Access to Mental Health Support for Rural Cancer Survivors: A Scoping Review

by © Chloe Koen-Butt

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ABSTRACT:

Objective: This review is an individual master's student-led scoping review. This scoping review will analyze: What factors influence access to mental health services for cancer survivors in rural areas? What strategies are available to improve access to mental health services for cancer survivors living in rural areas?

Introduction: The research recognizes different types of cancer can cause or exacerbate serious mental illness (Purushotham et al., 2013). In addition, rural communities suffer from a disproportionate amount of adverse health outcomes (Probst et al., 2019). The primary issue examined are the barriers accessing mental health support for rural cancer survivors.

Inclusion Criteria: The review will cover literature on cancer survivors who finished their treatment. The focal concept is accessibility to mental health services for cancer survivors. The setting for the review is rural and underserved areas.

Methods: The databases searched were CINAHL Plus (EBSCOhost), MEDLINE (Ovid), Embase (Embase.com), and APA PsycINFO (EBSCOhost). Publications in English and published from 2003 to the present. This scoping review followed the JBI Method protocols.

Results: In this dataset, 27 articles were included. A data collection table was created to categorize similar findings which demonstrated the following themes for both research questions. Travel and Transportation, Lack of Education, Community, Financial Challenges, More Research, Better Transitions, Survivorship Care Plans, Rural Locations, Telehealth, and Peer Support.

Conclusion: It would be beneficial to investigate the particular mental health support programs available in rural communities and examine the challenges, utilization, and effectiveness of these programs.

Keywords: Mental Health Support, Cancer Survivor, Rural, Scoping Review

GENERAL SUMMARY:

The objective of this scoping review focuses on the key elements of mental health support, rural residence, and cancer survivors because there are barriers to accessing mental health support for cancer survivors who live in rural areas. Four different databases were searched for the data used in the study which included 27 articles. This scoping review will analyze: What factors influence access to mental health services for cancer survivors in rural areas? What strategies are available to improve access to mental health services for cancer survivors living in rural areas?

The general approach this scoping review will utilize is using aspects of the Joanne Briggs Institute (JBI) method. Throughout this research paper, I seek to share insights with readers regarding recommendations for future research, gaps in the research and literature, and the results and themes of the scoping review.

Acknowledgements:

Many people deserve to be acknowledged for their contribution to my research and the completion of my master's thesis. First and foremost, I would like to thank my supervisor Dr. Victor Maddalena whom I feel I was able to work with by pure luck and timing. His patience and encouragement helped me to feel confident and stay on track. His constant encouragement throughout my degree and writing process to practice work-life balance and that saving time for fun and non-school related activities are just as important for my quality of writing. Thank you so much for all your guidance, support, and expertise.

I would also like to thank the other two members of my Thesis Advisory Board, Dr. Najafizada and Dr. Audas who were instrumental in providing me with feedback and advice throughout my writing process. I began unsure of the role of my thesis advisory board and quickly learned that they are there to keep me on track, provide me with their expert advice, and step in as “backup supervisors” at times and I am so grateful for the time they dedicated to me and my thesis.

Lastly, I would like to thank Kristen Romme from the Library who pointed me in the right direction to learn about Scoping Reviews. Kristen assisted me in gathering the data for my thesis by helping me create a search strategy and running my search strategy through multiple databases. Without Kristen, there would be no data to write about and I want to thank her for assisting in my research data collection and always being available to answer my questions.

Contents

Chapter 1: Introduction

Cancer is a well-researched topic. However, the connection between mental health and cancer survivorship has not been studied as widely, especially access to mental health services in rural areas. This scoping review seeks to map evidence to identify the gaps in the literature as well as the disparity in the access to available mental health services in rural communities for cancer survivors. Within the emerging field of health services research, the fundamental goal is to improve the healthcare experience for those accessing Canadian healthcare services. For this to happen, the scope of the literature needs to be reviewed to understand the extent of the literature available on this topic. Therefore, this thesis seeks to bridge part of that gap in research for rural cancer survivors.

In this first chapter I will examine the significance of the research topic, introduce the objective and research question, walk the reader through the study design and search strategy, provide definitions, and let readers know what to expect reading this scoping review.

1.1 Definitions

Cancer Survivor: Survivorship of cancer is not a one-size-fits-all concept (Allen & Roberto, 2014). The term is meant to empower and celebrate those individuals who overcame their cancer diagnosis and treatment. However, not everyone feels empowered once diagnosis and treatment are completed (Allen & Roberto, 2014). Survivorship is not a celebration for all, and some grieve how their past lives used to be or fear the uncertainty of what is next (Allen & Roberto, 2014).

There is a process of earning the title of “survivor”. Researchers reported some cancer survivors feel that to earn the title individuals had to have been actively involved in their cancer treatment as well as actively playing a role in preventing the recurrence of cancer (Allen & Roberto, 2014). For this thesis, the term survivor is defined as someone who has completed their primary cancer treatment and who is considered to be in cancer remission.

Rural: Statistics Canada defines rural areas as “all territory lying outside population centres. Rural population includes all population living in rural areas of census metropolitan areas” (Statistics Canada, 2021).

Formal Mental Health Services: Formal mental health services in the context of this research paper are psycho-oncology, psychiatry, psychology, social work, psychotherapy, self-help groups, support groups, and social support and includes licensed practitioners in those disciplines.

Accessibility: Accessibility can be defined as “the extent to which products, systems, services, environments and facilities can be used by people from a population with the widest range of characteristics and capabilities to achieve a specified goal in a specified context of use” (Jonsson et al., 2023, p.2).

1.2 Significance of Research

The significance of this research is outlined throughout the background chapter by looking at the information and research evidence available on rural health, rural communities, cancer and mental health, cancer types and mental health outcomes. In Canada, 20% of the population lives in rural areas (Mathias et al., 2021). The research in this thesis indicates that places where people reside can have adverse health effects and having access to services can reduce some of the social disparities that influence health outcomes (Marmot & Wilkinson 2006). The intersectionality of factors that influence health all play a role in the quality of care someone may end up receiving. Rural communities suffer from a disproportionate amount of adverse health outcomes (Probst et al., 2019). People are shaped by the places where they live and the access to resources available (Clark et al., 2022). Places of residence have infrastructures, social norms, cultural norms, and institutions that affect opportunity and outcomes for the populations residing there (Clark et al., 2022). Particularly, health outcomes affect those residing in rural areas based on the structures and institutions available.

Research has been done on the comorbidity of illnesses and mental health where it has been found that patients who struggled with both a physical illness and mental health struggles raised healthcare costs by 45% per person (Purushotham et al., 2013). The research done on the comorbidity of physical illness and mental health problems is very important, and yet, little attention is placed on this duality in research (Purushotham et al., 2013). Most of the research that has been conducted in this area is on breast cancer and of all the different mental illnesses the research focuses on depression (Purushotham et al., 2013). The research that focuses on the duality of cancer and mental health struggles recognizes that the impact is not solely on how different types of cancer can cause more serious mental illness (Purushotham et al., 2013).

Rather, other external factors can impact cancer patients and survivors' mental well-being from other societal factors such as low socioeconomic status, low social support, place of residence, and familial support. People who develop post-traumatic stress disorder, anxiety, or depression can experience these illnesses long after cancer treatment is complete (Purushotham et al., 2013). The needs of cancer patients and survivors are not the same and research needs to be conducted in both areas to provide the proper support for these changing needs. Recognizing that cancer patients and survivors have different needs, stressors, difficulties, and feelings is important to keep in mind when looking at mental well-being and mental health supports for cancer survivors.

1.3 Objective and Research Question

The objective of this study is to identify the key elements of mental health support for cancer survivors who reside in rural areas. It also seeks to look at strategies and factors that influence rural access to mental health support for cancer survivors. This review is an individual master's student-led review. Due to time and resource constraints, there is a limit to the scope of the questions being analyzed, and will therefore focus on the two following questions:

- ➔ What factors influence access to mental health services for cancer survivors in rural areas?
- ➔ What strategies are available to improve access to mental health services for cancer survivors living in rural areas?

1.4 Study Design & Search Strategy

The general approach this scoping review will utilize is a modified version of the Joanne Briggs Institute (JBI) method. The JBI method consists of identifying research questions, looking for relevant studies, selecting studies, charting studies, and summarizing and reporting the results (Curnew, 2017). Due to restraints in available research time and myself being the only researcher, a modified JBI method was used. Modifications are explained later in the research design chapter.

The search strategy was co-developed by me in consultation with a librarian. The strategy includes subject terms and text words for the three main concepts: cancer survivors; mental health services; and rural and underserved populations. The following databases were searched:

CINAHL Plus (EBSCOhost), MEDLINE (Ovid), Embase (Embase.com), and APA PsycINFO (EBSCOhost).

1.5 What to Expect

This scoping review will discuss the importance of mental health support for rural cancer survivors. I will share the intent behind using a scoping review as the study design and outline each step of the research taken through the lens of the JBI Method. I collate the research based on similar findings and report it on a data extraction table. Different themes are then created and outlined based on the two research questions that intend to highlight the information around rural cancer survivors' access to mental health services and what strategies are recommended to improve the access for mental health services for rural communities. Finally, I seek to share insights with readers regarding recommendations of future research, gaps in the research and literature, improvements that could be considered for future research, a knowledge translation plan that can be used for dissemination of findings at conferences, and lastly what I learned through the process of this research thesis.

The next chapter will look at the background research regarding cancer survivors and mental health. It highlights rural health, rural communities, cancer and menta health, and cancer types and mental health outcomes. Laying the groundwork for the research that is already present will aid in understanding the topic as a whole.

Chapter 2: Background

Having reasonable access to mental health services for many rural patients is a challenge (Gunn et al., 2013). Cancer patients and survivors who live in rural areas have a different experience from those who live in urban areas when it comes to getting physical and mental health care services (Mollica et al., 2018). According to Zimmerman et al. (2017), one in three cancer survivors suffers from a mental illness that requires professional support. Despite evidence that survivors will likely struggle with mental health, a large number do not receive adequate treatment (Zimmerman et al., 2017). This chapter will discuss the background research and information regarding rural health, rural communities, cancer and mental health, and cancer types and mental health outcomes. The intention of this section is to provide readers with the background information which highlights the need for mental health services for cancer survivors and why rural cancer survivors in particular need these supports.

2.1 Intersectionality

The term Intersectionality was coined by Critical Race Theorist Kimberlé Williams Crenshaw (Losleben & Musubika, 2023). It is a critical framework that is based on the overlapping of discriminations that can happen at different levels, often at the same time (Losleben & Musubika, 2023). Crenshaw believes that the experience of oppression cannot be viewed as independent and rather as overlapping layers (Losleben & Musubika, 2023). Within this theory, it is understood that the overlapping of discrimination creates less opportunities and more obstacles for those that are effected (Losleben & Musubika, 2023). As such, it is important to keep in mind intersectionality when reading this thesis. Often people who live in rural communities aren't just facing the difficulties and discriminations associated with getting cancer and mental healthcare needs met outside of city centers. They are likely experiencing other levels of discrimination that contribute to their experience of inequity in accessing the resources they require.

2.2 Rural Health

For as long as people have been researching social determinants of health and well-being, health has followed a social gradient where the higher the social position, the better the health (Marmot & Wilkinson, 2006). The social gradient shows how health can be affected by social and economic factors (Marmot & Wilkinson, 2006). Poverty affects health, but it is not the sole determinant of whether someone has good health or bad health (Marmot & Wilkinson, 2006). When it comes to the determinants that affect health, it is important to distinguish the difference between behaviors and biological markers (Marmot & Wilkinson, 2006). Biological markers vs. behaviors can be understood as this idea of nature vs. nurture. Nature is innate biological factors, whereas nurture is upbringing and life experiences (Psychology Today accessed: Nov.15, 2023). The social circumstances of both of these affect health and well-being. For those who research social determinants of health, areas where people live can be worse health-wise than other areas and having access to services can mediate some of the social inequities that impact health outcomes (Marmot & Wilkinson, 2006).

Neighborhoods and locations can directly influence health. How individuals are taken care of and their health is managed in times when they may be unwell can affect health. How they continue to take care of themselves after illness has improved can affect health. The intersectionality of factors that can affect health all play a role in the quality of care someone may end up receiving. Rural communities suffer from a disproportionate amount of adverse health outcomes (Probst et al., 2019). Researchers predict this disparity is intensified by “structural urbanism” where the current healthcare system disadvantages rural populations

(Probst et al., 2019). Structural urbanism in health care has a bias toward urban centers with larger populations (Probst et al., 2019). Some of this bias is the allocation of funds, but researchers also note that lower population density and remote settings can be inefficient when it comes to providing the same type of funding for health care that urban settings receive (Probst et al., 2019). Funding for rural and urban settings should be equitable over equal.

2.3 Rural Communities

A basic definition of rural was defined at the beginning of this chapter. However, rural is a term that can ha many different definitions depending on different factors. Different countries may have diffeent meanings or standards for what would be considered a definition of rural. Probst et al. (2019) describe rurality as a "continuum with large metropolitan areas at one end of the spectrum and remote frontier areas at the other" (p. 1976). A mix of population size, population density, and distances of work commute define rural (Probst et al., 2019). Urban territories have much clearer characteristics of what falls under "urban" and because rural is not bounded by such characteristics, it often ends up being defined as whatever is not urban (Clark et al., 2022). Having a dichotomous understanding or definition of urban and rural erases the many different complexities that both places have and simplifies them each to one very specific thing (Clark et al., 2022).

In Canada, 20% of the population lives in rural areas (Mathias et al., 2021). Scholars have often described rural communities as being left behind compared to urban communities (Clark et al., 2022). The sentiment of feeling left behind for rural communities has to do with economic distress and poverty that has been present for generations (Clark et al., 2022). Economic distress and poverty have to do with the fact that underemployment and unemployment are pervasive across rural communities (Clark et al., 2022). Living in rural areas used to be seen as ideal for the nuclear family (Clark et al., 2022). Raising a family with a big yard and not surrounded by busy city center streets was seen as ideal. However, this is no longer the ideal way of life because of the greater poverty, job insecurity, poorer health status, and higher rates of mortality compared to urban settings (Clark et al., 2022). Although Clark et al. discusses rurality in the context of the U.S., an assumed connection can be drawn to the Canadian context when it comes to the rural experience. Not enough research has been done in the Canadian context to draw definitive connections to rurality in both countries.

2.4 Cancer & Mental Health

Diagnosis and treatment of cancer can have an emotional, physical, and financial impact on people and can result in significant mental health struggles (Purushotham et al., 2013). Cancer treatments have been improving with time and research, which means the number of people who survive cancer diagnosis and treatment is growing (Van der Kruk et al., 2022). As this number increases, so should the research examining survivors' psychological needs as well as interventions for these ongoing needs (Van der Kruk et al., 2022). In the last 10 years, the research on psychological care for cancer survivors has increased, unfortunately, the current level of psychological intervention for cancer survivors leaves many with unmet needs (Van der Kruk et al., 2022). Van der Kruk et al., (2022) reported on a 2011 study that rural cancer patients have worse psychosocial outcomes that continue into survivorship where they have higher needs in terms of daily living and physical functioning (Van der Kruk et al., 2022). Cancer survivorship is difficult for everyone, no matter their location of residence. Both rural and urban survivors are trying to get back to their “normal” way of life, have had to spend time away from work and their families, and suffered the financial burden to support the psychological needs of survivorship (Van der Kruk et al., 2022). In Canada, public mental health are an insured service, however, there can be long waits for these services so many people choose to seek support privately which can result in added costs. Despite the costs associated with psychological support, the survivors who did access these resources found it helped with the fear of the unknown, loneliness, and made them feel they were not the only ones experiencing this post-cancer mental health challenges (Van der Kruk et al., 2022).

Cancer survivorship and mental health intersect in a variety of ways that result in many difficult feelings and experiences. For this thesis, the term survivor is defined as someone who has completed their primary cancer treatment and who is considered to be in cancer remission. On the first page of this thesis, the cited definition of cancer survivor touches on the complexity of surviving this illness and the mental toll it can have on patients' well-being. Cancer diagnosis and survivorship well-being are on a continuum and the mental health support needed can change with time (Van der Kruk et al., 2022). The needs of patients throughout treatment may highlight the stressors of being diagnosed with an illness, or not being able to perform some of the same tasks someone may have been able to previously do (Van der Kruk et al., 2022). In cancer survivorship, the needs may be more along the lines of not having constant monitoring, the fear of the illness coming back, or needing support around navigating life as a survivor (Van der Kruk et al., 2022). The needs of cancer patients and survivors are not the same and need to be researched as such to provide the proper support for these changing needs. Recognizing that cancer patients and survivors have different needs, stressors, difficulties, and feelings is important to keep in mind when looking at mental well-being and mental health supports for cancer survivors.

Cancer treatment is very taxing on the body as well as the mind. As a result, cancer survivors spend a large portion of their lives managing the consequences of the disease and treatment. The psychological struggles that can take place in survivorship include fear of recurrence, anxiety, depression, and survivor guilt. Some factors that may contribute to psychological struggles are not being able to fulfill social or familial roles, difficulties returning to work, financial implications, and not being able to do everything survivors could do before cancer diagnosis. Cancer causes changes to a lifestyle that survivors once led where they have a large responsibility to maintain their health such as physical activity and nutrition. The conclusion of treatment can cause a lot of uncertainty for patients with the unknown of what life will be like after having cancer, if the cancer will come back, what kind of symptoms they might experience, and how to manage them (Recklitis & Syrjala, 2017).

Some issues that may have already been present but got put to the side during treatment may come to the forefront again such as troubles with education or careers, familial or marital troubles, and finances. There is often an expectation among cancer patients that once treatment is completed, the symptoms and pain will go away and they can go back to the health they had before getting diagnosed with cancer and they will feel completely better. There is a disappointing irony that is present that being cured of cancer does not guarantee good health. There are late effects of cancer that impact the physical health of survivors and mentally it is a tough reality that health and life likely will not go back to the way it was pre-cancer diagnosis. The potential consequences this reality can have on survivors requires mental health intervention to support this realization. All of the mental health impacts outlined that going through cancer treatment can have on somebody are not isolated things and survivors can experience many different types of mental tolls when transitioning from active treatment to survivorship (Recklitis

& Syrjala, 2017).

2.5 Cancer Types and Mental Health Outcomes

The mental health outcomes for cancer survivors, vary by the type of cancer and type of cancer treatment. Depression is reported to be the highest for cancer survivors for the first 2 years after treatment is complete. Depression is reported to be the highest in breast cancer survivors (1.5-46%) and pancreatic survivors (33-50%). Gynecological survivors (12-23%) and colon survivors (8%) were both reported to have a lower prevalence of depression compared to pancreatic and breast cancer survivors. Another study reported that depression in colon cancer survivors varies based on the type of surgery they have. This was shown in 35% of colon cancer survivors who had colostomies also had depression however, only 10% of colon cancer survivors who had anastomosis had depression (Chongpison et al., 2015).

A more recent study on the mental health effects of breast cancer reported that 80% of breast cancer survivors experience considerable amounts of distress due to cancer diagnosis, treatment (Devarakonda et al., 2023), and the quality of life that follows both those events. The initial diagnosis of breast cancer leads to uncertainty about life to follow, change to daily routine, and vulnerability (Devarakonda et al., 2023). Regarding different surgery types for breast cancer, there were better psychosocial outcomes for breast reconstruction than for mastectomy surgery (Devarakonda et al., 2023). This identification of treatment or surgery type on mental well-being is an important thing to note when looking at the impacts of cancer on mental well-being.

When talking about mental health outcomes, depression is not the only mental illness present. Rather, an attempt to highlight that cancer types and treatment types has an effect on mental health outcomes for cancer survivors. The following chapter will discuss the methodology for the scoping review as well as the study design and search strategy. The chapter will also discuss the use of, and the decision to use, a scoping review for this thesis.

Chapter 3: Methodology

The methodology outlines the data collection and research to be coherent and consistent throughout the collection process. The methodology ensures the predetermined search strategy and inclusion criteria are followed to make the research consistent and unbiased. This chapter seeks to outline the different steps taken in the data collection process as well as the synthesis of results taken to present the findings. Specifically, this chapter will explain the rationale for a scoping review, the study design, the search strategy, the data collection process, the inclusion criteria, the synthesis of results, and objective and research questions.

3.1 Rationale for Scoping Review

Systematic reviews use methods where conclusions can be drawn from the findings of published studies. The research is often used to establish the quality of evidence and then used to address any issues in current practices. Alternatively, a scoping review is an ideal tool for determining the coverage or evidence of specific bodies of literature. Based on the specific evidence found, systematic reviews are conducted to be able to draw conclusions on the chosen topic. When the evidence is unclear based on specific bodies of literature, a scoping review would be conducted first. The main purpose of a scoping review is to identify and map the available literature (Munn et al., 2018).

I chose to do a scoping review to identify the knowledge gaps on an understudied topic of access to mental health services for rural cancer survivors. Additionally, I chose to do a scoping review as a precursor to a systematic review as it is often best practice to do a scoping review prior to a systematic review. A scoping review focuses on collecting data and describing the evidence in a clearly illustrated format (Peters et al., 2022).

A scoping review is the appropriate method of inquiry for this thesis because it is helpful for planning future research and health policy work. Doing a broader search on the research done and the literature written about this topic allows for the knowledge of how specific research has been conducted or analyzed in this field to be studied. It also provides insight into what works or does not work for future research on this topic and in this field of research (Munn et al., 2018). Furthermore, a scoping review is useful for emerging topics that do not have a lot of research evidence published and this can be used to identify the gaps in the literature for future research (Tricco et al., 2016).

In planning for this scoping review, it has been made clear that there are no existing reviews that focus on the intersection of access to mental health services for rural cancer survivors. This scoping review seeks to fill the gap of scoping reviews that report on the complexities of rural cancer survivors and their access to mental health services within the health research field.

3.2 Study Design

The general approach this scoping review will take is to use key aspects of the JBI method. The JBI method seeks to map literature across a range of study designs for a particular field (Aromataris & Munn, 2020). The JBI Method consists of identifying research questions, looking for relevant studies, selecting studies, adding studies to tables, and summarizing and reporting the results (Curnew, 2017). This study will only use aspects of the JBI method because not every feature of the framework is be included in the study process. For example, publishing the *a priori* protocol prior to research.

According to the JBI method, a scoping review should be rigorously conducted, transparent, and trustworthy (Peters et al., 2022. An *a priori* protocol is created to pre-define the reviews objectives, methods, and reporting (Peters et al., 2022). An *a priori* protocol was developed, however, due to time constraints, it was not be registered or published ahead of time as usually done when following the JBI Method. Despite this, the quality of the *a priori* method is still relevant in showing how the data was extracted and presented (Peters et al., 2022).

Following the JBI method, evidence selection is meant to be performed by two or more reviewers (Peters et al., 2022). This step of the JBI method is meant to be included to eliminate research bias and improve rigour (Peters et al., 2022). With only one reviewer doing this research, I was unable to get a second reviewer to go through every article during evidence selection with me. In an effort to reduce research bias, pilot testing with Dr. Maddalena (my supervisor) took place before starting data extraction. This pilot testing was a random sample of 11 articles sent by the librarian through Covidence where I voted yes, no, or maybe based on the eligibility criteria. The results of these votes based on the title and abstract were sent to Dr. Maddalena who, then, screened them to see if he agreed with the rating of the randomized articles. A 100% agreement was reached between my supervisor and myself which we believe enhanced the quality and reliability of the data extraction process because there was only one reviewer. In further pursuit to reduce research bias, five of the final included research articles were sent to Dr. Najafizada of my thesis advisory board along with my extracted themes from the data to determine that they were in concordance with my findings. The outcome of this meeting revealed many of the sub-themes were on par with each other, and those that were not, were discussed between us to come into agreement on the final themes.

3.3 Search Strategy

The search strategy was written by a librarian (Kristen Romme) in consultation with me. The strategy includes subject terms and text words for the three main concepts: cancer survivors; mental health services; and rural and underserved populations. The following databases were searched: CINAHL Plus (EBSCOhost), MEDLINE (Ovid), Embase (Embase.com), and APA PsycINFO (EBSCOhost). In addition, the reference lists of included papers were screened for relevant citations. Due to time and resource constraints, the search strategy was limited to publications in English published from 2003 to the present. Due to the limitations of there being only one author and not a research team, I went through each article myself using the inclusion and exclusion criteria for eligibility. While having a second reviewer is often standard for a scoping review to ensure there is no research bias, having Dr. Maddalena review some of the data assisted in the end goal of eliminating as much research bias as possible. I recognize the limitations of only having one reviewer. Moreover, for this thesis to be published, this process would need to be expanded or re-done with more than one reviewer reviewing all articles.

The librarian provided the initial Ovid MEDLINE search strategy which yielded 467 results. I provided her with a few target articles from this data that met all my inclusion criteria and would theoretically be included in the research to make sure that the strategy was returning the expected results. This was the first draft of the search strategy which included the term “urban” to have a comparison of what it is like accessibility-wise for rural versus urban cancer survivors. For comparison, the librarian suggested a new search be done without the term “urban” to expand on the search results as the main topic of the search was to look at rural communities, this seemed appropriate. For this search through Ovid MEDLINE and in consultation between myself, my supervisor, and the librarian, we decided to exclude the term “urban” from the search strategy.

Once this was confirmed, a second librarian peer-reviewed the Ovid MEDLINE search strategy before it was translated to other databases. There were four databases searched which included Ovid MEDLINE (n=467), Embase (n=661), APA PsycINFO (n=177), and CINAHL Plus with Full Text (n=344). The final search yielded 1649 results before duplicates were removed. Once duplicates were removed, the total data presented was 849 results which was the basis of the data for my study. A copy of the search strategy is included for reference in Appendix 1.

According to Kellermeyer et al. (2018), "Covidence mirrors the multiphase review process, including data extraction, directly in its design. Citations neatly progress through each stage based on votes received. In every state, reviewers can explicitly assign voting roles, including tie breaking, while maintaining blinding, which helps to minimize bias"(p.580). The voting of yes, no and tie breaking helps to minimize bias because multiple people are reviewing the included articles to make sure there is no personal prejudice is taking place. The initial data was run and added to Covidence on March 13th, 2023, and ten months after the initial search for data was done by the librarian, we consulted and decided that she would do another search of the same databases and check for any sources that had been published between March 2023 and December 2023 that may be included data for the research. Data was added to Covidence a second time on December 14th, 2023. Once searched, the data revealed 80 new articles imputed into Covidence and marked "yes" or "no". Once these were divided, the same process followed from the first review, and the articles that were marked as "yes" were then read in full. Of the total of 80 articles, 11 additional articles met the inclusion criteria for the dataset.

3.4 Data Collection

All data extracted by the search strategy was put into Covidence where I determined whether an article met the inclusion criteria or not. Titles and abstracts of all 849 articles were read for relevance of the study. From there, 143 articles were read in full using the inclusions/exclusion form to determine the relevance of the study which ended with a total of 27 articles included in the studies dataset. A summary table was created to map out the literature and abstracts with the following table headers for extraction:

- Title
- Author
- Publication Date
- Publication Type & Setting
- Type of Mental Health Intervention
- Type of Cancer
- Barriers to Access
- Rural/Urban Divide
- Strategies for Improvement

From there, a PRISMA flow diagram was created to show the inclusion and exclusion process for how the data was selected. Once the data had been collated, it was categorized and synthesized into similar findings. This flow diagram can be found in Appendix Two: Prisma Flow Chart.

3.5 Inclusion Criteria

The inclusion criteria were developed using the JBI method that guides both the researcher and reader in the inclusion criteria of sources that will be used in the review (Aromataris & Munn, 2020).

Population:

This review will consider any article that discusses cancer survivors. Any articles that focus on mental health support during cancer treatment for cancer patients will be excluded.

Concept:

The concept for this review is accessibility to mental health services for cancer survivors. Mental health services for this study include psychological counseling, social work services, psycho-oncology, psychiatric care, psychotherapy, social support, support groups, and self-help groups.

Context:

The context for this review is rural communities and medically underserved areas. Articles focusing on urban communities will be excluded.

Types of Studies:

Any article between the years 2003-2023 was considered. This is due to mental health being more understood as essential healthcare within the last 20 years. All publication types was considered including journal articles, books, and news articles. Studies from all countries were included as long as they are written in English. Due to time constraints, grey literature will not be included and only English data was considered for this same reason. According to Simon Fraser University, grey literature can be defined as “information produced outside of traditional publishing and distribution channels and can include reports, policy literature, working papers, newsletters, government documents, speeches, white papers, urban plans, and so on” (https://www.lib.sfu.ca/help/research-assistance/format-type/grey-literature [Accessed March 28, 2024]).

3.6 Synthesis of Results

Once collated, the data were categorized and synthesized into similar findings and concepts where themes were created based on the research questions. The data were categorized using an extraction table (see appendix Two) categorizing themes found in each included article. The literary summary table was created to aid in data extraction and was used in the synthesis of the results to report the findings. Results were then written following an adapted scoping review and presented with tables to show the breadth and scope of findings.

3.7 Reviewer Information

The primary reviewer is Chloe Koen-Butt, a masters of Applied Health Services Research student at Memorial University. The partial second reviewer is Dr. Victor Maddalena, Associate Professor in Health Policy and Health Service Delivery, and master's thesis supervisor. Furthermore, Dr. Najafizada from my advisory board acted as a partial third reviewer.

3.8 Objective and Research Question

The objective of this study is to identify the key elements of mental health support, rural residency, and cancer survivors. It seeks to look at strategies and factors that influence rural access to mental health support for cancer survivors. Due to time and resource constraints, there is a limit to the scope of the questions being analyzed, and will therefore focus on the two following questions:

- ➔ What factors influence access to mental health services for cancer survivors in rural areas?
- ➔ What strategies are available to improve access to mental health services for cancer survivors living in rural areas?

The following chapter introduces the search results for the scoping review. The chapter includes the characteristics of included articles, an overview of the thematic findings, key themes across the literature, and highlighting the difference in the literature between urban and rural. Furthermore, the following chapter discusses in detail the included literature and the themes extracted. The themes included are: travel and transport, lack of education, community, financial, more research, better transitions, survivorship care plans, rural locations, telehealth, and peer support.

Chapter 4: Results

4.1 Search Results

After using the search strategy to collect data from the databases, duplicates were excluded before being uploaded into Covidence. A total of 849 studies were screened based on title and abstract and 706 articles were deemed irrelevant. The remaining 143 articles were assessed for eligibility based on reading through the entire text. From this, 27 studies were included in the final dataset and 116 studies were found to be irrelevant. The irrelevant articles found that 68 had a concept that was not relevant, 22 had the wrong patient population, 25 had the wrong context, one had the wrong outcome, and one had no full text available. See Appendix Two: A PRISMA flow chart that is available to map out the inclusion and exclusion process.

4.2 Characteristics of Included Articles

Of the 27 articles that were included in the final sample set, 22 of those articles were written in the United States, three were written in Australia, one was written in Canada and one was written in China. The years in which the data from the sample spanned were 2007-2023 with 17 articles written 2020 onward. Of the included articles, 13 were qualitative studies, be that of interviews, analysis, surveys, and focus groups. The remaining were a mixture of clinical trials, systematic reviews, cross-sectional surveys, and conceptual analyses.

The most common cancer written about in the data was breast cancer on its own (n=8). Breast cancer was discussed in more articles (n=3) alongside other types of cancer mentioned within the same article such as prostate, colorectal, melanoma, and hematological cancer. Two articles focused on childhood cancer, two on head and neck cancer, and the rest were individual articles focused on lung cancer, skin cancer, and esophageal cancer.

Nine articles did not focus on a specific type of cancer. Of the 27 articles, 22 included a type of mental health intervention. Of these 22, the mental health interventions the articles discussed included community-based programs as well as informal community support, the potential for health promotion to assist with the long-term effects of cancer treatment, psychosocial or psychological support as a type of mental health intervention, evidence-based survivorship mental-health care, telehealth, resilience, and survivorship care plans. All but five articles included in the dataset discussed a rural and urban divide when it comes to post-cancer mental health care for survivors. Every article discussed barriers to access or lack of access that are present for rural residing survivors trying to access these services. Based on these reports, the following key categories were identified: travel and transportation (n=23), lack of education (n=14), community factors (n=6), and financial implications (n=17). A table that outlines these findings is included in Appendix Four: Characteristics of Included Articles.

4.3 Overview of Thematic Findings

Table 1: Factors That Influence Access To Mental Health Services

Barriers	Description
Travel and Transport	Distance to supportive care and unreliable transportation
Lack of Education	Lack of education for doctors in terms of services available in rural communities and survivors being unaware of what support is available
Community Factors	Unsupportive friends and family, perceptions of community members, and use of informal community support
Financial Implications	Lower rates of insurance, limited finances for private mental health support, cost of travel, and socioeconomic factors

Table 2: Strategies For Better Mental Health Support For Rural Cancer Survivors

Strategies	Description
More Research	Larger sample sizes for generalizability and more research on the intersections of mental health support, rural residents, and the cancer survivor
Better Transitions	More seamless hand-offs between the active treatment care team and the survivorship care team and more referrals to mental health support
Survivorship Care Plans	Information on what happens next after treatment ends and what to expect. All resources in one place
Rural Locations	Mental health support available in rural locations
Telehealth	Online support services
Peer Support	Support groups

4.4 Urban Vs. Rural

As a preamble to the thematic findings, it is important to note evidence suggests there are a variety of disparities between rural and urban cancer survivors (Andrykowski & Burris, 2010; Ann Bettencourt et al., 2007; DeGuzman et al., 2022; Gunn et al., 2021; LeBarre & Riding-Malon, 2017; Meneses et al., 2020; Ratcliff et al., 2021). Some of these disparities include lower quality of life, greater family disruption, poorer health outcomes, increased rates of poverty, lower cancer survival rates, and a rural physician shortage. It is reported that rural cancer survivors have higher rates of anxiety, depression, more emotional problems, and poorer mental functioning than their urban counterparts (Andrykowski & Burris, 2010; DeGuzman et al., 2022; Ratcliff et al., 2021) as well as report "lower" or "poorer" quality of life (LeBarre & Riding-Malon, 2017; Meneses et al., 2020; Ratcliff et al., 2021). Rural cancer survivors have greater family disruption when it comes to traveling long distances for treatment (Ann Bettencourt et al., 2007). There is a greater expectation that rural female breast cancer survivors continue to carry out their pre-cancer social roles (Ratcliff et al., 2021) for example family caregiving. Despite this expectation, rural survivors have reported a higher need for help to carry out their expected social roles (Ratcliff et al., 2021).

Rural cancer survivors lack confidence in rural healthcare professionals (Gunn et al., 2021). They believe that the support available to them in rural settings is not good enough and they lack confidence in the rural health services (Gunn et al., 2021). Some survivors report wanting their post-treatment support to be cancer-specific mental health support and they do not believe they can receive this specialized care in rural communities (Gunn et al., 2021). They also believe that the quality of care in rural communities is not going to be as good as what that they would receive in urban settings (Gunn et al., 2021). On top of the lack of confidence in specialized care providers in rural settings, there is also a shortage of specialized healthcare professionals in these rural communities (LeBarre & Riding-Malon, 2017). A shortage of specialized healthcare professionals ultimately results in inequity of care for rural cancer survivors compared to their urban counterparts (Meneses et al., 2020).

4.5 Key Themes Across the Literature

Looking at the findings of the data extraction process along with the research question (refer to section 4.3), the following key categories have been identified across the literature: travel and transportation, lack of education, community, and financial are all key categories for the research question: what factors influence access to mental health services for cancer survivors in rural areas. More research, better transitions, survivorship care plans, rural locations for care, phone and internet support, and support groups are the key categories for the second research question: what strategies are available to improve access to mental health care for cancer survivors living in rural areas? The following sub-sections discuss these key categories more in-depth and how they relate to access to mental health support for rural cancer survivors.

4.5.1 Travel and Transportation

Of the themes that were discovered in the dataset, travel and transportation were two of the most common barriers rural cancer survivors faced accessing mental health services. Travel and transportation were a consistent theme across 23 of the 27 included studies when looking at factors that influence barriers to accessing mental health services for rural cancer survivors (Anbari et al., 2020; Andrykowski & Burris, 2010; Arana-Chicas et al., 2023; Argenbright & Berry, 2021; Bernacchi et al., 2021; Bernacchi et al., 2023; Bernacchi et al., 2023; Ann Bettencourt et al., 2007; DeGuzman et al., 2022; Ficek et al., 2010; Ge et al., 2023; Goodwin et al., 2023; Gunn et al., 2021; Keimweiss et al., 2023; Klimmek, 2013; Lally et al., 2018; LeBarre & Riding-Malon, 2017; Maneses et al., 2020; Nicoll et al., 2023; Parret et al., 2011; Pascal et al., 2015; Phalen et al., 2023; Ratcliff et al., 2021). The data captured two main themes with travel which were distances to the appointments and unreliable transportation. Twelve articles discussed distance, seven discussed unreliable transportation, and four discussed both. The findings showed that cancer survivors are less likely to use psychological services or cancer survivor support groups due to the distance needed to travel to attend these programs (Andrykowski & Burris, 2010; Bernacchi et al., 2021; DeGuzman et al., 2022). This distance is a significant barrier (Bernacchi et al., 2021; Klimmek, 2013; LeBarre & Riding-Malon, 2017;) which compounded in a scarcity of resources for rural residing cancer survivors (Lally et al., 2018).

Not only is there a scarcity of resources for cancer survivors living in rural communities, but they also have less ease of access to healthcare because of the travel distances that are required (Bernacchi et al., 2023). Having a scarcity of resources in rural communities results in a high travel burden due to distance and travel time which makes survivors forgo treatments such as mental health care (Bernnachi, 2023). Many people who live in rural settings are older adults and are much less likely to have a means of private transportation (Arana et al., 2023). The survivors who do have a means of transportation do not always feel comfortable driving so far from their homes to receive post- cancer treatments or support (Arana et al., 2023). Klimmek (2023) did a study where a majority of the respondents reported that they drove an hour or more to cancer centers. For childhood cancer survivors, transportation distance is a barrier because they may need to miss a day or multiple days of school to access survivorship support services that are not offered in their local communities (Phelan et al., 2023). Having to miss school to attend survivorship support services can particularly be a burden for children who are trying to get their childhood back and reintegrate themselves into school and being among their peers.

The other theme was not having reliable transportation. Unreliable transportation could be having no access to transportation which is no doubt a geographical barrier to rural cancer survivors' ability to attend survivorship support, care, and education (Anbari et al., 2020; Argenbright & Berry, 2021; LeBarre & Riding-Malon, 2017; Ratcliff et al., 2015). Many programs supporting cancer survivors are offered face-to-face in urban centers which contributes to added travel burden such as taking time off work, getting a car, finding someone to drive, arranging childcare, booking overnight accommodations (Gunn et al., 2021), and problem-solving inadequate transportation (Pascal et al., 2015). The added travel burden often requires survivors to rely heavily on family members or friends to support them in making mental health services a viable option (Ficek et al., 2010; Gunn et al., 2021). The travel burden can especially be true for older adults who cannot drive and must rely on family and friends to take them into city centers (Arana-Chicas et al., 2023). Not everyone is comfortable driving into cities because of parking, traffic, and the crowded streets (Gunn et al., 2021) which only makes for geographic isolation and increases the inequity of rural cancer survivors accessing survivorship care (Maneses et al., 2020). Transportation can also be unreliable in places that have unpredictable or extreme weather conditions that may make traveling long distances for services not very practical (Parret, 2011).

Another example of unreliable transportation is that driving is sometimes the only option for rural survivors because of the lack of public transit (Nicoll et al., 2023). Some survivors take medication or receive surgery that may not allow them to drive or would impair their ability to drive safely (Parret, 2011). Survivors who are willing to travel long distances may not be able to due to a lack of reliable transportation available to them or cannot physically travel due to cancer-related disabilities (Bernacchi, 2023). Driving cannot always be an option if no one is available to help, which can make transportation from rural settings unreliable for cancer survivors (Nicoll et al., 2023). Rural survivors have a 78% greater likelihood of missing follow-up appointments than urban dwellers (Keimweiss et al., 2023). Part of this increase in missed appointments is due to unreliable transportation and distance (Keimweiss et al., 2023).

Although Goodwin et al. (2023) do not describe transportation as a barrier by way of long distances or unreliable transportation, they do discuss geographical isolation and how survivors need to have a different kind of self-commitment to survivorship because not everything is readily available and face greater distances to access care than their urban counterparts. People living in remote areas often have higher values of self-reliance and sufficiency which makes them less likely to ask for transportation help (Nicoll et al., 2023). Needing to ask someone to drive them to cities for treatment is an added travel burden for rural cancer survivors (Nicoll et al., 2023). Travel burden may increase mortality rates for cancer survivors and greater cancer-related distress because of the distance to care and unreliable transportation (Bernacchi, 2023).

4.5.2 Lack of Education

Lack of education about services provided to rural cancer survivors after they complete treatment is another key theme that emerged from the research data. Fourteen articles in the dataset touched on the theme of education and lack of knowledge about services needed for quality of life after cancer treatment (Alford-Teaster et al., 2023; Anbari et al., 2020; Arana-Chicas et al., 2023; Ann Bettencourt et al., 2007; De Guzman et al., 2017; Glasser et al., 2013; Goodwin et al., 2023; Gunn et al., 2021; Keimweiss, 2023; Nicoll, et al., 2023; Parret, 2011; Pascal et al., 2015; Ratcliff et al., 2021; Smith et al., 2023). Studies have shown there needs to be an improvement in the education about mental health support services that are available for rural survivors of cancer (Anbari et al., 2020; Gunn et al., 2021). Support services may consist of individual or group therapy. There is an ongoing need for education and support from healthcare providers for rural cancer survivors because many are lacking the education on the services that are offered (Anbari et al., 2020).

Lack of cancer-related services and information is a barrier for rural cancer survivors (Nicoll et al., 2023). Survivors have frequently mentioned the need and desire for ongoing education and support even after treatment ends (Anbari et al., 2020). Despite this need, none of the participants in a study referenced by De Guzman et al. (2017) remembered being given any information on survivorship care plans post-treatment in rural communities. A further study was done that looked at post- cancer treatment for rural cancer survivors and quality of life (Gunn et al., 2021). It was found that many respondents did not feel clear about the options available to them because there were little to no strategies or resources given to them (Gunn et al., 2021). Considering that psychological distress is a common feeling among rural cancer survivors, many report inadequate information regarding the services available to them (Pascal et al., 2015). One interview revealed that an adolescent reached out to the hospital to ask for help in finding a psychologist to process what they went through during cancer and the hospital told them no one in their city could help them (Smith et al., 2023).

The Clinical Oncology Society of Australia has noted that a significant aspect of cancer survivorship is the education and organization of supportive care specific to rural communities and their needs (Goodwin et al., 2023). However, many survivors have reported that when they return to rural areas after their cancer treatment is complete, they return with a lack of education and information on post-treatment care and where to go for mental health support (Goodwin et al., 2023). Notably, two-thirds of rural cancer survivors shared that they did not receive survivorship information to help their transition from cancer treatment that would support higher quality of life in their post-treatment survivorship (Goodwin et al., 2023). Furthermore, regarding education, community members in small Alaskan communities expressed concern that providers were not educated or aware of the available resources and services that would help with their cancer survivorship (Parret, 2011). Lack of awareness for available resources could lead to fewer referrals (Parrett, 2011). Doctors referrals are important because individuals in rural communities may not have their own knowledge of the available services to them or where to get this information (Parret, 2011). It is imperative to have this awareness because there is already a lack of mental health referrals provided to cancer survivors (Ratcliff et al., 2021).

Some survivors received information regarding what support is available if they need it but felt as though they would have better understood it if they were walked through it with someone from the hospital to educate them one-on-one with what options are available (Arana-Chicas et al., 2023).

Survivorship Care Plans are a way to provide information on supportive care available, however, in one study, 67% (n=16) reported not receiving a care plan for survivorship (Alford-Teaster et al., 2023). The research showed that the education around the importance of a survivorship care plan does not make it around the entire hospital care teams (Alford-Teaster et al., 2023). Oncology teams may implement the survivorship plan but their primary care provider may not receive it and the education the patient may be looking for is lacking education on cancer side effects (Alford-Teaster et al., 2023).

Survivors reported they had preconceived thoughts of what barriers they might have as rural dwellers when it comes to cancer treatment and survivorship. The limited information on post-cancer care, information around daily post-treatment care, and mental well-being was not necessarily a barrier that survivors were expecting. This lack of education and information further contributed to cancer-related stress and anxiety around not knowing what they could be doing to support themselves. Some survivors reported at the bare minimum the doctors could provide them with a list of providers to contact who may be able to help them with their post-cancer treatment needs (Keimweiss et al., 2023).

4.5.3 Community

There has been a growing understanding of communities role in well-being (Michalski et al., 2023). Community well-being refers to “a framework of environmental, social, economic, political, cultural and spiritual domains” (Michalski et al., 2023, p.2). Community can be a large part of people's well-being and having this support around them can be very important for healing. Alternatively, not everyone has the most supportive friends, family, or community around them, and this can take a toll on their mental well-being.

Community is represented in this scoping review in these two different categories, which are community care and perceptions from community. In this data set, six authors discussed the theme of community: (Andrykowski & Burris., 2010; Bernacchi et al., 2023; DeGuzman et al., 2022; Lally et al., 2018; Nicoll et al., 2023; Pascal et al., 2015). Survivors who live in rural areas are less likely to use formal mental health services such as psychiatrists, psychologists, and social workers due to communities perceptions (Andrykowski & Burris., 2010; DeGuzman et al., 2022; Lally et al., 2018; Pascal et al., 2015).

Rural cancer survivors are more likely to use informal support for mental well-being than their urban counterparts (Andrykowski & Burris, 2010; DeGuzman et al., 2022; Lally et al., 2018; Pascal et al., 2015). Informal support for mental well-being may include family members, friends, church peers, partners, and other community members such as neighbors (Pascal et al., 2015).

A significant barrier to accessing formal mental health resources for rural cancer survivors is that they are much more likely to have negative attitudes toward these resources (Andrykowski & Burris, 2010; DeGuzman et al., 2022; Lally et al., 2018). Formal mental health care is often stigmatized by rural communities and they believe that anyone suffering from mental health difficulties should be keeping those types of struggles to themselves (Andrykowski & Burris, 2010). Despite the screening that has advanced in the last ten years for cancer-related distress, there is still a barrier to rural cancer survivors accessing the relevant services that would help with this distress (DeGuzman et al., 2022). This barrier leaves rural cancer survivors vulnerable and more at risk for adverse mental well-being outcomes (DeGuzman et al., 2022; Lally et al., 2018).

As previously noted, distance is a barrier for rural cancer survivors. Even when the barrier for distance is taken into account, for example, through online therapy or support groups, there is still resistance from rural cancer survivors in accessing this care because of adverse community perceptions (DeGuzman et al., 2022). By not using these services, rural survivors rely on their community and inner circle for support as they believe that this is more acceptable than seeing a professional for any post-cancer-related emotional distress (DeGuzman et al., 2022). Only using ones inner circle for support instead of formal mental health services reinforces the barrier of self and community stigma when it comes to accessing mental health care for rural survivors (DeGuzman et al., 2022). Some rural cancer survivors believe that others may view them as weak for needing to access these services instead of handling them on their own (DeGuzman et al., 2022). It is also common for survivors to hold this stigma and mindset about themselves or other survivors they know which only further isolates them (DeGuzman et al., 2022).

The second theme regarding the barrier of community is community support. The most common type of informal mental health support for survivors is family and community support (Pascal et al., 2015). Many participants described a preference for discussing cancer-related distress with the people in their social circle as opposed to accepting a referral to a more formal mental health service provider (DeGuzman et al., 2022). Independence and autonomy are among some rural values that may dictate whether someone accepts or declines formal mental health support (Bernacchi et al., 2023; Nicoll et al., 2023). They are less likely to ask for help (Nicoll et al., 2023) but if they do, they are more likely to use their community networks instead of healthcare providers for post-cancer support because it aligns more with their values (Bernacchi et al., 2023).

Another reason that people end up using community support is because they do not know what else to do or where else to turn for support so they use the people around them to fill that “void” of support that may be lacking for them since finishing cancer treatment. Those who do get support from family members reported finding it helpful (Pascal et al., 2015). Using community networks and resources can strengthen survivors' resilience (Bernacchi et al., 2023), however, not all survivors found family or community to be supportive because they either could not provide support, or the support they did try to provide was not what the survivor needed (Pascal et al., 2015). Some survivors reported that a negative aspect of cancer survivorship was a lack of privacy from community members (Nicoll et al., 2023). Alternatively, a positive aspect that survivors did find from community members was being able to support by way of restoring a sense of normalcy to rural survivors' lives after cancer treatment (Pascal et al., 2015).

4.5.4 Financial

As previously discussed in this thesis, the majority of research included is American and health care functions under a different financial system than Canada. Drawing conclusions for Canadian funding would not be possible based on the research provided. The ability to pay for post-cancer mental health services is a large factor and financial barriers in the American context are mostly noted in this chapter. In Canada, there are public and privately funded mental health supports available. Publicly funded support has its own issues such as long wait times that can make them inaccessible. Private mental health care is a barrier for some Canadian cancer survivors accessing mental health services due to the costs associated with treatments. The disparities in financial barriers for cancer survivors looking to access mental health support in rural communities between America and Canada should be taken into consideration while reading this section.

In the studies reviewed, following transportation, financial implications were the second largest barriers to accessing mental health support for rural cancer survivors (Andrykowski & Burris, 2010; Arana et al., 2023; Argenbright & Berry, 2021; Bernacchi et al., 2021; Bernacchi et al. 2023; DeGuzman et al., 2017; Ficek et al., 2010; Gunn et al. 2021; Keimweiss et al., 2023; Klimmek, 2013; LeBarre & Riding-Malon, 2017; Parret et al., 2011; Pascal et al., 2015; Phalen et al., 2023; Nicoll et al., 2023; ; Ratcliff et al., 2021; Smith et al., 2023). When it comes to the financial implications of accessing mental health resources two themes arise that create a barrier for rural cancer survivors. One of these themes is that people who live in rural places often have lower rates of private health insurance (Andrykowski & Burris, 2010; Argenbright & Berry, 2021; Bernacchi et al., 2021; Ficek et al., 2010). Low rates of insurance coverage are a barrier for rural cancer survivors in accessing post-cancer treatment care (Andrykowski & Burris, 2010) especially psychological care due to a lack of health insurance (Bernacchi et al., 2021).

For childhood cancer survivors in America, it can become a barrier when having to switch from pediatric care to adult care which impacts insurance plans and navigating the barriers that come with insurance plans and living in remote locations (Smith et al., 2023). This adds to the overwhelming amount of medical information given to survivors not only from medical professionals but also from insurance companies (Smith et al., 2023).

Rural cancer survivors often do not have adequate health insurance resulting in not having access to appropriate and timely care (Argenbright & Berry, 2021). In some places in the United States, the quality of the services offered, or the availability of specialty programs depends on the kind of insurance coverage the individual holds (Argenbright & Berry, 2021). Ficek et al. (2010) did a study where some American rural cancer survivors stated they used their health insurance lifetime maximum on cancer treatment and did not have any coverage left for post-treatment care.

Another theme related to financial barriers to mental health access is having limited financial resources to spend on these types of services (Andrykowski & Burris, 2010; DeGuzman et al., 2017; Ficek et al., 2010; Gunn et al., 2021; LeBarre & Riding-Malon, 2017; Pascal et al., 2015; Phalen et al., 2023; Ratcliff et al., 2021). Disparities in cancer care are often similar when it comes to survivorship care (Argenbright & Berry, 2021). American cancer support plans after treatment ends need to address the financial consequences of cancer because lack of financial access puts rural cancer survivors at a disadvantage (DeGuzman et al., 2017). For rural cancer survivors, it is not just about the cost of traveling to these services, but the cost of the services themselves and medical care (Nicoll et al., 2023; Phalen et al., 2023;). Rural communities have greater rates of poverty compared to their urban counterparts (DeGuzman et al., 2017; Ficek et al., 2010; LeBarre & Riding-Malon, 2017; Ratcliff et al., 2021).

DeGuzman et al. (2017) conducted a qualitative study to examine post-cancer treatment perceptions and needs among rural cancer survivors regarding survivorship care plans. One theme extracted was this idea of financial toxicities where the respondents of the study reported ongoing financial concerns as a way of life where they are constantly worried about finances (DeGuzman et al., 2017). Some participants reported already struggling financially and cancer treatment made this financial strain worse (DeGuzman et al., 2017). Using mental health services would only contribute to financial struggles for example the cost of driving to appointments, cost of treatment, loss of wage for taking time off for treatment, and accommodations if the treatment is far enough away that an overnight stay is warranted. A second survivor reported:

> It's getting back and forth and stuff [and] having gas money to put in your vehicle to go. I've [had to] drive an hour and a half or two hours away from home to receive treatment [and] it is a strain (DeGuzman et al., 2017, p.695).

The financial struggles already present affect people's ability to focus on post-treatment survivorship care plans (DeGuzman et al., 2017). Financial stress is related to lower quality of life for cancer survivors and is especially true for rural cancer survivors. DeGuzman et al., (2017) show that low-income rural cancer survivors are left with unmet needs and few resources to address concerns when it comes to post-treatment mental health support. Other researchers reported survivors found that after cancer treatment was completed, many found returning to metropolitan areas for continuing care brought financial hardship (Gunn et al., 2021). Even if the cost of travel was reimbursed, there is financial hardship in taking days off work (Gunn et al., 2021). Often, the cost of travel does not get reimbursed and the cost to travel to treatment can be expensive (Bernacchi et al., 2023; Parret, 2011) including gas and car repairs from all the trips back and forth.

Rural cancer survivors are 66% more likely to experience health-related unemployment compared to urban survivors (Ratcliff et al., 2021). In general, rural residing individuals have lower socioeconomic status, and are older than their urban counterparts (Arana-Chicas et al., 2023). Rural areas tend to not be as economically stable as urban areas so there is already a level of financial stress that affects mental health (LeBarre & Riding-Malon, 2017). This stress, on top of the stress from cancer diagnosis and treatment, results in an increased need for mental health services for rural survivors.

Socioeconomic factors are present when looking at barriers for rural cancer survivors (Keimweiss et al., 2023). For example, neighborhood-level poverty and the high financial burden of cancer treatment as well as survivorship extends beyond the individual factors survivors face (Keimweiss et al., 2023). These geographic disparities affect rural communities outside of cancer diagnosis, care, and survivorship but when it comes to survivors who oftentimes are facing multiple barriers at once and it is important to look at the individual and community-level disparities (Keimweiss et al., 2023). Two of these disparities are: first, that mental health services are unaffordable and not accessible due to higher rates of poverty in rural communities in America (LeBarre & Riding-Malon, 2017) and second, because distances for care result in a greater financial burden (Ratcliff et al., 2021). Rural poverty further causes a more significant financial burden for cancer survivors (Klimmek, 2013).

4.6 Strategies For Improvement

The data presents not only the barriers to care for rural cancer survivors but also, based on the research, strategies for improvement. Of the 27 articles that were included in the dataset, 25 provide suggestions for what may be future directions of care. From this data, five themes were identified: **Further Research** (Anbari et al., 2020; Ann Bettencourt et al., 2007; DeGuzman et al., 2022; Ficek et al., 2010; Glasser et al., 2013; LeBarre & Riding-Malon, 2017;), **Better**

Transitions (Anbari et al., 2020; Argenbright & Berry, 2021; Ficek et al., 2010; Glasser et al., 2013; LeBarre & Riding-Malon, 2017), **Survivorship Care Plans** (Anbari et al., 2020; DeGuzman et al., 2017; Glasser et al., 2013; Gunn et al., 2021), **Rural Locations for Care** (Bernacchi et al., 2021; Pascal et al., 2015), and **Phone/Internet Support** (LeBarre & Riding-Malon, 2017; Menesse et al., 2020; Ratcliff et al., 2021).

4.6.1 More Research

This section discusses more research by reporting on what has been found in the literature and my own personal views on where I believe more research can be conducted. For consistency, these have been combined into one sub-section.

As a future direction of care, more research on the topic of rural cancer survivors and their access to mental health services was noted as an important theme to consider in improving mental health services access for the population of cancer survivors who live in rural areas (n=6).

Many of these articles suggested more research on different strategies for improvement to see if these strategies listed would truly be beneficial for this community of survivors (Anbari-Brandt et al., 2020). While in a scoping review generalizability is not the goal, for strategies for improvement in access to mental health services. Ann Bettencourt et al. (2007) suggest that more research is warranted to develop some generalizability of study findings. They note that in their study, many of the sample sizes were too small to create any form of generalizability, and therefore more research is needed to create any strategies for improvement (Ann Bettencourt et al., 2007; DeGuzman et al., 2022). Identifying gaps in the literature and knowledge is important so that future research priorities can be set.

DeGuzman et al (2022) shared that although the goal is not about generalizability for the entire population, some level of generalizability is needed to develop and implement strategies for improvement. Glasser et al. (2013) proposed future research to look at the comorbidities that are associated with being a cancer survivor, specifically for rural cancer survivors. The comorbidities highlights the need for rural-specific research when looking at future directions of care because these comorbidities for cancer survivors are not the same for rural and urban survivors. Rural survivors may especially be open to rural-based interventions and future research that looks at these communities. Their direct experiences and insights should be taken into consideration (Ratcliff et al., 2021).

Research has been done on the use of online support platforms for cancer survivors, especially after COVID lockdowns where, at times, online platforms were the only option for support. LeBarre & Riding-Malon (2017) report that there are still some barriers to online support for rural communities and believe that if this is going to be used as a viable option for rural cancer survivors, there needs to be further research for these communities to see if it would be useful and if the barrier issues could be addressed. An important aspect of future research for rural cancer survivors should consider survivors' changing needs (Ficek et al., 2010).
Research should be done to assess what these changing needs are (Ficek et al., 2010) and act accordingly toward strategies for improvement. Researchers can be utilized to evaluate comprehensive measures of rural resilience and use that to guide future research (Bernacchi et al., 2021).

Based on the research conducted for this master's thesis and the gaps identified, I believe more research is necessary. Firstly, research needs to be done within the context of Canada. If I were to research this topic, I would conduct qualitative research and do it within the Canadian context specifically. I believe there would be great value in researching specific mental health support programs for rural communities and looking at the barriers to the program, use of the program, and helpfulness of the program. Future scoping reviews would benefit by looking at specific countries outside the United States. The American healthcare system is different than other countries like Canada so any comparisons can be difficult.

Furthermore, future scoping reviews should look at the barriers faced specifically by racialized cancer survivors and people with disabilities who face even greater barriers to care and survivorship. A comparative research study between rural and urban cancer survivors as well as comparing survivors who have accessed mental health services to those who have not would provide insight into the importance of these resources on survivorship well-being.

This study listed future directions of care based on the data touching on those themes and sharing suggestions for what they think would be helpful for survivors. More research on each theme within future directions of care would offer a more comprehensive understanding of what would be beneficial to rural cancer survivors.

Lastly, research needs to be done in consultation with policymakers and those who work in program implementation to understand what is needed for the rural communities in their local areas to support rural cancer survivors and their access to mental health services.

Six articles discussed the theme identified as the need for future research on the topic of cancer survivors' access to mental health. Research suggestions included research on different types of strategies for improvement. The data from the 27 articles in this scoping review also suggested that research with larger sample sizes may benefit from some generalizability in knowing what supports need to be implemented. Lastly, it was recommended that more research be done on the urban vs. rural divide for mental health outcomes and cancer survivorship.

4.6.2 Better Transitions

Better transitions between active cancer treatment and survivorship was a frequently cited topic within the literature. Some of the articles (n=8) discussed a need for a more seamless hand-off between active cancer treatment support and further survivorship treatment support (Arana-Chicas et al., 2023; Bernacchi et al., 2023; Bernacchi et al., 2023; Glasser et al., 2013; Goodwin et al., 2023; Gunn et al., 2021; Keimweiss et al., 2023; Nicoll et al., 2023). The collected evidence suggests the need for a more seamless transition from active cancer treatment to survivorship care. Mental health is a significant concern for cancer survivors and transitioning from active treatment to recovery and the mental health concerns that can come along with this transition should be taken into consideration when creating future directions of care (Glasser et al., 2013).

When it comes to communication as a way to support a more seamless transition between active cancer care treatment and survivorship, it does not always mean communication between physician and patient. Providers have reported that to give a level of communication and care to patients, the communication between physicians and mental health providers needs to be seamless and clear as well (Arana-Chicas et al., 2023). Primary care practitioners and the cancer care team need to ensure cancer patient's medical information is shared and not expect the patient to be the messenger between healthcare providers (Arana-Chicas et al., 2023). Part of the lack of communication is also a lack of coordination for post-treatment needs (Keimweiss et al., 2023). For example, someone from the cancer survivors care team communicating and coordinating with physiotherapist for post-cancer treatments. Cancer survivors need clear and specific communication about what is expected of them in survivorship with their health, symptoms, recurrence prevention, and what can be done to help them should they have issues with certain health-related issues (Keimweiss et al., 2023). Communication on where to look for support programs and services contributes to survivor well- being and is important in aspects of improving accessibility of mental health services for cancer survivors (Nicoll et al., 2023).

Referrals to further care in supporting survivorship needs are important for well-being and mitigating barriers to accessing mental health support. Along the lines of a more seamless hand-off for survivors, referrals take the responsibility off of survivors to advocate for support in the areas they need. Not only are referrals important for survivors, but they need to be up-to-date and should be given at different points in the patients' survivorship journey (Goodwin et al., 2023). A barrier patients end up burdening themselves that was noted was sometimes patients are given referrals and then they do not take the initiative to make an appointment (Bernacchi et al., 2023). A way to fix this barrier could be a warm hand-off or having the doctor walk them through the referral.

A warm hand-off is “direct face-to-face referral between a primary care provider and [other] health staff” (Nguyen, 2016, p.22). During this process, the primary care provider should introduce the patient to the health professional (Nguyen, 2016). Exploring the concept of a “warm hand-off” would be to see if this improves the effectiveness of referrals (Bernacchi et al., 2023, p. 180). The evidence shows rural cancer survivors may decline mental health support for a variety of reasons and the introduction of these support persons may assist in rural survivors' use of supportive care (Bernacchi et al., 2023). The cycle of the warm hand-off can continue to other supportive services that would assist in more seamless transitions of care (Bernacchi et al., 2023). Respondents in one study suggested that someone from the recommended services reach out directly to them as survivors may not take the initiative to reach out themselves (Gunn et al., 2021). Having someone reach out directly to the patient would help with the sometimes lack of proactiveness and a reluctance to seek out mental health support by taking the responsibility off of the survivor to initiate contact (Gunn et al., 2021).

A suggestion for a future direction of care in providing more information is making sure that nurses who support cancer patients have a list of virtual mental health support platforms that can be shared with survivors (Bernachi et al., 2023). Having and sharing a list of rural-based supports can take the burden off of the survivor to seek out these services themselves. Another option for sharing information is creating a central "hub" for example a phone app that survivors can access to continually access information on survivorship support (Goodwin et al., 2023). Having a central place for survivors to access their medical information would be especially useful in rural communities when there is not as much face-to-face communication to get the information they need in an accessible way (Goodwin et al., 2023).

4.6.3 Survivorship Care Plans

Survivorship care plans are a strategy to improve the transition from active treatment to survivorship and can mitigate barriers to accessing mental health support. In multiple studies within the dataset (n=6), many survivors did not receive survivorship care plans (Anbari et al., 2020; Arana-Chicas et al., 2023; DeGuzman et al., 2017; Goodwin et al., 2023; Gunn et al., 2021; Klimmek, 2013). By not receiving survivorship care plans, it was not helpful for survivors to prepare for what happens next and how to access essential services. The evidence shows that survivorship care plans are helpful for survivors and should be utilized by the oncology team which would include creating the plan and ensuring the survivor understands everything (Arana-Chicas et al., 2023). The survivorship plans should also consider service availability that are different from those of urban survivors (Arana-Chicas et al., 2023). Based on the barriers for lack of education that included not being given the information needed to feel properly supported through survivorship, a survivorship care plan is notably useful in referring back to later during survivorship (Goodwin et al., 2023). Klimmek (2013) suggests that survivorship care plans should be the new standard of care for cancer survivors. These care plans should be collaborative between the oncology team and the survivor and include the survivor's goals for ongoing support (Klimmek, 2013).

Not only would the survivorship care plans provide support, but they also instill a sense of normalcy for the survivor when transitioning from active treatment (Klimmek, 2013). These survivorship care plans should include surveillance for recurrence, management of physical and psychological long-term effects of cancer, and health promotion (Anbari et al., 2020). Survivorship care plans should further help survivors transition back to a "post-treatment lifestyle" including returning to work or school, parenting, sexual functioning, and everyday activities (DeGuzman et al., 2017). Survivorship care plans have been praised as being able to help address some of the issues relating to the accessibility of mental health support for rural cancer survivors (Gunn et al., 2021). Exploring different ways to create and deliver these survivorship care plans that are accessible to rural cancer survivors should be a priority for future directions of care (DeGuzman et al., 2017).

4.6.4 Rural Locations

One of the biggest challenges in accessing mental health services for rural cancer survivors is that there are not very many locations and services that offer specialty care in rural communities. Survivors often have to travel long distances to access this care. Several articles (n=5) in the data highlighted the need to get more resources into these communities as a future direction of care (Bernacchi et al., 2021; DeGuzman et al., 2017; Keimweiss et al., 2023; Pascal et al., 2015; Smith et al., 2023). Some of these articles discussed community resources (Bernacchi et al., 2021), geographically accessible care (DeGuzman et al., 2017; Keimweiss et al., 2023), survivors as active members in the planning of rural health facilities (Pascal et al., 2015), and community-based organizations (Smith et al., 2023; Wilson et al., 2012). Community-based organizations provide numerous programs and services to community members including services to marginalized and disadvantaged members of society (Wilson et al., 2012).

Researchers have identified a gap in programs and health services for cancer survivors in rural communities (Pascal et al., 2015). Researchers are interested in creating sustainable resources to support more favorable health outcomes for these communities (Pascal et al., 2015).
These health outcomes includes collaboration from rural community members as a "two-way street" where it is both a reciprocal and combined effort to work together in combating health inequity (Pascal et al., 2015). Having this collaborative planning strategy, the goal for rural cancer survivors needs to be met when it comes to psychosocial care (Pascal et al., 2015). This approach also allows for different perspectives in planning how to tackle this barrier by hearing from the people most affected by it and who are most likely to use these services (Pascal et al., 2015). Gaining different perspectives should be the case for community and clinical-level support (Pascal et al., 2015) and the collaboration should continue from research design to the implementation process (Keimweiss et al., 2023).

Post-treatment cancer survivors need individualized care that is geographically accessible (DeGuzman et al., 2017). The barriers that rural survivors face often places the burden on survivors by requiring them to practice more resilience in trying to navigate access to their essential services (Bernacchi et al., 2021).

Rural survivors should have resources that are available to them in their own communities as much as possible (Bernacchi et al., 2021) and this is an important aspect of future directions of care. Community-based organizations connect families to different community-level support and assist in navigating post-cancer services (Smith et al., 2023).

4.6.5 Telehealth

Telehealth can be described as using technology to provide remote health services (Phalen et al., 2023). In a post-COVID world, we have been introduced to a new understanding of what healthcare and extended health supports can accomplish through telehealth. Many people believe the expansion of virtual health care taken during the pandemic can be the solution for barriers to services that are not accessible to everyone who needs them. In the dataset for this study, it was noted by some researchers (n=5) that a future direction of care would be providing more telehealth support appointments for rural cancer survivors who do not have the same level of access to services as urban cancer survivors (Alford-Teaster et al., 2023; Bernacchi et al., 2023; Meneses et al., 2020; Phalen et al., 2023; Ratcliff et al., 2021).

Since the pandemic in 2020, there was an uptake in the use of telehealth which was an underutilized type of care prior in some jurisdictions (Alford- Teaster et al., 2023; Bernacchi et al., 2023). Additionally, technology infrastructures improved significantly making it easier for care providers and patients to use telehealth (Alford-Teaster et al., 2023; Bernacchi et al., 2023). The pandemic specifically re- evaluated where cancer and cancer survivorship can use telehealth as an enabler in accessing support instead of a barrier (Alford-Teaster et al., 2023). Telehealth in one of the research studies did not just mean meeting on video or phone calls with a doctor but also included having an online portal where patients' health information can be accessed by different healthcare professionals and a place where patients can access things such as their survivorship care plans (Alford-Teaster et al., 2023). Telehealth for cancer survivorship also offers the possibility of multiple practitioners meeting at once with the survivor to discuss updates and address any questions or concerns in a collaborative way (Alford-Teaster et al., 2023). Psychosocial support interventions can take six to twelve weekly sessions to see an improvement or change (Ratcliff et al., 2021). For rural residing survivors, face-to-face intervention is not always sustainable for that length of time due to the different barriers to accessibility that are present (Ratcliff et al., 2021).

It has been recommended that video or telephone appointments are best for rural cancer survivors seeking psychological support to mitigate barriers to getting to physical appointments (Ratcliff et al., 2021). Virtual care does not mean it should replace in-person support, but rather work as an accessory to in-person care or when barriers prevent in-person care (Phalen et al., 2023). Meneses et al. (2020) posit that healthcare needs to focus on underserved areas specifically targeting rural populations and making their well-being a priority. Their findings support the “RE-AIM principle” of reach, effectiveness, adoption, implementation, and maintenance (Meneses et al., 2020, p. 501). It demonstrates that telehealth support for rural cancer survivors is providing a low-cost alternative to the barriers of face-to-face support for rural cancer survivors (Meneses et al., 2020). When implementing this future direction of care, those putting forth these types of support need to keep in mind that older adults and rural patients have “limited digital inclusion” and may require additional support compared to younger survivors and urban dwellers when it comes to connecting to the internet and setting up unfamiliar technology (Bernacchi et al., 2023). Frustrations with using technology can add further distress to these survivors and the assumption should not be that telehealth is the solution for every survivor of cancer (Bernacchi et al., 2023).

4.6.6 Peer Support

Peer support (n=4) was another theme established as a future direction of care for cancer survivors in rural communities (Arana-Chicas et al., 2023; Nicoll et al., 2023; Parret, 2011; Ratcliff et al., 2021). A benefit for support groups is they can be offered as face-to-face appointments and via telehealth such as scheduled group video calls (Ratcliff et al., 2021). A second benefit of support groups is they can be much more cost-effective compared to individual therapy (Ratcliff et al., 2021). Survivors appreciate the support other group members are able to offer, as well as their perspectives (Ratcliff et al., 2021). Support groups have been reported to be a positive experience for cancer survivors and they found it helpful to talk to other people with similar experiences (Nicoll et al., 2023). Rural cancer survivors reported they think getting referrals for cancer survivorship support groups will help with the loneliness and isolation they feel (Arana-Chicas et al., 2023). Having specific support groups for rural cancer survivors would allow these survivors to hear perspectives and relate to people who may have similar experiences.

Many survivors feel isolated and forgotten once treatment is completed, and their primary doctors and support stop reaching out to them (Parret, 2011). A provider in rural Alaska suggested, as a way of fostering peer support, to have “survivor dinners” once a year in their community that honor cancer survivors with their community around them (Parret, 2011). For smaller communities, many neighboring communities could get together to celebrate and share stories with other survivors as a type of peer support (Parret, 2011).

The next chapter focuses on further discussion of the scoping review. This includes gaps in the literature, strengths and limitations, and the knowledge translation plan. This chapter serves as an aid to further investigate into the topic of cancer survivors access to mental health services in rural communities.

Chapter 5: Discussion

The discussion chapter seeks to further discuss the gaps the literature for this thesis has. In doing this, it recognizes the bias of the included articles as well as my own implicit bias. Noting where the strengths and limitations lie will help with this bias and gaps for future research. Lastly, this chapter discusses a knowledge translation plan to give an insight on how literature can assist in real-world-change.

5.1 Gaps

The research articles were based solely on inclusion criteria set out at the beginning of the study. The articles included discussed issues around cancer survivorship, mental health support, the difference in cancer outcomes and access to treatment options for rural and urban cancer survivors.

There are gaps within the research that need to be addressed. To begin, it is noteworthy that most articles in the dataset originated in the United States. The insurance system in the United States can create barriers to accessing treatment for many people. Regardless, most of the data identified financial barriers as a factor in accessing mental health services for people who live in rural areas. Whether someone is insured publicly or privately, access may be available based on availability of providers or the barrier to costs associated. Another notable gap within the literature is very little is included in the research about the Canadian experience of rural residing cancer survivors and their access to mental health services. As a person living and studying in Canada, research that can be included in this context is important for influencing policy and practices. Having research in the Canadian context can be an asset in knowledge translation.

Another gap is not enough recognition or research done for racialized or vulnerable survivors living in rural communities. For example, black women are more likely to be diagnosed with late-stage breast cancer and have higher cancer mortality compared to white women (Kim et al., 2018). Some of these late-stage diagnoses may be a result of past and present medical distrust for black women that makes them less likely to seek medical advice upon noticing abnormal symptoms (Kim et al., 2018). Racial and ethnic minorities have worse health outcomes for many diseases compared to their white counterparts (Sonderlund et al., 2022). Structural racism is a crucial determinant of health and healthcare systems perpetuate white privilege by reinforcing societal norms that are rooted in racism (Sonderlund et al., 2022). Racialized residential segregation is enforced by practices that separate racial and ethnic minorities from white mainstream society that restricts access to health resources for racialized communities (Sonderlund et al., 2022). There was a gap in the literature for these communities. Remembering intersectionality, often vulnerable populations experience more than one form of discrimination. With this in mind, it would be interesting to look further into how racial and ethnic minorities experience rurality and accessing the necessary care that they need. Particularly post-cancer treatment and mental health support.

Lastly, there was a gap in the literature when it came to any types of disabilities or vulnerable populations. There was no recognition or information about cancer survivors with disabilities in rural communities. People with disabilities that occurred prior to their cancer diagnosis would surely have barriers in accessing both cancer treatments and survivorship care. People with mobility restrictions, hearing impairments, or language barriers could live in rural places and have other barriers to accessing services on top of the barriers present when living in rural communities. Experiences for these communities were not present in the data.

5.2 Strengths and Limitations

Although there has been research done on cancer, mental health services, and rural communities, the intersection of these three has not been widely researched. This thesis aimed to summarize the limited literature written on cancer survivors' access to mental health services in rural communities. A strength of doing a scoping review is gaps in this area of research are more likely to be highlighted. Another strength is the use of a knowledge translation plan to summarize the findings and inform policy makers and researchers. The thesis discusses the issue of access to mental health services for rural cancer survivors and highlights the barriers faced by cancer survivors living in rural areas. The second research question highlights the recommendations of future directions of care based on the research.

A limitation of the research is I was the only researcher reviewing the articles which is not standard for the JBI method. Although efforts were made to ensure rigour in the review and extraction of data, having two researchers doing the inclusion and exclusion criteria for the data would have reduced the risk of bias.

Regarding data collection, another limitation was the exclusion of grey literature. Due to limitations in time and resources, grey literature was excluded. Furthermore, for data collection, only English articles were considered because I am only able to read in English. It is unclear if the gaps in the research would have been different had non-English articles been included.

Lastly, this scoping review studied barriers to mental health services, not enablers. Although the priority was barriers to accessing mental health services, if articles that discussed enablers had also been included, contrasts could have been drawn for both sides of accessibility giving readers further insight on what it means for cancer survivors living in rural areas to have access to mental health services.

5.3 Knowledge Translation Plan

One of the intended outcomes of having a knowledge translation plan is making the research an interactive exchange between the knowledge creator and knowledge user (Sudsawa, 2007). A knowledge translation plan is a process of taking what we learned and providing the necessary information to put it into practice (Sudsawa, 2007). Knowledge Translation was defined by the Sudsawa (2007) as:

> The exchange, synthesis and ethically sound application on knowledge - within a complex system of interactions among researchers and users - to accelerate the capture of the benefits of research through improved health, more effective services and products, and a strengthened healthcare system (p.1).

Attached in Appendix Five – Knowledge Translation Plan – is a one-page monograph summary of the research that can be used as "key messages" or presented at conferences. This monograph has been created as a knowledge translation plan to bridge the gap between research and policy work to make the information more concise and accessible for those who seek to use research as evidence for policy change and implementation of programs. To my knowledge, through the research I conducted, none of the studies included a knowledge translation plan that examines barriers. A knowledge translation plan was also included in this study to be used as an aid in presentations and conferences as a masters level thesis project.

Chapter 6: Conclusion

This last chapter discusses the thesis as a whole. More specifically, what was reported and what I learned through the process of writing this scoping review. Lastly, I report on funding and if there are any conflicts of interest to report.

6.1 What the thesis reported

This thesis aimed to collect data via a scoping review to answer the question of what factors influence access to mental health services for cancer survivors in rural areas? Additionally, it sought to find evidence to answer the research question of what strategies are available to improve access to mental health services for cancer survivors living in rural areas? The objective of this study was to look at mental health support, rural communities, and cancer survivors and contribute to the growing literature on cancer care. During the data extraction process, themes were identified based on the present data and the research questions.

Examining access to mental health services for cancer survivors in rural communities, the themes included: financial, community, travel & transportation, and lack of education. Looking at future directions of care, the themes included: more research, better transitions, survivorship care plans, rural locations, peer support, and telehealth. Based on the studies included in the dataset, a literary summary table was created with the following headings: title, author, publication date, publication type, participants, type, setting, type of mental health intervention, type of cancer, barriers to access, rural/urban divide and strategies for improvement. The results from the data collection and extraction showed the disparity in access to mental health services based on the identified themes. The research demonstrated that although there are suggestions for future directions of care, there is room for improvement.

The study design represents a modified version of the JBI Method scoping review method. Using a modified version of the JBI Method was done to accommodate a masters level research project with a stricter timeline. The review questions were clearly stated in terms of what to expect the scoping review to address along with the inclusion criteria that detailed the basis of which the sources will be considered and included in the research (Peters et al., 2020). The search strategy was comprehensive and detailed the rationale behind the search (Peters et al., 2020) which led to the pilot testing, and lastly, the data extraction where the limitation of only having one reviewer was present, despite best efforts (Peters et al., 2020).

A scoping review was chosen for this study based on a broad search of literature aimed at identifying gaps that can support future research and health policy around access to mental health services for cancer survivors who live in rural areas. The goal was to contribute to the research on the topic of cancer survivors' access to mental health services in rural communities. The data included in the background show there are disparities in cancer care and access when it comes to rural versus urban residing cancer survivors. Greater family disruptions, lower quality of life, poorer health outcomes, poverty, and lower cancer survival rates are some of the disparities faced by urban and rural cancer survivors. Separate from mental health support, the available research shows that cancer survivors living in rural areas do not have access to the same types of cancer care compared to urban cancer survivors.

One of the gaps noted in the research was that many of the articles included were written in the United States. Due to the unique nature of US healthcare finance and delivery, there are challenges extrapolating these findings to other settings. The second gap was research on racialized communities was very limited. This is notable because racialized individuals and other vulnerable populations are more likely to experience health disparities.

Limitations included having only one reviewer to do data extraction for the scoping review, not using any grey literature, and only including research written in English.

A second limitation was not doing more of a comparison between barriers and enablers for rural cancer survivors' access to mental health services in rural communities. A strength of the research was including a knowledge translation plan to translate knowledge into practice for policyholders and those who do program implementation. Future research needs to be done on the topic to expand the knowledge of cancer survivors' access to mental health services in rural communities.

6.2 What I learned through the process

At the start of my master's research journey, I sought to examine female breast cancer survivors' access to mental health services in rural Nova Scotia. I intended to interview cancer survivors in the province, however, I quickly realized this would not likely provide a large enough sample and extended the recruitment to all of Canada. I was unable to recruit participants so I tried to make it include all types of cancer within Canada. However, despite my efforts, I could not get enough people to interview, and for the sake of trying to stay on track with my program of studies, I decided to shift and do a scoping review instead. Something that I learned from this process is that it is okay to change emphasis and not adhere to a specific topic or a type of research if it is not progressing as intended. While a goal for future research is to conduct interviews on the topic of cancer survivorship and mental health services, it was not what came about for this thesis and instead it will hopefully serve as the inspiration for further research. I learned what it means to do a modified scoping review which mimicked a standard scoping review with some modifications.

Throughout this research process, I learned that the term “survivorship” is not a simple concept. Depending on the researcher, survivorship can mean different time points within someone's cancer “journey” and it may be different from the next researcher who studies the topic. I also learned adopting the term “survivor” is not always an easy one for people who have been through a cancer diagnosis and treatment. Throughout the research, I learned of the personal and social toll it can take on someone to hold the title “survivor” and that should be considered when addressing, researching, and writing about cancer. Language is a powerful tool that can shape people's experiences and journey with cancer.

6.3 Conflicts

There are no conflicts of interest to declare for this research and master's thesis.

6.4 Funding

Currently, I am enrolled in the Masters of Applied Health Services program at Memorial University. While the program itself receives funding for students from the Atlantic Regional Training Centre for Health Services Research (ARTC). My specific master's thesis research did not have any funding.

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Appendix 1: Search Strategy

MEDLINE (via Ovid)
Search conducted: December 12, 2023

Ovid MEDLINE(R) ALL <1946 to December 07, 2023>
Cancer Survivors/ 9242
exp Neoplasms/ and (Survivors/ or Survivorship/) 15929
((survivor* or survived) adj5 (cancer* or tumor* or tumour* or neoplas* or malignan* or carcinoma* or adenocarcinoma* or choriocarcinoma* or leukemia* or leukaemia* or lymphoma* or melanoma* or mesothelioma* or myeloma* or sarcoma* or teratoma*)).tw,kf. 36695
((after or post or following) adj5 cancer).tw,kf. 106943
((finish* or complet* or end or ending or ended) adj3 treatment adj10 cancer).tw,kf. 2704
exp Neoplasms/ and ((finish* or complet* or end or ending or ended) adj3 treatment).tw,kf. 17229
or/1-6 [CANCER SURVIVORS] 155250
exp Mental Health Services/ 106359
((mental health or psych* or counsel* or emotional or stress* or distress*) adj3 (service* or care or treatment* or intervention* or program* or resource* or referral* or visit* or support*)).tw,kf. 258239
mental healthcare.tw,kf. 4299
supportive care.tw,kf. 21962
Psycho-Oncology/ 253
((psych* adj oncolog*) or psychooncolog*).tw,kf. 2846
exp Psychiatry/ or exp Psychotherapy/ 318123
(psychiatr* or psychotherap*).tw,kf. 339338
exp Social Support/ 80395
((social* or communit* or famil* or spous* or friend* or peer*) adj3 (service* or care or intervention* or program* or resource* or visit* or support*)).tw,kf. 284522
exp Social Work/ 18732
social work*.tw,kf. 19047
Self Help Groups/ 9628
(self help or support group*).tw,kf. 17250
((survivor* adj2 (service* or care or plan or plans or program* or resource* or support*)) and (mental health or psych* or emotional or stress* or distress*)).tw,kf. 1974
or/8-22 [MENTAL HEALTH SERVICES] 1083195
Rural Population/ 69738
exp Rural Health Services/ 14168
Rural Health/ 23957
Medically Underserved Area/ 7530
Community Health Centers/ 7565
medically underserved.tw,kf. 2031
(rural* or remote or regional or nonurban or non urban or nonmetropolitan).tw,kf. 581936

((isolat* or underserved or under served) adj3 (geographic* or setting* or communit* or region* or area* or town* or village*)).tw,kf. 24808
or/24-31 [RURAL] 635794
7 and 23 and 32 500
limit 33 to yr="2003 -Current" 474
limit 34 to english 468

Embase (via Embase.com)
Search conducted: December 12, 2023

No.	Embase.com Query	Results
#1	'cancer survivor'/de OR 'childhood cancer survivor'/de OR 'cancer survival'/exp	564434
#2	'neoplasm'/exp AND ('survivor'/de OR 'survivorship'/de OR 'cancer survival'/exp)	537795
#3	((survivor* OR survived) NEAR/5 (cancer* OR tumor* OR tumour* OR neoplas* OR malignan* OR carcinoma* OR adenocarcinoma* OR choriocarcinoma* OR leukemia* OR leukaemia* OR lymphoma* OR melanoma* OR mesothelioma* OR myeloma* OR sarcoma* OR teratoma*)):ti,ab,kw	55454
#4	((after OR post OR following) NEAR/5 cancer):ti,ab,kw	166906
#5	((finish* OR complet* OR end OR ending OR ended) NEAR/3 treatment NEAR/10 cancer):ti,ab,kw	5822
#6	'neoplasm'/exp AND (((finish* OR complet* OR end OR ending OR ended) NEAR/3 treatment):ti,ab,kw)	43444
#7	#1 OR #2 OR #3 OR #4 OR #5 OR #6	754301
#8	'mental health care'/exp OR 'counseling'/de OR 'psychological counseling'/de	248989
#9	(('mental health' OR psych* OR counsel* OR emotional OR stress* OR distress*) NEAR/3 (service* OR care OR treatment* OR intervention* OR program* OR resource* OR referral* OR visit* OR support*)):ti,ab,kw	348004
#10	'mental healthcare':ti,ab,kw	5429
#11	'supportive care':ti,ab,kw	40314
#12	'psycho-oncology'/de	1522
#13	((psych* NEAR/1 oncolog*):ti,ab,kw) OR psychooncolog*:ti,ab,kw	6054
#14	'psychiatric treatment'/de OR 'psychoanalysis'/de OR 'psychopharmacotherapy'/de OR 'psychotherapy'/exp	371340
#15	psychiatr*:ti,ab,kw OR psychotherap*:ti,ab,kw	491055
#16	'social support'/exp OR 'social care'/de OR 'psychosocial care'/de OR 'psychological care'/de OR 'peer counseling'/de	156918
#17	((social* OR communit* OR famil* OR spous* OR friend* OR peer*) NEAR/3 (service* OR care OR intervention* OR program* OR resource* OR visit* OR support*)):ti,ab,kw	354133
#18	'social work'/de	31497
#19	'social work*':ti,ab,kw	29471

#20	'self help'/de OR 'support group'/exp	30494
#21	'self help':ti,ab,kw OR 'support group*':ti,ab,kw	24925
#22	((survivor* NEAR/2 (service* OR care OR plan OR plans OR program* OR resource* OR support*)):ti,ab,kw) AND ('mental health':ti,ab,kw OR psych*:ti,ab,kw OR emotional:ti,ab,kw OR stress*:ti,ab,kw OR distress*:ti,ab,kw)	3351
#23	#8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22	1494987
#24	'rural population'/de OR 'rural area'/de OR 'rural health'/de OR 'rural health care'/exp	140160
#25	'medically underserved'/de	1773
#26	'medically underserved':ti,ab,kw OR 'medically under served':ti,ab,kw	2883
#27	rural*:ti,ab,kw OR remote:ti,ab,kw OR regional:ti,ab,kw OR nonurban:ti,ab,kw OR 'non urban':ti,ab,kw OR nonmetropolitan:ti,ab,kw OR 'non metropolitan':ti,ab,kw	765057
#28	((isolat* OR underserved OR 'under served') NEAR/3 (geographic* OR setting* OR communit* OR region* OR area* OR town* OR village*)):ti,ab,kw	29294
#29	#24 OR #25 OR #26 OR #27 OR #28	818851
#30	#7 AND #23 AND #29	1504
#31	#30 AND [2003-2023]/py	1449
#32	#31 AND [english]/lim	1431
#33	#32 NOT [conference abstract]/lim	659

APA PsycINFO (via EBSCO)
Search conducted: December 12, 2023

#	APA PsycINFO Query	Limiters/Expanders	Results
S1	DE "Survivors" AND (DE "Neoplasms" OR DE "Breast Neoplasms" OR DE "Endocrine Neoplasms" OR DE "Leukemias" OR DE "Melanoma" OR DE "Metastasis" OR DE "Nervous System Neoplasms" OR DE "Terminal Cancer")	Search modes - Boolean/Phrase	6,874
S2	TI ((survivor* OR survived) N4 (cancer* OR tumor* OR tumour* OR neoplas* OR malignan* OR carcinoma* OR adenocarcinoma* OR choriocarcinoma* OR leukemia* OR leukaemia* OR lymphoma* OR melanoma* OR mesothelioma* OR myeloma* OR sarcoma* OR teratoma*)) OR AB ((survivor* OR survived) N4 (cancer* OR tumor* OR tumour* OR neoplas* OR malignan* OR carcinoma* OR adenocarcinoma* OR choriocarcinoma* OR leukemia* OR leukaemia* OR lymphoma* OR melanoma* OR mesothelioma* OR myeloma* OR sarcoma* OR teratoma*)) OR KW ((survivor* OR survived) N4 (cancer* OR tumor* OR tumour* OR neoplas* OR malignan* OR	Search modes - Boolean/Phrase	8,917

	carcinoma* OR adenocarcinoma* OR choriocarcinoma* OR leukemia* OR leukaemia* OR lymphoma* OR melanoma* OR mesothelioma* OR myeloma* OR sarcoma* OR teratoma*))		
S3	TI ((after OR post OR following) N4 cancer) OR AB ((after OR post OR following) N4 cancer) OR KW ((after OR post OR following) N4 cancer)	Search modes - Boolean/Phrase	6,176
S4	TI ((((finish* OR complet* OR end OR ending OR ended) N2 treatment) N9 cancer)) OR AB ((((finish* OR complet* OR end OR ending OR ended) N2 treatment) N9 cancer) OR KW ((((finish* OR complet* OR end OR ending OR ended) N2 treatment) N9 cancer)	Search modes - Boolean/Phrase	830
S5	(DE "Neoplasms" OR DE "Breast Neoplasms" OR DE "Endocrine Neoplasms" OR DE "Leukemias" OR DE "Melanoma" OR DE "Metastasis" OR DE "Nervous System Neoplasms" OR DE "Terminal Cancer") AND TI ((finish* OR complet* OR end OR ending OR ended) N2 treatment)	Search modes - Boolean/Phrase	94
S6	(DE "Neoplasms" OR DE "Breast Neoplasms" OR DE "Endocrine Neoplasms" OR DE "Leukemias" OR DE "Melanoma" OR DE "Metastasis" OR DE "Nervous System Neoplasms" OR DE "Terminal Cancer") AND AB ((finish* OR complet* OR end OR ending OR ended) N2 treatment)	Search modes - Boolean/Phrase	1,472
S7	(DE "Neoplasms" OR DE "Breast Neoplasms" OR DE "Endocrine Neoplasms" OR DE "Leukemias" OR DE "Melanoma" OR DE "Metastasis" OR DE "Nervous System Neoplasms" OR DE "Terminal Cancer") AND KW ((finish* OR complet* OR end OR ending OR ended) N2 treatment)	Search modes - Boolean/Phrase	51
S8	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7	Search modes - Boolean/Phrase	14,331
S9	DE "Mental Health Services" OR DE "Community Mental Health Services" OR DE "Community Counseling" OR DE "Psychological First Aid"	Search modes - Boolean/Phrase	62,577
S10	TI (("mental health" OR psych* OR counsel* OR emotional OR stress* OR distress*) N3 (service* OR care OR treatment* OR intervention* OR program* OR resource* OR referral* OR visit* OR support*)) OR AB (("mental health" OR psych* OR counsel* OR emotional OR stress* OR distress*) N3 (service* OR care OR treatment* OR intervention* OR program* OR resource* OR referral* OR visit* OR support*)) OR KW (("mental health" OR psych* OR counsel* OR emotional OR stress* OR distress*) N3 (service* OR care OR treatment* OR intervention* OR program* OR resource* OR referral* OR visit* OR support*))	Search modes - Boolean/Phrase	326,073
S11	TI "mental healthcare" OR AB "mental healthcare" OR KW "mental healthcare"	Search modes - Boolean/Phrase	3,352
S12	TI "supportive care" OR AB "supportive care" OR KW "supportive care"	Search modes - Boolean/Phrase	1,922

S13	TI (psych* N0 oncolog*) OR AB (psych* N0 oncolog*) OR KW (psych* N0 oncolog*) OR TI psychooncolog* OR AB psychooncolog* OR KW psychooncolog*	Search modes - Boolean/Phrase	2,109
S14	'DE "Psychiatry" OR DE "Community Psychiatry" OR DE "Social Psychiatry" OR DE "Telepsychiatry" OR DE "Psychotherapy" OR DE "Psychotherapeutic Counseling" OR DE "Supportive Psychotherapy" OR DE "Cognitive Therapy" OR DE "Counseling" OR DE "Peer Counseling"	Search modes - Boolean/Phrase	146,064
S15	TI (psychiatr* OR psychotherap*) OR AB (psychiatr* OR psychotherap*) OR KW (psychiatr* OR psychotherap*)	Search modes - Boolean/Phrase	406,764
S16	DE "Social Support"	Search modes - Boolean/Phrase	67,480
S17	TI ((social* OR communit* OR famil* OR spous* OR friend* OR peer*) N2 (service* OR care OR intervention* OR program* OR resource* OR visit* OR support*)) OR AB ((social* OR communit* OR famil* OR spous* OR friend* OR peer*) N3 (service* OR care OR intervention* OR program* OR resource* OR visit* OR support*)) OR KW ((social* OR communit* OR famil* OR spous* OR friend* OR peer*) N3 (service* OR care OR intervention* OR program* OR resource* OR visit* OR support*))	Search modes - Boolean/Phrase	271,887
S18	DE "Social Casework" OR DE "Social Group Work"	Search modes - Boolean/Phrase	21,945
S19	TI "social work*" OR AB "social work*" OR KW "social work*"	Search modes - Boolean/Phrase	51,470
S20	DE "Support Groups"	Search modes - Boolean/Phrase	4,735
S21	TI ("self help" OR "support group*") OR AB ("self help" OR "support group*") OR KW ("self help" OR "support group*")	Search modes - Boolean/Phrase	18,262
S22	TI ((survivor* N1 (service* OR care OR plan OR plans OR program* OR resource* OR support*)) AND ("mental health" OR psych* OR emotional OR stress* OR distress*)) OR AB ((survivor* N1 (service* OR care OR plan OR plans OR program* OR resource* OR support*)) AND ("mental health" OR psych* OR emotional OR stress* OR distress*)) OR KW ((survivor* N1 (service* OR care OR plan OR plans OR program* OR resource* OR support*)) AND ("mental health" OR psych* OR emotional OR stress* OR distress*))	Search modes - Boolean/Phrase	1,091
S23	S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22	Search modes - Boolean/Phrase	937,200
S24	DE "Rural Health" OR DE "Rural Environments"	Search modes - Boolean/Phrase	23,991
S25	TI ("medically underserved" OR "medically under served") OR AB ("medically underserved" OR "medically under	Search modes - Boolean/Phrase	625

	served") OR KW ("medically underserved" OR "medically under served")		
S26	TI (rural* OR remote OR regional OR nonurban OR "non urban" OR nonmetropolitan OR "non metropolitan") OR AB (rural* OR remote OR regional OR nonurban OR "non urban" OR nonmetropolitan OR "non metropolitan") OR KW (rural* OR remote OR regional OR nonurban OR "non urban" OR nonmetropolitan OR "non metropolitan")	Search modes - Boolean/Phrase	107,932
S27	TI ((isolat* OR underserved OR "under served") N2 (geographic* OR setting* OR communit* OR region* OR area* OR town* OR village*)) OR AB ((isolat* OR underserved OR "under served") N2 (geographic* OR setting* OR communit* OR region* OR area* OR town* OR village*)) OR KW ((isolat* OR underserved OR "under served") N2 (geographic* OR setting* OR communit* OR region* OR area* OR town* OR village*))	Search modes - Boolean/Phrase	3,769
S28	S24 OR S25 OR S26 OR S27	Search modes - Boolean/Phrase	111,801
S29	S8 AND S23 AND S28	Search modes - Boolean/Phrase	182
S30	S29 AND PY 2003-2023	Search modes - Boolean/Phrase	177
S31	S30 AND LA English	Search modes - Boolean/Phrase	177

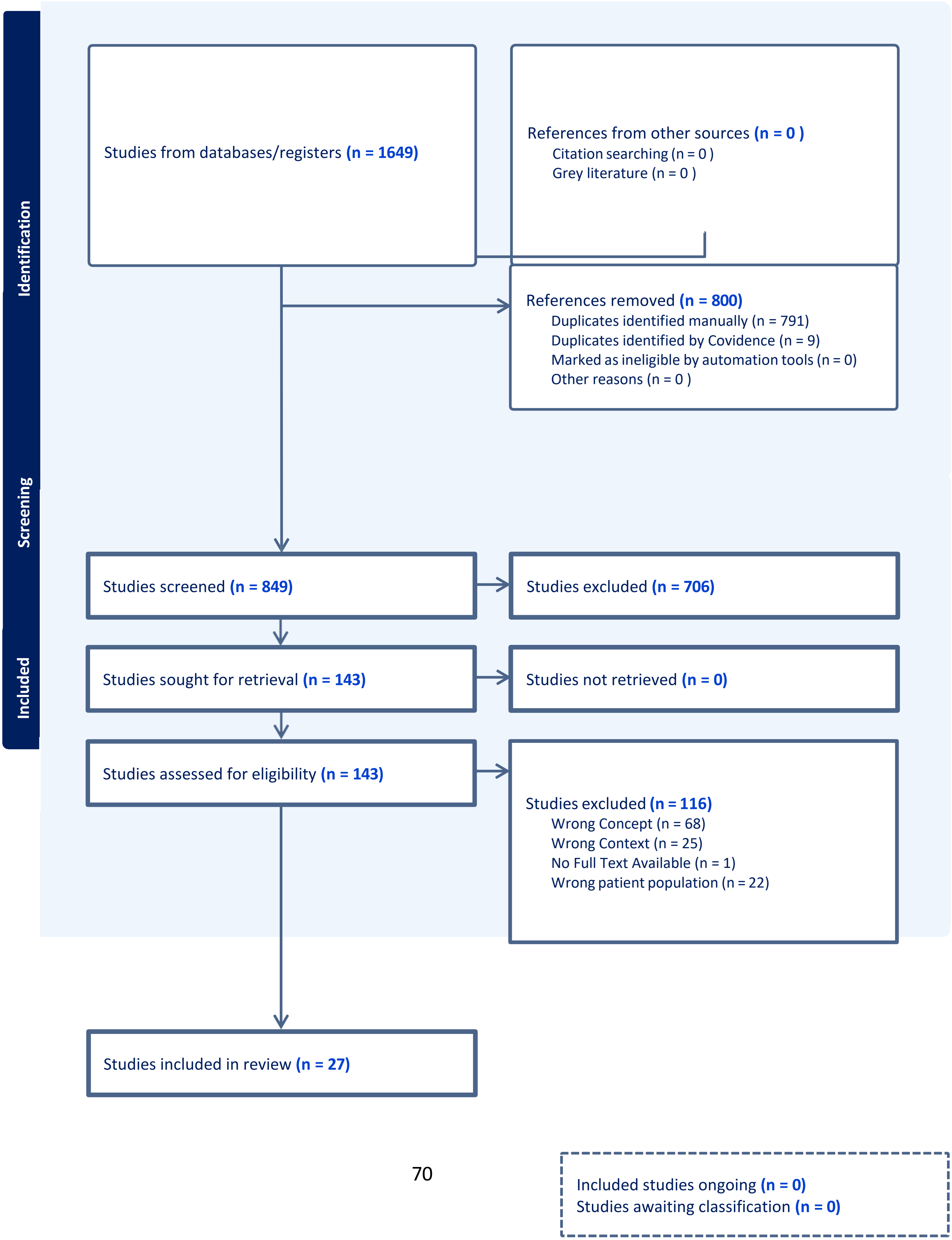
CINAHL Plus with Full Text (via EBSCO)
Search conducted: December 12, 2023

#	Query	Limiters/Expanders	Results
S1	(MH "Cancer Survivors")	Search modes - Boolean/Phrase	13,419
S2	(MH "Survivors") AND (MH "Neoplasms+")	Search modes - Boolean/Phrase	4,666
S3	TI ((survivor* OR survived) N4 (cancer* OR tumor* OR tumour* OR neoplas* OR malignan* OR carcinoma* OR adenocarcinoma* OR choriocarcinoma* OR leukemia* OR leukaemia* OR lymphoma* OR melanoma* OR mesothelioma* OR myeloma* OR sarcoma* OR teratoma*)) OR AB ((survivor* OR survived) N4 (cancer* OR tumor* OR tumour* OR neoplas* OR malignan* OR carcinoma* OR adenocarcinoma* OR choriocarcinoma* OR leukemia* OR leukaemia* OR lymphoma* OR melanoma* OR mesothelioma* OR myeloma* OR sarcoma* OR teratoma*))	Search modes - Boolean/Phrase	21,374
S4	TI ((after OR post OR following) N4 cancer) OR AB ((after OR post OR following) N4 cancer)	Search modes - Boolean/Phrase	30,357

S5	TI ((((finish* OR complet* OR end OR ending OR ended) N2 treatment) N9 cancer)) OR AB ((((finish* OR complet* OR end OR ending OR ended) N2 treatment) N9 cancer)	Search modes - Boolean/Phrase	1,547
S6	(MH "Neoplasms+") AND TI ((finish* OR complet* OR end OR ending OR ended) N2 treatment)	Search modes - Boolean/Phrase	218
S7	(MH "Neoplasms+") AND AB ((finish* OR complet* OR end OR ending OR ended) N2 treatment)	Search modes - Boolean/Phrase	4,687
S8	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7	Search modes - Boolean/Phrase	56,854
S9	(MH "Mental Health Services") OR (MH "Community Mental Health Services") OR (MH "Counseling") OR (MH "Emergency Services, Psychiatric+")	Search modes - Boolean/Phrase	82,633
S10	TI (("mental health" OR psych* OR counsel* OR emotional OR stress* OR distress*) N3 (service* OR care OR treatment* OR intervention* OR program* OR resource* OR referral* OR visit* OR support*)) OR AB (("mental health" OR psych* OR counsel* OR emotional OR stress* OR distress*) N3 (service* OR care OR treatment* OR intervention* OR program* OR resource* OR referral* OR visit* OR support*))	Search modes - Boolean/Phrase	158,043
S11	TI "mental healthcare" OR AB "mental healthcare"	Search modes - Boolean/Phrase	2,307
S12	TI "supportive care" OR AB "supportive care"	Search modes - Boolean/Phrase	7,705
S13	(MH "Psycho-Oncology")	Search modes - Boolean/Phrase	95
S14	TI (psych* N0 oncolog*) OR AB (psych* N0 oncolog*) OR TI psychooncolog* OR AB psychooncolog*	Search modes - Boolean/Phrase	1,259
S15	(MH "Psychiatry") OR (MH "Psychoanalysis") OR (MH "Psychology")	Search modes - Boolean/Phrase	24,622
S16	TI (psychiatr* OR psychotherap*) OR AB (psychiatr* OR psychotherap*)	Search modes - Boolean/Phrase	112,839
S17	(MH "Support, Social+")	Search modes - Boolean/Phrase	103,262
S18	TI ((social* OR communit* OR famil* OR spous* OR friend* OR peer*) N2 (service* OR care OR intervention* OR program* OR resource* OR visit* OR support*)) OR AB ((social* OR communit* OR famil* OR spous* OR friend* OR peer*) N3 (service* OR care OR intervention* OR program* OR resource* OR visit* OR support*))	Search modes - Boolean/Phrase	209,888
S19	(MH "Social Work+")	Search modes - Boolean/Phrase	15,524
S20	TI "social work*" OR AB "social work*"	Search modes - Boolean/Phrase	27,264
S21	(MH "Support Groups")	Search modes - Boolean/Phrase	11,393

S22	TI ("self help" OR "support group*") OR AB ("self help" OR "support group*")	Search modes - Boolean/Phrase	11,177
S23	TI ((survivor* N1 (service* OR care OR plan OR plans OR program* OR resource* OR support*)) AND ("mental health" OR psych* OR emotional OR stress* OR distress*)) OR AB ((survivor* N1 (service* OR care OR plan OR plans OR program* OR resource* OR support*)) AND ("mental health" OR psych* OR emotional OR stress* OR distress*))	Search modes - Boolean/Phrase	1,219
S24	S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23	Search modes - Boolean/Phrase	559,445
S25	(MH "Rural Population") OR (MH "Rural Areas") OR (MH "Rural Health Services") OR (MH "Rural Health") OR (MH "Hospitals, Rural") OR (MH "Rural Health Centers") OR (MH "Rural Health Personnel")	Search modes - Boolean/Phrase	54,081
S26	(MH "Medically Underserved") OR (MH "Medically Underserved Area")	Search modes - Boolean/Phrase	6,591
S27	TI ("medically underserved" OR "medically under served") OR AB ("medically underserved" OR "medically under served")	Search modes - Boolean/Phrase	1,184
S28	TI (rural* OR remote OR regional OR nonurban OR "non urban" OR nonmetropolitan OR "non metropolitan") OR AB (rural* OR remote OR regional OR nonurban OR "non urban" OR nonmetropolitan OR "non metropolitan")	Search modes - Boolean/Phrase	154,302
S29	TI ((isolat* OR underserved OR "under served") N2 (geographic* OR setting* OR communit* OR region* OR area* OR town* OR village*)) OR AB ((isolat* OR underserved OR "under served") N2 (geographic* OR setting* OR communit* OR region* OR area* OR town* OR village*))	Search modes - Boolean/Phrase	5,042
S30	S25 OR S26 OR S27 OR S28 OR S29	Search modes - Boolean/Phrase	175,206
S31	S8 AND S24 AND S30	Search modes - Boolean/Phrase	362
S32	S31 AND PY 2003-2023	Search modes - Boolean/Phrase	342
S33	S32 AND LA English	Search modes - Boolean/Phrase	338

Appendix 2: PRISMA Flow Chart



Appendix 3: Data Extraction Sheet

1	Title, Author, Date	Type & Setting	Type of Mental Health Intervension	Type of Cancer	Barriers to Access	Urban/Rural Divide	Strategies for Improvement
2	From Active Treatment or Surveillance: how the barriers and facilitators of implimenting survivorship care planning could be an opportunity for telehealth in oncology care for rural patients (Alford-Teaster et al. 2023)	Surveys/Interviews, USA	Transitions in care	n/a	-lack of mental health services -infrequent care transitioning back to primary care -lack of education -lack of survivorship care plans -exclusive use of EMR (finding it imperfect, poor technology infrastructures in rural communities) -crowded with irrelevant information	n/a	-appropriately placed telehealth appointments
3	Breast Cancer Survivorship in Rural Settings: a systematic review (Anbari-Brandt, et al. 2020)	Systematic Review, USA	Health promotion, management of long-term effects of cancer treatment	Breast cancer	- transportation -smart devices for communication - education	- distance to treatment facilities - other rural community mem. as support	- more research specifically for rural com. -improvement to survivor services & education -SCP (survivor care plans)
4	The use of formal and informal mental health resources by cancer survivors: differences between rural and nonrural survivors and a preliminary test of the theory of planned behavior (Andrykowski, et al. 2009)	Quantitative Analysis, USA	n/a	Female Breast, colorectal or hematological cancer	-poorer rural availability to resources - long travel to care - unreliable transportation -lower insurance rates - limited finincial resources - social norms	-more anxiety/depression - poorer mental functioning - greater global distress	n/a
5	Cancer survivorship challenges of rural older adults: a qualitative study (Arana-Chicas et al. 2023)	Quantitative Analysis, USA	Survivorship Care Plans	n/a	-communication challenges with healthcare team -lack of awareness of survivorship care plans -transportation challenges (not being able to drive and having to rely on people to take them or not comfortable driving so far from their homes) -financial toxicity	rural = consideration for farming and farm animals -they are generally more older and less educated in rural places -both experience transportation issues but they experience it differently	-referrals to support groups -healthcare worker discussing their survivorship plan with them

1	Title, Author, Date	Type & Setting	Type of Mental Health Intervension	Type of Cancer	Barriers to Access	Urban/Rural Divide	Strategies for Improvement
6	Inovative Cancer Survivorship Services for Rural and Underserved Communities (Argenbright & Berry, 2021)	Description/evauation of program, Texas - USA	community based cancer survivorship program	n/a	-inatiquate health insurance -complexities of healthcare system -access to transportation -other geographical limitations	- safety health net system offered in urban settings but not rural for those with inatequate health insurance	building a cancer survivorship clinic within the cancer hospital
7	Rural Cancer Survivors' Perceptions of a Nurse-Led Telehealth Intervention to Manage Cancer-Related Distress (Bernacchi et al. 2023)	Semi structured qualitative interviews, USA	telehealth	head and neck cancer	-high travel burden (cost of travel, may lack access to transportation -technology barriers for rural patients -self feelings that they aren't "bad enough" to warrent taking services away from other people	-rural has greater levels of cancer related distress (allowed for better referral for needed care i.e. seeing a social worker)	-additional support for rural survivors who experience "limited digital inclusion" -"warm hand off" (connecting patient with social worker or other psychosocial care worker
8	Barriers and facilitators to resilience for rural cancer survivors during COVID-19 (Bernacchi et al. 2023)	descriptive qualitative study, USA	resiliance	n/a	-provider shortages -long travel distances -complicated survivorship care (what is existing isn't necessarily tailored to rural survivors) -rural values (autonomy & Independence) -preference to informal survivor support (faith, community) -covid preventing lower in person contact -need to keep diagnosis and treatment of cancer private	n/a	-interventions targetting resilience & rural context specific -nurses to have list of virtual support groups to share with survivors
9	Rural Resiliance in Cancer Survivors: Conceptual Analysis of a Global Phenomenon (Bernacchi et al. 2021)	Conceptual Analysis, USA	Informal community resources i.e. spirituality, strong community networks,	n/a	- Provider shortages - Local hospital closures - travel times to healthcare facility - lack of insurance -low socioeconomic status -mistrust of healthcare providers	-rural seem to seek support from informal sources i.e. friends/family or community members	Identifying domains where survivors health is either supported or not supported and directing patients to relevant community resources

1	Title, Author, Date	Type & Setting	Type of Mental Health Intervension	Type of Cancer	Barriers to Access	Urban/Rural Divide	Strategies for Improvement
10	The breast cancer experience of rural women: a literature review (Bettencourt et al. 2007)	Literature Review, USA	social support/psychological support services	Breast cancer	-Travel Issues - lack of information about accomodations after traveling for treatment - lack of access to the information needed to access treatment i.e. no rural specific survivorship care info	-rural = more family disruption -different types of treatment due to travel and access to travel/accomodation	-additional research on the topic -being more specific with the research and doing something with the research to make a difference for rural communitites
11	Survivorship Care Plans: rural, low-income, breast cancer survivor perspectives (DeGuzman et al. 2017)	longitudanal Qualitative Analysis, USA	post-treatment on-medical survivorship care planning	Breast cancer	-lack of finances to access -no knowledge of survivorship care support or programs	-stacking of apts to save from going back and forth into the city - stacking often prioritizes medical treatment/follow up and less on supportive care services	individualized survivorship support that is financially and geographically accessible - survivorship isn't a one-size fits all
12	Self Reliance, Social Norms, and self-stigma as barriers to psychosocial help-seaking among rural cancer survivors with cancer related distress (DeGuzman et al. 2022)	Qualitative interview study, USA	psychosocial support	Head and neck	- distance from care -not an accepted social norm to talk to a psychologist -community and self stigma -self reliance -minimization -preference for informal support	-rural = poorer health and psychological distress -rural relies more on community support	more research with larger sample sizes to further explore barriers to intake uptake for physchological care for survivors
13	Treatment Related Needs of Statewide Cancer Survivors (Ficek et al. 2010)	Cross Sectioal Survey, USA	health promotion, practical/personal, psychosocial, spiritual, & emotional needs, information, care & support, access to care needs	n/a	-not getting desired treatment due to insurance issues -distance to travel -cost of travel and overnight stay	rural = more likely to have greater poverty -older populations -lack of privacy/isolations -service access issues	incorportating counselling or support services for suvivor care -recommendation for future studies to look at how the needs of survivors change from year to year
14	A randomised controlled trial to improve the resilience of oesophageal cancer survivors in rural China: A study protocol (Ge et al. 2023)	Control Group, China	-Resiliance with and overcoming cancer -Positive psychology	Esophageal Cancer	-inconvenient transportation -not as many options for support care	rural = lacking in staff and experience in rural hospitals compared to urban	-Family support

1	Title, Author, Date	Type & Setting	Type of Mental Health Intervension	Type of Cancer	Barriers to Access	Urban/Rural Divide	Strategies for Improvement
15	What are the post-treatment information needs of rural cancer survivors in Australia? A systematic literature review (Goodwin et al. 2023)	literature Review, Australia	Post treatment unmet needs	n/a	-lack of clear post-cancer treatment pathways -limited local healthcare and support people -no information about support workers -geographic isolation	rural = more hospitalizations and pschological distress -rural survivors require a higher degree of self committment because not everything is readily accessible to them	-written care plans -'hub' for survivorship information -telehealth services (but providing better internet services in rural communities for this to work) -healthcare workers to provide up-to-date referrals -alternative models of survivorship care
16	Psychosocial Needs of Rural Survivors of Cancer and Their Partners (Glasser et al. 2013)	Qualitiative Survey Study, USA	n/a	n/a	-accessibility -survivors not knowing what is available to them -lack of information in maintaining a healthy lifestyle	-lower health outcomes -shortage of primary physicians and cancer specialists in rural communities -lack of insurance for rural patients -rural survivors face higher levels of psychological distress	-further research on the commorbidities associated with being a rural cancer survivor -developing a model to transition from active treatment to recovery -having someone as a "navigator" to assist cancer survivors in what options are out there for them for post-cancer treatment
17	Improving Survivors' Quality of Life Post Treatment: The Perspectives of Rural Australian Cancer Survivors and Their Carers (Gunn et al. 2021)	Qualitative Interview study, Australia	telephone/internet support	Non-melanocytic skin cancer	-in-person programs so harder for rural survivors to attened -lacking a post-treatment plan and information of what is out there for them -limited scope of what is available rurally -lack of availability to services -requires too much time away from home to travel to urban cancer centres -financial costs	-lack of continuity in rural healthcare practitioners -lack of confidence in rural healthcare -rural care/support after cancer is often provided by family and friends because of the barriers to access	-survivorship care plans -addressing rural health workforce shortages -reaching out directly to survivors instead of waiting for them to reach out for support -

1	Title, Author, Date	Type & Setting	Type of Mental Health Intervension	Type of Cancer	Barriers to Access	Urban/Rural Divide	Strategies for Improvement
18	"Just give it to us straight!": a qualitative analysis of midwestern rural lung cancer survivors and caregivers about survivorship care experiences (Keimweiss et al. 2023)	Semi-structured interviews, USA	survivorship care management	Lung cancer	-socio-demographic factors (poverty, neighborhood level deprivation, high financial burden) -barriers are individual and community level -transportation burden -financial burden -limited survivorship information -poor care coordination -treatment related side-effects not allowing people to get to appointments	rural has a median survival of 12 months less than urban for lung cancer survivors -rural = 78% more likely to miss an apt than urban survivors	-elimination of geographic level disparities -multidisciplinary survivor care teams -practice training and policy reform for rural cancer survivors because survivor care isn't one size fits all -clearly communicated recommendations and care information - provided in person and written down -
19	Understanding the 'work' of transitional cancer survivorship: Case studies of rural older adults and their support persons (Klimmek et al. 2013)	dissertation, USA	n/a	breast and prostate cancer	-travel difficulties (travel time) -rural poverty that may cause greater fincancial stress -limits of treatment due to time and money -difficulty communicating with medical professionals -distrust in medical professionals -power differences between provider and patient	n/a	-survivorship care plans (collaborative goal setting between patient and and health care provider) -policy makers looking into alternative modes of transportation
20	Feaseability of synchronous online focus groups of Rural Breast Cancer Survivors on Web-based Distress Self-Management (Lally et al. 2018)	Qualitative online focus groups, America	CaringGuidence Online Focus Groups for psychoeducation	Breast cancer	-long distances to travel -Stigma	-longer commute for care = more depressive symptoms	n/a
21	Post Traumatic Growth in Breast Cancer Survivors: sources of support in rural and non rural areas (LeBarre & Riding-Malon 2017)	Literature Review, USA	Social, Psychological and Spiritual Support	Breast cancer	-lack of providers -limited health coverage -few options for transportation -long distances to travel -many health services being unaffordable -rural regions don't attract specialized levels of care	-rural = indimate sense of community/extended networks as well as stigma and lack of privacy compared to urban -rural reports lower levels of health compared to urban	-further research on online support for rural communites -develope support specific to rural cancer survivors because the literature shows there is a difference in need/access -educating mental health/health providers on the impacts of cancer and what to look out for during and after treatment

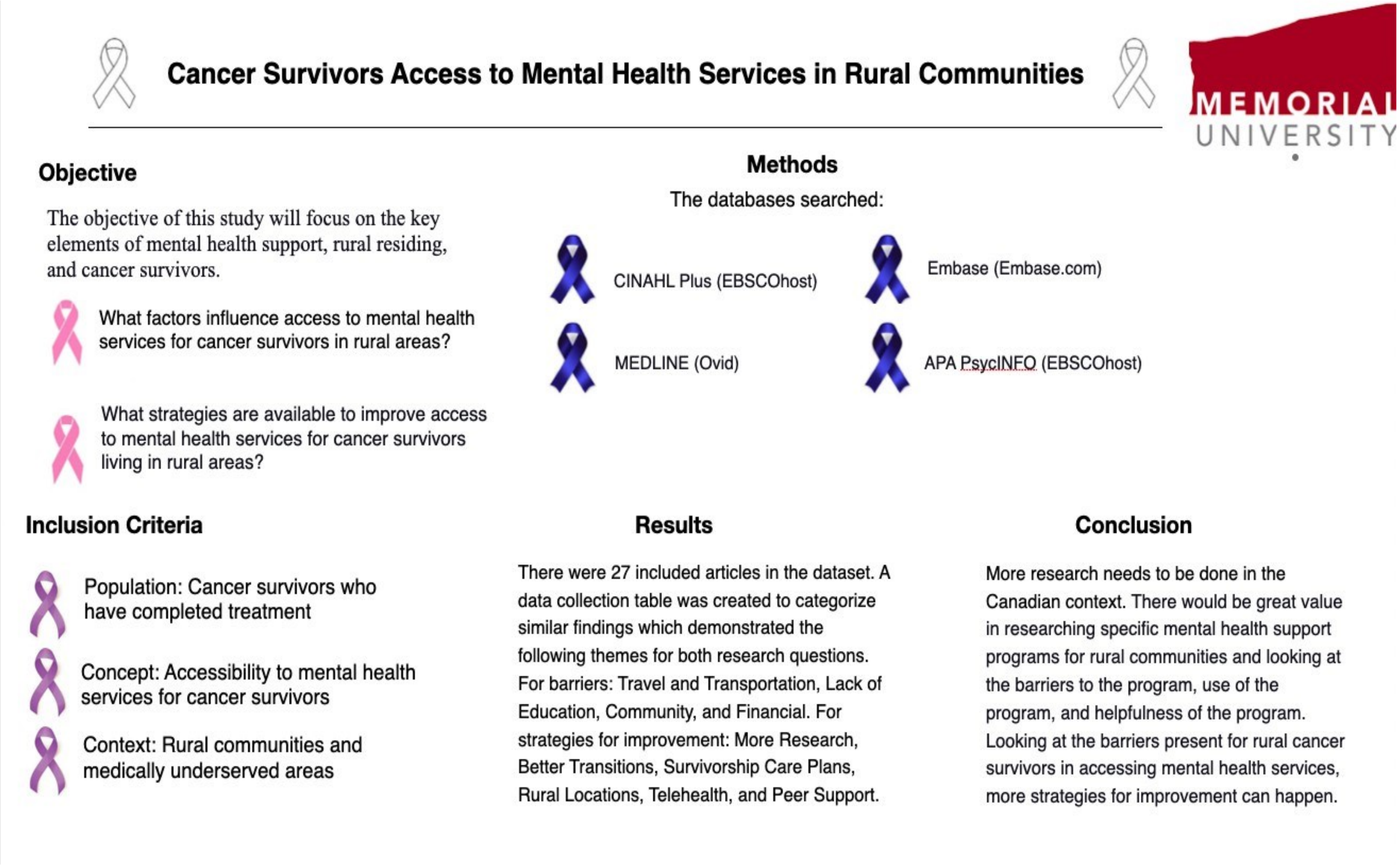
1	Title, Author, Date	Type & Setting	Type of Mental Health Intervension	Type of Cancer	Barriers to Access	Urban/Rural Divide	Strategies for Improvement
22	A telephone-based education and support intervention for Rural Breast Cancer Survivors: a randomized control trial comparing two implimentation strategies in rural Florida (Meneses et al. 2020)	Randomized Clinical Trial, USA	Evidence based educational and support intervention	Breast cancer	-Geographic isolation -difficulty traveling to care	-rural residing americans reported lowing QOL, mental health outcomes, and access to health lifestyle choices compared to urban	-telephone support and other tele-health interventions
23	Cancer Survivors Living in Rural Settings: A Qualitative Exploration of Concerns, Positive Experiences and Suggestions for Improvements in Survivorship Care (Nicoll 2023)	Qualitative Descriptive Analysis,Toronto, Canada	n/a	breast, prostate, colorectal, and melanoma	-burden to travel -travel costs -lack of cancer related services information -lack of personal privacy in small communities -self-suffient lifestyle -lack of convenient public transit -	n/a	-communication and information -peer and group support -financial aid -return to work support
24	Meeting the needs of breast cancer survivors in Alaska: Survivors' and healthcare providers' perspectives (Parret 2012)	Dissertation (mixed methods), Alaska USA	n/a	Female breast cancer	-difficulty travelling long distances -travelling is expensive and sometimes hazardous due to the weather conditions -not being told what is available or where to get the information -cultural barriers -financial strains (cost of fuel) -travel unpredictable from rural places -fear of the "big city"	-urban survivors offered different treatment options than rural -rural can't continue to hunt for their food when they have tp travel for care	-need for more support services -support groups -survivor dinners (survivors being honored by their community once a year)
25	Returning Home: psychosocial care during the re-entry phase of cancer survivorship in rural Australia (Pascal et al. 2015)	Qualitative Interview Study, Australia	Formal psychosocial care	n/a	-geographic isolation -lack of availability to treatment services -inadequate transportation -lower socioeconomic status -lack of information -concern for privacy -lack of referrals -feeling like someone worse than them needed the treatment more	-rural = lower cancer survivor rates	-government funded facilities for cancer survivors to be present in rural communities -having cancer survivors as active members in planning/designing/evaluating rural care

1	Title, Author, Date	Type & Setting	Type of Mental Health Intervension	Type of Cancer	Barriers to Access	Urban/Rural Divide	Strategies for Improvement
26	Perspectives on Virtual Care for Childhood Cancer Supervisors in Non-Metropolitan Areas during the COVID-19 Pandemic (Phalen et al. 2023)	Literature Review, USA	Tele-Health	childhood cancer	-distance from treatment facility (people needing to miss school or work to go for appointments) -financial difficulties for cost of apppointments and cost of travel -there are still barriers to virtual care (costs, internet, no physical examinations)	n/a	Tele-health for survivorship care -virtual care platforms where providers can share notes and collaborate -support groups and online communities -
27	A systematic Review of behavioural interventions for rural breast cancer survivors (Ratcliff et al. 2021)	Systematic Review, USA	education intervention studies & Psychosocial support intervention studies	Breast cancer	-greater financial strain -long travel distances -lack of referrals to MH services	-rural = poorer mental health, poorer quality of life, and greater stigma associated with diagnosis	-telephone/video support to help with barriers to access -cancer support groups -considering non-traditional providers for support -increased knowledge of medical systems -future research with rural survivors to get their perspectives and insights
28	A qualitative study of childhood cancer families' post-treatment needs and the impact of a community-based organization in a rural, socioeconomically disadvantaged majority Hispanic/Latino region (Smith et al. 2023)	Qualitative (semi-structured interview)USA	guideline-concordant survivorship care	childhood cancer	-health professional shortage area -Low insurance areas -Hospitals not providing information -resource limitations	Lack of insurance or low income and living far from specialized clinics	-Community based organizations (connecting families to resources, community liaison -changing the narrative of survivor (so families don't feel they are taking resources away from other people)

Appendix 4: Characteristics of Included Articles

Country	America = 22	Australia = 3	Canada = 1	China = 1
Year	2007-2010 = 3	2011-2014 = 3	2015-2019 = 4	2020-2023 = 17
Study Type	Qualitative = 13	Mixed Methods = 8	Quantitative = 2	Literature Review = 4
Cancer Type	Breast = 8	Childhood = 2	Head/Neck = 2	Mixed = 6

Appendix 5: Knowledge Translation Plan



Cancer Survivors Access to Mental Health Services in Rural Communities

MEMORIAL UNIVERSITY

Objective

The objective of this study will focus on the key elements of mental health support, rural residing, and cancer survivors.

- What factors influence access to mental health services for cancer survivors in rural areas?
- What strategies are available to improve access to mental health services for cancer survivors living in rural areas?

Methods

The databases searched:

- CINAHL Plus (EBSCOhost)
- Embase (Embase.com)
- MEDLINE (Ovid)
- APA PsycINFO (EBSCOhost)

Inclusion Criteria

- Population: Cancer survivors who have completed treatment
- Concept: Accessibility to mental health services for cancer survivors
- Context: Rural communities and medically underserved areas

Results

There were 27 included articles in the dataset. A data collection table was created to categorize similar findings which demonstrated the following themes for both research questions. For barriers: Travel and Transportation, Lack of Education, Community, and Financial. For strategies for improvement: More Research, Better Transitions, Survivorship Care Plans, Rural Locations, Telehealth, and Peer Support.

Conclusion

More research needs to be done in the Canadian context. There would be great value in researching specific mental health support programs for rural communities and looking at the barriers to the program, use of the program, and helpfulness of the program. Looking at the barriers present for rural cancer survivors in accessing mental health services, more strategies for improvement can happen.