CHAPTER I INTRODUCTION

1.1 Background

At the time of the emergence of healthy living trends, it was covered in liputan6.com and jdih.dpr.go.id that what is being discussed today is about the dialysis trend carried out by young people or Gen Z in Indonesia. This is due to the increasing number of patients affected by kidney failure with an age range of 18-25 years. Cases of kidney failure are always increasing every year and are one of the diseases that require special attention around the world. This disease also poses a risk of heart and blood vessel disease so that it can increase the mortality rate (Wiliyanarti & Muhith, n.d.). Thus, it can be said that kidney failure is one of the deadly diseases besides heart disease.

Based on Riskesdas 2018 data, the prevalence of chronic kidney failure in Indonesians over 15 years old increased to 3.8%, up 2% from 2013. As many as 1.33% of the population aged 15-24 years and also 2.28% of the population aged 25-35 years had a history of kidney disease in 2018. Based on the latest data from the Indonesian Health Letter (SKI) in 2023, it shows that there are still 141 patients aged 15-34 years who must undergo hemodialysis therapy. As many as 16.2% are in the 15-24 age group, while 31.4% are in the 25-34 year age group. Medically, patients who experience kidney failure must undergo Hemodialysis therapy or commonly known as dialysis. Medically, the definition of Hemodialysis (HD) is a procedure in which blood contained in the patient's body is expelled and processed through a machine outside the body called a dialysis (Supriyadi et al., 2011). So that the therapy is used by patients to replace problematic kidney function.

Kidney failure is a group of non-communicable diseases but has a high level of danger. This problem occurs due to several factors, such as a person's habit of consuming smoking or exposure to cigarette smoke, an unhealthy diet/diet, lack of daily physical activity, consumption of alcoholic beverages, and family history (Wahdi Doni et al., 2022). Another cause is the habit of young people who lack in consuming mineral water and tend to consume flavored packaged drinks. According to research that has been conducted by (Sari et al., 2021), it is said that the number of adolescents who consume packaged drinks is relatively high. Where out of 167 students, there were 55.1% of respondents who consumed packaged drinks approximately 3 times a day. The results of the 2018 Basic Health Research (Riskesdas) revealed that 56.4% of Indonesian adolescents aged 15–19 years consume flavored drinks at least once a day. In

addition, (Lolowang et al., 2021) in their research found that of the 45 respondents who were undergoing treatment for kidney failure, they had poor quality of life in terms of physical, psychological, social relationships, and environmental health.

Alfian (2017) stated that many people in productive age ignore all forms of prevention to reduce the factors that cause diseases in the future, such as not implementing a healthy lifestyle, smoking, and consuming alcohol (Lolowang et al., 2021). Young people are also more interested in consuming packaged drinks and fast food because they are more practical and have a wide variety of flavors. Based on the context of cognitive development, at the stage of adolescence to adulthood (18-25 years) there is a change in identity. James Marcia's theory of identity development states that in this period humans began to explore many things and also began to be brave in committing (Santrock, n.d. 2018: 439). Based on this statement, it can be said that at this stage of development humans have begun to explore a lot and have begun to make decisions with a logical mindset. If associated with lifestyle and diet, adolescents to early adulthood with an age range of 18-25 years can already understand and choose the lifestyle they live and what they consume daily whether it is good or not. However, if it is associated with the phenomenon of an increase in the number of kidney failure patients in the age range of 18-25 years, it can be seen that young people do not care about maintaining their health. One of the factors is because high mobility makes them less concerned about maintaining a healthy lifestyle and choosing to consume instant and practical food and drinks.

With the emergence of these problems, it is necessary to educate the public, especially young people, about how to prevent kidney failure by maintaining kidney health. In this modern era, many media can be used as a tool to convey education to the public. One of the media that can be used is with comics. Basically, comics come from the word "comic" which has a funny meaning. The beginning of the comic was in 1884 when there was a collection of strips of pictures on the weekend pages of an English-language newspaper entitled "The Funnies" (Alrosyi, n.d.). Creative image designs from illustrators can certainly attract young people to read. Today's young generation now prefers contemporary things, including several contemporary media that can attract their interest in reading, one of which is in the form of comics. Boneff in Indira Maharsi states that the majority of the main readers of comics are young people with an age range of 15-25 years. (Ayuswantana & Rizkiantono, n.d.)

In the digital era, the internet also has a role in publishing comics through websites. Just by relying on smartphones, many young people are interested in reading digital comics because of their easy access. Basically, web comics can also be referred to as digital comics. The definition of digital comics itself is comics published through internet media. The positive

impact of using an online platform is that publishing costs are lower and the reach can be wider. This can occur in line with the development of cyberspace in communication technology (Nindyana & Aryanto, 2022). Currently, there are many online platforms that provide digital comic services so that the web comics designed can be easily accessed by the public.

This is the basis for making web comics as an educational medium for the public. When viewed through the context of benefits, the design of visual communication itself has the goal of creating a means of presentation that can convey a message, attract attention visually, and ensure that the message can be easily remembered by the audience (Rahmadhanty, n.d.) Web comics are used as a medium in conveying education about the dangers of maintaining kidney health. The webcomic platform used to upload the results of the design is *a webtoon*. Based on data obtained in similarweb.com (2022), *webtoon* applications are the most downloaded category of free comics on the Google Play Store (Febyanti et al., 2023) Based on this statement, it can be concluded that many people are interested in downloading the application. So this application was chosen for the design of web comics as an educational medium for young people with an age range of 18-25 years related to how to maintain kidney health.

The target audience for this design is a group of young people with an age range of 18 to 25 years. The determination of the target audience is based on three factors. The first factor is seen based on data on adolescents undergoing hemodialysis, the second is based on cognitive development where the mindset of adolescents to early adulthood has begun to explore a lot and commit to the decisions to be made. Finally, it is seen in terms of the majority of users of digital comic platforms. That way, the age restriction from 18-25 years old is felt to be in accordance with the purpose of making this digital comic design, where it is hoped that the educational message in the web comic about how to maintain kidney health can be conveyed to the public more optimally.

1.2 Problem Identification

Based on the background that has been explained earlier, it can be concluded that several identification of problems are as follows:

1. The phenomenon of dialysis in adolescents is increasing due to kidney failure. This is based on the latest data from the Indonesian Health Letter (SKI) in 2023, where there is an increase in adolescent patients over 18 years old who are undergoing hemodialysis due to kidney failure.

2. Lack of public concern in implementing a healthy lifestyle. This is supported by the results of research and research conducted by (Lolowang et al., 2021) which shows that 45 people as respondents are undergoing treatment for kidney failure due to poor quality of life factors, both in terms of physical, psychological, social relationships, and the environment.

1.3 Problem Formulation

Referring to the background and identification of the problems that occur, there is a formulation of problems in this design, namely:

How to design a web comic with attractive visual elements that can provide education to young people 18-25 years old regarding how to prevent kidney failure?

1.4 Problem Limitations

In order for the design process to focus on one topic, it is necessary to determine several limitations of problems in designing digital comics, namely:

- 1. The design of this digital comic focuses on providing education with the theme of how to maintain kidney health.
- 2. The target audience limit is aimed at young people with an age range of 18-25 years.
- 3. The result of this design is in the form of digital comics uploaded on the *webtoon* platform.

1.5 Purpose of Design

The purpose of this design is to provide education to young people with an age range of 18-25 years on how to prevent kidney failure by implementing a healthy lifestyle so as not to do hemodialysis therapy in the future. So that if it is concluded that the purpose of this design is

- 1. Increasing public awareness about the importance of maintaining body health.
- 2. When young people's awareness of maintaining a healthy lifestyle increases, the rate of kidney failure and hemodialysis therapy can decrease.

1.6 Benefits of Planning

There are several benefits that can be obtained from designing digital comics on how to prevent kidney failure. For students, this design can be used as a means to apply the knowledge and abilities gained during the lecture period by providing benefits to the community. In addition, the results of this research can be used as a source of reference and learning for students who are interested in designing digital comics and developing this knowledge in future projects.

The benefit of this design in terms of audience is that it is hoped that the public, especially young people, can understand how to prevent kidney failure. In addition, it is also hoped that this digital comic can be used as educational material for the public to be more concerned about health and implement a healthy lifestyle by reducing the consumption of packaged food and beverages, cigarettes, and alcoholic beverages. So that people can avoid deadly diseases at a young age

1.7 Planning Framework



- 1. Meningkatnya fenomena cuci darah pada kalangan remaja karena penyakit gagal ginjal. Hal ini didasarkan pada hasil riset kesehatan pada tahun 2018 dimana terjadi peningkatan pasien remaja diatas 15 tahun yang menjalani hemodialisis akibat gagal ginjal.
- 2. Kurangnya kepedulian masyarakat dalam menerapkan pola hidup sehat. Hal ini didukung oleh hasil riset serta penelitian yang dilakukan oleh Lolowang (2020) dimana menunjukkan bahwa 45 orang sebagai responden sedang menjalani pengobatan gagal ginjal dikarenakan faktor kualitas hidup yang buruk, baik dalam segi kesehatan fisik, psikologis, hubungan sosial, maupun lingkungan.

Rumusan Masalah

Bagaimana merancang komik web dengan unsur visual menarik yang dapat memberikan edukasi kepada anak muda 18-25 tahun terkait cara pencegahan penyakit gagal ginjal?

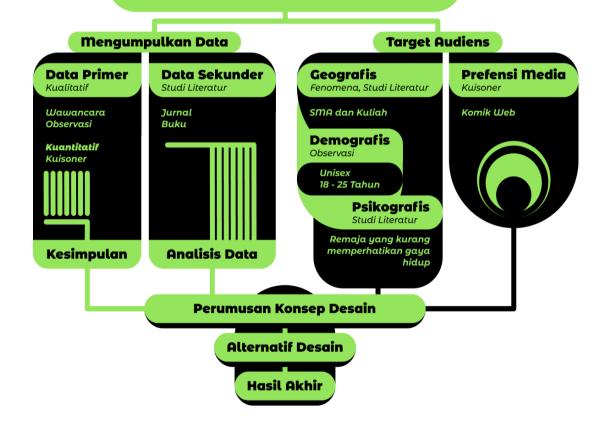


Chart 1. 1 Planning Framework

(source: Personal Documents)