Promotoras for Cervical Cancer Awareness and Prevention in Hispanic Women

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Background and Significance

- Cervical cancer is the fourth most common cancer in women after breast, colorectal, and lung cancer.
- Hispanic women have lower cervical cancer screening rates compared to the general population (74.7% of Hispanics ever had cervical cancer screening compared to 79.1% of non-Hispanic whites, Mann et al, 2016).
- While public health agencies have implemented measures aimed at promoting screening in Hispanic women, the measures have not been effective in addressing cervical cancer disparities between Hispanic women and the general population.
- A study conducted by Akinlotan et al. (2017) indicated that cultural barriers prevent Hispanic women from getting cervical cancer screening.

Methods

- PICOT question guiding the review is “For Hispanic women aged 21 to 65 years; does the utilization of community health care workers (promotoras) increase cervical cancer screening rates?”.
- Keywords cervical cancer screening AND Hispanic women were searched on the following databases, PubMed and CINHAL.
- The titles and abstracts evaluated were limited to experimental studies conducted within the past six years, focused on cervical cancer screening, educational interventions to increase awareness, usage of community healthcare workers, and Pap smear tests reuptake.
- After reviewing titles, abstracts, and full text for the stated limits, five articles were identified for inclusion for this project.

Fatcamera. (n.d.). *A culturally sensitive approach to cervical cancer prevention* [Photograph]. Nursing for Women’s Health. https://nwhjournal.org/article/S1751-4851(18)30136-3/fulltext#figures

Summary of Evidence

- Calderón-Mora et al. (2019) used promotoras to provide cervical cancer education on a 1:1 basis versus in a group-led environment. The studies by Carrasquillo et al. (2018) and Molokwu et al. (2018) utilized promotoras to provide individualized educational training to participants and compare it to participants receiving only educational print material. Thompson et al. (2016) conducted a study on home-based educational session led by promotoras compared to usual care. Shokar et al. (2019) combined promotoras with a multi-component approach where the promotora educated the participants and provided them with resources and appointments for screening.
- Utilization of promotoras resulted in a significant increase in cervical cancer knowledge in Hispanic women following educational interventions (Molokwu et al., 2018, Calderon-Mora et al., 2019, Carrasquillo et al., 2018, Thompson et al., 2016, & Shokar et al., 2019).
- Studies by Carrasquillo et al. (2018) and Thompson et al. (2016) resulted in significance difference between groups in relation to screening. Carrasquillo et al. (2018) demonstrated a higher incidence of Pap smear screening in self-swab participants (77%) which involved aid from a promotora. Furthermore, 53% of the participants in the high-intensity training (promotora-led education) in the study by Thompson et al. (2016) got screened for cervical cancer.
- Although the studies by Calderón-Mora et al. (2019), Molokwu et al. (2016), and Shokar, et al. (2019) resulted in no significant difference between groups, whether small, there was still higher percentage of individuals being screened from the intervention groups that involved the promotoras.

Implications for Nursing practice and role of the CNL

- The evidence-based project has implications on the quality, safety, and patient outcomes related to providing cervical cancer screening to Hispanic women.
- The project demonstrates the effectiveness of promotora-led, education-based interventions in increasing participation in screening and awareness.
- Utilizing promotoras to make home visits opposed to working in a clinical environment can increase screening completion rates. In addition, to providing education to Hispanic women out in the community, promotoras should assist with healthcare system navigation and with scheduling appointments for maximal patient outcome.
- A critical factor in the success of the intervention is inter/intradisciplinary communication and collaboration. The role of the CNL should include continuous assessment of the team operation.

Summary and Conclusions

- Promotora-led informational sessions lead to an increase in awareness, regardless if the sessions were conducted individually or in groups. Considering this, promotoras could conduct group sessions, which would indicate less staff training, and require less resources.
- Recruitment, intervention, and follow up in a familiar environment for the participants demonstrated to have a positive effect on participation and continuation. Therefore, setting up ways for the promotora to make home-visits, or work, in community centers could be more beneficial than them working at facilities.
- Utilizing the promotora in multicomponent interventions where the promotoras provides navigation, and appointments in addition to education, resulted in women being 14x more likely to be screened. Aside from educational training, promotoras should provide navigational services for Hispanic women.
- Studies that offered self-sampling saw higher rates of knowledge and Pap smear test completed. I recommend more studies be performed to determine the implication and find ways to integrate this into practice.

Acknowledgement

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Does Telephone-Based Breastfeeding Support Affect Breastfeeding Duration Rates in Mother-Infant Pairs?

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Background and Significance

Breastfeeding is the best form of nutrition for growth and development as well as survival (Jerin et al., 2020). The World Health Organization and the CDC recommend that all infants be exclusively breastfed up until 6 months, however, only 1 in 4 infants in the United States (U.S.) are (Patel et al., 2018 & CDC, 2021). Some of the reasons for this are due to problems with lactation or latching, concerns about infants' weight, mothers going back to work, lack of family support, unsupportive hospital practices (CDC, 2020). A Cochrane systematic review found that when mothers received breastfeeding support, exclusive breastfeeding rates increased at 6 months (McFadden et al., 2017). This poster will look at if breastfeeding support through telephone intervention compared to no telephone-based support will affect rates of breastfeeding up to 6 months of age.

Methods

The databases PubMed and CINAHL were searched for evidence using the keywords: "telephone support," "mobile phone support," and "breastfeeding." The search was limited to the years 2016-2021.
The titles and abstracts of the articles were reviewed in relevance to the PICO. Five studies remained and were used for this synthesis to evaluate if telephone support increased the duration of breastfeeding.

Implications for Nursing and CNL Ro

Telephone support could be used as a supplemental intervention to in-person breastfeeding consultations.

- Allows the prompt response of a trained healthcare provider or peer that can give evidence-based support and prevents mothers from accepting incorrect advice from friends and family
- Questions are answered promptly which reinforces knowledge from trained volunteers
- Ensures good quality level care due to trained professionals answering phone calls
- Telephone counseling can be a low-cost and widely accepted intervention to increase breastfeeding duration at home after delivery

As a CNL going forward, one can advocate for this intervention in their microsystem or unit to implement follow-up phone calls with mothers who are breastfeeding.

- Mothers can be checked on and given evidence-based information that continues to provide good quality care even after they leave the hospital
- Use interdisciplinary communication in creating the protocol and policies for the breastfeeding calls
- The program will continue after discharge, providing seamless continuity of care

Conclusions

There was moderate evidence found in the literature that telephone counseling increased breastfeeding duration in mother-infant pairs. Using this evidence, telephone support could be used as an intervention to supplement the knowledge mothers have about breastfeeding and increase breastfeeding duration rates. As discussed before, telephone support should not replace in-person consultations, but rather supplement and reinforce the education that they have learned and offer easy access to support.

Table of Evidence

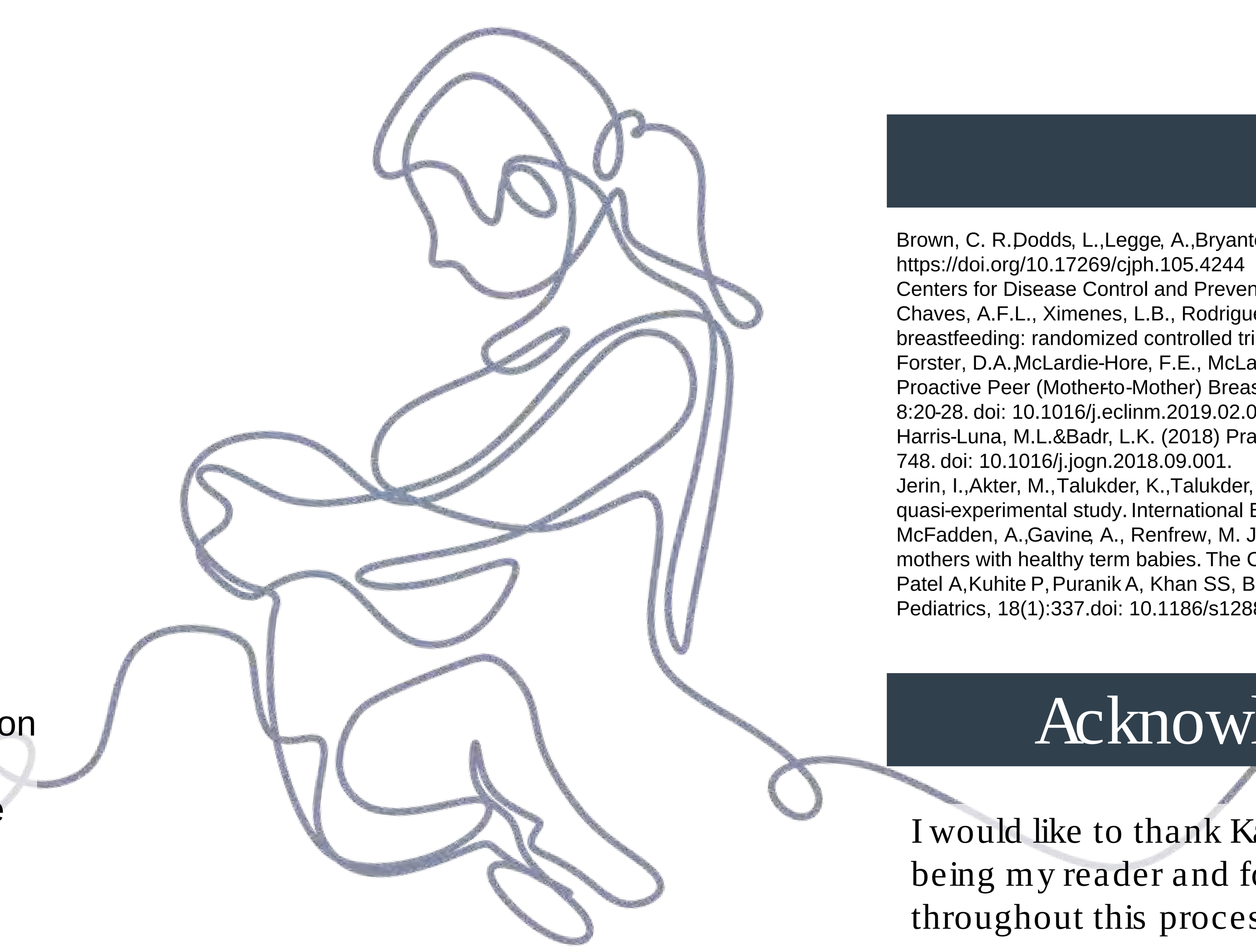
Authors	Grade of Evidence	Intervention	Results
Chaves et al. (2019)	Level 2, C-low quality evidence	Intervention: Telephone based education at 7/15/30 days postpartum Control: Routine guidelines of the child-friendly hospital	Results: After four months, more women in the intervention group were breastfeeding compared to the control group, however it was not statistically significant (p=0.109)
Forster et al. (2019)	Level 2, B-good quality evidence	Intervention: Telephone support from a peer volunteer weekly up to 6 months Control: Usual supports for breastfeeding after discharge	Results: 75% of the intervention group were breastfeeding at 6 months (1.10, with a 95% CI of 1.02-1.18)
Harris-Luna & Badr (2018)	Level 3, B-good quality evidence	Intervention: Telephone education from trained promotoras weekly for 4 weeks and biweekly up to 12 weeks postpartum Control: Standard care of breastfeeding support	Results: After 12 weeks, 45% of women in the intervention group continued to exclusively breastfeed compared to only 13% in the control group (p=0.04)
Jerin et al. (2020)	Level 3, B-good quality evidence	Intervention: Telephone call biweekly until 6 months postpartum. Control: Routine breastfeeding support postpartum.	Results: After five months 71% if infants in intervention group were still exclusively breastfeeding while only 42% were still exclusively breastfeeding in the control group (p=0.000)
Patel et al. (2018)	Level 2, B-good quality evidence	Intervention: Cell phone counseling by a certified lactation counsellor once a week, until 6 months postpartum and a daily text message Control: Routine services offered through Baby Friendly Hospital Initiative	Results: Rates of exclusive breastfeeding were significantly higher for subsequent visits (24h: 74% vs 74%, 6 wk: 81 vs 97%, 10 wk: 78% vs 98%, 14 wk: 71% vs 96%, 6 mo: 49% vs 97%, p<0.001 for last 4 visits)

Evidence Summary

The table above summarizes the studies used to research telephone support and its affect on breastfeeding duration rates.
In summary, the evidence:

- Used nurses or lactation consultants (n=3), used peers or lay workers (n=2)
- Randomized controlled trial (n=3), quasi-experiment (n=2)
- Good quality evidence (n=4), low quality evidence (n=1)
- Significantly improved breastfeeding rates (n=4), no effect (n=1)

There was good evidence with consistent findings from all the studies, therefore moderate evidence is indicated in the literature for telephone breastfeeding support to be effective in increasing the duration rate of breastfeeding.



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Is Digital Breast Tomosynthesis a Better Primary Diagnostic Tool than Digital Mammograms Amongst Women with Dense Breasts?

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BACKGROUND AND SIGNIFICANCE

- Breast cancer is the second leading cause of cancer death for women
- Digital mammograms (DM) have been an effective tool for early detection of breast cancer, but it has many limitations such as false positive and negative results, overdiagnosis, and overtreatment.
- Mammograms miss about 13% of breast cancer and it can miss more cancers with factors like breast density.
- Currently, additional imaging or biopsy is needed if a false positive mammogram occurs to confirm the presence of cancer
- Digital breast tomosynthesis (DBT) is a three-dimensional imaging that can capture multiple angles of the breast in a short scan to produce a series of section images that potentially improves recall and cancer detection rates.

PICO

Is digital breast tomosynthesis a better primary diagnostic tool at reducing recall rate and improving cancer detection rate with cost in consideration compared to digital mammogram for women between the ages of 40 and 49 with dense breasts.

METHODS AND LITERATURE PROFILE

- Onesearch database was utilized for the purpose of this investigation
- Keywords: “digital breast tomosynthesis” and “dense breasts”
- Articles included: peer reviewed, in the English language, electronic full text, and within 5 years (2016-2021), which resulted with 210 articles
- Article titles excluded if topics were unrelated, which generated 42 articles.
- Eight articles were fully reviewed
- Five remaining articles (random controlled trial, systematic review and meta-analysis, retrospective observational study, prospective cohort study, and simulation study) were analyzed

EVIDENCE SUMMARY

• Recall rates did not differ for women with dense breasts (Aase et al., 2018)

•Recall rate for women with dense breast was less with DBT and was far superior at detecting and accurately diagnosing masses in dense breasts (Bian et al., 2016)

•Women between the ages of 40 and 49 with scattered fibroglandular density had improved recall rate and cancer detection rate but not for women with extremely dense breast on subsequent screening rounds (Lowry el al., 2020)

• Recall rate for women with dense breast was reduced with DBT and cancer detection rate improved using DBT with or without DM for both diagnostic and screening studies (Phi et al., 2018)

•DBT sensitivity of 80%, with the cost of €96, the incremental cost-effectiveness ratio (ICER) for women with dense breast was €41,021 per life year gain which was similar the U.S. study, where ICER was $53,893 and was considered as cost-effective with a threshold of $100,000 per QALY (Wang et al., 2020)

NURSING PRACTICE IMPLICATIONS

- Inconsistent recall rate with DBT
- Overall improved cancer detection rate with DBT compared to DM
- DBT more likely to be cost-effective for women with dense breast and potentially for general population depending on cost
- DBT not widely available
- Evidence not sufficient to alter practice

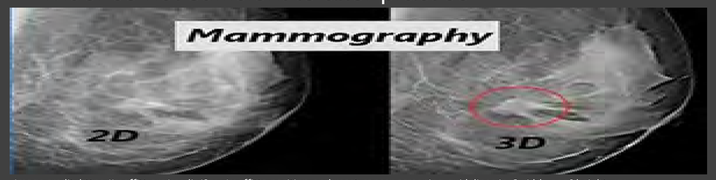

Image credit: https://moffitt.org/media/6532/moffitts-position-on-breast-cancer-screening-guidelines.jpg?width=300&height=172

ROLE OF CNL

- Use evidence-based practice and identify gaps in quality of care, coordination, and management of specific populations
- Continue to explore ways on improving the quality of current DM screening or finding better ways to screen
- Outcome manager to synthesize data, information, and knowledge to evaluate and achieve optimal client outcomes
- Collaborate with other health professionals in analyzing cost, benefits, risks, and problems when designing studies to measure whether DBT can be beneficial to all women and not only those with dense breasts

CONCLUSIONS

- Overall DBT showing promising results on detecting cancers for women with dense breast and the cost-effectiveness
- Barriers to overcome are inconsistent recall rates and the availability of DBT
- Future random controlled trial studies with adequately powered samples to compare the accurate detection of breast cancer and recall rates between the modalities
- Future study to compare expenses of completing DBT and traditional additional imaging after receiving a false positive result
- DBT remains inconclusive to implement into practice without gathering more evidence

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Mindfulness-Based Therapy for Depression in Breast Cancer Patients

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ABSTRACT

In the U.S., breast cancer is the second most common type of cancer among women. Breast cancer diagnosis is associated with many adverse health conditions, including depression. Antidepressants are commonly used to treat depression in breast cancer patients but can have undesirable side effects and can reduce the efficacy of chemotherapeutic drugs. Alternative and supplemental treatments are needed to treat depression in breast cancer patients. Mindfulness is a non-judgmental awareness of the present moment. Mindfulness-Based Therapy (MBT) utilizes mindfulness in varying ways, incorporating meditation, yoga, art/music therapy, and movement. This paper will explore the research question: In adult women diagnosed with breast cancer, does Mindfulness-Based Therapy reduce levels of reported depression within 6 months? The evidence search began on PubMed. The keywords "mindfulness" and "breast cancer" were used to narrow the results to 155 articles. The titles, abstracts, and full articles were then screened to find the 5 strongest articles. The evidence shows that MBT can reduce depression among women diagnosed with breast cancer. Significant improvements were also seen in anxiety and insomnia. MBT was also shown to be effective in reducing depression via telehealth. The evidence shows that the effects of MBT are maintained up to 6 months post-intervention.

BACKGROUND

Mindfulness-Based Therapy utilizes mindfulness as a key component to increase awareness of negative thinking patterns. In doing so, MBT allows individual's to consciously alter behaviors and emotions to better cope with life stressors. MBT is highly versatile and may include meditation, yoga, art therapy, music therapy, and movement. The concept of mindfulness originates in Buddhist traditions that is often used in meditation to allow one to be present in the moment and become self-aware. In 1979, Jon Kabat-Zinn was the first to utilize the concept of mindfulness therapeutically as a secular practice via Mindfulness-Based Stress Reduction. A number of different types of MBT exist that include Mindfulness-Based Cognitive Therapy, Mindfulness-Based Stress Reduction, Guided Self-Help Mindfulness Intervention, and Mindfulness-Based Art therapy..

METHODS AND LITERATURE PROFILE

- **The search for evidence began with PubMed.**
- **The keywords "mindfulness" and "breast cancer" were used which yielded 155 results.**
- **The results were narrowed using filtering criteria such as "published since 2014", "randomized control trial", "systematic review", and "meta-analysis" which led to a total of 62 results.**
- **The titles of the 62 articles were screened and excluded if they did not include a population of women diagnosed with breast cancer, or depression as a measured outcome. This led to 36 results.**
- **The 36 articles were screened and excluded if they did not include a population of women diagnosed with breast cancer, depression as a measured outcome, or access to the full article. This resulted in 17 articles.**
- **The remaining 17 articles were fully read, and 5 articles were chosen based on the strength of the study, strength of the outcome, and alignment with the PICOT statement.**

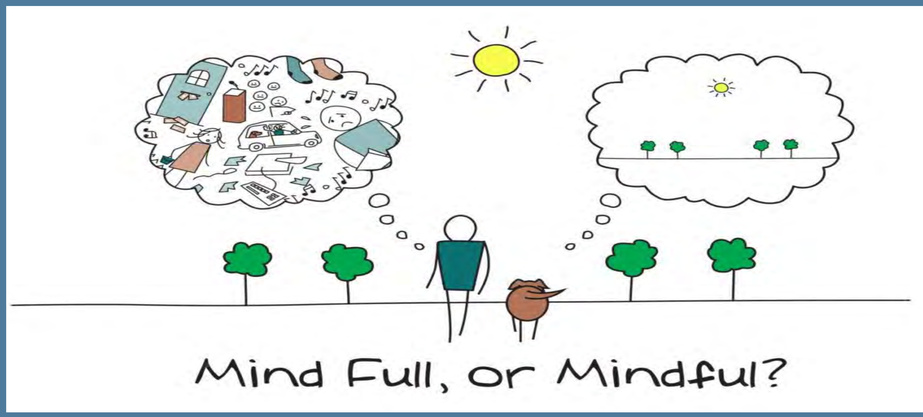

Image: LugusDesk, 2018

PURPOSE

The purpose of this project was to systematically analyze the effect of Mindfulness-Based Therapy on reducing depression among adult women diagnosed with breast cancer.

TABLE OF EVIDENCE

Author	Type of Study	Intervention	Sample Size	Results
Sarenmalm et al. (2017)	5-year three-arm, longitudinal, randomized control trial	Mindfulness-Based Stress Reduction- 8 weeks	n= 177 MSBR- 66 Active MSBR- 57 Non-MSBR- 54	Improvement in depression, coping capacity, and immune response. Effects maintained up to 3 months post-intervention.
Jang et al. (2017)	Randomized control trial	Mindfulness-Based Art Therapy- 8 weeks	n= 24 MBAT group- 12 Control- 12	Improvements in depression, anxiety, fatigue, and insomnia. Effects recorded post-intervention, but no follow-up.
Shao et al. (2020)	Randomized control trial	Guided Self-Help Mindfulness-Based Intervention- 6 weeks	n= 144 GSH-MBI group- 72 Control- 72	Improvements in depression and insomnia. Effects improved with time and maintained up to 3 months post-intervention.
Park et al. (2020)	Randomized control trial	Mindfulness-Based Cognitive Therapy- 12 weeks	n= 74 MBCT group- 38 Control- 36	Improvements in depression, anxiety, and fatigue. Effects maintained up to 3 months post-intervention.
Schell et al. (2019)	Systematic Review with meta-analysis (only RTC's used)	Mindfulness-Based Stress Reduction- varying lengths	n=1,571 Total RCT's- 12	Improvements in depression, anxiety, insomnia up to 6 months post-intervention. Improvements in fatigue post-intervention.

FINDINGS AND IMPLICATIONS

- **Mindfulness-Based Therapy was shown to be effective in reducing depression among adult women diagnosed with breast cancer.**
- **MBT was shown to significantly improve secondary measures that included anxiety, fatigue, and insomnia.**
- **The effects of MBT are maintained up to 6 months post-intervention.**
- **Several types of MBT were shown to be effective in reducing depression including MBSR, MBAT, MBCT, and GSH-MBI.**
- **MBT was successfully implemented via telehealth and led to reductions in depression.**

CONCLUSIONS

- **The strengths of the studies included the randomized control trial study design and the use of standardized measurement tools.**
- **The weaknesses of the studies included the lack of data regarding long-term effects of MBT.**
- **Future studies are needed that measure the efficacy of MBT long-term and with continued treatment. Long-term studies would determine if the effects of MBT can be maintained and not only reduce early depression but avoid remission. Despite the need for additional research, the current literature show empirical support for the use of MBT.**
- **The current literature shows that Mindfulness-Based Therapy can be used as a treatment to reduce depression among adult women diagnosed with breast cancer. MBT can also be used to reduce anxiety and insomnia, as well as be implemented via telehealth. CNL's can utilize MBT as an alternative/supplemental therapeutic tool to treat depression and provide care that is more individualized for the patient's specific needs.**

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University of Maryland School of Nursing

Effects of School-Based Education & Provider Interventions on Adolescent HPV Vaccination Rates

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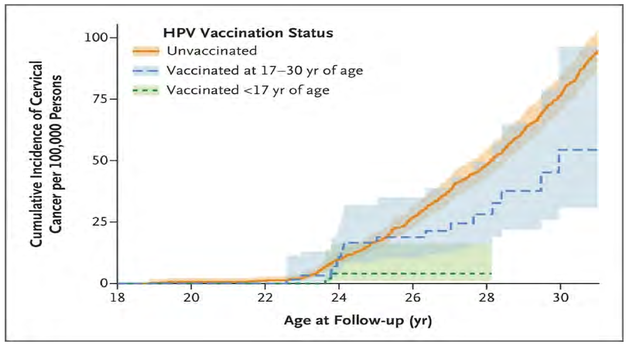
PICOT

Does school-based education compared to provider education increase HPV vaccination rates among adolescents?

BACKGROUND & SIGNIFICANCE

Human Papillomavirus (HPV) is one of the most common sexually transmitted infections which can lead to genital warts or cervical cancer in women. About 43 million adolescents were infected with HPV in 2018 and each year 12,000 women are diagnosed with cervical cancer associated with HPV in the United States. The HPV vaccine prevents infections caused by certain types of human papillomavirus. Although HPV vaccines has been found to be effective, the rates of use are low. Thus, increasing HPV vaccination rates among adolescents is key to reduce their risk of cervical cancer.



METHODS: SUMMARY OF SEARCH

- PubMed and CINAHL databases were used to conduct the literature search.
- The following keywords were used: “HPV vaccine” AND “education” AND “adolescents” OR “teenagers” yielding a total of 152 articles.
- Inclusion criteria: English primary peer-reviewed research articles less than ten years old that examined school-based and provider educational interventions to improve HPV vaccination rates among adolescents. Publication dates ranged from 2011-2021.
- Exclusion criteria: unrelated to the PICOT topic, studies on other vaccines, different outcome measurements, discussion of barriers to vaccination, no intervention, non-adolescent population, and measurement of attitudes and beliefs regarding HPV vaccine.
- From both databases: 101 titles were screened, and 86 articles were excluded; then 15 abstracts were screened and 10 were excluded.
- The final synthesis included five primary research articles: three randomized controlled trials, one quasi-experimental study, and one systematic review.

IMPLICATIONS FOR NURSING

It is recommended that school-based HPV vaccine educational interventions be incorporated into the traditional provider education. The studies were rated as good and high-quality studies as each was well-defined and reproducible with definitive conclusions supporting the hypotheses. With high level of evidence, the interventions are sufficient to incorporate into clinical practice.

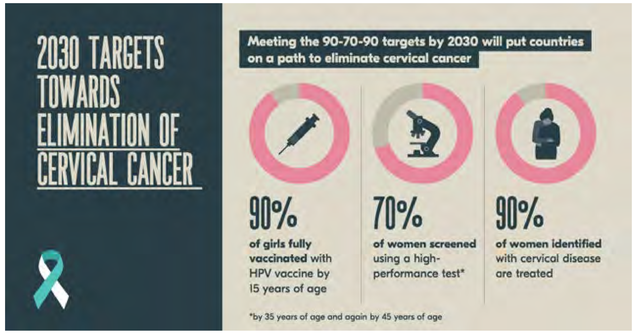
School-based interventions can be implemented into clinical practice to improve adolescent HPV vaccination rates. Implementing school-based interventions into clinical practice increases student access to HPV vaccines. School-based HPV vaccine interventions also targets a diverse population of adolescents without regard to their healthcare coverage and access. The recommendation of school-based educational interventions receives an ‘A’ USPSTF rating.

CLINICAL NURSE LEADER (CNL) ROLE

- CNLs act as a lateral integrator where they facilitate, coordinate, and oversee the care provided by the healthcare team.
- CNLs communicate with adolescents, their parents, healthcare providers, as well as school staff about the importance of the HPV vaccine.
- Collaborating with everyone involved in the care of adolescents increases their chances of receiving the HPV vaccine.
- As a CNL, it is our duty to ensure that adolescents are educated about the importance of HPV vaccines in order to reduce the risk of HPV-related diseases such as cervical cancer.

EVIDENCE SUMMARY

The researchers in each study evaluated the effects educational interventions provided by healthcare professionals or school staff had on adolescent HPV vaccination rates. The findings from the literature all consistently showed that multi-component educational interventions from school related members and healthcare professionals were beneficial in increasing HPV vaccination rates among adolescents. The studies also demonstrated that educational interventions targeting parents, adolescents as well as healthcare staff were helpful in improving HPV vaccination initiation as well as dosage completion rates.



SUMMARY & CONCLUSION

The findings from the studies all demonstrated that school-based interventions alone or in combination with provider education were beneficial in improving HPV vaccination rates among adolescents.

- HPV vaccination initiation and completion rates can be improved using HPV fact sheets, images, and communication interventions.
- There should be clinical studies that compare both school-based interventions and provider-based educational interventions to evaluate their direct effects on HPV vaccination rates among adolescents.
- We must educate and increase HPV vaccination among adolescent boys as well.
- Adolescents and their parents’ attitudes, beliefs, and awareness of the HPV vaccine should be assessed and evaluated.
- Barriers to receiving and completing the HPV vaccine should be considered so clinicians can incorporate them into their care.
- Implementing school-based educational interventions is recommended and the overall benefit is substantial to the adolescent population.
- School-based educational interventions are beneficial in increasing HPV vaccination and does not pose any harm to patients.
- Increasing HPV vaccine rates among adolescents can prevent their risk of cervical cancer.
- Integrating school-based educational interventions into healthcare can greatly improve HPV vaccine rates among adolescents.

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