



#Cancer

World Breast Cancer Day

19 October 2024

Table of content

EDITORIAL	3
THE CASE OF BREAST CANCER IN THE CAMEROONIAN CONTEXT: A CHALLENGE FOR PUBLIC HEALTH	4
SUMMARIES OF SYSTEMATIC REVIEWS	5
1. Weight loss programmes for overweight and obese breast cancer survivors: what are their benefits and harms, and do they help survivors to live longer?	5
2. Oncoplastic breast-conserving surgery (O-BCS) for women with primary breast cancer	7
3. Partial breast irradiation for early breast cancer	8
4. Is skin-sparing mastectomy an effective and safe surgical procedure for the treatment of breast cancer?	9
5. Exercise interventions for adults with cancer who are receiving radiation therapy without additional cancer therapy	11
6. Systemic therapies for preventing or treating aromatase inhibitor-induced musculoskeletal symptoms in early breast cancer	12
7. Does shared decision-making help women when making decisions about whether or not to participate in breast cancer screening?	14
8. Reduced breast density following endocrine therapy as an indicator of breast cancer risk	15

This document has been prepared by Cochrane Cameroon to provide **healthcare professionals** with evidence on the prevention and management of breast cancer.
Enjoy your reading!

EDITORIAL

Every year, October 19 marks World Breast Cancer Day, as part of the Breast Cancer Awareness Month known as Pink October. The celebration of this day aims to raise awareness of early detection, prevention and improved care for women with breast cancer. In 2024, it will be a key moment to continue promoting women's health and highlighting advances in cancer treatment research.

In developing countries, the WHO is placing particular emphasis on improving access to care and early detection in 2024, where medical infrastructures are often inadequate. According to the WHO, around 70% of breast cancer cases occur in low-income countries, particularly in sub-Saharan Africa. The 2024 initiative is part of the global strategy for the fight against cancer" (2020-2030), which aims to reduce premature deaths from preventable cancers by 25% by 2030.

1. **Screening and prevention:** According to the WHO, it is recommended that organized screening programs be set up, particularly for women aged 50 to 69, using regular mammograms, in order to reduce mortality from breast cancer. However, putting these recommendations into practice in countries such as Cameroon is complicated by the vulnerability of health systems and medical infrastructure.

2. **Awareness-raising and education:** Awareness-raising and training play a key role in the 2024 campaign. The WHO is working with local partners to encourage self-examination and regular medical consultations, and to train health professionals in the latest advances in detection and treatment.

3. **Global involvement:** As part of World Breast Cancer Day 2024, the WHO is encouraging governments, non-governmental organizations and communities to get involved in the fight against breast cancer by raising awareness, running free screening campaigns and implementing appropriate public health policies.

Why was this summary produced?

This summary was produced to provide up-to-date evidence on the management of mental health.

What is a systematic review?

A summary of studies that answers a clearly formulated question and uses systematic and explicit methods to identify, select and critically appraise relevant studies. Data from different studies are extracted and can be analysed together using meta-analysis techniques.

THE CASE OF BREAST CANCER IN THE CAMEROONIAN CONTEXT: A CHALLENGE FOR PUBLIC HEALTH

In Cameroon, breast cancer is a major public health concern, with a steady increase in the number of cases detected each year. Numerous studies and reports highlight the seriousness of the situation, as well as the difficulties associated with early detection, treatment and awareness-raising.

Breast cancer incidence in Cameroon

According to the World Health Organization (WHO), breast cancer is the most common cancer among women in Cameroon, accounting for around 19.2% of all female cancers in the country. According to the Cameroon Cancer Registry, around 2,500 new cases are diagnosed each year.

Challenges of early detection

In Cameroon, early detection of breast cancer is restricted, due to a lack of access to medical infrastructure and low awareness of the importance of self-examination and regular mammograms. According to a survey by Tebeu and colleagues (2018), it was found that less than 15% of women living in rural areas had access to breast cancer screening, due to high costs and a lack of specialized facilities.

Access to care and treatment

Difficulties encountered in the treatment of breast cancer in Cameroon include the lack of specialized oncology centers. According to a study by Cameroon's Ministry of Public Health (2021), there is a lack of radiotherapy equipment and qualified personnel in the country's main cities, leading some patients to seek treatment abroad.

Awareness campaigns

Faced with these difficulties, various local and international NGOs are actively involved in informing women about early detection of breast cancer. Each year, initiatives such as "Pink October" are launched to motivate women to undergo screening and adopt behaviors conducive to cancer prevention.

SUMMARIES OF SYSTEMATIC REVIEWS

I. Weight loss programmes for overweight and obese breast cancer survivors: what are their benefits and harms, and do they help survivors to live longer?

What is a healthy weight?

Body mass index (BMI) assesses whether people are a healthy weight for their height. A BMI of 18 to 25 shows a healthy weight, a BMI over 25 indicates being overweight, and a BMI over 30 indicates obesity.

Breast cancer and weight

People with a BMI over 25 are more likely to develop a recurrence of their breast cancer. Obesity can also affect people's quality of life (well-being) and can lead to serious and life-threatening conditions, including type 2 diabetes, coronary heart disease and stroke. After successful treatment for breast cancer, people with a BMI over 25 are advised to lose weight.

Losing weight

The most common method for losing weight is to reduce the number of calories eaten and to increase physical activity. A healthy, reduced-calorie diet and regular exercise may be combined with psychosocial support. Some weight loss programmes include all three elements.

Why we did this Cochrane Review

We wanted to identify which weight-loss programmes work best to help overweight and obese breast cancer survivors to lose weight; and whether the programmes had advantages or unwanted effects.

What did we do?

We searched for studies that assessed weight loss programmes in survivors of early-stage breast cancer who had a BMI over 25 and no evidence that their cancer had returned. We looked for randomised controlled studies, in which the programmes people received were decided at random. This type of study usually gives the most reliable evidence about the effects of a programme.

We wanted to know how weight loss programmes affected:

- How long people lived;
- Whether their breast cancer returned;
- The length of time before the cancer returned;
- How many people died;
- Body weight;
- Measurements of waist size;
- People's quality of life (well-being); or
- Had any unwanted effects.

Search date: we included evidence published up to June 2019.

What we found: We found 20 relevant studies in 2028 women. The studies compared participation in a weight-loss programme to not participating in one but receiving usual care, a placebo (dummy) treatment, a different type of weight-loss programme, written information, or being on a waiting list instead. All the programmes included dietary changes; some combined these with exercise or psychosocial support, or both.

Most studies were conducted in the USA. The weight loss programmes lasted from two weeks to two years; the people participating were followed for three months to 36 months after starting their programme.

None of the studies reported results for: how long people lived; or the length of time before their cancer returned, or how many people died. Few studies reported about the effect of weight loss programmes on the return of breast cancer.

What are the results of our review?

Compared with those not participating in a weight loss programme, breast cancer survivors with a BMI over 25 who take part in one may:

- Lose more body weight;
- Have greater reductions in their waist size and BMI; and
- Improve their well-being.

Taking part in a weight loss programme did not cause more unwanted effects.

Programmes combining diet with exercise or psychosocial support, or both, seemed to reduce body weight and waist size more than programmes based on dietary changes alone.

Our confidence in these results

Our confidence in these results is generally low. We identified limitations in the ways that some of the studies were designed and conducted, and the people taking part and those assessing them knew who received which treatments, which could have affected the study results.

Conclusions

Weight loss programmes may help overweight and obese breast cancer survivors to lose weight, reduce their BMI and waist size, and may improve their quality of life, without increasing unwanted effects. We did not find evidence about whether they could help people live longer, or delay the return of breast cancer.

We need more studies to find out which weight loss programmes work best to help breast cancer survivors lose weight, and whether this helps them to live longer.

Citation: Shaikh H, Bradhurst P, Ma LX, Tan SY, Egger SJ, Vardy JL. Body weight management in overweight and obese breast cancer survivors. *Cochrane Database of Systematic Reviews* 2020, Issue 12. Art. No.: CD012110. DOI: 10.1002/14651858.CD012110.pub2.

2. Oncoplastic breast-conserving surgery (O-BCS) for women with primary breast cancer

Background

Traditional surgery for early breast cancer is standard breast-conserving surgery (S-BCS) which aims to keep as much of the breast as possible. For women with large tumours compared to their breast size it can be difficult to conserve the breast whilst ensuring all the tumour is removed and may mean that mastectomy is needed. The most important part of surgical treatment for breast cancer is removing all cancer. In recent years, oncoplastic breast surgery techniques have been used to conserve the breast whilst removing breast cancer by applying the principles of plastic surgery, resulting in better cosmetic results. Oncoplastic breast-conserving surgery (O-BCS) may also result in better patient satisfaction and quality of life.

Traditionally, surgeons have either preserved the breast tissue by removing the cancerous lump (S-BCS) or reconstructing immediately after mastectomy. O-BCS involves removing cancer and either moving/adjusting the remaining breast tissue around (volume displacement) or bringing in tissue from elsewhere to fill the defect after breast cancer removal (volume replacement). There are many techniques that fall under O-BCS that we have listed in full in other parts of the review; however, all are similar in their principle.

Review question

We reviewed the evidence about the effects of O-BCS (that is, removing some of the breast tissue and then reconstructing the remaining breast by either mobilising the breast tissue (mammoplasty or volume displacement) or bringing the tissue from elsewhere (partial breast reconstruction or volume replacement)) compared to other S-BCS (that is, removing the tumour in the breast without the need for further breast adjustment) or mastectomy (that is, removing all the breast tissue with or without reconstruction). We studied the effect on cancer-related (local recurrence, disease-free survival and overall survival), quality of life and cosmetic outcomes in women with breast cancer.

Study characteristics

The evidence is current to August 2020. We included 78 studies involving 178,813 patients with breast cancer. We split the studies into those that compared O-BCS to S-BCS, O-BCS to mastectomy alone and O-BCS to mastectomy with reconstruction. Some studies contributed to more than one comparison.

Key results

It seemed that O-BCS resulted in similar rates of local recurrence (that is, whether cancer returned in the same breast) and disease-free survival (free of any breast cancer after initial treatment) when compared to S-BCS, and resulted in less need for a second re-excision surgery (which may be required if the tumour is not fully removed in the first operation). O-BCS may result in more complications and more biopsies in the years after the surgery compared to S-BCS. It seems that O-BCS may give better patient satisfaction and surgeon rating for the look of the breast, but the evidence for this is of

poor quality, and due to lack of numerical data, it was not possible to pool the results of different studies.

It was not possible to conclude whether or not cancer outcomes of local recurrence and disease-free survival for O-BCS were similar to mastectomy with or without reconstruction as there were not many good-quality studies. It seems O-BCS has fewer complications than surgeries involving mastectomy.

In practice, the decision to select O-BCS should be done through shared decision making with the surgeon, discussing the potential risks and benefits.

Certainty of evidence

The certainty of the evidence in this review was very low. The studies had several methodological flaws. Differences between groups in cancer stage and other cancer treatments that were used may have affected the results. This is likely to have an impact on the findings, and future research is needed to investigate the topic further.

Citation: Nanda A, Hu J, Hodgkinson S, Ali S, Rainsbury R, Roy PG. Oncoplastic breast-conserving surgery for women with primary breast cancer. *Cochrane Database of Systematic Reviews* 2021, Issue 10. Art. No.: CD013658. DOI: 10.1002/14651858.CD013658.pub2.

3. Partial breast irradiation for early breast cancer

What is the issue?

Breast cancer is the most common cancer that women get.

Women with early breast cancer who choose to keep their breast need to have radiotherapy (RT) as well as surgery to remove the cancer to make sure it does not regrow in the breast. RT is treatment with high energy x-rays. Having RT for breast cancer usually means 15 to 30 visits to the RT department, five times per week.

If breast cancer does regrow in the same breast (called local recurrence), it tends to come back in the area it was removed from. Women can also grow a new cancer (new 'elsewhere primary') in another part of the same breast. We are not sure if the RT given to stop cancer regrowth where the first cancer was, stops the growth of 'elsewhere primaries.'

Why does it matter?

We always want to treat the smallest area we can with RT because this means fewer side effects. Treating only part of the breast could mean that RT might be able to be used again in another part of the same breast if needed. New ways of giving RT mean that treating part of the breast can be done with fewer treatments. This is likely to be easier for women and cost less money.

What did we compare? We asked if giving RT to part of the breast (called partial breast irradiation (PBI)) is as good as giving RT to the whole breast. PBI can be given with a shortened treatment duration (called accelerated partial breast irradiation (APBI)). For this treatment to be acceptable, it would need to control the cancer as well as giving RT to the whole breast does. It would also be important that the PBI gives about the same side effects and breast appearance as treating the whole breast.

What did we find? We found nine studies, which involved 15,187 women. Our evidence is current to 27 August 2020. Local recurrence is probably slightly more common with APBI/PBI (moderate-quality evidence) and the breast appearance (scored by doctors and nurses) was probably worse with APBI/PBI (moderate-quality evidence). There is probably little difference in survival (high-quality evidence). Late radiation fibrosis (change in breast appearance and feel) is probably increased with APBI/PBI. There are probably few differences in breast cancer-related deaths and spread of breast cancer around the body with the use of APBI/PBI. The use of APBI/PBI makes little difference to how many women need mastectomy (removal of the whole breast) because of unacceptable late side effects or local recurrence.

What do our findings mean? This means that at the moment, PBI does not give the same cancer control in the breast as treating the whole breast, but the difference is small. It may cause worse side effects. There are seven big ongoing studies that will be important to answer this question. We hope to have a clearer answer in the next update of this review.

Citation: Hickey BE, Lehman M. Partial breast irradiation versus whole breast radiotherapy for early breast cancer. *Cochrane Database of Systematic Reviews* 2021, Issue 8. Art. No.: CD007077. DOI: 10.1002/14651858.CD007077.pub4.

4. Is skin-sparing mastectomy an effective and safe surgical procedure for the treatment of breast cancer?

What is the aim of this review?

We reviewed the evidence about the surgery technique called skin-sparing mastectomy (SSM) (that is, removing the breast tissue including the breast and areola (skin surrounding the nipple) but preserving all the skin that overlies the breast) compared to conventional mastectomy (that is, removing the skin that overlies the breast including nipple and areola).

Key messages

We found that SSM may not be different from conventional mastectomy for the risk of cancer recurring in the breast area only (local recurrence), chance of dying of breast cancer (overall survival) or risk of complications after surgery. Complications after surgery which were assessed included breast reconstruction loss (where the breast reconstruction flap or implant needs to be surgically removed due to complications), skin necrosis, local infection, hemorrhage (bleeding), quality of life, and cosmetic results. The results of this review are based on 14 studies and most of these with likely biased due to flaws in their design.

What is skin-sparing mastectomy?

Conventional mastectomy for breast cancer is a surgical procedure consisting of removing the entire breast tissue, the skin that overlies the breast, and the nipple-areola complex. The chance of cancer returning to the chest wall (site of mastectomy) after this type of surgery is about 2.3% after 20 years. Trying to improve cosmetic results has led to the use of skin-sparing mastectomy (SSM) as an alternative to conventional mastectomy. Preserving as much of the breast skin as possible leaves minimal breast

tissue and provides higher psychological satisfaction and the perception of less injury. SSM has been used for the treatment of breast cancer for the last two decades.

What did we want to find out?

We wanted to find out if SSM is as effective to treat breast cancer as conventional mastectomy and assess whether the surgical complication rates differed.

What did we do?

We searched for studies that compared SSM with other types of mastectomies for the treatment of breast cancer. We compared and summarized the results of the studies and rated our confidence in the evidence based on factors such as study methods and sizes.

What did we find?

We found 14 cohort studies (longitudinal studies that follow people over time) involving 12,283 surgeries where 3183 people underwent an SSM and 9100 underwent a conventional mastectomy.

People who had an SSM or conventional mastectomy may have similar:

- Chance of cancer returning after surgery (1 study);
- Survival (2 studies);
- Risk of overall complications (4 studies);
- Risk of removing the breast reconstruction flap or implant due to complications (3 studies);
- Risk of skin necrosis (4 studies);
- Risk of infection (2 studies);
- Risk of hemorrhage (4 studies);

However, the evidence is very unclear.

Based on one study, there did not appear to be a difference in aesthetic outcomes between SSM with immediate breast reconstruction compared to conventional mastectomy and delayed breast reconstruction. One study evaluated the quality of life. The study suggested similar patient satisfaction, social activity, physical aspects, and general condition in people who have an SSM followed by breast reconstruction and those who have a mastectomy without breast reconstruction.

What are the limitations of the evidence?

The studies found were mostly retrospective. This means that participants were chosen years after their surgery, and asked about their experiences after surgery, which may have brought bias into the research studies. Of the 14 studies, two studies commenced at the time of surgery.

People who had conventional mastectomy were likely different to those who had SSM. Most studies did not consider these differences across groups when analyzing the data.

How up to date is this evidence?

The review authors searched for studies that had been published up to August 2019.

Citation: Mota BS, Bevilacqua JLB, Barrett J, Ricci MD, Desidério, Munhoz AM, Filassi JR, Baracat E, Chada, Riera R. Skin-sparing mastectomy for the treatment of breast cancer. Cochrane Database of Systematic Reviews 2023, Issue 3. Art. No.: CD010993. DOI: 10.1002/14651858.CD010993.pub2.

5. Exercise interventions for adults with cancer who are receiving radiation therapy without additional cancer therapy

What is radiation therapy?

Radiation therapy (also called radiotherapy) is a treatment that delivers high doses of radiation to a specific part of the body to kill cancer cells. One in two people with cancer will undergo radiation therapy. Some people receive radiation therapy alone, while others receive radiation therapy combined with other cancer treatments that affect the whole body (chemotherapy, immunotherapy, or hormone therapy). The unwanted effects of radiation therapy usually affect the part of the body where the radiation is delivered, but there may also be symptoms that affect the whole body. These unwanted effects can lead to reduced physical activity, physical performance, and quality of life. There is evidence that people with cancer who perform exercise may be less likely to die from cancer or from other causes, may be less likely to have their cancer return, and may have fewer unwanted effects of cancer treatment.

What did we want to find out?

We wanted to find out if exercise could help to improve the following outcomes in people with cancer receiving radiation therapy alone.

- Fatigue
- Quality of life
- Physical performance
- Psychosocial effects (such as depression)
- Overall survival
- Return to work
- Anthropometric measurements (such as weight)
- Unwanted effects

What did we do?

We searched electronic medical literature databases for randomised controlled trials (RCTs) that enrolled people with all types and stages of cancer who were receiving RT alone. Eligible RCTs randomly assigned some participants to receive any type of exercise intervention plus standard care and others to standard care alone. We excluded exercise interventions that involved physiotherapy alone, relaxation programmes, or combination programmes with exercise and, for example, dietary restrictions.

We compared the results of the studies and rated our confidence in the evidence, based on factors such as study methods and sizes.

What did we find?

We included three studies that enrolled 130 people with breast or prostate cancer. The exercise groups participated in a supervised exercise programme three to five times per week for five to eight weeks. The exercise interventions included warm-up, aerobic exercise, and cool-down.

We analysed the differences between the exercise groups and control groups in the outcome values after radiation therapy. We could not compare the differences between the groups in the change in outcome values from before to after radiotherapy because

the studies did not provide enough information for this comparison. In some outcomes (fatigue, physical performance, quality of life), there were already differences between the exercise and control groups at the beginning of the studies.

Exercise may improve fatigue and may have little or no effect on quality of life. Exercise may improve physical performance, but we are very uncertain about the results. Exercise may have little or no effect on psychosocial effects, but we are very uncertain about the results. Two studies reported no unwanted effects of exercise. No studies measured our other outcomes of interest.

Exercise programmes in people with cancer receiving RT alone may provide some benefits, but the evidence to support this is poor. Due to the lack of evidence, we could not detect and also not rule out clear differences in outcomes.

What are the limitations of the evidence?

We have little or very little confidence in the evidence because the results are based on a small number of studies that enrolled very few people, because the people in two studies knew which group they were in, and because the evidence focused on a specific population whereas the question we wanted to answer was broader. Further research is likely to change our results.

How up to date is the evidence?

The evidence is up to date to 26 October 2022.

Citation: Trommer M, Marnitz S, Skoetz N, Rupp R, Niels T, Morgenthaler J, Theurich S, von Bergwelt-Baildon M, Baues C, Baumann FT. Exercise interventions for adults with cancer receiving radiation therapy alone. *Cochrane Database of Systematic Reviews* 2023, Issue 3. Art. No.: CD013448. DOI: 10.1002/14651858.CD013448.pub2.

6. Systemic therapies for preventing or treating aromatase inhibitor-induced musculoskeletal symptoms in early breast cancer

What was the aim of this review?

Hormonal therapy with aromatase inhibitors is used to treat a type of early breast cancer (hormone-receptor positive) in women after the menopause. All cause side effects including joint and muscle pains and stiffness (aromatase inhibitors musculoskeletal symptoms, or so-called AIMSS), which may cause some women to stop taking their aromatase inhibitors, and potentially worsen survival. The aim of this Cochrane Review was to examine whether systemic therapies (treatments that reach cells throughout the body by travelling through the bloodstream) can prevent or treat AIMSS. The authors collected and analysed all relevant studies to answer this question.

Key messages

It is very unclear if systemic therapies improve, worsen or make no difference to pain or quality of life for women taking aromatase inhibitors. Most of the evidence was of very low quality. It was very unclear if systemic therapies for AIMSS were safe.

What did the review study?

We looked at research studies of systemic therapies, which included medicines, vitamins, and complementary and alternative medicines, to see if these could prevent or treat the joint and muscle pains and stiffness of women taking aromatase inhibitors. We included trials of systemic therapies compared to placebo (dummy treatment), or to

standard treatments. Women treated with aromatase inhibitors for early-stage hormone receptor-positive breast cancer were included. Most studies were for treatment of AIMSS. Outcomes that were studied included changes in pain, stiffness, hand strength (grip strength), safety and side effects of the study treatments, number of women continuing to take their aromatase inhibitors, quality of life for women, how many women developed muscle and joint aches from their aromatase inhibitors, and survival.

What were the main results of this review?

After collecting and analysing all the relevant studies, we found 17 studies with 2034 women included. Different numbers of women were involved in these studies, ranging from 37 to 299. Four studies looked at systemic therapies to prevent the joint and muscle pains from aromatase inhibitors; 13 studies investigated systemic therapies to treat these symptoms. Ten studies were carried out in the USA, three in China, two in Australia, one in Italy and one in Brazil. Many of the studies had low numbers of women and this may have made it difficult to find small differences. There were problems with some studies being at risk of bias. Other problems were because several studies had not fully published information about their treatment ingredients or their results, so that some data were not available for review or analysis. In addition, studies used many different types of treatment, and it was not appropriate to combine their results in analysis.

AIMSS prevention studies: It is unclear whether any of these studies found a positive or negative effect on pain, and on the number of women who developed AIMSS because of the very low quality evidence. Systemic therapies may have little to no effect on grip strength, quality of life or on women continuing to take their aromatase inhibitors (low-quality evidence). None of the studies looked at stiffness.

AIMSS treatment studies: It is unclear whether any of these studies found a positive or negative effect on pain, stiffness and quality of life of women because of the very low-quality evidence. Systemic therapies likely result in little to no change on grip strength in women with AIMSS (low-quality evidence). None of the studies looked at the number of women continuing to take aromatase inhibitors or who developed AIMSS, or their survival.

Safety: We do not know if systemic therapies for AIMSS are safe as the evidence is very uncertain. There were no serious side effects. One treatment, duloxetine, resulted in an increase in side effects for women, and one treatment, etoricoxib, had a safety alert during the trial. Length of monitoring of women for many studies was short. Safety data should be interpreted with caution.

How up-to-date is this review?

The last search for studies (published and ongoing) in this review was in September 2020 within the specified databases and in March 2021 in the Cochrane Breast Cancer's Specialised Register.

Citation: Roberts KE, Adsett IT, Rickett K, Conroy SM, Chatfield MD, Woodward NE. Systemic therapies for preventing or treating aromatase inhibitor-induced musculoskeletal symptoms in early breast cancer. Cochrane Database of Systematic Reviews 2022, Issue 1. Art. No.: CD013167. DOI: 10.1002/14651858.CD013167.pub2.

7. Does shared decision-making help women when making decisions about whether or not to participate in breast cancer screening?

Key messages

Shared decision-making could help women feel less unsure or regretful and assist with learning during the decision-making process for breast cancer screening. However, it is important to note that our understanding of how exactly it may affect women's screening decisions is incomplete.

What is shared decision-making?

Shared decision-making is when a doctor and a patient work together to choose the best care. They talk about different options, the pros and cons, and what matters to the patient. They use tools like booklets or online guides (decision aids) to provide clear information and decide together.

Why does shared decision-making matter for breast cancer screening?

Breast cancer screening helps save lives and reduces health issues during treatment. However, it may sometimes give incorrect results or lead to too much treatment. When women and doctors make choices together, they can make informed decisions that align with women's values.

What did we want to find out?

We wanted to know if shared decision-making could help women feel more satisfied, confident, and knowledgeable when deciding whether to participate in breast cancer screening.

What did we do?

We included studies that looked at how shared decision-making affects women making choices about breast cancer screening. We chose studies that compared some or all the important aspects of shared decision-making with routine care. We judged how certain we could be in the findings based on factors like study methods and sizes.

What did we find?

We looked at 19 studies with 64,215 women. Women were given information about the pros and cons of breast cancer screening. Most studies used tools to provide this information. Six studies did not include a discussion with a healthcare professional, and 11 studies did not consider a woman's values and preferences. The studies followed women for a short time, usually from one to three months, and were conducted in the USA, Europe, Australia, and one in Iran. Most studies were funded by government or schools, and some by private groups.

Shared decision-making involving all key components

Two studies included discussions with healthcare professionals and considered values and preferences. Based on a single study, shared-decision making may not affect women's knowledge about when to start screening and screening frequency, but the results are uncertain. The two studies did not look at outcomes like women's satisfaction with the shared decision-making process, confidence in screening choices, adherence to decisions,

active participation in decision-making, effective communication with doctors, or changes in mental health.

Shortened forms of shared decision-making with clarification of values and preferences

Six studies used decision-making tools and considered values and preferences but did not include conversations with a healthcare professional. This type of shared decision-making could make women feel more confident and knowledgeable about their choices, although it may not affect anxiety or cancer worry. These studies did not look at outcomes like women's satisfaction with the shared decision-making process, adherence to decisions, active participation in decision-making, or effective communication with doctors.

Enhanced communication about risks without other components of shared decision-making

Eleven studies provided women with information about options and the pros and cons but did not include a conversation with a healthcare professional or consider women's values and preferences. This type of shared decision-making helps women feel more knowledgeable about their choices, although it is unclear if it increases confidence. It does not affect anxiety or depression, but does reduce cancer worry. These studies did not look at outcomes like women's satisfaction with the shared decision-making process, adherence to decisions, active participation in decision-making, or effective communication with doctors.

What are the limitations of the evidence?

Although there were many studies involving a total of over 60,000 women, the studies used different approaches to look at shared decision-making, presented data in varied formats, and did not look at outcomes considered important in our review. These differences prevented us from combining information in some cases for clear results. Also, some studies had issues with their methods. As a result, we cannot be certain about some of the conclusions in this review.

How up-to-date is this information?

The information is current to August 2023.

Citation: Riganti P, Ruiz Yanzi MV, Escobar Liquitay CM, Sgarbossa NJ, Alarcon-Ruiz CA., Kopitowski KS, Franco JVA. Shared decision-making for supporting women's decisions about breast cancer screening. Cochrane Database of Systematic Reviews 2024, Issue 5. Art. No.: CD013822. DOI: 10.1002/14651858.CD013822.pub2.

8. Reduced breast density following endocrine therapy as an indicator of breast cancer risk

What is the issue?

Breast cancer is a common cancer and cause of death in women worldwide. Treatment options for breast cancer include endocrine therapy. Endocrine therapy can also be used to prevent breast cancer for women who have not been diagnosed with breast cancer. It would help doctors and their patients to understand whether some patients are likely to have greater benefit from endocrine therapy than others. The structure of the breast is likely to change following endocrine therapy. These structural changes are seen when women have a mammogram (breast x-ray). They appear as a decrease in the area of white tissue (breast density) on the mammogram. We wanted to find out whether

reductions in breast density after endocrine therapy can help to determine how well endocrine therapy works.

Review question

We searched for previously published studies. We assessed whether a reduction in breast density after receiving endocrine therapy was associated with better outcomes. For women without breast cancer, this focused on whether those with decreased breast density were less likely to develop breast cancer. For women with breast cancer, this included whether those with greater decreases in breast density were less likely to die from breast cancer.

Study characteristics

We performed the search on 3 August 2020. We included studies of adult women with breast cancer if the women's breast cancer had been diagnosed at an early stage and could be treated with endocrine therapy (hormone receptor-positive breast cancer). We included drugs often used in practice (tamoxifen and aromatase inhibitors). We found a wide variety of studies. The studies varied in terms of how they had been planned and the characteristics of the women included in the studies, as well as in how breast density change was measured.

Key results

Most studies reported a reduced risk of breast cancer after endocrine therapy for women who had a breast density reduction compared with women who did not have a reduction. There was slightly stronger evidence for the drug tamoxifen.

- Two studies reported on breast density reduction following tamoxifen and risk of breast cancer death. The findings were based on 172 women who died from breast cancer. Overall, the certainty of the evidence was low.
- Two studies considered if breast cancer returned after treatment with tamoxifen. There were concerns about the study methods and certainty of findings in these two studies. Overall, the certainty of the evidence was very low.
- One study considered treatment with an aromatase inhibitor and the chance of breast cancer returning. There was considerable uncertainty about the effect size because there were only 175 women in the study. The certainty of the evidence was very low due to potential risk of bias in the study.
- One study considered if breast cancer returned locally or at a distance from the original tumour. There was risk of bias in reporting and uncertainty about the sizes of the effect. The certainty of the evidence for both outcomes was very low.
- Two studies looked at the chance of women with breast cancer being diagnosed later with a new breast cancer, such as in the opposite breast. There was risk of bias in reporting and uncertainty about the size of the effect. The certainty of the evidence was very low.
- One study considered women who had not previously had breast cancer and who received tamoxifen. Results were based on 51 women who developed breast cancer. Overall, the certainty of the evidence was low.

- One study considered whether the beneficial effect of tamoxifen could be explained by a decrease in breast density. There was some evidence to support this, but there was uncertainty about the strength of the effect. The results were based on 51 women who developed breast cancer after receiving tamoxifen. The certainty of the evidence was low.

Overall, we found some evidence that breast density change following tamoxifen therapy is useful information to help determine how well the drug will work in future. However, there is much uncertainty about the strength of this effect. This was due to small numbers of women in the studies, relatively few studies for each outcome, and limitations in many of the studies such as how breast density change was measured. More research is needed to help assess these issues.

Quality of the evidence

Overall, we assessed the certainty of the available evidence as low or very low.

Citation: Atakpa EC, Thorat MA, Cuzick J, Brentnall AR. Mammographic density, endocrine therapy and breast cancer risk: a prognostic and predictive biomarker review. Cochrane Database of Systematic Reviews 2021, Issue 10. Art. No.: CD013091. DOI: 10.1002/14651858.CD013091.pub2.

Others sources:

Cameroun Cancer Registry, Statistiques annuelles sur les cancers, 2021.

Ministry of public health Cameroon, Public health annual report, 2021.

ONG Pink Hope Cameroon, Annual report on the Pink October campaign, 2023.

Tebeu, Pierre-Martin, et al., Access to breast cancer screening in Cameroon, *Journal of Women's Health*, 2018.

World Health Organisation, Report on cancer in Africa, 2022.

World Health Organisation, Report on cancer in LMIC, 2023.

World Health Organisation, World strategy against cancer, 2020-2030.

Document produced by:

Cochrane Cameroon
Centre for the Development of Best Practices in Health
Phone office: +237 242 081 919 Email: camer.cdbpsh@gmail.com
Website: www.cdbph.org Yaounde, Cameroon