

THE INFLUENCE HEALTH EDUCATION ON THE LEVEL KNOWLEDGE OF LOW BACK PAIN PATIENTS ABOUT HOW TO LOAD

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ABSTRACT

Low back pain (LBP) or low back pain is one of the musculoskeletal disorders caused by low body activity. LBP is one of the complaints felt by some workers, increasing at the age of 50. Health education is a general health education activity aiming to awaken and change people's attitudes and behaviour to achieve the desired level of health and increase public knowledge of an object through their senses. This study aimed to determine the effect of health education on the level of knowledge of low back pain patients about how to lift weights. The research design used a quasi-experimental study using One Group Pretest-Posttest Design. This study's sample was all 31 patients with low back pain in the Polyclinic of Kabanjahe Hospital. The study results with the Paired T-Test, with $P = 0.000$, showed a clear difference regarding weight lifting techniques in patients with low back pain before and after health education. Health education advice on weight lifting techniques for low back pain patients is more often done to increase insight and understanding about disease prevention, shallow back pain.

Keywords : *Health Education, Knowledge, Low Back Pain*

1. INTRODUCTION

Low Back Pain (LBP) is one of the musculoskeletal disorders caused by low body activity. LBP is one of the complaints felt by most workers, which usually begins at the age of 25 and increases at 50 (Yunus, 2008). Data from the World Health Organization (WHO), low back pain is often complained of by office employees. Apart from LBP, other complaints include eye fatigue, shoulder pain and soreness, and wrist pain. These work activities require office employees to sit for long periods and maintain their positions (Sakinah, 2013).

Research in Spain by Fernandez et al. (2011) in adults obtained LBP prevalence was 19.9%. LBP was more common in women (67.5%) than men (33.5%). There were 1.5 times more LBP sufferers from the 31-50 year group than the 16-30 year age group. Research conducted by the pain study group of the Indonesian Neurologists Association (PERDOSSI) at 14 teaching hospitals in Indonesia in May 2012 showed that the number of pain sufferers was

4,456 people (25% of total visits), of which 1,589 people (35,86 %) people with low back pain (PERDOSSI, 2007)

Based on research conducted on 742 samples that were treated at the RSCM Neurology polyclinic during May 2002, it is known that from the 742 samples of pain, polyclinic visitors found 116 people with LBP with a percentage of 15.6%. Of this number, 76 represent the female sex group, 65.5% and 40 people (34.5%) male sufferers. Of the LBP sufferers, it turns out that the 41-60 year age group occupies the highest percentage compared to other age groups (Purba, J.S, 2004).

Based on the research, the length and attitude of sitting are risk factors for LBP. Prolonged sitting is one of the most common causes of LBP, with an incidence rate of 39.7% -60% in adults. Sitting for a long time results in tension and tension of the ligaments and spinal muscles, resulting in LBP (Samara, 2004)

The correct way to lift items includes wearing stable shoes, making sure feet are firm and stable, in a state of 90° and keeping feet close to the item you are trying to lift, bend knees and lower body, make sure your waist is straight, lift things to the abdomen and lift things. Slowly, if the item is a little heavy, lean on leg muscles, make sure knees are bent when lifting an item, get help if the item is too heavy for someone to lift and use a trolley or other equipment to divert too heavy an item.

Based on the preliminary survey conducted at Kabanjahe Hospital, 31 people were suffering from Low Back Pain in 2020. In a survey of 10 patients on lifting weights, as many as seven people said they lift weights as usual and stop when their waist hurts. Three patients said that they did not know the correct way to lift weights for LBP sufferers. Based on the above background, it encourages the author to research, "The effect of health education on the level of knowledge of low back pain patients about how to lift weights".

2. METHODOLOGY

This research's design is quasi-experimental using One Group Pre Test-Post Test Design to know the effect of health education on the level of knowledge of low back pain patients about how to lift weights. This research was conducted in the Polyclinic Room of Kabanjahe Hospital in February 2020 using a total sampling technique so that the number of samples in this study was known as 31 people.

The instruments in this study were questionnaires and leaflets. The questionnaire for knowledge about low back pain was given using ten questions. Measurement of knowledge using the Guttman scale model with two alternative answers, yes and no. The score given is 1 for Yes and 0 for No.

Data collection was carried out in stages: after the proposal was approved, the researcher submitted a letter of application for permission to the Kabanjahe Hospital to conduct research. Once approved, the researcher meets the potential respondent to explain the aims and objectives of the study. Prospective respondents are given Informed Consent and the width of the questionnaire and sign the agreement sheet. The questionnaires that have been filled in are collected to the researcher and checked again for data processing. Then the respondent was given, in this case, health education about LBP. In providing treatment, researchers used leaflets as a tool.

Furthermore, the respondents were again given a questionnaire, in this case, the post-test. After all the data is complete, the researcher goes to the hospital education and training section to report that the research has been completed. The data processing procedure was carried out through the editing, coding, scoring and tabulating stages, and the data were analyzed through univariate and bivariate analysis procedures using the paired T-test with a significance level of 95%.

3. RESULT

Table 1. Distribution of respondents based on education

No.	Education	Amount	Percentage
1.	SD	2	6.5
2.	Junior High	8	25.8
3.	High school	10	32.3
4.	Bachelor	11	35.5
Total		31	100

Table 2. Distribution of frequency of knowledge before health education

No.	Pre Test	Amount	Percentage
1.	Good	6	19.4
2.	Enough	10	32.3
3.	Less	15	48.4
Total		31	100

Table 3. The distribution of the frequency of knowledge is as easy as health education

No.	Post Test	Amount	Percentage
1.	Good	16	51.6
2.	Enough	12	38.7
3.	Less	3	9.7
Total		31	100

Table 4. Health education analysis of low back pain on the level of knowledge

No.	Variabel	Max	Min	Mean	Std. Dev	P Value	N
1.	Befor health education	3	1	2.29	0.783		31
2.	After health education	2	1	1.58	0.672	0.000	31

4. DISCUSSION

The results of statistical tests using the paired t-test show that the effect of health education on the level of knowledge of patients with low back pain about how to lift weights obtained a

P-value of 0.000, which is smaller than $\alpha = 0.05$, which means that health education significantly affects patient knowledge about low back pain. Thus, the hypothesis states that the effect of health education on low back pain on the level of patient knowledge in lifting weights at Kabanjahe Hospital is accepted.

Several other factors influence weight lifting techniques, namely anthropometry (human body size), load height, work environment, work equipment, work skills, body weight, transport distance, muscle strength, body weight, height, size of transport, muscle strength, weight, height, size of the goods to be transported.

This research is in line with the stated by WHO in Notoatmodjo (2012), one of the strategies for behaviour change is providing information to increase knowledge so that awareness arises that people will behave according to their knowledge. One of the efforts to provide information that can be done in counselling. Knowledge occurs after someone senses an object or stimulus.

After a person knows the object or stimulus, the next process is to behave towards the stimulus or object (Notoatmodjo, 2012). In this study, the extension with the lecture and demonstration method is a stimulus or object expected to influence respondents to behave following the message or content of the lecture.

5. CONCLUSION

- a. The knowledge of low back pain patients about how to lift weights before health education is held in the Polyclinic room of Kabanjahe Hospital; most of the respondents have less knowledge
- b. Knowledge of low back pain patients about how to lift weights after health education was held in the Polyclinic room of Kabanjahe Hospital, most of them had good knowledge.
- c. There is an effect of health education on patient knowledge—low back pain about how to lift weights

REFERENCES

Arikunto, S. (2010). Metode peneltian. *Jakarta: Rineka Cipta.*

- Kelompok Studi Nyeri PERDOSSI. (2007). Nyeri neuropatik di daerah punggung bawah (low back pain) : penuntun penatalaksanaan nyeri punggung bawah. Yogyakarta : PERDOSSI
- Notoatmodjo, S. (2012). Kesehatan Masyarakat Ilmu dan Seni. Jakarta : Rineka Cipta
- Notoadmodjo, S. (2012). Metodologi Penelitian. Jakarta : Rineke Cipta
- Purba, J.S (2004). Nyeri punggung bawah : studi epidemiologi, patofisiologi dan penanggulangan. www.ojs.lib.unair.ac.id/2567 (diakses pada 6 Februari 2020)
- Sakinah. (2013). Jurnal faktor yang berhubungan dengan keluhan nyeri punggung bawah pada pekerja batu bata di kelurahan Lawawoi kabupaten Sidrap. <http://repository.unhas.ac.id/handle/123456789/6701> (diakses 20 Februari 2020)
- Samara, Diana. (2004). Jurnal lama dan sikap duduk sebagai faktor resiko terjadinya nyeri pinggang bawah. Jakarta : Universitas Trisakti.
- Yunus, M (2008). Jurnal Hubungan antara posisi duduk dan masa duduk dengan keluhan nyeri punggung bawah pada pemecah batu granat. Universitas Diponegoro. <http://www.fkm.undip.ac.id/> (diakses pada 24 Februari 2020)