

# CHAPTER I

## INTRODUCTION

### 1.1. Background

Every teenager will go through puberty. In females, puberty is marked by menstruation. Menstruation is a physiological event in women in which female reproductive hormones begin to work<sup>1</sup>. Female reproductive hormones increase during menstruation, including estrogen, progesterone, follicle stimulating hormone (FSH), and luteinizing hormone, which begins about 14 days after ovulation<sup>2</sup>. The menstrual cycle experienced by women every month, resulting in menstrual irregularities, causing various disorders, one of which is dysmenorrhea<sup>3</sup>.

Dysmenorrhea can be defined as extreme pain caused by uterine cramps that accompany menstruation. This pain can be cramping and is often accompanied by lower back pain, nausea, vomiting, headache, or diarrhea. The pain occurs before or at the same time as menstruation and lasts for several hours or even several days<sup>4</sup>. Women tend to be irritable and unable to control their emotions, physical weakness and mental instability during menstruation due to the pain they experience<sup>5</sup>.

Dysmenorrhea is divided into primary dysmenorrhea and secondary dysmenorrhea<sup>6</sup>. Primary dysmenorrhea is very painful menstruation without pathological evidence, while secondary dysmenorrhea is an indication that can cause some specific diseases. It usually occurs due to various diseases such as endometriosis, salpingitis, and others. A person suffering from dysmenorrhea can experience mild or severe symptoms as shown by the different levels of mild or severe impact. This can be shown by the increase in cases of dysmenorrhea<sup>7</sup>.

Data show that the incidence of dysmenorrhea increases in adolescents between the ages of 15-17 years, peaks between the ages of 20-24 years, and then gradually

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<sup>1</sup> Daulay, Gambaran Pengetahuan Dan Sikap Remaja Puteri Tentang Dismenorea Di Desa Nagasaribu Kecamatan Padangbolak Tenggara Tahun 2012.

<sup>2</sup> Sinaga et al., Manajemen Kesehatan Menstruasi.

<sup>3</sup> Abbara et al., "Gangguan Siklus Menstruasi Pada Remaja: Literature Review."

<sup>4</sup> Fahmiah, Huzaimah, and Hannan, "Dismenorea dan Dampaknya terhadap Aktivitas Sekolah pada Remaja."

<sup>5</sup> Ramdan et al., "Menstrual Period in Qur'an."

<sup>6</sup> Sari, Harahap, and Saleh, "Prevalensi Penggunaan Obat Anti-Inflamasinon-Steroid (OAINS) Pereda Dismenoreidi Fakultas Kedokteran Universitas Sriwijaya Palembang."

<sup>7</sup> Nurdin, "Hubungan Perilaku Remaja Putri Terhadap Efek Penggunaan Obat Pereda Nyeri Haid."

decreases with age. The prevalence of dysmenorrhea in Indonesia is high, reaching 64.25% of 60-75% of adolescents. Three-quarters of these adolescents experience mild to severe pain, and one-quarter experience severe pain, which is treated in various ways, including the use of analgesics<sup>8</sup>.

Analgesics are commonly used to relieve pain, including dysmenorrhea. Although analgesics can reduce pain, they can be addictive and have dangerous side effects. Non-steroidal drugs can cause nausea, vomiting, acute asthma, diarrhea, acne, and gastrointestinal bleeding. Acetaminophen is one of the most common nonsteroidal drugs used to treat dysmenorrhea. However, there is no medication that can be taken safely for long periods of time to relieve menstrual pain. Theoretical studies suggest that analgesics used to relieve dysmenorrhea may harm the bowel if used for more than 3 months<sup>9</sup>.

In addition to the use of non-steroidal anti-inflammatory drugs (NSAIDs), which include pharmacological treatment of menstrual pain, non-pharmacological therapies are more widely used to treat menstrual pain. These include abdominal massage, aromatherapy, compressing the painful area with warm water, drinking ginger water, and rest such as sleeping. To treat menstrual pain, non-pharmacological therapies are safer because they do not have harmful side effects<sup>10</sup>. Dissemination of information or knowledge between individuals influences this.

Darussalam Gontor University students who live in dormitories, with restrictions on the use of smartphones, laptops and the Internet, so sources of information and knowledge about dysmenorrhea management are still low. In addition, there are a number of variables that affect a person's level of knowledge regarding menstrual pain management, including stress, diet, lifestyle, and nutritional status<sup>11</sup>.

Based on the above background, this research is important to do because knowledge about the use of dysmenorrhea medication is related to a person's level

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<sup>8</sup> Fahmiah, Huzaimah, and Hannan, "Dismenorea dan Dampaknya terhadap Aktivitas Sekolah pada Remaja."

<sup>9</sup> Gumelar et al., "Pengaruh Senam Yoga Dengan Media Audiovisual Terhadap Penurunan Intensitas Nyeri Haid (DISMINORE)."

<sup>10</sup> Permata and Hajma, "Pengetahuan Sikap Dan Perilaku Remaja Putri Terhadap Swamedikasi Nyeri Haid (DISMENORE) Di SMA NEGERI 3 Kota Cilegon Provinsi Banten."

<sup>11</sup> Permata and Hajma.

of knowledge. If a person's level of knowledge is low, then knowledge about the use of dysmenorrhea medication is also low.

## 1.2. Problem Formulation

1. What is the prevalence of dysmenorrhea among female students at Darussalam Gontor University?
2. How is the level of knowledge of female students of Darussalam Gontor University in the use of dysmenorrhea pain relievers?
3. How is the relationship between knowledge and use of dysmenorrhea pain relievers in female students of Darussalam Gontor University?

## 1.3. Research Objectives

1. To determine the prevalence of dysmenorrhea among female students at Darussalam Gontor University.
2. To know the level of knowledge of female students of Darussalam Gontor University in the use of menstrual pain relievers.
3. To know the relationship between knowledge and use of menstrual pain relievers in female students of Darussalam Gontor University.

## 1.4. Research Benefits

### 1. Theoretical Benefits

The results of the study can be used as a reference material for further research, especially regarding knowledge about the use of NSAIDs for menstrual pain relief.

### 2. Practical Benefits

The results of this study are expected to increase knowledge for Darussalam Medical Center regarding the use of dysmenorrhea drugs used by female students of Darussalam Gontor University and actions that can be taken next.

### 3. Originality of Research

Research on the use of nonsteroidal anti-inflammatory drugs to relieve menstrual pain has been conducted by several researchers, as shown in Table 1 below.

Table 1. Originality Of Research

Research title	Type of research	Variable	Results	Research differences
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Prevalence of use of non-steroidal anti-inflammatory drugs (NSAIDs) for dysmenorrhea Faculty of Medicine, Sriwijaya University Palembang <sup>12</sup>	Non experimental	Use of NSAIDs for dysmenorrhea relief	The prevalence of NSAID use was 53.7%, with at least 4.6% of adverse events being heartburn. Of the 131 respondents who took NSAIDs, only 6 people experienced symptoms of side effects.	The relationship between knowledge and use of dysmenorrhea medication
Dysmenorrhea intensity and analgesic treatment used among Hasanuddin University medical students <sup>13</sup>	Non experimental	Dysmenorrhea intensity and analgesic treatment used	There were 189 students with mild dysmenorrhea intensity, 100 with moderate, 22 with severe and 16 with no pain. Analgesic treatment as many as 90 people used acetaminophen, 58 people used mefenamic acid, 15 people used ibuprofen and 12 people used a combination of analgesics.	The relationship between knowledge and use of dysmenorrhea medication
Evaluation of knowledge and use of menstrual pain relievers in female students of Tadulako University <sup>14</sup>	Non experimental	Evaluation of knowledge and use of dysmenorrhea medication	Female students' knowledge of menstrual pain relievers is in the good category, while the use of menstrual pain relievers is in the good category, and there is a relationship between female students' knowledge and the use of menstrual pain relievers at Tadulako University.	The relationship between knowledge and use of dysmenorrhea medication

<sup>12</sup> Sari, Harahap, and Saleh, "Prevalensi Penggunaan Obat Anti-Inflamasi Non-Steroid (OAINS) Pereda Dismenorei Fakultas Kedokteran Universitas Sriwijaya Palembang."

<sup>13</sup> Adlin, "Intensitas Dismenore Dan Pengobatan Analgetik Yang Digunakan Dalam Kalangan Mahasiswi Fakultas Kedokteran Universitas Hasanuddin."

<sup>14</sup> Rohanah, "Evaluasi Pengetahuan Dan Penggunaan Obat Pereda Nyeri Haid Pada Mahasiswi Universitas Tadulako."