



1. The Effect of Health Education on Diet Compliance Among Patients with Diabetes Mellitus in the Sukaraja Public Health Center's Work Area in Sukabumi Regency
2. The Effects of Husband Support, Motivation, and Self-Efficacy on the Examination of Visual Inspection of Acetic Acid (IVA) in Karawang Village, Karawang Health Center, and Sukabumi Regency in Women of Childbearing Age (PUS)
3. The Experience of Nursing Care Patient with ECG Letal in Intensive Care Unit Sekarwangi Hospital
4. The Effectiveness of Consumption of Red Guava Juice Against Increasing Hemoglobin Levels in Pregnant Women
5. Influence of Hypnotherapy to Reduce the Anxiety of School-Age Children in the Preoperative Phase in the Guntur Room of Level II Dustira Cimahi Hospital
6. Academic Stress Affects Smartphone Addiction in Nursing Student
7. The Effectiveness Of The Protective Barrier Of The Skin Against Medical Adhesive Related Skin Injury (Marsi) In Children Treated In Pediatric Intensive Care Units : Systematic Review
8. Stress Level of Nursing Students During Online Learning During the Covid-19 Pandemic
9. The Relationship of Self Care with Disabilities in People with Leprosy in the South Jakarta
10. Effect of Stress Ball on Stress and Anxiety in Hemodialysis Patients
11. What is the Level of Pain in Patients Who Are Inserted Urinary Catheters Using Pure Jelly?
12. Self-Control Technique to Improve Self-Esteem Among Victims of Bullying
13. The Expectations of Baby Moms and Toddlers in An Integrated Health Care (Posyandu) in Penggilingan Village East Jakarta
14. The Effect of Breastfeeding Technique Education on the Breastfeeding Efficacy of Public Mothers at the GSIA Nabire Clinic, Papua
15. Differences in Knowledge of Preconceptional Mothers about Breast Examination (Breaking) as Pre-and-Post Explanation Breast Cancer Prevention
16. The Effectiveness of Biscuit Consumption of Pregnant Women on Increasing The Circumference of The Upper Arm In Pregnant Women with Chronic Energy Deficiency (CED) In The Karawang Kulon Health Center Area
17. Effectiveness of MGSO4 Administration Against Prevention of Eclampsia in Severe Pre-Eclampsia in RSIA Resti Mulya in 2022
18. Differences in the Effectiveness of Giving Dark Chocolate and Ginger to Reducing Menstrual Pain Intensity in SMAN 1 Cikande Students in 2022
19. The Effect of Baby Massage in Healing Cough of The Common Cold in Infants at Zhafira Zarifa Clinic
20. Relationship of Mothers' Characteristic, Attitude, and Self Efficacy Toward Exclusive Breastfeeding Practice in Work Area of Tigaraksa Public Health Centre
21. Technology-Based Interventions in Schizophrenia Patients : A Narrative Review
22. The Effectiveness of Venopheric Infusation on Ferritine Levels in Pregnant Women with Iron Deficiency Anemia in RSPAD Gatot Soebroto
23. Effectiveness Of Beetroot And Spinach Against The Increase In Hemoglobin Levels Of Pregnant Women In The Primary Clinic Kasih Bunda, 2022
24. The Effect of Audiovisual-Based Education Media on Self Management in Type 2 Diabetes Mellitus Patients in the Work Area of UPT Puskesmas Ledeng
25. The Effect of Progressive Muscle Relaxation on Anxiety in Covid-19 Patients in Bandung
26. The Effectiveness of the Combination of Spiritual Emotional Freedom Technique and Slow Deep Breathing in Lowering Blood Pressure Reduction in Hypertensive Patients at UPT Puskesmas Pasundan, Bandung City
27. MUSKAR-T for Improving Mental Health and Cancer-Related Symptoms in Women Diagnosed with Breast Cancer Undergoing Chemotherapy: A Queasy Experimental Design
28. Overview of Emotional Stability in Class Adolescents Based on Nursing Perspectives
29. NICU Room Baby Care at the Sekarwangi Regional General Hospital: Mothers' Satisfaction with Baby Care and Social Support for Mothers with Premature Infants
30. Effectiveness of Consumption of Brown Rice and Potatoes in Reducing Blood Sugar in the Elderly with Type 2 Diabetes Mellitus at Pondok Ranji Health Center

JURNAL KEPERAWATAN KOMPREHENSIF	VOL. 8	Special Edition	Page 1-222	Bandung June 2022	ISSN 2354-8428 e-ISSN 2598-8727
------------------------------------	--------	--------------------	---------------	-------------------------	--

Research Article

What is the Level of Pain in Patients Who Are Inserted Urinary Catheters Using Pure Jelly?

Tria Firza Kumala^{1*} | Khrisna Wisnusakti² | Oop Ropei³ |
Monna Maharani Hidayat⁴ | Diwa Agus Sudrajat⁵

^{1,2,3,4}Fakultas Ilmu dan Teknologi Kesehatan Universitas Jenderal Achmad Yani, West Java – Indonesia

⁵Sekolah Tinggi Ilmu Keperawatan PPNI Jawa Barat – West Jawa - Indonesia

*contact

tiafirza@yahoo.com

Received : 23/05/2022

Revised : 23/06/2022

Accepted : 26/06/2022

Online : 30/06/2022

Published : 30/06/2022

Abstract

Aims: To identify pain level among patients who inserting urine catheter using Pure gel .

Design: Used was a description analytic design technique.

Methods: This research was conducted using analytic descriptive. Sample collection using purposive sampling technique. This study incorporated a total of 30 participants into the sample pool for analysis. The numerical rating scale is the instrument that is employed. The mean was used to examine the data.

Results: The results of total 30 subjects joined in this study, the means rank pain level of patients inserting urine catheter using pure gel was 3.80 (SD 1.186) , with *p-value* 0.001. There is a difference between the lowest pain level of 0 and the highest pain level of 6 among patients using a pure jelly urinary catheter.

Conclusions: The results of this study can describe nursing practice-based evidence in the management of catheter insertion provides the foundation for the development of knowledge in performing urinary catheter insertion actions that can be incorporated into the Standard Operating Procedure (SOP) to help reduce pain in patients who are using urinary catheters.

Keywords

Pain level, Pure Jelly, Urine Catheter

INTRODUCTION

Urinary catheterization is inserting a rubber or plastic tube (catheter) into the urinary bladder (bladder) through the urethra (1). During a urinary catheterization, a thin, flexible tube called a catheter is inserted into the bladder through the urethra to collect urine (2). Urinary catheterization is done by inserting

a plastic or rubber tube through the urethra into the bladder which serves to drain urine in clients who are unable to control urination or clients who experience obstruction (3).

A urinary catheter is used to treat 200 million cases of urine incontinence worldwide, according to the WHO. In the United States, incontinence affects an estimated 13 million people, as reported by

the Kidney and Urological Disease Advisory Board; however, there may be additional cases that have not been reported (4)

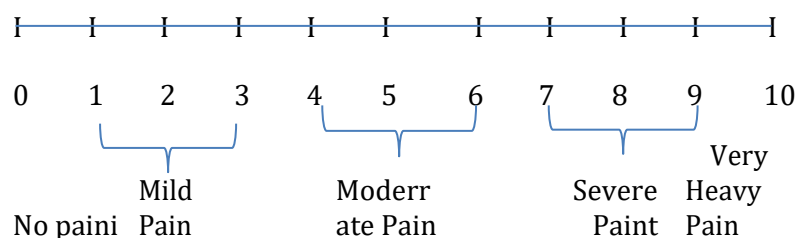
The insertion of a catheter is an invasive procedure that can cause pain. Pain is a subjective experience that is different, caused by subjective sensory sensations, discomfort, and unpleasant taste sensations and is caused by potential tissue damage (5). Differences in each person's complaints of pain are influenced by individual psychological factors, therefore it can affect the patient's belief in his illness and recovery (6). Experiencing pain is a person's body's way of protecting itself when it detects a threat. People's perceptions of pain and their reactions to it are also crucial factors (7).

METHODS

This study employed descriptive-analytical research design. The total

number of respondents was 30 respondents, using a purposive sampling technique method by measuring the level of pain. Samples were selected based on the age criteria of 18-75 years, the first catheter was inserted in all samples. The purpose of this study was to determine the level of pain in patients with urinary catheter insertion using pure gel.

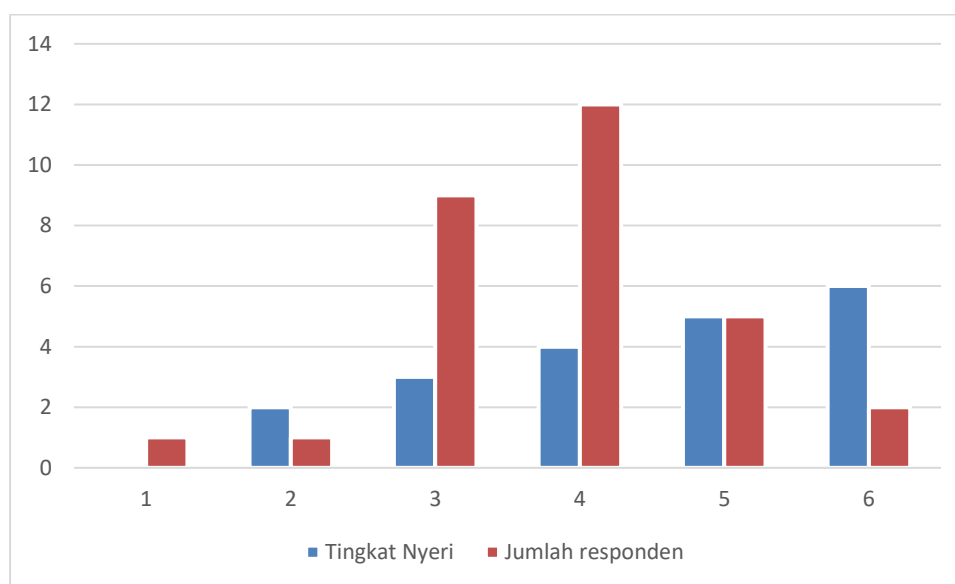
A numerical pain scale is used to assess the respondent's level of discomfort during catheter placement. The pain scale used is a closed pain scale, namely, the answer has been prepared by the researcher so that the respondent only needs to answer or choose an answer. The pain scale or questionnaire used is a number scale with numbers from 0 to 10. On a scale from 0-10, 0 represents no pain, 1-3 means mild pain, 4-6 means moderate pain, 7-9 means severe pain, and 10 denotes extreme agony. Therefore, a numerical scale (Numeric Rating Scale) will be used as a research instrument (3)



RESULTS

Univariate Analysis

- Distribution of Pain Levels In patients who urinary catheter insertion using pure Jelly (Diagram 1)



The distribution of pain levels in 30 patients who underwent urinary catheter insertion using pure jelly from the lowest pain level 0 and the highest pain level 6 obtained the largest data the number of respondents as many as 12 respondents said moderate pain with a pain scale of 4. While there were 2 respondents who reached a pain scale of 6, which means the pain is close to severe pain.

- b. An overview of the average pain level of Urine Catheter Installation using Pure Jelly Lubricants (Tabel 1)

Variable	Mean	S.D	Minimal	95%LU
	Median		Maximal	
Pain level	3.80	1.186	0 – 6	3.36 –4.24
	4.00			

The description in table 1 is that there are 3.80 mean values and 4.00 (95% LU: 3.36-4.24) median values with a standard deviation of 1.186. In this data, after using the interval estimate, 95% of respondents who have tried Pure Jelly Lubricants say that their average pain level is somewhere between 3.36 and 4.24.

DISCUSSION

Data collected from respondents whose catheterizations were performed using pure jelly lubricant revealed a mean value of

3.80, a median value of 4.00 (95% LU: 3.36-4.24), and a standard deviation of 1.186 in terms of reported pain levels. Using this method, we find that a score of 0 indicates no pain while a score of 6 indicates extreme discomfort (8). From the estimated intervals, it can be concluded that it is 95% believed that the average pain level of respondents using Pure Jelly Lubricant is between 3.36 and 4.24.

Pain in individuals is caused by changes in function both physiologically and psychologically. In adulthood, it is very difficult to interpret pain, depending on the

signs and symptoms of a disease, or physiological changes (9,10). The relationship between the activated receptors and the resulting pain is strong. Many different chemicals, including histamine, bradykinin, prostaglandins, and acids, are generated when tissue damage occurs as a result of a lack of oxygen. These chemicals bind to pain receptors and cause them to respond to the damage. Pain can also be triggered by thermal, electrical, or mechanical stimulation (11).

Of the 30 respondents, the results obtained different levels of pain, the highest number said the pain felt when inserting a urinary catheter using pure jelly as many as 12 people were on a scale of 4, namely moderate pain, a total of 9 respondents said the pain was on a scale of 3, namely mild pain. and there are 2 respondents who said the pain was on a scale of 6, including moderate pain but entering the limit of severe pain. From these differences, it is very clear that individual responses to pain are different, or very subjective. This is supported by several sources that explain the perception of pain (12).

CONCLUSION

The results of the average value in this study illustrate the differences in pain levels that vary, from no pain to mild pain to moderate pain in patients who were first placed with a urinary catheter. This illustrates that the pain experienced by patients can be caused by several factors that influence it. Pain is the body's natural defense system; it is experienced when there is damage to tissue and prompts a response from the individual in the form of movement away from the unpleasant stimulus (3,13). One of the stimuli that can stimulate pain receptors is the insertion of a catheter. Muscle spasms are another element that can induce pain; this factor is a common cause of pain and is the foundation of a syndrome or collection of clinical symptoms. Therefore, the use of xylocaine

gel is needed to be used as a standard for catheter insertion.

REFERENCES

1. Asmadi NS. Konsep dasar keperawatan. In Egc; 2008.
2. Brockopp DY, Tolsma-Hastings MT. Dasar-Dasar Riset Keperawatan (Fundamentals of Nursing Research). In EGC Jakarta; 2000.
3. Potter PA. Buku Ajar Fundamental Keperawatan: Konsep, Proses, dan Praktik, vol. 2. In Egc; 2006.
4. Przydacz M, Denys P, Corcos J. What do we know about neurogenic bladder prevalence and management in developing countries and emerging regions of the world? *Ann Phys Rehabil Med.* 2017;60(5):341-6.
5. Loue S. Encyclopedia of aging and public health. Springer Science & Business Media; 2008.
6. Andarmoyo S. Konsep & proses keperawatan nyeri. ar-ruzzmedia; 2013.
7. Taylor CR, Lillis C, LeMone P, Lynn P, Lebon M. Study Guide for Fundamentals of Nursing The Art and Science of Nursing Care. Wolters Kluwer Health| Lippincott Williams & Wilkins; 2011.
8. Jensen MP, Karoly P, Braver S. The measurement of clinical pain intensity: a comparison of six methods. *Pain.* 1986;27(1):117-26.
9. Ohrbach R, Dworkin SF. Five-year outcomes in TMD: relationship of changes in pain to changes in physical and psychological variables. *Pain.* 1998;74(2-3):315-26.
10. Simons LE, Elman I, Borsook D. Psychological processing in chronic pain: a neural systems approach. *Neurosci Biobehav Rev.* 2014;39:61-78.

11. Smeltzer S, Bare B. Buku Ajar Keperawatan Medikal Bedah: Brunner & Suddarth's, Jakarta: EGC. Sci Res. 2013;5(6):419–23.
12. McGrath PA. Psychological aspects of pain perception. Arch Oral Biol. 1994;39:S55–62.
13. Utami S. Efektifitas Relaksasi Napas Dalam Dan Distraksi Dengan Latihan 5 Jari Terhadap Nyeri Post Laparatomi. J Keperawatan Jiwa Persat Perawat Nas Indones. 2016;4(1):61–73.