

*Original Article***Characteristics of Low Back Pain Patients at The West Aceh Health Center for The Period January 2022 - June 2023**Adico Notareza Aulia¹ , Safrizal Rahman² , Laila Apriani Hasanah Harahap³ ¹General Practitioners Pante Ceureumen Health Center, West Aceh Regency, Indonesia²Orthopedics and Traumatology Division, Department of Surgery, School of Medicine, Universitas Syiah Kuala, Banda Aceh, Indonesia³Universitas Teuku Umar, West Aceh Regency, IndonesiaCorrespondence should be addressed to Adico Notareza Aulia, Pante Ceureumen Health Center, West Aceh Regency 23680, Indonesia, e-mail: adico_notareza@yahoo.com**ABSTRACT**

Background: Around the world, 80% of adults experience low back pain (LBP). LBP frequently results in disability in sufferers, which affects many facets of life. We conducted this study to ascertain the prevalence of low back pain cases in the general clinic of health centers in West Aceh Regency due to the rising incidence of LBP in the world.

Methods: To identify the characteristics of LBP (Low Back Pain) patients in the general clinic of health centers in West Aceh Regency from January to June 2023, we utilized a descriptive study approach with a cross-sectional design. Purposive and non-probability sampling were used in this study's sampling procedures.

Results: From January 2022 to June 2023, 21.600 patients were registered for care at the general clinic of the health centers in the West Aceh area. 230 LBP patients were diagnosed during that time, or 10,6 cases per every 1000 clinic visits.

Conclusion: The results showed that LBP patients who came to the General Clinic of the West Aceh Health Center from January 2022 to June 2023 were mostly in the age group 50-60 years. Namely, 112 samples (48.7%), female gender 140 people (60.9%) and male 90 people (39.1%), and the type of work patients who experience the most LBP are housewives, as many as 61 people from the total sample.

Keywords: Characteristics; Low back pain; West Aceh health center; Human and medicine

INTRODUCTION

Around the world, 80% of adults experience low back pain (LBP). LBP frequently results in disability in sufferers, which affects many facets of life. Patients with LBP frequently have difficulty performing daily tasks and deal with significant levels of psychosocial stress. The most frequent complaints among LBP sufferers are discomfort during routine activities and a decline in confidence.¹ Low back pain in young adults is usually attributed to one of the more common disorders, such as muscular strain, facet joint dysfunction, or spondylolisthesis.²

According to a recent estimate, 7.3% of individuals worldwide experience low back

discomfort severe enough to impede activities, translating to more than 500 million people at any given moment. Compared to industrialized countries, developing countries have a higher incidence of LBP. All of this adds to the extremely heavy global weight.³

In 2020, low back pain (LBP) occurred in 619 million people worldwide, and it is estimated that by 2050, LBP cases will increase to 843 million due to population expansion and aging. The highest number of LBP cases occurred at 50 - 55 years old. It is more common in women than men and increases with age up to 80. Non-specific LBP is the most common presentation of LBP (approximately 90% of cases).⁴



LBP is the second most common problem in the United States, leading to many doctor visits and medical costs. The cost of treatment for this condition can reach 100 million dollars per year.⁵ There is no evidence to support superior outcomes, and LBP costs are rising more quickly than overall healthcare costs. The evidence to support a decline in pain or disability complaints in the community is lacking.⁶ A recent meta-analysis showed that LBP is the most prevalent work-related Muscular Skeletal Disorder (62%) out of the nine musculoskeletal body regions among perioperative nurses.⁷ Each patient who reports low back pain, with or without sciatica, merits careful assessment based on history, physical examination, examination by diagnostic imaging, and laboratory investigation.⁸

Chronic pain significantly lowers the quality of life for 100 million adult Americans and 20% of the global population.⁹ Since many of these patients receive opioid treatment, chronic pain continues to be a major factor in the US opiate pandemic.¹⁰ Chronic low back pain (CLBP) is a very common type of chronic pain, and the neurological mechanisms that underlie it are now well understood.¹¹ LBP remains one of the most common reasons to seek health care and, along with neck pain, is the medical condition associated with the highest overall costs.¹² Surgical cases are the costliest per care episode, but most spending on LBP management can be attributed to the significantly larger volume of nonoperative care episodes.¹³ Back pain places a high direct and indirect burden on healthcare systems and societies.¹⁴ Healthcare practices require more effective and affordable strategies to better manage the rising burden of LBP and direct resources to those most in need.¹⁵

The prevalence of LBP in Indonesia amounted to 24.7%, of which almost 75% are related to work (occupational), while Lampung Province prevalence was 18.9%.¹⁶ In 2018, there were approximately 12,756 cases of diseases of the muscular system and connective tissue in

Kupang City, East Nusa Tenggara (NTT) Province, with a proportion of 7.3%. This number ranks sixth in the list of the ten most common diseases in Kupang City in the same year.¹⁷

To its onset, low back pain can be categorized into acute, subacute, and chronic low back pain, where acute low back pain is pain < 6 weeks, subacute pain is felt six weeks - 3 months and is said to be chronic if it has lasted > 3 months. Low back pain can also be grouped into specific low back pain, radicular pain, and non-specific low back pain.¹⁸ Given the various etiologies and disease burden of low back pain, it is necessary to establish a precise and accurate diagnosis so that patients immediately get management that suits their condition. The Pain reported by patients can be nociceptive or neuropathic. The symptoms that many patients complain about are pain like being pressed and pain attacks. In addition to back pain, as described, red flags or danger signs must be addressed immediately.¹⁹

When their lower back hurts, women are more likely than men to visit the doctor.²⁰ Up to 40% of pregnant women experience low back and pelvic pain (LBPP) symptoms six months after giving birth.²¹

Women have lower back discomfort more frequently than men, and this discrepancy becomes more pronounced in postmenopausal women. Female sex hormones are crucial in the pathophysiology and genesis of several degenerative musculoskeletal illnesses. Due to relative estrogen deprivation, disc degradation is accelerated in postmenopausal women.

In contrast to industrialized nations, low-income countries pay little attention to or research low back pain. Numerous studies in metropolitan settings demonstrate a significant frequency of LBP in housewives. Rural housewives have a high prevalence of low back pain (83%), a worrying warning for our culture. Rural housewives could benefit from improved healthcare initiatives to improve their education



on healthy posture, ergonomic measures, health plans, health awareness, and activity pacing.²²

We conducted this study to ascertain the prevalence of low back pain cases in the general clinic of health centers in West Aceh Regency due to the rising incidence of LBP in the world. By looking at the characteristics of patients seeking treatment at health centers diagnosed with LBP, this study can be useful data for health management, especially in The West Aceh district.

MATERIAL AND METHODS

To identify the characteristics of LBP (Low Back Pain) patients in the general clinic of health centers in West Aceh Regency from January to June 2023, we utilized a descriptive study approach with a cross-sectional design. Data were taken in the form of name, gender, place, date of birth, occupation, and address. In this study, references were obtained from the patient medical records in the registration books of numerous general clinics and health institutions in West Aceh. Data obtained from patient data diagnosed with low back pain was taken from health centers in West Aceh district from January 2022 to June 2023.

It takes around a month to decide on the study topic, craft a research proposal, gather data, and create a research report. The research proposal, collecting data, and making a research

report occurred from January 2022 to June 2023. Purposive and non-probability sampling were used in this study's sampling procedures. Based on the researcher's considerations, samples were collected. Researchers decide the criteria for research subjects' inclusion and exclusion.

The following criteria were used to select the study's sample: (1) patients who sought treatment at the general clinic of health centers in the West Aceh district and were given a doctor's diagnosis of low back pain; and (2) patients who were at least 18 years old. Patients with a diagnosis of LBP who have had spinal surgery and those under 18 are among the exclusion criteria. The secondary data used in this study came from the medical records of patients who visited the health center in West Aceh Regency between January 2022 and June 2023 and were diagnosed by the general practitioner there.

RESULTS

From January 2022 to June 2023, 21.600 patients were registered for care at the general clinic of the health centers in the West Aceh area. 230 LBP patients were diagnosed during that time, or 10,6 cases per every 1000 clinic visits. The inclusion criteria for this study included 230 participants with a diagnosis of LBP. It may be deduced that more women experience LBP (140 patients), or 60.9 percent (Table 1),

Table 1. Division of Patients by Gender

Gender	Amount	(%)
Men	90	39,1
Women	140	60,9
Total	230	100

Table 2. Division of Patient by Occupation

Occupation	Amount	(%)
Farmers	42	18,2
Labor	38	16,5
Employee	54	23,4
Housewife	61	26,5
Jobless	35	15,4
Total	230	100



Table 3. Division of Patients by Age

Age	Amount	(%)
>18 – 30	10	4,3
30 – 50	68	29,5
50 – 60	112	48,7
>60	40	17,5
Total	230	100

based on the gender distribution of patients. Based on the above distribution of patients by occupation, it can be explained that the occupation of patients who experience the most LBP, as many as 61 persons from the whole sample, is housewives (Table 2). The age range of patients who experience the most LBP is between 50 and 60 years old, which may be explained by the division of patients according to age (Table 3).

DISCUSSION

Based on Table 1, LBP affects more women than males. Women accounted for 140 of the 230 patients who complained of LBP, or roughly 60.9% of all instances reported at the health center's general clinic from January 2022 to June 2023. According to the findings of another study conducted in Nigeria in 2019, the same phenomena was observed in LBP cases, with females outnumbering males by a ratio of 2:1.²³

The distribution of patients according to their occupations, summarized in Table 3, was found that around 42 people, or around 18.2%, were farm laborers, 38 people, or around 16.5% were laborers, 54 people, or around 23.4% were employees, 61 people, or around 26.5% were housewives. Unemployment found 35 cases or around 15.4%. In 2019, a study was conducted at Al-Ihsan Bandung Hospital, and it was stated that housewives often experience LBP due to frequent standing work.²⁴

Judging by the age attached in Table 3, patients suffering from LBP at visits to the general clinic of the health center in West Aceh Regency found ten patients aged 18-30 years or around 4.3%, 68 patients aged 30-50 years or

around 29.5%, 112 patients aged 50-60 years or around 48.7%, 40 patients aged over 60 years around 17.5%. Looking at the data above, it can be concluded that patients aged 50-60 years are the most common age who experience complaints of low back pain. This is by following what is mentioned in the 2019 Global Burden of Disease, that the incidence of Low Back Pain is more experienced by patients 50 - 55 years old.⁴

CONCLUSION

According to the study's findings, the following conclusions were drawn: Between January 2022 and June 2023, were 21.600 patients registered for care at the general clinic of the health centers in the West Aceh area. Patients with LBP were diagnosed in 230 cases during that time, with a ratio of 10,6:1000 for the number of poly visits and patient characteristics, according to information gathered from general clinics of health centers in the West Aceh region between January 2022 and June 2023. It was found that women experienced LBP more often, and the most common age of patients experiencing LBP was between 50 - 60 years old. Housewives are the occupations that most often experience LBP complaints.

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