

Reinforcing Factors for Preventing Acute Respiratory Infections (ARI) in Class IIA Correctional Institution Kendal in 2024

Reinforcing Factors untuk Mencegah Infeksi Saluran Pernapasan Akut (ISPA) di Lapas Kelas IIA Kendal Tahun 2024

Hardiat Dani Satria¹, Syamsulhuda Budi Musthofa²,
Mateus Sakundarno Adi²

¹ Health Promotion, Faculty of Public Health, University of Diponegoro

²Health Promotion, Faculty of Public Health, University of Diponegoro

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Corresponding Author:

Hardiat Dani Satria
danisindoro@gmail.com
081390864062

Abstract

The incidence of Acute Respiratory Infections (ARI) has become the predominant health issue at Class IIA Correctional Institution Kendal. A significant proportion of inmates contract ARI every month. Previous studies identified three contributing factors to the occurrence of ARI in the correctional institution: overcrowding, poor personal hygiene and inadequate sanitation. This study aims to provide recommendations for preventing the spread of ARI at Class IIA Correctional Institution Kendal. This quantitative study employs a cross-sectional research design with a sample of 294 inmates at Class IIA Correctional Institution Kendal. The sample was selected using a total sampling technique, encompassing all inmates in the institution. Data analysis was conducted using the chi-square test. Reinforcing factors include support from healthcare staff, peer support, and community leader support. The variables of healthcare staff support and peer support showed a significant relationship with the incidence of ARI at Class IIA Correctional Institution Kendal, with Pearson Chi-Square test p-values of 0.001 and 0.033, respectively. However, the variable of community leader support did not show a significant relationship, with a Pearson Chi-Square test p-value of 0.977. Class IIA Correctional Institution Kendal should optimize support from healthcare staff, peers and community leaders to continuously educate inmates. Education on personal hygiene is crucial in preventing the contraction of ARI among inmates at the institution.

Abstrak

Kejadian Infeksi Saluran Pernapasan Akut (ISPA) menjadi penyakit yang mendominasi di Lembaga Pemasyarakatan (Lapas) Kelas IIA Kendal. Sebagian besar narapidana yang menghuni Lapas terjangkit ISPA setiap bulannya. Berdasarkan penelitian sebelumnya, ada tiga faktor yang menjadi penyebab kejadian ISPA di Lapas, yaitu kelebihan kapasitas, buruknya personal hygiene dan buruknya sanitasi. Penelitian ini bertujuan untuk memberikan rekomendasi solusi untuk mencegah penyebaran ISPA di Lapas Kelas IIA Kendal. Penelitian kuantitatif ini menggunakan desain penelitian *cross-sectional* dengan sampel sebanyak 294 narapidana di Lapas Kelas IIA Kendal. Sampel dipilih menggunakan teknik total sampling, yang mencakup seluruh narapidana di institusi tersebut. Analisis dilakukan menggunakan uji *chi-square*. *Reinforcing factors* terdiri dari

dukungan petugas kesehatan, dukungan teman dan dukungan tokoh masyarakat. Variabel dukungan petugas kesehatan dan dukungan teman menunjukkan hubungan yang signifikan dengan kejadian ISPA di Lapas Kelas IIA Kendal. Nilai p dalam uji Pearson *Chi-Square* adalah 0,001 dan 0.033. Sedangkan variabel dukungan tokoh masyarakat tidak menunjukkan hubungan yang signifikan dengan kejadian ISPA. Nilai p dalam uji Pearson *Chi-Square* adalah 0,977. Lapas Kelas IIA Kendal perlu memaksimalkan dukungan para petugas kesehatan, teman dan tokoh masyarakat agar dapat senantiasa mengedukasi para narapidana. Edukasi tentang personal *hygiene* menjadi hal yang penting dalam mencegah agar narapidana tidak terjangkau ISPA di Lapas Kelas IIA Kendal.

INTRODUCTION

As is well known, viral epidemics or pandemics of Acute Respiratory Infections (ARIs) pose a global threat (Jefferson et al., 2023). Individuals in prisons represent a highly vulnerable population to ARIs (Noer et al., 2021). ARIs is one of the most common illnesses affecting inmates, caused by several factors such as sanitation, overcrowding, and personal hygiene. A study conducted at the Class IIA Narcotics Prison in Sungguminasa, Gowa Regency, showed a relationship between overcrowding, overcrowding, temperature, humidity, ventilation, and lighting with the incidence of ARIs in the prison (Hidayat & Karmila, 2020). Similarly, research at the Class IIA Bentiring Prison in Bengkulu found a relationship between temperature, humidity, lighting, room ventilation, and preventive behavior with ARIs occurrence (Gazali & Adeko, 2023). Another study at the Class I Detention Center in Bandar Lampung, Lampung Province, indicated a link between personal hygiene behaviors and environmental sanitation with the incidence of scabies and ARIs (Gultom & Indarwati, 2022).

The connection between personal hygiene and sanitation with ARIs incidence also appeared in research conducted at Class IIB Sleman Prison. ARIs is a type of infectious disease caused primarily by inadequate environmental conditions, especially poor sanitation, such as overcrowded room occupancy (Ganefati, et al. 2023). Preliminary research conducted

through interviews, observations, and field data analysis revealed that the Class IIA Kendal Prison also faces overcrowding issues and health problems, including ARIs outbreaks (Data Bimkemaswat, 2023). As is known, Class IIA correctional institutions are categorized as facilities located in municipalities or regencies with a capacity of 250-500 inmates. Class IIA Correctional Institution Kendal operates as a technical implementing unit (UPT) under the Ministry of Law and Human Rights in Central Java. Its responsibilities include rehabilitating inmates or juvenile offenders, providing guidance, preparing facilities, managing work outputs, and organizing social and spiritual guidance for inmates. Additionally, it ensures security, maintains prison discipline, and handles administrative and household matters.

Data from Class IIA Correctional Institution Kendal indicates that its official capacity is for 126 inmates, while as of September 2024, it housed 294 individuals. This means that the facility is operating at 2.3 times its ideal capacity. Previous research at Class IIA Palu Correctional Institution concluded that sanitation conditions, such as clean water, waste management, toilets, and wastewater channels, were adequately maintained through daily cleaning shifts in each block. Personal hygiene practices, such as proper clothing, hand and nail cleanliness, towel hygiene, and bed maintenance, were also found to be good among inmates. The study recommended further health education on environmental sanitation and personal

hygiene to enhance inmates' awareness of maintaining their personal cleanliness (Ningsih et al., 2019).

Health behavior, according to the Predisposing, Reinforcing, and Enabling Constructs in Educational Diagnosis and Evaluation (PRECEDE) and Policy, Regulatory, and Organizational Constructs in Educational and Environmental Development (PROCEED) models—commonly referred to as the PRECEDE-PROCEED model developed by Lawrence W. Green and Marshall W. Kreuter—is influenced by predisposing, reinforcing, and enabling factors (Green et al, 2022).

Despite these findings, the role of reinforcing factors, which include healthcare worker support, peer support, and community leader support, remains underexplored. While prior studies emphasize environmental and individual hygiene factors, they seldom investigate how supportive behaviours from external parties can influence inmates' personal hygiene practices and subsequently ARI incidence. This gap is significant, as the PRECEDE-PROCEED model—a widely used framework for understanding health behavior—identifies reinforcing factors as critical elements in shaping behavior.

This study focuses on reinforcing factors (factors that support or hinder behavior), specifically including the support of healthcare workers, peer support, and community leader support for personal hygiene behavior. Based on this overview, the research examines three variables: the support of healthcare workers, peer support, and community leader support. Given the strong relationship between reinforcing factors and ARIs incidence identified in previous studies, this research aims to focus on these factors to provide further insights.

RESEARCH METHODS

The study titled "Reinforcing Factors for Preventing Acute Respiratory Infections (ARIs) at Class IIA Correctional Institution Kendal in 2024" employs a quantitative descriptive approach with a cross-sectional

design. Cross-sectional design is a method used to examine the dynamics of the correlation between risk factors and outcomes through a single-point observation or data collection (point-time approach). This means that each research subject is observed only once, and measurements are conducted on the status of the subject's characteristics or variables at the time of the examination (Abduh et al, 2023).

In addition to the cross-sectional design, this study will also analyze results from field observations. Using a mixed-methods approach, this research aims to integrate and leverage the strengths of both qualitative and quantitative research methods. By combining these two approaches, the study can provide a deeper and more comprehensive understanding of a phenomenon or research problem. The mixed-methods approach can merge a cross-sectional design with field observations to achieve a more thorough understanding of a phenomenon. This combination utilizes the quantitative approach (cross-sectional) and the qualitative approach (field observation) within a single study (Nasution et al, 2024).

The purpose of this study is to identify whether there is a relationship between inmates' sanitation perceptions and the incidence of ARIs within the prison environment. Using a cross-sectional design, data was collected simultaneously during the research conducted from July to August 2024. The study sample consisted of 294 inmates at the Class IIA Correctional Institution Kendal, selected using the total sampling method, where all inmates meeting the inclusion criteria participated in the research. The findings revealed that 120 inmates had experienced ARIs within the past month. The determination of ARIs cases involved several stages: inmates were required to report ARIs symptoms experienced within the previous month, followed by anamnesis by a physician and verification using medical records.

The results aim to determine whether there is a relationship between reinforcing factors, including the support of healthcare

workers, peers, and community leaders, and the risk of ARIs occurrence. With 120 inmates affected by ARIs and the remaining 174 inmates unaffected, this research seeks to provide new insights into the importance of considering reinforcing factors.

This study employs the Chi-Square statistical test to analyze the relationship between sanitation perception and ARIs incidence at the Class IIA Correctional Institution Kendal. The Chi-Square test is a statistical technique commonly used to test hypotheses in populations with nominal data and large-scale samples. If the Chi-Square test result is below 0.05, the data is considered statistically significant (Sugiyono, 2007).

Based on the analysis conducted, the study is expected to provide recommendations emphasizing the importance of reinforcing factors, particularly the support from healthcare workers, peers, and community leaders, in preventing the spread of ARI at the Class IIA Correctional Institution Kendal.

RESULTS AND DISCUSSION

Results

The inmate population at Class IIA Correctional Institution Kendal is predominantly within the age range of 20-29 years, accounting for 37.07% of the total. This is followed by the 30-39 age group at 30.61%, the 40-49 age group at 17.69%, the 50-59 age group at 5.44%, and the 60-69 age group at 4.76%. The smallest percentages are contributed by the <20 age group at 2.38% and the 70-79 age group at 2.04%. These figures highlight that the majority of inmates are in their productive years, particularly those aged 20-29 and 30-39. The Directorate General of Corrections (Ditjenpas) has also reported that the role of youth in the productive age bracket is increasingly diminishing, with many being drawn into criminal activities. This is evident from the data on inmates aged 18-30 years at Class IIB Correctional Institution Balikpapan (Ditjenpas, 2015).

The majority of inmates at Class IIA Correctional Institution Kendal originate from Kendal, with 65.31%. This is followed by

Semarang (11.90%), Pekalongan (2.72%), Batang (2.04%), Tegal (2.04%), Magelang (1.70%), and other regions. The significant proportion of inmates from Kendal (65.31%) underscores the dominance of local residents in the facility's population. This trend indicates that correctional facilities tend to house inmates from nearby areas. While inmates may come from various cities or regions, the data suggests a notable concentration of local inmates (DataIndonesia.id, 2024).

Most inmates at the facility have served sentences of less than two years. During the research period, 29.93% had served less than one year, while 30.95% had served between one and two years. This shows that nearly 61% of the inmates have relatively short sentences of under two years. All inmates in the Class IIA Correctional Institution Kendal meet the research criteria, as they have been incarcerated for at least one week.

From the data, the largest proportion of inmates falls within the 1-2 years sentence range, accounting for 30.95%. This is followed by those with <1 year (29.93%), >2-3 years (12.59%), >3-4 years (10.54%), >5 years (10.20%), and >4-5 years (5.78%). The highest percentage of inmates falls within the 1-2 years category, making it the dominant range.

Regarding comorbidity history, the majority of inmates (70.07%) fall under the "No Comorbidity" category, indicating that most do not have pre-existing conditions. However, 10.20% of inmates report comorbidity related to ARI, making ARI the most prevalent comorbidity. This finding aligns with research conducted at Class IIA Narcotics Correctional Institution in Sungguminasa, where ARI was also reported as the most common condition (Gultom & Indarwati, 2022).

Chi-Square tests revealed the following results: the p-value for the association between healthcare worker support and ARI incidence was 0.001, indicating a significant relationship. The p-value for peer support and ARI incidence was 0.033, also indicating a

significant relationship. Conversely, the p-value for community leader support and ARI incidence was 0.977, indicating no significant relationship.

Discussion

Based on the research, it was found that healthcare workers' support for personal hygiene behavior at Class IIA Correctional Institution Kendal is categorized as good. The scores for healthcare worker support regarding personal hygiene were predominantly above 76%, with a majority of responses being "Yes" (>90%). This indicates that the questions related to healthcare worker support for personal hygiene were answered positively. Healthcare workers' support in providing inmates with information and access to personal hygiene supplies received dominantly positive scores from inmates at Class IIA Correctional Institution Kendal.

Among respondents who contracted ARI, 87.50% received good healthcare worker support, which is higher compared to those who received moderate support (3.33%) and poor support (9.17%). Similarly, among respondents who did not contract ARI, 95.40% reported good healthcare worker support, while 3.45% and 1.15% reported moderate and poor support, respectively. The role of healthcare workers at Class IIA Kendal is commendable and aligns with research conducted in Parigi Moutong Regency, which highlighted that healthcare workers effectively strategize to reduce ARI incidence among children under five at Summersari Public Health Center. Recommendations from this study emphasize collaboration between healthcare workers and immunization program managers in preventing and managing ARI (Muhammad & Purnamasari, 2022).

One effort to reduce ARI transmission is through increasing awareness about ARI prevention. This can be achieved via health education activities. Healthcare workers play a vital role in providing information about ARI (Sari et al, 2023). Research in Watumelomba Village indicates a relationship

between ARI perception and family support, as well as the role of healthcare cadres. Recommendations from this study include consistent socialization activities, family support, and the role of cadres in basic ARI management efforts (Amrun, 2023).

Using the Chi-Square test, a p-value of 0.001 (<0.05) was obtained, concluding that the hypothesis is accepted, indicating a relationship between healthcare worker support and ARI incidence at Class IIA Correctional Institution Kendal.

Peer support for personal hygiene behavior at Class IIA Kendal is also categorized as good. The scores for peer support regarding personal hygiene were predominantly above 76%, with a majority of responses being "Yes" (>90%). This indicates that questions related to peer support for personal hygiene were answered positively. Peer support in providing inmates with information and access to personal hygiene supplies received dominantly positive scores from inmates at Class IIA Correctional Institution Kendal.

The proportion of respondents who contracted ARI and received good peer support was 84.17%, higher than those with moderate (6.67%) and poor peer support (9.17%). Additionally, respondents who did not contract ARI also had good peer support at 89.12%, with the remaining respondents having moderate (4.76%) and poor peer support (6.12%). Previous studies have not specifically examined peer support in relation to personal hygiene and ARI. However, in this study, "peers" can be analogous to "family" in research conducted at other locations. Thus, this research aligns with studies highlighting the role of family in ARI management, which includes three themes: knowledge, role and ARI prevention. The conclusion from these studies emphasized that family roles in ARI management often involve traditional treatments (Luhukay, 2018).

Based on the Chi-Square test, a p-value of 0.033 (<0.05) was obtained, indicating that the hypothesis is accepted, and there is a significant relationship between peer support

and ARI incidence at Class IIA Correctional Institution Kendal.

Community leader support for personal hygiene behavior at Class IIA Correctional Institution Kendal is categorized as good. The scores for community leader support regarding personal hygiene predominantly exceeded 76%, with a majority of responses being “Yes.” This indicates that questions related to community leader support for personal hygiene were positively answered. Community leader support in providing inmates with information and access to personal hygiene supplies also received dominantly positive scores from the inmates at Class IIA Correctional Institution Kendal.

The proportion of respondents who contracted ARI and received good community leader support was 80.83%, higher than those with moderate (3.33%) and poor support (15.83%). Similarly, among respondents who did not contract ARI, 85.06% reported good community leader support, with the remaining respondents reporting moderate (2.30%) and poor support (12.64%).

Community leaders play a significant role in ARI prevention. For example, in Gampong Bireuen Meunasah Reuleut, Aceh Province, community leaders actively promoted traditional treatments for ARI using household spices like ginger and turmeric. Counseling sessions provided information to the community about traditional ARI treatments using lecture and demonstration methods, aided by PowerPoint presentations. The results of this community leader support showed an increase in community knowledge about ARI and its traditional treatments (Chaizuran & Hijriana, 2023).

However, some studies indicate that community leaders' roles are not always significant in ARI prevention. For instance, research conducted in Sidomulyo, Pekanbaru, in 2021 revealed that the community lacked knowledge about ARI and had never received education from community leaders about the disease. This highlights the importance of community leaders in educating the public to

improve overall public health (Masril et al, 2022).

Based on the Chi-Square test, a p-value of 0.997 (>0.05) was obtained, indicating that the hypothesis is rejected, and there is no significant relationship between community leader support and ARI incidence at Class IIA Correctional Institution Kendal.

Theoretically, reinforcing factors such as health officers, peers, and community leaders play a crucial role in preventing and controlling ARI incidents at Class IIA Correctional Institution Kendal. Based on field observations, the limited number of health officers is a significant challenge. Only one doctor and one nurse are available to address the healthcare needs of all inmates. This limitation not only affects the effectiveness of ARI treatment but also reduces the capacity for health education related to ARI prevention (Satria et al, 2024). Most of the counseling and education efforts on ARI prevention are carried out by external parties, such as the local health center (Puskesmas), adding to the challenge of creating sustainable interventions.

Peer support, which includes inmate companions, shows more positive outcomes. At Class IIA Correctional Institution Kendal, inmate companions act as educators who help raise awareness among fellow inmates about the importance of maintaining personal hygiene and preventing ARI. This role of peers reflects a key element in the PRECEDE-PROCEED model, where strong reinforcing factors can motivate healthy behaviors. In this context, peers serve as reinforcements that encourage the adoption of personal hygiene practices among inmates.

Meanwhile, the role of community leaders, such as public figures providing counseling within the prison, is already in place but lacks specificity regarding ARI issues. The topics delivered tend to be general and do not fully support ARI prevention efforts. Within the PRECEDE-PROCEED model, this lack of focus highlights the need for more targeted programs based on the needs of the prison population, particularly in terms

of health education relevant to ARI risks. Directed community support could serve as a more effective reinforcing factor if focused on specific health issues like ARI.

Overall, the reinforcing factors at Class IIA Correctional Institution Kendal demonstrate potential that can be further optimized. Within the framework of the PRECEDE-PROCEED model, strengthening the capacity of health officers, enhancing peer support, and developing targeted counseling programs by community leaders are essential steps in facilitating healthy behaviors and preventing ARI incidents. With better synergy among these three elements, preventive health strategies can become more effective, supporting the vision of the correctional facility as a healthier environment.

The recommendations from this study suggest that to prevent and control ARI incidents at Class IIA Correctional Institution Kendal, it is essential to strengthen the roles of health officers, peer support, and community leaders. Increasing the number of healthcare professionals, such as doctors and nurses, is crucial to enhancing healthcare services and the capacity for disease prevention education. Additionally, continuous training for health officers, inmate companions, and community leaders is needed to provide more specific education on ARI prevention.

Preventive measures that can be implemented include conducting regular counseling sessions for inmates on the importance of maintaining personal and environmental hygiene. These sessions can be delivered using engaging visual and interactive materials, involving peers and community leaders as facilitators. Furthermore, regular health check-ups for inmates are necessary to detect ARI symptoms early.

CONCLUSION

Class IIA Correctional Institution Kendal needs to maximize the support roles of health officers, peers, and community leaders to enhance education on personal hygiene for

inmates. This support can take the form of regular health counseling, direct motivation from fellow inmates, and the role of community leaders in influencing healthy behaviors. With this collaboration, inmates are expected to better understand the importance of maintaining personal hygiene, especially in a crowded environment with a high risk of disease transmission, such as ARI.

The application of reinforcing factors is a strategic step in preventing ARI infections within the correctional institution. These reinforcing factors aim to provide ongoing support that can encourage consistent behavior change. Education on personal hygiene, such as proper handwashing, bathing, and maintaining a clean living environment, should be a primary focus of the health program. Through a sustained approach and active participation from all parties, Class IIA Correctional Institution Kendal can create a healthier environment and reduce the incidence of ARI among inmates.

Furthermore, the strategies implemented in correctional facilities can serve as a model for the general public, particularly for communities in densely populated areas or with limited access to health education. The integration of collaborative efforts from health professionals, peer motivators, and community leaders can inspire broader applications in public health programs. By demonstrating that effective education and support systems can significantly improve hygiene behaviors and reduce health risks, these initiatives could be scaled up to benefit other vulnerable populations.

Ultimately, addressing ARI prevention within the correctional institution not only improves the well-being of inmates but also contributes to public health goals by reducing the overall burden of infectious diseases. The lessons learned from this context highlight the importance of reinforcing factors in fostering healthier communities, emphasizing that health interventions can and should extend beyond institutional boundaries to create a ripple effect for the broader society.

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BIBLIOGRAPHY

- Abduh, M., Alawiyah, T., Apriansyah, G., Sirodj, R. A., & Afgani, M. W., 2023. Survey Design: Cross Sectional dalam Penelitian Kualitatif. *Jurnal Pendidikan Sains Dan Komputer*, 3(01), 31-39.
- Amrun, R., 2023. Hubungan Persepsi Sakit, Dukungan Keluarga, dan Peran Kader terhadap Pemilihan Pengobatan Penyakit ISPA oleh Ibu Balita di Watumelomba Wilayah Kerja Puskesmas Tontonunu Kabupaten Bombana. *Jurnal Ilmiah Ilmu Kebidanan dan Kandungan*, 15(3), p. 11.
- Chaizuran, M., & Hijriana, I., 2023. Penyuluhan Pengobatan Tradisional ISPA Pada Balita di Gampong Bireuen Meunasah Reuleut Provinsi Aceh. *Jurnal Mandala Pengabdian Masyarakat*, 4(1), 1-6.
- Data Bimkemaswat, 2023. Lembaga Pemasarakatan Kelas IIA Kendal.
- Dataindonesia.id, 2024. Data Jumlah Kapasitas dan Penghuni Lapas/Rutan di Indonesia (2014-2023). Retrieved from <https://dataindonesia.id/varia/detail/data-jumlah-kapasitas-dan-penghuni-lapas-rutan-di-indonesia-20142023>.
- Ditjenpas, 2015. Tahanan Rutan Overload di Usia Produktif. Retrieved from <https://www.ditjenpas.go.id/tahanan-rutan-overload-di-usia-produktif>.
- Gazali, M., & Adeko, R., 2023. Analisis Faktor Lingkungan, Perilaku Terhadap Kejadian Penyakit Infeksi Saluran Pernapasan Atas (ISPA) di Lembaga Pemasarakatan Bentiring Bengkulu. *Journal of Nursing and Public Health*, 11(1), 92-98.
- Green, L. W., Gielen, A. C., Ottoson, J. M., Peterson, D. V., & Kreuter, M. W. (Eds.), 2022. Health program planning, implementation, and evaluation: Creating behavioral, environmental, and policy change. Johns Hopkins University Press.
- Gultom, T. B., & Indarwati, S., 2022. Pengaruh Personal Hygiene Dan Sanitasi Lingkungan Terhadap Penyakit Scabies Pada Warga Binaan Pemasarakatan (WBP) Di Rumah Tahanan Negara (RUTAN) Kelas I Bandar Lampung Propinsi Lampung Tahun 2020. *Jurnal Dunia Kesmas*, 11(2).
- Hidayat, H., & Karmila, K., 2020. Faktor Yang Berhubungan Dengan Kejadian Penyakit Infeksi Saluran Pernapasan Akut Di Lembaga Pemasarakatan Narkotika Kelas IIA Sungguminasa Kabupaten Gowa. *Sulolipu: Media Komunikasi Sivitas Akademika Dan Masyarakat*, 20(2), 199-205.
- Jefferson, T., Dooley, L., Ferroni, E., Al-Ansary, L. A., van Driel, M. L., Bawazeer, G. A., Jones, M. A., Hoffmann, T. C., Clark, J., Beller, E. M., Glasziou, P. P., & Conly, J. M., 2023. Physical interventions to interrupt or reduce the spread of respiratory viruses. *The Cochrane database of systematic reviews*, 1(1), CD006207.
- Luhukay, J., Mariana, D., & Puspita, D., 2018. Peran Keluarga Dalam Penanganan Anak dengan Penyakit ISPA di RSUD Piru. *Jurnal Keperawatan Muhammadiyah*, 3(1).
- Masril, B. A., Sari, N. P., & Natassa, J., 2022. Hubungan Pengetahuan Ibu, Lingkungan dan Status Gizi dengan Kejadian ISPA pada Balita di Wilayah Kerja Puskesmas Rawat Inap Sidomulyo Pekanbaru Tahun 2021. *Jurnal Kesehatan Komunitas (Journal of Community Health)*, 8(2), 333-343.
- M. Noer, R., Masriani Situmorang, & Try Noprianto, 2021. Hubungan Tingkat

- Pengetahuan Dan Sikap Dengan Personal Hygiene Pada Tahanan Di Polda Kepri. *Initium Medica Journal*, 1(2), 11–16. Retrieved from <https://journal.medinerz.org/index.php/IMJ/article/view/66>.
- Muhammad, R. F., & Purnamasari, N. D., 2022. Strategi Petugas Kesehatan Dalam Menurunkan Angka Kejadian Infeksi Saluran Pernapasan Akut Pada Balita di Puskesmas Sumber Sari Kabupaten Parigi Moutong. *Jurnal Ilmiah Kesmas-IJ*, 22(2), 1-6.
- Nasution, F. H., Jailani, M. S., & Junaidi, R., 2024. Kombinasi (Mixed-Methods) Dalam Praktis Penelitian Ilmiah. *Jurnal Genta Mulia*, 15(2), pp.251-256.
- Ningsih, A. S., Budiman, B., & Alief, A. R., 2019. Analisis Kondisi Sanitasi dan Personal Hygiene WBP di Lembaga Pemasarakatan Klas IIA Kota Palu. *Jurnal Kolaboratif Sains*, 2(1).
- Sari, Y. I. P., Martawinarti, R. N., Juniana, M., Lukman, M. N., Santi, L. D., Aulia, E. S., ... & Azizi, P. D., 2023. Pendidikan Kesehatan Pencegahan ISPA (Infeksi Saluran Pernafasan Akut). *Jurnal Pengabdian Masyarakat Jurusan Keperawatan*, 1(2), 10-15.
- Satria, H. D., Musthofa, S. B., & Adi, M. S., 2024. Strategies for Improving Healthcare Services at Kendal Class IIA Correctional Institution Clinic.
- Sri Puji Ganefati, Herman Sanjoto, Sigid Sudaryanto, Sutedjo, S., Sardjito Eko, Haryono, H., & Sugianto, S., 2023. Upaya Pengendalian Penyakit Menular Lapas Kelas IIB Sleman Melalui Penyuluhan Kesehatan, Desinfeksi Kuman Udara Ruangan di Blok Tahanan, dan Penyehatan Air. *J-ABDI: Jurnal Pengabdian Kepada Masyarakat*, 3(6), 1177–1186. <https://doi.org/10.53625/jabdi.v3i6.6770>.
- Sugiyono, 2007. *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Bandung: Alfabeta.

