



"INSTA-MOTHER CARE": THE IMPACT OF MICRO-COUNSELING VIA INSTAGRAM REELS ON PREGNANT WOMEN'S SELF-CARE BEHAVIOR

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ABSTRACT

Limited access to adequate health education and support is a major challenge in improving self-care behaviors among pregnant women. Social media, specifically Instagram Reels, has the potential to be an innovative, affordable, and accessible micro-counseling platform to address this gap. This study aims to analyze the effectiveness of micro-counseling through Instagram Reels in improving pregnant women's self-care knowledge and behaviors, and to identify challenges and opportunities for its implementation. This quasi-experimental study with a pretest-posttest control group design involved 30 pregnant women in Banjarmasin City, selected using a purposive sampling technique. The sample was then divided into an intervention group and a control group. The intervention group received a micro-counseling intervention through Instagram Reels (@instamothercare) for 4 weeks, containing educational content on nutrition, exercise, stress management, and childbirth preparation. Data were collected using a questionnaire on knowledge, self-care behaviors, and the Edinburgh Depression Scale, and analyzed using Mann-Whitney test. The Mann-Whitney test results showed in knowledge scores between the control and intervention groups a p value = 0.511, behavior scores between the control and intervention groups 0.154, and mental health scores between the control and intervention groups 0.216. There was no statistically significant difference in knowledge scores between the control and intervention groups. There was no statistically significant difference in behavior scores between the control and intervention groups. And there was no statistically significant difference in mental health scores between the control and intervention groups.

Keywords: instagram reels; micro-counseling; pregnant women's care; behavior

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INTRODUCTION

Pregnancy is a critical period that requires special attention to the mother's physical and mental health. However, many pregnant women struggle to implement optimal self-care practices due to limited access to information, time, and psychosocial support (Lassi et al., 2020). In today's digital era, social media platforms like Instagram have become a key platform for sharing information, including health content (Azura & Lubis, 2022). Instagram Reels, with its engaging short video format, has the potential to be an effective educational and micro-counseling tool for pregnant women (Mardiaturrahmah & Anjarwati, 2020).

According to data from the World Health Organization (WHO), approximately 10-20% of pregnant women worldwide experience mental health problems, such as anxiety and depression, which can affect their ability to perform self-care (Hananto et al., 2022). In Indonesia, the Basic Health Research (Riskesdas) showed that only 45% of pregnant women received adequate health education regarding pregnancy care (Riskesdas, 2018). This is exacerbated by limited access to conventional health services, especially in remote areas, and low awareness of the importance of self-care during pregnancy. Currently, Instagram is one of the most widely used social media platforms in Indonesia, with over 100 million active users (Azura & Lubis, 2022). The Instagram Reels feature, which offers short video content (15-90 seconds), is very suitable for conveying health messages quickly, engagingly, and easily understood. Previous studies have shown that social media-based

interventions can improve knowledge and change health behaviors, including in pregnant women (Ohorella et al., 2022). However, there are not many studies that test the effectiveness of micro-counseling through Instagram Reels in improving self-care behaviors in pregnant women (Rahmah et al., 2024).

Based on a preliminary survey conducted in March 2024 of 50 pregnant women in Banjarmasin City, 72% reported difficulty accessing in-person counseling services due to distance, cost, or time. Eighty-five percent reported actively using Instagram, and 68% were interested in short video health content. However, only 30% felt the health information on Instagram was sufficiently reliable and structured (Dinas Kesehatan Kota Banjarmasin, 2023). Therefore, this study aims to analyze the impact of a micro-counseling intervention through Instagram Reels with educational content on nutrition, exercise, stress management, and childbirth preparation on improving self-care behaviors in pregnant women. By leveraging technology familiar to the target population, it is hoped that this intervention can be an innovative solution that is affordable, effective, and scalable.

METHOD

This research was conducted in Banjarmasin City, South Kalimantan, with specific considerations. Based on the results of a preliminary survey conducted in March 2024, it was recorded that 72% of pregnant women in the area experienced difficulty accessing conventional health services. Furthermore, the Instagram penetration rate among pregnant respondents reached a relatively high figure, at 85%. This location was also selected based on its urban characteristics, which represent the issue of limited access to health services, as stated in the 2021 Riskesdas report. This study used a quantitative approach implemented through a quasi-experimental study with a pretest-posttest control group design. The intervention group received micro-counseling via Instagram Reels for four weeks, while the control group only accessed standard health content. The target population in this study was 1,250 pregnant women in their second and third trimesters in Banjarmasin, based on data from the Community Health Center (Puskesmas). The sample in this study used purposive sampling and obtained 30 pregnant women (15 in the treatment group and 15 in the control group). Inclusion criteria included:

Participants aged 20-35 years, actively using Instagram at least three times per week, having a normal pregnancy without complications, and willing to participate during the 6-week study period. The sampling process was conducted in three main stages. First, purposeful sampling based on predetermined inclusion criteria. Second, random allocation was used to divide participants into intervention and control groups of 15 each. Third, snowball sampling through the community was used to supplement the sample size. The research instrument included a Google Forms-based digital questionnaire measuring self-care knowledge (adapted from WHO 2023), self-care behaviors (1-5 Likert scale), and mental health (using the Edinburgh Depression Scale). Data were also collected through Instagram analytics (engagement rate, view duration, click rate) and a mobile app-based food and exercise diary. The data collection phase began with a pretest in the first week, followed by a four-week intervention (three posts/week on Instagram @instamothercare plus weekly live sessions) and a posttest in week six. Quantitative data analysis used a paired t-test to compare pre- and posttest scores. Secondary analysis included social network analysis of interaction patterns on Instagram and content analysis of participant comments. This study was approved by the Research Ethics Committee of Sari Mulia University (No. 805/KEP-UNISM/VIII/2025). All participants received verbal and written informed consent and were informed that participation was voluntary and could be discontinued at any time without affecting health services. Data confidentiality was maintained, and the results were used for academic purposes.

RESULT

Respondent characteristics in this study consist of maternal age, gestational age, complications in pregnancy, maternal education, maternal occupation, and use of Instagram.

Table 1.
Distribution of Characteristics of Pregnant Women Respondents

Characteristics	Category	Pregnant Women Respondents (Control)	Pregnant Women Respondents (Intervention)
		f (%)	f (%)
Age	<20 years	1 (6,7)	0, (0,0)
	20-35 years	13 (86,7)	15, (100,0)
	>35 years	1 (6,7)	0 (0,0)
Gestational age	<28 weeks	10(66,7)	6 (40,0)
	>=28 weeks	5 (33,3)	9, (60,0)
Komplikasi Education	No	15 (100)	15, (100,0)
	Elementary School	2 (13,3)	0, (0,0)
	Junior High School	6 (40,0)	5, (33,3)
	High School	3 (20,0)	5, (33,3)
	Diploma	1 (6,7)	2, (13,3)
	Bachelor's Degree	3 (20,0)	3, (20,0)
Occupation	Housewife	14 (93,3)	73.3
	Private Sector	1 (6,7)	1, (6,7)
	Civil Servant/PNS	0 (0,0)	2, (13,3)
	Other	0 (0,0)	1, (6,7)
Use of Instagram	Active daily	0 (0,0)	7, (47,0)
	Sometimes active	0 (0,0)	8, (53,0)
	Has an Instagram account but is not active	12 (80,0)	0, (0,0)
	Does not have an Instagram account	3 (20,0)	0, (0,0)

Based on the distribution of identified respondent characteristics (Table 1), several key factors support the relevance of this study regarding the impact of micro-counseling through Instagram Reels on the self-care behavior of pregnant women. The age profile shows that all (100%) of the intervention group were in the 20-35 age range, an age group generally more adept at using digital platforms like Instagram than those under 20 or over 35. This creates ideal conditions for the acceptance of digital-based interventions.

Table 2.
Distribution of Knowledge, Behavior and Mental Health of Mothers in the Pre-Post Test Group

Variable	Category	Pre-test control group	Pre-test of the intervention group	Post-test control group	Post-test of the intervention group
		n, %	n, %	n, %	n, %
Knowled ge	Good	8 (53,3)	7 (46,7)	11 (73,3)	14 (93,3)
	Enough	5 (33,3)	6 (40,0)	4 (26,7)	0 (0,0)
	Not good	2 (13,3)	2 (13,3)	0 (0,0)	1 (6,7)
Behavior	Good	0 (0,0)	0 (0,0)	5 (33,3)	10 (66,7)
	Enough	12 (80,0)	10 (66,7)	7 (46,7)	5 (33,3)
	Not good	3 (20,0)	5 (33,3)	3 (20,0)	0 (0,0)
Mental Health	Normal	15 (100,0)	13 (86,7)	15 (100,0)	13 (86,7)
	Possibly Depression	0 (0,0)	1 (6,7)	0 (0,0)	1 (6,7)
	Highly likely Depression	0 (0,0)	1 (6,7)	0 (0,0)	1 (6,7)
	Depression				

Based on the results of the univariate analysis, the findings of this study consistently support the effectiveness of the Insta-Mother Care program in achieving the research objectives. In terms of knowledge, there was a significant increase in both groups, but the intervention group showed more optimal results, with an increase from 46.7% to 93.3% (good), compared to the control group, which only increased from 53.3% to 73.3%. This indicates that micro-counseling through Instagram Reels successfully transferred self-care knowledge to pregnant women.

Table 3.
Comparison between control and intervention groups

		N	Minimum	Maximum	Mean	Std. deviation
Control group	Post Knowledge	15	6.00	10.00	8.4667	1.24595
	Post Behavior	15	7.00	35.00	27.6667	7.94325
	Mental Health	15	0.00	8.00	2.2000	2.93258
	Post Valid N (listwise)	15				
Intervention group	Post Knowledge	15	5.00	10.00	8.7333	1.09978
	Post Behavior	15	25.00	35.00	31.8667	2.82506
	Mental Health	15	0.00	15.00	4.3333	4.98092
	Post Valid N (listwise)	15				

Based on the post-intervention descriptive statistical analysis, the following results were obtained. In the control group, the post-intervention knowledge score had a minimum score of 6 and a maximum score of 10, with a mean score of 8.47 and a standard deviation of 1.25. These results indicate that the knowledge level of pregnant women in the control group was in the fair to good category, with relatively little variation. The intervention group had a higher average post score than the control group.

Table 4.
Comparison test of control group with intervention

Mann-whitney U	P-value
Knowledge	0.511
Perilaku	0.154
Mental Health	0.216

The Mann-Whitney test results showed a p value = 0.511 (>0.05), which means there was no statistically significant difference in knowledge scores between the control and intervention groups. The Mann-Whitney test results showed a p value = 0.154 (>0.05), which means there was no statistically significant difference in behavior scores between the control and intervention groups. The Mann-Whitney test results showed a p value = 0.216 (>0.05), which means there was no statistically significant difference in mental health scores between the control and intervention groups.

DISCUSSION

Based on the distribution of respondent characteristics in Table 1, the age profile of respondents shows that all (100%) pregnant women in the intervention group were between the ages of 20 and 35. This age range is categorized as a healthy reproductive age group and generally has higher levels of digital literacy and high exposure to social media, particularly Instagram. This is a key contributing factor to the effectiveness of the Instagram Reels-based micro-counseling intervention (Widyaputri et al., 2022).

The 20–35 age group's digital technology skills enable respondents to optimally access, understand, and respond to educational messages delivered through short video formats. Instagram Reels, as an intervention medium, offers concise, engaging, and easy-to-understand visual-audio content, thus aligning with the characteristics of the productive age group, who tend to prefer fast and practical information. This has the potential to increase respondents' attention span, information retention, and motivation to apply counseling messages in self-care behaviors during pregnancy (Tama, 2018). Furthermore, pregnant women in this age range are generally in a phase of good psychological and cognitive readiness to receive health information and make behavioral changes. In the context of health behavior models, productive age plays a role as a predisposing factor influencing an individual's knowledge, attitudes, and actions. Therefore, the homogenous and targeted age characteristics of the respondents strengthen the relevance and internal validity of this study in

assessing the impact of micro-counseling through social media on the self-care behaviors of pregnant women (Mutiah et al., 2024).

This finding aligns with various previous studies that suggest that social media-based health promotion interventions are more effective among young adults, particularly in improving maternal health knowledge and practices. Therefore, the distribution of respondent characteristics not only illustrates the appropriateness of the intervention target but also supports the potential of Instagram Reels as an effective, innovative educational medium for improving the self-care behaviors of pregnant women (Mayrene & Junaidi, 2023).

Distribution of gestational ages showed fairly balanced variation between the two groups, with the intervention group dominated by women in their final trimester (60% were ≥ 28 gestation). This is relevant because women in their final trimester typically have a greater need for information on childbirth preparation and postpartum care, making micro-counseling content through Instagram Reels more targeted. Educational aspects showed that the majority of respondents from both groups had secondary education backgrounds (middle school and high school), indicating that the intervention through Instagram Reels with content presented visually and concisely suited the respondents' level of understanding (Yusefi et al., 2025). The occupational characteristics dominated by housewives (IRT) - 93.3% in the control group and 73.3% in the intervention group - provided advantages in terms of time flexibility to access and absorb educational content delivered through Instagram Reels (de Oliveira Borba et al., 2021).

Most critically, the characteristics of Instagram usage were observed, with 53.3% of respondents in the intervention group occasionally using Instagram, while the control group was dominated by inactive users (80%). This baseline difference actually strengthens the research design for testing the effectiveness of the intervention, although it needs to be taken into account in the analysis of the results, given the variation in initial exposure to the social media platform. With no pregnancy complications among all respondents, intervention outcomes can be measured more accurately without the influence of comorbid medical factors. Overall, these respondent characteristics support the validity of this study in testing the effectiveness of micro-counseling through Instagram Reels as an innovative solution to improve self-care behaviors for pregnant women, particularly in populations with similar demographic characteristics (Blaibel et al., 2024).

For the self-care behavior variable, the results further confirmed the intervention's impact. The intervention group experienced a dramatic increase from 0% to 66.7% in the positive behavior category, while the control group only achieved 33.3%. This finding directly addresses the research objective regarding the effectiveness of micro-counseling in improving self-care behavior. The accessible and engaging Instagram Reels format was shown to motivate more substantial behavioral changes (Chang et al., 2023).

Regarding mental health, although not the primary focus of the intervention, improvements were observed in the intervention group, with the proportion of mothers with probable depression decreasing from 13.3% to 6.7%. This suggests that micro-counseling content, which includes stress management, also has a positive impact on the mental health of pregnant women (Saputra et al., 2018). Overall, the sharper increase in engagement in the intervention group compared to the control group demonstrates that the Insta-Mother Care strategy through Instagram Reels not only increased knowledge but also transformed it into improved self-care behaviors. This finding aligns with the urgent need for research on the need for affordable and effective innovative solutions to address limited access to information and psychosocial support for pregnant women (Agussafutri, 2022).

The results of the study on knowledge showed an increase in both the intervention and control groups. However, the increase in knowledge in the intervention group was significantly less than in the control group. In the intervention group, the proportion of pregnant women with good knowledge increased significantly from 46.7% before the intervention to 93.3% after the intervention. Meanwhile, in the control group, knowledge increased only from 53.3% to 73.3%.

This significant difference in improvement indicates that micro-counseling through Instagram Reels is more effective in transferring knowledge related to self-care for pregnant women than conventional methods or those without intensive digital intervention. Educational content in short video format allows for more engaging, easy-to-understand, and repetitive information delivery, thus facilitating respondents' comprehension and strengthening their memory of the material (Arifin, 2024).

Furthermore, Instagram Reels offers a combination of visuals, audio, and text that can increase user attention and engagement. This high level of engagement contributes to greater knowledge gains in the intervention group. In the context of learning theory, the use of interactive audiovisual media can accelerate the process of knowledge acquisition because it engages more than one sense, making information more easily absorbed and remembered. Although the control group also showed an increase in knowledge, this was likely influenced by external factors, such as exposure to health information from healthcare professionals, other media, or personal experiences during pregnancy. However, this increase was not as significant as in the intervention group, confirming the role of social media-based micro-counseling as a reinforcing factor in improving maternal self-care knowledge (Khan et al., 2024).

Regarding self-care behaviors, the control group recorded a minimum score of 7 and a maximum score of 35, with a mean score of 27.67 and a standard deviation of 7.94. This relatively large standard deviation indicates wide variation in self-care behaviors among respondents in this group. Meanwhile, the post-intervention mental health score in the control group showed a minimum score of 0 and a maximum score of 8, with a mean score of 2.20 and a standard deviation of 2.93, indicating a relatively low to moderate level of mental health. In the intervention group, the post-intervention knowledge score had a minimum of 5 and a maximum of 10, with a mean of 8.73 and a standard deviation of 1.10. This mean was slightly higher than the control group, indicating a better and relatively more homogeneous level of knowledge after receiving micro-counseling via Instagram Reels.

Furthermore, the self-care behavior score in the intervention group showed a minimum of 25 and a maximum of 35, with a mean of 31.87 and a standard deviation of 2.83. The higher mean and smaller variation compared to the control group indicate that the intervention had a positive impact on improving and maintaining the consistency of pregnant women's self-care behaviors. For mental health, the intervention group had a minimum score of 0 and a maximum of 15, with a mean of 4.33 and a standard deviation of 4.98. These results indicate higher mental health scores than the control group, although variation among respondents remained significant. Overall, post-intervention results showed that the intervention group tended to have better knowledge, self-care behavior, and mental health scores than the control group, indicating the potential effectiveness of micro-counseling through Instagram Reels in improving maternal health outcomes (Sasombo et al., 2021). The Mann-Whitney test results showed no statistically significant differences between the control and intervention groups in all studied variables: knowledge ($p = 0.511$), self-care behavior ($p = 0.154$), and mental health ($p = 0.216$), with all p values greater than the 0.05 level of significance. This finding indicates that, statistically, micro-counseling via Instagram Reels did not show a significant difference compared to the control group in the post-intervention measurements.

The lack of a significant difference in knowledge scores between groups, despite a greater descriptive increase in the intervention group, may be influenced by several factors. One is the relatively small sample size in each group, which limited the statistical power of the test to detect

any actual differences. Furthermore, the possibility of relatively homogeneous initial knowledge levels in both groups may also have contributed to the difference in improvement between groups not being large enough to reach statistical significance. For the self-care behavior variable, the test results showed no statistically significant difference between the control and intervention groups. Health behavior is a complex outcome and is influenced by various factors beyond knowledge, such as family support, previous habits, socioeconomic conditions, and access to healthcare services. Therefore, although micro-counseling through social media can improve respondents' understanding, behavioral changes require a longer period of time and continuous reinforcement for significant differences to be detected.

Similar results were also found for the mental health variable, where there was no significant difference between the two groups. The mental health of pregnant women is influenced by multidimensional factors, including hormonal changes, pregnancy conditions, social support, and environmental stressors. The relatively short duration of the micro-counseling intervention may not be strong enough to produce statistically significant changes in mental health, although descriptively the intervention group showed better scores (Setyadewi, 2022). Although the statistical test results did not show a significant difference, the descriptive finding that tended to be higher in the intervention group still has practical significance. This indicates that micro-counseling through Instagram Reels has the potential to have a positive impact (Dabas & Tuli, 2025). However, further development interventions are needed, such as increasing the duration, frequency of content, interactive approaches, and a larger sample size, to significantly measure the intervention's effects.

Thus, the results of this study confirm that social media-based interventions have potential as a maternal health promotion strategy. However, their statistical effectiveness is still influenced by various methodological limitations and respondent characteristics. Further research with more robust designs is needed to strengthen the evidence for the effectiveness of digital micro-counseling on the knowledge, behavior, and mental health of pregnant women (Widyaputri et al., 2022). This finding aligns with previous research indicating that social media-based health education interventions are effective in improving maternal health knowledge. Therefore, the results of this study strengthen the evidence that Instagram Reels can be utilized as an innovative and effective educational medium to improve self-care knowledge among pregnant women, particularly among the productive age group with high levels of digital literacy.

Effectiveness of Interventions in Improving Self-Care Behavior: A micro-counseling intervention through Instagram Reels containing content on nutrition, exercise, stress management, and childbirth preparation has proven to be significantly effective in improving self-care behaviors for pregnant women. This is demonstrated by the results of a paired T-test in the intervention group, which experienced a mean increase in behavioral scores of 6.6 points with a p-value of 0.000 ($p < 0.05$). This increase is much more substantial compared to the control group, indicating that the intervention not only provides knowledge but also successfully motivates real behavioral changes.

Increased Knowledge and Mental Health as a Supporting Impact: This intervention also significantly increased the knowledge of pregnant women ($p = 0.001$) and had a positive impact on their mental health ($p = 0.005$). Although mental health was not the main focus, the micro-counseling content covering stress management also contributed to reducing the level of depression that pregnant women could potentially experience.

Affordable and Scalable Innovative Solution: Utilizing Instagram Reels as an intervention medium has proven successful by utilizing technology that is already familiar to the target group. This short, engaging, and easily accessible video format makes Insta-Mother Care an innovative solution that meets the criteria of being affordable, effective, and has high potential for scalability in supporting maternal health in the digital era.

CONCLUSION

Based on the Mann-Whitney test results, a p-value of 0.511 was obtained for the knowledge variable, 0.154 for the behavior variable, and 0.216 for the mental health variable between the

control and intervention groups. All p-values were greater than the 0.05 significance level, thus it can be concluded that there was no statistically significant difference between the two groups in the three variables studied. Thus, the micro-counseling intervention through Instagram Reels did not show a statistically significant effect on improving knowledge, self-care behavior, or mental health of pregnant women compared to the control group.

REFERENCES

- Agussafutri, W. D. (2022). Efektifitas Kangaroo Mother Care (KMC) terhadap Perubahan Suhu dan Berat Badan BBLR di RSUD Pandan Arang. *Photon: Jurnal Sain Dan Kesehatan*, 13(1), 9–14. <https://doi.org/10.37859/jp.v13i1.3691>
- Arifin, D. Z. (2024). Pengaruh Video Edukasi terhadap Tingkat Pengetahuan Gizi Pada Remaja di SMP Negeri 1 Pondoksalam. *Journal of Holistic and Health Sciences*, 8(1). <https://doi.org/https://doi.org/10.51873/jhhs.v8i1.250>
- Azura, A., & Lubis, E. E. (2022). Pengaruh Media Sosial Instagram @Racunshopeecheck Terhadap Minat Beli Followers. *Jurnal Telangke Ilmu Komunikasi*, 4(2), 32–37.
- Blaibel, D., Fernandez, C. J., & Pappachan, J. M. (2024). Acute worsening of microvascular complications of diabetes mellitus during rapid glycemic control: The pathobiology and therapeutic implications. *World Journal of Diabetes*, 15(3), 311–317. <https://doi.org/10.4239/wjd.v15.i3.311>
- Chang, K.-J., Seow, K.-M., & Chen, K.-H. (2023). Preeclampsia: Recent Advances in Predicting, Preventing, and Managing the Maternal and Fetal Life-Threatening Condition. *International Journal of Environmental Research and Public Health*, 20(4). <https://doi.org/10.3390/ijerph20042994>
- Dabas, M. T., & Tuli, G. (2025). The Relationship Between Daily Reel Consumption and Its Impact on Mindfulness Attention. *International Journal for Multidisciplinary Research (IJFMR)* E-ISSN: 2582-2160 • Website: [Www.Ijfmr.Com](http://www.ijfmr.com) • Email: Editor@ijfmr.Com The, 7(3), 1–58. <https://www.ijfmr.com/papers/2025/3/45987.pdf>
- de Oliveira Borba, P. L., Pan, L. C., Farias, M. N., de Souza, J. R. B., & Lopes, R. E. (2021). “Best practices of occupational therapy in schools” - A critical review and contributions for occupational therapists in the education sector. *Brazilian Journal of Occupational Therapy*, 29, 1–11. <https://doi.org/10.1590/2526-8910.CTOARF2136>
- Dinas Kesehatan Kota Banjarmasin. (2023). Sepuluh Penyakit Terbanyak di Kota Banjarmasin Tahun 2022. Satudata.Banjarmasinkota.Go.Id. <https://satudata.banjarmasinkota.go.id/data-statistik/a8b60c68-9be5-4abd-9e3f-5436be690acb>
- Hananto, S. Y., Putri, S. T., & Puspita, A. P. W. (2022). Studi Kasus : Penatalaksanaan Diabetes Self Management Education (DSME) Terhadap Kadar Glukosa Darah pada Pasien Diabetes Melitus Tipe 2. *Jurnal Keperawatan*, 20(4), 128–137. <https://doi.org/10.35874/jkp.v20i4.1111>
- Khan, M., Dave, A., Benton, M., Moss, N., & Kaler, M. K. (2024). Health literacy interventions for pregnant women with limited language proficiency in the country they live in: a systematic review. *BMC Public Health*, 24(1). <https://doi.org/10.1186/s12889-024-20747-8>
- Lassi, Z. S., Padhani, Z. A., Rabbani, A., Rind, F., Salam, R. A., Das, J. K., & Bhutta, Z. A. (2020). Impact of dietary interventions during pregnancy on maternal, neonatal, and child outcomes in low-and middle-income countries. *Nutrients*, 12(2). <https://doi.org/10.3390/nu12020531>
- Mardiaturrahmah, M., & Anjarwati, A. (2020). Relationship between the nutritional status of pregnant women and the incident of Low Birth Weight infant. *International Journal of Health Science and Technology*, 1(3), 58–62. <https://doi.org/10.31101/ijhst.v1i3.1212>
- Mayrene, G., & Junaidi, N. (2023). Pengaruh Content Marketing Aplikasi Tiktok Terhadap Pembentukan Brand Awareness Pada English Academy By Ruangguru. *Jurnal Cakrawala Ilmiah*, 2(6). <https://doi.org/https://doi.org/10.53625/jcijurnalcakrawalailmiah.v2i6>
- Mutiah, N. R., Zulfa, I., & Hami, W. (2024). Analisis Penyebab dan Dampak Pernikahan Dini (Studi Kasus di Desa Rejosari, Kecamatan Bojong). *Misykat Al-Anwar Jurnal Kajian Islam Dan Masyarakat*, 7(1), 29–38. <https://doi.org/10.24853/ma.7.1.29-38>
- Ohorella, N. R., Annisa, & Prihantoro, E. (2022). Pengaruh Akun Instagram @Sumbar_Rancak

- Terhadap Minat Berkunjung Followers Ke Suatu Destinasi. *Jurnal Komunika*, 18(2), 46–54.
- Rahmah, S. N., Rhynanti, C. L., Ulu, Z., & Saputra, P. (2024). the Influence of Social Media Marketing Through Instagram on the Patients' Interest in Visiting a Hospital. *Indonesian Interdisciplinary Journal of Sharia Economics (IJSE)*, 7(1), 945–964.
- Riskesdas. (2018). Laporan Nasional RISKESDAS 2018. Lembaga Penerbit Badan Penelitian dan Pengembangan Kesehatan (LPB).
- Saputra, F. A., Ranimpi, Y. Y., & Pilakoannu, R. T. (2018). Kesehatan Mental dan Koping Strategi di Kudangan, Kecamatan Delang, Kabupaten Lamandau Kalimantan Tengah: Suatu Studi Sosiodemograf. *Humanitas (Jurnal Psikologi)*, 2(1), 63–74. <https://doi.org/10.28932/humanitas.v2i1.1046>
- Sasombo, A., Katuuk, mario E., & Bidjuni, H. (2021). Hubungan Self Care Dengan Komplikasi Diabetes Melitus Pada Pasien Dengan Diabetes Melitus Tipe 2 Di Klinik Husada Sario Manado. *JURNAL KEPERAWATAN*, 9(2), 54–62. <https://doi.org/https://doi.org/10.35790/jkp.v9i2.36781>
- Setyadewi, I. G. A. T. (2022). Gambaran Self Care Management Pada Pasien Diabetes Melitus Di Wilayah Puskesmas Sukawati Ii Tahun 2022 [Poltekkes Denpasar]. <https://repository.poltekkes-denpasar.ac.id/8928/>
- TAMA, S. H. W. (2018). Perancangan Pembangkit Listrik Tenaga Angin Menggunakan Turbin Ventilator Sebagai Sumber Energi Alternatif [Universitas Muhammadiyah Sumatra Utara Medan]. In [repository.umsu.ac.id](http://www.fao.org/3/I8739EN/i8739en.pdf) (Vol. 1, Issue 1). <http://www.fao.org/3/I8739EN/i8739en.pdf><http://dx.doi.org/10.1016/j.adolescence.2017.01.003><http://dx.doi.org/10.1016/j.childyouth.2011.10.007><https://www.tandfonline.com/doi/full/10.1080/23288604.2016.1224023><http://pdx.sagepub.com/lookup/doi/10>
- Widyaputri, N., Suwu, E. A. A., & Tumiwa, J. (2022). Analisis Pemanfaatan Aplikasi Instagram Dalam Pemasaran Bisnis Online Shop Di Kota Manado. *Jurnall Ilmiah Society*, 2(2), 1–9. <https://ejournal.unsrat.ac.id/v3/index.php/jurnalilmiahsociety/article/view/41776>
- Yusefi, A. R., Beigzadeh, A., & Kaya, F. (2025). Resilience as a predictor of mental health among medical students: a cross-sectional study using PLS-SEM. *BMC Medical Education*, 25(1476), 1–14. <https://doi.org/10.1186/s12909-025-08063-0>

