



Pain complaints in patients with urinary catheterization in the emergency room

Nurul Qamarya^{1*}, Siti Rukayah², Mochamad Robby Fajar Cahya³, Santalia Banne Tondok⁴, Revie Fitria Nasution⁵, Satriana Dardi⁶, M. Khalid Fredy⁷, Rahmat Pannyiwi⁸

¹ Nursing Science Study Program, Akademi Kebidanan Surya Mandiri Bima , Bima, Indonesia

² Nursing Science Study Program, STIKES Persada Husada Indonesia, Bekasi, Indonesia

³ Faculty of Nursing and Midwifery, Universitas Binawan Jakarta, Jakarta, Indonesia

⁴ Program Studi Pendidikan Ners, Poltekkes Kemenkes Jayapura, Jayapura, Indonesia

⁵ Nursing Science Study Program, Akademi Keperawatan Berkala Widya Husada, Depok, Indonesia

⁶ Nursing Science Study Program, STIKES Gunung Sari Makassar, Makassar, Indonesia

⁷ Nursing Science Study Program, STIKES Baitul Hikmah Bandar Lampung, Lampung, Indonesia

⁸ Nursing Science Study Program, STIKES Amanah Makassar, Makassar, Indonesia

Article Info

Article history:

Received Oct 30, 2022

Revised Nov 21, 2022

Accepted Nov 30, 2022

Keywords:

Emergency Department;
Pain Complaints;
Patient;
Urine Catheterization.

ABSTRACT

Urine retention is an emergency that must get immediate help / action, because total urine retention that lasts several days can result in urosepsis which can end in death, so it needs rapid management by catheterization. Comparing the effectiveness of jelly administration techniques applied to the tip of the catheter and jelly sprayed directly at the urethral meatus on pain complaints in patients with urinary catheterization. The type of research used is a quasi experiment, the sample is taken with purposive sampling technique, this study seeks to reveal the causal relationship of the dependent and independent variables with measurements after the intervention. There is an influence of the jelly administration technique on complaints of pain in urinary catheterization patients and there are differences in the technique of administering jelly between the topical method and the smear method for pain complaints, where the smear method complains of pain lighter while the topical method.

This is an open access article under the CC BY-NC license.



Corresponding Author:

Santalia Banne Tondok,
Nursing Science Study Program,
Poltekkes Kemenkes Jayapura,
Padang Bulan, RW.2, Hedam, Kec. Heram, Kota Jayapura, Papua 99351. Indonesia
Email: stavicky.87@gmail.com

1. INTRODUCTION

Catheterization action is an invasive action and can cause pain, so if done in the wrong way it will cause permanent damage to the urethral tract (Kurniawati, 2016), (Guru, 2021), . Tissue irritation or necrosis can also be caused by the use of catheters whose size does not match the size of the urethral orifice, lack of use of jelly, excessive pressure, for example, fixating too tightly and the use of intermittent catheters that too often can damage skin tissue (Jenny et al., n.d.), (Akmal, 2021), (Ardhiansyah, 2021). The impact of pain as a result of spasm of the sphincter muscle due to catheterization will occur bleeding and urethral damage that can cause permanent urethral stricture, this will aggravate the disease and extend patient care days (Prihadi et al., 2021), (UTAMI et al., 2015). The use of jelly is intended to prevent spasm of the external urethral meatus muscle so as to reduce irritation to the urethral wall (Kurniawati, 2016), (Zuliani et al., 2021), (DEWI, 2022) .

Every catheter installation procedure must be considered principles that should not be abandoned, namely (Ramli, 2020); Catheter installation is carried out aseptically by disinfecting sufficiently using materials that do not cause irritation to the skin of the genitalia and if necessary given prior prophylaxis, trying not to cause pain to the patient, using a catheter with the smallest size that is still effective enough to drain urine, if the use of a fixed catheter is needed, trying to use a closed system (Salton, 2019), a fixed catheter is maintained as short as possible until definitive action is taken on the cause of urine retention (Rahayuningsih, 2022), (Syaiful et al., 2020), (Puspitasari, 2019)

2. RESEARCH METHOD

The type of research used is quasy experiment, the sample taken with purposive sampling technique, this study seeks to reveal the causal relationship of the dependent and independent variables with measurements after the intervention (Sa'adah, 2021) (Hermawan, 2019), (Nasrudin, 2019). Respondents who were intervened for urinary catheterization were previously observed regarding bladder tension, interviewed about the frequency of micturition in 24 hours and the sensation of stimulation to micturate (Fitriyana & Wahyuni, 2015), after it was confirmed that there was an indication for catheter installation, then the researcher gave informed consent to the respondent as a sign of agreement to be a research sample (Joelsson-Alm, 2012), (Hijriyah, 2020), (CHRISTOVEL NABABAN, 2019).

3. RESULTS AND DISCUSSIONS

Data collection in this study was carried out in the Emergency Room. This study was conducted for 1 month with a sample of 30 respondents consisting of 15 respondents who were catheterized using the technique of giving jelly lubrication method and 15 respondents who were catheterized using the technique of giving jelly oles method. Based on the results of data processing, the following statistical analysis is presented both univariate and bivariate.

a) Univariate Analysis

Univariate analysis in this study aims to see the frequency distribution of the characteristics of respondents including education, who are catheterized using the technique of giving jelly lubrication method with the oles method. The results of the univariate analysis will be described as follows: Characteristics of respondents based on education.

Table 1. Comparison of Respondent Characteristics of Lubrication Method and Oles method based on Education Level in Emergency Room.

Education	Lubrication method		Spread method		Total	%
	N	%	n	%		
SD	4	13,3	6	20,0	10	33,3
SMP	5	16,7	3	10,0	8	26,7
SMU	4	13,3	3	10,0	7	23,3
SI	2	6,7	3	10,0	5	16,7
Total	15	50%	15	50%	30	100%

Based on table 1, it can be seen that respondents with the lubrication method, the highest level of education is junior high school, namely 5 respondents (16.7%), and respondents with the oles method, the highest level of education is elementary school, namely 6 respondents (20.0%).

The results showed that the average pain intensity experienced by respondents was lower in urine catheterization with the lubrication method with a mean value of 1.73 than the oles method with a mean value of 2.60. This shows that there is a difference between pain complaints of the lubrication method and the oles method.

Based on the results of this study, it can be seen that the technique of giving jelly lubrication method is able to reduce the risk of irritation and pain complaints experienced by patients, where this

can be seen from the intensity of pain expressed by respondents that is lighter than the oles method (Ratnaningsih et al., 2021).

4. CONCLUSION

Based on the results of the study and the description in the discussion, the researchers concluded that: There is an effect of jelly administration techniques on pain complaints in patients with urine catheterization with a meaning of $p = 0.000$ and There are differences in jelly administration techniques between the oles method and the lubrication method on pain complaints, where the lubrication method is lighter pain complaints with a mean of 1.73 while the oles method with a mean of 2.60. For further research, it is hoped that it can carry out development with research using more than one independent variable.

ACKNOWLEDGEMENTS

The author is very grateful to all those who have contributed to this research. Especially among higher education institutions in the implementation of the Tridarma of Higher Education. Hopefully we can collaborate in development in the health sector for the benefit of the community.

REFERENCES

- Akmal, A. M. (2021). *Obstruksi Urethrasis Oleh Magnesium Ammonium Fosfat Causa Azotemia Post-Renalis Pada Kucing Persia (Felis Catus) Di Klinik Kobe Jakarta Utara*. UNIVERSITAS HASANUDDIN.
- Ardhiansyah, A. O. (2021). *Kompetensi Bedah untuk Dokter Umum*. Airlangga University Press.
- CHRISTOVEL NABABAN, R. (2019). *GAMBARAN PELAKSANAAN INITIAL ASSESSMENT PADA PASIEN GAWAT DARURAT OLEH PERAWAT IGD DI RSUD KOTA PADANGSIDIMPUAN TAHUN 2019*.
- DEWI, D. N. I. (2022). *FAKTOR-FAKTOR YANG BERHUBUNGAN DENGAN RETENSI URINE PASCA OPERASI DI POLIKLINIK BEDAH RSUD Dr. H. ABDUL MOELOEK PROVINSI LAMPUNG TAHUN 2022*. Poltekkes Tanjungkarang.
- Fitriyana, F., & Wahyuni, T. (2015). *Analisis Praktik Klinik Keperawatan pada Pasien Gagal Ginjal Kronik dengan Pemberian Aromatherapy Lavender untuk Menurunkan Kecemasan di Ruang Hemodialisa RSUD A. Wahab Sjahranie Samarinda 2015*.
- Guru, Y. Y. (2021). *PERBANDINGAN PEMASANGAN KATETER MENGGUNAKAN LIDOKAIN YANG DICAMPUR JELI DENGAN LIDOKAIN DURASI SATU MENIT DIMASUKAN JELI TERHADAP TINGKAT NYERI PASIEN PRIA DI UGD RSUD dr. TC HILLERS MAUMERE*. *Jurnal Keperawatan Dan Kesehatan Masyarakat*, 6(1).
- Hermawan, I. (2019). *Metodologi Penelitian Pendidikan (Kualitatif, Kuantitatif dan Mixed Method)*. Hidayatul Quran.
- Hijriyah, E. (2020). *HUBUNGAN PENGETAHUAN KELUARGA DENGAN TINGKAT KECEMASAN PADA ANGGOTA KELUARGA YANG DIRAWAT DI RUANG INTENSIVE CARE UNIT (ICU) RSUD SULTAN IMANUDDIN PANGKALAN BUN. HUBUNGAN PENGETAHUAN DENGAN TINGKAT KECEMASAN ANGGOTA KELUARGA YANG DI RAWAT DI RUANG INTENSIVE CARE UNIT (ICU) RSUD SULTAN IMANUDDIN PANGKALAN BUN*.
- Jenny, S., Darmastuti, B., THTKL, S., Djohar, T. H., & Soewito, M. Y. (n.d.). *West Java Otorhinolaryngology Head and Neck Surgery Update on Daily and Emergency Setting*.
- Joelsson-Alm, E. (2012). *Bladder distension: aspects of a healthcare-related injury*. Karolinska Institutet (Sweden).
- Kurniawati, M. F. (2016). Perbedaan Teknik Pemberian Jelly Dengan Cara Mengoleskan Ke Selang Kateter Dan Menyemprotkan Ke Meatus Uretra Terhadap Kecepatan Pemasangan Dan Keluhan Nyeri Pada Pasien Kateterisasi Urin. *Jurnal Ilmu Kesehatan MAKIA*, 2(1), 8–11.
- Nasrudin, J. (2019). *Metodologi Penelitian Pendidikan: Buku ajar praktis cara membuat penelitian*. Pantera Publishing.
- Prihadi, J. C., Soeselo, D. A., & Kusumajaya, C. (2021). *Kegawatdaruratan Urologi*. Penerbit Universitas Katolik Indonesia Atma Jaya.
- Puspitasari, E. D. (2019). *ASUHAN KEBIDANAN CONTINUITY OF CARE PADA NY. A MASA KEHAMIL SAMPAI DENGAN KB DI KLINIK FAUZIAH PULUNG PONOROGO*. Universitas Muhammadiyah Ponorogo.
- Rahayuningsih, A. (2022). *ASUHAN KEBIDANAN BERKESINAMBUNGAN PADA NY B G5P2A2AH2 USIA 36 TAHUN GRANDEMULIGRAVIDA DAN RIWAYAT ABORTUS DI PMB SRI ESTHINI KULON PROGO*. Poltekkes Kemenkes Yogyakarta.

- Ramli, R. (2020). Hubungan Pemasangan Kateter dengan Kejadian Infeksi Saluran Kemih pada Pasien di Ruang Rawat Inap Penyakit dalam RSUD Nene Mallomo Kabupaten Sidenreng Rappang Tahun 2020. *Jurnal Inovasi Penelitian*, 1(6), 1259–1268.
- Ratnaningsih, D. P., Wijaya, I. P. A., & Kusuma, P. W. (2021). PERBEDAAN EMLA CREAM DAN ETHYLCHLORIDE SPRAY UNTUK MENURUNKAN NYERI DALAM PEMASANGAN INFUS. *Jurnal Keperawatan Sriwijaya*, 8(2), 27–38.
- Sa'adah, L. (2021). *Metode penelitian ekonomi dan bisnis*. Lppm Universitas Kh. A. Wahab Hasbullah.
- Salton, M. I. (2019). Asuhan Kebidanan Berkelanjutan Pada Ny. PN Di Puskesmas Pembantu Tenau Periode Tanggal 18 Februari S/D 18 Mei 2019. Poltekkes Kemenkes Kupang.
- Syaiful, Y., Fatmawati, L., & ST, S. (2020). *Asuhan Keperawatan Pada Ibu Bersalin*. Jakad Media Publishing.
- UTAMI, W., ZUHRIYAH, A., & YANTI, Y. (2015). Studi Komparasi Nyeri Pada Pasien Yang Dipasang Kateter Menggunakan Jelly Dengan Lubrication Adekuat Di Igd RSUD Dr. R Sosodoro Djatikoesoemo Bojonegoro Tahun 2014. *Asuhan Kesehatan: Jurnal Ilmiah Ilmu Kebidanan Dan Keperawatan*, 6(1).
- Zuliani, Z., Malinti, E., Faridah, U., Sinaga, R. R., Rahmi, U., Malisa, N., Mandias, R., Frisca, S., Matongka, Y. H., & Suwarto, T. (2021). *Gangguan Pada Sistem Perkemihan*. Yayasan Kita Menulis.