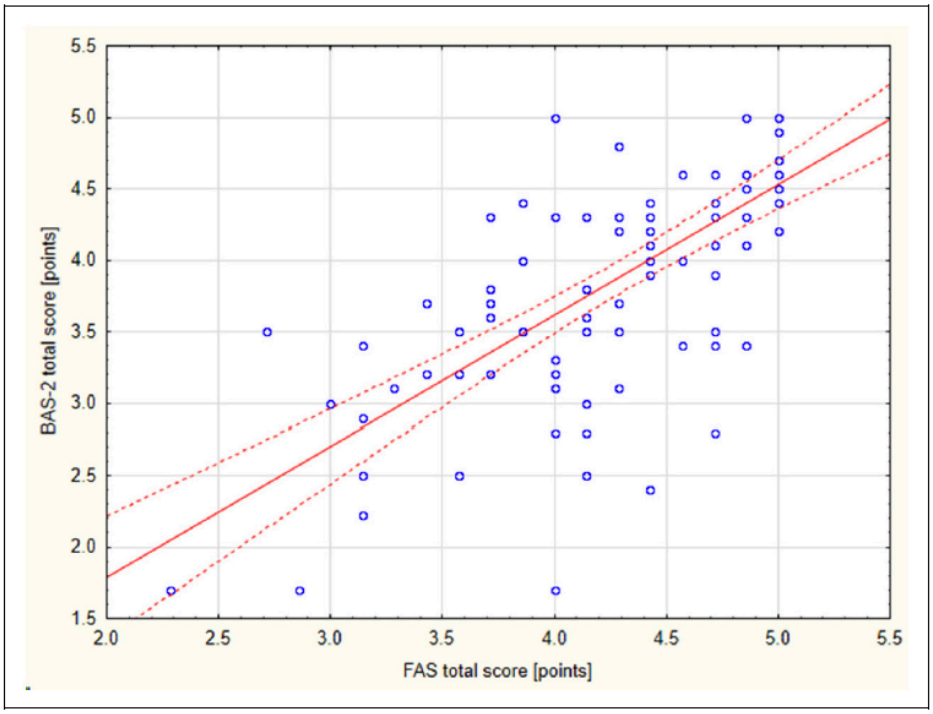

Figure 2. The correlation between total scores of the Functionality Appreciation Scale (FAS) and the Body Appreciation Scale-2 (BAS-2).

an interval and longer periods.[10] What is more, the questionnaires were designed originally for UK/U.S. populations with some political and cultural differences from the Polish population. However, given how little funding there is for psychometric explorations, and that the BSQ and the FAS are still used currently in many different countries, we decided that there was more than enough justification to proceed with this work for Poland/Polish.

These findings support these Polish versions of the BSQ and the FAS for clinical and research purposes, though these findings should be treated as preliminary but providing a solid foundation to expand research on body image. Future studies, with funding, should involve help-seeking samples, larger samples and more complex designs including more test-retest completions over wider intervals to explore longer-term stability and exploration of sensitivity to change across interventions in help-seeking samples.

To conclude, the preliminary results of the present study demonstrated promising psychometric results of the BSQ and the FAS questionnaires in samples of Polish-speaking individuals. These translated instruments would appear to be suitable for the evaluation of body shape distress in Polish speakers for research or clinical purposes.

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Declaration of conflicting interests

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References

1. Tylka TL and Wood-Barcalow NL. The Body Appreciation Scale-2: item refinement and psychometric evaluation. *Body Image* 2015; 12: 53–67.
2. Jáuregui-Lobera I, Bolaños-Ríos P and Ruiz-Prieto I. Thought–shape fusion and body image in eating disorders. *Int J Gen Med* 2012; 5: 823–830.
3. Pimenta F, Rosas R, Campos J, et al. Body image quality of life inventory: preliminary study for the adaptation with a Portuguese sample. *Obes Facts* 2017; 0: 111.
4. Kling J, Kwakkenbos L, Diedrichs PC, et al. Systematic review of body image measures. *Body Image* 2019; 30: 170–211.
5. Cooper PJ, Taylor MJ, Cooper Z, et al. The development and validation of the Body Shape Questionnaire. *Int J Eat Disord* 1987; 6: 485–494.
6. https://www.psyctc.org/psyctc/psyctc-org-home/instruments/body-shape-questionnaire-bsq/ [accessed 11 Dec 2020]
7. Alleva JM, Tylka TL and Van Diest AM K. The f[illegible] opment and psychometric evaluation in U.S. con[illegible] 23: 28–44.
8. Alleva JM and Tylka TL. Body functionality: a review of the literature. *Body Image* 2020 [epub], March 2021; 36: 149–171. https://doi.org/10.1016/j.bodyim.2020.11.006
9. Razmus M and Razmus W. Evaluating the psychometric properties of the Polish version of the Body Appreciation Scale-2. *Body Image* 2017; 23: 45–49.
10. Czepczor-Bernat K, Modrzejewska A and Modrzejewska J. A preliminary study of body image and depression among adults during COVID-19: a moderation model. *Arch Psychiatr Nurs* 2022; 36: 55–61.
11. Matera AB and Rogoza R. Validation of the Polish version of the Multidimensional Body-Self Relations Questionnaire among women. *Eat Weight Disord* 2015; 20: 109–117.
12. Lipowska M and Lipowski M. Polish normalization of the Body Esteem Scale. *Health Psychol Rep* 2013; 1: 72–81.
13. Yurtsever I, Matusiak L, Szepietowska M, et al. Cosmetic Procedure Screening Questionnaire (COPS): creation and validation of the Polish language version. *Postepy Dermatol Alergol* 2021; 38: 881–886.

14. Yurtsever I, Matusiak L, Szepietowska M, et al. Title Appearance Anxiety Inventory (AAI): creation and validation of Polish language version. *Adv Dermatol Allergol* 2022, Epub ahead of print. Online publish date: 2021/11/14. https://doi.org/10.5114/ada.2021.112767
15. Worth AP and Balls M. The principles of validation and the ECVAM validation process. *Altern Lab Anim* 2004, 32 Suppl 1B, 623–629. https://doi.org/10.1177/026119290203002S03
16. Marx RG, Menezes A, Horovitz L, et al. A comparison of two time intervals for test-retest reliability of health status instruments. *J Clin Epidemiol* 2003; 56: 730–735.
17. Cash TF and Fleming EC. The impact of body image experiences: development of the body image quality of life inventory. *Int J Eat Disord* 2002; 31: 455–460.
18. Cronbach LJ. Coefficient alpha and the internal structure of tests. *Psychometrika* 1951; 16: 297–334.
19. Shrout PE and Fleiss JL. Intraclass correlations: uses in assessing rater reliability. *Psychol Bull* 1979; 86: 420–428.
20. Kapstad H, Nelson M, Overas M, et al. Validation of the Norwegian short version of the Body Shape Questionnaire (BSQ-14). *Nord J Psychiatry* 2015; 69: 509–514.
21. Taylor MJ. *The nature and significance of body image disturbances*. PhD thesis University of Cambridge: UK, 1987, file:///tmp/Pages-from-BSQ_PhD_thesis_Taylor_1987_chapter2.pdf.
22. Probst M, Pieters G and Vanderlinden J. Evaluation of body experience questionnaires in eating disorders in female patients (AN/BN) and nonclinical participants. *Int J Eat Disord* 2008; 41: 657–665.
23. Conti MA, Cordás TA and Dias de Oliveira MDR A study of the validity and reliability of the Brazilian version of the Body Shape Questionnaire (BSQ) among adolescents. *Rev Bras Sáude Matern Infant* 2009; 9: 331–338.

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Ida Yurtsever works as dermatologist at prestigious private clinics in both Warsaw and Wroclaw, Poland. She is an expert specially in Aesthetic Dermatology field. She obtained her medical degree from the Warsaw Medical University in 2013 and completed her specialization in Dermatology and Venereology at Hospital of Ministry of Interior in Warsaw in 2019. She is a postgraduate of Aesthetic Medicine School at Warsaw Medical University. She continues to publish articles in multiple peer-reviewed dermatology journals. She is a member of the Polish Dermatology Society and the European Academy of Dermatology and Venereology. As a member of Polish Aesthetic Medicine and Antiaging Society, she continually participates in numerous national and international aesthetic dermatology congresses. Currently, she works on her PhD thesis.

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Marta Szepietowska is a medical student of Wroclaw Medical University in Poland. Within the Erasmus Plus program she completed one year of her studies at the Faculty of Medicine of

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Chris Evans holds visiting chairs at the University of the Americas (UDLA) in Quito, Ecuador and at the University of Roehampton, London UK. He worked as a medical psychotherapist from 1984 to 1996 with qualifications in analytic/psychodynamic therapy from the Royal College of Psychiatrists, Group Analysis from the IGA, London and Family Systemic Therapy from the Tavistock Clinic and University of East London. He worked clinically from community to forensic high security. Since stopping clinical work he works as an independent researcher with wide interests but particular expertise in psychometrics and routine change measurement, see https://www.psyctc.org/psyctc/ and as maintaining the CORE (Clinical Outcomes in Routine Evaluation) system (https://www.coresystemtrust.org.uk/).

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4.4 ARTYKUŁ CZWARTY:

To inject or to reject? The body image perception among aesthetic dermatology patients.

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Article

To Inject or to Reject? The Body Image Perception among Aesthetic Dermatology Patients

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Abstract: Background: Nowadays, aesthetic dermatology treatment has become not only physical beautification but also it can have positive effects on patients' mental health. Body dysmorphic disorder can be the reason for treatment dissatisfaction. In the general population, the prevalence of BDD is 1.9% and it is more common among cosmetic patients. The aim of this study was to conduct the most comprehensive evaluation of body image and BDD among aesthetic patients. Methods: We recruited a group of 412 individuals, who were asked to complete 6 different on-line questionnaires concerning self-image, i.e., COPS, AAI, FAS, BAS-2, BSQ-16, and RSES. Results: The prevalence of BDD ranged from 7.28% to 11.17%, depending on the screening tool that was used. Our research revealed that BDD susceptibility, body image, body appreciation, and self-esteem were strongly interrelated ($p < 0.001$). A higher BMI was a risk factor for BDD, body dissatisfaction, and depreciation. The financial status markedly influenced all of the features. A history of psychiatric treatment influenced the risk of BDD, body satisfaction, body appreciation, and self-esteem. A history of cosmetic procedures and treatment satisfaction had no impact on the obtained results. Conclusions: Improving recognition of body dissatisfaction among aesthetic patients is very important. The psychometric assessment of patients before cosmetic treatment could be of help in choosing the appropriate approach.

Keywords: body image; BDD; aesthetic medicine; cosmetic dermatology; self-esteem; body satisfaction; body appreciation

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1. Introduction

The growing popularity of aesthetic dermatology treatment and easy accessibility to the aesthetic market has led to the situation that undergoing aesthetic procedures has become not only for physical beautification but also it can have positive effects on patients' mental health. A report that was conducted in 2018 revealed that in Poland 600,000 individuals admitted to undergoing aesthetic treatment. A total of 65% of individuals that were undergoing aesthetic procedures were residents of larger cities, 94% had a higher or secondary education, 75% were professionally active, and 59% of them had good monthly income (above GDP per capita). The main motives to undergo aesthetic treatment that were reported by the responders were the desire to improve well-being and increase attractiveness, self-confidence, and self-acceptance. While most of the women were driven to act by dissatisfaction with their appearance, a third of the men went to an aesthetic medicine office at the instigation of a loved one. A total of 96% of aesthetic dermatology patients are happy with the procedures that are performed [1]. However, the amount of unhappy individuals after aesthetic treatment is constantly increasing. Did the procedure go wrong, or were the primary expectations unreal? Where is the line between innocent beautification and unhealthy, numerous face/body modifications? Would evaluating body

image or screening for body dysmorphic disorder (BDD) not be a reasonable solution before injecting? These are the questions that are worth asking and we will try to answer them in our work.

Body image is defined as a multidimensional construct, consisting of self-perception and self-attitude (concerning physical appearance). Body image has two aspects: body dissatisfaction, which is conceptualized as a poor or negative body image versus positive body image, a.k.a. body appreciation [2]. A poor body image includes preoccupation with one's body, body shame, and body dissatisfaction. It may influence self-esteem and quality of life leading to depression, eating and sexual disorders, and emotional instability and poor self-esteem [3,4]. Positive body image can be understood as respecting, accepting, and holding favorable opinions toward the body [2].

BDD is a mental health disorder where assumed defect in physical outlook, disables everyday life functioning [5–9]. It is preoccupation with thinking and behaviors connected to concerns with appearance. Enrico Morselli, the Italian psychiatrist firstly described BDD in 1891 [5]. He used the term "dysmorphophobia" which referred to the Greek word "dysmorphia", meaning hideousness. BDD is correlated with severe suffering, constant intrusive thoughts, shame, depression, poor quality of life, social distancing, and suicide [5–8]. In general population, the prevalence of BDD is assessed as 1.9%. It is more common among cosmetic dermatology (around 9%) and cosmetic surgery patients (around 13%) [5,6,10].

It is worth highlighting that approximately 76% of BDD patients undergo aesthetic treatments in order to 'repair' perceived defects in their physical appearance [6]. Moreover, most of the patients with BDD presenting to aesthetic professionals do not recognize themselves as suffering from any mental health disorder [5]. Unfortunately, BDD among aesthetic patients is usually or misdiagnosed or underdiagnosed, which leads to an increased risk of treatment dissatisfaction, not to mention the delay in necessary psychiatric treatment, depression, prolonged suffering, and even suicide [7,11].

The aim of this study was to conduct the most comprehensive evaluation of body image and BDD among patients undergoing aesthetic dermatology procedures. Although some of the aspects that were analyzed in the paper have been previously studied, e.g., BDD in aesthetic patients [12–14] or self-esteem and body satisfaction [15], to the best of our knowledge our study encompasses the largest population of aesthetic patients ever studied to date, using multiple screening tools; there has never been such diversity of questionnaires used in one paper. We also wanted to underline the importance of the psychometric assessment, facilitating proper diagnosis, before conducing the beauty treatment.

We assumed that individuals undergoing aesthetic treatment are more susceptible to self-image/ body-image disturbances and BDD, which could led to unsatisfying results, therefore we wanted to underline the importance of the psychometric assessment, facilitating proper diagnosis, before conducing the beauty treatment. For that purpose we tried to evaluate BDD versus non BDD individuals, the body image, the body appreciation and self-esteem level in light of other aspects such as age, sex, BMI, history of psychiatric treatment, past procedures, education and financial status.

2. Materials and Methods

We recruited group of 412 subjects, i.e., 397 women and 15 men, aged 18–71 years (mean, 35.78 ± 7.57 years), who checked into an aesthetic clinic in order to have an aesthetic procedure in the close future (biostimulators, botulinum toxin, hyaluronic acid fillers, mesotherapy, skin resurfacing, vascular laser treatment, etc.). It is worth underlying, that the sample size of 385 subjects is the minimum number to meet the desired statistical constraints (to have a confidence level of 95% that the real value is within ±5%) and to be considered as representative for the Polish population. The detailed characteristics of the studied group is given in the Table 1. The participants were asked to complete 6 different on-line questionnaires that were all validated for Polish language, concerning body image in general. The main criterium we took into consideration, next to general

availability of the questionnaires, to assess all the analyzed parameters, i.e., BDD, body image, body appreciation and self-esteem, was the availability of the validated tools in Polish language. Besides the questionnaires, the studied individuals were also asked for their demographics, self-reported financial status, education level, a history of psychiatric treatment and previous aesthetic treatment. The patients were given an iPad with Google Forms, that was previously created specifically for that purpose. Informed consent was obtained from each individual.

Table 1. Characteristics of the studied group undergoing aesthetic dermatology procedures.

	All (n = 412)	Females (n = 397)	Males (n = 15)	p-Value *
Age (mean ± SD)	35.78 ± 7.57	35.82 ± 7.61	34.73 ± 6.62	NS
BMI (mean ± SD)	22.1 ± 3.95	22.1 ± 3.95	24.96 ± 2.71	<0.001
BMI ≥ 25 (n)	61 (14.81%)	54 (13.6%)	7 (46.67%)	<0.001
BMI ≥ 30 (n)	15 (3.64%)	15 (3.78%)	0 (0%)	N/A
Antidepressants (n)	41 (9.95%)	38 (9.57%)	3 (20%)	NS
Antipsychotics (n)	17 (4.13%)	15 (3.71%)	2 (13.33%)	NS
First time AP (n)	69 (16.75%)	64 (16.12%)	5 (33.33%)	NS
Treatment satisfaction after APs (n)	315 (81.40%)	306 (80.95%)	9 (75%)	NS
APs done before (n)				
needle mesotherapy	184 (44.66%)	175 (44.08%)	9 (60%)	NS
hyaluronic acid /filler/	202 (49.03%)	197 (49.62%)	5 (33.33%)	NS
botulinum toxin	188 (45.63%)	183 (46.1%)	5 (33.33%)	NS
laser	188 (45.63%)	181 (45.59%)	7 (46.67%)	NS
PDO lifting threads	16 (3.88%)	16 (4.03%)	0 (0%)	N/A
plastic surgery	48 (11.65%)	47 (11.84%)	1 (6.67%)	NS
non-invasive cosmetic procedures	214 (51.94%)	208 (52.39%)	6 (66.67%)	NS
Education level (n)				
elementary education	0 (0%)	0 (0%)	0 (0%)	
high school diploma	43 (10.44%)	38 (9.57%)	5 (33.33%)	<0.01
graduate degree	369 (89.56%)	359 (90.43%)	10 (66.67%)	
Financial status (n)				
poor	12 (2.91%)	12 (3.02%)	0 (0%)	
average	48 (11.65%)	48 (12.09%)	0 (0%)	NS
good	237 (57.52%)	228 (57.43%)	9 (60%)	
very good	115 (27.92%)	109 (27.46%)	6 (40%)	

*—differences between genders. BMI—body mass index, AP—aesthetic procedure, SD—standard deviation, NS—not significant, N/A—not applicable.

This project was conducted in accordance with the principles of Good Clinical Practice and the principles of the Helsinki Declaration of the World Medical Association and was approved by the Bioethical Committee of the Medical University of Wroclaw (KB number 325/2020).

The questionnaires that were applied in our study were:

The COPS (the Cosmetic Procedure Screening Questionnaire), which evaluates the unattractive characteristics with regard to BDD diagnostic criteria. The questionnaire contains 9 items which are rated from 0 points (least impaired) to 8 points (most impaired), ranging from 0 to 72 points. The score is a sum of inquiries 2 to 10. Questions 2, 3, and 5 are reversed. The higher result indicates for greater impairment. Individuals who have 40 points or more are likely to have BDD [11,16,17].

The AAI (the Appearance Anxiety Inventory) was developed primarily to measure the outcomes of the therapy in people with BDD. The scale encompasses 10 questions. Each item is evaluated on a 5-point Likert scale ranging from 0 points (not at all) to 4 points (all the time). The total score is obtained by summing the items. The maximum score is 40 points, and higher scores indicate greater frequency of a process. Due to the fact that the author of the AAI did not establish a clinical cut-off, we assumed the cut-off for the BDD

high-risk group as 20, we took the average of two scores that were reported by Veale et al. in 2014, where a clinical sample of adults with BDD had a median score of 27 points, and adults that were concerned with their appearance, 13 points [18,19].

The FAS (the Functionality Appreciation Scale) was developed to reflect appreciation of body functionality: respecting, recognizing, and honoring the capability of the body. It consists of 7 questions ranging from 0 points (no appreciation) to 5 points (maximal appreciation). The score is the average of all the items, with higher scores indicating greater appreciation of body functionality (ranges 0–5 points) [20,21].

The BAS-2 (the Body Appreciation Scale) is comprised of 10-items, answered on a 6-point scale (0–5) each. The score is the mean of the items. The higher scores indicate higher body appreciation [2,22].

The BSQ-16 (the Body Shape Questionnaire) evaluates body shape concerns that are typical of anorexia nervosa and bulimia nervosa. The questionnaire contains of 16 items, scored from 0 points to 6 points (least and most impaired, respectively), with the sum of the questions ranging from 0 points to 96 points. A cut-off of 38 points suggests mild concern with shape. The questionnaire was designed for women but can be used for men with slight wording changes following the author's guidelines [21,23,24].

The RSES (the Rosenberg Self Esteem Scale) is one of the most used self-esteem measurements. It encompasses 10 items, evaluated on a 4-point Likert scale each (strongly agree, agree, disagree, and strongly disagree). Questions 1, 2, 4, 6, and 7 are reversed and have a positive impact. The total score ranges from 10 points to 40 points where a score less than 15 points signifies low self-esteem [25].

Statistical Analysis

The statistical analysis was performed with Statistica 13.3 software (TIBCO Software Inc., Palo Alto, CA, USA). To examine the differences between categorical variables, the Chi-squared test was used. Differences between groups were established using the Kruskal–Wallis test and the Mann–Whitney U-test as the analyzed variables were of abnormal distribution. The Spearman's rank correlation analysis was used to assess the strength of the relationship between two different variables. p-values that were less than 0.05 indicated statistical significance.

3. Results

Of the 415 patients that were approached, 3 (0.72%) did not complete the questionnaires, leaving the total number of 412 subjects. The group consisted of 397 women, aged 18–71 years (mean, 35.82 $\pm$ 7.61 years) and 15 men, aged 23–46 years (mean, 34.73 $\pm$ 6.62 years). All of the participants were identified as white, employed, and the majority had high self-reported socioeconomical status (83.01%, n = 341; i.e., good 57.52%, n = 237 or very good 25.49%, n = 105). The lowest education level was high school diploma (10.44%, n = 43) and higher education was stated by 89.56% of participants (n = 369). A history of psychiatric treatment was given as follows: antidepressants 9.95% (n = 41) and antipsychotics 4.13% (n = 17). No one reported the diagnosis of BDD in the past. A history of cosmetic procedures was reported by 343 patients (83.25%) and 315 patients (81.40%) stated mood improvement after the aesthetic treatment (387 patients completed the treatment satisfaction question, as the questionnaires were handed in after the aesthetic procedure, even if it was the first time). The detailed characteristics of the studied group is given in the Table 1.

3.1. BDD

There were two different questionnaires, i.e., the COPS and the AAI, that were used to screen for BDD among the participants. High risk of BDD ranged from 7.28% (n = 30) using the COPS to 11.17% (n = 46) using the AAI. The mean value of the COPS total score was assessed as 19.21 $\pm$ 12.13 points (range, 0–69 points) and the AAI total score was 11.34 $\pm$ 6.57 points (range, 0–40 points). For the need of the research interpretation, the studied individuals were divided into the BDD and the non-BDD group (Table 2). High

risk BDD patients were significantly younger according to the AAI (33.50 ± 8.03 years vs. 36.06 ± 7.47 years; $p = 0.02$) than those with a lower risk of BDD; such a trend was also observed for the COPS (33.97 ± 7.45 years vs. 35.92 ± 7.57 years). The BMI of the patients that were suspected of BDD was higher than of those without the BDD suspicion (24 vs. 22; $p = 0.02$ for both questionnaires). Taking socio-economic status into consideration, according to both, the COPS and the AAI, high education to secondary education ratio was significantly lower in the BDD group than in the non-BDD group (60% vs. 93.46% and 80.43% vs. 92.35%, respectively). The financial status was reported to be higher in the non-BDD group (Table 2). Of note, psychiatric treatment was reported significantly more often in the BDD group than the non-BDD group; 41 patients reported taking antidepressant agents (COPS: 33.33% vs. 8.14%, $p < 0.001$; AAI: 21.74% vs 8.49%, $p < 0.01$), whereas 17 patients reported antipsychotic agents (COPS: 20.00% vs. 2.8%, $p < 0.001$; AAI: 15.56% vs 2.74%, $p < 0.01$). Surprisingly, a history of cosmetic procedures and treatment satisfaction was given by similar percentage of patients in both the BDD and the non-BDD groups (both questionnaires). There were no significant differences between the genders (both scales).

Table 2. Characteristics of the BDD and non-BDD groups that were undergoing aesthetic dermatology procedures, according to different screening tools.

	COPS			AAI		
	BDD (*n* = 30)	**Non-BDD (*n* = 382)**	***p*-Value**	**BDD (*n* = 46)**	**Non-BDD (*n* = 366)**	***p*-Value**
Age (mean ± SD)	33.97 ± 7.45	35.92 ± 7.57	NS	33.5 ± 8.03	36.06 ± 7.47	0.02
BMI (mean ± SD)	22.09 ± 3.89	23.9 ± 4.24	0.02	22 ± 3.21	24 ± 7.39	0.02
Antidepressants (*n*)	10 (33.33%)	31 (8.12%)	<0.001	10 (21.74%)	31 (8.47%)	<0.01
Antipsychotics (*n*)	6 (20%)	11 (2.88%)	<0.001	7 (15.22%)	10 (2.73%)	<0.001
Non-first time AP (*n*)	25 (83.33%)	315 (82.46%)	NS	35 (76.09%)	307 (83.88%)	NS
Treatment satisfaction after APs (*n*)	24 (82.76%)	291 (81.28%)	NS	36 (83.72%)	279 (81.1%)	NS
Education level (*n*)						
elementary education	*n*/A	N/A		N/A	N/A	
high school diploma	12 (40%)	25 (6.54%)	<0.001	9 (19.57%)	28 (7.65%)	0.04
graduate degree	18 (60%)	357 (93.46%)		37 (80.43%)	338 (92.35%)	
Financial status (*n*)						
poor	4 (13.33%)	8 (2.09%)		3 (6.52%)	8 (2.19%)	
average	10 (33.33%)	37 (9.69%)	0.001	8 (17.39%)	40 (10.93%)	0.04
good	8 (26.67%)	230 (60.21%)		17 (36.96%)	223 (60.92%)	
very good	8 (26.67%)	107 (28.01%)		18 (39.13%)	95 (25.95%)	

BDD—body dysmorphic disorder, COPS—the Cosmetic Procedure Screening Questionnaire, AAI the Appearance Anxiety Inventory, BMI—body mass index, AP—aesthetic procedure, SD—standard deviation, NS—not significant, N/A—not applicable.

3.2. Body Appreciation

Body appreciation was estimated using the FAS and the BAS-2, which revealed comparable results. The mean value of the FAS total score was assessed as 4.1 ± 0.72 points (range 1.0–5.0 points) and the BAS-2 total score as 3.58 ± 0.84 points (range 1.2–5.0 points). Although the age differences were not correlated to the body appreciation, a higher BMI was reported as a risk factor for the lower body appreciation ($r_S = -0.2$, $p < 0.01$). Patients with a higher body appreciation stated better financial status (statistical significance was observed just for the BAS-2, $p < 0.01$; the FAS revealed a trend, $p = 0.1$). A history of psychiatric treatment was linked to lower body appreciation (antidepressant treatment vs. no treatment: FAS total score of 3.71 ± 0.96 points vs. 4.19 ± 0.74 points, $p = 0.001$, BAS-2 total score of 3.31 ± 1.08 points vs. 4.64 ± 0.88 points, respectively [$p = 0.04$]; antipsychotic treatment vs. no treatment: FAS total score of 3.47 ± 0.94 points vs. 4.18 ± 0.75 points, $p = 0.001$, BAS-2 total score of 3.0 ± 1.06 points vs. 3.63 ± 0.9 points, respectively {$p < 0.01$}). Interestingly, a history of cosmetic procedures and treatment satisfaction did not influence the body appreciation (Table S1). Of note, a lower body appreciation was observed significantly more often in patients who were suspected of BDD than in those

without BDD suspicion ($p < 0.001$) (Table 3.). No significant differences between the genders were observed.

Table 3. Spearman's rank correlation coefficient (r_S) for total scores of all questionnaires that were used in the study ($p < 0.0001$ for all correlations).

	COPS	AAI	FAS	BAS-2	BSQ-16	RSES
COPS		0.80	−0.43	−0.65	0.67	−0.56
AAI	0.8		−0.42	−0.67	0.72	−0.57
FAS	−0.43	−0.42		0.53	−0.38	0.52
BAS-2	−0.65	−0.67	0.53		−0.66	0.68
BSQ-16	0.67	0.72	−0.38	−0.66		−0.51
RSES	−0.56	−0.57	0.52	0.68	−0.51	

COPS—the Cosmetic Procedure Screening Questionnaire, AAI—the Appearance Anxiety Inventory, FAS—the Functionality Appreciation Scale, BSQ-16—the Body Shape Questionnaire-16, BAS-2—the Body Appreciation Scale, RSES—the Rosenberg Self Esteem Scale.

3.3. Body Image

The BSQ-16 was used to evaluate body image. The mean value of the BSQ-16 total score was assessed as 42.73 ± 16.07 points (range, 2–87 points). Mild concern with shape was reported by 120 individuals (29.13%), while moderate concern was reported by 72 individuals (17.48%) and marked concern was reported by 39 individuals (9.47%). The participants with higher BMI achieved higher total scores of BSQ-16 ($r_S = 0.3$, $p < 0.001$). A history of psychiatric treatment negatively influenced body image as assessed with BSQ-16 total score (antidepressants vs. no antidepressants: 50.24 ± 20.03 points vs. 41.82 ± 15.31 points, respectively [$p = 0.02$]; antipsychotics vs. no antipsychotics: 57.53 ± 21.60 points vs. 42.04 ± 15.48 points, respectively [$p < 0.01$]). Moreover, worse financial status was reported significantly more frequently by patients with a higher risk of shape concerns ($p < 0.01$). Again, a history of cosmetic procedures and treatment satisfaction did not influence body image (Table S1). It should be highlighted that 51.28% (20/39) of individuals with marked concern with shape were suspected of BDD significantly more often according to the COPS ($p < 0.001$) and 74.36% (29/39) of individuals according to the AAI ($p < 0.001$), (Figures 1 and 2). There were no significant differences between the genders that were observed.

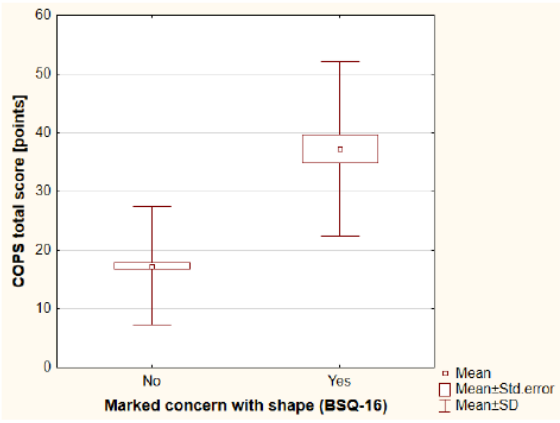

Figure 1. The differences in the COPS total score between individuals with marked concern with shape and without such concern. COPS—the Cosmetic Procedure Screening Questionnaire, BSQ-16—the Body Shape Questionnaire-16, SD—standard deviation.

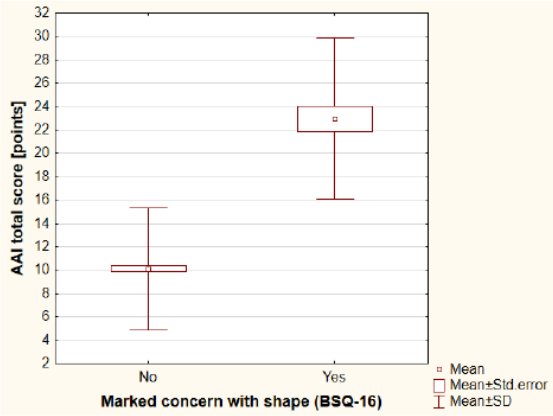

Figure 2. The differences in AAI total score between individuals with marked concern with shape and those without such concern. AAI—the Appearance Anxiety Inventory, BSQ-16—the Body Shape Questionnaire-16, SD—standard deviation.

3.4. Self-Esteem

Self-esteem was assessed by the RSES. The mean value of the RSES total score was 20.98 ± 5.44 points (range, 2–30 points). A low self-esteem was reported by 48 individuals (11.65%). The lower self-esteem that was assessed with the RSES total score was dependent on a history of psychiatric treatment (antidepressants vs. no antidepressants: 18.32 ± 6.62 points vs. 21.30 ± 5.21 points, respectively [$p < 0.01$]; antipsychotics vs. no antipsychotics: 17.35 ± 5.61 points vs. 21.18 ± 5.36 points, respectively [$p < 0.01$]). The higher the financial status, the higher the self-esteem that was noted ($p < 0.001$). Once again, a history of cosmetic procedures and treatment satisfaction did not influence the self-esteem (detailed data not shown). It is worth underlining that according to the COPS, 14 out of 48 individuals (29.17%) with low self-esteem were suspected significantly more frequently for BDD ($p < 0.001$) and according to the AAI, it was 18 out of 48 individuals (37.5%) ($p < 0.001$) (Figures 3 and 4). No significant differences were found between the genders.

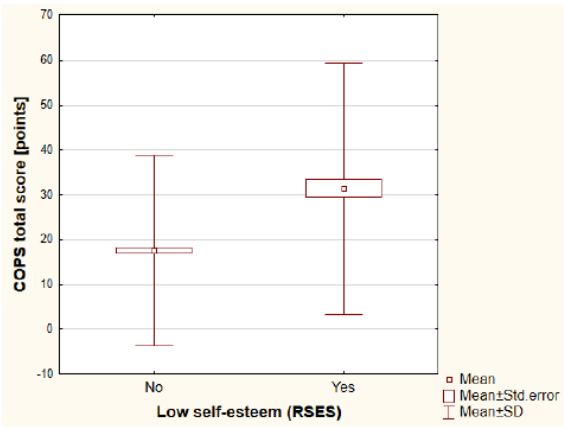

Figure 3. The differences in COPS total score between individuals with low self-esteem versus high self-esteem. COPS—the Cosmetic Procedure Screening Questionnaire, RSES—the Rosenberg Self Esteem Scale, SD—standard deviation.

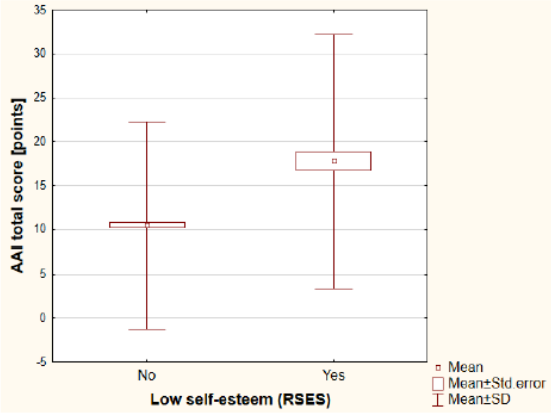

Figure 4. The differences in COPS total score between individuals with low self-esteem versus high self-esteem. AAI—the Appearance Anxiety Inventory, RSES—the Rosenberg Self Esteem Scale, SD—standard deviation.

3.5. Correlations

The Spearman's rank correlation test revealed that all the studied features were significantly interrelated as follows: the patients with a higher risk of BDD had lower body image, body appreciation, and lower self-esteem than those with lower risk; lower body appreciation was observed in subjects with lower body image, lower self-esteem, and BBD suspicion. A higher self-esteem was related to higher body image, higher body appreciation, and with a lower risk of potential BBD. Poor body image was related to lower body appreciation, lower self-esteem, and higher risk of BDD (Table 3).

4. Discussion

The aim of this study was to examine body image perception in cosmetic dermatology patients using multiple screening tools. We assumed, based on literature, that concerns with appearance are higher in aesthetic dermatology patients than in the average population. The prevalence of BDD in our studied group ranged from 7.28% to 11.17%, depending on the screening tool that was used. Those slight differences might be the result of an imprecisely defined cut-off for the AAI in the literature. Of note, the usage of a cut-off of 20 (also assumed by us) was previously described by Mastro et al. [26]. Moreover, Veale et al. [10] in 2016 summed up the five studies on BDD in cosmetic dermatology patients (less than 152 participants each), obtaining the weighted prevalence of 9.2%, which is similar to ours; the prevalence of BDD in the general population was substantially lower and assessed as 1.9%. Marked concern with shape, which also can be defined as poor body image, was assessed in our study as 9.47% and low self-esteem was found to be 11.65%.

Our research revealed that all of the examined features (BDD susceptibility, body image, body appreciation, and self-esteem) were strongly interrelated. Obviously, BDD and body dissatisfaction (poor body image) are known to be associated with low self-esteem, shame, constant intrusive thoughts, depression, anxiety, social distancing, and poor quality of life [4–7,26,27]. Conversely, low self-esteem is known as a risk factor for poor body image and BDD [15,26,28]. The dependance between body appreciation and body image was previously described by Alleva et al. in 2014 [20].

Although the available literature describes differences in BDD, body image, body satisfaction, and self-esteem between genders [6,29], we did not find such dependencies. It might be the result of scarce representation of the male group in our research.

We observed a relationship between higher BMI and BDD, body dissatisfaction, and a lack of body appreciation. The study that was conducted by Lu-Hsu et al. [30] in 2021 also revealed a link between BMI and body satisfaction. Interestingly, we did not

find any correlation between BMI and self-esteem although previous studies underlined being overweight as a factor that was associated with low self-esteem [28]. The possible explanation of this fact is the currently growing popularity of trends that are linked with a body positive attitude.

One of the most interesting findings in our study was that all of the questionnaires revealed that finance status markedly influenced all of the examined features, i.e., susceptibility to BDD, low body appreciation, poor body image, and low self-esteem. The only conclusion which could be derived from that is rather terrifying. Is socioeconomic status really so important? In previous studies, Raymore et al. [31], Valeska et al. [32], and Macêdo-Uchôa et al. [15] analyzed the relationship between socioeconomic level and self-esteem; they found a significantly higher level of self-esteem among the individuals with a higher level of finance and education. Therefore, it can be assumed that individuals from lower socioeconomic groups are more vulnerable to lower self-image and self-esteem and are thus an important target group in spreading awareness and implement prevention.

We also revealed that a history of psychiatric treatment highly influenced the risk of BDD, body satisfaction, body appreciation, and self-esteem. Previous studies described a history of depression as a known risk factor for body image disruptions and BDD due to greater sensitivity over physical appearance [3–8]. Conversely, depression can develop due to body dissatisfaction, as a result of prolonged anxiety and shame that is associated with BDD and the resulting social dysfunction [33].

It is worth underlining that a history of cosmetic procedures and treatment satisfaction did not influence any of the examined features. At the beginning of our study, we assumed whether individuals with body dissatisfaction and BDD would be dissatisfied with the received treatment, which would lead to further mood decrease. Now, there is a reason to believe that particular patients with body dissatisfaction might actually benefit from some of the aesthetic dermatology treatment. To date, the vast majority of studies have indicated that cosmetic procedures that were performed on individuals with BDD were associated with poor outcomes [7]. However, Veale at al. [34] noticed that the outcomes of the aesthetic treatment varied according to the procedure. Those findings suggested that certain cosmetic procedures are associated with better outcomes for BDD. Similarly, Crerand et al. [35] revealed a trend towards a more positive response to surgical interventions compared to less invasive treatment in terms of preoccupation with the treated body part. Moreover, Arruda Felix et al. [36] proved that patients with mild to moderate BDD may benefit from rhinoplasty.

This study has some limitations, which in our opinion do not lessen the acquired results. Firstly, the control group was not included in the research, yet the available studies on the prevalence of BDD in the general population are numerous, as well as for the Polish population [6,8,10]. Secondly, the number of male subjects was rather scarce. Although the study reflects actual situations, it was difficult to distinguish potential differences between genders. Moreover, this was a single-center study, however, it should be underlined that the sample size was sufficient to be considered representative for the whole population (to have a confidence level of 95% where the real value is within ±5% of the measured value). Finally, the studied group was not examined according to the treatment that was received. The satisfaction of the aesthetic treatment dependence on the procedure being performed could be the subject for further studies.

5. Conclusions

Summarizing, it is very significant to improve recognition of body dissatisfaction by all means among aesthetic dermatology patients. The psychometric assessment of each patient before cosmetic procedures may play an important role in planning the treatment.

A multidisciplinary approach and co-operation between aesthetic physicians, psychiatrists, and psychologists could be the standard of the future in determining the line between pathologic body image disturbances and healthy where one is satisfied and proud with self-image, which is required for normal development [27]. A refusal to perform aesthetic

procedures and send for psychiatric treatment seems to be the best therapeutic option for some disturbed patients.

As a closure, we would like to add some positive attitude towards individuals with broadly understood body dysmorphic disorders. Being more aesthetically sensitive than general results in a greater emotional reaction to more attractive features, and the importance of beauty plays a greater role in their identity. Therefore, some BDD patients may have greater aesthetic appreciation skills, manifested in their education in art, design, or aesthetic practice itself [6].

Supplementary Materials: The following supporting information can be downloaded at: https://www.mdpi.com/article/10.3390/jcm12010172/s1, Table S1: The influence of cosmetic procedures and treatment satisfaction history on body appreciation (FAS, BAS-2) and body image (BSQ-16) outcomes.

Author Contributions: Conceptualization, I.Y., Ł.M. and J.C.S.; methodology, I.Y., Ł.M. and J.C.S.; software, Ł.M.; formal analysis, Ł.M.; investigation, I.Y., Ł.M. and J.C.S.; resources, N/A.; data curation, I.Y. and Ł.M.; writing—original draft preparation, I.Y.; writing—review and editing, Ł.M.; visualization, Ł.M.; supervision, J.C.S.; project administration, J.C.S.; funding acquisition, N/A. All authors have read and agreed to the published version of the manuscript.

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

Data Availability Statement: Data supporting the reported results can be obtained on request, e-mail: ida.yurtsever@gmail.com.

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

References

1. Available online: https://www.rp.pl/zdrowie/art9535631-coraz-popularniejsze-sa-zabiegi-z-uzyciem-kwasu-hialuronowego-i-botoksu/ (accessed on 17 December 2022).
2. Tylka, T.L.; Wood-Barcalow, N.L. The Body Appreciation Scale-2: Item refinement and psychometric evaluation. *Body Image* **2015**, *12*, 53–67. [CrossRef] [PubMed]
3. Jáuregui-Lobera, I.; Bolaños-Ríos, P.; Ruiz-Prieto, I. Thought–shape fusion and body image in eating disorders. *Int. J. Gen. Med.* **2012**, *5*, 823–830. [CrossRef] [PubMed]
4. Pimenta, F.; Rosas, R.; Campos, J.; da Silva, W.R.; Maroco, J. Body image quality of life inventory: Preliminary study for the adaptation with a Portuguese sample. *Obes. Facts* **2017**, 111. [CrossRef]
5. Singh, A.R.; Veale, D. Understanding and treating body dysmorphic disorder. *Indian J. Psychiatry* **2019**, *61*, 131–135.
6. Veale, D. Body dysmorphic disorder. *Postgrad. Med. J.* **2004**, *80*, 67–71. [CrossRef]
7. Bowyer, L.; Krebs, G.; Mataix-Cols, D.; Veale, D.; Monzani, B. A critical review of cosmetic treatment outcomes in body dysmorphic disorder. *Body Image* **2016**, *19*, 1–8. [CrossRef]
8. Szepietowski, J.C.; Salomon, J.; Pacan, P.; Hrehorów, E.; Zalewska, A. Body dysmorphic disorder and dermatologists. *J. Eur. Acad. Dermatol. Venereol.* **2008**, *22*, 795–799. [CrossRef]
9. Sjorgen, M. The diagnostic work up for body dismorfic disorder. *J. EC Psychol. Psychiatry* **2019**, *8*, 72–76.
10. Veale, D.; Gledhill, L.; Christodolou, P.; Hodsoll, J. Prevalence of Body Dysmorphic Disorder in different settings. *Body Image* **2016**, *18*, 168–186. [CrossRef]
11. Yurtsever, I.; Matusiak, L.; Szepietowska, M.; Wójcik, E.; Veale, D.; Szepietowski, J. Cosmetic Procedure Screening Questionnaire (COPS): Creation and validation of the Polish language version. *Adv. Dermatol. Allergol. Postępy Dermatol. I Alergol.* **2021**, *38*, 881–886. [CrossRef]
12. Sun, M.D.; Rieder, E.A. Psychosocial issues and body dysmorphic disorder in aesthetics: Review and debate. *Clin. Dermatol.* **2022**, *40*, 4–10. [CrossRef] [PubMed]
13. Hsu, C.; Juma, H.A.; Goh, C.L. Prevalence of body dysmorphic features in patients undergoing cosmetic procedures at the National Skin Centre, Singapore. *Dermatology* **2009**, *219*, 295–298. [CrossRef] [PubMed]

14. Kacar, S.D.; Ozuguz, P.; Bagcioglu, E.; Coskun, K.S.; Uzel Tas, H.; Polat, S.; Karaca, S. The frequency of body dysmorphic disorder in dermatology and cosmetic dermatology clinics: A study from Turkey. *Clin. Exp. Dermatol.* **2014**, *39*, 433–438. [CrossRef] [PubMed]
15. Macêdo Uchôa, F.N.; Macêdo Uchôa, N.; Medeiros da Costa Daniele, T.; Lustosa, R.P.; de Castro Nogueira, P.R.; Reis, V.M.; Andrade, J.H.C.; Deana, N.F.; Aranha, A.M.; Alves, N. Influence of Body Dissatisfaction on the Self-Esteem of Brazilian Adolescents: A Cross-Sectional Study. *Int. J. Environ. Res. Public Health* **2020**, *17*, 3536. [CrossRef] [PubMed]
16. Veale, D.; Ellison, N.; Werner, T.G.; Dodhia, R.; Serfaty, M.A.; Clarke, A. Development of a Cosmetic Procedure Screening Questionnaire (COPS) for Body Dysmorphic Disorder. *J. Plast. Reconstr. Aesthetic Surg.* **2012**, *65*, 530–532. [CrossRef]
17. Veale, D.; Eshkevari, E.; Ellison, N.; Cardozo, L.; Robinson, D.; Kavouni, A. Validation of genital appearance satisfaction scale and the cosmetic procedure screening scale for women seeking labiaplasty. *J. Psychosom. Obstet. Gynecol.* **2013**, *34*, 46–52. [CrossRef]
18. Veale, D.; Eshkevari, E.; Kanakam, N.; Ellison, N.; Costa, A.; Werner, T. The Appearance Anxiety Inventory: Validation of a Process Measure in the Treatment of Body Dysmorphic Disorder. *Behav. Cogn. Psychother.* **2014**, *42*, 605–616. [CrossRef]
19. Yurtsever, I.; Matusiak, L.; Szepietowska, M.; Veale, D.; Szepietowski, J. Title Appearance Anxiety Inventory (AAI): Creation and validation of Polish language version. *Adv. Dermatol. Allergol.* **2021**, *38*, 940–943. [CrossRef]
20. Alleva, J.M.; Tylka, T.L.; Kroon Van Diest, A.M. The Functionality Appreciation Scale (FAS): Development and psychometric evaluation in U.S. community women and men. *Body Image* **2017**, *23*, 28–44. [CrossRef]
21. Yurtsever, I.; Matusiak, L.; Szepietowska, M.; Evans, C.; Szepietowski, J.C. Body Shape Questionnaire-34 (BSQ) and Functionality Appreciation Scale (FAS)-pertinent body image screening tools: Creation and validation of Polish language versions. *Sci. Prog.* **2022**, *105*, 00368504221117068. [CrossRef]
22. Razmus, M.; Razmus, W. Evaluating the psychometric properties of the Polish version of the Body Appreciation Scale-2. *Body Image* **2017**, *23*, 45–49. [CrossRef] [PubMed]
23. Cooper, P.J.; Taylor, M.J.; Cooper, Z.; Fairbum, C.G. The development and validation of the Body Shape Questionnaire. *Int. J. Eat. Disord.* **1987**, *6*, 485–494. [CrossRef]
24. Available online: https://www.psyctc.org/psyctc/psyctc-org-home/instruments/body-shape-questionnaire-bsq/ (accessed on 16 August 2022).
25. Rosenberg, M. *Society and Adolescent Self-Image*; New Jersey Princeton University Press: Princeton, NJ, USA, 1965.
26. Mastro, S.; Zimmer-Gembeck, M.J.; Webb, H.J.; Farrell, L.; Waters, A. Young adolescents' appearance anxiety and body dysmorphic symptoms: Social problems, self-perceptions and comorbidities. *J. Obs. Compuls. Relat. Disord.* **2016**, *8*, 50–55. [CrossRef]
27. Perego, G.; Di Mattei, V.E. A New Framework for Narcissism in Health Psychology and Psycho-Oncology. *Front. Psychol.* **2020**, *11*, 1182. [CrossRef]
28. Kling, J.; Kwakkenbos, L.; Diedrichs, P.C.; Rumsey, N.; Frisen, A.; Brandao, M.P.; Silva, A.G.; Dooley, B.; Rodgers, R.F.; Fitzgerald, A. Systematic review of body image measures. *Body Image* **2019**, *30*, 170–211. [CrossRef]
29. Kuck, N.; Lara Cafitz, L.; Paul-Christian Bl'rkner, P.C.; Hoppen, L.; Wilhelm, S.; Buhlmann, U. Body dysmorphic disorder and self-esteem: A meta-analysis. *BMC Psychiatry* **2021**, *21*, 310. [CrossRef]
30. Hsu, J.L.; Tsai-Ling Hung, R.; Antoine, M. Investigating the Linkages between BMI, Body Image, and SATAQ among Young Asian Females. *Int. J. Environ. Res. Public Health* **2021**, *18*, 7460. [CrossRef]
31. Raymore, L.A.; Godbey, G.C.; Crawford, D.W. Self-Esteem, gender, and socioeconomic status: Their relation to perceptions of constraint on leisure among adolescents. *J. Leis. Res.* **1994**, *26*, 99–118. [CrossRef]
32. Veselska, Z.; Madarasova Geckova, A.; Reijneveld, S.A.; van Dijk, J.P. Socio-economic status and physical activity among adolescents: The mediating role of self-esteem. *Public Health* **2011**, *125*, 763–768. [CrossRef]
33. Phillips, K.A.; Diaz, S.F. Gender differences in body dysmorphic disorder. *J. Nerv. Ment. Dis.* **1997**, *185*, 570–577. [CrossRef]
34. Veale, D. Outcome of cosmetic surgery and 'DIY' surgery in patients with body dysmorphic disorder. *Psychiatr. Bull.* **2000**, *24*, 218–220. [CrossRef]
35. Crerand, C.E.; Menard, W.; Phillips, K.A. Surgical and minimally invasive cosmetic procedures among persons with body dysmorphic disorder. *Ann. Plast. Surg.* **2010**, *65*, 11–16. [CrossRef] [PubMed]
36. Arruda Felix, G.A.; Azevedo de Brito, M.J.; Nahas, F.X.; Tavares, H.; Cordás, T.A.; Dini, G.M.; Ferreira, L.M. Patients with mild to moderate body dysmorphic disorder may benefit from rhinoplasty. *J. Plast. Reconstr. Aesthetic Surg.* **2014**, *67*, 646–654. [CrossRef] [PubMed]

5. STRESZCZENIE W JĘZYKU POLSKIM

Rozprawa doktorska powstała w oparciu o monotematyczny cykl czterech artykułów opublikowanych w międzynarodowych czasopismach naukowych indeksowanych w bazie PubMed i uwzględnionych na liście Journal Citation Reports oraz znajdujących się w wykazie czasopism naukowych Ministerstwa. Artykuły zostały opublikowane w recenzowanych czasopismach o łącznym współczynniku wpływu 9,732 oraz 320 punktów ministerialnych.

Jednym z elementów tej pracy doktorskiej było przetłumaczenie na język polski oraz zwalidowanie odpowiednich narzędzi diagnostycznych, służących do oceny szeroko pojętego samopostrzegania. W cyklu trzech prac walidacyjnych wykazano przydatność zastosowania przetłumaczonych narzędzi diagnostycznych, tj. COPS, AAI, BSQ-34 i FAS do oceny psychometrycznej polskojęzycznych pacjentów.

W czwartej pracy pt.” To inject or to reject? The body image perception among aesthetic dermatology patients” przy zastosowaniu czterech, wcześniej przygotowanych, nowych kwestionariuszy oraz dwóch dodatkowych, zwalidowanych w przeszłości, dokonano oceny psychometrycznej osób poddających się zabiegom dermatologii estetycznej. Zgodnie z wcześniejszymi założeniami, częstość występowania BDD w grupie pacjentów poddających się zabiegom estetycznym była wysoka (7,28% - 11,17%,). Wyraźne zaniepokojenie kształtem własnego ciała zaraportowało 9,47% osób, a niską samoocenę 11,65% badanych. Jednym z najbardziej zaskakujących wniosków z badania była duża zależność statusu materialnego z wszystkimi badanymi elementami, tj. podatnością na BDD, niskim docenianiem własnego ciała, słabym obrazem własnego ciała oraz niską samooceną. Być może powinno stanowić do podstawę do dalszych badań oraz do szerzenia świadomości w tych środowiskach. Kolejna konkluzja z pracy, którą warto podkreślić to brak związku zadowolenia z wcześniejszych zabiegów z żadną z powyżej badanych zmiennych, co było sprzeczne z pierwotnymi założeniami pracy. Korzyści z wybranych zabiegów estetycznych u niektórych pacjentów z zaburzeniami oceny własnego ciała, coraz częściej podawane w piśmiennictwie na pewno są tematem wartym przeprowadzenia dalszej diagnostyki.

Ocena psychometryczna pacjentów poddających się zabiegom estetycznym jest to temat warty przeprowadzenia bardziej szczegółowych, wieloośrodkowych badań na większej liczbie pacjentów, z zastosowaniem grupy kontrolnej oraz z większym zaangażowaniem populacji męskiej. Zadowolenie z leczenia estetycznego uzależnione od rodzaju wykonywanego zabiegu również mogłoby być przedmiotem dalszych badań.

Podsumowując, bardzo istotne jest zwiększenie rozpoznawalności zaburzeń oceny własnego ciała wśród pacjentów dermatologii estetycznej oraz zaznajomienie profesjonalistów z dostępnymi narzędziami diagnostycznymi. Ocena psychometryczna każdego pacjenta przed

zabiegami estetycznymi powinna odgrywać istotna rolę w planowaniu leczenia. Multidyscyplinarne podejście i współpraca lekarzy dermatologii estetycznej, psychiatrów i psychologów mogłyby być standardem przyszłości w określaniu granicy między patologią, a normą w kontekście zabiegów estetycznych.

6. STRESZCZENIE W JĘZYKU ANGIELSKIM

This doctoral dissertation was based on a monothematic series of four articles published in international scientific journals indexed in the PubMed database and listed in Journal Citation Reports also located on the list of scientific journals of the Ministry. The articles have been published in peer-reviewed journals with a total impact factor of 9,732 and 320 ministerial points.

One of the elements of this doctoral thesis was translation and validation of diagnostic tools appropriate for assessing broadly understood self-perception. In a series of three validation works, four newly created diagnostic tools, i.e., COPS, AAI, BSQ-34 and FAS, were proven adequate for the psychometric assessment of Polish-speaking patients.

In the fourth work entitled 'To inject or to reject? The body image perception among aesthetic dermatology patients' psychometric assessment of people undergoing aesthetic dermatology treatments was carried out with use of four previously prepared, new questionnaires and two additional questionnaires, validated in the past. As previously assumed, the prevalence of BDD in the group of patients undergoing aesthetic procedures was high (7.28% - 11.17%). Significant body shape concern was reported by 9.47% of people, and low self-esteem by 11.65% of the respondents. One of the most surprising study conclusions was the strong relationship between the material status and all the examined elements, i.e., susceptibility to BDD, low body appreciation, poor body image and low self-esteem. Perhaps it should be the indication for further researches and for spreading awareness in those environments. Another conclusion from the work that is worth emphasizing is the lack of relationship between satisfaction with previous treatments and any of the above-mentioned variables, which is contrary to the original assumptions of the work. The growing reports about the benefits of selected aesthetic procedures in some groups of BDD patients are certainly a topic worth further investigation.

Psychometric assessment of patients undergoing aesthetic procedures is a subject worth conducting more detailed, multi-center studies on a larger number of patients, using a control group and with greater involvement of the male population. Satisfaction with aesthetic treatment depending on the type of procedure performed could also be the subject of further research.

To sum up, it is very important not only to increase the recognition of body image disorders and self-esteem disruptions among aesthetic dermatology patients but also to familiarize professionals with the available diagnostic tools. Psychometric assessment of each patient before aesthetic procedures should play an important role in planning the treatment. A multidisciplinary approach and cooperation of aesthetic doctors, psychiatrists and

psychologists could be the standard of the future in defining the borderline between pathological behaviors and innocent beautification in the context of aesthetic procedures.

7. ETYKA

Projekt pracy doktorskiej opartej na poniższych publikacjach został zatwierdzony przez Komisję Bioetyczną Uniwersytetu Medycznego we Wrocławiu - Nr KB 335/2020. Badanie przeprowadzono przestrzegając zasad Good Clinical Practice oraz zasad Deklaracji Helsińskiej Światowego Stowarzyszenia Lekarzy przyjętą przez 18 Zgromadzenie Ogólne Światowego Stowarzyszenia Lekarzy (WMA), w Helsinkach w czerwcu 1964 r., a zmienionej przez 64 Zgromadzenie Ogólne WMA, w Brazylii w październiku 2013 r. Badania zostały przeprowadzone z zachowaniem anonimowości uzyskanych danych.

8. OPINIA KOMISJI BIOETYCZNEJ

KOMISJA BIOETYCZNA
przy
Uniwersytecie Medycznym
we Wrocławiu
ul. Pasteura 1; 50-367 WROCŁAW

OPINIA KOMISJI BIOETYCZNEJ Nr KB – 335 /2020

Komisja Bioetyczna przy Uniwersytecie Medycznym we Wrocławiu, powołana zarządzeniem Rektora Uniwersytetu Medycznego we Wrocławiu nr 133/XV R/2017 z dnia 21 grudnia 2017 r. oraz działająca w trybie przewidzianym rozporządzeniem Ministra Zdrowia i Opieki Społecznej z dnia 11 maja 1999 r. (Dz.U. nr 47, poz. 480) na podstawie ustawy o zawodzie lekarza z dnia 5 grudnia 1996 r. (Dz.U. nr 28 z 1997 r. poz. 152 z późniejszymi zmianami) w składzie:

prof. dr hab. Jacek Daroszewski (choroby wewnętrzne, endokrynologia, diabetologia)
prof. dr hab. Krzysztof Grabowski (chirurgia)
dr Henryk Kaczkowski (chirurgia szczękowa, chirurgia stomatologiczna)
mgr Irena Knabel-Krzyszowska (farmacja)
prof. dr hab. Jerzy Liebhart (choroby wewnętrzne, alergologia)
ks. dr hab. Piotr Mrzygłód, prof. nadzw. (duchowny)
mgr prawa Luiza Műller (prawo)
dr hab. Sławomir Sidorowicz (psychiatria)
prof. dr hab. Leszek Szenborn, (pediatria, choroby zakaźne)
Danuta Tarkowska (pielęgniarstwo)
prof. dr hab. Anna Wiela-Hojeńska (farmakologia kliniczna)
dr hab. Andrzej Wojnar, prof. nadzw. (histopatologia, dermatologia) przedstawiciel Dolnośląskiej Izby Lekarskiej)
dr hab. Jacek Zieliński (filozofia)

pod przewodnictwem
prof. dr hab. Jana Kornafela (ginekologia i położnictwo, onkologia)

Przestrzegając w działalności zasad Good Clinical Practice oraz zasad Deklaracji Helsińskiej, po zapoznaniu się z projektem badawczym pt.:

„Ocena psychometryczna osób zgłaszających się po poradę z zakresu dermatologii estetycznej".

zgłoszonym przez **lek.med. Idę Yurtsever** zatrudnioną w gabinecie: „Ida Yurtsever: Dermatologia i Medycyna Estetyczna" w Józefosławiu oraz złożonymi wraz z wnioskiem dokumentami, w tajnym głosowaniu postanowiła **wyrazić zgodę** na przeprowadzenie badania w gabinecie: „Ida Yurtsever: Dermatologia i Medycyna Estetyczna" w Józefosławiu oraz Katedrze i Klinice Dermatologii, Wenerologii i Alergologii UMW pod nadzorem prof. dr hab. Jacka Szepietowskiego **pod warunkiem zachowania anonimowości uzyskanych danych**.

Uwaga: Badanie to zostało objęte ubezpieczeniem odpowiedzialności cywilnej Uniwersytetu Medycznego we Wrocławiu z tytułu prowadzonej działalności.

Pouczenie: W ciągu 14 dni od otrzymania decyzji wnioskodawcy przysługuje prawo odwołania do Komisji Odwoławczej za pośrednictwem Komisji Bioetycznej UM we Wrocławiu.

Opinia powyższa dotyczy projektu badawczego będącego podstawą rozprawy doktorskiej.

Uniwersytet Medyczny [illegible] ławiu
KOMISJA BIOETYCZNA
przewodniczący
prof. dr hab. Jan Kornafel

Wrocław, dnia 10 czerwca 2020 r.

9. CURRICULUM VITAE

DANE OSOBOWE

Imię i Nazwisko: Ida Yurtsever
Data i miejsce urodzenia: 07.06.1988, Łomża
Adres: Ogrodowa 8d/19, 05-509
Numer telefonu: 791 451 837
Specjalista dermatolog-wenerolog
Numer Prawa Wykonywania Zawodu: 2957950

WYKSZTAŁCENIE

- Październik 2020
  uzyskanie tytułu specjalisty w dziedzinie Dermatologii i Werenologii
- Listopad 2014 – Styczeń 2020
  Specjalizacja w dziedzinie Dermatologii i Wenerologii
  Młodszy asystent w Klinice Dermatologii CSK MSW, Warszawa
- Listopad 2013 – Luty 2015
  Studia Podyplomowe w Szkole Medycyny Estetycznej przy Centrum Kształcenia Podyplomowego Warszawskiego Uniwesytetu Medycznego
- 2007 - 2013
  Studia lekarskie - Warszawski Uniwersytet Medyczny
  I wydział lekarski, 2013 uzyskanie dyplomu o numerze 50303,

DOŚWIADCZENIE ZAWODOWE

- Listopad 2014 – Styczeń 2020
  Specjalizacja w dziedzinie Dermatologii i Wenerologii
  Młodszy asystent w Klinice Dermatologii CSK MSW, Warszawa
- Listopad 2015 – czerwiec 2020
  Wykładowca w Szkole Medycyny Estetycznej przy Centrum Kształcenia Podyplomowego Warszawskiego Uniwesytetu Medycznego
- Listopad 2017 – do chwili obecnej
  Dermatolog, lekarz medycyny estetycznej w Klinice Spire Clinic w Warszawie

- Listopad 2017 – do chwili obecnej
  Dermatolog, lekarz medycyny estetycznej w Klinice Doktor Beata Dethloff
  w Warszawie
- Grudzień 2020 – do chwili obecnej
  Dermatolog, lekarz medycyny estetycznej w Klinice Skin Spa
  we Wrocławiu

SZKOLENIA

Członek Polskiego Towarzystwa Dermatologicznego od 2014 roku

Członek EADV (Europejska Akademia Dermatologii i Wenerologii) od 2016 roku

Liczne szkolenia z pracy z produktami Allergan, Galderma, Lea Vivacy, Neauvia, Croma itp.

Szkolenie z anatomii klinicznej na kadawerach – Cadaverlab, Lea Vivacy, Lyon 2019

Liczne konferencje z zakresu dermatologii estetycznej m.in. PTMEIAA, SLDE, ALLERGAN

Liczne konferencje zagraniczne w zakresie dermatologii i dermatologii estetycznej m.in.:

EADV Genewia 2017 oraz Wiedeń 2018, IMCAS Paryż 2018, AMWC Monte Carlo 2019,

World Dermatology Congress Mediolan 2019

Szkolenie z lipofillingu ARTHREX październik 2020

Allergan Medical Institute od marca 2022

UMIEJĘTNOŚCI

Dermatologia kliniczna

Dermatochirurgia, drobne zabiegi dermatologiczne t.j. elektrokoagulacja, kriochirurgia, łyżeczkowanie, laser CO2

Dermatologia estetyczna m.in.:

Zabiegi z zastosowaniem toksyny botulinowej – redukcja zmarszczek mimicznych

twarzy, bruksizm, migrenowe bóle głowy

Zabiegi z zastosowaniem nici PDO – lifting twarzy, redukcja podbródka, lifting brwi, modelowanie nosa itp.

Zabiegi z zastosowaniem kwasu hialuronowego – volumetria twarzy, modelowanie

konturu żuchwy, modelowanie ust, modelowanie brody, modelowanie nosa,

wypełnianie doliny łez

Zabiegi z zastosowaniem hialuronidazy

Mezoterapia igłowa zarówno z gotowymi produktami jak i osoczem bogatopłytkowym

Resurfacing za pomocą lasera ablacyjnego CO2/Erb-Yag

Zastosowanie lasera naczyniowego w leczeniu rumienia/ trądziku różowatego.

10. DOROBEK NAUKOWY

a. sumaryczny Impact Factor: 14,976 punktów
b. sumaryczna liczba punktów MEiN: 465,00 punktów
c. liczba publikacji: 9
d. liczba cytowań: 7
e. liczba doniesień zjazdowych: 7

Publikacje

1. Yurtsever I, Kwiatkowska M, Szymańska E, Walecka I. Treatment of basal cell carcinoma – a review of therapeutic options. Med Probl. 2016; 52: 21-24
2. Kwiatkowska M, Yurtsever I, Wiślińska P, Szymańska E, Walecka I. Pyoderma gangrenosum preceding chronic myelomonocytic leukemia for several months. Med Probl. 2015; 51: 20-22
3. Yurtsever I, Borkowska B, Pręgowska-Szczęsna A, Nasierowska-Guttmejer A, Walecka I. Choroba Pageta o lokalizacji pozasutkowej –opis przypadku. Dermatologia po Dyplomie, 2017; 8: 33-38
4. Yurtsever I, Łukomska M, Sobolewski P, Szymańska E, Owczarek W, Walecka I. Familial localized scleroderma with pediatric onset: a review. Adv Dermatol Allergol. 2020 May; 38(2): 193-197. doi: 10.5114/ada.2020.95335
5. Maślińska M, Dźwigała M, Sobolewski P, Yurtsever I, Szymańska E, Walecka I. High-resolution ultrasound imaging of skin involvement in systemic sclerosis: a systematic review. Rheumatol Int, 2021 Feb;41(2):285-295. doi: 10.1007/s00296-020-04761-8.
6. Yurtsever I, Matusiak Ł, Szepietowska M, Wójcik E, Veale D, Szepietowski J. Cosmetic Procedure Screening Questionnaire (COPS): creation and validation of Polish language version. Adv Dermatol Allergol, 2021 Oct;38(5):881-886. doi: 10.5114/ada.2020.96704
7. Yurtsever I, Matusiak Ł, Szepietowska M, Veale D., Szepietowski J. Appearance Anxiety Inventory (AAI): creation and validation of the Polish language version. Adv Dermatol Allergol, 2022 Oct;39(5):940-943. doi: 10.5114/ada.2021.112767

8. Yurtsever I, Matusiak Ł, Szepietowska M, Evans C, Szepietowski J. Body Shape Questionnaire-34 (BSQ) and Functionality Appreciation Scale (FAS) - pertinent body image screening tools: Creation and validation of Polish language versions. Sci Prog. 2022 Jul-Sep;105(3). doi: 0.1177/00368504221117068
9. Yurtsever I, Matusiak Ł, Szepietowski J. To inject or to reject? The body image perception among aesthetic dermatology patients. To inject or to reject? The body image perception among aesthetic dermatology patients. J. Clin. Med. 2023 Jan; 12(1). doi: 10.3390/jcm12010172

Doniesienia zjazdowe:

1. Yurtsever I. Piodermia zgorzelinowa – trudności diagnostyczne, Zjazd sekcji Forum młodych PTD, OSSA 12-13.11.2015.
2. Yurtsever I, Kowalska – Olędzka E, Kwiatkowska M, Jasińska M, Borkowska B, Wiślińska P, Lanckorońska J, Walecka I. Trichotillomania – diagnostic difficulties - case report. All about hair and nails, 13-15.03.2018, Warsaw
3. Borkowska B, Kamont M, Yurtsever I, Kwiatkowska M, Nasierowska-Guttmejer A, Walecka I. Nail melanoma – disagreement between dermoscopy and histopathological picture – case report. EADV Geneva, 13-17.09.2017
4. Kwiatkowska M, Borkowska B, Kamont M, Yurtsever I, Nasierowska-Guttmejer A, Walecka I. Atypical pigmentation of nail plate - discrepancy between clinical, dermoscopic and histopatological picture. EADV Geneva, 13-17.09.2017
5. Sobolewski P, Yurtsever I, Wieczorek A, Szymańska E, Walecka I. Współistnienie czerniaka i twardziny układowej u pacjenta leczonego immunosupresyjnie. Posiedzenie PTD, Warszawa, 21.02.2019
6. Szmurło A, Kowalska-Olędzka E, Yurtsever I, Kędzierska M, Walecka I. Liczne znamiona Meyersona stymulowane przez pranobeks inozyny i intensywną ekspozycję na promieniowanie UV - opis przypadku. Dermatologia w praktyce klinicznej, Warszawa, 6.09.2019
7. Szmurło A, Kowalska-Olędzka E, Kędzierska M, Yurtsever I, Filipiak D, Ciechanowicz P, Walecka I. Centralne odśrodkowe łysienie bliznowaciejące - rzadki problem w populacji polskiej. Zjazd sekcji Forum młodych PTD, Łódź 24-25.10.2019

11. OŚWIADCZENIA WSPÓŁAUTORÓW

UNIWERSYTET MEDYCZNY
IM. PIASTÓW ŚLĄSKICH WE WROCŁAWIU

Wydział Lekarski
Katedra i Klinika Dermatologii, Wenerologii i Alergologii
Kierownik : Prof.dr hab. n.med. Jacek Szepietowski
Ul. Chałubińskiego 1, 50-368 Wrocław
Tel. +4871/327-09-41 Fax. +4871/327-09-42
e-mail: dermwen@umw.edu.pl http://www.derm.umed.wroc.pl

Wrocław, 1.02.2023

OŚWIADCZENIE

Oświadczam, że w pracach:

Cosmetic Procedure Screening Questionnaire (COPS): creation and validation of Polish language version.
Ida Yurtsever, Łukasz Matusiak, Marta Szepietowska, Ewa Wójcik, David Veale, Jacek C Szepietowski

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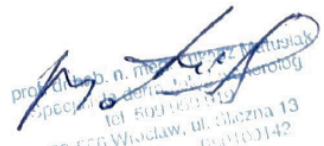
mój udział polegał na przeprowadzeniu analizy statystycznej, nadzorze naukowym oraz akceptacji finalnej wersji manuskryptu.



Z poważaniem,
prof. dr hab. n. med. Łukasz Matusiak

UNIWERSYTET MEDYCZNY
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Wrocław, 1.02.2023

OŚWIADCZENIE

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Z poważaniem,
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Z poważaniem,
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To whom it may concern

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This is to confirm that my contribution to the above paper consisted of scientific advice, input to the drafting and approval of the final version of the manuscript.

Please note that I hold visiting (honorary) chairs in the Psychology Departments of the Universidad de Las Américas (UDLA) in Quito, Ecuador and at the University of Roehampton in the UK. Both are aware of the publication and have it in their (probably largely internal) list of publications but as those posts are honorary I regard myself as working autonomously within an informal organisation PSYCTC.org. I split my life now between France and the UK, hence the addresses.

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03 February 2023

I declare that in manuscripts:

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and

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My contribution consisted of scientific supervision and approval of the final version of the manuscript.

Kind regards,

Yours sincerely

Professor David Veale
GMC No. 2612724