



Faculty of Cognitive Sciences and Human Development

**PSYCHOLOGICAL WELL-BEING OF BREAST CANCER SURVIVORS
AMONG UNIVERSITY STUDENTS**

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Bachelor in Psychology (Honours)

2024

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UNIVERSITY STUDENTS**

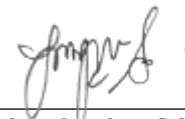
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This project is submitted
in partial fulfilment of the requirements for a
Bachelor in Psychology with Honours

Faculty of Cognitive Sciences and Human Development
UNIVERSITI MALAYSIA SARAWAK
(2024)

The project entitled 'Psychological Well-Being of Breast Cancer Survivor Among University Students' was prepared by Farah Damia binti Mohd Zulkifli, 77973, and submitted to the Faculty of Cognitive Sciences and Human Development in partial fulfillment of the requirements for a Bachelor in Psychology with Honours

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Date:

10th July 2024

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ACKNOWLEDGEMENT

First and foremost, I would like to express my deepest gratitude to Allah Almighty for the abundant grace, guidance, and wisdom bestowed upon me throughout the course of this research. Without His blessings, none of this would have been possible.

I extend my heartfelt appreciation to my supervisor, Dr. Jamayah Saili, for her unwavering support, patience, and motivation. Her extensive knowledge and invaluable guidance have been instrumental in the completion of my research and thesis. I am profoundly grateful for her continuous encouragement and insightful advice.

I also want to dedicate this work to the most special person in my life, my late mother, Norasyikin binti Ibrahim, who passed away on January 26, 2023, after battling breast cancer. Her passing inspired me to persevere and conduct this study to help others facing similar struggles. May her soul rest in peace and be blessed by Allah. A special note of gratitude goes to my father, Mohd Zulkifli bin Harun, whose unwavering support and encouragement have been a cornerstone of my life. He is a father figure I deeply admire. Additionally, I want to thank my beloved siblings, Muhammad Haikal Hariz and Salma Maisarah, who have been my strongest support system throughout this journey.

I am profoundly thankful to my fellow friends who share the same supervisor as me for their incredible generosity in sharing their insights on our Final Year Project. Their willingness to listen and discuss our mutual struggles has been invaluable throughout this journey. I cannot express enough gratitude for their kindness. I would also like to extend my heartfelt appreciation to my dearest friends, Raja Nur Batriesya, Nurul Izzaty, and Nur Pasihah. Their unwavering support, understanding, and companionship have been indispensable. Their friendship has given me strength and motivation, and I am deeply grateful for having them in my life. To all these remarkable individuals, I owe my deepest thanks and appreciation. Their love, encouragement, and guidance have been pivotal in my academic and personal growth.

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ABSTRACT

The psychological well-being of breast cancer survivors, particularly among university students, is an area that warrants significant attention due to the unique challenges faced by this demographic. This research explores the intricate experiences of young female university students in Malaysia who have survived breast cancer, aiming to understand how they balance their academic responsibilities with their health struggles. Through a comprehensive qualitative study, employing semi-structured interviews, this research delves into the emotional and psychological impacts of breast cancer diagnosis, treatment, and recovery among six university students. The study identifies key themes such as initial diagnosis, treatment and recovery, emotional responses, accessible support systems, and self-coping mechanisms. By examining these aspects, the research provides valuable insights into the coping strategies and support networks that enhance the psychological well-being of breast cancer survivors in an academic setting. The findings underscore the importance of tailored support structures and interventions to address the specific needs of this vulnerable group, advocating for a more inclusive and supportive university environment.

Keywords: Breast Cancer Survivors, Psychological Well-being, University Students, Coping Mechanisms, Support Systems.

ABSTRAK

Kesejahteraan psikologi pesakit kanser payudara yang terselamat, terutama dalam kalangan pelajar universiti, adalah satu bidang yang memerlukan perhatian yang signifikan kerana cabaran unik yang dihadapi oleh demografik ini. Penyelidikan ini meneroka pengalaman mendalam pelajar universiti wanita muda di Malaysia yang telah terselamat daripada kanser payudara, bertujuan untuk memahami bagaimana mereka mengimbangi tanggungjawab akademik mereka dengan perjuangan kesihatan mereka. Melalui kajian kualitatif yang komprehensif, menggunakan temubual separa berstruktur, penyelidikan ini mengkaji impak emosi dan psikologi diagnosis kanser payudara, rawatan, dan pemulihan dalam kalangan enam orang pelajar universiti. Kajian ini mengenal pasti tema utama seperti diagnosis awal, rawatan dan pemulihan, tindak balas emosi, sistem sokongan yang boleh diakses, dan mekanisme penyesuaian diri. Dengan meneliti aspek-aspek ini, penyelidikan ini memberikan pandangan berharga tentang strategi penyesuaian dan rangkaian sokongan yang meningkatkan kesejahteraan psikologi pesakit kanser payudara yang terselamat dalam persekitaran akademik. Penemuan ini menekankan pentingnya struktur sokongan dan intervensi yang disesuaikan untuk memenuhi keperluan spesifik kumpulan yang rentan ini, serta mengadvokasi persekitaran universiti yang lebih inklusif dan menyokong.

Kata Kunci: Pesakit Kanser Payudara, Kesejahteraan Psikologi, Pelajar Universiti, Mekanisme Penyesuaian Diri, Sistem Sokongan.

CHAPTER ONE

INTRODUCTION

1.0 Overview

This chapter briefly explore the experiences, challenges and particular difficulties the majority of breast cancer survivors confront, particularly while balancing their lives as university students. Intended to help readers comprehend the influences on psychological well-being following a breast cancer diagnosis and course of treatment. It consists of background of study, statements of the problems, research objectives, theoretical framework, significance of the study, definition of terms, and limitations of the study.

1.2 Background of the study

Psychological well-being is a fundamental aspect of mental health (Tang, 2019), which may be described as an individual's capacity for the presence of pleasant feelings or the lack of negative ones. Even if the discomfort might be hard for the unaided eye to notice, it is crucial that everyone take care of it to keep the body functioning properly. This is due to the fact that our behavior and all health levels are closely correlated with our psychological well-being. Higher psychological well-being seems to be proven to result in longer and healthier lifespans, according to studies (Morin, 2022). Conversely, a lack of psychological well-being may lead to a number of mental health issues, including anxiety, depression, and even more. Exploring life as a university student, stepping into university life is indeed a significant transition from adolescence to adulthood. It denotes a time of growing individualism, accountability, and self-awareness. Being a student at a university may be an amazing and life-changing experience. However, due to academic demands, social pressures, and the adjustment to a more autonomous lifestyle, sustaining psychological well-being as a university student can be tough.

Not only are students often overburdened with obligations, but they also occasionally overlook their own health. The majority of participants (98.0%) of 245 female students at the International Islamic University of Malaysia (IIUM) Kuantan Campus, according to the findings of a survey conducted by Azlan et al. in 2022, have a high level of knowledge about the risk factors, and symptoms of breast cancer, and breast self-examination (BSE). Nevertheless, the findings also revealed that 31.0% of the individuals had never engaged in BSE. The majority of them stated that ignorance, forgetfulness, and carelessness were the main reasons they weren't implementing BSE. A little over 36.3% of interviewees said they were unaware of the BSE procedure. This shows that while there's a commendable level of awareness regarding breast cancer among female students at IIUM Kuantan Campus, there's a significant gap between knowledge and action.

The challenges faced by university students, particularly females, and the increasing incidence of breast cancer in Malaysia are two critical issues that deserve the researcher's attention. The transition from the structured environment of school to the uncharted territory of university life is a pivotal moment in a young person's journey to adulthood. It's a time characterized by a surge in responsibilities, academic pressures, financial constraints, and the need to establish oneself in a new and unfamiliar environment. As highlighted by a study conducted by Asif et al. (2020), the prevalence of mental health issues among university students is deeply concerning. A substantial proportion of these students, report experiencing depression, anxiety, and stress. The burden of academic commitments, coupled with the demands of growing up, often becomes the primary source of stress for many students. This stress can manifest in various ways, potentially leading to a decline in academic performance and, more importantly, taking a toll on their psychological well-being. Therefore, through this study, the researcher would like to understand and deepen the intersection of these pressing

issues by exploring the challenges faced by female university students in Malaysia who are also dealing with post breast cancer diagnosis.

While these struggles are prevalent among university students, the researcher's attention is also diverting special attention to the psychological well-being of young female students who are facing a different, life-altering challenge: breast cancer. The statistics for breast cancer in Malaysia are alarming. In 2018, over 7,500 women in the country were diagnosed with breast cancer, and nearly 3,000 lost their lives to this disease (Tan et al., 2021). The latest report from the Malaysian National Cancer Registry Department indicates a consistent increase in the incidence of breast cancer over the years.

Breast cancer is a nightmare for many women because it is often associated with the fear of death. However, it is essential to remember that the outcomes of breast cancer can vary significantly. Factors such as early detection, the stage at which the cancer is diagnosed, and the treatment received all play a crucial role in determining a patient's prognosis. Notably, one in every 19 women in Malaysia is considered to be at high risk of breast cancer (Tan et al., 2023), underscoring the urgency of awareness and early detection. As we reflect on the prevalence of breast cancer and the challenges faced by university students, especially young females, the increasing number of breast cancer survivors also needs to be recognized. These survivors not only conquer the physical battle against the disease but also navigate a complex psychological journey. Coping with a cancer diagnosis, enduring the rigors of treatment, and confronting the uncertainty of the future can be emotionally taxing.

The challenges of university life and the prevalence of breast cancer among young women in Malaysia are two profound issues that need to be prioritized. It's essential to address

mental health concerns among university students and promote awareness, early detection, and support for those affected by breast cancer. These challenges highlight the strength, resilience, and determination of individuals in the face of adversity, reminding us of the need for a compassionate and supportive society.

Undoubtedly, for several people, receiving a cancer diagnosis and treatment may be quite distressing and upsetting (Wong et al., 2021). Cancer has a significant negative effect on a person's physical and mental health, and both patients and their loved ones may face overwhelming symptoms. Patients' individual experiences with cancer are greatly influenced by their psychological health. Yet, despite the advancements in breast cancer therapies and findings, psychological care and emotional support for cancer patients have received less attention. Hence, this study attempts to explore and unravel the challenge faced by breast cancer survivors among female university students in maintaining a balance between their psychological well-being and their academic pursuits. Apart from that, the goal of this study is to breach the knowledge gap in the literature on this topic as well.

The researchers will not concentrate on a single university, but rather on Malaysian university students, as there aren't many instances of breast cancer survivors in higher education. The researcher in this study will examine the psychological well-being of female university students aged between 18 and 30 years. The potential participants that will be involved in this study will also be drawn from various backgrounds.

The correlation between mental health and academic performance among university students is well-documented (Chu et al., 2023). However, scant research specifically delves into the psychological well-being of breast cancer survivors within the university student

population in Malaysia. This research gap underscores the significance of this study in unraveling the nuanced interplay between psychological well-being, academic pursuits, and the unique challenges faced by breast cancer survivors in this demographic. By bridging this void, the researcher aims to shed light on how the psychological impact of breast cancer influences not only personal lives but also academic trajectories, thereby advocating for more comprehensive support structures tailored to these individuals' needs.

1.3 Statement of the Problems

Over the past several decades, there has been a dramatic increase in university students' interest in mental health and wellbeing (Hernández-Torrano et al., 2020) as there is an increasing concern about university students' mental health globally (Siddique et al., 2022). The majority of them are quantitatively researched, and most of them aim to forecast psychological well-being on average rather than delving deeper and comprehending the fundamental mechanisms causing the problem. The results of a quantitative study by Quiquiles & Medez (2022) showed there is a typically strong correlation between the psychological health and quality of life of breast cancer survivors. According to the findings, there is a substantial correlation between psychological well-being and quality of life; in other words, those who have extremely high psychological well-being also have outstanding quality of life.

Besides, breast cancer diagnosis and treatment represent a life-altering event, and understanding the long-term emotional and mental health experiences of university students who have survived breast cancer. Studies pertaining to the psychological health of individuals who have survived breast cancer, especially among university students are crucial because they can provide light on the potential long-term emotional, mental health difficulties, addressing the unique needs and challenges faced by these specific groups. Though research on

psychological well-being of breast cancer survivors, its treatment and awareness in general has expanded, however, relatively limited research has been done on the psychological well-being of breast cancer survivors among university students particularly in Malaysia.

Seeking the right balance between academic obligations and health concerns is one of the biggest obstacles for breast cancer survivors among university students. Treatment for breast cancer can be emotionally and physically stressful and may involve hormone therapy, radiation, chemotherapy, and surgery. It may be rather demanding to keep up with homework and assignments while managing the side effects, exhaustion, and discomfort. An additional source of tension and anxiety is the worry that one would fall behind in their studies or not graduate on time. The researcher focuses on all of these components to fill in the gaps and lessen the shortage of available literature on this topic.

1.4 Research Objectives

1.4.1 General Objective

To explore the experience of breast cancer survivors among university students.

1.4.2 Specific Objectives

1. To discover the meaning of being a student living with cancer.
2. To explore the challenges faced by university students having breast cancer.
3. To determine the coping strategies and network of support that improves the psychological well-being of breast cancer survivors among university students.

1.5 Research Questions

1. What is the meaning of being a student living with cancer?
2. How does a person with breast cancer face the challenges of life as a university student?
3. What are the coping strategies and resilience mechanisms should the breast cancer survivors employ to maintain their mental health?

1.6 Theoretical Framework

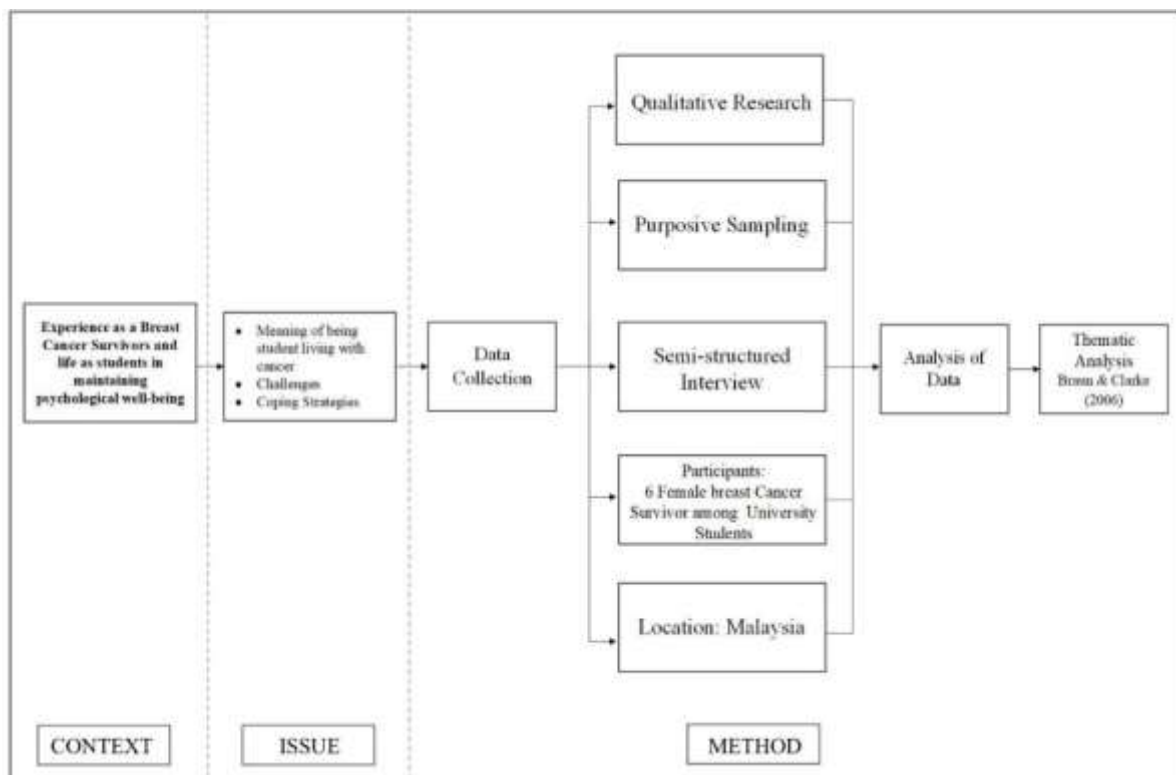


Figure 1: Theoretical Framework on Psychological Well-being of Breast Cancer Survivors

1.7 Significance of the study

The study focusing on breast cancer survivors who are university students holds immense potential to offer insight on their experiences, coping strategies, and support networks. This research endeavor has the potential to bring forth valuable insights that can

benefit not only the survivors themselves but also other university students facing similar challenges, as well as the individuals and institutions that aim to provide support.

Understanding how breast cancer survivors manage their lives as university students while maintaining their psychological well-being is of paramount importance. Individuals in this category frequently find themselves juggling the demands of their studies, the psychological and physical side effects of cancer treatment, and the significant life adjustments that accompany receiving a cancer diagnosis. The insights gained from this study can offer guidance and inspiration to others who are navigating the same tough path. By sharing their experiences, survivors can serve as role models, demonstrating that it is possible to overcome adversity, continue their education, and preserve their mental and emotional health.

Furthermore, this research unravels the most effective coping strategies and support networks employed by breast cancer survivors among university students. These insights can be invaluable for these survivors in enhancing their resilience and emotional well-being. It also provides guidance to university healthcare professionals on the types of support services and interventions that can be most beneficial.

Equally important is the potential for this study to educate and inform the people surrounding breast cancer survivors. By recognizing the unique challenges faced by these individuals, friends, family members, and peers can better understand the importance of encouragement and support. They can gain insights into how to provide effective emotional support and be there for these students during their educational journey.

In a broader societal context, research that highlights the experiences of breast cancer survivors among university students can contribute to the ongoing conversation about the

importance of mental health in educational institutions. Its prompt universities and colleges to further invest in support services and accommodations tailored to the specific needs of these students. Moreover, it reinforces the idea that individuals facing adversity can not only survive but also thrive, provided they have the right assistance as they need it. The study empowers both survivors and the individuals around them to advocate for mental health and well-being and serve as a reminder of the remarkable resilience of the human spirit.

1.8 Definition of Terms

1.8.1 Psychological Well-being

Conceptual Definition:

Psychological well-being is a fundamental feature of mental health. Robertson (2023) notes that the word psychological well-being (PWB) bears a lot of similarities to other terminologies used to describe any pleasant mental state, including happiness. It is separated into two key areas. The first relates to how much happiness and good emotions people experience. However, subjective well-being is also frequently understood to refer to psychological well-being. It refers to how someone perceives and assesses a certain life event that takes place in their lifetime.

Operational Definition:

In this study, psychological well-being is described as the difficulty of a breast cancer survivor's journey in dealing with her role as a female university student. It also covers how they balance their psychological well-being while maintaining academic success.

1.8.2 Breast Cancer Survivors

Conceptual Definition:

A person who has completely recovered from all indications of breast cancer and undergone the necessary therapy is considered a survivor of breast cancer. Breast cancer survivorship, on the other hand, describes how an individual deals with their experiences and obstacles in life adhering to a diagnosis of breast cancer.

Operational Definition:

In the context of this study, breast cancer survivors are considered as female university students who are currently pursuing their studies (applicable only for: Diploma, Undergraduates, Post-graduates' and PhD students) have been diagnosed with breast cancer and completely recovered from it.

1.9 Limitations of the study

However, there are a few limitations that the researcher would like to point out, the primary limitation is the small sample size. With only six participants, the study's findings are based on a very limited number of individuals. This small sample size may not accurately represent the diversity of experiences among breast cancer survivors at Malaysian universities. People's experiences with breast cancer can vary significantly based on factors such as the stage of the disease, the type of treatment received, and personal circumstances. As a result, the findings could not be generalizable to the entire population of breast cancer survivors at universities in Malaysia.

Moreover, bias have entered the study due to the participant selection process, which was based on certain characteristics. These variables may have an impact on the kinds of difficulties and symptoms that participants describe. Hence, not all breast cancer survivors may benefit from the study's conclusions, particularly if they differ from those who were selected in terms of traits or life events.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

In this chapter, delving into an analysis of the existing literature concerning breast cancer survivorship among Malaysian university students. This chapter explores topics such as their mental and emotional health, the prevalence of cancer across different cultures in Malaysia, the challenges faced by university students who are breast cancer survivors, the crucial importance of support networks for these survivors, coping strategies they employ, as well as relevant theories or models associated with this context.

2.1 Psychological Well-being of University Students

The intersection of breast cancer survivorship and university life indeed presents a distinct set of challenges, particularly impacting emotional well-being and overall quality of life for those affected. According to Bowen et al. (2021), breast cancer survivors, especially university students, often contend with heightened emotional distress and a compromised quality of life due to the unique stressors they encounter. Hence, comprehending the concept of psychological well-being can deepen insights into the challenges these individuals experience.

Psychological well-being encapsulates a blend of positive conditions across various life aspects, spanning physical and spiritual happiness alongside optimal functioning (Gao & McLellan, 2018). It encompasses an individual's capacity to navigate life and its engagements effectively (Shahira et al., 2018). Within this construct, psychological well-being acknowledges the presence of negative emotions like disappointment, failure, and loss, recognizing these as inherent facets of life, in addition to positive sentiments. Hence, sustained

well-being hinges on one's capability to manage and regulate adverse emotions over time (Shahira et al., 2018).

According to Shahira, et al. (2018), psychological well-being, particularly among university students, is indeed influenced by a multitude of factors, including academic pressures that stem from demanding coursework and the pursuit of excellence. This environment often fosters stress and, in some cases, perfectionism, which can significantly impact mental health. However, positive emotional and social support structures play a crucial role in mitigating these stressors and strengthening psychological well-being. Thus, students who receive adequate emotional and social support tend to exhibit higher psychological well-being (McLean et al., 2023). When individuals feel supported and connected, they often experience greater satisfaction in their personal and professional lives. This support helps them navigate academic challenges more effectively and cope with stress, contributing to a happier and more fulfilling life overall (McLean et al., 2023).

Social adjustments represent another critical facet. For many students, university marks a transitional phase where they grapple with newfound independence, away from familiar support networks. Adapting to diverse social settings, building new friendships, and managing conflicts or feelings of isolation add layers of stress that can affect their psychological well-being (Kayani et al., 2023). Additionally, the pressure to conform to social norms and expectations further complicates this adjustment process (Kayani et al, 2023).

Navigating financial responsibilities can pose significant challenges for students transitioning into independence, especially when juggling tuition fees and living expenses. While certain students secure aid through scholarships or bursaries, others rely on loans or part-

time jobs to cover their costs. However, these financial demands can intersect with academic pursuits, impacting both the quality of education and the well-being of students. Mofatteh (2020) argues that managing expenses among the majority of students involves getting part-time employment, but this often leads to a delicate balancing act between work and academics. The time allocated to work might impede their ability to fully engage in their studies, affecting their educational experience and potentially adding to their mental health burdens. Furthermore, the pressure to meet financial obligations can amplify stress and strain, potentially undermining the overall well-being of students (Mofatteh, 2020). The need to repay loans or support families financially can create an additional layer of pressure, impacting their capacity to focus on their studies and leading to potential mental health challenges.

Students often bear the burden of personal expectations, stemming from an internal desire to succeed as well as external pressure from society and family. Hassel and Ridout (2018) suggest these self-imposed standards, coupled with societal and family expectations to excel academically and socially, create a constant state of pressure and stress. An inner drive for personal achievement often compels students to set high standards for themselves across many aspects of life. At the same time, external influences, such as societal norms and family aspirations, add to this burden, creating a complex network of expectations that students feel obligated to meet (Hassel & Ridout, 2018).

As a result, this merging of internal and external expectations puts students under constant pressure (Hassel & Ridout, 2018), as they struggle with the pressure to meet these high standards. The constant pursuit of academic, social, and personal success can create stress, anxiety, and mental exhaustion as students strive to meet these multifaceted expectations.

2.1.1 Gender Differences

In the context of the study, recognizing the gender differences becomes crucial in comprehending the unique challenges and experiences faced by female breast cancer survivors within the university setting. Studies suggest that women, in general, tend to navigate emotional experiences differently (Agustí et al., 2022), often reporting more intense emotional expressions and stronger positive relations with others. These factors might significantly influence how female survivors cope with and adapt to the challenges of university life post-breast cancer diagnosis.

Gender differences in psychological well-being have been a subject of extensive research, although the findings have often been inconsistent and nuanced. While some studies reveal minimal disparities between men and women in overall psychological well-being (Gómez-Baya, 2018), other dimensions of emotional experiences and social relations do exhibit notable variations.

One common observation is that women tend to report experiencing both positive and negative emotions more frequently and intensely than men (Matud et al., 2019). This difference in emotional expression does not necessarily indicate a lower well-being for either gender but highlights distinct patterns in how emotions are perceived, expressed, and managed. Positive relations with others have consistently emerged as an area where women tend to score higher. This could be attributed to societal expectations emphasizing women's roles in nurturing relationships, leading to stronger social connections and support systems among women compared to men (Matud et al., 2019).

However, women often score lower than men in certain dimensions of psychological well-being such as self-acceptance and autonomy. These differences may be influenced by cultural and societal norms that shape gender roles (Matud et al., 2019). Societies that place more emphasis on individualism and independence may inadvertently encourage men to prioritize and develop a stronger sense of autonomy, while women may face expectations that lean more towards interdependence and self-sacrifice.

Age is another factor influencing gender disparities in psychological well-being. Some differences across women and men, particularly in autonomy, might appear predominantly in specific life stages (Matud et al., 2019). Besides, cultural and societal contexts also play a pivotal role in shaping gender differences in psychological well-being. Norms, values, and expectations regarding gender roles vary across cultures, leading to differences in how men and women perceive and experience well-being (Matud et al., 2019).

In essence, societal norms, cultural expectations, age, and individual experiences collectively influence the complex interplay of factors that impact identified gender differences in psychological well-being. Understanding these nuances is crucial in recognizing and addressing the diverse needs and experiences of individuals across different genders when it comes to fostering psychological well-being. This study will look into the complex intersection of psychological well-being and the experiences of female breast cancer survivors in a university setting. By recognizing the influence of various aspects of societal norms, cultural expectations, age, and individual experiences on gender differences in psychological well-being, this study aims to unravel the different challenges and needs faced by these individuals.

2.2 Cancer Prevalence in Malaysia

Breast cancer ranks as the second most prevalent cancer globally and holds the top spot as the most frequently diagnosed cancer among women in numerous regions. Approximately 2.1 million new cases of breast cancer were reported in 2018, marking it as the fifth most fatal cancer, causing an estimated 627,000 deaths (Yusoff et al., 2022). Within Malaysia, breast cancer rates are rising steadily and persist as the most prevalent cancer among women in the country.

The intricate fabric of Malaysia's diverse ethnic groups, primarily Malay, Chinese, and Indian, exerts a profound influence on lifestyle choices and habits within each community (Yusof & Ishak, 2022). These cultural nuances significantly impact various factors like hygiene practices, dietary habits, tobacco and alcohol use, as well as exposure to different environmental elements. These lifestyle elements are closely linked to cancer development and play a pivotal role in shaping each community's perspective towards cancer and its treatment (Yusof & Ishak, 2022).

When delving into the specific context of breast cancer cases in Malaysia, these ethnic variations in lifestyle behaviors become particularly pertinent (Yusof & Ishak, 2022). For instance, dietary patterns among different ethnic groups might vary, influencing the prevalence and risk factors associated with breast cancer. Studies have indicated that certain dietary choices, such as high consumption of red meat or processed foods, could potentially elevate the risk of breast cancer (Sivasubramanian et al., 2023). Variations in these dietary preferences among ethnicities could contribute to differing incidence rates within these communities.

Moreover, the evolving lifestyle patterns in Malaysia, reflecting a shift towards Western behaviors, have significantly contributed to an increased risk of cancer among its population (Schliemann et al., 2020). This shift is notable in dietary choices, where there's a prevalent intake of saturated fatty acids, a trend that aligns with global data, placing South East Asia, including Malaysia, among the highest consumers of these unhealthy fats. Additionally, the consumption of sugar, sweetened condensed milk, and local sweets is widespread, contributing to a diet that might elevate cancer risks (Chazelas et al., 2019). A concerning trend accompanies these dietary habits: over 50% of Malaysians are overweight or obese. This trend significantly impacts overall health and is strongly linked to an increased risk of various cancers (Schliemann et al., 2020).

2.3 Challenges and Struggles of Breast Cancer Survivors Among University Students

Emotionally, breast cancer survivors might face heightened levels of anxiety, fear, and stress (Carreira et al., 2018). Coping with the uncertainty of their health status, the fear of relapse, and the psychological impact of the cancer experience itself can deeply affect their mental well-being (Tran et al., 2022). Balancing these emotional challenges with the academic pressures of university life creates a constant juggling act that can strain their mental resilience.

Moreover, the social dimensions of their university experience may undergo significant changes. Breast cancer survivors might find it challenging to maintain social connections due to the physical and emotional toll of their treatment, potentially leading to feelings of isolation or disconnection from their peers (Fox et al., 2023). The need for ongoing medical appointments, fatigue, or physical changes resulting from treatment can influence their ability to participate in extracurricular activities or social events, further impacting their sense of belonging within the university community.

In addressing these challenges, survivorship care plans (SCPs) emerge as invaluable tools (Szuhany et al., 2021). These plans, tailored to the individual needs of breast cancer survivors, including those navigating university lives, encompass comprehensive strategies to promote holistic well-being. SCPs often incorporate wellness activities aimed at managing stress, enhancing emotional resilience, and improving overall quality of life.

For university students who are breast cancer survivors or have familial ties to breast cancer, these survivorship care plans could serve as vital support systems (Coughlin et al., 2019). SCPs could offer guidance on managing academic commitments while prioritizing self-care, integrating wellness activities into their routine to mitigate emotional distress, and fostering a supportive environment within the university community.

The fear of cancer recurrence not only affects survivors' mental and emotional well-being but also impacts their daily decisions and future plans (National Cancer Institute, 2020). For breast cancer survivors navigating university life, the fear of cancer recurrence can significantly impact their academic journey and overall collegiate experience. Balancing the demands of coursework, social activities, and personal well-being becomes more complex in the shadow of this persistent fear.

The challenges of managing academic responsibilities alongside the fear of cancer returning can be overwhelming. Survivors may find it difficult to concentrate on studies, often experiencing heightened anxiety and apprehension during crucial academic periods. This emotional burden can affect their ability to focus, leading to decreased academic performance and added stress. Moreover, the fear of recurrence may influence survivors' social interactions

and participation in university activities. Engaging fully in social events or extracurricular activities might become daunting as the fear remains a constant companion, impacting their ability to immerse themselves fully in the university experience. The need for regular medical check-ups and ongoing health concerns may disrupt academic schedules, leading to missed classes or appointments. This can further exacerbate stress levels and impact their ability to maintain consistent academic progress.

The coexistence of anxiety and depression presents as a prevalent and interwoven challenge among breast cancer patients, observed both during active treatment phases and throughout the survivorship period. Sun et al.'s (2019) research highlights the substantial prevalence of these mental health conditions within this demographic. Their findings indicate that approximately 32.93% of individuals diagnosed with cancer encountered symptoms indicative of anxiety, while a notable 38.55% reported experiencing depressive symptoms following their diagnosis.

The psychological impact of breast cancer among university students in Malaysia is a significant area of concern that can have profound effects on their emotional well-being and academic performance. However, research specifically focusing on breast cancer survivors within the university setting in Malaysia might be limited, as breast cancer tends to be more prevalent among older demographics. Yet, general studies on the psychological impact of cancer and the experiences of breast cancer survivors can offer insights into potential emotional distress, anxiety, depression, PTSD (Brown et al., 2020), or adjustment disorders among university students facing similar challenges.

A breast cancer diagnosis and subsequent treatment can have a profound effect on women on a physical and psychological level. Facing the challenges of therapy often involves enduring pain and struggling with vulnerability, in addition to the emotional trauma that accompanies such a diagnosis. In addition, the treatment method itself can trigger many changes in a woman's body, which leads to distress and significant changes in appearance. This combination of physical and emotional turmoil can profoundly shape a woman's experience throughout her breast cancer journey, affecting her overall well-being and self-perception (Thakur et al., 2022)

The impact of breast cancer treatment on survivors' health is multifaceted. Prolonged treatment, often encompassing surgeries, chemotherapy, radiation, and hormonal therapies, can lead to various side effects, both immediate and long-term (Kim et al., 2013). These treatments, while crucial for battling cancer, can bring about a range of challenges for survivors, including fatigue, loss of energy, reduced physical strength, and diminished overall quality of life. These adversities often persist beyond the active treatment phase, significantly affecting survivors' day-to-day functioning and well-being.

2.4 Coping Mechanisms of Breast Cancer Survivors, The Support System and The Intervention Strategies for Cancer Survivors

The coping mechanisms embraced by breast cancer survivors encompass a broad spectrum of strategies vital in navigating the emotional challenges, stemming from a cancer diagnosis. Personal resilience stands as a cornerstone, reflecting the inner strength and determination exhibited by survivors to confront and overcome adversity. This resilience empowers them to face the uncertainties and difficulties that accompany the cancer journey, fostering a sense of perseverance in the face of distress. The distress management strategies

outlined in this review predominantly centered around two primary categories: problem-solving and emotion-focused coping mechanisms (Sarang et al., 2023).

2.4.1 Emotion-focused Coping Strategies

Emotion-focused coping strategies, on the other hand, center around managing the emotional impact of the cancer experience. These strategies are geared towards regulating and processing emotions, such as fear, anxiety, or grief. Emotion-focused coping might involve seeking emotional support from family and friends, engaging in activities that provide comfort or distraction, or employing relaxation techniques to manage emotional distress (Smith et al., 2023).

2.4.1.1 Social Support

Coping strategies utilized by breast cancer survivors are diverse, as evidenced by a comprehensive review of studies. Emotion-focused coping strategies were the subject of 62.5% of the 96 studies, indicating their prevalence (Sarang et al., 2023). In 95.0% of the 62 studies, women were observed to seek social support from family and friends as a key coping mechanism (Sarang et al., 2023). A significant proportion, 75.0% of the studies, highlighted emotion-based adjustment strategies. This involved the process of accepting the cancer diagnosis, seeking new meanings and goals in life, and even reframing cancer as a challenge to be faced (Sarang et al., 2023). The presence of supportive family relationships enables survivors to feel understood, heard, and validated in their emotional experiences. Conversations with family members can provide an outlet for expressing fears or worries, sharing the emotional burden, and receiving encouragement and understanding. Moreover, family support creates a sense of belonging and connection, alleviating feelings of isolation that often accompany a cancer diagnosis. Knowing they have a support system within their

family can significantly contribute to a survivor's emotional resilience and overall well-being (Sarang et al., 2023).

Support networks play a crucial role in fulfilling a spectrum of needs for breast cancer survivors (Vassilev et al., 2023), addressing various aspects of their well-being. Interpersonal needs, encompassing emotional support and understanding, are met through connections within these networks. Family members and close friends often provide a safe space for survivors to express their emotions, share their concerns, and seek reassurance, offering a vital source of comfort and empathy during challenging times.

Moreover, these networks address social needs by fostering a sense of belonging and community (Vassilev et al., 2023). Support groups, consisting of fellow survivors or individuals navigating similar experiences, offer a platform for shared experiences, mutual encouragement, and solidarity. Being part of a support group helps people feel like they belong and share a strong connection with others who understand them. This sense of togetherness contributes significantly to emotional resilience (Vassilev et al., 2023).

Practical assistance forms another critical component within support networks, addressing the logistical and day-to-day needs of breast cancer survivors. Healthcare providers offer invaluable guidance, medical expertise, and treatment information, aiding survivors in making informed decisions about their care. Additionally, support networks often extend practical help with tasks such as transportation to appointments, household chores, or childcare, alleviating some of the burden's survivors might face.

Emotional and informational guidance provided by these networks helps survivors navigate the complexities of their cancer journey, from diagnosis through treatment and into survivorship (McGrath et al., 2019). This support plays a pivotal role in enhancing their coping mechanisms, fostering a sense of empowerment, and promoting better psychological adjustment to life after cancer treatment. Understanding the multifaceted needs fulfilled by these support systems is integral in tailoring interventions and resources that fortify these networks, ensuring they continue to serve as pillars of strength for breast cancer survivors.

2.4.1.2 Positive Reframing and Constructing Meaning

Additionally, Sarang et al. (2023) found that 60.0% of the studies underscored the importance of religion or spirituality in the coping process for women dealing with breast cancer. These findings collectively demonstrate the wide array of coping strategies employed by breast cancer survivors, ranging from emotional regulation and social support to adaptive adjustments and spiritual sources of strength. Spiritual coping mechanisms offer a source of strength, hope, and meaning amidst the challenges they face (Sarang et al., 2023). Coping strategies rooted in spirituality involve drawing on beliefs, faith practices, and connections with higher powers or spiritual entities to navigate the emotional and existential aspects of the cancer experience.

For several survivors, spiritual beliefs and practices provide a sense of comfort and solace during times of distress. Engaging in prayer, meditation, or rituals associated with their faith offers a space for reflection, contemplation, and seeking guidance or support from a higher power (Sarang et al., 2023). These practices often instill a sense of hope and resilience, providing reassurance and a sense of purpose that aids in coping with the uncertainties of their cancer journey. Spirituality also plays a role in helping survivors find meaning in their

experiences. Breast cancer often prompts individuals to contemplate life's deeper questions, leading to a search for meaning and purpose in the face of adversity. Spiritual beliefs can offer a framework through which survivors interpret their experiences, helping them find a sense of meaning or understanding, and fostering a positive outlook amidst the challenges they confront (Sarang et al., 2023).

Adaptive coping mechanisms form another integral facet, encompassing various strategies individuals employ to manage stress, anxiety, and emotional distress. These adaptive approaches might involve reframing perspectives, seeking meaning in the experience, or employing mindfulness techniques to navigate the tumultuous emotions that accompany a cancer diagnosis. The ability to adapt and find constructive ways to manage these challenges plays a pivotal role in mitigating the emotional upheaval.

Moreover, psychological interventions serve as valuable tools in supporting breast cancer survivors. Counseling, therapy, or interventions focusing on cognitive-behavioral strategies provide avenues for survivors to process their emotions, develop coping skills, and explore ways to enhance their psychological well-being. These interventions offer valuable resources for survivors to address and manage the emotional distress that persists post-treatment.

2.4.2 Problem-solving Coping Strategies

Meanwhile, problem-solving strategies involve actively addressing the tangible challenges and issues arising from a breast cancer diagnosis (Mohammadi et al., 2018). This might include seeking information about treatments, healthcare options, or making decisions

related to their care. Problem-solving strategies aim to tackle specific stressors head-on, empowering survivors to take control and find practical solutions to the challenges they face.

In the studies reviewed by Sarang et al. (2023), women took proactive steps to adapt their lifestyles in response to the difficulties posed by treatments and its side effects, aiming to facilitate detrimental impacts. They employed various strategies to mitigate the impact of changes resulting from treatments such as hair loss and loss of breasts, often resorting to techniques like tattooing eyebrows and using scarves to conceal these changes. Additionally, they actively engaged in treatment procedures and sought solutions, including visiting lymphedema clinics. Among Asian women particularly, there was a sense of being overwhelmed by the abundance of information from various sources, prompting them to actively seek assistance in navigating through this information overload to make informed decisions (Sarang et al., 2023). This active problem-solving approach aligns with Lazarus and Folkman's theory of problem-focused coping, demonstrating its significance, especially observed among Asian women in dealing with breast cancer challenges.

2.5 Associated Theory/Model

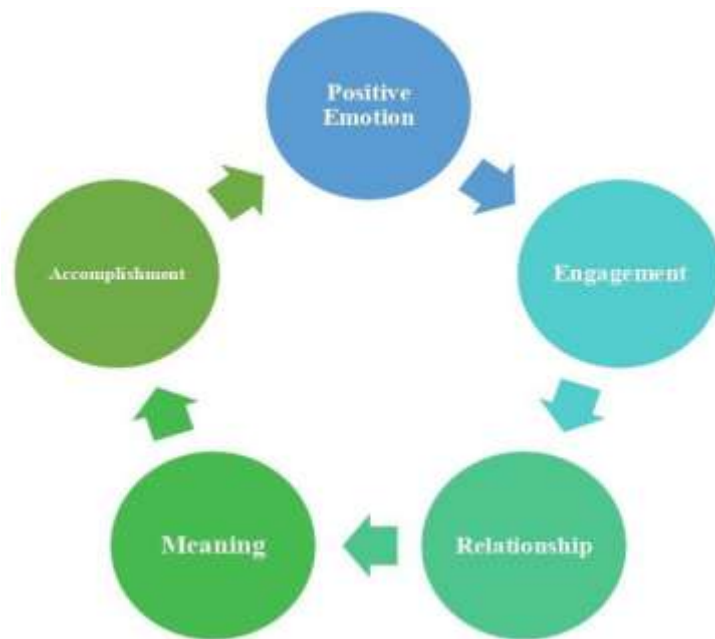


Figure 2: *PERMA Model of Well-being*

2.5.1 PERMA Model

The PERMA Model, designed by psychologist Martin Seligman in 2011, outlines five fundamental aspects, which are Positive Emotions, Engagement, Relationships, Meaning, and Accomplishments, that collectively contribute to an individual's overall well-being and life satisfaction. Understanding and applying this model within the context of breast cancer survivors and university students facing cancer-related challenges offer a structured approach to designing interventions that bolster psychological resilience and well-being.

I- Positive Emotion

Positive Emotions refer to the experience of positive feelings such as joy, gratitude, and hope (Kovich et al., 2023). For breast cancer survivors and university students grappling with the complexities of cancer, fostering positive emotions can involve cultivating gratitude for support received, finding moments of joy in daily life (Kovich et al., 2023), or maintaining

hope despite challenges. For breast cancer survivors, fostering positive emotions involves consciously seeking moments of joy, gratitude, and hope in the middle of the challenges they face. Cultivating gratitude revolves around acknowledging and appreciating the support received from family, friends, healthcare providers, and the community (Sztachńska et al., 2019). Expressing gratitude, whether through simple acknowledgments or engaging in gratitude exercises, allows survivors to focus on the positives in their lives, even amidst adversity.

II- Engagement

Engagement, within the context of breast cancer survivors, encompasses immersing oneself in activities that bring a sense of absorption and flow, offering a respite from the challenges posed by the cancer journey. Encouraging survivors to engage in activities they enjoy, whether it's hobbies, studies, or social interactions, can significantly impact their emotional well-being and overall quality of life. For breast cancer survivors, engaging in activities they find enjoyable or meaningful serves as a valuable coping mechanism. Pursuing hobbies or interests they're passionate about provides moments of distraction and absorption, allowing them to temporarily step away from the stressors of cancer-related issues. Whether it's painting, gardening, reading, or engaging in sports, these activities offer a sense of fulfillment and pleasure, contributing to their emotional resilience. Similarly, involvement in studies or educational pursuits can also be a form of engagement for survivors who are university students. Focusing on academic goals and engaging in coursework provides a sense of purpose and accomplishment, fostering a positive mindset and contributing to a sense of normalcy amidst the challenges of cancer treatment and recovery.

The findings by Szuhany et al. (2021) revealed that 60% of participants engaged in wellness activities, irrespective of physician recommendations, align with the notion of engagement as a coping mechanism among breast cancer survivors. Engaging in various wellness activities, including exercise, nutrition interventions, mind-body practices, psychotherapy, and support groups, serves as a means for survivors to immerse themselves in activities that contribute to their emotional well-being and overall quality of life.

The prevalence of exercise, reported by 53% of the sample study conducted by Szuhany et al. (2021), echoes the idea of engaging in activities they find enjoyable or meaningful. Exercise often provides a sense of fulfillment and distraction, offering survivors moments of absorption that temporarily alleviate the stressors associated with cancer-related challenges. Moreover, the significant interest (73%) among those not engaged in exercise highlights its potential as a coping strategy, showcasing survivors' recognition of its positive impact on their emotional resilience (Szuhany et al., 2021).

III- Relationship

Relationships play a pivotal role in the lives of both breast cancer survivors and students, offering crucial emotional support, understanding, and a sense of belonging. Cultivating and nurturing meaningful relationships with various circles, including family, friends, support groups, or peers, holds immense significance for their emotional well-being and coping mechanisms. For breast cancer survivors, these relationships form a strong support network that provides a safety net during their cancer journey. Family members and friends offer emotional support, empathy, and encouragement, creating a space where survivors can freely express their feelings and concerns without judgment. These connections provide a sense

of comfort and understanding, alleviating feelings of isolation and fostering a sense of belonging, crucial for their emotional resilience.

Similarly, building meaningful relationships with support groups or peers who share similar experiences creates a sense of community and understanding among breast cancer survivors. Support groups offer a platform for sharing experiences, gaining insights, and receiving emotional support from individuals who comprehend the challenges of the cancer journey firsthand. These connections foster a sense of camaraderie and validation, reinforcing their emotional resilience. For students navigating university life while dealing with cancer-related challenges, relationships serve as a source of emotional support and understanding. Support from family, friends, or peers offers reassurance and encouragement, helping students manage the stressors of academic responsibilities and the emotional burden of coping with cancer. Meaningful connections contribute to a sense of inclusion, reducing feelings of isolation and enhancing their overall well-being (Centers for Disease Control and Prevention, 2023).

Basically, cultivating and nurturing meaningful relationships with various support networks is fundamental for both survivors and students. These connections provide emotional support, understanding, and a sense of belonging, playing a pivotal role in their coping mechanisms and overall emotional resilience as they navigate the complexities of their respective journeys (Centers for Disease Control and Prevention, 2023).

IV- Meaning

Meaning, within the context of both breast cancer survivors and university students, involves seeking purpose and significance in their life experiences, contributing to their emotional well-being and coping mechanisms. Encouraging survivors and students to find meaning in their respective journeys is crucial in navigating the challenges they face.

Breast cancer survivors often find meaning in their experience through multiple avenues. This includes personal growth and introspection, enabling them to extract wisdom and understanding from their journey. It may entail uncovering newfound strengths, resilience, or a heightened comprehension of life's essential values. Seeking meaning also involves supporting fellow survivors within the cancer community, sharing their own experiences, and providing guidance or aid, fostering a sense of purpose and contentment. Similarly, for university students facing cancer-related challenges, seeking meaning involves navigating their academic pursuits with a sense of purpose and significance. It might involve pursuing passions or interests that align with their goals, fostering a sense of direction and fulfillment amidst academic responsibilities and health concerns. Additionally, finding meaning in their university journey can involve engaging in activities that contribute to personal growth (Steger et al., 2021), such as volunteering, leadership roles, or involvement in causes they're passionate about.

V- Accomplishment

In a broader context, accomplishment is a concept that encompasses many aspects of life, often associated with the pursuit of victory (Kovich et al., 2022). Accomplishments, within the context of breast cancer survivors or university students facing cancer-related challenges, center on establishing and attaining meaningful objectives. Celebrating milestones—whether

they are minor victories in everyday life or significant achievements in recovery or academic endeavors—holds substantial importance in fostering a sense of accomplishment and progress (Kovich et al., 2022).

Achieving goals holds significant importance for the emotional well-being and recovery of breast cancer survivors. These objectives may span completing treatment stages to accomplishing personal feats, like participating in physical activities, returning to work, or embracing healthier habits. Every achieved milestone, irrespective of its scale, signifies advancement and resilience in their path. Commemorating these accomplishments, regardless of size, acts as a reminder of their fortitude and determination, enhancing their confidence and drive to progress further.

Likewise, for university students navigating their academic path while dealing with cancer-related challenges, accomplishments could involve academic milestones, such as completing assignments, passing exams, or achieving educational objectives. Recognizing and celebrating these achievements contributes to a sense of progress and fulfillment amid the complexities of balancing health concerns with academic pursuits. Each milestone attained represents resilience and dedication, fostering a positive outlook and motivating students to persevere in their educational journey.

Applying the PERMA Model to the experiences of breast cancer survivors and university students dealing with cancer-related challenges offers a structured framework for tailored interventions (Fang et al., 2023). By addressing these core elements, interventions can be designed to enhance positive emotions, encourage engagement, foster supportive

relationships, promote a sense of meaning, and celebrate achievements, ultimately contributing to their psychological resilience and well-being as they navigate their unique journeys.

CHAPTER 3

METHODOLOGY

3.0 Introduction

This chapter explore numerous factors that may contribute to this study and discuss the research approach that is being applied in this study. It encompasses research design, participants, instruments, pilot study, data collection, data collection procedure, data analysis procedure, and ethical issue.

3.1 Research Design

Qualitative research is critical in the field of education because it addresses questions of "how" and "why" and enables better knowledge of experiences, events, and contexts. (Cleland, 2017). Qualitative research designed to explore the study of the psychological well-being of breast cancer survivors among university students using a phenomenological approach to gain an in-depth understanding of their lived experiences. The research design was designed to capture unique aspects of the psychological journey of breast cancer survivors, taking into account the complexity of their roles as students and individuals coping with the challenges of a breast cancer diagnosis.

In addition, this study uses a sampling method to select participants based on specific criteria related to the research question. In this case, participants were selected based on their status as breast cancer survivors who are currently enrolled as university students in a Malaysian institution. The purpose of this selection was to focus on a specific subgroup of breast cancer survivors, allowing a deeper exploration of their shared experiences in the context of university life.

Next, the semi-structured interview method used in this study serves as the main data collection method. It allows participants to share their narratives in a conversational and open format. Interview questions were designed to elicit rich and detailed responses regarding participants' psychological well-being, coping mechanisms, support networks, and the impact of their cancer experience on their academic and personal lives. The use of open-ended questions allowed participants the freedom to express their thoughts and emotions in their own words, providing a more authentic picture of their experiences. This is also because every experience that the participants go through is also different. Therefore, if using the method of closed ended or quantitative questions, the answers shared by the participants will also be limited and it will be difficult to identify the underlying mechanism behind the issue.

To increase the credibility and rigor of the study, peer review was incorporated into the research design. After the initial interview, participants were given the opportunity to review and confirm the researcher's interpretation of their responses. This iterative process fosters a collaborative relationship between researcher and participant, ensuring that findings are based on participants' perspectives and experiences.

Thematic analysis was used as a method of data analysis, allowing to identify recurring themes and patterns in the participants' narratives. The researcher engaged in a systematic and iterative process of coding and categorizing the data to reveal key themes related to the psychological well-being of breast cancer survivors among university students. This analytical approach ensures a thorough exploration of various aspects of the participants' experiences.

Throughout the study process, ethical issues such as informed consent, confidentiality, and participant well-being are crucial. As a result, participants were given extensive

information about the study, including its objective, any potential risks, and the fact that their participation was entirely voluntary.

3.2 Participants and Sampling Procedures

3.2.1 Sample

Participants involved in this study are among six breast cancer survivors.

3.2.1.1 Inclusion Criteria

Participants chosen to be a part of the research sample have to fulfill certain requirements. They are:

- A woman aged 18-30s
- A University student (applicable for: Diploma, Undergraduate, Post Graduate & PhD)
- Diagnosed with breast cancer
- Willing and open to share the experience of being a breast cancer survivor (to the researcher only).

3.2.1.2 Exclusion Criteria

They are not:

- A man
- A woman aged less than 18 years and over 40s
- Diagnosed with different kind of cancer
- Fulfilled with all criteria mentioned in Inclusion Criteria except refuses to participate in the study.

3.3 Instruments

Trigueros et al. (2017) define a research instrument as a device used for gathering, measuring, and analyzing data during a study. Within the context of investigating the psychological well-being of breast cancer survivors through qualitative research, qualitative instruments play a more significant role than traditional ways of data collection and involve the researcher actively. Qualitative research is distinguished by a more subjective and interpretive approach, in contrast to the objective and systematic nature of quantitative research (Leigh, 2023). According to Wa-Mbaleka (2020), numerous instruments are used in qualitative research, but perhaps the most intriguing one is the possibility of the researcher serving as an instrument. The researcher is both an essential participant in the research process and an observer, influencing and being impacted by the dynamics of the study as it unfolds. The researcher's involvement in a qualitative instrument can take many different forms, including conducting interviews, taking part in observations, or fully integrating oneself into the setting through participant observation. Here, the researcher is not just an outsider but also an active participant who marches with the survivors through the emotional and psychological challenges. Hence, the researcher's direct engagement enables them to get insights that go beyond numerical measures and capture the subtleties, feelings, and social context that affect the breast cancer survivors' psychological well-being.

3.3.1 Semi-structured Interviews

Semi-structured interviews in the forms of guided questionnaires (Appendix A) are crucial to the researcher since, in this study, the researcher herself serves as the instrument through interviews. This makes it possible for the researcher's questions to follow each participant in parallel and stay true to the goal of the study. Surveys that are guided offer a methodical format that promotes uniformity among respondents and facilitates the comparison

of answers. This strategy is very helpful in eliminating unintentional drift or divergence in the direction of questioning and ensures that the research inquiry stays in accordance with the study's overall aims. Utilizing guided questions helps in striking a balance between giving survivors an adaptable platform to share their own experiences and upholding the standardization necessary for methodical research.

3.4 Pilot Study

Indeed, pilot studies do incorporate aspects of the broader research design, making them a type of feasibility study. Before major research, a pilot study is a small-scale preliminary inquiry to evaluate the validity, timeliness, cost, risk, and unfavorable outcomes of the proposed research design and methodology (Baldeh et al., 2020). It is easier to identify vulnerabilities that can be fixed when the methods and pilot study findings are properly analyzed (Malmqvist et al., 2019).

The choice made by the researcher to carry out a pilot study in this inquiry with a single volunteer who satisfies the predetermined participant criteria shows a purposeful and targeted approach to improving the research techniques, methodology, and tools. The focus on a single participant enables a thorough analysis of how the person understands and reacts to the interview questions concerning the difficulties encountered as a student breast cancer survivor. By working with a single subject, the researcher keeps an eye on and assess the subject's answers, which can provide important information on the questions' appropriateness, relevance, and clarity. The capacity of the participant to understand and communicate their experiences is closely linked to the questionnaire's validation.

After the completion of the pilot study, the researcher gains a valuable opportunity to correct, refine, and improve the questions prepared for the actual study. The insights gathered from the pilot study, including feedback from the participant and observations of the research process, provide a rich source of information to enhance the quality and effectiveness of the research instrument.

3.5 Data Collection

The process of collecting data begins with the search for participants who are university students who are also breast cancer survivors. After initiating the search for participants among university students who are breast cancer survivors, the researcher employed various social media platforms, including Facebook, WhatsApp, and Instagram, to advertise the study and attract potential participants. These platforms were chosen for the widespread use and accessibility among the target demographic. Through engaging posts and messages, the researcher provided information about the study's purpose, encourage those eligible to participate, and share details on how to get involved.

To facilitate the participant recruitment process, the researcher created a Google Form. This form served as an electronic tool for interested individuals to provide their information and express their willingness to participate. The form likely included questions related to demographic details, university enrollment status, and aspects relevant to the study, such as their age when being diagnosed with breast cancer.

Once participants submit their information through the Google Form, the researcher did start off the process of compiling and organizing the data. This step involves systematically reviewing each response to ensure it aligns with the predetermined criteria for inclusion in the

study. This verification process includes confirming university enrollment, age within the specified range, and a documented breast cancer diagnosis. Participants whose information meets these criteria move forward in the study, while those who don't meet the requirements may be thanked for their interest but excluded from further participation.

Throughout these data collection procedures, the researcher maintains a commitment to ethical standards, ensuring participant confidentiality and privacy. Clear communication channels were established to address any queries or concerns raised by potential participants. This detailed and systematic approach to data collection helps ensure the study's integrity and the reliability of the information gathered from university students who are also breast cancer survivors.

During conducting interviews, the researcher employed semi-structured questions to ensure a standardized approach across all participants. This method allows for consistency while still providing flexibility for participants to express their experiences in their own words. The recording process during the interviews was conducted with explicit consent from the participants, emphasizing transparency and respect for their autonomy.

Following the completion of each interview session, the researchers proceed to transcribe the recorded audio. This transcription serves as a crucial step in the data collection process, converting spoken words into written form. The transcriptions were treated as valuable evidence, capturing the nuances, emotions, and detailed responses of each participant. This meticulous approach to recording and transcribing interviews enhances the reliability and accuracy of the qualitative data collected, enabling the researchers to analyze and interpret the

information effectively. Additionally, it ensures that the participants' voices and experiences are faithfully represented in the subsequent stages of data analysis and reporting.

3.6 Data Analysis Procedure

Thematic analysis is a method of analyzing qualitative data. Braun & Clarke (2006) suggested six guided steps in conducting Thematic Analysis (Table 1).

Steps	Explanation
Data Familiarization	In this phase, the researcher engaged in thorough and repeated examination of the collected data. Because the researcher relies on audio recordings to document the interview sessions, it is essential to actively listen to capture not only the spoken words but also the participants' emotions and other pertinent details. This careful and attentive approach ensures a comprehensive understanding of the interview content, allowing the researcher to identify subtle information, tones, and expressions that contribute to the comprehensiveness of the qualitative data. The emphasis on audio elements provides a holistic perspective, enabling the researcher to delve into the participants' experiences beyond what is explicitly articulated in the transcripts.
Create initial codes	During this step, the researcher organizes the transcribed data in a systematic and meaningful way. Creating initial

	codes aids in reducing a lot of data into small chunks of meaning (Maguire & Delahunt, 2017).
Generating themes	The identical codes will be used to produce themes after the original code has been developed. Basically, the theme is characterized by its significance.
Review themes	Throughout this stage, the researcher reviewed, refined, and expanded upon the initial themes that were discovered in step 3 (generating themes).
Defining and naming themes	The goal of this phase, which is the last stage of theme refining, is to figure out the fundamental concept of each theme (Braun & Clarke, 2006, p.92).
Producing report	In the final stage, the researcher writes up analysis of data. Findings for each theme should be clearly explained.

Table 1: *Thematic Analysis*

3.7 Ethical Issue

3.7.1 Informed Consent

The participants were given an "informed consent" form before the initiation of the study. This consent described the purpose of the study and the expected outcomes. Ensuring that participants comprehended the study and gave their consent to participate freely was the major goal. Upon their decision to join, they signed the consent form. Alternatively, they were free to decline. Obtaining voluntary consent and understanding of the study participants' obligations was the aim of the research.

Alongside the informed consent form, participants were provided with a participant information sheet. With the help of this paper, participants have a better knowledge of the research study and what the researcher is looking into. Ensuring participants have access to all the necessary information to make an informed decision about participating in the study is the aim. In order to provide participants complete information about the research before they choose to participate, it is intended to remove any confusion or ambiguity. By doing this, it is ensured that participants are informed about the study and that their decision to join is founded on a thorough comprehension of it.

3.7.2 Confidentiality

Participants' information was only used for research purposes. The researcher's top priority is protecting the participants' privacy. This contains personal data on the participants, including name, address, and so forth. The participant's real name is replaced by a pseudonym. After the audio that was captured with the participants' permission is transcribed, it is discarded without dissemination.

CHAPTER 4

FINDINGS

4.0 Introduction

This chapter will present the findings from the data analysis, along with an overview of the participants' backgrounds. Each participant will be assigned a pseudonym to protect their real name and identity.

4.1 Participants' Demographic Background

Name	Age	Ethnicity	Marital Status	Education Level	Course	Occupation	Age at Diagnosis
Mary	37	Malay	Married	Master	Corporate Communication (UPM)	Part Time Student & HR Assistant Manager	31
Aisy	32	Malay	Single	Master	Islamic Studies (UKM)	Fulltime Student	26
Hazy	39	Malay	Single	PhD	Food Engineering (UPM)	Fulltime Student	35
Lily	38	Malay	Divorced	Master	Marketing (UM)	Part Time Student & Assistant Manager (Procurement Department)	36
Avy	39	Sino-Kadazan	Married	Master	Counseling (OUM)	Part Time Student & Civil Servant	19
Hasny	36	Malay	Widowed	Master	Human Resource Management (OUM)	Fulltime Student	22

Table 2: *Participants' Demographic Background*

Table 1 presents the demographic background of eight breast cancer survivors participating in the study, Mary, Aisy, Hazy, Lily, Avy, Hasny. The group consists mainly of Malay women, with one participant being Sino-Kadazan, and their ages range from 29 to 39. The participants have varied marital statuses: two are married, one is divorced, one is widowed, and four are single. They are all well-educated, possessing either a degree or a master's degree, with one individual pursuing a PhD. They are enrolled in diverse courses, including Corporate Communication, Islamic Studies, Food Engineering, Marketing, Counseling, Human Resource Management, General Studies, and Engineering Technology. Their occupations include a mix of full-time and part-time students, with some serving as HR Assistant Managers, Assistant Managers in Procurement, and Civil Servants. The age at which these participants were diagnosed with breast cancer ranges from 19 to 36 years.

4.2 Findings

In-depth interviews were conducted in this research with six individual breast cancer survivors who were university students. In order to achieve the objectives of the study, interviews were conducted according to a semi-structured questionnaire that had been prepared. The analysis revealed that there were 5 main themes and 12 sub themes emerged from the data.

Themes of Findings	Sub-themes	Categories
Theme 1: Initial Diagnosis as Breast Cancer	1.1 Discovery Process	Breast Self-examination (BSE)
	1.2 Family History	- History Family Members with Cancer - No History of Family Members with Cancer
Theme 2: Treatment and Recovery	2.1 Types of Treatment Received	Modern Medical Treatment
	2.2 Treatment Side Effects	Experience Side Effects
Theme 3: Challenges as a Student and a Breast Cancer Survivor	3.1 Identity & Perspective as a Student	- Positive Changes - No Changes
	3.2 Psychological Impact	- Fear of Recurrence - Stress - Anxiety
	3.3 Academic Situation	Performance Declines
	3.4 Social Interactions	Social Stigma, Isolation & Social Withdrawal
Theme 4: Accessible Support System	4.1 Supporters	- Family - Friends

		• University Resources • Support Groups
	4.2 Types of Support	• Emotional Support • Appraisal Support
Theme 5: Self-Coping Mechanisms	5.1 Psychological Strategies	• Mindfulness
	5.2 Practical Adjustments	• Time Management • Health Prioritization

Table 3: *Research Findings*

The study on the psychological well-being of breast cancer survivors among university students revealed five significant themes. The first theme described the initial diagnosis of breast cancer, highlighting the discovery process, family history and early symptoms experienced upon discovering the disease. The second theme focused on treatment and recovery, including the varied treatments and their side effects. The third theme explored challenges of the participants as a student and a breast cancer survivor, emphasizing the psychological impacting them, their academic situation and challenges they encountered in dealing with social interactions. The fourth theme examined the accessible support system, stressing the importance of support from family, friends, university resources, and support groups. Finally, the last theme highlighted self-coping mechanisms, focusing on psychological strategies and practical adjustments that helped survivors manage their conditions. Together, these themes paint a comprehensive picture of the diverse experiences of young breast cancer survivors.

4.2.1 Theme 1: Initial Diagnosis as Breast Cancer

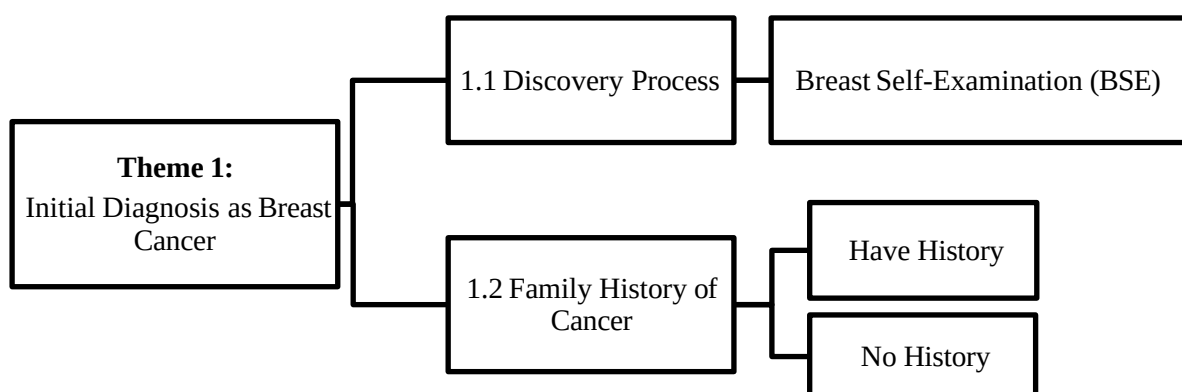


Figure 3: *Theme 1 Initial Diagnosis as Breast Cancer*

4.2.1.1 Discovery Process

The discovery process of breast cancer among participants involved breast self-examination and identification of early symptoms, leading to seeking medical consultation and further tests. All of the participants noticed subtle symptoms, highlighting the importance of vigilance. From the interview session, it shows that all participants are familiar with Breast Self-Examination (BSE) and first acknowledge that they might have Breast Cancer through self-examine

Breast Self-Examination:

"I noticed a lump in my breast, which prompted me to see a doctor," (Mary)

"I discovered a lump in my breast... and that's when they discovered the cancer," (Aisy)

"While showering, I always check my body, and I felt a large lump" (Hazy)

"I found a lump in my breast during a self-examination," (Lily)

"I started experiencing pain and swelling in my breast," (Avy)

"I had an unusual discharge and felt a lump in my breast," (Hasny)

4.2.1.2 Family History of Cancer

Among the participants, Lily and Avy reported a family history of cancer, indicating a hereditary pattern in their extended families. Lily's family has had cases of brain, ovarian, and breast cancer, while Avy's family has experienced breast, cell, and skin cancers. Conversely, Mary, Aisy, Hazy, and Hasny reported no family history of cancer, although Mary has several other medical conditions. This contrast highlights the varied backgrounds of participants in terms of family medical history.

Have History:

"In my extended family, cancer is indeed a hereditary disease. From my great-grandparent, who had brain cancer, then my grandmother, who had ovarian cancer. She passed away because the cancer was detected late. And the most recent case is my aunt in Kajang. It's

believed that cancer can be passed down through generations cancer, but ” (Lily) Initially, my aunt had breast

“Yes, my grandmother passed away from breast cancer around 2008 or 2009, and my maternal aunt also had breast cancer but survived. Additionally, two of my maternal uncles had other forms of cancer; cell cancer and skin cancer.” (Avy)

No History:

“There is no history of breast cancer in my family. Additionally, I do have other relevant medical conditions, including diabetes, high blood pressure, slipped disc, high cholesterol, trigger finger, and carpal tunnel syndrome.” (Mary)

“There’s no family history of breast cancer, so the diagnosis came as a shock.” (Aisy)

“I have no other medical conditions and no family history of breast cancer or any other cancers”. (Hazy)

“None of my family members ever experienced cancer before, I am the first one.” (Hasny)

4.2.2 Treatment and Recovery

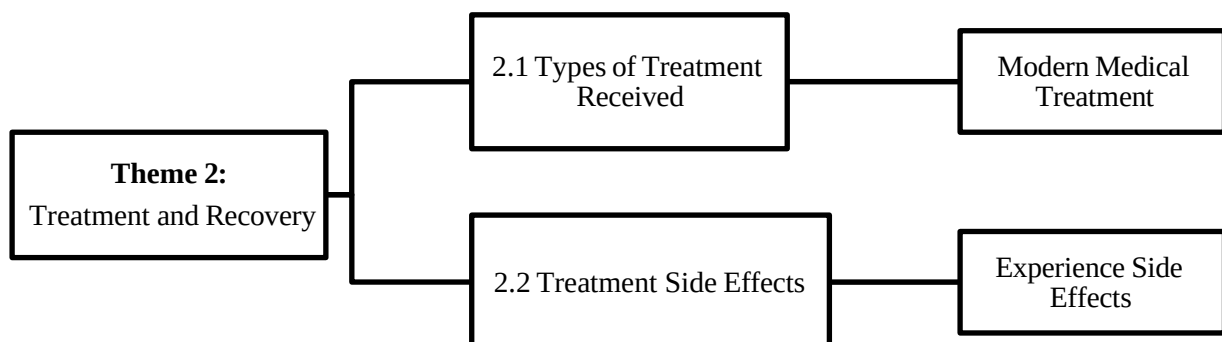


Figure 4: *Theme 2 Treatment and Recovery*

4.2.2.1 Types of Treatment Received

The analysis of the data revealed that all of the participants underwent a series of modern medical treatments, each contributing significantly to their recovery journey. The primary treatments included surgery, chemotherapy, radiotherapy, and hormonal therapy, each with distinct impacts on the survivors' physical and emotional well-being. None of them underwent traditional way of treatment.

Surgery:

"I had to undergo surgery to remove the tumor," (Mary)

"The surgery was tough, both physically and emotionally." (Aisy)

Chemotherapy:

"Chemotherapy was the hardest part; I felt drained all the time," (Lily)

Radiotherapy:

"Radiotherapy caused severe skin burns, and I was constantly tired," (Hazy)

"The daily trips for radiotherapy were exhausting, but I knew it was necessary." (Hasny)

Hormonal Therapy:

"I was taking hormone medication,...." (Lily)

"the doctor prescribed hormone therapy, specifically Tamoxifen, as an alternative to manage hormone levels ... " (Avy)

"Currently, I am undergoing hormone therapy, which will last for five years." (Hazy)

4.2.2.1 Treatment Side Effects

Experience Side Effects:

All of the participants in the interviews reported experiencing various side effects during their treatment. These side effects ranged from mild discomfort to more severe symptoms, impacting their daily lives and overall well-being.

“Yes, during my treatment, I experienced several complications. These included diarrhea, nosebleeds, vomiting, ulcers, low blood pressure, burning skin sensations, and a loss of appetite.” (Mary)

“I experienced mild neuropathy and fatigue as side effects,” (Aisy)

“Yes, I did. After surgery and treatment, and finishing targeted therapy, I was referred to physiotherapy because I developed lymphedema.” (Hazy)

“The main side effect was a burning sensation in my breast from the radiotherapy” (Lily)

“Yes, I had complications with Tamoxifen after the treatment” (Avy)

“The side effects were severe, like loss of appetite and weakness.” (Hasny)

4.2.3 Challenges as a Student and a Breast Cancer

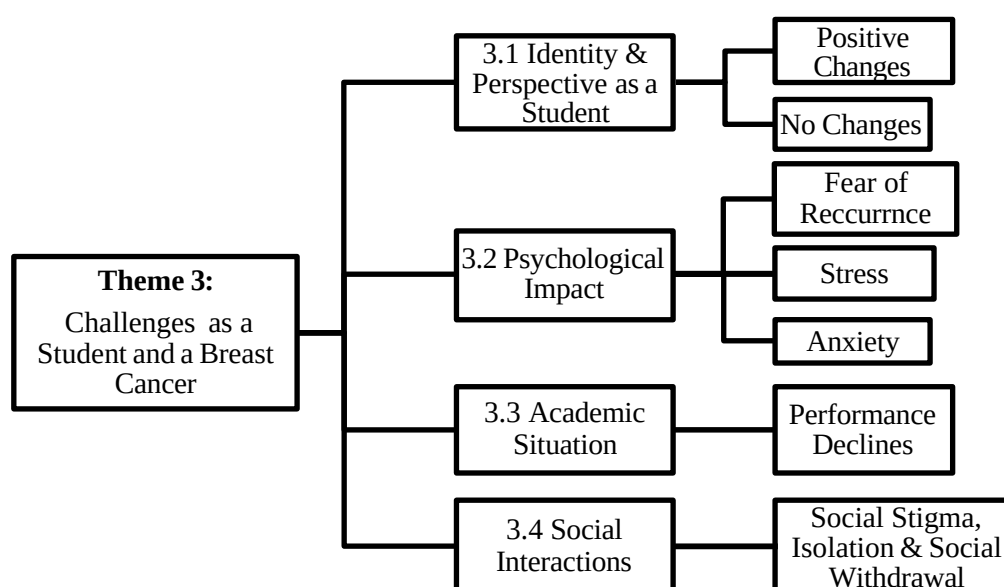


Figure 5: Theme 3 Emotional Responses

4.2.3.1 Identity & Perspective as a Student

Most participants reported positive changes in their identity and perspective as students following their cancer diagnosis. These changes include a greater emphasis on health and well-being over academic stress and deadlines, an improved understanding of the need for balance between academics and self-care, and a shift from learning for grades to a genuine interest in

knowledge for self-improvement and helping others. Additionally, participants expressed an increased appreciation for meaningful relationships and activities within the university environment. Only two participants, Hazy and Lily, noted no significant changes in their academic identity or behavior; Hazy's lifestyle remains affected by post-treatment effects, but her academic approach is unchanged, while Lily prefers not to let her illness alter her behavior or self-perception.

Positive Changes:

“Since I have been diagnosed with cancer, I have learned to prioritize better. Understanding what needs immediate attention and what can't wait until later has become crucial for managing my time effectively. While academics and work remain significant aspects of my life, I've come to realize the importance of prioritizing my health above all else. After all, being healthy is essential for performing well both in my studies and in the workplace.” (Mary)

“My perspective on academics and student life has shifted significantly. I used to stress over grades and deadlines, but now I prioritize my health and well-being. I understand the importance of balancing academic responsibilities with self-care. I also appreciate the social aspects of university life more and make a conscious effort to engage in meaningful relationships and activities...” “I’ve become more disciplined and better at managing my time. My academic performance improved once I returned because I was more motivated and had a clearer sense of purpose” (Aisy)

“My perspective on academics and student life has changed quite a bit since my diagnosis. Before, I used to stress a lot about grades and deadlines. Now, I realize that my health and well-being are more important. I’ve learned to prioritize better, focusing on what truly matters.” (Lily)

“It changed a lot. Previously, I wanted to study to secure my future. But now, I am voluntarily learning to improve my situation, my mental health, and to help others. My motivation to read and find information is much better now. Before, it was about exams and assignments. But now, I genuinely want the knowledge to understand better.” (Avy)

“Well, my focus on academics hasn't shifted drastically, but before cancer, it was everything to me. Dealing with treatment made me rethink things. I've learned to take it easy and prioritize self-care over just hitting the books. It's taught me the importance of balance and not burning out. School isn't just about grades; it's about growing as a person and finding harmony in life.” (Hasny)

No Changes:

“My identity hasn't changed much as a cancer survivor. The main change has been in my lifestyle, which is still affected even after four years due to the post-treatment effects...” “In terms of academics, not much has changed for me...” (Hazy)

“So far, it hasn't changed anything. I act as if I'm not sick. I don't like people feeling overly sympathetic towards me.” (Lily)

4.2.3.2 Psychological Impact

Participants faced several psychological challenges, including fear of recurrence, stress, and anxiety. The fear of cancer returning was a constant worry, affecting their daily lives and future plans, especially around medical appointments. Balancing academic responsibilities, work, and health often felt overwhelming. They experienced anxiety about their health and its impact on their personal and professional lives.

Fear of Recurrence:

“Of course, I felt that (fear of recurrence) before Following the tests, the doctor discovered something on my left breast that, if left untreated, could have led to the risk of developing cancer again.” (Mary)

“Additionally, the fear of recurrence was always at the back of my mind, making it hard to focus on the present.” (Aisy)

“Yes, I do. When I had thyroid cancer, I wasn't too worried about treatment or hair loss. But with my second cancer, breast cancer, I felt really down and questioned, “Why me?” Now, being told I might have a third cancer is making me feel down again.” (Avy)

Anxiety:

“This lack of understanding and support sometimes made me feel very lonely and added to my stress and anxiety. I often felt like I had to put on a brave face and downplay my struggles to fit in, which was exhausting.” (Aisy)

“I experienced anxiety before each chemotherapy cycle, but I never felt like quitting my studies. Despite the challenges, including severe brain fog, I couldn't bring myself to stop studying, especially considering I had a scholarship that I would have to repay if I discontinued my education. This scholarship became my motivation to persevere, even though it meant continuing my studies later than planned.” (Hazy)

“There are days when the stress and anxiety about my health make it difficult to stay focused and motivated.” (Lily)

Stress:

“While I was still a student, I experienced depression and stress. I wanted to finish my studies, but I had to stop for a while for treatment.” (Hazy)

“.....This might have been a side effect of the medication, making it difficult to control my emotions and stress. I felt like a burden because I was frequently unwell.” (Lily)

4.2.3.3 Academic Situation

All participants reported a decline in academic performance following their cancer diagnosis. The primary impacts included taking medical leave, reduced course loads, and significant interruptions in their academic progress. Mary and Hasny had to take breaks from their studies to focus on treatment. Aisy and Lily faced slowed academic progress due to the need for time off and dealing with personal and family issues. Hazy experienced severe brain fog and memory challenges, which affected her ability to write and consider continuing her PhD. Avy, dealing with the additional challenge of having a child, found it particularly difficult to complete her studies.

Performance Declines

“My breast cancer diagnosis significantly impacted my academic performance and goals. The treatment process necessitated taking medical leave as advised by my doctor, which meant I was unable to fully engage in my academic studies and professional responsibilities.” (Mary)

“My diagnosis initially slowed down my academic progress because I had to take time off and reduce my course load” (Aisy)

“There were moments when I felt so low that I considered quitting my PhD” “Despite the challenges, including severe brain fog,” “Writing has always been essential to me, but I realized that I haven't been journaling regularly. The last time I wrote was in 2020, and when I revisited it in 2022, I couldn't remember everything I had written. This memory challenge prompted me to start retraining my mind by rereading my journal entries.” (Hazy)

“My performance really suffered. I took a lot of leave, and on top of that, I was dealing with family issues. This had a significant impact on my work and studies.” (Lily)

“But this time, having a child made it much harder. I couldn't finish my studies because I was so down.” (Avy)

“My cancer diagnosis really impacted my studies. I had to take a break from university to focus on treatment.” (Hasny)

4.2.3.4 Social Interactions

Participants reported experiencing significant social stigma, isolation, and social withdrawal following their cancer diagnosis. Mary and Avy faced social stigma, with Mary dealing with unsolicited advice and product promotions online, and Avy experiencing negative perceptions from her colleagues and bosses, leading to job loss and further isolation. Lily and Aisy felt isolated and misunderstood by their peers; Lily struggled with self-confidence and worried about others' perceptions, while Aisy's friends drifted away due to their inability to relate to her experience. Both Avy and Lily preferred isolation over social interactions, with Avy particularly withdrawing socially due to feeling down about upcoming medical procedures. Overall, these experiences highlight the profound impact of cancer on their social lives, leading to feelings of isolation, reduced self-confidence, and significant changes in their social interactions.

Social Stigma, Isolation & Social Withdrawal

“...on social media, I faced challenges from certain individuals who attempted to sell me various products or posed as medical experts, offering unsolicited advice. Recognizing the potential negative impact on my mental health.” (Mary)

“Additionally, there were times when I struggled with self-confidence, especially in social situations, as I worried about how others perceived me.” (Lily)

“I didn't get any support from my bosses and colleagues. When they found out I had cancer, they assumed I couldn't perform or function properly due to hospital visits. As a result, they tried to oust me from my office, and eventually, I did leave. It was very hard because of people's perceptions that having cancer means you're going to die, have no future, can't do anything,

can't function, and are very unwell. It was a very downward situation for me from 2016 to 2018. I requested to be pooled, so I was sent to JPA, where I just punched in and out without working. Being secluded from people made me anxious, as I feared their judgment about my inability to work due to my illness.”(Avy)

“It was really tough because I felt isolated and misunderstood. Some friends seemed to drift away, either because they didn't know how to support me or because they couldn't relate to my experience.” (Aisy)

“One of the biggest challenges was feeling isolated. It's hard to relate to others when you're going through something like cancer. I often felt like I didn't fit in or that people couldn't understand what I was going through.” (Lily)

“I like to isolate myself nowadays. I used to enjoy being around people, but now I prefer isolation, maybe because I'm going for another mammogram soon. So, I'm feeling a bit down.” (Avy)

4.2.4 Accessible Support System

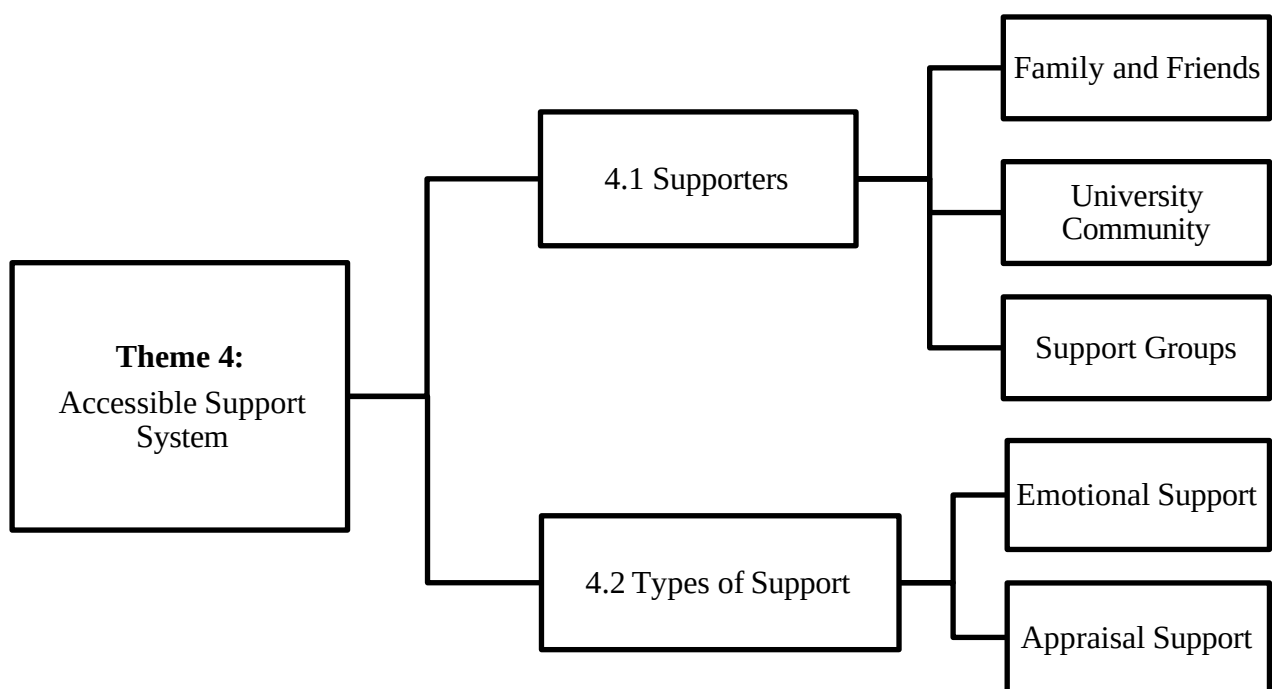


Figure 6: Theme 4 Accessible Support System

4.2.4.1 Supporters

Family and Friends:

Family and friends emerged as an important support system for participants. Many reported relying heavily on their families for emotional and practical support. All participants

shared that their families were very helpful in providing a stable and positive environment that was important for their mental health and recovery. Likewise, friends often play an important role in offering emotional comfort and practical help, such as organizing study groups to help catch up on coursework.

"I received plenty of support from my family, friends, At campus and workplace, both my friends and colleagues have been incredibly supportive, wishing for my recovery and offering help whenever needed." (Mary)

"During my treatment, I received extensive support from my family and friends, which was crucial.". My family was my rock throughout the entire process. They were there for me every step of the way, " (Aisy)

"I received a lot of support from my family. My late aunt, who also had breast cancer, gave me a lot of encouragement. My parents were very calm and supportive, advising me to follow the doctor's instructions." (Lily)

"I have about two close friends who are very good listeners, even though they don't have cancer experience" (Avy)

"My family's unwavering encouragement and willingness to assist with everyday tasks allowed me to focus on healing without the added stress of worrying about practical matters" (Hasny)

University Community:

The university community also provided essential support, with counseling services offering regular therapy sessions to help navigate the emotional complexities of their cancer journey.

"Additionally, the university counseling services provided regular therapy sessions, which helped me navigate the emotional complexities of my cancer journey." (Aisy)

"The support from the school of graduates was also significant, as they allowed me to take a two-year sick leave and extend my study." (Hazy)

"The support system at OUM is great. They are very understanding and I feel at ease" (Avy)

".....seeking support from university resources helped me cope with the emotional challenges more effectively." (Hasny)

Support Groups:

Support groups, both online and in-person, were also highlighted as valuable resources for sharing experiences and receiving peer support.

"I received plenty of support from , and support groups such as National Cancer Society Malaysia (NCSM) and Breast Cancer Welfare Association (BCWA). Additionally, a cancer survivor from BCWA provided me with a guidebook and advised me to join activities after my recovery." (Mary)

"..... breast cancer support groups also played a significant role in helping me manage the emotional and psychological challenges of my journey." (Aisy)

"I also became a member of support groups on Facebook a couple of months after my surgery, where I acquired a wealth of knowledge. I read numerous posts where people shared their experiences." (Hazy)

"I joined the cancer support group, though I haven't participated in their physical activities. Mostly, I engage through their WhatsApp group where they share beneficial information, experiences, facts, and coping strategies." (Lily)

"I have support groups on Facebook (Fighters Cancer Survivors). This is where I can communicate, ask questions, and voice my opinions." (Avy)

4.2.4.2 Types of Support

Emotional Support:

Emotional support was a recurring theme, with participants emphasizing the importance of having people to lean on during their treatment and recovery. This type of support included encouragement, comfort, and understanding from family, friends, and the university community. Majority of the participants reported that emotional support played a vital role in helping participants manage stress, anxiety, and other emotional challenges.

"Emotional support is incredibly important to prevent feelings of isolation and helplessness. When I was on the brink of receiving my cancer diagnosis, I believe not everyone possessed the strength to endure it." (Mary)

"The most beneficial types of support included emotional support from family and friends, which provided me with the encouragement and comfort I needed during tough times." (Aisy)

"I believe emotional support is the most crucial. When dealing with cancer-related deaths, as I mentioned earlier, it deeply impacts me. So, having emotional support is essential because

without it, it's challenging to stabilize one's emotions. You feel down, lack motivation, easily get angry, and so forth.” (Lily)

“For me, having emotional support meant having friends who were willing to listen when I needed to talk about my fears and frustrations regarding my health and academic journey.” (Hasny)

Appraisal Support:

Appraisal support, such as positive reinforcement and validation from their support networks, was also crucial. Two participants mentioned how these forms of support boosted her confidence, motivation, and overall sense of well-being during their academic journey and treatment process.

“Appraisal support, such as the positive reinforcement and validation from my support network, boosted my confidence and helped me stay motivated.” (Aisy)

“Honestly, I just need support from my management and for people to understand that cancer patients or survivors are not the same as normal people. We often have fears about things we are unsure of.” (Avy)

4.2.5 Self-Coping Mechanisms

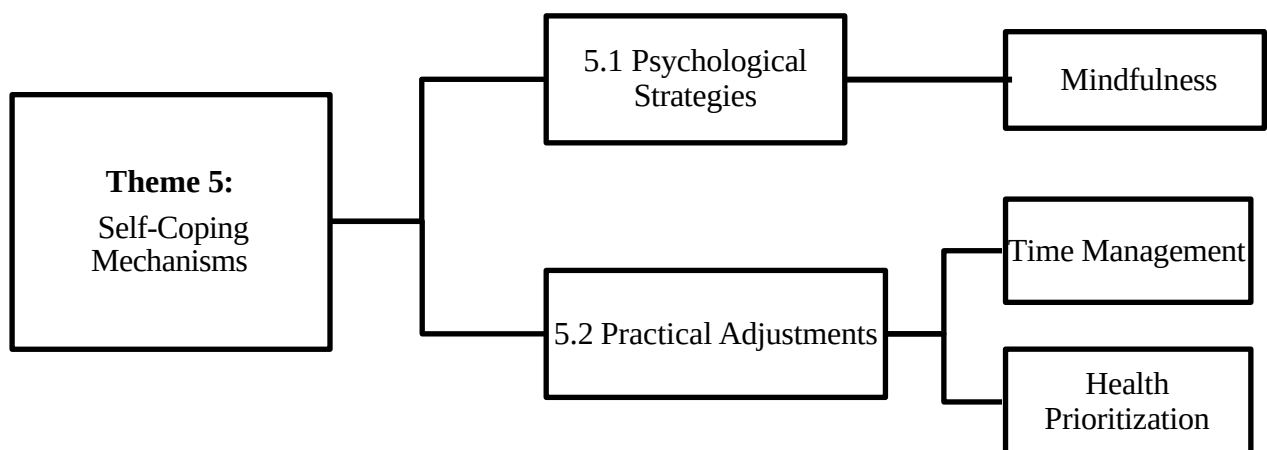


Figure 7: Theme 5 Self-Coping Mechanisms

4.2.5.1 Psychological Strategies

Mindfulness:

The analysis of the data revealed that three participants adopted mindfulness practices to cope with the stress and emotional strain of their breast cancer journey. Techniques such as meditation, deep breathing exercises, and yoga helped them stay present and manage anxiety. These mindfulness strategies provided a sense of calm and helped participants navigate their fears and uncertainties, fostering a more balanced emotional state during treatment and recovery.

“I found several coping strategies helpful, including practicing mindfulness and meditation to manage stress and anxiety.” (Aisy)

“Another approach that has been helpful for me is mindfulness, which involves acknowledging and accepting my feelings without judgment.” (Lily)

“Prioritizing self-care, setting realistic goals, and practicing mindfulness have been key coping strategies for me.” (Hasny)

4.2.5.2 Practical Adjustments

Time Management:

The analysis of the data revealed that effective time management was essential for participants to balance their treatment, recovery, and daily responsibilities. They developed strategies to prioritize tasks, delegate responsibilities, and allocate time for rest and self-care.

“Understanding what needs immediate attention and what can't wait until later has become crucial for managing my time effectively.” (Mary)

“Balancing work, studies, and family life is already challenging, and adding a health issue like cancer has made me appreciate the importance of self-care and time management even more.” (Lily)

Health Prioritization:

The data indicated that participants made health prioritization a central part of their coping strategy. This involved making conscious lifestyle changes, such as adopting healthier diets, engaging in regular physical activity, and avoiding stressors.

“While academics and work remain significant aspects of my life, I’ve come to realize the importance of prioritizing my health above all else. After all, being healthy is essential for performing well both in my studies and in the workplace.” (Mary)

“I used to stress over grades and deadlines, but now I prioritize my health and well-being. I understand the importance of balancing academic responsibilities with self-care.” (Aisy)

“I’ve learned to prioritize better, focusing on what truly matters. Balancing work, studies, and family life is already challenging, and adding a health issue like cancer has made me appreciate the importance of self-care and time management even more. I try not to overburden myself and take things one step at a time. Also, I’ve become more empathetic towards others who might be going through their own struggles, whether they’re visible or not.” (Lily)

“I’ve learned to take it easy and prioritize self-care over just hitting the books. It’s taught me the importance of balance and not burning out. School isn’t just about grades; it’s about growing as a person and finding harmony in life.” (Hasny)

CHAPTER 5

DISCUSSIONS

5.0 Introduction

This chapter discusses the research findings, the limitations of the current research and recommendations for future research.

5.1 Discussions

5.1.1 Initial Diagnosis as Breast Cancer

The initial diagnosis of breast cancer represents a pivotal moment that deeply impacts survivors' psychological and emotional well-being. The discovery process frequently begins with Breast Self-Examination (BSE) or the identification of symptoms prompting medical consultations. BSE is a crucial tool for early detection, significantly improving prognosis and survival rates. Schliemann et al. (2020) emphasize that regular BSE practices empower individuals to detect abnormalities early, thereby facilitating timely medical intervention. However, the moment of diagnosis is often accompanied by a surge of emotional responses, including shock, fear, and anxiety, profoundly affecting the individual's mental state.

Family history emerges as a significant factor during the initial diagnosis phase. Participants with a family history of cancer often report heightened anxiety due to perceived genetic predispositions, as they anticipate a higher likelihood of developing cancer themselves. This pre-existing anxiety can amplify the emotional turmoil experienced upon diagnosis. In contrast, those without a family history may face greater disbelief and denial, struggling to reconcile the unexpected reality of their condition. Schliemann et al. (2022) note that the psychological impact of discovering breast cancer, whether through routine self-examination

or unexpected symptoms, underscores the need for robust emotional support systems from the very onset of diagnosis.

The interplay of cultural and societal factors significantly influences individuals' perceptions and reactions to their condition. In Malaysian society, for example, cultural beliefs and stigma surrounding cancer can deter individuals from seeking early medical intervention. Tan et al. (2023) highlight that cultural stigmatization of cancer can lead to delays in diagnosis and treatment, as individuals might avoid medical consultations due to fear of social ostracization or shame. This cultural context necessitates tailored support mechanisms that address these societal barriers and promote early detection and proactive health-seeking behaviors. Moreover, the psychological distress experienced during the initial diagnosis is compounded by societal attitudes towards cancer. The fear of being stigmatized or treated differently by peers and colleagues can add an additional layer of stress for survivors. Therefore, it is crucial to develop culturally sensitive support systems that not only provide emotional and psychological assistance but also educate the community to reduce stigma and encourage supportive interactions.

The need for emotional support systems at the initial diagnosis stage is critical. Healthcare providers play a vital role in offering immediate psychological support and counseling to help individuals process their emotions and fears. Support from family and friends is equally important, providing a sense of security and understanding during a tumultuous time. The literature suggests that support groups and counseling services can be beneficial, offering survivors a platform to share their experiences and receive reassurance from others who have faced similar challenges (Smith et al., 2023).

5.1.2 Treatment and Recovery

The journey of treatment and recovery for breast cancer survivors is marked by various medical interventions, each accompanied by its own set of physical and psychological challenges. Survivors typically undergo a range of treatments, including surgery, chemotherapy, and radiation therapy. Each of these modalities presents unique difficulties that significantly impact the quality of life. Chemotherapy, for instance, is notorious for its severe side effects such as nausea, fatigue, and hair loss, which can profoundly affect a survivor's daily functioning and emotional well-being (Szuhany et al., 2021).

Surgery, whether it's a lumpectomy or mastectomy, brings its own set of challenges, including pain, changes in body image, and potential complications. The physical recovery from surgery can be arduous, requiring time and patience. Radiation therapy, while less invasive, can cause skin irritation, fatigue, and other localized side effects that add to the physical burden of treatment. The cumulative impact of these treatments can lead to significant physical debilitation, necessitating a robust support system to aid in the recovery process.

Recovery, however, is not solely about managing physical health; it also involves navigating the psychological aftermath of treatment. Survivors frequently report feelings of vulnerability and a constant fear of recurrence, which can linger long after the completion of treatment. This persistent anxiety can be debilitating, affecting all aspects of a survivor's life. The psychological toll of treatment side effects underscores the need for comprehensive care approaches that address both physical and mental health. Interventions that focus on emotional regulation and psychological resilience are particularly beneficial during this phase. Techniques such as mindfulness, cognitive-behavioral therapy (CBT), and support groups can help survivors manage their anxiety and build resilience (Smith et al., 2023).

The availability and quality of support systems during treatment play a crucial role in the recovery process. Family, friends, and healthcare providers are fundamental components of these support networks, offering essential emotional and practical assistance. The presence of a supportive family can provide a sense of security and comfort, while friends can offer companionship and distraction from the rigors of treatment. Healthcare providers, including doctors, nurses, and counselors, are pivotal in offering professional guidance and emotional support, ensuring that survivors do not feel alone in their journey.

The effectiveness of these support networks is highlighted in various studies, which emphasize the importance of a holistic approach to cancer care. This approach incorporates emotional and social support alongside medical treatment, recognizing that recovery is a multifaceted process. Robertson (2023) points out that survivors who receive comprehensive care that includes emotional support tend to have better psychological outcomes and overall quality of life. This underscores the need for integrated care models that address the physical, emotional, and social dimensions of recovery.

Moreover, support groups specifically for breast cancer survivors can provide a unique and valuable form of assistance. These groups offer a space where survivors can share their experiences, receive empathy and understanding, and learn coping strategies from others who have faced similar challenges. The sense of community and shared experience found in support groups can be incredibly empowering and reassuring, helping survivors to feel less isolated and more supported in their journey.

The role of professional counseling cannot be overstated. Mental health professionals can offer targeted interventions to help survivors manage their emotional distress, develop coping strategies, and build resilience. Counseling can be particularly beneficial in addressing issues such as body image concerns, sexual health, and the fear of recurrence, which are common among breast cancer survivors.

5.1.3 Challenges as a Student and a Breast Cancer Survivor

Balancing academic responsibilities with the demands of cancer treatment presents unique and formidable challenges for university students who are breast cancer survivors. Participants in the study reported significant disruptions to their academic performance, including difficulties in concentrating, maintaining attendance, and meeting academic deadlines. The cognitive effects of cancer treatments, often referred to as "chemo brain," can impair memory, attention, and executive function, making it particularly challenging for students to keep up with their coursework and academic commitments (Shahira et al., 2018).

These academic challenges are compounded by the psychological stress associated with the fear of recurrence and the ongoing management of health. The constant anxiety about the cancer returning can be all-consuming, diverting focus and energy away from academic tasks. Additionally, regular medical appointments and treatments can result in missed classes and the need for frequent breaks, further disrupting the academic routine. This dual burden of managing both health and academic responsibilities creates a persistent state of stress and can lead to feelings of being overwhelmed and underprepared.

The identity and perspective of students as both learners and cancer survivors are profoundly affected. Many participants reported that their experience with cancer led to

positive changes in their outlook, such as increased resilience, a greater appreciation for life, and a stronger sense of purpose. These students often develop a heightened sense of maturity and prioritization, allowing them to focus on what truly matters. However, this positive shift is not universal. Many students struggle with the dual burden of their academic and health responsibilities, leading to significant psychological impacts. The pressure to perform academically while simultaneously battling a life-threatening illness can result in heightened levels of stress, anxiety, and depression (Sztachńska et al., 2019).

Social interactions and the potential for social stigma further complicate the student experience. Survivors often face isolation and social withdrawal due to their health condition and the side effects of treatment. The physical changes resulting from treatment, such as hair loss and weight fluctuations, can make students feel self-conscious and different from their peers. This can lead to avoidance of social situations and a reluctance to engage with classmates, exacerbating feelings of loneliness and alienation. The fear of being judged or misunderstood by others can also deter survivors from seeking the social support they need.

Social stigma surrounding cancer can be particularly damaging. Some cultures in Malaysia, cancer is viewed with fear and misunderstanding, leading to stigmatization of those affected. This stigma can manifest in various ways, from overt discrimination to subtle changes in how survivors are treated by their peers. Such experiences can erode self-esteem and create additional psychological burdens for student survivors. Sarang et al. (2023) highlight the importance of supportive university environments that foster inclusivity and understanding for students with health challenges. Universities can play a critical role in mitigating these challenges by promoting awareness and acceptance, providing accommodations, and offering mental health support tailored to the needs of student survivors.

Supportive university environments can significantly alleviate some of the challenges faced by student survivors. Academic accommodations, such as flexible deadlines, remote learning options, and the ability to take leaves of absence without academic penalty, are crucial. These accommodations allow students to manage their treatment and recovery without compromising their educational progress. Additionally, counseling services and peer support groups within the university can provide much-needed emotional support and a sense of community.

Furthermore, raising awareness among faculty and students about the unique challenges faced by student survivors can foster a more understanding and supportive environment. Educators can be trained to recognize the signs of distress and provide appropriate support, while peers can be encouraged to offer empathy and assistance. Creating an inclusive campus culture that values diversity and supports all students, regardless of their health status, is essential for the well-being and academic success of breast cancer survivors.

5.1.4 Accessible Support System

The importance of accessible support systems cannot be overstated for breast cancer survivors navigating university life. Family and friends are primary sources of emotional and practical support, providing essential care and encouragement during treatment and recovery. Additionally, university resources, such as counseling services and academic accommodations, play a critical role in helping students manage their dual responsibilities (Shahira et al., 2018).

Support groups, both within and outside the university setting, offer a sense of community and shared experience. These groups provide a platform for survivors to share their

experiences, receive emotional support, and exchange practical advice. The benefits of such support networks are well-documented, with studies showing that participation in support groups can significantly improve psychological well-being and quality of life (Quiquiles & Medez, 2022).

The types of support received vary widely, encompassing emotional, informational, and appraisal support. Emotional support involves providing empathy, care, and understanding, while informational support includes sharing knowledge about treatment options and coping strategies. Appraisal support, on the other hand, involves providing constructive feedback and reassurance, helping survivors to maintain a positive outlook and build resilience (Smith et al., 2023).

5.1.5 Self-Coping Mechanisms

Self-coping mechanisms are vital for managing the various challenges of being a breast cancer survivor and a student. Psychological strategies such as mindfulness, meditation, and cognitive-behavioral techniques help survivors to manage stress and maintain emotional balance. These strategies are effective in reducing anxiety and improving overall psychological well-being, as supported by many studies (Sztachńska et al., 2019).

Practical adjustments, including time management and health prioritization, are also essential. Survivors often need to reorganize their schedules to accommodate treatment appointments and self-care routines. Effective time management can help mitigate the academic impact of cancer treatment, allowing students to balance their health needs with their educational responsibilities. Health prioritization, including maintaining a healthy diet, regular

exercise, and adequate rest, is crucial for sustaining physical and mental health during and after treatment (Szuhany et al., 2021).

The adoption of these coping mechanisms reflects the resilience and adaptability of survivors. By integrating psychological and practical strategies, survivors can navigate the complexities of their dual roles, fostering a sense of control and empowerment. The development of these coping mechanisms is supported by literature emphasizing the importance of holistic approaches to cancer survivorship, which address both the psychological and practical aspects of recovery (Robertson, 2023).

5.2 Related Theory/Model Discussion

The challenges experienced by breast cancer survivors, along with the demands of being a university student juggling multiple responsibility, can be understood through the perspective of the PERMA model.

1. Positive Emotions: This aspect focuses on experiencing feelings such as joy, gratitude, and hope. For breast cancer survivors and university students dealing with cancer, fostering positive emotions can involve appreciating the support received, finding moments of joy in daily activities, and maintaining hope despite challenges. Cultivating gratitude, for instance, helps individuals focus on the positives in their lives, even amidst adversity.

2. Engagement: Engagement involves being deeply absorbed in activities that bring a sense of flow, where time seems to pass quickly, and one is fully immersed. For breast cancer survivors, engaging in enjoyable or meaningful activities—like hobbies, social interactions, or

educational pursuits—can significantly enhance their emotional well-being and provide a respite from cancer-related stressors.

3. Relationships: Building and maintaining strong, supportive relationships are crucial for well-being. For individuals facing cancer, having a network of supportive friends, family, and healthcare providers can provide emotional sustenance and practical assistance, which is vital for their psychological resilience and overall well-being.

4. Meaning: Finding meaning involves having a sense of purpose and understanding that one's life is valuable and worthwhile. For breast cancer survivors, finding meaning might involve connecting their experiences to a larger purpose, such as helping others in similar situations, or gaining a deeper appreciation of life.

5. Accomplishments: This element focuses on achieving goals and experiencing a sense of accomplishment. For cancer survivors and students, setting and achieving personal or academic goals can foster a sense of competence and pride, contributing positively to their overall well-being.

5.2 Limitations

The limitations of this exploratory research should be addressed in future research to enhance the understanding of the psychological well-being of breast cancer survivors among university students. The sample size was relatively small, limiting the generalizability of the findings; a larger and more diverse participant pool is needed for broader insights. The study relied on self-reported data, which may introduce bias; future research could incorporate longitudinal studies and objective measures to validate and enrich the data. Another significant

limitation is that the age range of participants was predominantly in their 30s, making the findings less suitable for classification across different ages. Including participants from a wider age range would provide a more comprehensive understanding. Additionally, the focus on qualitative data, while providing in-depth insights, lacks the quantifiable metrics obtainable from mixed-methods approaches; integrating quantitative methods could offer a more thorough analysis. Finally, the study did not account for cultural and socio-economic differences, which can influence psychological well-being and coping mechanisms; future research should aim to include a more representative sample considering these variables.

5.3 Recommendations

In future research, researchers can address the limitations of this study by expanding the sample size to include a more diverse group of participants, which would enhance the generalizability of the findings. They can also incorporate longitudinal designs and objective measures to validate self-reported data and provide a richer, more accurate understanding of the experiences of breast cancer survivors. Additionally, including participants from a broader age range will allow for a more comprehensive analysis of how age-specific factors influence psychological well-being and coping mechanisms. Researchers should also consider integrating mixed-methods approaches, combining qualitative insights with quantitative data to offer a more holistic view. Furthermore, accounting for cultural and socio-economic differences will provide a nuanced understanding of the various factors affecting the psychological well-being of breast cancer survivors. Finally, exploring the role of technological interventions, such as digital support groups and telemedicine, could provide new avenues for supporting survivors in diverse contexts.

5.4 Conclusion

This study explored the psychological well-being of breast cancer survivors among university students, providing valuable insights into their experiences and coping mechanisms. The findings highlighted several key themes, including the discovery of initial diagnosis, treatment and recovery processes, accessible support systems, challenges as a student and a breast cancer survivor, and self-coping mechanisms. Participants shared their journeys, revealing the complex interplay of physical, emotional, and social factors that influence their psychological well-being.

Despite the study's limitations, such as the small and age-homogeneous sample size and reliance on self-reported data, the research offers a foundational understanding that can inform future studies. By addressing these limitations and incorporating the recommended approaches, future research can provide a more comprehensive and generalizable understanding of the psychological well-being of breast cancer survivors. This knowledge is crucial for developing effective support systems and interventions that cater to the diverse needs of survivors, ultimately enhancing their quality of life and aiding their recovery journey.

In conclusion, this research underscores the resilience and strength of breast cancer survivors, highlighting the importance of supportive networks, effective coping strategies, and the need for tailored interventions to address their unique challenges. By building on these findings and addressing the identified limitations, future studies can continue to advance our understanding and support of breast cancer survivors, ensuring they receive the care and resources necessary for their psychological and overall well-being.

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APPENDIX A
GUIDED QUESTIONNAIRE

Section	Questions
Demographic	Personal Information: ● Age: ● Ethnicity: ● Marital Status: ● Education Level: ● Occupation: Medical History: ● Age at Diagnosis: ● Date of Diagnosis: ● Type of Breast Cancer (if known): ● Family History of Breast Cancer: ● Other Relevant Medical History (e.g., previous cancers, chronic illnesses): Treatment and Recovery: ● Types of Treatment Received (e.g., surgery, chemotherapy, radiation therapy, hormonal therapy, etc.): ● Dates and Duration of Treatment: ● Any Complications during Treatment: ● Current Status (survivorship): ● Support Received During Treatment (family, friends, support groups):
Experience as a University students living with cancer	● Can you describe your experience of being a student while also dealing with a breast cancer diagnosis? ● How has your journey with post breast cancer influenced your identity as a university student? ● In what ways has your perspective on academics and student life changed since your cancer diagnosis?
Challenges	● What specific challenges have you encountered as a university student living

	with post breast cancer? • How has your diagnosis affected your academic performance and goals? • Are there social or emotional challenges you've faced on campus related to your cancer journey?
Support Systems	• In your experience, how crucial is a support system in managing the psychological well-being of university students with breast cancer? • Can you discuss any instances where support from friends, family, or the university community positively influenced your mental health? • What types of support do you believe are most beneficial for maintaining a sense of well-being during your academic journey as a breast cancer survivor?
Coping Mechanisms	• What coping strategies have you found helpful in navigating the academic and personal aspects of university life while dealing with breast cancer? • Can you describe any support networks, both formal and informal, that have positively influenced your psychological well-being? • How do you balance seeking support with maintaining your independence as a university student with breast cancer?

APPENDIX B

PARTICIPANTS INFORMATION SHEETS & INFORMED CONSENT



Participant Information Sheet

Dear Participant,

Please take some time to read through the following information.

Research Title

Psychological Well-being of Breast Cancer Survivors among University Students

Research Purpose

I am Farah Damia binti Mohd Zulkifli from the Faculty of Cognitive Sciences and Human Development in Universiti Malaysia Sarawak (UNIMAS). I am interested to study about the challenges experienced by university students who are breast cancer survivors in maintaining their academic performances. Therefore, I would like to invite you to take part in this study and share your experiences that you think are relevant regarding this matter.

Your Role

If you agree to be a part of this study, you will be involved in an interview session that may take 1 to 2 hours of your time. However, the time allocated for the interview depends on you and we can set the time and place according to your liking.

Participation Agreement

Your participation is voluntary, and you have the right to withdraw yourself from the study anytime you want. I will be recording the interview session and once it has been transcribed, the information will be destroyed. I will not disclose your name or any other private information that can reveal your identity in any records and information that we will use in this study.

Confidentiality

All your information is guaranteed confidentiality and I am the only one to know your participation in the study. I will be using your information for the study's findings, report, and presentation. However, I will make sure that the information used will not reveal your name and it stays confidential. This includes extracts written in the article and during the presentation.

If at any point you have any questions, please do not hesitate to ask the researcher, Farah Damia binti Mohd Zulkifli, or contact me at 019-3896785 or email me at 77973@siswa.unimas.my. You can also contact the supervisor of this study, Dr Jamayah Saili at 584507 or email her at sjamayah@unimas.my.

I highly welcome your cooperation and participation in this study and appreciate your sharing of experiences. Thank you.



Informed Consent Form

Psychological Well-being of Breast Cancer Survivors among University Students

Please ensure that you have consented to the followings before being interviewed:

- I understand the purpose and procedures of the study
- I was given the participant information sheet beforehand
- I understand that my participation is voluntary
- I understand that my name, address, and other private information will not be used
- I understand that my answers and reactions will be kept confidential
- I agree and consented to be a part of this study
- I agree and consented for my interview session to be recorded for the use of this study

Signature : _____

Date : _____

APPENDIX C

TRANSCRIPTION INTERVIEW SESSION WITH MRS. MARY

Interviewer: In short, you underwent chemotherapy, surgery, radiotherapy, and currently on medication maintenance with Kadcyła, right?

Mrs. Mary: Yes, that's correct. I underwent chemotherapy, surgery, radiotherapy, and I'm currently on medication maintenance with Kadcyła.

Interviewer: Okay, so since then, did you ever experience any complications during your treatment period? If yes, can you further explain it?

Mrs. Mary: Yes, during my treatment, I experienced several complications. These included diarrhea, nosebleeds, vomiting, ulcers, low blood pressure, burning skin sensations, and a loss of appetite. These side effects were challenging to deal with, but I was fortunate to have the support of my medical team who provided remedies and guidance to manage them as best as possible. Despite these complications, I remained determined to push through my treatment regimen and focus on my recovery journey.

Interviewer: Alhamdulillah, it's good to hear that despite the challenges, you were able to navigate through them with the support of your medical team. How are you currently? Are you considered a cancer survivor?

Mrs. Mary: Yes, Alhamdulillah, I am currently surviving.

Interviewer: What support did you receive during your treatment?

Mrs. Mary: I received plenty of support from my family, friends, and support groups such as National Cancer Society Malaysia (NCSM) and Breast Cancer Welfare Association (BCWA). Additionally, a cancer survivor from BCWA provided me with a guidebook and advised me to join activities after my recovery. Also, my colleague, who is also a cancer survivor, helped me a lot during this difficult time.

Interviewer: It's wonderful to hear that you had such a strong support network throughout your journey. Now, let's discuss your experience as a university student living with cancer diagnosis. How did you handle being a part-time student pursuing a Master's degree, while also working, and coping with your breast cancer diagnosis simultaneously?

Mrs. Mary: Working in HR was particularly challenging, especially when I had to manage my job responsibilities alongside chemotherapy and radiotherapy. The side effects were tough, so I had to take an extended medical leave. Balancing this with my part-time Master's studies made things even more strenuous. Keeping up with coursework and assignments was difficult due to fatigue and frequent medical appointments. It was also hard to concentrate on my studies while dealing with the physical and emotional toll of the treatment.

TRANSCRIPTION INTERVIEW SESSION WITH MS. AISY

Interviewer: That's a very balanced and healthy outlook. What specific challenges have you encountered as a university student living with breast cancer?

Miss Aisy: The biggest challenge was managing the physical and emotional toll of the treatment while keeping up with my studies. The fatigue and chemo brain made it difficult to concentrate and retain information. Socially, it was hard to stay connected with friends who didn't understand what I was going through. Additionally, the fear of recurrence was always at the back of my mind, making it hard to focus on the present.

Interviewer: As you've mentioned just now, you had friends who didn't understand what you were going through. How did that negatively impact you?

Miss Aisy: It was really tough because I felt isolated and misunderstood. Some friends seemed to drift away, either because they didn't know how to support me or because they couldn't relate to my experience. This lack of understanding and support sometimes made me feel very lonely and added to my stress and anxiety. I often felt like I had to put on a brave face and downplay my struggles to fit in, which was exhausting. The lack of social support also made it harder to cope with the emotional challenges of my diagnosis and treatment, as I didn't always have people to turn to who could truly empathize with my situation.

Interviewer: It sounds like there were many layers to the challenges you faced. How about your academic performance and goals? How has your diagnosis affected them?

Miss Aisy: My diagnosis initially slowed down my academic progress because I had to take time off and reduce my course load. However, it also made me more focused and determined to achieve my goals. I've become more disciplined and better at managing my time. My academic performance improved once I returned because I was more motivated and had a clearer sense of purpose.

Interviewer: That's impressive. It's clear that your diagnosis has had a profound impact on your academic journey. Are there social or emotional challenges you've faced on campus related to your cancer journey?

Miss Aisy: Yes, there were significant social and emotional challenges. I felt isolated at times because my peers couldn't fully relate to my experience. There were moments of anxiety and depression, especially when I felt overwhelmed by the dual pressures of treatment and studies. Finding the right balance between seeking support and maintaining my independence was also a challenge.

Interviewer: It's understandable to feel isolated in such a situation. I remembered you mentioned earlier on, you received extensive support from your family & friends. Based on your experience, can you describe how crucial a support system is, in managing the psychological well-being of university students with breast cancer?

Miss Aisy: A support system is absolutely crucial. The emotional and psychological support from family, friends, and the university community made a huge difference in my ability to cope. Knowing that I wasn't alone and had people to lean on helped me manage stress and stay positive.

TRANSCRIPTION INTERVIEW SESSION WITH MS. HAZY

Miss Hazy: Yes, that's right. 2020 was supposed to be my final year, and I was set to graduate. However, I became quite down and took a two-year break for my treatment.

Interviewer: How has your journey with breast cancer influenced your identity as a university student?

Miss Hazy: My identity hasn't changed much as a cancer survivor. The main change has been in my lifestyle, which is still affected even after four years due to the post-treatment effects.

Interviewer: Did you experience any side effects?

Miss Hazy: Yes, I did. After surgery and treatment, and finishing targeted therapy, I was referred to physiotherapy because I developed lymphedema.

Interviewer: Can you explain more about lymphedema?

Miss Hazy: Lymphedema is a condition that occurs when lymph nodes are removed from the armpit area, causing swelling in the arm. My right arm became very swollen, which affected my ability to work, as I was helping in my family's restaurant. I also experienced brain fog, a side effect known as chemo brain. Additionally, I had a chemo port, which caused an obstruction on my left side.

Interviewer: Can you explain more about the obstruction?

Miss Hazy: The obstruction means that the doctors and nurses advised me not to lift heavy objects. Although I had surgery on my right side, both sides are affected, limiting my ability to lift heavy items as I used to.

Interviewer: When talking about your identity as a student, did you ever feel so down after being diagnosed with breast cancer that you considered giving up your studies?

Miss Hazy: There were moments when I felt so low that I considered quitting my PhD, but it wasn't too severe. I have difficult-to-find veins, which became even smaller after chemotherapy. This made injections incredibly painful. Since I had surgery before chemotherapy, the medication felt like it was heating up my entire body, especially near the scar on my breast. It felt like being sliced with a knife. During the fourth chemotherapy session, I expressed to the doctor that I wanted to stop the treatment because I was feeling extremely unwell. The doctor advised against it but eventually decided to insert a chemo port and prescribed antidepressants due to my deteriorating condition. I experienced anxiety before each chemotherapy cycle, but I never felt like quitting my studies. Despite the challenges, including severe brain fog, I couldn't bring myself to stop studying, especially considering I had a scholarship that I would have to repay if I discontinued my education. This scholarship became my motivation to persevere, even though it meant continuing my studies later than planned.

Interviewer: I am amazed by your rational thoughts. How do you think academics and students' lives have changed since your cancer diagnosis? Have you noticed any differences?

TRANSCRIPTION INTERVIEW SESSION WITH MS. LILY

Interviewer: What specific challenges have you encountered as a university student and working woman living with breast cancer?

Miss Lily: One of the biggest challenges has been managing my time effectively. Balancing work, studies, and treatment can be overwhelming. I often feel exhausted, especially after treatment sessions, which makes it hard to concentrate on my studies and work tasks. At work, after my operation, I had to take medical leave. During that time, no one knew why I was on leave, but I still had to work from home because my team was short-staffed. Even after radiotherapy, if urgent matters came up, I had to go to the office.

At home, I often argued with my ex-husband, who was my husband at the time. This might have been a side effect of the medication, making it difficult to control my emotions and stress. I felt like a burden because I was frequently unwell. After the surgery, my left arm couldn't bend properly, so I needed physiotherapy. Additionally, I had a young baby at the time, which made managing family responsibilities even more challenging.

Another challenge is dealing with the emotional toll. There are days when the stress and anxiety about my health make it difficult to stay focused and motivated. Keeping up with assignments and meeting deadlines while attending frequent medical appointments is tough. I also face physical challenges, such as fatigue and side effects from medication, which can impact my productivity. Despite these obstacles, the understanding and support from my bosses and lecturers have been crucial in helping me navigate these difficulties.

Interviewer: How has your diagnosis affected your academic performance and goals?

Miss Lily: The year I was diagnosed, my performance really suffered. I took a lot of leave, and on top of that, I was dealing with family issues. This had a significant impact on my work and studies. There were times when I didn't complete my assignments, and I would just sit through classes or work without really engaging. I would just show up, wait for the time to go home, and then leave.

However, this phase didn't last long. I realized my mistakes, but my emotions were unstable, so I didn't care much about being reprimanded by lecturers or bosses. At that time, I just couldn't bring myself to worry about it.

Interviewer: Are there social or emotional challenges you've faced on campus and work related to your cancer journey?

Miss Lily: Yes, definitely. Especially when I was taking hormone medication, I became easily irritable, even over small things. One of the biggest challenges was feeling isolated. It's hard to relate to others when you're going through something like cancer. I often felt like I didn't fit in or that people couldn't understand what I was going through. There were also moments of anxiety and fear about the future, especially when it came to my health, academic and working performance. Additionally, there were times when I struggled with self-confidence, especially in social situations, as I worried about how others perceived me. Overall, navigating the social and emotional aspects of my cancer journey on campus has been quite challenging. However, I am grateful to have an aunty who always gives me words of encouragement. She's not a psychologist, but her advice has been incredibly helpful to me.

TRANSCRIPTION INTERVIEW SESSION WITH MS. AVY

Interviewer: After that, did the doctor provide any other alternatives to replace Tamoxifen?

Ms. Avy: No, there weren't any alternatives provided. However, I have appointments with the doctor every 3 or 6 months, which have now extended to every 6 months. Additionally, immediately after the operation, I opted for implants to recreate a breast appearance. However, earlier this year, especially last year, I had the implants removed due to further complications. Now, it's totally gone.

Interviewer: I see. That sounds challenging. Can you elaborate on the complications you experienced with the implants?

Ms. Avy: Certainly. Breast implants feel unnatural and uncomfortable, particularly in cold temperatures. It's challenging, especially when I try to hug my daughter; she describes it as feeling like a stone. Eventually, they caused infections and had to be removed completely. So, I am removing it for good lah. Then when the doctor removes it, it just looks like it's already infected. It's hard, and not shaped like a breast. But like a dried raisin or prune.

Interviewer: So, they weren't the type that could be easily removed?

Ms. Avy: No, the thing is, with silicone implants, the maintenance isn't ideal for me. Typically, with silicone implants, you need to remove and replace them every 9 or 8 years. Unless you opt for reconstruction using your own fat. However, if you use fat for breast reconstruction, there's another complication; it could lead to infection or other issues, resulting in discoloration. It may cause more harm than good.

Interviewer: I understand. Let's talk about your experience as a university student while dealing with cancer. How did your diagnosis affect your studies and life as a student and also a working woman?

Ms. Avy: Well, when I first had cancer, I did a lot of research during my thyroid cancer treatment. But when I was working on my LCCI diploma, I was first diagnosed with breast cancer in 2016. When the doctor told me I had another cancer, it was truly shattering. I was shocked, thinking, "I'm having another cancer," especially because I had a 2-year-old child at that time. When I had thyroid cancer before, I wasn't so worried since I was alone and only had my parents to worry about. But this time, having a child made it much harder. I couldn't finish my studies because I was so down. In terms of work, I didn't get any support from my bosses and colleagues. When they found out I had cancer, they assumed I couldn't perform or function properly due to hospital visits. As a result, they tried to oust me from my office, and eventually, I did leave. It was very hard because of people's perceptions that having cancer means you're going to die, have no future, can't do anything, can't function, and are very unwell. It was a very downward situation for me from 2016 to 2018. I requested to be pooled, so I was sent to JPA, where I just punched in and out without working. Being secluded from people made me anxious, as I feared their judgment about my inability to work due to my illness. In 2019, I was finally given a position and started working again. However, once the top management found out about my past cancers, they didn't want me as an employee, assuming I was sick without considering my performance.

TRANSCRIPTION INTERVIEW SESSION WITH MS. HASNY

Interviewer: Can you share what specific challenges have you encountered as a university student living with breast cancer?

Ms. Hasny: One of the biggest challenges has been managing my symptoms and treatment side effects while trying to keep up with my coursework. There were days when I had to miss classes or exams because I simply didn't have the energy to participate. Additionally, navigating the stigma and misconceptions surrounding cancer on campus was difficult at times. Some people didn't understand why I couldn't always be as active or involved as I once was, which could be isolating.

Interviewer: How has your diagnosis affected your academic performance and goals?

Ms. Hasny: At first, my cancer diagnosis really impacted my studies. I had to take a break from university to focus on treatment. But with determination and support, I managed to return and graduate. My goals might have shifted a bit because of my experience, but I'm not letting that stop me from pursuing my ambitions. If anything, it's made me even more determined to succeed. Luckily, for my Master's, there aren't many compulsory classes. I spoke with my supervisor about my situation, and thankfully, she understood. It's just taking longer to complete my Master's because I can't fully commit. But that's not stopping me from pursuing my goals.

Interviewer: Are there social or emotional challenges you've faced on campus related to your cancer journey?

Ms. Hasny: Absolutely. It's been challenging to navigate the emotional rollercoaster of cancer treatment while trying to maintain a sense of normalcy on campus. There were times when I felt overwhelmed by the pressure to appear strong and put together, even when I was struggling internally. But opening up to trusted friends and seeking support from university resources helped me cope with the emotional challenges more effectively.

Interviewer: How important is having a support system for university students dealing with breast cancer?

Ms. Hasny: Having a support system is absolutely vital for university students grappling with breast cancer. Imagine facing the demands of academic life while also navigating the physical and emotional challenges of cancer treatment. In my own experience as Ms. Hasny, there were moments when I felt overwhelmed by the uncertainty of my health and the pressure of my studies. During those times, having friends, family, and supervisors who offered unwavering support was like a lifeline. Whether it was a friend sitting with me during chemotherapy sessions, a professor extending deadlines with understanding, or a family member offering words of encouragement, each act of support made a tangible difference in my ability to cope. Without that network of support, the journey would have felt infinitely more daunting and isolating.

Interviewer: Can you share any examples of how support from friends, family, or the university community has positively impacted your mental health?