

## Original Research Article

## Effect of Wet Cupping Therapy on Reducing Pain in Patients with Low Back Pain in Bonto Bangun Work Area

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**Abstract:** Data from Public Health Center Bonto Bangun Bulukumba found that there were 93 patients experiencing LBP complaints from 2020, while in 2021 there were 71 patients and in 2022 from January to March there were 37 patients. Judging from the prevalence, from 2020-2022 it has indeed decreased but not yet resolved perfectly. Cupping therapy is a therapy recommended by the Prophet in which blood is extracted using a cup and a suction cup in the skin area which is incised 1 cm wide and 4 mm deep, so that it penetrates the epidermal layer of the skin, and because of the difference in pressure, the blood is pulled out of the peripheral blood vessels as much as 50-300 ml in 5 minutes and will cause a red or black rash. This series of therapies will eventually lead to healing as predicted by the Prophet Muhammad in his hadith with the permission of Allah ta'ala Research Objectives: To know the effect of wet cupping therapy on reducing pain in sufferers of Low Back Pain in the working area of Bonto Bangun, Bulukumba. The research design is true experimental. The sample is 16 people in the treatment group, and 16 people in the control group. The sampling technique is Simple Random sampling. The research was carried out in July 2022 in Bonto Bangun District, Bulukumba Regency. The results of the study are the pain scale before carrying out wet cupping therapy in the treatment group with a scale of 4.50 and the control group with a scale of 5.50. There was a difference in the pain scale after carrying out wet cupping therapy, namely in the treatment group it was 3.00 while in the control group it was 6.00. The results of the mean withney test obtained a value of  $p = 0.01$  (smaller than the value of  $\alpha = 0.05$ ). There is a significant difference in pain scale between before and after doing wet cupping therapy. It is better for agencies to carry out routine wet cupping therapy programs and facilitate more LBP patients.

**Keywords:** Wet cupping therapy, Low Back Pain.

## INTRODUCTION

Lower back pain. Low back pain (LBP) is defined as pain felt in the lower back whose source is the spinal column, muscles, nerves, or other structures around it (Rosida Hi Saraha, S.ST, 2021). LBP can be caused by several factors. Including work position, depression, obesity, height, age and sitting too long (Elianor, 2007). Therefore, LBP is a health problem that is often found in various countries in the world. Low back pain complaints are a global problem faced by every country. According to the Global Burden of Low Back Pain in China, there was an increase in cases from 1990 to 2016 of 23.5% and women were most affected than men. LBP also affects young and old people, but the situation gets worse at the age of 30-60 years and over (WHO, 2018).

The American Osteopathic Association (AOA) in a survey showed that in the last 30 days around 62% of respondents felt pain in the lower back, 53% in the neck, 38% in the shoulder, 33% in the wrist and 31% in the upper back, (AOA AND MOA), 2013). Besides that, in Indonesia, low back pain is a health problem that many people complain about. In Indonesia, LBP is also a matter of great concern. Research conducted by the pain study group of the Indonesian Neurologist Association (PERDOSSI) found 14 teaching hospitals in Indonesia showing that the number of pain sufferers

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was 4,456 (25% of the total visits) of which 1,598 people (35.86%) of them were sufferers of low back pain. In addition, LBP data obtained in South Sulawesi, as many as 34,954 (63.39%) contracted back pain, and the highest was among those aged 65-74 years (Ministry of Health, 2018). After the initial data collection was carried out at the H. Andi Sultan Daeng Radja Hospital in Bulukumba Regency, found that there were 132 cases of LBP complaints in 2019, 120 cases in 2020, 115 cases in 2021, while researchers have also collected data at the Bonto Bangun Health Center and found 93 patients in 2020, while in 2021 there were 71 patients and in 2022 from January to March there were 37 patients. Judging from the prevalence from 2020-2022 it has indeed decreased but has not been resolved properly.

Non-pharmacological therapy or commonly known as complementary therapy is an alternative therapy besides medical treatment. Complementary therapies include acupuncture, cupping therapy (cupping), energy therapy (tai chi, prana, sound therapy), biological therapy (herbs and food combining) and modality touch therapy: acupressure, baby massage, reflexology, and other therapies (Widyatuti, 2008). Cupping therapy (cupping) is an effective complementary therapy to reduce pain. Cupping is a therapy performed by sucking on the surface of the skin, with or without bleeding. In general, there are two types of cupping techniques, namely dry cupping therapy and wet cupping therapy.

At this time it is difficult for people to check their health because of their fear of contracting the virus and the strict regulations in the government during the Covid 19 pandemic. So it is highly recommended to carry out homecare services. Homecare services can be a health care solution during a pandemic. Health is a very valuable thing. Moreover, LBP is a complaint of pain that must be treated immediately considering that this disease can reduce the productivity of sufferers. In the description above and against the background of limited research regarding cupping in Indonesia, researchers are interested and think it is necessary to raise the problem in cases of low back pain or low back pain (LBP) as a case study in completing the Nursing Study Program at STIKES Panrita Husada, Bulukumba Regency to find out the effect of cupping therapy wet on reducing pain in patients with low back pain in the work area of Bonto Bangun.

## MATERIALS AND METHODS

This research uses quantitative research methods. The design used is true experiment. This study used a pre and post test control group design approach. In this design, the research respondents were randomly divided into two or more groups. One group is the treatment group, while the other group is the control group as a comparison. In this study, researchers wanted to know whether or not there was an effect of wet cupping therapy on reducing pain in lowback pain sufferers in the Bonto Bangun work area.

## RESULTS

**Table 1: Distribution of Respondent Characteristics Based on Gender, Age, Occupation, and Education In bonto bangun public Health center Bulukumba Regency**

| Characteristics Respondents | (Treatment) | %    | (Control) | %    |
|-----------------------------|-------------|------|-----------|------|
| <b>Type Sex</b>             |             |      |           |      |
| Man                         | 10          | 62.5 | 11        | 68.8 |
| Woman                       | 6           | 37.5 | 5         | 31.2 |
| <b>Age</b>                  |             |      |           |      |
| Mature                      | 9           | 56.2 | 11        | 68.8 |
| Elderly                     | 7           | 43.8 | 5         | 31.3 |
| <b>Profession</b>           |             |      |           |      |
| Work                        | 12          | 75   | 13        | 81.3 |
| Not Work                    | 4           | 25   | 3         | 18.7 |
| <b>Education</b>            |             |      |           |      |
| Tall                        | 3           | 18.7 | 4         | 25   |
| Low                         | 13          | 81.3 | 12        | 75   |
| <b>Status Marry</b>         |             |      |           |      |
| Marry                       | 13          | 81.3 | 14        | 87.5 |
| Not Marry yet               | 3           | 18.8 | 2         | 12.5 |
| Amount                      | 16          | 100  | 16        | 100. |

Table 1 shows that most of the respondents are groups treatment and group control is male gender as many as 10 people (62.5%) and 11 people (68.8%).

By age respondent group treatment part big category mature (35-54 years) as many as 9 people (56.2%) as well as in the control group as much 11 people (68.8%).

The results of the research on the distribution of work of the respondents in the treatment group mostly worked as much 12 people (75%) as well as in the control group worked 13 people (81.3%).

### 1. Pain Level before Intervention

**Table 2: Levels Painful LBP before Therapy *cupping wet* in small Wake up Regency Bulukumba**

|           | Median | minimum | maximum |
|-----------|--------|---------|---------|
| Treatment | 4.50   | 2       | 8       |
| Control   | 5.50   | 2       | 8       |

Based on Table 2 shows the average LBP pain in the treatment group before doing *wet cupping* therapy is a scale of 4.50. Different on group control is scale 5.50.

This is in line with research conducted by (Purwanto *et al.*, 2018). The sample in this study were written batik workers. Sitting for a long time in one position by workers is very at risk of experiencing Low Back Pain. In workers, the range of Low Back Pain pain levels is 5 (4-6). So that in the implementation of therapy used wet cupping.

### 2. Level Pain after Intervention

**Table 3: Levels Painful LBP after Therapy *cupping wet* in small Wake up Regency Bulukumba**

|           | Median | minimum | maximum |
|-----------|--------|---------|---------|
| Treatment | 3.00   | 2       | 8       |
| Control   | 6.00   | 2       | 8       |

Table 3 shows the average LBP pain in the after treatment group *Wet Cupping* Therapy is 3.00. Unlike the control group, average painful LBP is 6.00.

Researchers argue that back pain experienced by workers the sensation of weight can decrease because the muscles in the back area are concentrating the tension decrease so flow his blood be fluent.

### 3. Effect of *Wet Cupping* against Reducing Pain in Sufferers of Low Back Pain

Analysis bivariate conducted with purpose for know connection among variable independent and dependent variable.

**Table 4: Test mean withney**

|                 | median | min | max | <i>p.s</i> |
|-----------------|--------|-----|-----|------------|
| Group Treatment | 3.00   | 2   | 8   | < 0.010    |
| Group Control   | 6.00   | 2   | 8   |            |

**Source:** Test means withney

Table 4 show that median on group treatment with a scale of 3.00 (mild pain) compared to the control group with a median with a scale of 6.00 (moderate pain). It shows there is difference median Among group treatment and control with difference 2, results test mean withney obtained score  $p=0.01$ , so concluded that there is difference average meaning scale painful Among group treatment and group control, this show there is effect of wet cupping therapy in reducing pain in patients with low back pain.

The above is in line with the theory in Sari's research (2019) that the length of work in a day is also another risk factor that influences the incidence of low back pain in carving craftsmen. Sitting position or static work position is the cause of low back pain in workers. A static work attitude for a long time causes complaints on the musculoskeletal system more quickly. According to Wijayanti, Yuantari, & Asfawi (2013), working in a long and incorrect sitting position will cause the lumbar muscles to become tense and can damage the surrounding soft tissue, resulting in complaints of lower back pain.

## CONCLUSIONS

1. The pain scale before carrying out wet cupping therapy on Reducing Pain in Patients with Low Back Pain in the Bonto Bangun work area, Bulukumba Regency, was on average.
2. The scale of pain after wet cupping therapy on reducing pain in patients with low back pain in the Bonto Bangun work area, Bulukumba Regency, was on average mild.
3. There is an effect of wet cupping therapy on reducing pain in patients with low back pain in the Bonto Bangun working area, Bulukumba Regency.

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