Spiritual Level Relationship with Resilience in Diabetes Mellitus Patients

Danu Mangippu Pasaribu[1] Yesi Hasneli[2] Hellena Deli[3]
Nursing Study Program, Faculty of Nursing, Universitas Riau, Pekanbaru City, Riau Province, Indonesia[1,2,3]
Email: danupasaribu34@gmail.com[1] yesi_zahra@yahoo.com[2] hellena.deli@lecturer.unri.ac.id[3]

Abstract
Introduction:Patients with Diabetes Mellitus (DM) often experience psychological problems that affect the daily management of DM. Spirituality provides the ability to do positive coping so that someone becomes resilient. Purpose: This study aims to determine the relationship between spiritual level and resilience in Diabetes Mellitus patients. Methods: Quantitative research design and cross sectional approach. The research sample was 100 respondents who were selected based on inclusion criteria using a purposive sampling technique. Measuring tools used are DSES and CD-RISC-25 questionnaires. The analysis used was univariate and bivariate analysis using the Chi-Square test with a value of $\alpha < 0.05$. Results: Statistical test using the Chi-Square test obtained p-value (0.004) $< \alpha$ (0.05). Conclusion: There is a spiritual level relationship with resilience in Diabetes Mellitus patients (p-value 0.004). DM sufferers are expected to be able to develop their adaptive abilities to overcome their illness by having a good spiritual approach to God as the main source of strength, building good intrapersonal and interpersonal relationships as the main coping in overcoming negative feelings due to their illness.
Keywords: Diabetes mellitus; resilience; Spiritual

INTRODUCTION

Non-Communicable Diseases (PTM) are the number one cause of death and disability globally (Pan American Health Organization, 2022). Diabetes Mellitus (DM) is one of the contributors to the total death rate from non-communicable diseases. The International Diabetes Federation (IDF) in 2021 reports that one or more than 10 adults in the world live with DM. Indonesia is the country with the fifth largest number of DM sufferers in the world with 19.5 million cases in the age group of 20-79 years.

Changes in the life of DM sufferers make them show several maladaptive psychological reactions or symptoms such as irritability, feeling useless, high levels of anxiety, stress, and depression (Woon et al., 2020). Stress, anxiety, and depression that occur in DM sufferers are an emotional state of negative emotions that arise as a result of the unpleasant experiences they receive (Du et al., 2018). Negative emotions in DM sufferers arise due to negative views of the conditions they are experiencing, resulting in difficulty adjusting to the various demands that must be met (Sari et al., 2020). The poor psychology of DM sufferers results in suffering which can directly affect the daily management of diabetes, and poor medical prognosis (Nurhayati, 2020).

In order for patients to survive and continue their lives, an adaptability called resilience is needed. Resilience is the ability to survive and adapt, as well as the human capacity to face and solve problems after experiencing adversity. This can be seen when a person is faced with a difficult event and knows how to adapt to the situation (Utami, 2017). According to Kusumawati et al. (2022) in undergoing diabetes management, DM sufferers must have a very good level of resistance or resilience. This is because DM sufferers must undergo diabetes treatment in a relatively long time. When the resilience of people with DM has decreased,

Research by Boell et al (2020) found that there is a relationship between resilience and self-care in people with DM at the Public Health Center in the City of Florianópolis, Brazil. The results show that adherence to diabetes management in DM sufferers has a significant correlation with the high resilience score they have (Boell et al., 2020). Ruiz-Aranda et al (2020) conducted an analysis of the relationship between resilience, depression, anxiety, and quality of life in patients with Type 1 DM at Virgen Macarena University Hospital, Spain. The results show that resilience has an influence on the quality of life of people with Type 1 DM, where respondents with higher resilience have a tendency to avoid depression and anxiety.

One of the efforts to become a resilient individual is that someone must have spirituality (Munawaroh & Mashudi, 2019). Spirituality provides strength for DM patients in dealing with various types of stressors, both physical and psychological stressors caused by their illness (Dharmayanti et al., 2021). Spirituality as a form of coping strategy has an influence in increasing resilience in individuals. This is in line with Missasi and Izzati's research (2019) regarding the factors that affect resilience. The results of this study explained that spirituality and resilience are two interrelated factors.

Previous research that conducted research on the relationship between spiritual intelligence and resilience in adolescents from underprivileged families found that there was a positive correlation between spiritual intelligence and resilience, namely the higher the spiritual intelligence, the higher the resilience, and vice versa (Finka & Prasetya, 2018) . These results are in line with research conducted by Karsih (2022) regarding the effect of spiritual guidance on resilience in victims after a landslide disaster. Spiritual guidance in this study has a significant effect on resilience as evidenced by the increased aspects of motivation and attention to the victims after the disaster (Karsih Sulistiawati, 2022).

Based on the results of interviews conducted with 18 DM sufferers, 15 respondents said they were diligent in carrying out worship activities, felt close to God every day, and had gratitude for their lives. 3 other respondents said they did not feel close to God and feelings of rejection of their disease conditions, as well as limitations in carrying out worship activities due to their physical limitations. Most DM sufferers say that they always comply with the diabetes care that is carried out, even so, patients with poor adherence to DM care are still found. In addition, there are still DM sufferers who experience stress and depression about their illness, and vice versa. Based on this description,

RESEARCH METHODS

This research is a form of quantitative research using a descriptive correlation research design with a cross sectional approach. The population in this study were DM sufferers who visited the Rejosari Pekanbaru Health Center in July-December 2022, namely 133 population. Sampling in this study used a purposive sampling technique on 100 research samples that had agreed and were willing to be research samples. The questionnaire used in this study was the Daily Spiritual Experience Scale (DSES) questionnaire to measure the spiritual level of DM sufferers and the Connor Davidson Resilience Scale questionnaire (CD RISC-25) to measure the resilience level of DM sufferers.

RESEARCH RESULTS AND DISCUSSION
Univariate analysis

Table 1. Distribution of Respondent Characteristics

Characteristics of Respondents	Frequency (n=100)	Percentage (%)
Age		
17-25 years (late teens)	3	3
26-35 years (early adulthood)	4	4

36-45 years (late adulthood)	8	8
46-55 years (early elderly)	26	26
56-65 years (late elderly)	34	34
>65 years (elderly)	25	25
Gender		
Man	27	27
Woman	73	73
Education		
Low (no school, SD, SMP)	46	46
High (SMA/SMK/STM, D3, S1, S2)	54	54
Work		
Doesn't work	5	5
Housewife	55	55
Retired	15	15
Self-employed	14	14
Laborer	1	1
Private sector employee	7	7
PNS/TNI/POLRI	3	3
Suffering from DM for a long time	54	54
1-5 years	24	24
6-10 years	22	22
>10 years		
Total	**100**	**100**

Table 1 shows that of the 100 respondents who have been studied, the majority of DM sufferers are in the age range of 56-65 years as many as 34 respondents (34%). Based on gender, 73 respondents (73%) were female. Based on the level of education, the level of higher education is 54 respondents (54%). Based on the type of work, 55 respondents (55%) are housewives (IRT). Patients with a span of time suffering from DM for 1-5 years amounted to 54 respondents (54%).

Table 2. Distribution of Respondents' Spiritual Levels

No	Spiritual Level	Frequency	Percentage (%)
1	Good	54	54
2	Not enough	46	46
	Total	**100**	**100**

Table 2 shows that the majority of respondents have a good spiritual level, namely as many as 54 respondents (54%).

Table 3. Distribution of Respondents' Resilience Levels

No	Resilience Level	Frequency	Percentage (%)
1	Good	46	46
2	Not enough	54	54
	Total	**100**	**100**

Table 3 shows that the majority of respondents have less resilience, namely as many as 46% of respondents.

Bivariate Analysis

Table 4. Relationship between Spiritual Level and Resilience in Diabetes Mellitus Patients

Spiritual Level	Resilience Level		OR	p-

	Good		Not enough		Total		*values*	
	F	%	F	%	F	%		
Good	32	32	22	22	54	100		
Not enough	14	14	32	32	46	100	3,325	0.004
Total	**46**	**46**	**54**	**54**	**100**	**100**		

Table 4 shows that from the results of the analysis, 32 respondents (32%) with a good spiritual level are likely to have a good level of resilience. The OR (Odds Ratio) value was 3.325 which means that respondents who have a good spiritual level have a 3.325 times greater chance of having a good level of resilience. Based on the value on the Pearson Chi-Square test of 0.004 <0.05, it can be concluded that there is a spiritual level relationship with resilience in Diabetes Mellitus patients.

Discussion
Univariate analysis
Characteristics of Respondents
Age

Based on the results of a study of 100 DM patient respondents at the Rejosari Health Center in Pekanbaru City, it was found that the most age group suffering from DM was in the age group 56-65 years (late elderly), namely 34 respondents (34%) and the least were in the age range 17-25 years (late teens), namely as many as 3 respondents (3%). The results of this study are in line with research conducted by Aprilia (2022) which showed that respondents with an age range of 56-65 years (late elderly) tend to be at risk of developing type 2 DM. The high incidence of DM in the elderly is due to age, Pancreatic beta cells that function in producing insulin will experience a decrease because the process of cell apoptosis exceeds the process of replication.

Gender

The results showed the high incidence of DM in the female sex, namely as many as 73 respondents (73%). This research is in line with the results of research by Oktavia et al (2022) which explained that there are more female DM sufferers than men. Richardo et al (2021) revealed that the high incidence of DM in women compared to men was caused by women having more adipose tissue, resulting in a higher fat content in women compared to men, namely by 20-25%. In addition, the increase in body fat levels in women is also influenced by female hormones, which at an advanced age experience the menopause phase, causing the hormone estrogen to decrease, causing body fat reserves to increase and resulting in insulin resistance.

Education

The results showed that respondents with higher levels of education had a slightly higher percentage of DM cases, namely 54 respondents (54%) compared to those with lower levels of education, namely 46 respondents (46%). Highly educated groups who have a high risk of DM are influenced by their lifestyle of consuming processed foods that contain saturated fat which results in the incidence of obesity which causes an increase in the prevalence of DM (Agustianto et al, 2020).

Work

Housewives (IRT) have a greater percentage of DM events, namely as many as 55 respondents (55%). This is in line with research conducted by Purwanti et al (2023), in which

the highest number of DM sufferers were housewives with a percentage of 43.8%. In this study it was said that the work environment had an effect both directly and indirectly on the incidence of DM. Edison et al (2022) revealed that the high incidence of DM in IRT was caused by a lack of physical activity compared to other jobs. Physical activity that has little effect on the process of breaking down fat and insulin sensitivity in the body (Decroli, 2019).

Spiritual Level

Based on the results of research conducted at the Rejosari Health Center on 100 respondents, the percentage of a good spiritual level was 54 respondents (54%). The results of this study are in line with research conducted by Dharmayanti (2021), where the majority of DM sufferers have a high spiritual level of 25 respondents (67.6%). God's role in the life of DM sufferers determines a good psychological picture. This will be illustrated if the sufferer associates his illness with the role of God's guidance, so he believes that his condition will improve because of God's guidance in his daily life. Worship and prayer is a form of means to communicate with God as a large entity in order to overcome various pressures, difficult situations, and suffering due to illness. This can give peace to DM sufferers in the midst of daily activities. Someone with good spirituality can be seen from how a person carries out his worship activities, such as praying, reading the holy book, participating in religious activities, and interpreting each of these activities with wisdom as a form of relationship with God. The existence of good communication with God gives a feeling of calm, peace, and a feeling of being loved which keeps a person away from stress and pressure. and interpret each of these activities with wisdom as a form of relationship with God. The existence of good communication with God gives a feeling of calm, peace, and a feeling of being loved which keeps a person away from stress and pressure. and interpret each of these activities with wisdom as a form of relationship with God. The existence of good communication with God gives a feeling of calm, peace, and a feeling of being loved which keeps a person away from stress and pressure.

Resilience Level

Based on the results of research conducted at the Rejosari Health Center on 100 respondents, the percentage of good resilience was 46 respondents (46%) and less resilience was 54 respondents (54%). The presence of diabetes mellitus and its complications tend to cause pain, sadness, and worry. These feelings tend to make sufferers have no enthusiasm in overcoming these negative feelings. This illustrates that DM sufferers are vulnerable in terms of acceptance of negative effects. When someone is faced with stress, positive emotions play a role in getting through difficult times. When a person has difficulty presenting positive emotions when faced with a stressor, a person becomes vulnerable to pessimism (Hendriani, 2018). In patients with DM, this results in a person being less resilient and at risk of experiencing anxiety and non-compliance with health maintenance management. Someone who believes they can face problems tends to have good resilience. Conversely, someone who lacks the ability to solve problems tends to have low resilience. The inability to interpret experience makes a person less likely to create new abilities to become a better individual than before. The experience of stress in relation to DM sufferers can be defined as the experience of DM sufferers. The inability to interpret or learn from difficult times makes DM sufferers tend to be less resilient Someone who believes they can face problems tends to have good resilience. Conversely, someone who lacks the ability to solve problems tends to have low resilience. The inability to interpret experience makes a person less likely to create new abilities to become a better individual than before. The experience of stress in relation to DM sufferers can be defined as the experience of DM sufferers. The inability to interpret or learn from difficult times makes DM sufferers tend to be less resilient Someone who believes they can face problems tends to

have good resilience. Conversely, someone who lacks the ability to solve problems tends to have low resilience. The inability to interpret experience makes a person less likely to create new abilities to become a better individual than before. The experience of stress in relation to DM sufferers can be defined as the experience of DM sufferers. The inability to interpret or learn from difficult times makes DM sufferers tend to be less resilient The inability to interpret experience makes a person less likely to create new abilities to become a better individual than before. The experience of stress in relation to DM sufferers can be defined as the experience of DM sufferers. The inability to interpret or learn from difficult times makes DM sufferers tend to be less resilient The inability to interpret experience makes a person less likely to create new abilities to become a better individual than before. The experience of stress in relation to DM sufferers can be defined as the experience of DM sufferers. The inability to interpret or learn from difficult times makes DM sufferers tend to be less resilient

Bivariate Analysis

The results of the analysis regarding the relationship between spiritual level and resilience in Diabetes Mellitus patients using the Chi-Square test, obtained a p-value $<\alpha$ (0.004 <0.05) which proves that there is a relationship between spiritual level and resilience in Diabetes Mellitus patients (H0 is rejected). , where 32 respondents (32%) have good spiritual will likely have good resilience. The OR (Odds Ratio) value was 3.325 which means that respondents who have a good spiritual level have a 3.325 times greater chance of having a good level of resilience. The better the spiritual, the better the resilience.

Based on the results of the research analysis, spirituality has an influence on the resilience of Diabetes Mellitus patients. This is shown from 54 respondents who have a good spiritual level, there are 32 respondents (59.25%) have good resilience. In line with the research conducted by Naryati & Setiawati (2022) in the inpatient room of Moh. Ridwan Meuraksa, of the 88 research respondents, 82 respondents (93.2%) had good spirituality, there were 84 respondents (95.5%) with high resilience. The results of the study showed that there was a relationship between spiritual level and resilience in Diabetes Mellitus patients.

Spirituality provides emotional support for DM sufferers. Emotional support can arise from oneself in the form of faith/trust, hope, and ways of making sense of life. When faced with difficulties, DM sufferers can show positive emotions through their faith/trust in God. With faith/trust in God as a big entity, DM sufferers are able to have hope regarding their health condition. Hope is able to give someone the spirit or enthusiasm to look at a better future. DM sufferers with good spirituality have emotional support and positive influence from themselves, the support of others, and a relationship with God.

Spirituality is included in one aspect of resilience and is a potential factor driving resilience (Simpson et al, 2020). Spirituality is one of the effective coping for DM sufferers in creating positive emotions. With positive emotions, DM sufferers will become resilient in responding to various stressors/problems and not easily trapped in conditions that cause stress which can worsen their condition.

CONCLUSION

Based on the results of research conducted by researchers regarding the relationship between spiritual level and resilience in Diabetes Mellitus patients, it is known that the majority of DM sufferers are in the age range of 56-65 years, as many as 34 respondents (34%), as many as 73 respondents (73%) are female, as many as 54 respondents (54%) had a high level of education, 55 respondents (55%) were housewives (IRT), and 54 respondents (54%) had DM for the last 1-5 years. DM sufferers with a good spiritual level are as many as 54 respondents (54%) and less spiritual level as many as 46 respondents (46%). DM sufferers with a good level

of resilience, namely as many as 46 respondents (46%) and less resilience level, as many as 54 respondents (54%). In 54 respondents (100%) with a good spiritual level, there are 32 respondents (59.25%) with a good level of resilience. Statistical tests using the Chi-Square test showed a p-value (0.004) < α (0.05), so it can be concluded that there is a relationship between spiritual level and resilience in Diabetes Mellitus Patients.

SuggestionFor the development of nursing science, it is hoped that the results of this research can be a source of information in the development of mental health nursing knowledge, especially regarding the spiritual level relationship with resilience in DM patients. It is hoped that this research can be used as an additional information and development of comprehensive health services for DM sufferers, especially in relation to psychoeducation in the form of stress management by applying spiritual values to increase resilience in Diabetes Mellitus patients. For the community, it is hoped that DM sufferers will be able to develop their adaptation abilities to overcome their illness by having a good spiritual approach to God as the main source of strength. build good intrapersonal and interpersonal relationships as the main coping in overcoming negative feelings due to the illness. For future researchers, it is hoped that this research can be used as a source of information for future researchers regarding spiritual level and resilience in Diabetes Mellitus patients at the puskesmas. This research can be further investigated by looking more broadly at the aspects that affect each variable and its relation to other characteristics possessed by the research object.

Research limitations

For the majority of respondents, the researcher had to provide assistance by reading it, providing an understanding of the answer choices, and filling in the respondents' answers, so that it took a long time in the filling process. Question items that tend to be sensitive related to the study of the spiritual aspects of the respondents resulted in many respondents refusing to fill out the questionnaire. In addition, differences in location and data collection situations, such as at the puskesmas or at the respondent's residence, were limitations in this study.

BIBLIOGRAPHY
Agustianto, R. F., Mudjanarko, S. W., & Prabowo, G. I. (2017). Tingkat Pendidikan Bukan Merupakan Prediktor Risiko Diabetes Berdasarkan Skoring American Diabetes Association. Higeia Journal of Public Health Research and Development, 1(3), 625–634.
Aprilia, F. K. (2022). Hubungan Pengetahuan Dengan Kepatuhan Diet, Aktivitas Fisik dan Minum Obat Pada Penderita Diabetes Mellitus Di Wilayah Kerja Puskesmas Sedati (Doctoral dissertation, Stikes Hang Tuah Surabaya).
Boell, J. E. W., Silva, D. M. G. V. da, Guanilo, M. E. E., Hegadoren, K., Meirelles, B. H. S., & Suplici, S. R. (2020). Resilience And Self-Care In People With Diabetes Mellitus. Texto & Contexto - Enfermagem, 29. https://doi.org/10.1590/1980-265x-tce-2018-0105
Decroli, E. (2019). Diabetes melitus tipe 2 (A. Kam, Y. P. Efendi, G. P. Decroli, & A. Rahmadi). Padang: Pusat Penerbitan Bagian Ilmu Penyakit Dalam Fakultas Kedokteran Universitas Andalas.
Dharmayanti, N. M. S., Widyanthari, D. M., & Saputra, I. K. (2021). Hubungan Pengalaman Spiritualitas Dengan Perilaku Self Management Pada Pasien Diabetes Melitus Di Puskesmas Gianyar I. Community of Publishing In Nursing (Coping), 9(5), 572–580. https://ojs.unud.ac.id/index.php/coping/ article/download/75242/43194
Du, J., Huang, J., An, Y., & Xu, W. (2018). The Relationship between stress and negative emotion: The Mediating role of rumination. Clinical Research and Trials, 4(1). https://doi.org/10.15761/crt.1000208

Edison, I. P., Yesi Hasneli, & Sri Utami. (2022). Hubungan Status Ekonomi Dengan Perilaku Pencegahan Gangren Pada Pasien Diabetes Mellitus Di Masa Pandemi Covid-19. Riau Nursing Journal, 1(1). https://doi.org/10.31258/rnj.1.1.155-163

Finka, C. I., & Prasetya, B. E. A. (2018). Relationship Between Spiritual Intelligence with Resilience in Teenagers Born in Poor Families. Psikodimensia, 17(2). https://doi.org/10.24167/psidim.v17i2.1533

Hendriani, W. (2018). Resiliensi psikologis: Sebuah pengantar (I. Fahmi). Jakarta: Penerbit Kencana.

Karsih Sulistiawati. (2022). Pengaruh Bimbingan Spiritual Terhadap Resiliensi Korban Pasca Bencana Tanah Longsor Di Huntara Lapangan Lebak Limus Desa Kiarapandak, Kecamatan Sukajaya Kabupaten Bogor (Skripsi Sarjana, Universitas Islam Negeri Syarif Hidayatullah). https://repository.uinjkt.ac.id/ dspace/handle/123456789/63959

Kusumawati, M. D., Kusnanto, & Kusumawati, M. D. (2022). Perbandingan Efektivitas Mindfulness Based Intervention Terhadap Diabetes Resilience Training pada Diabetes Burnout Syndrome dan Kontrol Glikemik Penderita Diabetes Melitus Tipe 2. Jurnal Penelitian Kesehatan Suara Forikes, 13(1), 24–33. https://doi.org/http://dx.doi.org/10.33846/sf13105

Missasi, V., & Izzati, I. D. C. (2019). Faktor–Faktor yang Mempengaruhi Resiliensi. Prosiding Seminar Nasional Magister Psikologi Universitas Ahmad Dahlan, 2009.

Munawaroh, E., & Mashudi, E. A. (2019). Resiliensi: Kemampuan bertahan dalam tekanan dan bangkit dari keterpurukan (Hamidulloh Ibda). Semarang: CV Pilar Nusantara.

Naryati, N., & Setiawati, Y. (2022). Hubungan Kesejahteraan Spiritual dengan Kemampuan Resiliensi pada Penderita Diabetes Millitus Tipe 2 di Ruang Rawat Inap Rumah Sakit Tingkat II Moh. Ridwan Meuraksa. Malahayati Nursing Journal, 4(8). https://doi.org/10.33024/mnj.v4i8.6936

Nurhayati, P. (2020). Faktor-faktor yang berhubungan dengan kecemasan dan depresi pada pasien diabetes melitus tipe 2. Health Sciences and Pharmacy Journal, 4(1). https://doi.org/10.32504/hspj.v4i1.176

Oktavia, S., Budiati, E., Masra, F., Rahayu, D., & Setiaji, B. (2022). Faktor-faktor Sosial Demografi yang Berhubungan dengan Kejadian Diabetes Melitus Tipe 2. Jurnal Ilmiah Stikes Kendal, 12(4), 1039–1052.

Pan American Health Organization. (2022). Noncommunicable Diseases. PAHO. Diperoleh tanggal 10 Desember 2022 dari https://www.paho.org/en/topics/ noncommunicable-diseases

Pertiwi, Z. M. E. (2021). Hubungan Kesejahteraan Spiritual dengan Resiliensi pada Pasien Diabetes Mellitus Tipe 2 di Poli Penyakit Dalam RS Jember Klinik (Doctoral dissertation, Fakultas Keperawatan).

Purwanti, E., Mintarsih, M., & Sukoco, B. (2023). Pengetahuan dan Kepatuhan Minum Obat Antidiabetik pada Pasien Diabetes Melitus Tipe II. Jurnal Keperawatan Silampari, 6(2), 1129-1138. https://doi.org/https://doi.org/10.31539/jks.v6i2.5009

Richardo, B., Pengemanan, D., & Mayulu, N. (2021). Kejadian Diabetes Mellitus Tipe II pada Lanjut Usia di Indonesia (Analisis Riskesdas 2018). Jurnal Kedokteran Dan Kesehatan, 17(1), 9–20.

Ruiz-Aranda, D., Mateo-Rodriguez, C., Olmedo, I. S., García, C. G., Enríquez, A. J., & Martinez-Brocca, M. A. (2020). Relationship between Resilience and Quality of Life in Patients with Fear of Hypoglycemia: The Mediating Effects of Anxiety and Depression. Sustainability, 12(20), 8512. https://doi.org/ 10.3390/su12208512

Sari, C. W. M. S., Hijriani, T., & Suhendar, I. (2020). Anxiety and Risk Factors in Diabetes Mellitus Sufferers at Wanaraja Health Center in Garut. Asian Community Health Nursing Research. https://doi.org/10.29253/achnr. 2020.2131

Simpson, Grahame Kenneth, et al. "Do spirituality, resilience and hope mediate outcomes among family caregivers after traumatic brain injury or spinal cord injury? A structural equation modelling approach." Neuro Rehabilitation 46.1 (2020): 3-15.

Utami, C. T. (2017). Self-Efficacy dan Resiliensi: Sebuah Tinjauan Meta-Analisis. Buletin Psikologi, 25(1). https://doi.org/10.22146/buletinpsikologi. 18419

Woon, L. S.-C.,et al. (2020). Depression, Anxiety, and Associated Factors In Patients With Diabetes: Evidence From The Anxiety, Depression, and Personality Traits In Diabetes Mellitus (ADAPT-DM) study. BMC Psychiatry, 20(1), 227. https://doi.org/10.1186/s12888-020-02615-y