

# Chapter 1

## Introduction

### 1.1 Background

When some body cells multiply uncontrollably and move to other organs, the condition is known as cancer (Brown et al., 2023). Due to unchecked cell invasion, migration, and also division, cancer frequently affects several organs. According to (Koya & Ibrahim, 2024), there are about 100 distinct types of cancer. It is known that there are four main types of cancers, including sarcomas, carcinomas, and leukemias also lymphomas. According to (Cooper, 2000), both immune system and blood-forming cells were responsible for around 8% of all human cancers. Patients were needed to pay attention to their health and healthcare professionals such as doctors, pharmacists, and nurses also need to provide education and remind them about implementing patient compliance chemotherapy protocols with their health that may be related to the drug-related problems (DRPs) based on the explanations related to the cancer disease before.

Drug-related problems (DRPs) were one of the significant issues in healthcare (Kefale et al., 2020). DRPs can be defined as an incident or situation involving drug therapy that actually or potentially distracts the best possible outcome from medical care according to (Rosetta Chinyere Ude-Okeleke et al., 2024). Nonadherence, adverse drug response, indication, and efficacy, was the four categories of drug-related problems (DRPs) that were divided (Cooper et al., 2019). Indication was the first category, in order to guarantee proper usage at the patient level, a medication indication refers to the particular medical conditions or circumstances for which it is prescribed or suggested based on patient data and criteria (Sharma, 2017). The second was efficacy, clinically significant outcomes that have a direct impact on patients well-being are used to determine the effectiveness of drugs or medications (Roscioni et al., 2014). Then the third was adverse drug response, an intervention involving the administration of a medication that may result in a noticeable negative or unpleasant reaction (Coleman & Pontefract, 2016). The last was nonadherence, it can be described as

patients who intentionally decide not to utilize their treatment or comply with the guidelines (Hugtenburg et al., 2013). Based on the types of drug-related problems (DRPs), therefore the role of appropriateness reviews of chemotherapy protocols were important. Also in realizing all these things in drug-related problems (DRPs) that are related to the chemotherapy protocols, therefore the purpose of this research is to analyze drug-related problems (DRPs) during an appropriateness review of chemotherapy protocols in cancer hospital Jakarta.

### **1.2 Objective**

The purpose of this study is to identify whether drug related problems (DRPs) are detected during an appropriateness review process of chemotherapy protocols in Cancer Hospital Jakarta.

### **1.3 Hypothesis**

The hypothesis was that there were no detected drug related problems (DRPs) during an appropriateness review of chemotherapy protocols in Cancer Hospital Jakarta.