Imagem corporal e qualidade de vida de mulheres que realizaram tratamento cirúrgico para câncer de mama

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Dissertação de Mestrado

Porto Alegre

2024

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Dissertação de mestrado apresentada ao Programa de Pós-Graduação em Psicologia da Universidade Federal do Rio Grande do Sul como requisito para obtenção do título de Mestre em Psicologia.

Orientador: Prof. Dr. Eduardo Augusto Remor

Porto Alegre

2024

Sonhamos o voo, mas tememos as alturas. Para voar é preciso amar o vazio. Porque o voo só acontece se houver o vazio. O vazio é o espaço da liberdade, a ausência de certezas. Os homens querem voar, mas temem o vazio. Não podem viver sem certezas. Por isso trocam o voo por gaiolas. As gaiolas são o lugar onde as certezas moram.

Rubem Alves

Nota: Este projeto é parte de um projeto maior (projeto guarda-chuva) coordenado pela Profa. Dra. Andréa Pires Souto Damin e desenvolvido pelo o Serviço de Mastologia do Hospital de Clínicas de Porto Alegre (HCPA) e com o Programa de Pós Graduação de Ciências Médicas: Ginecologia e Obstetrícia da Universidade Federal do Rio Grande do Sul (UFRGS). O projeto tem como título "Impacto da Pandemia da covid-19 e do Tratamento Cirúrgico em Mulheres com Câncer de Mama: Ansiedade, Depressão e Qualidade de Vida (2022/0269)", o qual foi aprovado pelo Comitê de Ética do HCPA em 14/09/2022 - CAAE: 25980619.6.0000.5327. O projeto maior inclui os seguintes estudos: (1) Estudo I - Revisão de literatura. Imagem corporal de mulheres submetidas à tratamento cirúrgico de câncer de mama: uma Revisão de Escopo; (2) Estudo II - Imagem corporal e qualidade de vida de mulheres que realizaram tratamento cirúrgico para câncer de mama; (3) Estudo III - Impacto da pandemia da covid-19 e do tratamento cirúrgico em mulheres com câncer de mama: ansiedade, depressão e qualidade de vida; (4) Estudo IV - Desenvolvimento e avaliação de aspectos psicossociais de mulheres brasileiras submetidas ao tratamento de câncer de mama.

O projeto apresentado pela Mestranda Camila Zanella Battistello, se trata de um adendo ao projeto principal orientado pelo Prof. Dr. Eduardo Remor e considera os estudos I e II e foram incluídos como adendo ao projeto principal, ambos aprovados pelo CEP.

Agradecimentos

Em primeiro lugar, gostaria de agradecer a minha família pelo apoio e motivação. Em especial, aos meus pais, que vieram da roça, batalharam com muito esforço para eu estar aqui hoje. Mesmo não entendendo muito bem o trabalho de uma psicóloga no ambiente de saúde, vocês me oportunizaram adquirir conhecimento e ter experiências que eu não poderia imaginar. Obrigada por estarem comigo, auxiliarem com as despesas e acreditarem que eu conseguiria (mesmo com alguns momentos de choro).

Minha querida avó Natalina, que mesmo não se lembrando muito do que eu faço pelo Alzheimer, estava sempre me acolhendo com comida, massagens e deixando minha roupa dobrada no fim do dia para que eu pudesse aproveitar o tempo e escrever mais. E ao meu irmão, o alemão da família, que me auxiliou tantas vezes com a tecnologia. Vocês me ensinam diariamente a importância da rede de apoio na saúde.

Além disso, às minhas colegas de equipe (e amigas) que me ajudaram com toda a elaboração do projeto e coleta de dados: a minha eterna chefa Mônica, à Luiza e à Isabelle. Vocês tornaram a caminhada mais leve, com risadas e cafezinhos entre uma entrevista e outra. Que possamos novamente nos encontrarmos para novas trocas dentro da oncologia.

Meus caros colegas, Micheli, Thércia, João Guilherme, Victor, Antônio, Mathias e Jefferson: obrigada pela torcida durante esses dois anos. A parceria de vocês me fortaleceu e sou extremamente grata pelo PPG de Psicologia ter possibilitado conhecer pessoas que me impulsionaram.

Aos meus colegas e amigos de grupo que pude conhecer, estreitar laços e fortalecer amizade: Miguel, Kátia, Kamilla, Ícaro, Eliana e Marina. Obrigada pelas risadas, pelas palavras de conforto e por acreditarem no meu potencial mesmo quando eu não enxergava. Com vocês, me senti acolhida.

Agradeço também Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) que financiou minha bolsa de estudos, à Universidade Federal do Rio Grande do Sul – UFRGS e ao Programa de Pós Graduação em Psicologia do Desenvolvimento.

Um agradecimento especial ao meu orientador, Eduardo Remor. Obrigada por, há quase quatro anos atrás, ter me oportunizado a possibilidade de ingressar no ambiente acadêmico como iniciação científica voluntária e, após isso, me orientar como mestranda. Entre elogios e críticas construtivas, o senhor me mostrou que a ciência pode oferecer respostas (temporárias) às hipóteses simples e complexas dentro da saúde, considerando sempre a ética e o cuidado com os estudos. Mesmo quando eu não conseguia ir a frente em algum momento da escrita, ou quando não havia sentido nas palavras, a sua orientação me fez ver além. O senhor é minha inspiração. Obrigada por todos as oportunidades até o momento.

E, por fim, agradeço de coração pelas pacientes desta pesquisa. Obrigada por me deixarem conhecer um pouco melhor suas inseguranças, medos e angústias. Vocês me ensinam diariamente o que é realmente ser psicóloga da saúde – e uma pessoa melhor também.

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Lista de abreviaturas

AIS	Acceptance of Illness Scale
ASI-R	Appearance Schemas Inventory – Revised
BCTOS	Breast Cancer Treatment Outcomes Scale
BIBCQ	Body Image After Breast Cancer Questionnaire
BIBCQ Body	Image after Breast Cancer Questionnaire
BIS	Body Image Scale
BITS	Breast Impact of Treatment Scale
DAS24	Derriford Appearance Scale 24
EORTC	European Organization for Research and Treatment of Cancer
ESS	Experience of Shame Scale
ISP-25	Physical Self-Perception Profile
MBSRQ	Multidimensional Body-Self Relations Questionnaire
MBSRQ-AS	Multidimensional Body-Self Relations Questionnaire
PRISMA-ScR	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
Extension for Scoping Reviews	
QoL	Quality of Life
RSES	Rosenberg Self-esteem Scale

Resumo

O câncer de mama é uma doença causada pela multiplicação desordenada de células anormais na mama. O tratamento da sistêmico da doença pode alterar a imagem corporal das pacientes, bem como sua qualidade de vida. Assim, o objetivo geral desta dissertação é investigar a satisfação da imagem corporal e qualidade de vida em pacientes que realizaram cirurgia para câncer de mama. Dessa forma, foi realizada uma revisão de escopo (estudo 1) para averiguar o estado da arte sobre estes constructos, e um estudo empírico (estudo 2) cujo objetivo foi avaliar de forma quantitativa a satisfação com a imagem corporal e a qualidade de vida desta população em um hospital de referência localizado no Sul do Brasil no período de 2020 a 2021. A revisão do escopo incluiu a análise de 51 artigos e identificou um impacto negativo significativo na percepção da imagem corporal e na qualidade de vida após o tratamento cirúrgico do câncer de mama na maioria dos estudos. Participaram do estudo empírico 106 pacientes mulheres que responderam a um questionário sociodemográfico, um de imagem corporal e um de qualidade de vida. Neste estudo, verificou-se que níveis mais baixos de satisfação com a imagem corporal e variáveis clínicas e sociodemográficas estão associados a níveis mais baixos de qualidade de vida em mulheres que se submeteram à cirurgia de câncer de mama. Em conjunto, a revisão de escopo e o estudo empírico reforçam a importância dos aspectos da imagem corporal para a qualidade de vida nessa população.

Palavras-chave: Imagem corporal. Qualidade de vida. Câncer de mama. Cirurgia.

Abstract

Breast cancer is a disease caused by the disorganized multiplication of abnormal cells in the breast. The systemic treatment of the disease can alter patients' body image as well as their quality of life. Therefore, the general aim of this dissertation is to investigate body image satisfaction and quality of life in patients who have undergone surgery for breast cancer. Thus, a scoping review (study 1) was carried out to ascertain the state of the art on these constructs, and an empirical study (study 2) whose objective was to quantitatively assess body image satisfaction and quality of life in this population in a referral hospital located in southern Brazil in the period 2020 to 2021. The scoping review included the analysis of 51 articles and identified a significant negative impact on body image perception and quality of life after breast cancer surgical treatment in the majority of studies. The empirical study included 106 female patients who answered a sociodemographic questionnaire, a body image questionnaire and a quality of life questionnaire. In this study, it was found that lower levels of satisfaction with body image and clinical and sociodemographic variables are associated with lower levels of quality of life in women who have undergone breast cancer surgery. Taken together, the scoping review and the empirical study reinforce the importance of aspects of body image for quality of life in this population.

Keywords: Body image. Quality of life. Breast cancer. Surgery.

Apresentação

Esta dissertação surge como uma iniciativa para aprofundar o entendimento acerca da imagem corporal e qualidade de vida em mulheres submetidas a cirurgia de câncer de mama em um hospital de referência na região Sul do Brasil, uma vez que essa temática ainda carece de exploração no país. Meu interesse em investigar a dimensão psicológica associada aos processos de saúde e doença tem sido constante ao longo de minha trajetória como pesquisadora, iniciando na graduação por meio de experiências como iniciação científica e, posteriormente, como estagiária em hospital. A percepção da importância dos processos subjetivos das mulheres afetadas pelo câncer de mama, e como estes contribuem significativamente para a experiência de encarar a vida diante da doença, despertou meu interesse em auxiliar na adaptação ao processo de adoecimento e na busca por melhorias na qualidade de vida das pacientes oncológicas.

Essa compreensão da interconexão biopsicossocial tornou-se ainda mais evidente durante minha especialização em Psicologia Hospitalar, com ênfase em oncologia e cuidados paliativos no Hospital de Clínicas de Porto Alegre. Os desafios enfrentados, como a comunicação com a equipe, o acolhimento de familiares em situações de óbito e lidar com a frustração diante de quadros clínicos agravados pelo câncer, revelaram a carência de recursos sobre intervenções psicológicas para essa população, que necessitava de uma escuta ativa e empática. Assim, os desafios encontrados no cotidiano motivaram a realização das pesquisas que compõem esta dissertação. É a partir dessas experiências práticas que busquei fundamentar este trabalho.

A presente dissertação está organizada em quatro capítulos. O Capítulo 1 consiste em uma introdução ao tema e uma contextualização teórica breve, sendo apresentados alguns

aspectos sobre Psicologia da Saúde, Psico-oncologia, câncer de mama e tratamentos para a sua cura, além de aspectos psicológicos de imagem corporal e qualidade de vida neste contexto.

O Capítulo 2 apresenta o Estudo 1 escrito em inglês e que é intitulado "What is the relationship between body image and the quality of life of women who underwent surgery for breast cancer? A Scoping Review"[1]. Esse estudo de revisão de escopo objetivou fornecer um panorama geral acerca do conhecimento existente sobre a relação da imagem corporal percebida com a qualidade de vida de mulheres que realizaram tratamento cirúrgico.

Em seguido, o Capítulo 3 apresenta o Estudo 2), também escrito em inglês, intitulado "Body image and quality of life of women who underwent breast cancer surgery"[2], é apresentado um estudo empírico que teve como objetivo avaliar a satisfação com a imagem corporal e a qualidade de vida de mulheres submetidas a tratamento cirúrgico para câncer de mama em um hospital de referência localizado no Sul do Brasil nos anos de 2020 e 2021. Por fim, o Capítulo 4 consiste nas considerações finais da dissertação, buscando integrar os resultados dos dois estudos e abordando as contribuições das pesquisas realizadas.

[1] Tradução do título: Qual a relação entre a imagem corporal e a qualidade de vida de mulheres operadas de câncer de mama? Uma revisão do escopo

[2] Tradução do título: Imagem corporal e qualidade de vida de mulheres submetidas à cirurgia de câncer de mama,

Capítulo I

Introdução e contextualização teórica breve

A Psicologia da Saúde aplicada a Oncologia

A Psicologia da Saúde representa uma esfera de contribuições profissionais, científicas e educacionais da Psicologia dedicada à promoção e preservação da saúde com surgimento na década de 1970. Seu propósito abrange a prevenção e tratamento dos aspectos que envolvem o processo de saúde-doença, a identificação de fatores vinculados ao desenvolvimento de enfermidades, além do compromisso em aprimorar a análise do sistema de serviços de saúde e participar na formulação de políticas sanitárias. Dessa maneira, este campo interdisciplinar se dedica a realizar estudos voltados para a promoção, prevenção e tratamento da saúde tanto a nível individual quanto populacional, visando aprimorar a qualidade de vida (Matarazzo, 1980; Calvetti, Muller & Nunes, 2007; Castro & Remor, 2018).

No contexto da saúde, o câncer constitui uma doença de multiplicação de células anormais e com material genético alterado, com graus de estadiamento diferentes, com curso insidioso e prognóstico incerto. A área responsável pelo estudo desta doença é a oncologia. Considerando isso, a psico-oncologia designa-se como um campo de atuação da Psicologia, que tem uma interlocução entre a psicologia clínica, a psicologia da saúde e a oncologia. Desse modo, entende que o diagnóstico oncológico é acompanhado por implicações objetivas e subjetivos, como a alteração na rotina diária dos pacientes pelos tratamentos, e também como representações e estigmas associados à doença (Oliveira & Remor, 2019). Assim, a psico-oncologia tem como objetivo auxiliar o paciente, os familiares e a equipe envolvida no processo de adoecimento através de apoio emocional e intervenções que visam a melhora da qualidade de vida possível em todos os estágios da doença, desde a prevenção, o diagnóstico, o tratamento, a cura e/ou a indicação de cuidados paliativos (Santos et al., 2022).

Além disso, é necessário compreender que as neoplasias são a segunda causa de maior nível de letalidade no Brasil (DataSUS, 2021). Dessa forma, a psico-oncologia leva em consideração a avaliação e as intervenções psicológicas adaptadas a esse contexto específico da saúde. Nesse sentido, é necessário contemplar as condições clínicas específicas da doença, como o local da lesão oncológica, dado que existem variações nos tipos de tratamento, que englobam quimioterapia, radioterapia, cirurgias e terapia medicamentosa (Carvalho et al., 2008). Em termos mais simples, é fundamental compreender que essa patologia expõe o paciente a uma rede complexa de mudanças, dada a diversidade nos tipos de tratamentos disponíveis, aliada ao contexto social brasileiro em que o câncer está associado ao sofrimento e à morte.

Psico-oncologia e o modelo biopsicossocial: um olhar para o câncer de mama

No contexto da oncologia, o câncer de mama apresenta-se como uma doença causada pela multiplicação desordenada de células cancerígenas da mama, que forma um tumor com potencial de invadir outros órgãos, sendo o segundo com maior incidência em mulheres de todas as regiões do Brasil, após o câncer de pele. Em 2022, a estimativa era que ocorreriam 66.280 casos novos da doença, responsável por 29,7% dos diagnósticos oncológicos no país (Instituto Nacional de Câncer [INCA], 2020). Para o ano de 2023, no entanto, houve um aumento com números estimados de 73.610 casos novos, o que representa uma taxa de incidência de 41,89 casos por 100.000 mulheres. A taxa de mortalidade pela doença no país foi 11,84 óbitos/100.000 mulheres, em 2020, com as maiores taxas nas regiões Sudeste e Sul (INCA, 2022).

Na tentativa de prevenir a ocorrência da doença, são realizadas recomendações e ações de rastreamento do câncer, como o autoexame das mamas, ultrassonografia e a mamografia, sendo esta a técnica mais recomendada para mulheres acima de 50 anos no Brasil (INCA, 2015). Além disso, é necessário mais esforço para o diagnóstico precoce, cuidado e consultas

médicas com maior frequência em jovens que apresentam fatores de risco elevados, como histórico familiar do diagnóstico, suscetibilidade genética comprovada e lesões proliferativas com atipia (Barros, Barbosa & Gebrim, 2001; Paiva et al., 2021). Sendo assim, após a lesão oncológica não metastática ser detectada, é importante averiguar qual a sua graduação histológica. Isto é, de acordo com informações clínicas (formação tubular/glandular; pleomorfismo nuclear; e índice mitótico), cada uma destas variáveis assume um valor (1 a 3) e de acordo com o escore final de (3 a 9), há a definição do grau histológico: grau 1, grau 2 ou grau 3 (Elston & Ellis, 1991; Aquino et al., 2017).

Nesse sentido, quanto menor o grau da doença, melhor o prognóstico (Buitrago, Uemura & Sena, 2011). Da mesma forma, quanto maior o estadiamento, menor chances de resultados positivos, sendo necessário o uso de técnicas mais invasivas. De acordo com o estadiamento do câncer, os devidos planos terapêuticos médicos são realizados: eles variam desde a necessidade de tratamentos locais (cirurgia e radioterapia), a procedimentos sistêmicos ou mais de uma técnica combinada - quimioterapia, hormonioterapia e imunoterapia (Ministério da Saúde, 2004; Nascimento et al., 2019).

Dessa forma, nos estádios 1 e 2, a conduta habitual consiste na cirurgia, que pode ser conservadora (com retirada apenas do tumor) ou na remoção total do seio (mastectomia). É importante ressaltar que há a avaliação dos linfonodos axilares e risco de recorrência pelo oncologista (idade da paciente, comprometimento linfonodal, tamanho tumoral, grau de diferenciação), a fim de melhor prognóstico e busca pela terapia mais apropriada (Moran et al., 2014; Paluch-Simon et al., 2022). Ademais, ressalta-se que a cirurgia conservadora (setorectomia) ocorre quando apenas uma parte do seio (quadrante) é retirada (INCA, 2019). Para esta, é necessário, na maioria dos casos, realizar quimioterapia neoadjuvante. Isto é, são efetuadas infusões de medicação antes da cirurgia para câncer de mama, a fim de que haja a diminuição da lesão e permitindo aumento do percentual de cirurgias conservadoras (Costa &

Chagas, 2013). Quimioterapias adjuvantes, por sua vez, são realizadas após a retirada do tumor, com finalidade de diminuir a chance de recidiva e aumentando a sobrevida (Machado & Sawada, 2008). Após o tratamento, é necessário permanecer em acompanhamento no ambulatório por cinco anos e depois, em continuidade na atenção primária em saúde a fim de haver a vigilância da recorrência (Ministério da Saúde, 2021).

Nesse sentido, destaca-se que o câncer hoje é considerado uma doença crônica em razão das novas tecnologias de tratamento que possibilitam sua cura. Porém, na maioria dos casos, ainda há o impacto do quadro clínico e dos efeitos colaterais das terapêuticas na saúde mental e física da mulher (Simeão et al., 2013; Fonseca, Lencastre & Guerra, 2014). Este processo de adoecimento acarreta importantes impactos físicos, emocionais e sociais na vida do paciente e familiares, tanto pela doença em si, quanto por problemas decorrentes dos tratamentos, que costumam ser prolongados, dolorosos e permeados por incertezas quanto a sua eficácia (Varela et al., 2017). A partir dessa visão, há o olhar para a pessoa, desde uma perspectiva biopsicossocial. Isto é, a saúde pode ser explicada com a relação e influência mútua entre três esferas: a biológica, a psicológica e o contexto social em que o sujeito está inserido (Engel, 1977; Freedman, 1995). Ademais, é fundamental abordagem multiprofissional, sendo necessário que os profissionais aprimorem não apenas suas habilidades técnicas-instrumentais de cada formação acadêmica, mas também evoluam na capacidade relacional, permitindo o estabelecimento de um vínculo adequado entre os pacientes, seus familiares e a equipe com que se trabalha, a fim de promover um melhor cuidado (Straub, 2014).

Aplicando a abordagem biopsicossocial e a psico-oncologia ao cuidado da paciente diagnosticada com câncer de mama, diversos estudos apontam para a influência de fatores psicológicos e sociais no tratamento (Maluf, Mori & Barros, 2005; Silva et al., 2021; Cunha, Pornaro & Oliveira, 2023). Com relação aos familiares envolvidos no cuidado da mulher, aspectos positivos apontados na literatura são o reconhecimento do papel de cuidador, a

importância do grupo de convívio como estratégia de enfrentamento, a aquisição de novas responsabilidades pelos integrantes e o amadurecimento de membros da família (Tavares & Trad, 2009; Karkow, et al., 2015; Silva et al., 2020). Variáveis psicossociais de experiências negativas podem ser associadas em mulheres mais jovens e em estágios mais avançados da doença (Castro et al., 2016), por exemplo. A má qualidade de vida das mulheres pode também ser associadas ao desenvolvimento de depressão (Demarque et al., 2016) e ansiedade (Bringel et al., 2022).

Quando a paciente recebe o diagnóstico de câncer de mama, este supõe um impacto emocional. Prejuízos e mudanças na rotina de pacientes oncológicas são amplamente descritos na literatura, especialmente entre aqueles diagnosticados tardiamente (Barros, 2008; Arab et. al., 2017). Além disso, o adoecimento pelo câncer de mama e seu tratamento geram sérias consequências que podem ser temporárias ou permanentes na vida da mulher (Santos & Vieira, 2011). A partir do diagnóstico, essas mulheres podem ser acometidas por preocupações em relação à morte, angústia, ansiedade, medo e, em alguns casos, sintomas depressivos (Reich & Remor, 2014; Desautels et al., 2018). Isto é, de acordo com o modelo biopsicossocial, o diagnóstico da doença pode ser considerado ameaçador de sua existência e angustiante para a paciente e sua rede de apoio, uma vez que há a possibilidade de mutilação do seio e também o pensamento atrelado a morte (Ramos & Lustosa, 2009).

Na oncologia, há o uso do termo distresse (*distress)* para se referir a um leque de emoções relacionadas a sintomas de depressão, ansiedade e transtorno de ajustamento (Bidstrup et al., 2015). Nesse sentido, mulheres com diagnóstico oncológico de câncer de mama podem apresentar níveis de distresse diferentes durante as diferentes fases do tratamento. Por exemplo, quando comparado com homens que tiveram diagnóstico de câncer de próstata e relataram sofrimento emocional na descoberta do quadro clínico, as mulheres com câncer de mama referiram maior sofrimento durante as fases ativas do tratamento, expressando

preocupações sobre fadiga, família e amigos, peso e dor (Stapleton et al., 2017). Além disso, disfunção sexual oriunda dos tratamentos também pode afetar a qualidade de vida nessas pacientes (Dinapoli et al., 2021).

Dessa maneira, os tratamentos cirúrgicos, aliados a sessões de radioterapia e quimioterapia, podem provocar sentimento de perda da identidade antes conhecida, fundamentados na modificação da imagem corporal e nas repercussões negativas na qualidade de vida dessas mulheres (Vieira et al., 2015). Assim, o tratamento oncológico pode causar uma diminuição na autoestima destas pacientes (Garcia & Daiuto, 2016), além de operações cirúrgicas estarem frequentemente associadas com ideias de mutilação e prejuízo na qualidade de vida das mulheres (Boing et al., 2017).

Em vista disso, há a necessidade de ajustamento da mulher à nova realidade e das perdas concretas (tempo necessário em consultas médicas, possibilidade de retirada do seio, etc.) e simbólicas (considerando-se uma experiência de distresse) vivenciadas durante este processo (Guedes et al., 2018). Com isso, ressalta-se a assistência diferenciada pela equipe de saúde multiprofissional, entendendo-se que o atendimento psicológico auxilia na compreensão, na elaboração desses lutos experimentados e na adesão ao tratamento a longo prazo (Lôbo et al., 2014). Entende-se que as restrições impostas pelo tratamento, a incerteza quanto à evolução do quadro e a própria transformação corpórea podem representar uma experiência que diminui a autoestima (Morales-Sánchez et al., 2021) e qualidade de vida dessas pacientes (Greenlee, et al., 2017; Araujo et al., 2019).

Imagem corporal e qualidade de vida: uma visão para o câncer de mama

O aumento das taxas de sobrevida vem associado à preocupação com a qualidade de vida das pacientes sobreviventes. Nesse sentido, qualidade de vida é um termo subjetivo e multifatorial. Este conceito está relacionado com a percepção do indivíduo de sua inserção na

vida, no contexto da cultura e sistemas de valores nos quais ele vive e em relação aos seus objetivos, expectativas, padrões e preocupações (World Health Organization [WHO], 1994).

Nesse sentido, a satisfação com a percepção corpórea visual de si mesma perpassa aspectos de qualidade de vida, que podem acarretar mudanças no bem-estar físico e subjetivo das pacientes (Brady et al., 1997). Isto é, a partir do tratamento oncológico, estas mulheres podem presenciar sintomas como dor, fadiga, medo da morte, mudanças corporais, senso de feminilidade e sexualidade prejudicados (Izydorczyk et al., 2018; Archangelo, et al., 2019). Ademais, dentre os efeitos colaterais do tratamento quimioterápico, há alopécia, irritação e mudança da cor da pele e diminuição da libido. Em decorrência disso, mudanças na aparência podem estar relacionadas com uma diminuição na autoestima dessas mulheres, o que têm sido associada a redução da satisfação da imagem corporal e qualidade de vida (Richard et al., 2019).

Isto posto, pode-se empregar que a imagem corporal está associada com a percepção visual do próprio corpo como inteiro e de suas partes individuais, de modo em como o indivíduo representa a si próprio em seu aparelho psíquico (Gonçalves et al., 2014; Nazareth & Castro, 2021). Isto é, configura-se como um constructo subjetivo e, portanto, podem haver mudanças durante os diferentes tratamentos, incluindo quimioterapia, radioterapia, hormonioterapia e cirurgia (Reich & Remor, 2012; Kolodziejczyk & Pawłowski, 2019). Ademais, é necessário ressaltar que em mulheres, satisfação com a imagem corporal inclui aspectos como sentir-se atrativa, feminina, com senso de identidade própria e como forma de expressar emoções no meio social em que está inserida (Paterson et al., 2016; Miaja, Platas & Martinez-Cannon, 2017). Além disso, estudos apresentam que fatores sociodemográficos, como idade mais avançada, a existência de rede de apoio e assistência psicológica também são variáveis preditoras para melhor adesão ao tratamento e, consequentemente, melhor qualidade

de vida da paciente (Crippa et al., 2003; Mokhtari-Hessari & Montazeri, 2020; Dinapoli et al., 2021).

Em decorrência dessas mudanças, as pesquisas em imagem corporal vêm crescendo não apenas no sentido de entender como a doença afeta a paciente, mas também a fim de incrementar as terapêuticas necessárias para o processo, de forma a investigar melhores intervenções para atuar junto às mulheres e, consequentemente, aumentar a qualidade de vida desta população (Sun et al., 2014; Chang et al., 2014; Davis et al., 2020; Amini-Tehrani et al., 2021; Brunet & Price, 2021).

Considerações Finais

A Psicologia da Saúde é a especialidade que busca estudar e intervir no processo de saúde-doença. Com isso, pode-se entender a psico-oncologia como um campo de atuação na área, interligando saberes da psicologia da saúde, da psicologia clínica e da oncologia. Desse modo, considera-se o diagnóstico oncológico pode se revelar traumático, impactando e modificando significativamente a qualidade de vida das pacientes, sobretudo no que diz respeito à organização da vida cotidiana, familiar e social. Uma variedade de sentimentos intensos, como desesperança, angústia e o temor do desconhecido são vivenciados, exercendo influência ao longo de todo o processo de adoecimento e tratamento.

Nesse cenário, o câncer de mama é ainda considerado um desafio para as pacientes, para os familiares e para as equipes por sua alta taxa de incidência e letalidade, mesmo com novas tecnologias de tratamento. Além das implicações emocionais decorrentes do diagnóstico de neoplasia maligna, essa doença apresenta características específicas em decorrência da percepção da imagem corporal, envolvendo angústias diretamente ligadas à feminilidade, maternidade e sexualidade. Com isso, é necessário um olhar da psico-oncologia junto à equipe multiprofissional para este fenômeno, a fim de procurar acolher as demandas das pacientes

com este diagnóstico, como forma de entender melhor suas demandas e buscar intervenções que visam adaptar a realidade da mulher nesta nova realidade.

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Capítulo II[3]

What is the relationship between body image and the quality of life of women who underwent surgery for breast cancer? A Scoping Review

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Abstract

Purpose: This review aimed to identify, characterize, map, and summarize existing knowledge about the relationship of perceived body image with the quality of life of women who have undergone surgical treatment for breast cancer.

Methods: A scoping review was conducted following the PRISMA-ScR guidelines. PubMed, PsycINFO and Scopus databases were searched, and articles published until August 2022 were included.

Results: The search resulted in 796 records, and fifty-one articles were included for analysis. A significant negative impact on body image perception and quality of life after surgical treatment for breast cancer was found in the majority of studies. Sociodemographic variables such as age, education, socioeconomic status, unstable attachment styles and time after the surgery may have an effect on a worsening of the overall body image and quality of life score

[3] Article submitted and accepted for publication in the journal "Psycho-Oncology", which uses Vancouver formatting.

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of women. It was found that there was greater dissatisfaction with body image in women who underwent mastectomy compared to those who underwent conservative surgery.

Conclusion: Evidence has shown that breast cancer surgery affects the perceived body image and quality of life of patients worldwide. Age, education, socioeconomic status, and the type of surgery are potential factors influencing these outcomes. It is worth noting that the review encompassed articles from various countries, reflecting a significant cultural diversity among the studied populations. However, most of these articles did not delve into an analysis of these cultural disparities. This review also indicated insufficient details regarding the assessment instruments used to assess perceived body image.

Keywords: Body image. Breast cancer. Oncology. Quality of life. Surgical treatment.

Background

Breast cancer is a disease caused by the disordered multiplication of abnormal cells in the breast, which forms a tumor with the potential to invade other organs. In 2020, this disease became the most diagnosed type of cancer globally, with more than 2.26 million new cases and almost 685,000 deaths worldwide [1]. As a result, it is the most common cause of cancer death in women and the fifth most common cause of cancer death in general.

Despite being a diagnosis with a rising evolution, breast cancer has been showing a downward trend in mortality worldwide. That said, data indicate that the reduction in deaths may be related to greater access to health services, which enables early diagnosis and timely treatment of the disease, thus increasing survival [3]. In this sense, it is necessary to consider that treatment for the disease (surgery, chemotherapy, radiotherapy and systemic treatment) can lead to physical symptoms such as body pain, loss of vaginal lubrication, fatigue, sleep disorders [4,5]. In addition, psychological symptoms are also involved in this process, such as anxiety, depression, isolation, low self-esteem and fear of death [6]. Thus, it is noteworthy that, in most cases, there is still the impact of the clinical picture and the side effects of therapies on

the mental and physical health of women, according to the procedures involved in their cure [7, 8, 9].

Studies indicate that the breast is perceived as an important part of women's identity in contemporary society [6], serving as a symbol of femininity, sexual desire, beauty and motherhood [10]. In view of this, surgical operations are often associated with ideas of mutilation and impairment in women's quality of life [11]. In other words, satisfaction with the visual bodily perception of oneself can lead to changes in the physical and subjective well-being of patients, permeating aspects of their quality of life. This concept, in turn, is a subjective and multifactorial term. According to the World Health Organization [12], quality of life is related to the individual's perception of their insertion in life, in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns [13, 14].

Thus, taking into account that physical appearance is also one of the factors that describe quality of life [15, 16], considering it is important in order to have better health outcomes, understanding that the therapies linked to the treatment of breast neoplasms can cause negative repercussions and losses in the quality of life of the women who underwent them [17, 18]. It is necessary to reflect that the increase in the survival rates of these women also makes it possible to think about the quality of life of patients who underwent cancer treatments, especially those who underwent partial or total removal of the breast and had body changes after treatment.

However, during the evolution of studies in the area of health psychology and psycho-oncology, few studies aimed to explore the role of body image as a predictor of emotional distress. To the best of our knowledge, research on body image has been growing [19, 20, 21, 22, 23]. Therefore, this scoping review presents an updated overview of the existing literature on the field not only in order to understand how the disease affects the patient, but also in order

to investigate better interventions to work with women and, consequently, increase the quality of life of this population.

The main purpose of this article is to review the existing scientific literature, in materials published until August 2022, on the relationship of perceived body image with the quality of life of women who have undergone surgical treatment for breast cancer. It also seeks to describe which instruments are used to measure body image for breast cancer. In addition, it aims to identify whether different types of surgery (total mastectomy or conservative) have different impacts on perceived body image and quality of life in women with breast cancer, in order to orient clinical practice and personalize psychological interventions according to patient needs.

The guiding questions of the study are the following:

1. What is the relationship of perceived body image with the quality of life of this population?

2. Which instruments are used to measure body image in the context of breast cancer research? Which dimensions do the instruments evaluate?

3. Are the different types of surgery (total or conservative mastectomy) associated with any specific profile of body image and quality of life?

Methodology

Scoping review can be defined as a way to clarify and map working definitions and conceptual boundaries of a topic or field that has not yet been studied and it allows to clarify key concepts and definitions in the literature [24, 25]. The study was conducted according to the guidelines of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR) [26] as a tool to ensure rigor in the processes that make up this review.

Protocol

The protocol was drafted using the Preferred Reporting Items checklist for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR). The final scoping review protocol was registered with the Open Science Framework on May 21, 2023 [27], and is available at the following link: https://osf.io/qm6da/.

Literature search strategy

Librarian assistance with experience in the literature review was consulted to develop the search strategy in September 2022, and descriptors were defined by using the controlled vocabularies MeSH and Decs. Language of manuscripts was limited to English, Spanish and Portuguese; this was done for practical reasons. The Boolean operators AND were used to combine terms and filter the studies. A computerized search was conducted to locate the empirical studies in the following scientific databases: PsycINFO, Pubmed and Scopus.

The search terms were composed of descriptor combinations addressing:

(1) surgery for breast cancer: (Breast Neoplasms/surgery[mh] OR Mastectomy[mh] OR Mastectomy[tw] OR Mammectomy[tw] OR Breast Conservation Therapy[tw] OR Breast Quadrantectomy[tw] OR Breast-Conserving Surgery[tw] OR Breast-Sparing Surgery[tw] OR Limited Resection Mastectomy[tw] OR Local Excision Mastectomy[tw] OR Lumpectomy[tw] OR Partial Mastectomy[tw] OR Segmentectomy[tw]).

(2) body image: (Body Image[mh] OR Body Image[tw] OR Body Identity[tw] OR Body Representation[tw] OR Self Concept[mh:noexp] OR Self-concept[tw] OR Self Confidence[tw] OR Self Esteem[tw] OR Self Perception[tw] OR Self-Perception[tw] OR self-image[tw] OR self-image[tw]).

(3) quality of life: (Quality of life[mh] OR Quality of life[tw] OR HRQOL[tw] OR Health-Related Quality Of Life[tw] OR Life Quality[tw]).

(4) 1 AND 2 AND 3.

Articles selection

This scoping review considered primary studies with quantitative methodology (no restriction to design) published until August 2022 that relate body image, quality of life and breast cancer in women who underwent surgical treatment. Inclusion criteria related to types of studies: empirical studies (for example: transversal study, case-control study, cohort study, case studies, randomized clinical trial and studies with qualitative data collection), which include results that relate body image, quality of life and breast cancer in women who underwent surgical treatment. Inclusion criteria related to types of measurement: studies that used standardized and psychometric instruments to measure body image and/or quality of life related to breast cancer. Inclusion criteria related to types of results: studies that related results of psychosocial variables associated with body image, even if this construct is not the focus of the study. Exclusion criteria: studies that do not report psychosocial outcomes; which are written in a language other than English, Spanish and Portuguese; studies that do not include the perspective of body image; secondary research, literature reviews, protocols for ongoing studies and trials, case reports, or in-vitro or animal studies.

All databases were screened for relevant texts. One researcher independently uploaded the references and checked for duplicates in the software *Zotero*. This software allows to label which articles should be considered for the scoping review and which ones are not eligible for the scoping review, based on the inclusion criteria mentioned above. Then, two other researchers read and selected articles to compose the scoping review. Data was extracted from papers included in the scoping review by three independent reviewers using a data extraction tool (table) developed by the authors of the review. The data extracted included specific details about the key findings relevant to the research questions. They selected those for the final review material based on the inclusion and exclusion criteria, and conflicts were debated and

solved in consultation with a fourth author. The article selection process was recorded using the PRISMA-ScR flowchart [26].

Data Analysis and Presentation

For the next stage, we developed a data extraction framework to map study characteristics based on discussion among the authors. The main categories were: tittle, authors, year, country, research design, main objective, psychosocial variables associated with body image, how it was evaluated (interview, questionnaire/self or hetero-evaluation), effect on QoL, sample size and characteristics, instrument name measuring body image and quality of life, main results of the study). Before the review process, the authors piloted the data extraction framework to evaluate if it was consistent and coherent with the study's goals. Using Google Sheets, three authors independently included data from the final studies selected to review. When necessary, a fourth reviewer was consulted to solve potential disagreements.

Results and Discussion

The search resulted in 796 records. It was reduced to 524 after removing duplicates. Next, titles and abstracts were screened, and 210 were excluded for not meeting the inclusion criteria and 38 articles were not located, even after three attempts to contact responsible authors (emails sent to the correspondence author). In the next stage, after reading the objectives and methodology of the studies, 196 articles were discarded. Then, 80 articles were read in full and assessed for eligibility. Fifty-one articles were included in the final review. PRISMA-ScR process flowchart for selection of reviewed studies is illustrated in Figure 1.

Figure 1. PRISMA-ScR process flowchart for the selection of reviewed studies

****Include Figure 1 approximately here ****

General characteristics of the studies

The geographical scope, population and characteristics of the studies relating body image and quality of life in women undergoing surgical treatment for breast cancer are

summarized in Table 1. All the articles were written in English (n = 51). The populations studied were diverse, including 27 countries in a broad geographical scope. The studies analyzed were published between 1999 and 2021, with samples ranging from 13 to 3045 participants. The ages of the participants ranged from 18 to 94, however, some studies did not include this information. Table 1 summarizes the general characteristics of the selected studies.

****Include Table 1 approximately here ****

Body Image and Quality of Life of women who have undergone surgery

The notion of body image is inherently subjective, encompassing how individuals perceive their entire body and its specific parts, including the breasts. It encompasses thoughts, perceptions, emotions, and actions, and is susceptible to various influences [28, 29]. Factors contributing to its formation include the cultural environment, media influence, life experiences, the quality of interpersonal relationships, and one's mental well-being [30]. Women who have undergone breast cancer treatment may encounter physical changes resulting from chemotherapy, radiotherapy, and surgery, potentially affecting their body image and overall quality of life [31].

In the context of women, aspects such as self-identity, feelings of femininity, and attractiveness play a pivotal role in determining satisfaction with body image [32]. Consequently, treatments like chemotherapy, radiotherapy, surgery, and hormone therapy possess the potential to inflict significant alterations on the body, thereby posing a risk to body image [33, 34]. Each treatment modality manifests distinct side effects, ranging from the enduring surgical scars with immediate impact to skin alterations resulting from radiotherapy-induced tissue damage and the transient, reversible changes such as hair loss associated with chemotherapy [32].

Research further underscores the significant correlation between body image and emotional well-being, as well as its profound influence on health status and overall quality of

life [35]. This underscores the imperative of recognizing body image as a vital determinant for promoting health in this particular population.

Concerning the first main purpose of this review**,** the correspondence between low levels of body image perception and a lower quality of life after surgical treatment for breast cancer has been described in 31 studies [19, 20, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63] (see Table 1). In view of this, considering the 51 studies found, six articles indicate an association between dissatisfaction after surgery and perceived body image [64, 65, 66, 67, 68, 69]. In the body image dimensions, that is, body image satisfaction, self-consciousness of appearance and shame, only this last one was associated with an increase in levels over time [70]; however, other dimensions of the perceived body image construct were not significant in predicting quality of life in the recovery phase from surgery.

Studies showed that sociodemographic variables such as age [76], education [20, 53], socioeconomic status [20, 40, 49, 53], unstable attachment styles [77] and working life [53] may have an effect on a worsening of the overall quality of life score of these women. On the other hand, specifically, younger women who have undergone surgical treatment tend to have worse quality of life and body image scores [40, 42, 55, 63]. The time elapsed after systemic treatment operates as a variable that improves the quality of life and body image of operated patients [38, 41, 46, 49, 52, 58, 59, 70, 78]. In other words, studies show that the longer the time after surgery, the better the quality of life and perceived body image. In this way, the period after the procedure can be considered a predictor of body image and quality of life.

Perceived body image, quality of life and types of surgery

Timely and accurate diagnosis plays a pivotal role in the success of breast cancer treatment, achieving a cure, and ensuring the survival of patients [79]. Breast self-examinations and mammograms are invaluable tools for detecting the disease in its early stages. Upon

receiving a breast cancer diagnosis, patients often grapple with a wave of intense emotions, including thoughts of mortality, distress, anxiety, fear, and, in some instances, the onset of depressive symptoms [80, 81]. This emotional impact can be amplified when surgical intervention becomes necessary.

In cases where cancer has advanced to more critical stages, surgical treatment is often required to remove the tumor. Several factors, such as age, disease stage, the patient's overall health, tumor size and location, influence the choice of surgical approach. Sectoral resection (or conservative surgery) involves removing only the specific area of the breast housing the tumor, along with the surrounding breast tissue. Radical mastectomy, on the other hand, entails the complete removal of the breast, with the option of removing chest wall muscles and axillary lymph nodes if necessary [82].

Breast reconstruction is a procedure aimed at restoring the breast's appearance after mastectomy and can be performed either concurrently with or following the initial surgery. Consequently, surgical treatments can profoundly impact a patient's sense of identity, primarily by altering their perception of body image, with consequential negative effects on their overall quality of life [18]. This is exacerbated by the potential for cancer treatment to erode the self-esteem of these individuals [83].

Studies have identified impacts covering self-esteem and body image, sexuality, financial life and other aspects and other aspects that interfere with and impair the quality of life of this population [17, 45, 48, 50, 84]. The findings of this review corroborate the existing literature, since satisfaction with perceived body image and the quality of life of patients undergoing breast cancer treatment may also be associated with the surgical methods used, according to the studies analyzed. Among the articles included in this study, 21 reported significant dimensions of greater dissatisfaction with body image in women who underwent

mastectomy compared to those who underwent conservative surgery [19, 35, 36, 37, 38, 39, 40, 43, 46, 49, 57, 60, 62, 64, 65, 66, 68, 72, 78, 85].

Insecurity about physical appearance, which causes anguish, is one of the main factors in body image dissatisfaction. In addition, dissatisfaction with the aesthetic result of surgical treatment and changes in sexual pleasure also have a negative impact on these women's sex lives [19, 40, 45, 46, 49, 57, 65, 60, 85].

Twenty-one studies were identified that compared the impact on quality of life between different types of surgery. Of these, ten found no significant differences in QoL levels between the different types of surgical procedures [38, 46, 60, 64, 65, 67, 68, 69, 72, 76]. However, eleven articles show differences, including those related to symptoms (such as swelling, pain and difficulty mobilizing the arm), which show that breast-conserving surgery provides a higher QoL compared to mastectomy [19, 39, 40, 41, 42, 43, 45, 57, 62, 66, 78].

Patients who had radical mastectomy often reported issues such as arm edema and difficulty lifting their upper limbs. Consequently, procedures that yielded positive results in terms of physical function correlated with benefits such as reduced body pain, increased mobility, and better capacity to engage in daily activities [38, 48, 57, 76, 77, 78, 86, 87]. Furthermore, research has indicated that involving patients in the decision-making process regarding their treatment type is crucial during their cancer journey. Studies, including [65], have demonstrated that patient participation in treatment decisions not only enhances satisfaction levels but also plays a vital role in their overall experience and survival. This underscores the importance of investing in multidisciplinary teams that empower patients by providing them with comprehensive information. This empowerment enables patients to express their expectations, fears, and anxieties, which are essential considerations for their post-operative and post-cancer life.

Instruments used to measure body image

Understanding which instruments are suitable for evaluating body image in the context of breast cancer is crucial for a precise analysis of the findings in this study. To achieve this, a comprehensive survey was conducted to identify the specific tools employed in the articles incorporated into this scoping review for the assessment of body image in breast cancer patients.

The process involved identifying and excluding instruments that did not directly address the concept of body image. Upon closer examination, it became apparent that not all the instruments used for assessing body image effectively captured this complex construct. Subsequently, the attributes and characteristics of these instruments were meticulously described. In the final phase of the analysis, those instruments that genuinely prove to be well-suited for assessing body image within this distinct population of breast cancer patients were pinpointed and highlighted.

When evaluating the body image of breast cancer patients who have undergone surgical interventions, it is imperative that the assessment instruments consider factors relevant to this specific population. To select appropriate instruments for this assessment in breast cancer patients, several quality criteria can guide the process. These criteria should be based on the inclusion of items aligning with the previously mentioned definition of body image, while also addressing pertinent issues. These issues encompass the impact of surgery on physical appearance, such as the presence of scars and aesthetic outcomes; the consequences of the disease or treatment on body image, including aspects like hair loss or alterations to the skin; the repercussions of the disease or treatment on sexual well-being, such as feelings of diminished attractiveness; concerns related to breast "amputation"; and matters pertaining to identity and femininity. Utilizing these outlined criteria, a comprehensive evaluation was

conducted for each of the instruments identified within the scoping review designed to assess body image in patients dealing with this particular type of cancer.

Among the 51 articles evaluated, 57 instruments were found that had been used by the authors to assess various constructs. Of these, 14 were found to have been used to assess body image. However, the Rosenberg Self-esteem Scale (RSES) [88] and the Acceptance of Illness Scale (AIS) ([89] were not suitable for this assessment. These scales were used in three studies to assess body image, however, even though they assess self-esteem and self-acceptance, both do not have any items about the body or body image. In addition to these scales, 12 other instruments were identified that were intended to assess body image in breast cancer patients. A summary of the information is shown in Table 2 and each instrument is described below.

****Include Table 2 approximately here ****

It can be seen that some instruments assess body image in a way that addresses specific aspects related to cancer and its treatment. The Body Image Scale (BIS) [32] was the most used instrument to assess body image among the studies included in this review, appearing six times. Along these lines, the Breast Impact of Treatment Scale (BITS) [90] also assesses this construct for cancer patients, the former being more general and suitable for application to patients with different types of cancer, and the latter more focused on breast cancer. The Breast Cancer Treatment Outcomes Scale (BCTOS) [91]. In addition to being an instrument with a greater number of items than the previous one, the Body Image After Breast Cancer Questionnaire (BIBCQ) [92] assesses other dimensions of body image perception, such as: vulnerability (to cancer), body stigma, limitations (in daily functioning), body concerns, appearance (obviousness of the effect of cancer on appearance), and arm concerns in the context of breast cancer.

Although they did not include questions directly related to cancer, the Derriford Appearance Scale 24 (DAS24) [93] and the Appearance Schemas Inventory – Revised (ASI-

R) [94] were also used to assess patients' body image in some studies. We also found one study that used only the body shame subscale of the Experience of Shame Scale (ESS) instruments [95]. Some studies concealed very relevant information, which even hindered this analysis. The BREAST-Q [96], for example, was only used in the study by [75], according to the authors, to assess body image. The instrument originally aims to assess satisfaction and health-related quality of life [97], is made up of pre- and post-operative modules, and has separate modules for different types of breast surgery (mastectomy, breast reconstruction, breast augmentation and reduction mammoplasty), i.e. each scale is independent and self-administered. However, the included study only stated that a validated version was used, without mentioning the validation study or the number of items and, above all, did not state which modules were used.

Some scales have more than one version as a result of adaptations to different cultures, such as the BCTOS [91], mentioned above. One of the studies used an adapted version of the Physical Self-Perception Profile (ISP-25) for France, removing 5 items from the original scale. The final version used by [86] had 25 items in total. The original scale was developed and validated by [98], is multidimensional and assesses aspects such as: perception of sporting competence (sport); perception of body attractiveness (body); perception of physical strength and muscle development (strength); perception of level of fitness and exercise (condition); and physical self-esteem. The Multidimensional Body-Self Relations Questionnaire (MBSRQ), developed by [99], has also undergone several revisions and has versions with different numbers of items. The version used in the studies consisted of 46 items covering: appearance orientation, evaluation of appearance, concern about excess weight, a scale of satisfaction with body areas and self-rated weight. The Body Cathexis Scale [100] was used to determine a person's satisfaction with a body part or function. Finally, the study by [41], conducted in the United States, used an adapted version of the Body Image Index to assess satisfaction with the appearance of the body and breasts. This inventory was developed by [101] and has 7 items.

Concerning the second question of this review, the survey on the validation of the instruments identified in this review showed limitations in terms of the instruments available and suitable for use in the Brazilian population, which also leads to limitations in the studies carried out and their results. In addition, the analysis of the suitability of the instruments found in the studies to assess body image in women with breast cancer is an aggravating factor, given that aggravating the situation, as it demonstrates the shortage of suitable instruments to use in this context. Of the 12 instruments identified for assessing body image in the study samples, only three have already been validated for the Brazilian population: the Breast Cancer Treatment Outcomes Scale (BCTOS) [91], the abbreviated version of the Multidimensional Body-Self Relations Questionnaire (MBSRQ-AS) [102] and the Body Image after Breast Cancer Questionnaire (BIBCQ) [92]. However, of the three, only the BIBCQ [92] seems really suitable for carrying out this assessment.

Based on the information presented and on the third question in this review, it is important to analyze the dimensions covered by the instruments and assess their relevance to this specific population. Furthermore, it is necessary to consider that some of them assess similar dimensions. The ASI-R [94], when assessing the individual's investment in their body image, investigates their efforts to be or feel attractive and their belief in how their appearance influences their self-worth and self-concept. The MBSRQ [99], Body Cathexis Scale [100] and Body Image Index [101] assess dimensions more related to satisfaction with appearance, the first of which also assesses issues related to body weight. The BIS [32] assesses behavioral, affective and cognitive aspects of body image, as does the BITS [90]. However, the latter is more focused on the stress of body change, specifically in people with breast cancer who have undergone breast surgery. Like the BITS [90], the BREAST-Q [96], the BCTOS [91] and the BIBCQ [92] are also more directly related to dimensions about breast cancer or breast surgery, which can be considered positive for studies that evaluate this specific population, providing

more relevant and accurate information. Within the context of breast cancer, these instruments assess body image, the distress of altered appearance due to treatments, the effect of cancer on appearance, body stigma, vulnerability to cancer, concerns about the body and perceived differences in aesthetic and functional results after surgery. However, this review was unable to find standardized scales of perceived body image with structured dimensions on the subject. As a result, there is still a need for studies on the clearest dimensions to assess body image.

Limitations

The review exclusively incorporated studies available in English from three specific databases. It's important to acknowledge that there could be pertinent research in this field published in different languages and across alternative databases. Furthermore, the review exclusively encompassed studies where the sample underwent evaluation through psychometric instruments, thus excluding those employing alternative assessment methodologies such as qualitative approaches like interviews. These alternative methods may also contain valuable data regarding the subject matter. Moreover, it's worth noting that 38 articles could not be located, even contacting the authors three times, on different days and times.

Conclusions

Evidence has been discovered regarding the impact of breast cancer surgery on the quality of life and body image perceptions of patients across various countries worldwide. Factors such as age, educational background, socioeconomic status, religious practice and the specific type of surgical procedure they underwent are potential predictors of declines in the overall quality of life and body image scores among these women. Additionally, the duration of time following systemic treatment is a variable that exhibits a positive correlation with improvements in both quality of life and body image among surgery patients. Concerning diverse surgical approaches, research indicates that individuals who have undergone

mastectomies tend to experience greater dissatisfaction with their body image when compared to those who have undergone conservative surgical procedures.

It is worth noting that the review encompassed articles from various countries, reflecting a significant cultural diversity among the studied populations. This cultural diversity directly impacts the quality of life and body image perceptions of the subjects under examination. However, most of these articles did not extensively delve into an analysis of these cultural disparities. Some cultural factors that may exert influence include considerations such as the significance of parenthood or marital status, the limited resources available for healthcare investment, and the absence of public services that might facilitate certain treatments that could potentially lessen the burden on these women. The dearth of pertinent information within the studies included in the review represents another significant factor. This deficiency encompasses a lack of sociodemographic data, insufficient details regarding the assessment instruments used, and an absence of information concerning the psychometric properties of these instruments. Moreover, the review identified studies with notably small sample sizes or inherent problems in their research design and methodology.

Finally, it can be concluded that body image is a subjective and complex construct, and there are a variety of aspects and dimensions included in the instruments that aim to assess this construct. In addition, it is important to note that there are several specificities related to body image in the breast cancer population, which raises questions about the suitability of the scales used for this assessment in the studies. Furthermore, there is a lack of validated instruments (or more options) to assess body image related to breast cancer, which represents a significant challenge for researchers. It is important to note that, in some studies, only the body image sub-scales of a certain instruments were used, since the rest of the instrument was considered irrelevant to the topics studied. In these cases, reliability may be compromised, and using such instruments brings limitations to the studies and impacts their results. In other words, the lack

of comprehensive instruments to evaluate body image construct is a central factor to be considered, requiring studies to be carried out to meet this need.

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Figure 1.

PRISMA process flowchart for selecting the studies reviewed

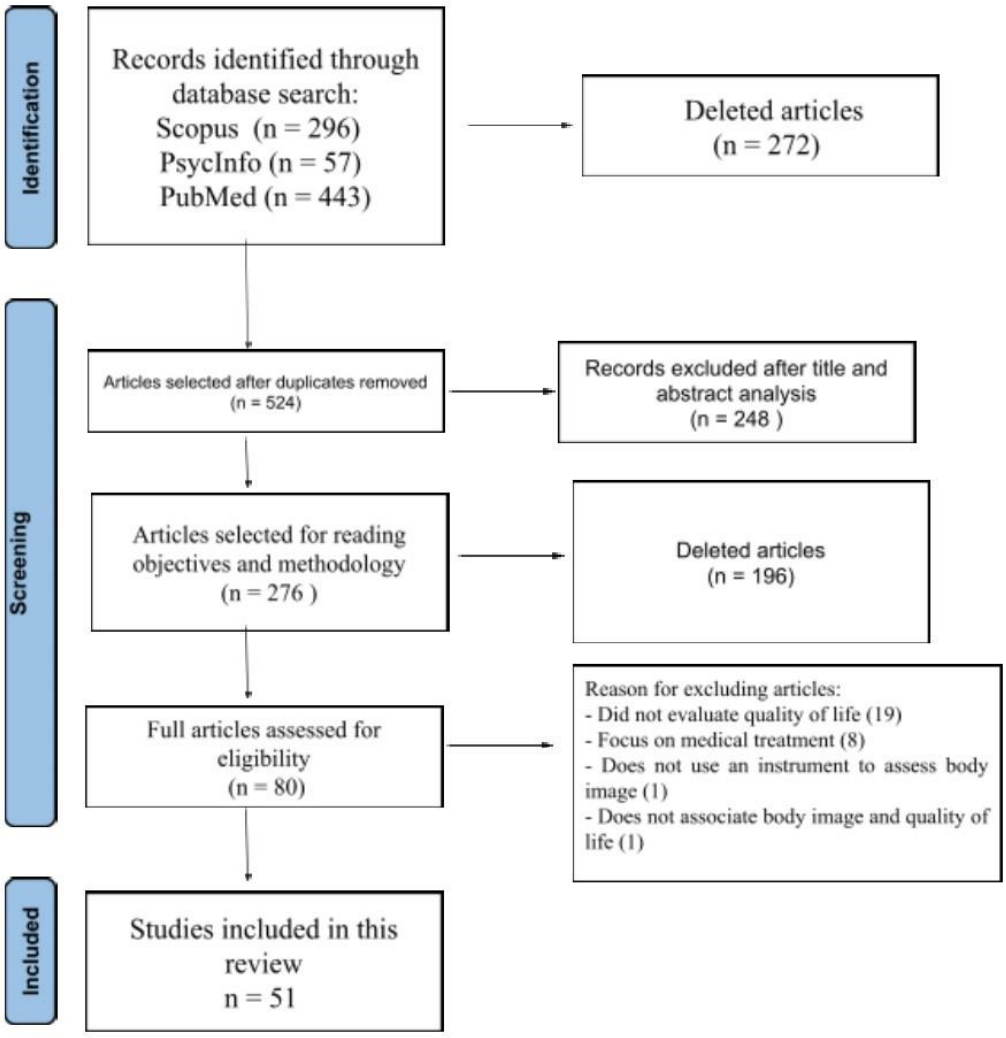

Table 1.

General characteristics of the studies

First author and year	Country (article language)	Instruments used (Acronym or name)	Article summary	Sample (n)	Age (min-max; mean (SD))	Education level
Sharbaf et al. (2016) [30]	Iran (English)	SF36 - Health Survey; EORTC QLQ-BR23	Comparison of mean QoL and body image ratings showed a significant difference between the control and experimental groups after receiving treatment (Mindfulness-based cognitive therapy). This improvement reflects the impact of treatment in mastectomized cancer patients.	50	NI - NI; NI (NI)	At least elementary school.
Spatuzzi et al. (2016) [54]	Italy (English)	EORTC QLQ-C30; EORTC QLQ-BR23; Body Image Scale (BIS); Multidimensional Scale of Perceived Social Support.	Women with mastectomy had more limited functioning than those in the BCS group. Women with BCS did not report any different difficulties with their body image than women who only had a mastectomy. The results show that, for women who decided to undergo reconstruction after mastectomy, social support could be involved in the level of satisfaction with their body image after breast surgery.	157	35-75; 56.4 (12.7)	N (%) Low - 99 (63.1) High - 58 (36.9)
Słowik et al. (2017) [55]	Poland (English)	Female Sexual Function Index (Polish version PL-FSFI); EORTC QLQ-C30; EORTC QLQ-BR23.	The study found no significant difference in overall quality of life (QoL) based on the type of surgery among women. Demographic variables and surgery type did not impact body image. However, emotional disturbances within three months post-surgery increased the risk of disturbances in body image and assessment of future prospects. Multiple regression analysis revealed a positive correlation between emotional functioning and future prospects (p=0.01) and body image (p=0.007). Patients undergoing breast-conserving surgery (BCS) with axillary lymphadenectomy reported the greatest local complaints, while mastectomy patients exhibited higher cognitive functioning but more severe systemic side effects compared to BCS patients.	42	36-68; 56 (NI)	N (%) Superior -13 (31.0%) Medium - 15 (35.7%) Professional - 10 (23.8%) Basic - 4 (9.5%)
Chang et al. (2007)[49]	Taiwanese (English)	The Functional Assessment of Cancer Therapy - Breast (FACT-B)	The study found no significant difference in QoL between women who underwent mastectomy and those who had BCS. However, women who had a mastectomy expressed greater concern about their resulting body image compared to BCS patients. BCS had a measurable, positive impact on body image and satisfaction with treatment decisions. Mastectomy patients were significantly more dissatisfied with their treatment compared to those who had undergone BCS (18.5% versus 4.8%; p = 0.005). Additionally, women who made their own treatment decisions were more satisfied with the results than those whose decisions were made by someone else.	220	32-69; 49 (NI)	Wide range of educational levels, but three-quarters of patients had 12 years or less of education.

Bhat et al. (2019)[40]	India (english)	The long-term quality of life–breast cancer questionnaire.	QoL of women who underwent BCS to be higher than those who underwent mastectomy. Physical function and body image aspects of the QoL were significantly lower in women who had undergone BCS compared with the mastectomy group.	40	NI-NI; 50.92 (7.85)	NI
Wu et al. (2019)[43]	Taiwanese (English)	WHOQOL-BREF; BIS	Total body image scores are predictive of all QoL facets and domains. Patients who received total mastectomy showed relatively stable trends, compared with patients who received BCS, who tended to feel "appearance dissatisfied" and "less sexually attractive" about 40 months after surgery. Patients who received axillary lymph node dissection tended to show fluctuations in QoL scores and body image with time after surgery. After controlling for potential confounders, they found that patients' QoL was not associated with different types of tumor removal surgery.	581	18-NI; 53 (9)	Education - Breast Conservation Surgery/Mastectomy ≤ 6 years - 29 (13.7%) / 56 (15.1%) 7-12 years - 93 (44.1%) / 178 (48.1%) > 12 years - 86 (40.8%) / 135 (36.5%)
Enien et al. (2018)[34]	Egypt (english)	EORTC QLQ-C30 (version 3.0); EORTC QLQ-BR23	The stage of disease was a significant predictor in the body image functioning model (P = 0.003), while chemotherapy played a role in the global health and cognitive functioning models (P = 0.014 and 0.050). Egyptian women with breast cancer generally exhibited medium to good QoL functioning and low to medium symptom experiences. Mastectomy patients had a more favorable global health status and body image across the functional scale, attributed to social and religious factors. BCS patients had more favorable functional scale scores on almost all other items. Body image and sexual functioning scored the lowest using disease-specific tools. Factors such as widowhood, hypertension with nodal status n 1, and mastectomy were associated with better body image related to QoL. On the other hand, elderly, illiterate, postmenopausal patients with advanced stage and lymphedema tended to have a less favorable health-related QoL.	172	18-NI; 50.32 (8.54)	University (n=8) - 4.7% High school (n=47) - 27.3% Primary school (n=23) - 13.4% Illiterate (n=94) - 54.7%
Moreira et al. (2010) [56]	Portugal (English)	Derriford Appearance Scale 24 (DAS24); Experience of Shame Scale; Appearance Schemas Inventory - Revised (ASI-R); WHOQOL-Bref; Hospital Anxiety and Depression Scale (HADS).	Within the dimensions of body image, only shame increased over time. Patients who underwent mastectomy felt more shame and were more dissatisfied with their appearance than those who underwent BCS. Body image dimensions were not significant in predicting QoL in the recovery phase. With respect to QoL, MANOVA did not produce a significant multivariate effect [Pillai's Trace ¼ .10, F(3.52) ¼ 1.92, p ¼ .13, hp 2 ¼ .10]. Subsequent univariate analysis revealed a significant effect for social QoL [F(1.54) ¼ 5.43, p ¼ .024, hp 2 ¼ .09], albeit greater than the alpha-corrected level (.017). It was found a significant decrease in anxiety levels, showing that levels of psychological distress are higher at the onset of the disease and that they tend to decrease over time. Higher levels of satisfaction were associated with better physical and psychological QoL and higher levels of shame with lower physical QoL. These results somewhat support the	56	37-68; 52.39 (7.77)	N (%) Less than high school - 23 (41.1%) High school or more - 33 (58.9%)

			hypothetical relationship between body image and adjustment, but not its predictive role.			
Paiva et al. (2013) [51]	Brazil (English)	Religion Practice Questionnaire; EORTC QLQ-C30; EORTC QLQ-BR23	Patients with higher RPQ scores did not significantly change their QoL score. Patients with low PRQ worsened some QoL scores over time. Acceptance of body image was positively correlated with religious practice and specifically with prayer activity. Positive correlation between body image and RPQ scores, both when analyzing T0 data only (N = 27, r = 0.4059, P = 0.0396) and when considering T0, T1 and T2 data together (N = 67, r = 0.3264, P = 0.0070). There was no significant correlation between the EORTC-QLQ-BR23 domains and other RPQ scores.	27	18-NI;NI (NI)	Median PRQ (min-max) <8 years - 3.20 (2.40–4.60) 9–11 years - 3.46 (3.06–4.20) >12 years - 3.60 (3.20–4.40)
Rim et al. (2017)[32]	South Korea (English)	EORTC QLQ-BR23; EuroQoL EQ-5D;Global physical activity questionnaire (GPAQ).	In the EQ-5D-3 L analysis, the pain/discomfort and anxiety/depression categories had lower QoL. In multivariate analyses, arm symptoms, breast symptoms and body image improved with time. The type of breast surgery influenced body image, chemotherapy affected body image and sexual activity. Various sociodemographic factors strongly affected each QoL category; family income for systematic therapy side effects; hobbies activity for systemic therapy side effects, arm symptoms, future sexual and prospecific activity; medication of psychotropic drugs for side effects of systemic therapy and body image; changing jobs for body image and future perspectives were observed with strong significance ($p < 0.001$). Pain/discomfort and self-care categories in EQ-5D-VAS, arm/arm symptoms and body image in QLQ-BR23 were improved, while anxiety/depression and future perspective BR23 categories were not, suggesting a need for psychosocial support. Multivariate analysis revealed that axillary dissection was a prominent clinical factor affecting the greatest number of QoL categories.	1156	20-70; 50 (NI)	N (%) Low or medium (Complete high school or below) - 1st year = 350 (61%); 2nd year = 193 (59.6%); 3rd year = 152 (66.4%). High (completed higher education or more) - 1st year = 234 (39%); 2nd year = 131 (40.4%); 3rd year = 77 (33.6%).
Nowicki et al. (2015)[52]	Poland (English)	EORTC QLQ-C30; EORTC QLQ-BR23	With regard to Global Health Status/QoL and Physical Functioning, women's QoL in the immediate postoperative period was similar in women after mastectomy and in those undergoing BCS. Patients treated with BCS had a better body image than women after mastectomy - the mean score was 52 and 66, respectively ($p = 0.01$) - while those who were mastectomized more often suffered from arm symptoms such as pain, swelling, and problems with lifting the limb.	100	30-79; 57 (12)	Amputation (n=52) = N (%) Primary/vocational - 15 (29%) Secondary/superior - 37 (71%) Breast conservation (n=48) = N (%) Primary/vocational - 10 (21%) Secondary/higher - 38 (79%)
Yao et al. (2019)[61]	United States (English)	HADS; BREAST-Q - (body image); Breast In-Visit Decision Aid (BIDA); Fear of Recurrence scale; ad hoc questionnaire (decision-	No significant differences were found between BIDA and UC for QoL and body image. After seeing the surgeon, BIDA group patients had higher composite knowledge scores compared to UC patients [n = 55 (87.3%) vs. n = 39 (68.4%) respectively, $p = 0.012$]. Patients in the BIDA cohort reported being asked more frequently about their surgical referral ($p = 0.013$) and discussing bilateral mastectomy (BM) as an option (p =	120	NI-NI; 56.4 (9.2)	(%) Secondary education - 25 (20.8%) Higher education (bachelor's) - 54 (45%) Graduate - 37 (30.8%) Unknown - 4 (3.3%)

		making involvement and patient values).	0.048). There was a trend towards fewer patients in the BIDA cohort undergoing BM than in the UC cohort [10 (15.9%) versus 14 (24.6%), p = 0.49].			
Sowa et al. (2018)[37]	Poland (English)	EORTC QLQ-C30; EORTC QLQ-BR23; Mini-Mental Adjustment to Cancer Scale (Mini-MAC)	Results indicate that members of self-help groups experience significant benefits. These patients had higher scores on emotional functioning, general QoL, body image (p = 0.0366) and life prospects (p = 0.0313). Based on the results of QLQ C30, group A1 (self-help) had better emotional functioning (p = 0.0005) and a higher overall quality of life (p = 0.0259), while group A2 (control) had better functioning (p = 0.0042). Based on the BR23 QLQ scores, there were statistically significant differences in body image (p = 0.0366) and life prospects (p = 0.0313) in favor of the A1 group. In the control group, there was a greater use of destructive survival strategies and anxious worry (p = 0.1957).	284	NI-NI; 63.54 (7.89)	A1 Primary - 5 (3.11%) Middle - 116 (72.05%) Higher - 40 (24.84%) A2 Primary - 8 (6.84%) Medium - 71 (60.68%) Higher - 38 (32.48%)
Chang et al. (2014)[12]	South Korea (English)	EORTC QLQ-C30; EORTC QLQ-BR23.	Socioeconomic status is significantly associated with changes in appearance, body image, and QoL in Korean women with breast cancer. Employed patients had significantly higher altered appearance distress (1.80 vs 1.48; p<0.05) and poorer body image (36.63 vs 51.69; p<0.05) compared to patients who were unemployed. Higher education (10.58, standard error (SE)=7.63) and family income (12.88, SE=5.08) were positively associated with better body image after adjusting for age, stage of disease at diagnosis, current status of treatment, and type of breast surgery. In terms of monthly household income, patients with higher income reported better body image than patients with lower income (42.02 vs 53.23; p<0.05), and it was statistically significant. Patients who were married and who had higher education had better QoL and were statistically significant in the multivariate models.	126	18-NI; 47.7 (8.1)	N (%) Secondary school or less - 18 (14.4%) More than secondary school - 107 (85.6%)
Wani et al. (2018)[39]	India (English)	EORTC QLQ-BR23	Women who survived breast cancer failed to improve their body image, sexual functioning, and sexual pleasure scales, but did well on other BR23 scales. In addition to family and marital support, these patients approached their religion, which has been seen to influence their psychosocial well-being in an optimistic way.	147	NI-NI; 42.90 (10.48)	NI
Doege et al. (2022)[46]	Germany (English)	EORTC QLQ-BR23	Body image and future prospects were positively associated with age. Older breast cancer survivors reported higher body image and better future prospects, but lower sexual functioning. Survivors age 30-49 who had BCS reported better body image compared with those who had mastectomy. Diagnostic stage was not associated with QoL overall and across most age subgroups. BC survivors aged 30-79 years without disease reported a better future outlook and fewer side effects from systemic therapy than those with active disease.	3045	20-89; 65.3 (NI)	N (%) ≤ 9 years - 1653 (54.3%) 10 years - 858 (28.2%) ≥ 12 years - 534 (17.5%)

Peintinger et al. (2003)[57]	Austria (English)	EORTC QLQ-C30; EORTC QLQ-BR23; Karnofsky Performance Status Scale (KPS); McGill Pain Questionnaire.	The type of axillary surgery does not seem to affect overall QoL at short-term follow-up, but patients recover sooner after SLNB. Body image and sexual functioning remain stable in both types of axillary surgery.	56	18-80; 60.1 (NI)	Primary - 44.6% Secondary/professional - 25% Higher - 14.3% Unknown - 16.1%
Sun et al. (2014)[11]	South Korea (English)	EORTC QLQ-C30; EORTC QLQ-BR23; Rosenberg Self-Esteem Scale; Beck Depression Inventory (BDI); BIS; - Cancer Rehabilitation Evaluation System (CARES).	QoL and body image were better in the BCS group than in the total mastectomy or BRS after total mastectomy group. Total mastectomy and BCS after total mastectomy had similar QoL.	407	20-70; 49.8 (8.3)	N (%) Secondary school - BCS = 39 (15.4); TM = 23 (18.9); TM-R = 2 (6.5) High School - BCS = 87 (34.3); TM = 52 (42.6); TM-R = 8 (25.8) Faculty - BCS = 113 (44.5); TM = 43 (35.2); TM-R = 19 (61.3) Graduate - BCS = 15 (5.9); TM = 4 (3.3); TM-R = 2 (6.5)
Landry et al. (2018)[69]	France (English)	Physical Self-Perception Profile (ISP-25); Rosenberg Self-esteem Scale; EORTC QLQ-C30; EORTC QLQ-BR23	Self-esteem, physical self-perception, QoL, global health status, pain and breast symptoms were only improved in the group that practiced adapted physical activity.	23	18-NI; 52 (3)	EG = experimental group; CG = control group. n (%) No qualification - EG = 0 (0.0); CG = 1 (10). Secondary School - EG = 2 (15); CG = 2 (20). Secondary education - EG = 6 (46); CG = 4 (40). University degree - EG = 5 (38); CG = 3 (30).
Volders et al. (2017) [48]	Holland (English)	EORTC QLQ-C30; EORTC QLQ-BR23.	At 36 months, all QoL factors except arm symptoms had returned to baseline or improved. Significantly better QoL was found in terms of body image, pain, and arm and breast symptoms for good/excellent cosmetic results compared to fair/poor results. BCS did not show any correlation with any QoL factor. There is a high correlation between poor cosmetic outcomes and low scores on QoL indicators.	128	NI-NI ;55 (9.9)	NI
Rahman et al. (2016)[18]	Bangladeshi (English)	EORTC QLQ-C30; EORTC QLQ-BR23.	Four of the global health status/QoL parameters such as physical functioning, role functioning, emotional functioning, cognitive functioning deteriorated, but only physical functioning status significantly affected ($p<0.005$). Breast symptoms such as body image problems, general symptoms and sexual sensation affected QoL after mastectomy.	250	21-67; 44.7 (9.87)	NI
Siefert et al. (2018)[60]	United States (English)	Symptom Distress Questionnaire; BIS; Breast Cancer Treatment Outcomes Scale (BCTOS); Functional Assessment of	Findings support evidence of relatively low discomfort from symptoms over time, satisfactory body image, and overall good QoL after BCS. Most women reported body image satisfaction and good QoL despite a small decline in social well-being. Fatigue and mild to moderate symptomatic discomfort persisted over time.	31	44–85; 58.5 (11.97)	High school - n=6 Some college - n=8 Bachelor's degree - n=7 Degree - n=7 Other - n=3

		Chronic Illness Therapy–Fatigue (FACIT-F) ; - Functional Assessment of Cancer Therapy–Breast Scale (FACT-B);				
Batenburg et al. (2020)[50]	Holland (English)	Cosmetic evaluation questionnaire (structured by Sneeuw); EORTC QLQ-C30 ; EORTC QLQ-BR23; HADS	Cosmetic dissatisfaction was independently associated with worse overall QoL, body image, social function and emotional functioning and a higher proportion of patients with moderate/severe depression scores.	808	18-NI; 58 (10)	NI
Wittmann et al. (2017)[33]	Hungary (English)	Spielberger State and Trait Anxiety Inventory (STAI); BDI; FACT-B; Posttraumatic Growth Inventory (PTGI); Breast Impact of Treatment Scale (BITS).	Trait anxiety was associated with QoL, post-traumatic growth, and body image. A negative relationship was observed between QoL, depression and anxiety before surgery and 18 months after surgery. Patients who reported a higher level of psychological distress experienced a lower QoL. Patients who had difficulties accepting their altered body image experienced higher levels of depression and traumatic anxiety 18 months after surgery. Patients with severe body image problems experienced lower emotional and physical well-being. Problems related to body image may appear and persist 18 months after surgery. There was a significant relationship between QoL 18 months after the operation and physical activity among breast cancer patients.	63	NI-NI, 56.1 (11.92)	N (%) Primary qualification - 11 (17.5) Upper secondary qualification - 33 (52.4) University qualification - 19 (30.1)
Stan et al. (2012)[70]	United States (English)	FACT-B; Profile of Mood States (POMS); Multidimensional Body-Self Relations Questionnaire (MBSRQ)	Significant improvements in QoL, mood and body image have been reported because of the exercises. Statistically and clinically significant improvements were seen. For the MBSRQ, improvements were reported on all subscales except for appearance orientation. Statistically and clinically significant changes were observed for the health assessment subscales ($p = 0.049$) and body area satisfaction ($p = 0.017$). Clinical significance mirrored statistical significance in all psychological outcomes (effect size of 0.5 or greater).	13	33-65; 49 (9)	NI
Janz et al. (2005)[23]	United States (English)	EORTC QLQ-C30; EORTC QLQ-BR23	Significant differences in QoL by surgical treatment were limited to body image with women receiving mastectomy with reconstruction reporting lower scores than women receiving BCS ($p < 0.001$). Chemotherapy lowered overall QoL scores on four QoL dimensions (p-values < 0.001), including body image, with a disproportionately greater impact on women with lower levels of education. Younger women reported lower QoL scores on seven of the nine QoL dimensions (p values < 0.001). It was observed for body image that BCS and chemotherapy were a better combination than mastectomy and	1357	27.9–79.9; 60 (11.3)	(%) High school/some college - 162 (12%) High school diploma - 299 (22%) Some college - 508 (38%) Bachelor's or more - 375 (28%)

			chemotherapy. No significant interactions were observed for radiotherapy.		
Jayasinghe et al. (2021)[62]	Sri Lanka (English)	EORTC QLQ-C30; EORTC QLQ-BR23	Sexual functioning and pleasure, breast and arm symptoms, and hair loss contributed to poor QoL, while the impact on overall health status, including physical, social, and emotional functioning, was minimal. Age was the only statistically significant factor associated with QoL, where younger patients had significantly better QoL.	54	36-81; 59 (NI)	Primary - 7.4% Secondary - 79.6% Undergraduate - 3.7% Graduate - 5.6%
Kindts et al. (2019)[42]	Belgium (English)	Body Image after Breast Cancer Questionnaire (BIBCQ); EORTC QLQ-C30; EORTC QLQ-BR23.	QoL and body image are temporarily impaired due to radiotherapy in the context of BCS, but it improved up to 1 year after radiotherapy. Overall QoL showed trivial deterioration during radiotherapy and a mean improvement thereafter up to 1 year after radiotherapy to levels higher than baseline yet still unsatisfactory (mean difference (MD) − 3.8, 8.7 and p 0.009, < 0.001 , respectively). No significant changes in QoL were observed between 1 and 2 years after radiotherapy. AO scored as PROM associated with BCCT and body image measures.	175	NI-NI; NI (NI)	NI
Nano et al. (2005)[47]	Australia (English)	FACT-B; Functional Assessment of Cancer Therapy–General (FACT–G)	QoL assessment was similar between the three groups, but the body image scores of the BCS and BRS patients were higher than the mastectomy group. Body image results were the same among patients who underwent BRS and BCS. Patient satisfaction was higher in the BRS group than in the BCS group, while esthetics were similar. There was no statistical difference between the three groups in the FACT-B total score (one-way ANOVA P = 0.1416) for QoL.	310	32-83; 58.89 (NI)	NI
Monteiro-Grillo et al. (2005)[26]	Portugal (English)	Ad Hoc questionnaire assessing body image perception, social habits, sexual attraction and self-consciousness with relatives/friends	Mastectomy patients reported a significantly higher frequency of changes in perceived body image and other related social behaviors. No differences were found in relation to sexuality, denial of the disease by the husband/partner or concealment of the disease from family members. No significant differences were found between patients over and under 50 years of age, for all the variables studied after adjusting for the surgical procedure. mastectomy has a negative effect on patients' body image perception and social behavior patterns, with a concomitant decrease in QoL. The patient's sexuality is not significantly affected.	125	NI-NI; 51.5 (8.5)	NI.
Velikova et al. (2018)[38]	United Kingdom (English)	EORTC QLQ-C30; EORTC QLQ-BR23; BIS; HADS; EuroQoL EQ-5D-3L.	Up to 2 years, chest wall symptoms were worse in the radiotherapy group than in the no-radiotherapy group (mean score 14.1 [SD 15.8] in the radiotherapy group vs 11.6 [14.6] in the no-radiotherapy group). radiotherapy, estimated effect 2.17, 95% CI 0.40-3.94, p=0.016); however, there was an improvement in both groups between years 1 and 2 (visit effect -1.34, 95% CI -2.36 to -0.31; p=0.010). No differences were observed between treatment groups in arm and shoulder symptoms, body image, fatigue, global QoL, physical function, or anxiety or depression outcomes. Radiotherapy had no effect on any of the other prespecified QoL	947	18-NI; 56.1 (11)	NI.

			domains. There were worse QoL scores for anxiety, body image, and chest wall symptoms in younger women, regardless of whether or not they received radiotherapy.			
Cortes-Flores et al. (2014)[58]	Mexico (English)	EORTC QLQ-C30; EORTC QLQ-BR23	Global health status (94.30 ± 12.04; p = 0.028) and role functioning (85.16 ± 17.23; p = 0.138) were highest in the quadrantectomy group. Breast symptom scores (22.56 ± 22.30; p = 0.009) and body image perception (85.56 ± 19.72; p = 0.025) were the highest in the group that received BCS. The overall health of patients who had undergone mastectomy without reconstruction was lower (72.61 ± 20.89; p = 0.014) among women older than 50 years than among younger women. The quadrantectomy procedure was better accepted, but general health status did not differ between groups. Overall health status was lower among women over age 50 who had received a mastectomy without reconstruction. The patient's assessment of overall QoL and her assessment of breast cancer were unrelated to age. There were no significant differences between the types of surgery.	139	NI-NI; 49.56 (11.56)	NI
Huang et al. (2018)[35]	United States (English)	BIBCQ; FACT-B.	Patients who reported an above-average perception of global body image tended to be further away from their surgery than those who reported a below-average perception (median 20.9 vs. 8.1 months, respectively, p = 0.009). Patients who reported an above-average QoL also tended to be further away from their surgery than those with a below-average overall QoL (median 21.8 vs. 6.4 months, respectively, p = 0.004). Receiving reconstruction, contralateral prophylactic mastectomy, disease stage, patient race, education, type of insurance, income, marital status, employment status, and age at surgery did not significantly affect body image or QoL in this cohort. Better perception of body image and higher QoL were associated with being further away from surgery.	94	29-82; 49.5 (NI)	Less Than High School - 4 (4.3%) High School Diploma / GED - 25 (26.6%) Bachelor's Degree - 40 (42.6%) Bachelor's / Professional Degree - 25 (26.6%)
Han et al. (2010)[28]	Germany (English)	EORTC QLQ-C30; EORTC QLQ-BR23.	BCS patients have a better QoL and higher satisfaction rate with their postoperative breasts compared to patients undergoing mastectomy or BRS. The BCS group had better body image compared with the mastectomy (P = 0.004) and BRS (P = 0.003) group. Patients in the BRS had more financial hardship and more future prospects than the BCS group (P = 0.006, P = 0.039). Compared with the mastectomy and BRS, patients in the BCS group had better self-rated postoperative outcomes (P = 0.001, P\0.001) and less visible post operative scars (P = 0.003, P = 0.019).	112	25-85; 57.5 (13.9)	Group 1: Secondary school - 40 (52.6%) Completed secondary education - 36 (47.4%) Group 2 - Secondary school - 9 (45%) Completed secondary education - 11 (55%) Group 3 - Secondary school - 4 (25%) completed high school - 12 (75%)
De Haes et al. (2003)[22]	United Kingdom, Netherland, Belgium (English)	HADS(Emotional functioning scale - eight-item version); Non-standardized EORTC questionnaire,	Survival was similar after both procedures. As QoL seems to be better after BCS. No significant difference in duration of survival was observed between the two treatment arms when patients enrolled in the QOL substudy were included (P=0.33). Patients undergoing tumor excision and tamoxifen did not differ from those undergoing mastectomy	136	70-NI; NI (NI)	NI

		constructed for the study, with 36 items.	in terms of fatigue, emotional functioning, fear of recurrence, social support, physical functioning, and leisure activities. Patients treated conservatively reported fewer problems (P=0.04) and a change, albeit significant, towards a benefit in body image (P=0.06), compared with those who had undergone a mastectomy.			
Arraras et al. (2016)[53]	Spain (English)	EORTC QLQ-C30 (version 3.0); EORTC QLQ-BR23.	QoL scores were high in most areas (>80 points in functioning; <20 points in symptom areas). Limitations were moderate (>30 points) on overall QoL, sleep disturbance, future outlook, sexual areas, and hot flushes. Mastectomized patients had a 4-fold increased risk of low body image scores. Patients with longer follow-up showed lower systemic side effects, hot flushes and breast symptoms. The time elapsed since surgery helped to reduce treatment-related symptoms. QoL in Spanish patients with premenopausal early-stage breast cancer at long follow-up after surgery is high. Differences in QoL between groups treated with surgery are limited. Differences between groups based on surgery were primarily in body image.	243	34-68; 54.2 (6.8)	NI
Montazeri et al. (2008)[27]	Iran (English)	EORTC QLQ-C30; EORTC QLQ-BR23.	Breast cancer patients generally realized the long-term benefit of their cancer treatment. Patients reported problems with overall QoL, pain, arm symptoms, and body image even 18 months after their treatments. The results showed that there were significant differences in patients' functioning and overall QoL at three time points (P < 0.001). While there were deteriorations in patient outcomes in terms of body image and sexual functioning, there were significant improvements in breast symptoms, side effects of systemic therapy, and patients' future outlook (P < 0.05).	167	24-81; 47.2 (13.5)	N (%) Illiterate - 38 (22.8) Primary - 78 (46.7) Secondary - 33 (19.8) College/university - 18 (10.7)
Amichetti et al. (1999)[20]	Italy (English)	Ad hoc questionnaire assessing five main fields of post-treatment adjustment: physical well being, sexual adaptation, aesthetic outcome, emotional/psychological well being and relational behavior.	Subjective evaluations of the cosmetic results of the therapies were generally good. Only 13 patients (16%) reported the perception of a deterioration in body image. This study revealed a good QoL in patients treated with BCS and postoperative irradiation, with a preserved favorable body image and an absence of negative impact on sexuality. Radiotherapy did not lead to any significant additional problems that could affect QoL.	106	32-94; 54 (NI)	Primary school - 36 (43%) Secondary school - 26 (32%) Secondary school - 16 (19%) University - 4 (5%) Unknown - 1 (1%)
Shimozuma et al. (1999)[21]	United States (English)	CARES; KPS; POMS.	One year after surgery, most women report high levels of functionality and QoL, with no relationship between the type of surgery and QoL. Physical and treatment-related problems were frequently reported one month after breast cancer surgery, and they occurred with equal frequency in women who received mastectomy or BCS. Poorer QoL one year after surgery was significantly	227	NI-NI; NI (NI)	N (%) Secondary education or less - 52 (22.9) Complete or partial school - 119 (52.4) Higher education - 56 (24.7)

			associated with greater mood disturbance and body image discomfort one month after surgery, as well as positive lymph node involvement. Although most patients experienced substantial disturbances in the physical and psychosocial dimensions of the QoL postoperatively, most women recovered during the year after surgery, with only a minority (<10%) significantly worsening during that time.			
Tarkowska et al. (2021)[45]	Poland (English)	Acceptance of Illness Scale; Mini-Mental Adjustment to Cancer (Mini-MAC) ; EORTC QLQ-C30; EORTC QLQ-BR23.	Statistically significant differences were observed between study groups on the global subscale of QoL, physical functioning, emotional functioning, cognitive functioning, social functioning, body image, and sexual functioning. In most symptomatic scales, significant differences were also observed ($p < 0.05$). Patients with mastectomy and lymphadenectomy were significantly ($p < 0.0001$) more likely to have destructive coping strategies one year after surgery. BCS is associated with a better QoL compared to mastectomy. BCS with SLNB offered better acceptance of disease levels and contributed to patients choosing more constructive strategies to deal with the breast.	338	18-NI; NI (NI)	n (%) GROUP BCS Elementary - 23 (12.43%) professional - 34 (18.38%) secondary - 76 (41.08%) higher - 52 (28.11%) GROUP Mastectomy Elementary - 12 (7, 84%) professional - 43 (28.10%) secondary - 64 (41.83%) superior - 34 (22.22%)
Maharjan et al. (2018)[36]	Nepal (English)	EORTC QLQ-C30 (version 3.0) -; EORTC QLQ-BR23.	The results revealed a good score on global QoL. Women who have been involved in the service/company have the best overall QoL, physical functioning, and perception of their body image. Body image was highly significant with age, occupation, education, use of breast implants and comorbidity. Respondents' age does not show any association with their overall QOL. Likewise, women who use BRS have a good QoL and better perception of body image than those who do not. Literate respondents tend to show better cognitive functioning than less educated respondents. However, illiterates perform better in emotional functioning, body image, and future perspective.	107	20-NI; 47.88 (9.76)	n (%) Primary level - 7 (10.9) Secondary level - 22 (34.4) Upper secondary level - 20 (31.2) Bachelor's degree (bachelor/higher) - 15 (23.4)
Pereira et al. (2017)[31]	Brazil (English)	EORTC QLQ-C30; EORTC QLQ-BR23.	Women's QoL after breast surgery worsened in the vast majority of dimensions studied. The QoL of women in the preoperative period was better in the Physical Function dimensions for classes C and D; and Emotional for class B. There was an improvement in QoL after surgery for Body Image in class C. Evaluating all social classes, dimensions of physical functioning, functional limitations, Social functioning, sexual functioning, financial difficulty, body image and arm symptoms worsened after surgery. The cognitive functioning and future perspectives dimensions improved in the postoperative period.	87	30-NI; NI (NI)	N (%) Illiteracy or up to the 3rd year of basic education - 46 (52.9%) Complete basic education - 14 (16.1%) Complete secondary education - 15 (17.2%) Complete higher education - 8 (9.2%)
Arndt et al. (2008)[64]	Germany (English)	EORTC QLQ-C30; EORTC QLQ-BR23.	Differences in global QoL and social functioning gradually increased over time and became statistically significant only at 5 years. Some very specific benefits of BCS, such as improved body image, are already visible very opportunely after completion of therapy. Five years after diagnosis, women after BCS and age-matched women in the	315	18-80; 59.05 (NI)	Years of education = N (%) BCS 9 = 70 (79%) 10 = 10 (11%) 12+ = 8 (9%)

			general population reported virtually identical mean global health/QoL scores, as well as physical and functional function, whereas women after mastectomy tended to report worse in almost all cases. The QoL-C30 function scales better than their age-matched peers in the reference population. Improvements over time in QoL were stronger in women undergoing BCS than in women after mastectomy.			Mastectomy = 9 = 166 (73%) 10 = 38 (17%) 12+ = 22 (10%)
Hartl et al. (2010)[29]	Germany (English)	HADS; Stress in Cancer Patients, Revised Version (QSC–R23); EORTC QLQ-C30 (version 3.0); EORTC QLQ-BR23	Breast cancer patients' QoL scores improved over time, but deficiencies were still observed in terms of anxiety, body image, and sexual functioning. After surgery, mastectomy-treated patients had more body image problems than BCS-treated patients (63.1 versus 80.4; p=0.037). The body image differences between the two surgical subgroups increased over time: One year later, the mastectomy patients reported significantly more body image problems than the BCS subgroup (59.1 versus 81.8; p=0.000) . Comparing the two subgroups, BCS and mastectomy, the latter subgroup, however, was very small (N=21). QoL scores in the BCS and mastectomy subgroups were similar after surgery (56.5 versus 61.5; NS) and 1 year later (65.4 versus 65.5; NS). BCS-treated patients and mastectomy-treated patients had similar values on all functional scales at baseline and at 1-year follow-up (p>0.05).	236	33–89; 58.7 (10.7)	N (%) > 9 years of education - 124 (53.7)
Hsiao et al. (2019)[63]	China (English)	EORTC QLQ-C30; EORTC QLQ-BR23; Beck Depression Inventory-II (BDI-II); STAI; Experiences in Close Relationships-Revised scale (ECR-R); Meaning of Life Questionnaire (MLQ).	Although general QoL functions improved after surgery, no significant changes in breast-specific functions were found during the 14-month follow-up period. Depressive symptoms predicted almost all general and breast-specific QoL functions and symptoms. Avoidable and anxious attachment styles were associated with negative scores for specific breast functions and symptoms. The specific functions of the breast, in particular body image and sexual function, remain unaffected with the passage of time after surgery. Increases in BDI-II depressive symptoms were correlated with lower global QoL function scores, all aspects of functioning and global health status during the 14-month follow-up period months. Body image had not improved 14 months after surgery.	83	30-64; 49.50 (9.02)	n (%) High school graduate and below - 5 (6%) Bachelor and above - 78 (94%)
Türk et al. (2018)[19]	Turkey (English)	FACT-B; Body Cathexis Scale.	The women's average total FACT-B score was 68.47 (SD=22.44), and the body image score was 121.61 (SD=21.96). According to the results of the linear regression analysis, except for the FACT-B social/family well-being, positive correlations were calculated between the other FACT-B subdimensions and the FACT-B total score and the total image score body respectively (β=0.822, p=0.000). In the multiple linear regression model, there was a mean correlation between education and professional status with QoL, with no correlation between QoL and other characteristics of women. There was an	57	28-78; 49.34 (NI)	n (%) Illiterate - 7 (12.3) Primary Education - 36 (63.2) Secondary Education - 10 (17.5) University - 4 (7.0)

			important positive relationship between body image and time after mastectomy and chemotherapy and no correlation between body image and other women's characteristics.			
Ha et al. (2019)[41]	Vietnam (English)	Quality of Life Index Vietnamese version (QoLI-V); The Mishel Uncertainty in Illness Scale - Short Form (SF-MUIS);	The experimental group exhibited low uncertainty before discharge and a significantly higher QoL than the control group at 1 and 3 weeks post-mastectomy, respectively (P G.05). Women's physical well-being, psychological well-being, body image concerns, and women's social concerns were significantly increased with UMP. UMP was considered as a promising program that could benefit the QoL of women with breast cancer 3 weeks post-mastectomy.	115	30-59; NI (NI)	Control group Primary school - 12 (20.7) Secondary school - 21 (36.2) High school - 16 (27.6) University or higher - 9 (15.5) Experimental group Primary school - 14 (24.6) Secondary school - 25 (43.9) High school - 15 (26.3) University or higher - 3 (5.3)
Hopwood et al. (2007)[25]	United Kingdom (English)	EORTC QLQ-C30; EORTC QLQ-BR23; BIS; HADS.	Adjuvant chemotherapy affected most QoL domains and resulted in worse body image, sexual functioning, breast and arm symptoms (< 0.001). Mastectomy was associated with greater body image concerns (p<0.001), and wide local excision with more arm symptoms (p = 0.01). There were no effects of endocrine therapy on QoL. Women <50 years (premenopausal) had worse QoL with regard to anxiety, body image and breast symptoms, but age and clinical factors had no effect on depression. Overall, QoL and mental health were favorable for most women about to start radiotherapy, but younger age and receiving chemotherapy were significant risk factors for poorer QoL. Surgery had an impact and endocrine therapy had no effect on QoL.	2208	26-87; 56.9 (10.4)	NI
Pirnia et al. (2020)[44]	Iran (English)	Multidimensional Body-Self Relations Questionnaire (MBSRQ); Female Sexual Function Index (FSFI); WHOQOL-BREF; Difficulties in Emotion Regulation Scale (DERS).	Body image and sexual function with QoL, and had an inverse relationship with difficulty in regulating emotions (P < 0.01). Body image, sexual function, and difficulty in regulating emotions were predictors of QoL (P < 0.01). In predicting QoL based on sexual function and body image, difficulty in regulating emotions plays a mediating role (P < 0.01). In patients with breast cancer undergoing mastectomy, adequate sexual function, age-dependent sexual attraction, and QoL were influenced by emotion regulation.	90	18 - 65; 44.12 (7.34)	NI
Salibasic et al. (2018)[59]	Bosnia and Herzegovina (English)	EORTC QLQ-C30; EORTC QLQ-BR23; BDI-II	There is no difference in QoL before and after surgery, regardless of the type of operation. There is a significant difference in the degree of depression in patients after mastectomy, who had a greater degree of depression than the patients surveyed who underwent BCS.	160	18-70; 53.91 (15.09)	NI
Burwell et al. (2006)[24]	United States (English)	Medical Outcomes Study (MOS)-Sexual Functioning Scale; Index of Marital Satisfaction; Quality of Life-Visual	Statistically significant differences were observed between study groups on the global subscale of QoL, physical functioning, emotional functioning, cognitive functioning, social functioning, body image, and sexual functioning. In most symptomatic scales, significant differences were also observed (p < 0.05). Patients with mastectomy and lymphadenectomy were significantly (p < 0.0001) more likely to have destructive	209	29-50; NI (NI)	n (%) Secondary education or less - 50 (24) Some higher education - 61 2(9) University graduate - 48 (23) Graduate - 50 (24)

	Analog Scale; FACT-B; Body Image Index.	coping strategies one year after surgery. BCS is associated with a better QoL compared to mastectomy. BCS with SLNB offered better acceptance of disease levels and contributed to patients choosing more constructive strategies to deal with the breast.	

Note: BCS - breast conservative surgery; BRS - breast reconstruction surgery.

Table 2.

Instruments used to measure body image

Instruments	Number of items	Dimensions evaluated	Is it validated for use in Brazil? (Yes No)	Validated for the study (yes/no)
BIS - Body Image Scale	10	Behavioral, affective and cognitive aspects of body image.	No	It was not validated for the study carried out in Taiwan, only translated. The Italian version was also only adapted, as the validation study was still being carried out. The remaining studies used validated versions.
DAS24 - Derriford Appearance Scale 24	24	Self-consciousness of appearance, discomfort and inhibition felt because of appearance.	Yes	Yes
ESS - Experience of Shame Scale; Subscale body shame	25	Shame about personal habits (the way you deal with others, the type of person you are, your personal abilities), behavioral shame (shame about doing something wrong, saying something stupid and failing in competitive situations) and body shame (feeling ashamed of your body or any part thereof).	No	No, just translated by the study authors.
ASI-R - Appearance Schemas Inventory - Revised	20	The individual's investment in their body image: the individual's efforts to be or feel attractive and the individual's belief in how their appearance influences their self-worth and self-concept.	No	Yes
BREAST-Q - (body image)	Uninformed.	Body image and quality of life in patients undergoing breast surgery (breast augmentation, reduction, reconstruction and mastectomy without reconstruction).	No	Yes

ISP-25 - Physical Self-Perception Profile	25	Perception of sporting competence (sport), perception of bodily attractiveness (body), perception of physical strength and muscular development (strength), perception of level of physical conditioning and exercise (condition) and physical self-esteem.	No	The version adapted for France was used, where 5 items were removed from the original scale, totaling 25 items.
BCTOS - Breast Cancer Treatment Outcomes Scale	18	Perceived differences in aesthetic and functional outcomes after breast conservation surgery and irradiation: functional status, cosmetic status, and breast-specific pain.	Yes	Adapted but not validated version used.
BITS - Breast Impact of Treatment Scale	13	Body change stress (subjective psychological stress that accompanies negative and disturbing thoughts, emotions and behaviors in women who have undergone breast cancer and breast surgery).	No	No
MBSRQ - Multidimensional Body-Self Relations Questionnaire	46	Body image: orientation towards appearance, evaluation of appearance, concern about being overweight, a scale of satisfaction with areas of the body and self-classification of weight.	Yes	The Iran study uses a version adapted for Malay, which has not been validated.
BIBCQ - Body Image after Breast Cancer Questionnaire	53	Body image: vulnerability (to cancer), body stigma, limitations (in daily functioning), concerns about the body, appearance (obviousness of the effect of cancer on appearance), and arm concerns in the context of breast cancer.	Yes	No, in both cases the original version of the instrument was used, without cross-cultural adaptation.
AIS - Acceptance of Illness Scale	8	Illness acceptance: illness-related limitations, reduced self-esteem, and lack of self-sufficiency.	No	Adapted but not validated version used.
Body Cathexis Scale	40	Satisfaction with body part or body function.	No	Yes, the original had 46 items.
Body Image Index	7	Satisfaction with the appearance of the body.	No	Adapted but not validated version used.

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Body Cathexis Scale	40	Satisfaction with body part or body function.	No	Yes, the original had 46 items.
Body Image Index	7	Satisfaction with the appearance of the body.	No	Adapted but not validated version used.

Capítulo III

Artigo será submetido à resvita "Body Image" – texto original será disponibilizado após 2027

Body image and quality of life of women who underwent breast cancer surgery

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Abstract

Breast cancer is a condition resulting from the uncontrolled proliferation of breast cancer cells. It is necessary to consider that the treatment of the disease (surgery, chemotherapy, radiotherapy and systemic treatment) can alter patients' body image as well as their quality of life. In response to this demand, this study aimed to evaluate satisfaction with body image and quality of life of women who underwent surgical treatment for breast cancer in a reference hospital located in the South of Brazil. 106 women with breast cancer participated in the

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research, with an average age of 55 years (SD = 12.99). They responded to the Body Image and Relationships Scale, Functional assessment of Cancer Therapy for Breast Cancer scale, and a questionnaire on clinical and sociodemographic variables. As a result, through multiple linear regression analyses, it can be seen that body image can be affected by older age and chemotherapy experience, and that quality of life can be affected by factors such as strength and health, social barriers and appearance and sexuality. It is concluded that healthcare teams must pay attention to multiple factors to provide a better quality of life for breast cancer patients.

Keywords: Body image. Breast cancer. Oncology. Quality of life. Surgical treatment.

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Capítulo IV

Considerações Finais

O câncer de mama pode representar um desafio para as pacientes que recebem este diagnóstico, pois elas necessitam adaptar-se à uma nova rotina permeada por dificuldades e desconfortos oriundos do tratamento. Além disso, as terapêuticas utilizadas para a sua cura colocam a mulher em um espaço de incerteza com relação a sua própria imagem, além de poder acarretar em alterações no bem-estar físico e subjetivo dessas pacientes, permeando aspectos de sua qualidade de vida.

Dito isso, no cenário nacional são escassos estudos que explorem aspectos relacionados com a satisfação da imagem corporal de mulheres que necessitam da cirurgia como estratégia em busca da cura da doença. Dessa forma, os artigos desta dissertação constituíram-se como uma tentativa de expandir o conhecimento em torno do sofrimento psíquico envolvido com a imagem corporal dessa população, buscando identificar os fatores relevantes para a qualidade de vida dessas pacientes.

A revisão de escopo (Artigo 1) permitiu um olhar amplo do conhecimento produzido em torno da imagem corporal e da qualidade de vida em pacientes que realizaram cirurgia para cancer de mama. Dessa forma, este primeiro estudo foi necessário para elucidar quais as váriaveis deveriam ser observadas na pesquisa empírica (Artigo 2), além de identificar lacunas existente na área. Como resultados das pesquisas, pode-se ressaltar a importância de monitorar as mudanças na percepção da imagem corporal em mulheres submetidas à cirurgia de câncer de mama, especialmente aquelas mais jovens e as que passaram por quimioterapia. É crucial considerar essas alterações para fornecer apoio adequado durante o processo de adoecimento e tratamento, uma vez que estas variáveis mostraram-se preditoras de uma melhor percepção da

imagem corporal. Além disso, a qualidade de vida pode ser afetada por fatores como força e saúde, barreiras sociais e aparência e sexualidade.

Por fim, considera-se que a avaliação psicológica desempenha um papel essencial, ajudando na adesão ao tratamento e facilitando os ajustes necessários para lidar com as possíveis mudanças resultantes do câncer de mama. Ademais, utilizando ferramentas apropriadas, os psicólogos podem compreender melhor os pacientes e oferecer orientações sobre como lidar com o estresse decorrente do tratamento. Em suma, essa dissertação de Mestrado trouxe como principal contribuição o fornecimento de um melhor panorama geral sobre a importância do cuidado com a imagem corporal e a qualidade de vida de mulheres que realizaram cirurgia para cancer de mama.

Apêndice A - Roteiro de ligação telefônica

Projeto número GPPG ou CAAE: 25980619.6.0000.5327

Bom dia/Boa tarde, o meu nome é _____, sou pesquisador do projeto que está sendo realizado no Hospital de Clínicas de Porto Alegre: "O Impacto da pandemia da covid-19 e do tratamento cirúrgico em mulheres com câncer de mama: ansiedade, depressão e qualidade de vida". Poderia falar com a Sra.? _____.

O objetivo do projeto é identificar os sintomas de ansiedade e depressão, o medo da covid-19 e a qualidade de vida em mulheres com câncer de mama submetidas ao tratamento cirúrgico durante a pandemia covid-19. Estou ligando para convidar a senhora a participar desta pesquisa, pois verificamos que você realizou cirurgia no Serviço de Mastologia no período de março de 2020 a dezembro de 2021.

Se tiver interesse em participar, você terá que responder a um questionário sociodemográfico, com questões de respostas simples, com opções de respostas prontas, bem como questionários referentes ao medo da covid-19, imagem corporal, ansiedade, depressão e qualidade de vida. Você terá em torno de 30 minutos podendo ser estendido o tempo caso necessário. A ligação não será gravada.

Ressaltamos que caso não tenha interesse em participar, isto não interfere em nada no seu atendimento ou em consultas e exames já agendados.

Se estiver de acordo, você gostaria de receber o Termo de Compromisso Livre e Esclarecido do projeto, onde constam as informações detalhadas, pelo e-mail, mensagem ou WhatsApp?

Contato para envio do TCLE (e-mail/WhatsApp/mensagem):

Você gostaria de participar: ( ) Sim

( ) Não

Se aceitar, mas preferir responder por telefone em outro momento:

- Pedir que informe qual o melhor momento para realizar a entrevista por telefone.

Retorno em_____

Em caso de concordância aplicar o instrumento. Se não aceitar, agradecer pelo tempo e atenção.

Perguntar se a pessoa possui mais alguma dúvida e ressaltar que os contatos dos pesquisadores e do CEP estão no Termo enviado.

Observação: este roteiro é apenas um guia para o diálogo, sendo que os pesquisadores tomarão todo o cuidado para evitar qualquer constrangimento, bem como responderão perguntas ou dúvidas adicionais que se apresentem durante a ligação.

Apêndice B - Questionário Sociodemográfico

INFORMAÇÕES PESSOAIS

Cidade:

Profissão:

Ocupação atual:

Religião:

Estado civil: ( ) Solteira ( ) casada ( ) namorando ( ) divorciada/separada ( ) viúva

Escolaridade: ( ) Analfabeta ( ) Ensino Fundamental ( ) Ensino Médio ( ) Ensino Superior ( ) Pós-graduação

INFORMAÇÕES SOBRE A DOENÇA E TRATAMENTO

Diagnóstico:

Data:

Tratamento:

1 - Cirurgia ( ) cirurgia conservadora ( )
mastectomia ( ) reconstrução

2 - Quimioterapia ( ) Adjuvante ( ) Neoadjuvante

3 - Radioterapia

4 - Covid-19 ( ) sim, antes cirurgia ( ) sim, depois cirurgia

5 - Hospitalização por covid-19 ( ) emergência ( ) internação ( ) UTI ( )não teve

6 - Comorbidades:

INFORMAÇÕES SOBRE REDE DE APOIO SOCIAL

Acompanhante(s) no tratamento:

Filhos: ( ) Não ( ) Sim

Quantos e idade:

Mora com quem?

Histórico de câncer na família:

Histórico de covid-19 na família:

Perdas por câncer e/ou por covid-19:

Suporte emocional percebido: ( ) Adaptativo ( ) Frágil/ pobre ( ) Outro

Principal figura de apoio:

INFORMAÇÕES COMPLEMENTARES

Histórico de dependência química: ( ) Não ( ) Sim

( ) Tabaco ( ) Álcool ( ) Medicamento ( ) Outras:

Dependência química atual: ( ) Não ( ) Sim

( ) Tabaco ( ) Álcool ( ) Medicamento ( ) Outras:

Histórico de alterações:

( ) Sono ( ) Alimentação ( ) Lazer

Alterações atuais:

( ) Sono ( ) Alimentação ( ) Lazer

Já realizou acompanhamento psicológico?

( ) Sim

( ) Não

Quando:

Motivo:

Uso atual de medicamento psiquiátrico

Apêndice C - Escala de Relacionamentos e Imagem Corporal - ERIC

(Steluti, 2013)

Instruções: Este questionário pergunta sobre sua imagem corporal após a descoberta do seu câncer de mama. Assinale apenas uma alternativa por frase. Para respondê-las você deve relacionar seu tratamento: descoberta, tratamento, cirurgia e dia a dia após o câncer de mama com sua condição física, as dificuldades encontradas no seu dia a dia e sobre sua aparência e sexualidade. Se estiver com dúvidas em alguma palavra sobre seu significado, você deve perguntar a qualquer momento. As opções de respostas variam: 5 (concordo plenamente), 4 (concordo), 3 (nem concordo nem discordo), 2 (discordo) ou 1 (discordo plenamente).

Fator 1: Força e Saúde

	Discordo plenamente	**Discordo**	**Nem concordo nem discordo**	**Concordo**	**Concordo plenamente**
1. Minha falta de energia me impedia de fazer coisas que eu queria fazer.					
2. Tinha energia suficiente para fazer as coisas que eu queria fazer.					
3. Minha falta de energia me fazia sentir constrangida ou envergonhada.					
4. Sentia-me fisicamente capaz de fazer todas as coisas que eu queria.					
5. Meu corpo estava forte.					
6. Sentia-me fisicamente em forma.					
7. Sentia que meu corpo estava saudável.					
8. Sentia-me fisicamente poderosa.					

9. Estar fora de forma me impedia de fazer coisas que eu queria fazer.					
10. Sentia que as coisas que determinavam minha saúde estavam além do meu limite.					
11. Sentia-me constrangida e envergonhada porque estava fora de forma.					
12. Sentia-me confiante que podia me tornar mais forte.					

Fator 2: Barreiras Sociais

	Discordo plenamente	**Discordo**	**Nem concordo nem discordo**	**Concordo**	**Concordo plenamente**
13. Restringia minhas atividades sociais por causa das minhas ondas de calor.					
14. Ondas de calor não me deixavam fazer as coisas que eu queria fazer.					
15. Restringia minhas atividades sociais por causa da mudança na minha aparência física que atribuo a minha cirurgia de câncer de mama.					
16. Mudanças na minha aparência física, que atribuo a minha cirurgia de câncer de mama, não me deixam fazer as coisas que eu queria fazer.					

17. Eu restringi minhas atividades sociais por causa da minha aparência física.					
18. Minhas ondas de calor me envergonhavam.					
19. Restringia minhas atividades sociais por causa de sintomas físicos que atribuo ao meu tratamento de câncer de mama (cirurgia, quimioterapia, radiação (radioterapia) me impediam de fazer coisas que eu queria fazer.					
20. Sintomas físicos do tratamento de câncer de mama (cirurgia, quimioterapia, radiação (radioterapia) me impediam de fazer coisas que eu queria fazer.					
21. Senti-me desconfortável e envergonhada com os sintomas físicos que eu atribuo ao meu tratamento de câncer de mama (cirurgia, quimioterapia, radioterapia).					

Fator 3: Aparência e sexualidade

	Discordo plenamente	**Discordo**	**Nem concordo nem discordo**	**Concordo**	**Concordo plenamente**
22. Tenho me sentido sexualmente atraente.					

23. Trocar de roupa e tomar banho no vestuário feminino de uma academia me constrangia ou envergonhava.					
24. Sentia-me constrangida ou envergonhada com a aparência do meu corpo.					
25. Meu corpo me parecia natural (normal).					
26. Mudanças na minha aparência física, que atribuo a minha cirurgia de câncer de mama, me envergonham.					
27. Sentia-me confortável com a aparência do meu corpo.					
28. Tenho ficado satisfeita com a minha vida sexual.					
29. Sentia-me confortável trocando de roupa ou tomando banho no vestiário feminino de uma academia.					
30. Sentia-me confortável com a aparência do meu corpo.					
31. Sentia que tinha algum controle sobre a minha (condição de) saúde.					
32. Atividade sexual era uma parte importante da minha vida.					

Apêndice D - Functional Assessment of Cancer Therapy for Breast Cancer (FACT-B) - versão 4

(Michels, Latorre & Maciel, 2012)

Abaixo encontrará uma lista de afirmações que outras pessoas com a sua doença disseram ser importantes. Faça um círculo ou marque um número por linha para indicar a sua resposta no que se refere aos últimos 7 dias.

	BEM-ESTAR FÍSICO	**Nem um pouco**	**Um pouco**	**Mais ou menos**	**Muito**	**Muitís-simo**
GP1	Estou sem energia	0	1	2	3	4
GP2	Fico enjoado/a	0	1	2	3	4
GP3	Por causa do meu estado físico, tenho dificuldade em atender às necessidades da minha família	0	1	2	3	4
GP4	Tenho dores	0	1	2	3	4
GP5	Sinto-me incomodado/a pelos efeitos secundários do tratamento	0	1	2	3	4
GP6	Sinto-me doente	0	1	2	3	4
GP7	Sinto-me forçado/a a passar tempo deitado/a	0	1	2	3	4

	BEM-ESTAR SOCIAL/FAMILIAR	**Nem um pouco**	**Um pouco**	**Mais ou menos**	**Muito**	**Muitís-simo**
GS1	Sinto que tenho uma boa relação com os meus amigos	0	1	2	3	4
GS2	Recebo apoio emocional da minha família	0	1	2	3	4
GS3	Recebo apoio dos meus amigos	0	1	2	3	4
GS4	A minha família aceita a minha doença	0	1	2	3	4
GS5	Estou satisfeito/a com a maneira como a minha família fala sobre a minha doença	0	1	2	3	4
GS6	Sinto-me próximo/a do/a meu/minha parceiro/a (ou da pessoa que me dá maior apoio)	0	1	2	3	4
Q1	*Independentemente do seu nível atual de atividade sexual, por favor responda à pergunta a seguir. Se preferir não responder, assinale o quadrículo ☐ e passe para a próxima secção.*					
GS7	Estou satisfeito/a com a minha vida sexual	0	1	2	3	4

	BEM-ESTAR EMOCIONAL	Nem um pouco	Um pouco	Mais ou menos	Muito	Muitís-simo
GE1	Sinto-me triste	0	1	2	3	4
GE2	Estou satisfeito/a com a maneira como enfrento a minha doença	0	1	2	3	4
GE3	Estou perdendo a esperança na luta contra a minha doença	0	1	2	3	4
GE4	Sinto-me nervoso/a	0	1	2	3	4
GE5	Estou preocupado/a com a ideia de morrer	0	1	2	3	4
GE6	Estou preocupado/a que o meu estado venha a piorar	0	1	2	3	4

	BEM-ESTAR FUNCIONAL	Nem um pouco	Um pouco	Mais ou menos	Muito	Muitís-simo
GF1	Sou capaz de trabalhar (inclusive em casa)	0	1	2	3	4
GF2	Sinto-me realizado/a com o meu trabalho (inclusive em casa)	0	1	2	3	4
GF3	Sou capaz de sentir prazer em viver	0	1	2	3	4
GF4	Aceito a minha doença	0	1	2	3	4
GF5	Durmo bem	0	1	2	3	4
GF6	Gosto das coisas que normalmente faço para me divertir	0	1	2	3	4
GF7	Estou satisfeito/a com a qualidade da minha vida neste momento	0	1	2	3	4

	PREOCUPAÇÕES ADICIONAIS	Nem um pouco	Um pouco	Mais ou menos	Muito	Muitís-simo
B1	Sinto falta de ar	0	1	2	3	4
B2	Sinto-me insegura com a forma como me visto	0	1	2	3	4
B3	Tenho inchaço ou dor em um ou ambos os braços	0	1	2	3	4
B4	Sinto-me sexualmente atraente	0	1	2	3	4
B5	Sinto-me incomodada com a queda do cabelo	0	1	2	3	4
B6	Fico preocupada com a possibilidade de que outros membros da minha família um dia tenham a mesma doença que eu	0	1	2	3	4
B7	Fico preocupada com o efeito do "stress" (estresse) sobre a minha doença	0	1	2	3	4
B8	Sinto-me incomodada com a alteração de peso	0	1	2	3	4
B9	Consigo sentir-me mulher	0	1	2	3	4
P2	Sinto dores em algumas regiões do meu corpo	0	1	2	3	4

Apêndice E - Termo de consentimento livre e esclarecido (TCLE) - virtual

Nº do projeto GPPG ou CAAE 25980619.6.0000.5327

Título do Projeto: IMPACTO DA PANDEMIA DA COVID-19 E DO TRATAMENTO CIRÚRGICO EM MULHERES COM CÂNCER DE MAMA: ANSIEDADE, DEPRESSÃO E QUALIDADE DE VIDA

Você está sendo convidada a participar de uma pesquisa cujo objetivo é identificar os sintomas de ansiedade e depressão, imagem corporal, o medo da covid-19 e a qualidade de vida em mulheres com câncer de mama submetidas ao tratamento cirúrgico durante a pandemia da covid-19. Esta pesquisa está sendo realizada pelo Serviço de Mastologia do Hospital de Clínicas de Porto Alegre (HCPA).

Se você aceitar participar da pesquisa, os procedimentos envolvidos em sua participação são os seguintes: responder a um questionário sociodemográfico aplicado pelo pesquisador composto por questões de respostas simples, com opções de respostas prontas. Além disto, serão respondidos questionários referentes ao medo da covid-19, ansiedade, depressão e qualidade de vida. Esta entrevista será realizada uma única vez, de forma on-line, pelo Google Meeting ou WhatsApp. A entrevista não será gravada, visando a preservar sua privacidade. Caso seja necessário, seu prontuário poderá ser consultado, a fim de complementar informações referentes a sua saúde. Os possíveis riscos ou desconfortos decorrentes da participação na pesquisa estão relacionados ao preenchimento do questionário, podendo haver algum estresse emocional.

A participação neste estudo não trará nenhum benefício direto a você, porém contribuirá para aumentar o conhecimento da influência do tratamento cirúrgico nos aspectos relacionados à depressão, ansiedade, imagem corporal e qualidade de vida, beneficiando outras mulheres. Se você sentir necessidade ou caso seja identificado algum tipo de sofrimento psicológico, você poderá ser encaminhada para atendimento com a psicóloga responsável pela pesquisa. Sua participação na pesquisa é totalmente voluntária, ou seja, não é obrigatória. Caso você decida não participar, ou ainda, desistir de participar e retirar seu consentimento, não haverá nenhum prejuízo ao atendimento que você receberá ou poderá vir a receber na instituição.

Não está previsto nenhum tipo de pagamento pela sua participação na pesquisa e você não terá nenhum custo com respeito aos procedimentos envolvidos. Caso ocorra alguma intercorrência ou dano resultante de sua participação na pesquisa, você receberá todo o atendimento necessário, sem nenhum custo pessoal.

Os dados coletados durante a pesquisa serão sempre tratados confidencialmente. Os resultados serão apresentados de forma conjunta, sem a identificação dos participantes, ou seja, o seu nome não aparecerá na publicação dos resultados. Os pesquisadores enfatizam a importância do participante da pesquisa em guardar uma cópia do documento (físico e/ou eletrônico) em seus arquivos.

Caso você tenha dúvidas, poderá entrar em contato com a pesquisadora responsável: Dra. Andréa Damin, pelo telefone: (51)33598117; com a pesquisadora Mônica Echeverria, pelo telefone: (51) 33598507; ou com Comitê de Ética em Pesquisa do Hospital de Clínicas de Porto Alegre (HCPA), pelo e-mail: cep@hcpa.edu.br, telefone: (51) 33596246 ou endereço: Av. Protásio Alves, 211 - Portão 4 - 5º andar do Bloco C - Rio Branco - Porto Alegre/RS, de segunda à sexta, das 8h às 17h.

Você concorda em participar da pesquisa?

( ) Sim, concordo em participar da pesquisa.

Anexo 1 - Documento de constatação da aprovação do projeto no Comitê de Ética em Pesquisa (CEP)

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PARECER CONSUBSTANCIADO DO CEP

DADOS DA EMENDA

Título da Pesquisa: Impacto da pandemia da covid-19 e do tratamento cirúrgico em mulheres com câncer de mama: ansiedade, depressão e qualidade de vida

Pesquisador: Andréa Pires Souto Damin

Área Temática:

Versão: 5

CAAE: 25980619.6.0000.5327

Instituição Proponente: Hospital de Clínicas de Porto Alegre

Patrocinador Principal: Financiamento Próprio

DADOS DO PARECER

Número do Parecer: 5.643.777

Apresentação do Projeto:

As informações elencadas nos campos "Apresentação do Projeto", "Objetivo da Pesquisa" e "Avaliação dos Riscos e Benefícios" foram retiradas do arquivo do projeto e das Informações Básicas da Pesquisa "PB_INFORMAÇÕES_BÁSICAS_DO_PROJETO_1993472_E1", de 29/08/2022.

O impacto do adoecimento e do tratamento cirúrgico em mulheres com diagnóstico de câncer de mama está associado a mudanças físicas, emocionais, familiares e sociais. Pacientes com câncer experimentam um número significativo de estressores relacionados à pandemia de COVID-19, que estão associados ao aumento dos sintomas psicológicos.

Neste contexto, este estudo tem como objetivo identificar o impacto da pandemia da covid-19 e do tratamento cirúrgico em mulheres com câncer de mama nos aspectos relacionados à ansiedade, depressão e qualidade de vida.

Para tal, será realizado um estudo quantitativo, transversal de natureza exploratória. Participarão pacientes com diagnóstico de câncer de mama submetidas ao tratamento cirúrgico durante a pandemia da COVID-19, as quais são atendidas pela equipe de Mastologia do Hospital de Clínicas de Porto Alegre (HCPA). Serão coletados os dados das pacientes que realizaram intervenção cirúrgica no período de março de 2020 a dezembro de 2021. Para a coleta de informações será

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Bairro: Rio Branco **CEP:** 90.410-000
UF: RS **Município:** PORTO ALEGRE
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aplicado questionário demográfico, escala de ansiedade e depressão hospitalar (HADS), escala de qualidade de vida FACT-B e escala do MEDO da Covid-19.
A coleta de dados será iniciada após a aprovação do estudo pelo Comitê de Ética do HCPA e da autorização das participantes do Termo de Consentimento Livre e Esclarecido.

Objetivo da Pesquisa:

Objetivo Primário:

Identificar os sintomas de ansiedade e depressão, o medo da covid-19 e a qualidade de vida em mulheres com câncer de mama submetidas ao tratamento cirúrgico durante a pandemia covid-19.

Objetivo Secundário:

- Identificar os sintomas de ansiedade e depressão em mulheres com câncer de mama submetidas ao tratamento cirúrgico durante a pandemia da covid-19
- Investigar o medo da covid-19 em mulheres com câncer de mama submetidas ao tratamento cirúrgico durante a pandemia
-Verificar qualidade de vida de mulheres com câncer de mama submetidas ao tratamento cirúrgico durante a pandemia da covid-19
- Associar os resultados das escalas de depressão, de ansiedade e de qualidade de vida ao medo da covid 19.
- Avaliar atitudes sobre aparência, saúde, força física, sexualidade, relacionamentos e funcionamento social de mulheres submetidas aos tratamentos do câncer de mama.

Avaliação dos Riscos e Benefícios:

Os riscos podem ocorrer relativos ao desconforto emocional durante o preenchimento dos questionários e aplicação das escalas. Se acaso, alguma situação de desconforto ocorrer, a entrevista será interrompida e será oferecido apoio psicológico no mesmo momento, já que a própria entrevistadora é a psicóloga responsável por este atendimento.

Benefícios: A partir do conhecimento do impacto da pandemia da covid-19 e do tratamento cirúrgico em mulheres com câncer de mama nos aspectos relacionados à ansiedade, depressão e qualidade de vida, poderemos oferecer um apoio psicológico dirigido às demandas mais frequentes, melhorando desta forma, o acolhimento e o acompanhamento psicológico destas

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pacientes

Comentários e Considerações sobre a Pesquisa:
Emenda 1 submetida na PB em 29/08/2022.

Justificativa:

Inserção da Escala de relacionamentos e imagem corporal – ERIC. A escala é ERIC utilizada para avaliar atitudes sobre aparência, saúde, força física, sexualidade, relacionamentos e funcionamento social de mulheres submetidas aos tratamentos de câncer de mama. A inserção se dá para complementar a avaliação da qualidade de vida em pacientes com câncer de mama.

Considerações sobre os Termos de apresentação obrigatória:
Foram incluídos os seguintes documentos:
-Projeto versão 5
-TCLE versão 5

Recomendações:
Sem recomendações.

Conclusões ou Pendências e Lista de Inadequações:
A emenda não apresenta pendências e está em condições de aprovação.

Considerações Finais a critério do CEP:
Emenda 1 submetida na PB em 29/08/2022 aprovada.

Este parecer foi elaborado baseado nos documentos abaixo relacionados:

Tipo Documento	Arquivo	Postagem	Autor	Situação
Informações Básicas do Projeto	PB_INFORMAÇÕES_BÁSICAS_1993472_E1.pdf	29/08/2022 11:55:33		Aceito
Outros	CartaemendaCEPHCPA.docx	03/08/2022 12:26:18	MONICA ECHEVERRIA MONICA	Aceito

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Continuação do Parecer: 5.643.777

Projeto Detalhado / Brochura Investigador	Projetoversao5adendo.docx	03/08/2022 12:26:01	MONICA ECHEVERRIA MONICA	Aceito
TCLE / Termos de Assentimento / Justificativa de Ausência	TCLEadendo.docx	03/08/2022 12:25:11	MONICA ECHEVERRIA MONICA	Aceito
Outros	carta_resposta_CEP.docx	09/05/2022 00:08:01	MONICA ECHEVERRIA MONICA	Aceito
Outros	roteiro_ligacaotelefonica.docx	09/05/2022 00:06:06	MONICA ECHEVERRIA MONICA	Aceito
Outros	LGPDassinado.pdf	09/05/2022 00:02:54	MONICA ECHEVERRIA MONICA	Aceito
TCLE / Termos de Assentimento / Justificativa de Ausência	TCLEvirtual.docx	08/05/2022 23:59:05	MONICA ECHEVERRIA MONICA	Aceito
TCLE / Termos de Assentimento / Justificativa de Ausência	TCLEpresencial.docx	08/05/2022 23:58:52	MONICA ECHEVERRIA MONICA	Aceito
Projeto Detalhado / Brochura Investigador	projeto_mestrado.docx	08/05/2022 23:56:57	MONICA ECHEVERRIA MONICA	Aceito
Folha de Rosto	Folha_de_Rosto_Thais.pdf	06/12/2021 20:08:41	Andréa Pires Souto Damin	Aceito

Situação do Parecer:
Aprovado

Necessita Apreciação da CONEP:
Não

PORTO ALEGRE, 14 de Setembro de 2022

Assinado por:
Têmis Maria Félix
(Coordenador(a))

Endereço: Avenida Protásio Alves 211 5° andar Bloco C Portão 4
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