**RISK FACTORS FOR TAILOR WORKERS WITH THE INCIDENT OF FLAK PAIN AT PT X**

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**Abstract**

Flank pain is a type of problem in the musculoskeletal system. This condition causes pain that appears both on the right and on the left, behind the waist, precisely in the area below the ribs and above the pelvis. Back pain is still a problem from the decline in work productivity in various parts of the world. Research method Quantitative research design through a "cross sectional" approach. This researcher uses Simple Random Sampling with obtained as many as 155 respondents. The purpose of this study is to analyze occupational risk factors including length of sitting, sitting position, and length of work with the incidence of "flak pain" at Tailor at Pt X. The results of this study note that the factor of sitting too long is the most influential factor in the incidence of "flank pain".

***Keywords:*** *genesis flank pain; long work; long sit; position sitting.*

**INTRODUCTION**

Flak pain is an unpleasant sensory experience and emotional hole in the area between the 12th thoracic vertebra to the bottom of the pelvis or rectum that arises because of potential tissue damage or damage (Noor Z.H, 2013). back or spine. This is due to atherosclerosis which then clogs blood vessels so that muscle work becomes continuous and muscle tension occurs due to the supply of oxygen, lactic acid and nutrients which will then cause back pain or flaccid pain (Reo No, 2018). if the worker sits in the same position continuously for a long period of time. Flak pain is a very common world health problem, because it often affects work productivity. (Organization, 2015) The prevalence of flaccid pain in the world shows that 33% of the population in developing countries experience persistent pain. In the UK about 17.3 million people have experienced back pain and of these around 1.1 million people experience paralysis caused by the back. Epidemiological data regarding flax pain or back pain in Indonesia do not yet exist, but the incidence based on patient visits from several hospitals in Indonesia ranges from 3 to 17% who experience "flax pain" reaching 60-70% in early adulthood. Indonesia has obtained data on the number of sufferers of "flax pain" which is not known for certain, but ranges from 7.6% to 37% of the total population of Indonesia (Lailani, 2015). According to (Parjoto, 2013) in several developing countries, the number of sufferers of "flak pain" is around 15-20%, most of the contribution of patients recovering from acute and chronic flak pain. One of the causes of flax pain is muscle disorders which will be exacerbated by certain situations, such as prolonged sitting and wrong sitting position, age, gender, overweight (BMI), posture and chairs that are not ergonomic. plays an important role in the occurrence of back pain, due to prolonged sitting, long working sitting position, and repetition (Umami AR, Hartanti RI, 2014).

**METHOD**

Quantitative research methods through the "cross sectional" approach. In this study using Simple Random Sampling with obtained as many as 155 respondents. The analytical technique used is the Logistics Regression test.

**RESULTS AND DISCUSSION**

The results and discussion contain scientific research findings and discussions. Write down scientific findings obtained from the results of research that has been done but must be supported by adequate data. The scientific findings referred to here are not the results of the research data obtained. The scientific findings must be explained scientifically including: What scientific findings were obtained? Why did that happen? Why are trend variables like that? All these questions must be explained scientifically, not only descriptive if necessary supported by adequate scientific basis phenomena. In addition, it should also be explained in comparison with the results of other researchers who are almost the same topic. The results of the research and findings must be able to accommodate the research objectives in the introduction.

**RESULTS**

The incidence of flak pain in this study was influenced by factors such as length of sitting, sitting position, length of work. The results are in table 1-5.

Table 1.

Respondents Based on Flak pain

|  |  |  |
| --- | --- | --- |
| Flak Pain | f | % |
| Positive | 132 | 85 |
| Negative | 23 | 15 |

Table 1 shows that most of the respondents experienced the incidence of Flak pain as many as 132 respondents (85%).

Table 2.

Respondents Based on Long Sitting

|  |  |  |  |
| --- | --- | --- | --- |
|  | long sitting | f | % |
| ≤8 o'clock |  | 21 | 16 |
| >9 o'clock |  | 134 | 84 |

Table 2 shows that most of the respondents took a long sitting >9 hours as many as 134 respondents (84%).

Table 3.

Respondents Based on Sitting Position

|  |  |  |
| --- | --- | --- |
| Sitting position | f | % |
| Non ergonomic | 132 | 92 |
| Ergonomic | 23 | 8 |

Table 3 shows that most of the respondents are in a non-ergonomic sitting position as many as 132 respondents (92%).

Table 4.

Respondents Based on Length of Work

|  |  |  |
| --- | --- | --- |
| Length of work | f | % |
| < 6 year | 25 | 18 |
| 6 – 10 year | 30 | 23 |
| > 10 year | 100 | 59 |

Table 4 shows that more than half of the respondents have worked longer than 10 years as many as 100 respondents (59%).

Table 5.

The results of the Job Factor Analysis with the Incidence of Flak Pain on Tailors at PT. X

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Omnibus test of model  coefficients | | | |  | | | | | |
| Chi-square | | | |  | Df | | | Sig. |  |
| Step Step 83.320 | | | |  | 3 | | | .000 |  |
| Block 83.320 | | | |  | 3 | | | .000 |  |
| Model 83.320 | | | |  | 3 | | | .000 |  |
| Model Summary | | | |  |  | | |  |  |
| Step -2 Log likelihood Cox & Snell Square | | | | R | Nagelkerke R Square | | |  |  |
| 1 65.451 a .345 | | | |  | .592 | | |  |  |
| B | S.E. | Wald | Df | | | Sig. | Exp(B) | | |
| Step 1a X3 | .387 | 6.938 | 1 | | | .009 | .362 | | |
| X2 | .684 | 11.910 | 1 | | | .000 | 15.808 | | |
| X1 | .800 | 15.967 | 1 | | | .002 | .066 | | |
| Constant | 1.594 | 1.208 | 1 | | | .273 | 5765 | | |

Variables entered in step 1: X3, X2, X1

Table 5 shows that the incidence of flak pain in the toilet is influenced by the length of sitting and the long working position. Sitting for too long in the wrong sitting position with a chair that is not ergonomic can cause lower back pain or flak pain. Flak pain is excessive muscle contraction and narrowing of blood vessels in the area between the 12th thoracic vertebra to the bottom of the hip or anal canal. Long working hours is one of the factors that influence the incidence of flak pain. Sitting for too long while working will cause the disc cavity to permanently narrow resulting in spinal degeneration which will later lead to back pain or flak pain.

The flak pain factor is influenced by the length of sitting with a duration of 8-9 hours per day. Long sitting reduces muscle activity, especially the large muscles in the legs and back, so that in reducing the body's ability, length of work is also a factor related to Tailor's physical condition. If the Tailor worker sits for too long without resting, it causes fatigue in the back muscle tissue, especially the lumbar muscles (Qareebella at all, 2018).

The most dominant factor affecting flak pain in Tailor is the factor of sitting too long. This is because the Tailor sits for too long without resting when operating the sewing machine which can later cause a condition where energy transfers from muscles to tissues, including: dermis of blood vessels, fascia, muscles, tendons, cartilage, bones, ligaments, intra-articular meniscus, and bursa which will be inefficient, causing fatigue which can lead to back pain or flak pain. Flak pain is back pain in the lower right or left, which is a musculoskeletal disorder caused by poor activity. Flaik pain risk factors that influence include individual factors (smoking, age, body mass index, gender) and occupational factors (long sitting, sitting position, length of work, work position, repetition or repetition, working period) (Zuniawati, 2021)

**DISCUSSION**

The results of the logistic regression show that the omnibus value of the model test shows p-value = 0.000 < 0.05 so that H0 is rejected and H1 is accepted, meaning that there is a joint influence on the factors of length of work, length of sitting and length of work on the incidence of flak pain in Toilor at PT X. Based on the value of Exp (B), it is known that the factors that influence the incidence of Flak pain in Toilor at PT.X are the sitting position factor with the highest Exp (B). ) is 15,808. The results of this study indicate that the length of sitting is the most dominant factor. Sitting too long in a position that is not in accordance with an ergonomic chair will cause back pain or flak pain. The cause of Flak pain is excessive muscle contraction and narrowing of blood vessels which causes back pain or flak pain (Reo No, 2018)

Flak pain is influenced by long sitting with a duration of 8-9 hours per day. Long sitting reduces muscle activity, especially the large muscles in the legs and back, so that in reducing the body's ability, length of work is also a factor related to Tailor's physical condition. If the Tailor worker sits for too long without resting, it causes fatigue in the back muscle tissue, especially the lumbar muscles. The most influencing factor for Flak pain is the factor of sitting too long. This is because tailor workers sit for too long without resting when operating sewing machines which can later cause a condition where energy transfers from muscles to tissues, including: dermis of blood vessels, fascia, muscles, tendons, cartilage, bones, ligaments, intra-articular meniscus, and inefficient bursa, causing fatigue which can lead to back pain or flak pain 9Ramdan, Jella. 2018)

Flaik pain risk factors that influence include individual factors (smoking, age, body mass index, gender) and occupational factors (long sitting, sitting position, length of work, work position, repetition or repetition, working period). Sitting too long in a position that is not in accordance with an ergonomic chair will cause back pain or flak pain. The cause of Flak pain is excessive muscle contraction and narrowing of blood vessels which causes back pain or flak pain. The longest sitting in the wrong position needs to be considered how to adjust the sitting position and it is better to use an ergonomic chair when sitting really helps reduce the risk of back pain or flak pain (Muttaqin, 2010). Flak pain is caused by a muscle (strain) or ligament (sprain) injury. Common causes include lifting weights the wrong way, poor posture, not exercising regularly, fractures, ruptured discs, or arthritis. Usually the only symptom is pain in the back or Flak pain. Flak pain is also an unpleasant condition that patients complain about, which is felt as clear or vague and diffuse or localized (Defriyan, 2011). The trigger factors for flak pain include individual factors (smoking, age, body mass index, gender) and occupational factors (long sitting, sitting position, length of work, working position, repetition or repetition, working period at work). (Santoso, 2013). According to (Widjayanti et all, 2013) the results of his research with the title of the relationship between sitting length and sitting attitude on complaints of myogenic low back pain in students of Muhammadiyah University of Surakarta. The results found a relationship between sitting and sitting posture. Prolonged sitting forces the spine and tendons and muscle tissue to overexert the upper body. Thus the muscle tissue in the back will experience fatigue, especially the lumbar muscles. This can take the form of a sprain or lower back strain that can occur suddenly, or it can develop slowly over time due to repetitive motion resulting in complaints of lower back pain.

Workers who have a sitting position for half a day of working time or more have a 1.6 times risk of suffering from Flak pain. The longest sitting in the wrong position needs to be considered (Sari, Theresia, I., & Engeline, 2015) if the Tailor worker sits for about 15 to 20 minutes, then the muscles in the back usually start to get tired and start to feel lower back pain. The longest sitting in the wrong position needs to be considered how to adjust the sitting position. Sitting duration > 4 hours has a relationship with complaints of LBP or low back pain. According to Samara et al, it was stated that sitting for more than 1.5 to 5 hours had a 2.35 times greater risk of experiencing Flak pain. Flak pain is a condition of physical discomfort that occurs in any part of the spine or back, ranging from mild to making you unable to move. (Alfiani, 2016)

The working period is one of the factors of Flak pain that causes back pain complaints. The results of research from (Syuhada et al, 2018) on risk factors for low back pain that occur in tea picker workers at cianter tea plantations in Subang Regency with the results of the relationship between years of service, back posture, body weight are factors that affect the incidence of low back pain in tea picker. In doing work, workers are required to carry out non-ergonomic body positions, for example in an upright sitting position, bent sitting position or half sitting (Todingan, 2015). The sitting position is a working position in which the feet do not get heavy weight and a stable position while they work when done ergonomically. If it is non-ergonomic, the worker will experience a static load which will eventually cause Flak pain. Research by (Widjayanti et all, 2013) at the Catholic STIKES St. Vincentius A Paulo Surabaya there is a relationship between sitting position and complaints of low back pain. Determining whether or not a sitting posture or sitting position is efficient at work is to place a balanced pressure on different body structures and requires little muscle effort to endure so that you will feel comfortable (Tarwaka, 2018). Working for a long time with an unergonomic sitting posture will cause the back muscles to become tense and can damage the surrounding soft tissue (Wijana, 2016). By sitting for a long time, it must be done ergonomically, this can provide a sense of comfort while working (Todingan, 2015)

The results of research on Tailors at PT. X as many as (85%) experienced Flak Pain. Flak Pain is pain in the lower back, musculoskeletal disorders that occur due to poor body activity. Back pain can be caused by things other than the underlying disease. Examples include excessive activities such as exercise or lifting too much, sitting or lying down for a long time, sleeping in an uncomfortable position, or wearing a backpack that doesn't fit (Zuniawati, 2021). The trigger factors for flak pain include individual factors (smoking, age, body mass index, gender) and occupational factors (long sitting, sitting position, length of work, working position, repetition or repetition, working period at work). (Santoso, 2013). The accumulation of activity at the Tailor in a long period of time carried out continuously can cause disturbances to the body, especially disorders of the lower back which can cause pain or Flaik pain. Flak pain is caused by tension in the spine, especially at the waist. Flak pain is caused by a muscle (strain) or ligament (sprain) injury. Common causes include the wrong way of lifting weights, poor posture. Tailor workers are at greater risk due to sitting in the wrong position for too long and the chair is not ergonomic, if the Tailor sits for too long in the wrong position when sitting, this can result in contraction of the muscles and constriction of the blood vessels continuously which results in injury to the bones behind. Tailor workers should work while sitting in an ergonomic manner and use chairs that conform to ergonomic standards. Ergonomic chairs are chairs that are specifically designed to meet the needs of the user to sit, provide a sense of comfort while working and minimize Occupational Diseases and the incidence of Flak Pain in Tailors at PT.X

**CONCLUSION**

The results of the study found that there was a joint influence of the factors of sitting, sitting position, and length of work with the incidence of Flak Pain in Tailors at PT X and it was found that the most dominant factor influencing the incidence of Flak pain in Tailor workers was length of sitting.

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