



## Nursing Care In Ny. W With Complaints Of Abdomial Pain At Kardinah Regional General Hospital, Tegal City

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**Abstract.** Abnormal pain is a general term encompassing various health complaints affecting the area between the chest and pelvis (including the abdominal wall and internal organs), with varying intensity, duration, and pain points. The research aims to identify the application of nursing care for acute pain by providing warm compresses to a patient with the initials Ny.W, who experienced abnormal pain in the Lavender ward at Kardinah Regional Hospital, Tegal City. This study applied a descriptive design. Data were collected through several stages, including anamnesis (gathering of medical history), direct observation, physical assessment, and documentation. The research findings indicated that the patient's issue was resolved on the third day, marked by a reduction in pain intensity. Overall, the nursing problem was managed within three days through the intervention of warm compresses as a nursing action.

**Keywords:** Abdominal pain, Warm Compress, Nursing Care

### 1. BACKGROUND

The concept of recurring abdominal pain, also known as recurrent abdominal pain (RAP), was first introduced by Apley and Nais towards the end of the 1950s. This recurring abdominal pain is categorized into 2 types, namely organic and nonorganic (functional) disorders. Research shows that around 9 to 25 percent of cases of recurrent abdominal pain are related to organic abnormalities in the body. These disorders include infection, inflammation, blockages, problems absorbing nutrients, disorders of the reproductive system, nerve problems, as well as a number of other factors such as food poisoning (Maryana, 2021) .

Sudden abdominal pain, also known as abdominal pain, is often an initial indication of an acute condition in the abdomen that appears suddenly without specific signs. The term abdominal pain is used to describe symptoms of pain or discomfort in the stomach that have no clear source, but are often found in patients with serious abdominal conditions. Abdominal pain reflects an unpleasant subjective experience, felt in various parts of the abdomen, and can appear as sudden (acute) or prolonged (chronic) pain. (V. J. Caiozzo *et al.* , 2019) . This pain occurs as a result of blockage, either partial or complete, in the hollow organ or other organs

involved. This condition is caused by the peristaltic movements of these organs (Maryana, 2021) .

Based on reports (WHO, 2022), the prevalence of abnominal pain ranges from 10% to 15% in a number of developing countries. Meanwhile, a Riskesdas survey in the same year revealed an increase in the prevalence of abnominal pain in Indonesia, reaching 15.3%. These statistics are based on collecting data from 20,591 patients who reported pain in the last five years throughout the province (Harahap *et al.*, 2024) .

The discomfort called pain, whether acute or chronic, has a similar impact, where this discomfort causes the patient to feel anxious and worried. Therefore, painful conditions need to be treated immediately, because if left unchecked, it can have negative effects on the patient's health. Acute pain is a normal, predictable physiological response resulting from strong stimulation, whether chemical, thermal or mechanical, which is generally related to surgical procedures, injuries or acute illnesses (Andriyanto, 2019) . Quoted from (Harahap *et al.*, 2024) the number of pain cases in Indonesia has increased by 15.3%. This data was collected from 20,591 patients who complained of pain over the past five years in all provinces. The results of 3 weeks of observation in the lavender room at Kardinah Regional Hospital, Tegal City, found that 30 patients complained of abnominal pain.

Pain management for patients with complaints of abdominal pain at Kardinah Regional Hospital, Tegal City, involves pharmacological and non-pharmacological methods. Pharmacological methods use pain relievers, while non-pharmacological methods include distraction and relaxation techniques. Relaxation is directly applied to patients who experience pain, and the results vary depending on the cause and response of each patient. Some patients improve and can be sent home, while others require diagnostic measures as well as intensive medical care.

## **2. THEORETICAL STUDY**

### **Abdominal Pain**

Abdominal pain refers to various symptoms that affect the area between the chest and pelvis, both the abdominal wall and internal organs, depending on the intensity, location and duration of the pain (Al-Masawabe *et al.*, 2021) . This symptom is also the main indication for an acute abdominal condition, which appears suddenly and specifically. The term acute abdomen is used to describe various non-specific signs and symptoms, such as pain in the stomach and pain when pressed, but is often associated with serious intra-abdominal conditions (Maryana, 2021) .

Pain in the stomach can arise due to disorders of the digestive organs or other organs, such as stomach inflammation, gastroenteritis infection, pelvic inflammatory disease (PID), pancreatitis, appendicitis, constipation, hemorrhoids, ulcerative colic, inflammation, gallstones, kidney stones, infections of the stomach, kidneys or urinary tract, as well as miscarriage or ectopic pregnancy. (Al-Masawabe., M, M., & Abu-Naser, 2021)

### **Warm ice compress**

Giving a warm compress is a method used to produce a feeling of heat in the patient through the use of fluids or devices that radiate heat to areas of the body that need it. This therapy aims to provide comfort, reduce or eliminate pain, prevent or treat muscle spasms, and create a warm sensation (Ii et al., 2017) . Apart from that, warm compresses function as a way to regulate body temperature by using fluids or devices that can emit heat or cold, helping to increase blood circulation, as well as relieve pain.

Giving a warm compress with a water bag or bladder can reduce the level of pain by acting as a conductor, namely transferring heat from the water bag to the area of the stomach that is experiencing pain, resulting in vasodilation of the blood vessels, the muscles will become more relaxed and the level of pain felt will decrease ( Sartiya Rini & Subera, 2023). Giving this warm compress will have an impact on sending signals through the spinal cord to the hypothalamus, where the hypothalamus plays a role in body homeostasis. When this receptor is sensitive to the feeling of heat from the compress given, it will be stimulated in the hypothalamus and cause peripheral vasodilation (Hakameri, et al., 2023) .

### **3. CASE STUDY METHOD**

This research applied a descriptive design to present information. The descriptive method functions to describe or analyze research findings without making broad generalizations. In other words, descriptive research focuses on presenting symptoms and events, both those that are happening now and those that are relevant to the current situation. (Sugiyono, 2016).

Case studies are a very in-depth and detailed type of research about certain organizations, institutions or phenomena (Arikunto, 2012). This research focuses on an object and examines both the object as a whole and only a number of relevant aspects (Sugiyono, 2016). The aim of this research is to describe the treatment of acute pain through the application of warm compresses to patients experiencing abdominal pain in the Lavender room at Kardinah Hospital, Tegal City.

## 4. CASE STUDY RESULTS

### Assessment

1. Patient Identity
  - Name : Mrs. W
  - Age : 38 Years
  - Female gender
  - Education : Elementary school
  - Occupation : Housewife
  - Islam
  - Address : Central Debong, South Tegal
  - Medical Diagnosis : Abdominal pain
  - CM No : 0738\*\*\*
  - Entry date : 13 January 202 4
2. Person responsible
  - Name : Mr. A
  - Age : 39 Years
  - Address : Central Debong, south Tegal
  - Occupation : Farm laborer
  - Relationship with patient : Husband

### Health History

- a. Complaints: stomach pain, nausea, vomiting, and weakness
- b. History of current illness: the patient has complaints of weakness, nausea, vomiting, bleeding again after eating, and pain in the stomach since three days ago
- c. History of previous illness: the patient stated that he had stomach acid disease
- d. Family history of illness: the patient said he had stomach acid from his late mother.

### Supporting investigation

**Table 1. Patient Laboratory Examination**

Inspection	Results	Normal N value	Increase/Decrease
<b>HEMATOLOGY</b>			
<b>Hemoglobin L</b>	10.6 g/dL	11.0 – 15.0	Decrease
<b>H leukocytes</b>	10.17 10 <sup>3</sup> /μL	4.0 - 10.0	Increase
<b>Hematocyte L</b>	29.8 %	37.0 – 47.0	Decrease
<b>H platelets</b>	331 10 <sup>3</sup> /μL	150 - 300	Increase
<b>Erythrocytes L</b>	3.35 10 <sup>3</sup> /μL	3.50 – 5.00	Decrease
<b>RDW</b>	20.4 %	11.0 – 16.0	Normal
<b>MCV</b>	61.3 fl	80.0 – 100.0	Normal
<b>MCH</b>	18.2 p.m	27.0 – 34.0	Normal
<b>MCHC</b>	29.6 g/dL	32.0 – 36.0	Normal
<b>Diff</b>			
<b>Neutrophils %</b>	69.2 %	50.0 – 70.0	Normal
<b>Lymphocyte%</b>	21.6 %	20.0 – 40.0	Normal
<b>Monocytes%</b>	5.0 %	3.0 – 12.0	Normal
<b>Eosinophils %</b>	4.1 %	0.5 – 5.0	Normal
<b>Basophils %</b>	0.1 %	0.0 – 1.0	Normal

<b>lymphocytes#</b>	2.19 10 <sup>3</sup> /μL	0.80 – 4.00	Normal
<b>Neutrophil# H</b>	7.05 10 <sup>3</sup> /μL	2.00 – 7.00	Increase
<b>NLR H</b>	3.21	< 3.13	Increase
<b>CLINIC CHEMISTRY</b>			
<b>SGOT</b>	26 U/L	<40	Normal
<b>SGPT</b>	15 U/L	<41	Normal
<b>Urea</b>	39.0mg/dL	15.0 – 40.0	Normal
<b>Creatinine H</b>	1.83 mg/dL	0.60 – 1.10	Increase
<b>Temporary Glucose</b>	80 mg/dL	<140	Normal
<b>ELECTROLYTE</b>			
<b>Sodium</b>	141.0 mmol/l	135 - 145	Normal
<b>Potassium L</b>	1.68 mmol/l	3.3 – 5.1	Decrease
<b>Chloride H</b>	113.6 mmol/l	96 - 100	Increase

Source: Kardinah Hospital Medical Record Data

## Therapy/Medication

**Table 2. Patient Pharmacological Therapy**

No.	Drug name	Dose	Route giving	utility
1.	RL	20 tpm	IV	Replaces lost fluids
2.	RL + KCL flash January 14, 2024	25 ml	IV	Supplement medication to treat or prevent hypokalemia (potassium deficiency)
3.	Omeprazole	40 mg	IV	Treat gastroesophageal reflux disease (GERD), gastritis, or stomach ulcers.
4.	Ondansetron	8 mg	IV	Prevents nausea and vomiting.
5.	Sucalfate syrup	1 g	P.O	Treats dyspepsia, stomach ulcers, chronic gastritis, GRED and bleeding in the gastrointestinal tract.
6.	Antacid	1 tbsp	P.O	Medication to treat symptoms caused by excess stomach acid, including pain in the solar plexus area, flatulence, nausea, or a burning sensation in the chest.
7.	Cefotaxime	2 gr	IV	Antibiotics
8.	Ranitidine	50 gr	IV	This drug is designed to treat conditions related to excessive stomach acid production.

## Data analysis

**Table 3. Data Analysis Results**

No.	Data	Nursing Issues	Etiology
Sunday 01-14 - 20 24	DS: The patient stated that he was experiencing abdominal pain Q: The patient reports stomach pain Q: hot like being stabbed R: upper left side of the stomach S: Scale 5 T: Disappears	Acute Pain (D.0077)	Physiological Injurious Agents (Abdominal Pain)

	DO: The patient appears to be holding his stomach The patient appeared to grimace The patient is lying in bed.		
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## Nursing Diagnosis

Acute Pain bd Physiological Injuring Agents (Abdominal Pain) (D.0077)

## Nursing Plan

**Table 4. Nursing Interventions**

No.	Nursing diagnosis	Objectives and outcome criteria	Intervention															
	Acute Pain from Physiological Injuring Agents (Abdominal Pain Due to Gastric Acid) (D.0077)	<p>After carrying out 3 x 24 hour treatment, it is hoped that there will be a reduction in pain according to the results criteria : Pain Level (L.08068)</p> <table><tr><th>Indicator</th><th>Beginning</th><th>End</th></tr><tr><td>Pain complaints decreased</td><td>2</td><td>5</td></tr><tr><td>The grimace decreases</td><td>2</td><td>5</td></tr></table> <p>information :</p> <ol style="list-style-type: none"><li>1. Increase</li><li>2. Quite improved</li><li>3. Currently</li><li>4. Quite downhill</li><li>5. Decrease</li></ol> <table><tr><th>Indicator</th><th>Beginning</th><th>End</th></tr><tr><td>Blood pressure</td><td>3</td><td>5</td></tr></table> <p>information:</p> <ol style="list-style-type: none"><li>1. Worsening</li><li>2. Pretty bad</li><li>3. Currently</li><li>4. Quite improved</li><li>5. Improved</li></ol>	Indicator	Beginning	End	Pain complaints decreased	2	5	The grimace decreases	2	5	Indicator	Beginning	End	Blood pressure	3	5	<p><b>Pain Management (I.08238)</b></p> <p><b>Observation</b></p> <ul style="list-style-type: none"><li>- Identify location, characteristics, duration, frequency, quality, intensity of pain</li><li>- Identify the pain scale</li></ul> <p><b>Therapeutic</b></p> <ul style="list-style-type: none"><li>- Provide non-pharmacological techniques to reduce pain with warm compresses</li></ul> <p><b>Education</b></p> <ul style="list-style-type: none"><li>- Explain pain relief strategies</li></ul> <p><b>Collaboration</b></p> <p>Collaborative administration of analgesics (Ranitidine, Omeprazole, Antacids)</p>
Indicator	Beginning	End																
Pain complaints decreased	2	5																
The grimace decreases	2	5																
Indicator	Beginning	End																
Blood pressure	3	5																

**Implementation**

Diagnosis: Acute Pain due to Physiological Injuring Agents (Abdominal Pain Due to Gastric Acid) (D.0077)

**Table 5. Nursing Implementation**

<b>Date, Time, Day</b>	<b>Implementation</b>	<b>Response</b>	<b>TTD Nurse</b>
<b>Sunday, January 14 2024 15.00 WIB</b>	<ul style="list-style-type: none"> <li>- Identify the location, characteristics, duration, frequency, quality and intensity of pain</li> <li>- Identifying pain using a pain scale (scale 3)</li> <li>- Apply non-pharmacological techniques to relieve pain, such as using a warm compress</li> </ul>	DS : <ul style="list-style-type: none"> <li>- The patient said he was willing to undergo an assessment</li> </ul> P: stomach pain Q: hot like being pricked R: upper left side of the stomach S: Scale 5 T: Disappears <ul style="list-style-type: none"> <li>- The patient said he was willing to do a warm compress</li> </ul> DO: <ul style="list-style-type: none"> <li>- The patient appears to be holding his stomach</li> <li>- The patient is able to do it</li> <li>- There are no signs of allergies</li> </ul>	<b>Widia</b>
<b>Monday, January 15, 2024 10.30 WIB</b>	<ul style="list-style-type: none"> <li>- Identify the location, characteristics, duration, frequency, quality, intensity of pain</li> <li>- Identifying the pain scale (scale 1)</li> <li>- Provide non-pharmacological techniques to reduce pain with warm compresses</li> <li>- Collaborative administration of analgesics (Ranitidine, Omeprazole, Antacids)</li> </ul>	DS: <ul style="list-style-type: none"> <li>- The patient said he was willing to undergo an assessment</li> </ul> P: stomach pain Q: hot like being pricked R: Under the abdomen (lower quadrant) S: Scale 3 T: Disappears <ul style="list-style-type: none"> <li>- The patient stated that he was willing to be taught deep breathing relaxation techniques and apply warm compresses</li> </ul> DO: <ul style="list-style-type: none"> <li>- The patient is able to do it</li> <li>- There are no signs of allergies</li> </ul>	<b>Widia</b>
<b>Tuesday, January 16 2024 10.30 WIB</b>	<ul style="list-style-type: none"> <li>- Identify the location, characteristics, duration, frequency, quality, intensity of pain</li> <li>- Identifying the pain scale (scale 0)</li> <li>- Provide non-pharmacological techniques to reduce pain with warm compresses</li> <li>- Collaborative administration of analgesics (Ranitidine, Omeprazole, Antacids)</li> </ul>	DS: <ul style="list-style-type: none"> <li>- The patient said he was willing to undergo an assessment</li> </ul> Pain scale 0 <ul style="list-style-type: none"> <li>- The patient said he was willing to do a warm compress</li> </ul> DO: <ul style="list-style-type: none"> <li>- The patient appears sitting</li> <li>- The patient is able to do it</li> <li>- There are no signs of allergies</li> </ul>	<b>Widia</b>

## Evaluation

Diagnosis: Acute Pain bd Physiological Injurious Agent (Abdominal Pain) (D.0077)

**Table 6. Nursing Evaluation**

Day, Date, Time	Evaluation	TTD Nurse
Sunday, January 14 2024	Subjective: - The patient said he still felt pain in the lower abdomen P: stomach pain Q: hot like being pricked R: upper left side of the stomach S: Scale 4 T: Disappears Objective: - The patient appears to be holding his stomach Analysis: - The problem has not been resolved Planning: continue intervention	Widia
Monday, January 15, 2024	Subjective: - The patient said the pain was reduced P: stomach pain Q: Squealing R: Under the abdomen (lower quadrant) S: Scale 1 T: Disappears Objective: - The patient appears sitting Analysis: - Problem partially resolved Planning: continue intervention	Widia
Tuesday, January 16 2024	Subjective: - The patient said he no longer felt pain Objective: - The patient looks relaxed Analysis: - Problem resolved Planning: maintain intervention	Widia

## 5. DISCUSSION

The evaluation carried out on Mrs. W who experienced abdominal pain showed that the nursing problem was acute pain, with the main action being the administration of warm compresses. The following are the results and discussion related to the case study:

### Patient Assessment Results

Assessment is the initial stage in the nursing process. This stage involves knowledge as well as experience to gather information about the patient, so that an overview of the patient's needs is obtained which will be used to formulate a nursing diagnosis as well as set appropriate priorities (Hidayat, 2021) . The data collected during this assessment was obtained from interviews, observations, and documentation recording.

Nursing care for patients Mrs. W, who has been suffering *from abdominal pain* with acute pain since January 14 2024. The assessment was carried out in the Upper Lavender room at Kardinah Tegal Regional Hospital on January 14 2024. The data obtained showed that the



patient complained of stomach pain, nausea, vomiting and weakness. Blood pressure was recorded at 95/62 mmHg, pulse 88 times per minute, respiratory rate 24 times per minute, and body temperature 36.3°C. The patient also revealed that he had a history of stomach acid since last year. The nursing problems obtained are in line with the priority problems that have been prepared, namely acute pain with related physiological injury agents *gastroesophageal reflux disease* (GERD).

Data related to the assessment is divided into 2, namely major and minor data. Major data is information used to formulate a nursing diagnosis, while minor data is information that may or may not exist, but is still useful in the nursing diagnosis process. In Mrs. W's case, major data comes from subjective as well as objective information. Major data include stomach ache, nausea, vomiting. Minor data include pale mucous membranes, potassium 1.68 mmol/l, Chloride 113.6 mmol/l, erythrocytes  $3.35 \times 10^3/\mu\text{L}$ .

### **Diagnosis Results is Nursing**

Nursing diagnosis is a subjective process of analyzing data collected during the assessment process in order to determine a nursing diagnosis (Hidayat, 2021). Based on the data collected from Mrs. W, the nursing diagnosis that fits the theory is acute pain and nutritional deficit. The priority nursing diagnosis is acute pain caused by physiological injurious agents (abdominal pain due to stomach acid), because this problem can cause pain in the abdominal area.

The priority nursing diagnosis is acute pain caused by a physiological injurious agent. This problem can cause *abdominal pain* with acute pain caused by increased stomach acid levels (GERD).

### **Intervention and Implementation**

A nursing plan is a document that outlines the desired actions of the patient or the nursing actions determined to help the patient achieve the desired results. The purpose of this plan is that the planned actions provide predictable benefits for the patient, according to the nursing problem and the goals that have been set. (Hidayat, 2021) . This research highlights the nursing diagnosis of acute pain due to physiological injurious agents (abdominal pain caused by stomach acid). Therefore, nursing planning is focused on actions that can speed up healing of pain, including applying warm compresses. Warm compresses are a therapy that involves the use of hot compresses with the aim of increasing comfort, reducing or alleviating pain, preventing or reducing muscle spasms, and providing a warm sensation. (Ii et al., 2017)

. Warm compresses are a technique for regulating body temperature by using fluids or devices that can produce heat or cold in areas of the body, help improve blood flow and relieve pain.

The nursing implementation in this research was designed with the target of overcoming acute pain. In order to achieve this goal, Mrs. W had her pain scale measured and taught to apply warm compresses. Warm compresses are done using a bladder or water bag placed on the painful part of the stomach. This warm compress reduces the level of pain by acting as a conductor, namely moving heat from the bladder to the painful area of the stomach, resulting in vasodilation of the blood vessels, the muscles will become more relaxed and the level of pain felt will decrease.

### **Nursing Evaluation of Patients**

Measuring the acute pain scale in the internal medicine room can be resolved well and quickly if care implements the principles when carrying out pain scale measurement measures. The role of the family is very crucial in providing support and motivation to the patient, especially regarding the use of warm compresses to relieve stomach pain. The more active the family's role is during the medical rehabilitation process, the faster the patient's recovery process will be. Apart from that, the role of the family can help change lifestyles to become healthier in the future.

## **6. CONCLUSIONS AND RECOMMENDATIONS**

### **Conclusion**

After carrying out nursing care for Mrs. W who experienced abdominal pain in the Upper Lavender Room, Kardinah Regional Hospital, Tegal City from 14 January 2024 to 16 January 2024 it can be concluded:

#### **1. Assessment**

The author carried out an assessment on January 14 2024, which included biological, psychological, social and spiritual aspects. The assessment involves interview methods, observation, and documentation through physical examinations carried out systematically. The results of the assessment were that the patient's complaints included stomach pain, nausea, vomiting, and weakness that had lasted for 3 days.

## **2. Nursing Diagnosis**

Based on the analysis process, Mrs. W's nursing diagnosis which fits the theory is acute pain caused by physiological injurious agents (abdominal pain due to stomach acid and nutritional deficit due to inability to digest food ).

## **3. Plan**

The nursing action plan chosen to help handle Mrs. W's problem was giving warm compresses.

## **4. Implementation**

Nursing actions for Mrs. W were carried out according to the initial plan, involving the patient's family, and collaborating with the room nurse. To treat the acute pain experienced by Mrs. W, warm compresses were applied as part of the nursing implementation.

## **5. Evaluation**

The evaluation carried out by the author includes 2 types of evaluation, namely formative and summative evaluation, to determine whether the actions implemented achieve the goals set in the treatment plan. The problem faced by the client was successfully resolved on the third day.

## **7. SUGGESTION**

After providing treatment to Mrs. W who experienced abdominal pain in the Upper Lavender Room at Kardinah Regional Hospital, Tegal City, the author not only summarized the results, but also proposed suggestions to improve the quality of services, especially for patients with complaints of abdominal pain or other patients, including:

- a. It is hoped that the results of the case study will increase the knowledge and theoretical practice that has been obtained regarding nursing care for *abdominal pain patients* , especially the application of warm compresses.
- b. It is hoped that the results of the case study can provide input on the application of warm compresses to patients with acute pain due to *abdominal pain*.
- c. The results of the case study are that it is hoped that patients with complaints of abdominal pain will receive nursing care that is effective, efficient and in accordance with the standards of care for abdominal pain patients who experience acute pain.

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