

CHAPTER I

INTRODUCTION

1.1 Research Background

The accessibility of medical facilities significantly impacts a nation's population's health. The healthcare system struggles with constrained resources and rising demand due to rapid demographic increases. In order to preserve a sustainable quality of life, especially in emerging nations, concerning health, these complex concerns must be balanced with comprehensive solutions (Nimako & Kruk, 2021). Indonesia is a developing nation with the fourth-largest population in the world, consisting of 262 million people (BPS 2022). Healthcare difficulties could occur because of its geographic and socioeconomic diversity (Mboi et al., 2018). The health development strategy strongly emphasizes expanding access to and the availability of high-quality healthcare facilities. Implementing health service facilities requires collaboration between the private sector and the central and local governments to accomplish this goal (Kemenkes Indonesia 2021). There are many services that the private sector may offer, including outpatient clinic services and other services dependent on the type of disease, such as services for cancer patients. Research on cancer patient services at private hospitals is essential. However, there is not much research conducted related to cancer service facilities.

According to Government of Indonesia Regulation Number 47 (2016), there are many kinds of health service facilities in Indonesia, such as hospitals, clinical labs, clinics, independent doctor practices, puskesmas, pharmacies, and traditional health care and specialized medical service facilities. A healthcare provider specializing in ionizing radiation as a clinical modality to treat malignant neoplasia is a radiation therapy (RT) provider (Mehta et al., 2010). RT provider is included as a specialized healthcare unit in Indonesia. Regarding service quality, healthcare facilities owned by the private sector outperform those owned by the government. Additionally, the private sector typically can offer more creative health services in response to changing consumer needs (Basu et al., 2012).

Cancer treatment services have attracted private healthcare providers as cancer cases are getting more widespread worldwide, particularly in emerging countries. Patients are looking for better services during treatment that offer convenient and emphatic services. The private hospital should improve the quality of care inpatient treatment by establishing the system (Donabedian, 1988). This approach should become patient-centred, activating patient involvement in their treatment plan (Bombard et al., 2018). Healthcare institutions, particularly private ones, have recently expanded quickly. According to data, there was an increase of 50% radiotherapy facility in Indonesia from 2008 to 2017.

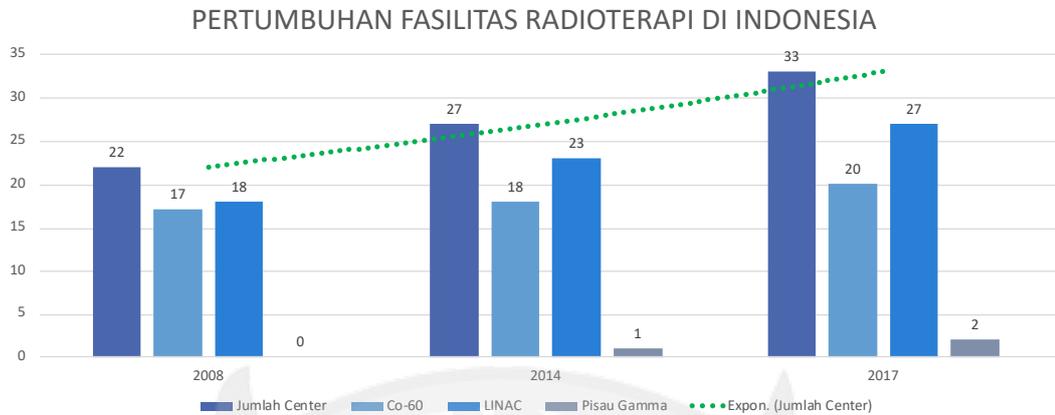


Figure 1.1 Indonesian radiotherapy growth
Source : (Yankes,2018)

Radiotherapy (RT), as one of the cancer treatments, is an essential part of both curative and palliative cancer care (Yap et al., 2016). As one of the emerging countries, Indonesia has had a very high demand for RT facilities during the past decade (Octavianus & Gondhowiardjo, 2022). According to data from 2020, there were 68,858 new incidences of breast cancer or 16.6% of Indonesia's total 396,914 new cancer cases. Over 230,000 deaths were reported during this time (Globocan, 2020).



Figure 1.2 Globocan Indonesian statistic data 2020
Source : (Globocan, 2020)

Cancer has contributed as a leading cause of death and is a critical problem that causes low life expectancy in almost all countries (Bray et al., 2021). There are various treatment modalities for cancer patients, including radiotherapy, immunotherapy, chemotherapy, hormone therapy, palliative care and surgery. Radiation therapy or radiotherapy (RT) is one of the most widely used instruments for cancer treatment because of its low cost and high effectiveness (Burnette & Weichselbaum, 2013). In a cancer treatment program, radiotherapy is essential. Cancers may be treated with radiotherapy alone or in conjunction with systemic treatments, surgery, or both. Additionally, it can relieve uncomfortable symptoms in those with terminal illnesses. The growth of radiotherapy facilities in Indonesia is consistent with the country's high cancer incidence. In Indonesia, 44 centres (66 radiation planes) are dispersed among 16 of the country's 34 provinces. Only 18.33% of patients in 2018 had radiation, which is still far below the objective of the 360 planes. Many oncology instances significantly impact the expense of addressing cancer cases in Indonesia. According to the Indonesian Ministry of Health, in 2021, the cost budget for cancer cases is second place overall, costing more than 3.5 trillion rupiahs.

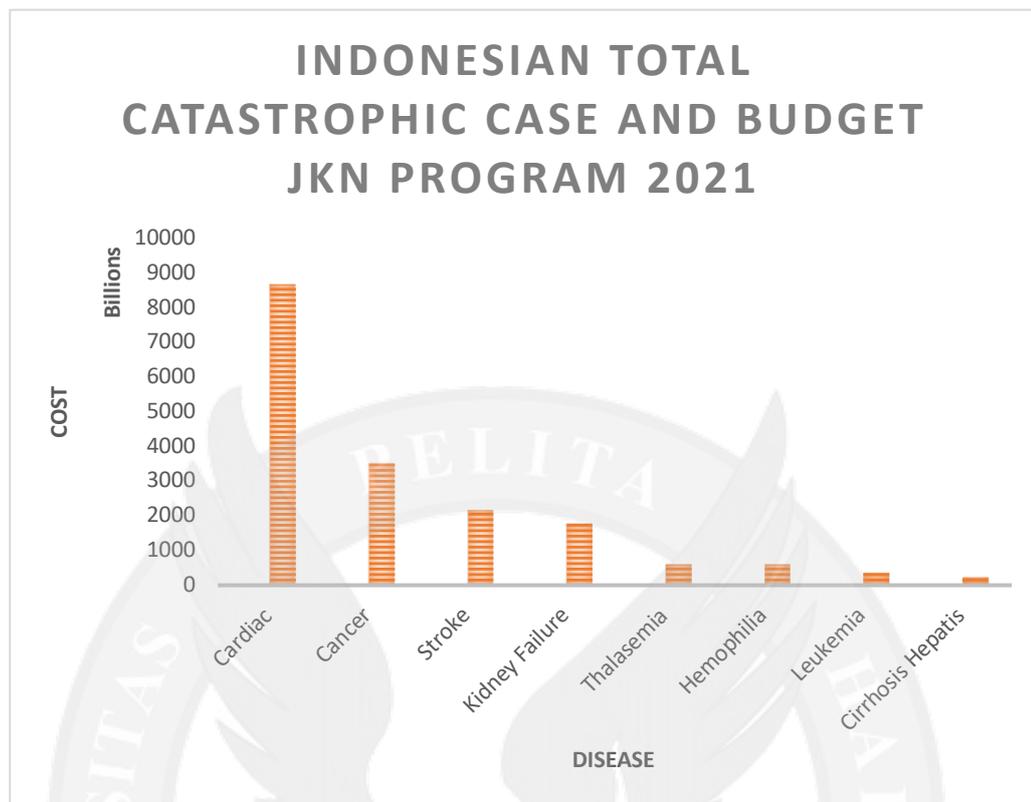


Figure 1.3 Indonesia catastrophic cost budget 2021
Source : (Kemenkes, 2021)

Ken Saras Hospital is a class C hospital founded in 2010 by PT KEN TANZAH MAKMUR. Ken Saras Hospital was established to be able to participate in providing referral health services for the people of Central Java in general and the people of Semarang Regency in particular. As a hospital operating for 10 (ten) years, the facilities available are complete. Service and support facilities, including medical equipment, non-medical, furniture, electrical, and human resources, have been 100% met as a class C general hospital standard. Ken Saras Hospital is located in the southern area of Semarang, precisely on Jl. Soekarno-Hatta Km. 29, Bergas District, Semarang Regency. Ken Saras Hospital has a land area of 7,055.00 m²

and a building area of 24,300 m². Furthermore, it has a total bed capacity of 190. Ken Saras Hospital provides superior services in cancer treatment, ultimately with the latest methods supported by advanced technology, from planning to the radiation therapy process. This hospital owns the pathology lab that can perform FNAB (Fine Needle Aspiration Biopsy), routine and special pathological examinations (histology & cytology), examination of Frozen Section (FS) during operation, and Immunohistochemical examination in cancer cases. Cancer therapy generally consists of surgery, chemotherapy, and radiation can all be done in this hospital. The equipment used for radiotherapy is the LINAC (Linear Accelerator) made by Siemens primus type. This plane is one of the most recent radiation therapy devices in Indonesia.

National insurance (BPJS) is primarily used in Indonesia's healthcare coverage system. With this system, patients can often receive treatment from primary healthcare facilities before being transferred to more sophisticated healthcare facilities for further care after diagnosis. Since the last five years, there has been an increase in both the private and public sectors, making radiotherapy in Indonesia expand rather quickly—more specifically, in Central Java. There are eight radiation suppliers in Central Java. Given the extent of the province covered, this number is quite significant. The Ken Saras radiation centre was established in 2015, and the number of patients has steadily risen. However, there has been a marked decline in the number of patients each year since 2019 emerged. The number of new patients dropped from 515 in 2019 to 318 in 2020, a 31% fall. In 2019, there were 515 new

patients. The report from 2021, which shows a 26% drop in new patients from the previous year, further supports the decline in the number of patients.

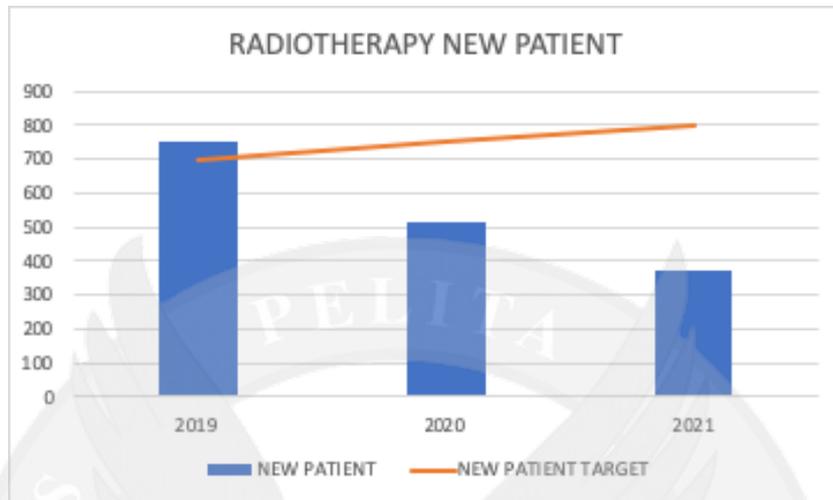


Figure 1.4 Hospital radiotherapy new patient data
Source : (Hospital internal data, 2022)

The second phenomenon is a decline in revisited or returning patients. There were 1254 patients receiving long-term radiation in 2019. The number of revisit patient visits dropped by 31% in 2020, which leaves 863 patients. This trend persisted in 2021, with 848 revisit patients, a 2% decrease from the year before.

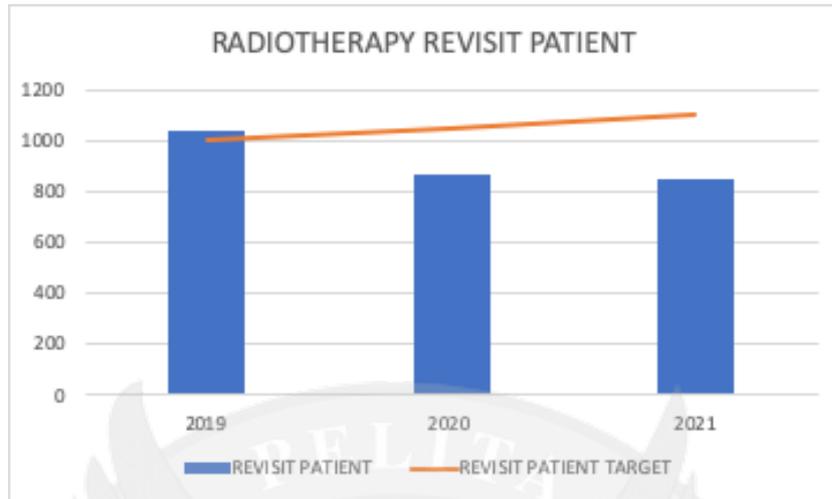


Figure 1.5 Hospital radiotherapy revisit patient data
 Source : (Hospital internal data, 2021)

The following two phenomena lead to the conclusion that the number of new patient visits and returning patients at Ken Saras Hospital has significantly reduced during the past three years. Also much below the target established by hospital management is the number of visits. This event may occur because more radiotherapy facilities emerge in the Central Java area, so patients have more options and competition for radiotherapy facilities. To ensure patients are comfortable with their course of treatment, the hospital provider must consider an approach that prioritizes providing excellent patient care. Patients are more likely to return to a health provider for treatment if they receive exceptional care and have an enjoyable and satisfying experience (Prakash, 2010). To survive in the intense hospital business competition, the quantity of patient visits is crucial for the hospital's existence and growth (Güçer & Arıcı, 2018). According to the patient visit data, hospital services may have contributed to the business gap at Ken Saras Hospital. Health services focused on the patient's needs are crucial to providing a

high-quality patient experience, building patient loyalty, and motivating patients to return and recommend others to this medical facility.

A typical curative RT treatment duration ranges from 3 to 8 weeks (Chaput & Regnier, 2021). Given the length of treatment, creating a good long-term relationship between the healthcare provider and patient is critical. The patient could develop commitment from trust raised from the relationship (Morgan & Hunt, 1994). Healthcare providers have a long record of analyzing customer satisfaction levels with their services mainly on a functional aspect, such as how the service is delivered, but less on the patient clinical outcome or technical aspects, which involve the physical and psychological state (Swain & Kar, 2018). Measuring patient satisfaction has been debated in the literature for decades, with the mission being described as complex and challenging (Collins & Nicolson, 2002). Moreover, the measurement of satisfaction surveys could hardly be transferred to the quality of care measurement (Fenton, 2012). Therefore, the interaction between patient and healthcare provider should be incorporated in accordingly measurement. This approach where more favourable to be described with patient experience (Wolf et al. 2014, 2021).

Patients and families may experience a sudden change in their lives after receiving a cancer diagnosis. They may react in various ways after getting the diagnosis, including shock, denial, perplexity, despair, anger, guilt, and resignation. Patients will remember this particular time well for years since it was a disruptive turning

point in their lives. While dealing with the news, patients frequently have to instantly absorb new information to comprehend their care options when discussing treatment plans with their practitioner. Therefore, communication with medical professionals during diagnosis and treatment planning is crucial. It can also impact a patient's mental state, attitude, perception, expectation and treatment decisions (Walsh & Nelson, 2003; Thorne et al., 2009).

The patient experience concept is widely acknowledged as a distinct dimension of healthcare quality. The patient is a one-of-a-kind human being. They are referred to as patients suffering from a disease but remain the same unique individual they have always been (Oben, 2020). The patient experience, clinical effectiveness, and patient safety are recognized as distinct components of healthcare quality worldwide (Doyle et al., 2013). Healthcare institutions concentrate on providing a superior patient experience (Stempniak, 2013). The focus on patient participation, the advent of the consumer mindset, and changes in healthcare policy that have tied hospital and physician compensation to patient experience indicators are all significant drivers of these industry-wide advances in quality (Manary et al., 2013). Patient experience is defined as the sum of all interactions, the impact of organizational cultures, patient perceptions, and the significance of taking into account experiences across the continuum of care (Wolf et al. 2014, 2021). Cancer patients suffering from chronic diseases face the possibility of a potentially incurable life-threatening illness, a condition that can cause physical and psychological distress. Reflecting on the Radiotherapy Patient Experience

Questionnaire (RTEQ), several elements could be used to measure the cancer patient experience during the external RT procedure and have been potentially valid and reliable (Olausson et al., 2017). However, the current application of RTEQ was limited to measuring the scalability of patient comfort and experiences but rarely used to assess its applicability regarding hospital outcomes.

The concept of patient engagement has gained prominence in the healthcare ecosystem over the last few decades (Tobiano et al., 2021). Patient engagement is a complex and multidimensional experience that results from an individual's cognitive, emotional, and affective toward their health promotion (Graffigna et al., 2014). As stated by a study, patient health engagement (PHE) can help healthcare professionals and policymakers customize their interventions to provide the most appropriate care management for patients and change their disease course (Barello et al., 2021). Patient engagement is a goal that healthcare companies frequently express and a cornerstone of excellent care quality (Coulter, 2011). This involvement has historically and regularly focused on how patients and physicians interact when making decisions about treatment or how to enhance people's efforts to manage their care (Coulter & Ellins, 2007). There are increasing efforts to integrate patients in more ways to enhance or rethink service delivery by incorporating patient experiences (Boivin et al., 2014). According to a recent study, better patient engagement may result from enhanced patient experience (Holt, 2018). These activities are partially due to rising awareness and acceptance that

users of health care have a legitimate role, the required information, and a substantial impact on the organization and delivery of services. (Bradshaw 2008).

A patient's ability to synergize the different stages of subjective dimensions (think, feel and act) during a specific period may impact the engagement. According to the PHE model's process, there are several levels that this model could describe; depending on their emotional, cognitive, and behavioural perspectives, people may engage in care management differently (Graffigna et al., 2015). For instance, a patient who receives a critical diagnosis may be unable to manage care due to the emotional effect. Patient engagement is also described as an active, cooperative interaction between patients and researchers about treatment plans in which the patients participate as partners and make decisions while sharing particular experiences and service values (Harrington et al., 2020). The idea of patient engagement is consistent with the which is the willingness and capacity to actively choose to play an active role in the care that is particularly relevant to the individual, in collaboration with a healthcare practitioner or institutions, for the sake of achieving higher health outcomes or fostering experiences of care (Higgins et al., 2017). Patient health engagement is a psychology theory based on experience that uses narrative qualitative research to thoroughly and methodically examine patients' disease experiences (Graffigna & Barelo, 2018). The healthcare system must offer more organized support and consider caregivers' primary requirements and objectives. According to this current view, PHE may be preferable to assess the

long-term relationship and commitment between patients and healthcare providers based on care delivery (Hahn et al., 2021).

Radiation therapy is defined by the technical aspect of care and patient involvement, therefore measuring the willingness to consider a recommendation to others and thus can be viewed as an essential factor in assessing the company's future performance (Purificacion et al., 2016). Given the highly competitive market for private RT facilities today, to gain more customers or patients, it was critical to implement a novel strategy to increase services and outperform the competition (Güçer & Arıcı, 2018). Patient health engagement affected by patient experience could impact the patient's intention that patronizes the hospital benefit, such as revisit intention and intent to recommend, so they should increase consumers' revisit intention by enhancing the quality of medical services (Graffigna et al., 2020; Park et al., 2021; Amin et al., 2022). Therefore, revisit intention and intent to recommend should become an essential consideration for stakeholders because retaining the existing customer and improving the repeat purchase is crucial to increase the patient (Yan et al., 2015). Therefore, we believe PHE is a better tool for portraying patient intention. PHE was used to mediate between patient experience and result.

This study proposes a new research model based on previous studies on hospital patient care in a more specific population, the cancer patient (Graffigna et al., 2020; Amin et al., 2022). This research aims to advance medical knowledge concerning

cancer patients undergoing radiotherapy. In addition, the institution's contribution is identifying the elements that increase the patient from RVI and ITR to improve service and provider growth. The dependent variable is revisit intention (RVI) and intent to recommend (ITR). At the same time, patient health engagement in this study model (PHE) has become a target construct that mediates patient experience to the (RVI) and (ITR). Furthermore, the elements of RTEQ become six independent variables as antecedents of PHE.

1.2 Research Questions

To answer the phenomenon of the research background, several research questions can be formulated in the form of research questions relating to the research variables described above:

1. Does manageable situational unease have a positive relationship on the patient health engagement of the radiotherapy patient?
2. Does manageable physical discomfort have a positive relationship on the patient health engagement of the radiotherapy patient?
3. Does situational repose have a positive relationship on the patient health engagement of the radiotherapy patient?
4. Does informational needs have a positive relationship on the patient health engagement of the radiotherapy patient?
5. Does treatment environment acceptance have a positive relationship on the patient health engagement of the radiotherapy patient?
6. Does level of trust and understanding have a positive relationship on the patient health engagement of the radiotherapy patient?

7. Does patient health engagement have a positive relationship on the revisit intention of the radiotherapy patient?
8. Does patient health engagement have a positive relationship on the intent to recommend of the radiotherapy patient?

1.3 Research Objective

The research objectives therefore can be structured in complying with the research questions mentioned above :

1. To test and analyse the positive effect of manageable situational unease on the patient health engagement of the radiotherapy patient.
2. To test and analyse the positive effect of manageable physical discomfort on the patient health engagement of the radiotherapy patient.
3. To test and analyse the positive effect of situational repose on the patient health engagement of the radiotherapy patient.
4. To test and analyse the positive effect of informational needs on the patient health engagement of the radiotherapy patient.
5. To test and analyse the positive effect of treatment environment acceptance on the patient health engagement of the radiotherapy patient.
6. To test and analyse the positive effect of level of trust and understanding on the patient health engagement of the radiotherapy patient.
7. To test and analyse the positive effect of patient health engagement on the revisit intention of the radiotherapy patient.

8. To test and analyse the positive effect of patient health engagement on the intent to recommend of the radiotherapy patient.

1.4 Research Contribution

The listed below are the benefits of this research:

1. Academic advantages

Academic advantages are associated with inputs for future research related to the application of revisit intention and intent to recommend theory from the findings of a research model that examines the antecedents of radiotherapy patient health engagement.

2. Practical Benefit

In this case, the practical benefit is as input for hospital management to consider the elements that affect revisit intention and intent to recommend. Positive consequences could be as recommendation and encourage hospital manager to drive hospital performance and revenue.

1.5 Thesis Outline

The research is organized into five chapters in a research systematic. There are explanations in each chapter based on the chapter title. The plots and interconnections between the five chapters ensure that this research becomes a definitive and cohesive whole as an academic context. The following is a construction for representing the systematics of this thesis's development.

1. Chapter 1: Introduction

This chapter contains the research background, as well as an explanation of the concepts and research problems, as well as the research variables that will be used. This chapter also includes descriptions of research questions, research objectives, research benefits, and writing systematics.

2. Chapter 2: Literature Review

This chapter contains a description of the basic theories that serve as the foundation of research, interpretations of variables, along with existing literature in relation to the research topic. The development of hypotheses and the description of the research model (conceptual framework) will be discussed further in this chapter.

3. Chapter 3: Research Method

This chapter describes the research object, research type, operational definitions of research variables, population and samples, sample size determination, sampling methods, data collection procedures, and data analysis techniques.

4. Chapter 4: Result and Discussion

This chapter includes a review of research results processing consisting of respondents' demographic and behaviour patterns, an analysis of research variable descriptions, an inferential analysis of research with PLS-SEM, and a discussion of these findings.

5. Chapter 5: Conclusion

This chapter contains research findings, managerial implications, limitations, and recommendations for future research.

