Murottal Al-Quran Intervention and Outcomes for Chronic Care Patients

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ABSTRACT

Introduction

Murottal Al-Qur'an therapy is an important spiritual intervention given to patients with chronic disease in addressed spiritual needs to connect them to their creator as part of holistic care that cannot be ignored. This literature review aims to review studies that have investigated intervention and outcomes of murottal Al-Qur'an therapy in patients with chronic disease.

Method

Articles were collected through electronic database from Science Direct, Pubmed, Springer, Taylor & Francis, and Google Search used keywords murottal, listening the holy Qur'an, chronic diseases, intervention and outcomes that were publised since 2011-2017 both Indonesian and English found 8 articles. 316 patients were conducted to this research.

Results

This literature review showed that murottal Al-Quran intervention had effect on reduced blood pressure in hypertensive patients, reduced anxiety in patients with CRF, improved quality of life in HIV AIDS patients, decreased blood sugar in DM patients, reduced cytokine InterLeukin-6 in pulmonary tuberculosis. The work mechanism of the murrottal Al-Quran intervention decreased stress hormones, activated natural endorphine, increased relaxation, decreased pain, anxiety and tension, improved body chemistry and hemodynamics, lowered blood pressure, slowed respiration, heart rate, pulse, and brain wave activity.

Conclusion

The murottal Al-Qur'an intervention was proven effective in caring patients with chronic disease and given positive results. The murottal Al-Qur'an intervention should be applied as an appropriate intervention to provide comfort, reduce anxiety, and improve the quality of life in patients with chronic diseases.

Keywords

Murottal; Listening the Holy Qur'an; Chronic Disease; Intervention and Outcome

BACKGROUND

Chronic disease is a type of degenerative disease that develops or persists for a very long time, which is more than six months. Patients who suffer from chronic diseases tend to have a high level of anxiety and tend to develop feelings of hopelessness and helplessness because various types of treatment cannot help him recover from chronic diseases (Sarafino, 2006). The pain suffered will disrupt daily activities, goals in life, and the quality of sleep (Affleck et al. In Setyowati, 2015). Chronic diseases can be suffered by all age groups, socioeconomic and cultural levels. According to WHO (2008), the main health problem that is the cause of human death is a chronic disease that is 63 percent of the total number of deaths (Ember, 2011). This collection of physical and psychological symptoms can reduce the quality of life

of patients with chronic diseases (Sarafino, 2006). Holistic nursing is nursing practice resulting in healing the whole person as human being that has interconnectedness of body mind social cultural spiritual aspect (American Holistic Nurses Association, 2009). Holistic nursing always correlates with religion or belief system (Mardiyono, 2011). Current therapies that begin to develop in the world are psychoreligious therapy (Purnomo, 2018). Spirituality intervention can be applied in nursing process based on nursing intervention classification (NIC) (McCloskey, Bulechek, Craft-Rosenberg, Daly, Denehy, Glick et al., 1996). Spirituality intervention is conceptualized with the Islamic tenets. Spirituality intervention of nursing practice mainly composes of prayer, recitation of the holy Qur'an, Zikr or remembrance of Allah (Syed, 2003). Murottal therapy is an important spiritual intervention given to patients with chronic disease as part of holistic care that cannot be ignored. Nursing has revealed many benefits of the Al-Qur'an method in the care of patients with chronic diseases. In addition this has also been revealed in the scriptures which states that the Qur'an is revealed as a healer (Ash Syifaa) and guidance (al-huda) for those who believe (Purnomo, 2018). Murottal Al-Qur'an interventions are provided through Al-Qur'an voice recordings that are Qori's' (Qur'an readers). The Qur'anic chant contains human sounds, while the human voice is an amazing healing instrument and the most accessible tool. Sound can reduce stress hormones by activating natural endhorphin hormones, increasing relaxed feeling and distracting from fear, anxiety and tension, lowering blood pressure, and slowing down breathing, heart rate, pulse and brain wave activity (Heru, 2012). Murottal Al-Qur'an therapy is Al-Qur'an reading therapy which is a religious therapy, where a person will be recited from the Qur'anic verses for a few minutes or hours so as to have a positive impact on one's body. Murottal Al-Qur'an therapy can speed healing. This is evidenced by several experts such as research conducted by Ahmad Al Khadi, president director of the Islamic Medicine Institute for Education and Research in Florida, United States, in obtaining 97% research results that listening to the Qur'anic verses has the effect of bringing calm and reducing tenderness nerve.

METHODS

The method used in this literature review is to collect and analyze research articles on murottal Al-Qur'an therapy and the results in patients with chronic diseases. Articles collected through electronic searches from Science Direct, Pubmed, Springer and Google Search using murottal keywords, listening to the holy qur'an, chronic diseases, interventions and results published in 2011-2017 both Indonesian and English and can access full text. From this search, there were 37 articles that matched the keywords, but only 10 articles consistently discussed murottal AL-Qur'an interventions and their results in patients with chronic diseases.

RESULTS

From this literature review, there were 8 articles that discussed murottal Al-Qur'an interventions and their results. The study was conducted in Indonesia (Maos, Wonogiri, Makasar, Pekanbaru), Tunisia and Iran, with chronic diseases including primary

hypertension, chronic renal failure, pulmonary tuberculosis, AIDS, type 2 diabetes mellitus, and ischemic stroke.

The results of this literature review showed that three studies used Surah Ar-Rahman, one study used the Yasiin sura, one study used the verse rukyah syar'I which consisted of sura surah Al-Fatihah 1x, Al-Baqarah verse 255, 285-286 1x, Al -Ikhlas 11x, Al-Falaq 1x, An-Naas 1x, Al-Anbiyak 83 1x, Az-Zumar 23 1x, one complete study of all the Surahs of the Qur'an and two studies not mentioning the suras used. All studies provide interventions in the form of listening to the Qur'an using earphones / headphones, compact discs and some accompanied by translations. On average, therapy is given for 10-20 minutes and carried out repeatedly at least twice in each intervention session.

The first article showed that a combination of Benson's relaxation and murottal therapy in the intervention group can significantly reduce fasting blood glucose levels. The second article showed that there are dynamics of increasing levels of Interleukin-6 (IL-6) in the group of Tuberculosis patients who received OAT therapy added with Murottal Qur'an therapy. The third article showed the lowest quality of life score of 87 (poor category) and the highest is 130 (good category), after murottal therapy intervention, the lowest quality of life score is 95 and the highest is 141, both of which are in the good category, and occur change in quality of life score after murottal therapy intervention. The fourth article showed that there are significant differences in the value of GCS before and after intervention (p = 0.034). The fifth article shows a significant decrease in blood pressure in the experimental group with p value $<\alpha$ (0.05). Measurements obtained from the mean blood pressure of the systolic test in the experimental group were 165.53 mmHg, diastol pre-test was 91.60 mmHg and post-test systole was 147.93 mmHg, diastolic post-test was 87.27 mmHg. The sixth article showed that the result of the following independent administration of murottal therapy on the control group and on the treatment group was p-value = 0.000, which was less than 0.05, which means that there was a difference on life quality between the control group and the treatment group following the murottal therapy treatment. The seventh article showed that after intervention, a significant Group × Period interaction effect was observed for all measured parameters (p < 0.05), except for 6MWT performance (p > 0.05). All measured parameters were significantly improved over baseline in both groups, except for Kt/V in the control group (p > 0.05). Moreover, final measurements were significantly higher in the intervention group than in the control group for all measured parameters, except for 6MWT performance and the physical component summary of the SF-36 (p > 0.05). The eight article showed that recitation of the Qur'an was effective in reducing anxiety in the intervention group, decreasing STAI score at baseline from 128.5 (SD = 13.0) to 82.1 (SD = 11.3), compared to the control group which experienced no change in anxiety scores from baseline to follow-up (118.3, SD = 14.5, vs. 120.1, SD = 14.4, respectively. Between subject comparison at followup, after adjusting for baseline differences, indicated a significant reduction in anxiety in the intervention versus the control group (F = 15.5).

Table 1. Extraction of research results

No	Title/ authors	Year/ Journal	Method	Intervensiion	Result	Conclussion
1	Benson's Relaxation And Murottal Therapy Surah Ar-Rahmaan Reduces Fasting Blood Glucose Levels In Patients With Type 2 Diabetes Mellitus In Maos District	2017/ Jurnal Ilmiah Kesehatan Keperawatan Vol 13, No. 2	Quasi experimental design with two group design pre test-post test control group design. A sample of 60 people.	Listened to the Surah Ar-Rahman 1-78 a day 2x for 7 days	The results showed that a combination of Benson relaxation and murottal therapy in the intervention group could significantly reduce fasting blood glucose levels.	The combination of Benson relaxation and murottal therapy significantly reduced the level of GDP in the intervention group.
	Esti Oktaviani Purwasih, Iman Permana, Yanuar Primanda					
2.	Effectiveness Of Murottal Quran Therapy On Changes Cytokine Levels Of Il-6 In Patients With Pulmonary Tuberculosis	2017/ Journal of Islamic Nursing Vol 2 No 2	Quasi eksperimental Design the sample was 20 people.	Listened to the surah Al-Fatihah 1x, Al- Baqarah verse 255, 285-286 1x, Al-Ikhlas 11x, Al-Falaq 1x, An- Naas 1x, Al-Anbiyak 83 1x, Az-Zumar 23 1x done for 2 weeks	The results showed that there were dynamics of increasing levels of Interleukin-6 (IL-6) in the group of Tuberculosis patients who received OAT therapy added with Murottal Qur'an therapy.	Based on the results the research carried out can be concluded that the addition of Murottal Qur'an therapy in patients with pulmonary tuberculosis
	Zakariyati, Burhanuddin Bahar, Ariyanti Saleh					undergoing OAT therapy statistically no significant with a p value of more than 0.005 but clinically the dynamics of IL-6 levels in the therapy group better than group of patients who only get OAT therapy only.

3.	Effect of Murottal Therapy on Changes in Quality of Life of Patients with HIV / AIDS in New Jumpandang Health Center Makassar City Maria Ulfah Ashar , Elly L. Sjattar , Burhanuddin Bahar	2017/ JST Kesehatan Vol. 7 No. 1	Pre experimental, the sample was 11 people.	Not mentioned surah and duration of intervention	The lowest quality of life score is 87 (poor category) and the highest is 130 (good category), after murottal therapy intervention, the lowest quality of life score is 95 and the highest is 141, both of which are still in good category, and the quality score changes. of life after murottal therapy intervention	There was an effect of murottal therapy on changing the quality of life of patients with HIV / AIDS in the New Jumpandang Health Center in the city of Makassar.
4.	Stimulation Of Murottal Al-Qur'an To Glasgow Coma Scale Value In Ischemic Stroke Patients Arif Setyo Upoyo, Helwiyah Ropi, Ria Sitorus	2011/ Indonesian Journal of Applied Sciences Vol 1, No. 3	Quasy eksperimen dengan Pre and post tes control group design. Sample was 38	The intervention group received murotal Al Quran stimulation 30 minutes a day for 3 days.	The results obtained were there were significant differences in the value of GCS before and after the intervention (p = 0.034).	Murotal Al-Quran stimulation is recommended for ischemic stroke patients who experience decreased consciousness.
5	Effect Of Benson Relaxation Techniques And Murottal Al-Qur'an On Blood Pressure In Patients With Primary Hypertension Laras Pratiwi, Yesi Hasneli, Juniar Ernawaty	2015/JOM Vol 2 No 2, Oktober 2015	Quasi experiment with nonequivalent control group approach While the sample used was 30 people	Intervention by listening to Surah Rahman 1-78 verses for 10 minutes, blood pressure was measured three times	The results of this study indicate a significant decrease in blood pressure in the experimental group with p value $<\alpha$ (0.05). Measurements obtained from the mean blood pressure of the systolic test in the experimental group were 165.53 mmHg, diastol pre-test was 91.60 mmHg and post-test systole was 147.93 mmHg, diastolic post-test was 87.27 mmHg.	The Benson and Murottal Al-Qur'an relaxation techniques are effective in lowering blood pressure in patients with primary hypertension.
6	Murottal Therapy And Quality Of Life Of	2017/Adi Husada	Quasi experimental	Listened to the Surah Ar-Rahman and	The result of the independent t- test following the	The conclusion in this study is

	Kidney Failure Patients Chronic With Hemodialysis In RSUD Dr. Soediran Builds Sumarso Wonogiri Noerma Shovie Rizqiea, Munawaroh, Happy Indri Hapsari, Martina Ekacahyaningtyas	Nursing Journal – Vol.3 No.2 Desember 2017	design, by using pre- and post-test nonequivalent control group approach. The sampling table of 44 respondents	translate it 3 times in each orientation, work and termination session with about 20 minutes	administration of murottal therapy on the control group and on the treatment group was p-value = 0.000, which was less than 0.05, which means that there was a difference on life quality between the control group and the treatment group following the murottal therapy treatment.	the effect of murottal therapy towards the quality of life of patients undergoing hemodialysis Listening Al-Qur'an has the effect of bringing calm and lowering tension.
7	Effects Of Listening To Holy Qur'an Recitation And Physical Training On Dialysis Efficacy, Functional Capacity, And Psychosocial Outcomes In Elderly Patients Undergoing Haemodialysis Bechir Friha, Wajdi Mkacherb, Abir Bouzguendac, Hamdi Jaafard,e, Salem Ali ALkandarif, Zohra Ben Salahg, Bart Sash, Mohamed Hammamia and Ameur Frihi	2017/LIBYA N JOURNAL OF MEDICINE, 2017 VOL. 12, 1372032 https://doi.or g/10.1080/19 932820.2017 .1372032	Quantitative design Sampel 53 dengan 28 intervensi dan 25 kontrol	Listening holy Qur'an three times a week for 20 minutes. Listening complete holy Qur'an after 24 weeks.	After intervention, a significant Group × Period interaction effect was observed for all measured parameters (p < 0.05), except for 6MWT performance (p > 0.05). All measured parameters were significantly improved over baseline in both groups, except for Kt/V in the control group (p > 0.05). Moreover, final measurements were significantly higher in the intervention group than in the control group for all measured parameters, except for 6MWT performance and the physical component summary of the SF-36 (p > 0.05).	conclusion, the present study showed that listening to a recitation of the Holy Qur'an in combination with interdialytic endurance—resistance training induced an improvement in physical condition and quality of life and a large reduction in anxiety among patients undergoing haemodialysis.
8	The Effect Of Holy Qur'an Recitation On Anxiety	2015/ Springer Science+Bus	Randomized Clinical Trial Sampel 60	Listening surah Yasiin three times a week for I month, each time 20	Recitation of the Qur'an was effective in reducing anxiety in the intervention group,	<u> </u>

In Hemodialysis Patients: A Randomized Clinical Trial	iness Media responden New York Published online: 6	minutes	decreasing STAI score at baseline from 128.5 (SD = 13.0) to 82.1 (SD = 11.3), compared to the control group	large reduction in anxiety among patients
Hassan	January 2015		which experienced no change in	•
Babamohamadi,Nemat	•		anxiety scores from baseline to	•
Sotodehasl Harold G.			follow-up (118.3, SD = 14.5,	family status.
Koenig			vs. 120.1, SD = 14.4,	
Changiz Jahani Raheb			respectively. Betweensubject	
Ghorbani			comparison at follow-up, after	
			adjusting for baseline	
			differences, indicated a	
			significant reduction in anxiety	
			in the intervention versus the	
			control group $(F = 15.5)$	

DISCUSSION

From the literature review the devices used in murotal intervention were earphones / headphones and compact discs known to have no significant differences in their use. Even so reading or listening to the Qur'an without knowing its meaning also remains useful if the reader with sincerity and humility.

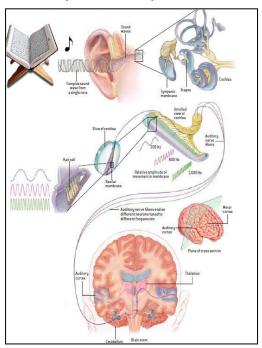


Figure 1. Mechanism of Sound in the Brain Source: (Weinberger, 2004)

Murotal therapy has a positive psychological impact, this is because when murotal is heard and reaches the brain, this murotal will be translated by the brain. Human perception is determined by all that has accumulated, desires, desires, needs and presuppositions (Oriordan, 2002). The biggest wishes and hopes of clients with chronic diseases are to recover as before. So the biggest need is the supporting power, namely the reality of the awareness of the existence of God Almighty (Krishna, 2001). Murottal reading of the Qur'an has a constant, regular rhythm and no sudden rhythm changes. Tempo murottal Al-Qur'an is also between 60-70 / minute, and its tone is low which is less than 60 decibels so it has a relaxation effect and can reduce anxiety (Widayarti 2011). Murottal Al-Qur'an intervention is received by the ear as a vibration that will be transmitted to the interrelated auditory bones between one another. Physical stimulation was changed by the difference in potassium ions and sodium ions into electricity through the N.VII nerve (Vestibule Cokhlearis) to the

brain precisely in the hearing area. From the secondary auditory area (the area of auditory interpretation) the reading signals of the Qur'an will be forwarded to the posterotemporalis temporal lobe of the brain known as the wernicke area. In this area the signals from the somatic, visual, and auditory association areas meet each other. After being processed in the Wernicke area, the signal is sent to the area of the prefrontal association. Meanwhile, besides being delivered to the primary auditory cortex of the thalamus, it is also delivered to the amygdala (the place where emotional memory is stored) which is the most important part of the limbic system (a system that influences emotions and behavior) (Pedak, 2009).

The thalamus also carries signals to the neocortex (the area of the brain that functions to think or process data and information that enter the brain). In the neocortex the signals are arranged into things that are understood and sorted according to their meaning, so that the brain recognizes each object and the meaning of its presence. Then the amygdala performs a signal to the hippocampus. Hippocampus is very important to help the brain store new memories. Murottal works in the brain where when driven by stimulation of murottal therapy the brain produces chemicals called neuropetide substances. This molecule will involve into the receptors and provide feedback in the form of pleasure and comfort (Abdurrochman, 2008).

Listened to the holy verses of the Qur'an, a Muslim, both those who speak Arabic and not, can feel great physiological changes. In general they feel a decrease in depression, sadness, and peace of mind (Siswantinah 2011). Listened to the murottal Al-Qur'an is also a belief factor, namely Islam. Muslims believe that the Qur'an is a holy book that contains His words and is a guideline for human life. So that listening to it will bring the subject to feel closer to God and guide the subject to remember and give up all the problems that are owned by God, this will increase the state of being comfortable and less anxiety. Sound can reduce stress hormones by activating natural endhorphin hormones, increasing relaxed feeling and distracting from fear, anxiety and tension, lowering blood pressure, and slowing down breathing, heart rate, pulse and brain wave activity (Heru, 2012).

Study limitations

Limited amount of research conducted with murottal intervension on chronic care patients. Murottal therapy is still limited to Muslim patients even though there were articles that provide non-Muslim patients and still provided positive results.

CONCLUSION

The Murottal Al-Qur'an intervention was proven effective in cared patients with chronic disease and given positive results. The Murottal Al-Qur'an intervention should be applied as an appropriate intervention to provide comfort, reduce anxiety, and improved the quality of life in patients with chronic diseases.

REFERENCES

- 1. Abdurrachman, et al, 2008. *Murottal Al-Qur'an: Alternatif Terapi Suara Baru*., Universitas Lampung, disampaikan pada Seminar Naasional Sains dan teknologii. Diakses dari http://docs.google.com
- 2. AHNA (2009). What is holisticnursing? :http://www.ahna.org/AboutUs/WhatisHolisticNursing/tabid/1165/Default.asp
- 3. Ashar, M. U., Sjattar, E. L., & Bahar, B. Pengaruh Terapi Murottal Terhadap Perubahan Quality Of Life Pasien Dengan Hiv/Aids Di Puskesmas Jumpandang Baru Kota Makassar. JST Kesehatan, Januari 2017, Vol. 7 No. 1:7–13
- 4. Bechir Friha, Wajdi Mkacherb, Abir Bouzguendac, Hamdi Jaafard,e, Salem Ali ALkandarif, Zohra Ben Salahg, Bart Sash, Mohamed Hammamia and Ameur Frihi. Effects of listening to Holy Qur'an recitation and physical training on dialysis efficacy, functional capacity, and psychosocial outcomes in elderly patients undergoing haemodialysis2017/Libyan Journal Of Medicine, 2017 Vol. 12, 1372032 https://doi.org/10.1080/19932820.2017.1372032
- 5. Burhanuddin, B., & Saleh, A. (2017). Efektifitas Terapi Murottal Qur'an Terhadap Perubahan Kadar Sitokin Il-6 Pada Pasien Tuberkulosis Paru. *Journal of Islamic Nursing*, 2(2), 76-82.
- 6. Ediy Purnomo.2018. Perbedaan Terapi Murottal Al-Qur'an Dan Terapi Musik Klasik Terhadap Depresi Pasien Gagal Ginjal Kronik Yang Menjalani Hemodialisis Di Rsud Dr. H. Soewondo Kendal.Naskah Publikasi. Prodi S1 Keperawatan Profesi Ners STIK Muhammadiyah Pekajangan Pekalongan.
- 7. Hassan Babamohamadi,Nemat Sotodehasl Harold G. Koenig Changiz Jahani Raheb Ghorbani. The Effect of Holy Qur'an Recitation on Anxiety in Hemodialysis Patients: A Randomized Clinical Trial2015 / Springer Science+Business Media New York Published online: 6 January 2015
- 8. Heru. (2012). *Ruqyah syari'i berlandaskan kearifan lokal*. Diperoleh tanggal 3 November 2017 dari http://trainermuslim.com/feed/rss.
- 9. Laras Pratiwi, Yesi Hasneli, Juniar Ernawaty Pengaruh teknik relaksasi *benson* dan murottal al-qur'an terhadap tekanan darah pada penderita hipertensi primer2015/JOM Vol 2 No 2, Oktober 2015

- 10. Mardiyono, Praneed Songwathana, , and Wongchan Petpichetchian, Spirituality Intervention and Outcomes: Corner stone of Holistic Nursing Practice. *Nurse Media Journal of Nursing*, 1,1, January 2011, 117 127
- 11. McCloskey, J. C., Bulechek, G. M., Craft-Rosenberg, M., Daly, J., Denehy, J., Glick, O., et al. (1996). *Nursing intervention classification (NIC)* (Vol. 2nd). St. Louis: Mosby.
- 12. Noerma Shovie Rizqiea, Munawaroh, Happy Indri Hapsari, Martina Ekacahyaningtyas Terapi murottal dan kualitas hidup pasien gagal ginjal Kronik dengan hemodialisa di rsud dr. Soediran mangun Sumarso wonogiri2017/Adi Husada Nursing Journal Vol.3 No.2 Desember 2017
- 13. Oriordan,RNL (1a).,2002. Seni Penyembuhan Alami Seni Penyembuhan Menggunakan Energi Jiwa, Penerjemah Aristyawati. Bekasi: Gugus Press.
- 14. Pedak, M.,2009. *Metode Supernol Menaklukkan Stres*. Jakarta: Hikmah Publishing House.
- 15. Purwasih, E. O., Permana, I., & Primanda, Y. (2017). Relaksasi Benson Dan Terapi Murottal Surat Ar-Rahmaan Menurunkan Kadar Glukosa Darah Puasa Pada Penderita Diabetes Melitus Tipe 2 Di Kecamatan Maos. *Jurnal Ilmiah Kesehatan Keperawatan*, 13(2).
- Rahayu Setyowati.2015.Gender Assossiated With Health-Related Quality Of Life In Patiens With Chronic Disease: A Literature Review. *Jurnal Kampus YPIB Majalengka*. Volume III No 7 Februari 2015
- 17. Sarafino, E.P.2006. *Health Psychology:Biopsychosocial Interaction*. Fifth Edition. New York:John Wilky and Sons Inc
- 18. Siswantinah, 2011. Pengaruh Terapi Murrotal Terhadap Kecemasan Klien gagal Ginjal Kronik yang Dilakukan Tindakan Hemodialisa di RSUD Kraton Kabupaten Pekalongan. Universitas Muhammadiyah Semarang.
- 19. Syed, I. B. (2003). Spiritual medicine in the history of Islamic medicine. Journal of the International Society for the History of Islamic Medicine, 2, 45-49.
- 20. Upoyo, A. S., Ropi, H., & Sitorus, R. (2011). Stimulasi Murotal Al Quran Terhadap Nilai Glasgow Coma Scale Pada Pasien Stroke Iskemik. *Indonesian Journal of Applied Sciences*, 1(3).
- 21. Weinberger, N. M. 2004. Music and the Brain. Scientific American, INC.
- 22. Widayarti, 2011. Pengaruh Bacaan Al-Qur'an Terhadap Intensitas Kecemasan Pasien Sindroma Koroner Akut Di RS Hasan Sadikin. Universitas Padjajaran.