



# PROCEEDING

## International Conference on Restorative Justice

4 January 2014, Grand Tjokro Hotel, Yogyakarta

Consumer Protection  
"Law and Pharmacy Perspectives"



Ahmad Dahlan University



**PROCEEDING**  
**INTERNATIONAL CONFERENCE ON RESTORATIVE JUSTICE**

**Theme :**  
**Consumer Protection: "Law and Pharmacy Prespective"**

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*Saturday, January 4, 2014*

*Grand Tjokro Hotel, Gejayan street No. 37, Yogyakarta*

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First Publisher, April 2014

ISBN: 978-979-18458-7-8

21 x 29 cm; xlii + 152 hlm

**Published by:**

Faculty of Pharmacy Ahmad Dahlan University, Yogyakarta

In corporation with:

Faculty of Law Ahmad Dahlan University, Yogyakarta



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# GIVING OF ORAL COUNSELING BY PHARMACISTS IMPROVE QUALITY OF HYPERTENSIVE PATIENTS IN RURAL PRIVATE HOSPITAL IN BANTUL DISTRICT YOGYAKARTA

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## ABSTRACT

**Background:** The hypertension prevalence in Indonesia in 2007 is 32,2%. High blood pressure can damage arteries and blood vessels. It can also cause coronary artery disease, kidney failure and stroke. It is expected that the appropriate counseling can improve the quality of life hypertensive patients.

**Objective:** This study aims to evaluate the quality of life after giving brief oral counseling by a pharmacist

**Methods:** This study was conducted with quasi-experimental design. The ambulatory hypertension patient data were collected prospectively during the period of January until April 2013. A total sample of patients were divided into 2 groups, 30 (50%) patients were received counseling (intervention group) and (50%) patients were not received counseling (control group). Exclusion criteria were deaf and pregnant patients. Data collection was conducted by doing interview and completion of SF-36 questionnaire.

**Outcome measured :** Quality of life domain in hypertension patients

**Results:** The results showed that oral counseling intervention by pharmacist could increase quality of life of hypertensive patients. The SF-36 parameters that were higher in intervention group are physical functioning ( $p=0,002$ ), emotional functioning ( $p=0,001$ ), social functioning ( $p=0,013$ ), general health ( $p=0,008$ ), physical status ( $p=0,157$ ), pain ( $p=0,014$ ) and fatigue ( $p=0,001$ ) in comparison to the control group.

**Conclusion :** To sum up, the pharmacist intervention by oral counseling can increase the quality of life of hypertensive patients.

**Key words :** quality of life, hypertension, brief oral counseling, rural hospital

## INTRODUCTION

Hypertension is one of the most common health problem in developed and underdeveloped countries (Kearney *et al.*, 2005). The prevalence of hypertension will increase in line with the life style changes such as smoking, obesity, physical inactivity, and psychosocial stress in many countries. The hypertension prevalence in Indonesia in 2007 is 32,2 % (Rahajeng and Tuminah, 2009). Hypertension is a public health problem because of the associated morbidity and mortality cause by cardiovascular disease.

Although there are effective medical therapies for hypertension management, only 37% of hypertensive patients in a 2003-2004 survey were reported to have their blood pressure controlled and it can lead to a huge adverse impact on quality of life (Ong *et al.*, 2007).

Since treatment of chronic diseases is often not curative, but aims to improve the quality of life, limit disease progression, and ameliorate suffering. Pharmacist being active members of the healthcare team can use these instrument in their practice to provide better patient care.

In a recent population based study, hypertension patients were found to have a lower health status compared with nonhypertension patients. Co morbidity with other disease associated with hypertension may influence how patients with hypertension rate their quality of life (Ogunlana *et al.*, 2009).

Poor medication adherence and lack of knowledge and awareness on hypertension are the major reasons for poor blood pressure control which is largely related to deterioration in patient's quality of life (Cavalcante *et al.*, 2008). It is need an implementation of pharmaceutical care program in the health care center to achieve the optimum therapeutic outcomes that improve patient's quality of life.

The aim of measuring quality of life is to provide information about well being patients and to assess the effectiveness of health care. Quality of life assessment measures

changes in physical functioning, emotional functioning, social functioning, general health, physical status, emotional status, pain and fatigue (Testa, 1996).

Health people 2010 for hypertension suggest the necessity of a more comprehensive and intensive approach to achieve optimal quality of life. The intervention which can be applied by pharmacists to manage hypertension patients is counseling. Counseling can improve the outcome therapy by maximizing the use of appropriate medication. One of the counseling benefit is improve medication adherence, so the the quality of live hypertension patients will be improved (Palaian *et al.*, 2006).

Over all, it is necessary to investigate the influence of counseling orally on the quality of life of ambulatory hypertension patients at internal disease polyclinic PKU Muhammadiyah Bantul Hospital, Indonesia.

## METHODS

The research was conducted prospectively to determine quality of life in ambulatory hypertensive patients at internal disease polyclinic PKU Muhammadiyah Bantul Hospital, Indonesia. The study group included 60 patients. They were divided in to two groups as intervention and control group. The intervention group patients received counseling regarding hypertension and hypertension therapy, while the control group not received counseling. The follow up patients were done from baseline to second follow up. The inclusion criteria were patients 18-65 years old with diagnosed to have levels I and II hypertension and got antihypertensive medication in their prescription. The exclusion criteria were deaf and pregnant patients.

The data were collected from January to April 2013. Data collection was conducted by doing interview and completion of Quality of Life (QOL) questionnaire. Validation questionnaire was carried out via conducting pilot study. The pilot study was conducted



with 30 patients. The reliability analysis of the questionnaire was performed by calculating cronbach alpha val questionnaire was valid and reliable.

The collected data were analyzed result were expressed as mean  $\pm$  standard deviation. P value of  $<0,05$  was considerece statistically significant

## RESULTS AND DISCUSSION

Table 1. Characteristic of hypertension patients

Characteristic patients		Intervention group (N=30)		Control group (N=30)	
			%		%
Sex	Male	20	66,7	9	30,0
	Female	10	33,3	21	70,0
Age	0-50	4	13,3	5	16,7
	>50	26	86,7	25	83,3
Stage of hypertension	Stage 1	3	10,0	12	40,0
	Stage 2	27	90,0	18	60,0
Habit	Smoking	4	13,3	3	10,0
	Not smoking	26	86,7	27	90,0
Education	0-9 year	16	53,3	20	66,7
	>9 year	14	46,7	10	33,3
Jobs	Official government	12	40,0	7	23,3
	Non official government	18	60,0	21	76,7
Payment	Self payment	7	23,3	12	40,0
	Insurance	23	76,7	18	60,0
Hypertension history	Yes	11	36,7	9	30,0
	No	19	67,3	21	70,0

This study recruited sixty patients in rural private hospital in Bantul district Yogyakarta. At the pre-study, clinical and sociodemographic data of patients were collected. The characteristic data of the subject can be seen on the table 1. Based on the characteristic patients, the subject were dominated by male patients (66.7%) for intervention group and female patients (70.0%) for control group. As for age, both of the intervention and control group were dominated by patients with the ages of 50 to 59 years. As for stages of hypertension, both groups were dominated by patients with hypertension stage two. As for payment, the treatment group was dominated by health insurance (46.7%), where as the control group was dominated by self-payment (40%). In this study also evaluated the characteristic of smoking behaviour, the history of hypertension, education, and jobs. The subject study, either the intervention group or the control one, both were dominated by those who didn't have the history of hypertension.

smoking behaviour, self employed workers and education under 9 years.

At baseline study, all patients receive the quality of life questionnaire. AB - answered the questionnaire, the interventi group received a counseling by pharmacie meanwhile the control group received a usual care in the hospital. At the end of th study patients received and answered quality of life questionnaire again.

The averages quality of life's doma scores of patients before and atte intervention were compared using the paire t-test and shown in table 2.

The increasing of quality of li questionnaire scores in the intervention grow were greater than the control group. Th quality of life domains in the interventio group that statistically significant differene ( $p<0,05$ ) with the control groups we Physical functioning, Emotional functioning Social functioning, General health, Pais Fatigue, and General quality of life. Th Physical and emotional status in both tw groups same increased. but were su statistically significant difference

( $p>0,05$ ). The result of a previous study by Shahina *et al* (2010) and Biradar *et al* (2012) also support these findings.

The intervention group has received counseling only once and an interval between the counseling and the post study relatively short time period (one month). It can improved the Physical functioning, Emotional functioning, Social functioning, General health, Pain, Fatigue, and General quality of life. The Physical and emotional status were not improved significantly because to

influence them need continuous and long time period counseling. Hypertension is a chronic disease and patients have been received therapy for long time ago, it was influenced quality of life patients especially the physical and emotional status. The counseling by pharmacist will be improving adherence in hypertension therapy and controlling blood pressure control (Alfian *et al.*, 2013), Good blood pressure controlled will improve quality of life hypertensive patients.

Table II. Quality of life domains scores of the intervention and control group

Domain	Intervention group (n=30)		p	Control group(n=30)		p
	Pre study mean±SD	Post study mean±SD		Pre study mean±SD	Post study mean±SD	
Physical functioning	71.83 ± 22.11	75.50 ± 20.78	0.002*	71.17 ± 24.48	72.67 ± 23.84	0.279
Emotional functioning	84.40 ± 15.80	92.53 ± 7.41	0.001*	85.27 ± 12.93	86.30 ± 13.47	0.357
Social functioning	71.25 ± 23.93	76.67 ± 21.71	0.013*	74.42 ± 25.25	81.50 ± 20.92	0.017*
General health	77.36 ± 9.39	81.22 ± 7.55	0.008*	73.99 ± 11.57	75.27 ± 12.61	0.288
Physical status	59.17 ± 39.11	60.83 ± 37.53	0.157	61.67 ± 36.98	59.17 ± 38.55	0.375
Emotional Status	67.76 ± 34.46	67.76 ± 32.16	1.000	58.88 ± 37.85	55.53 ± 38.51	0.273
Pain	62.92 ± 24.89	71.25 ± 20.28	0.014*	62.17 ± 21.20	67.50 ± 21.68	0.168
Fatigue	64.15 ± 11.45	71.50 ± 9.48	0.001*	65.50 ± 13.73	69.07 ± 13.21	0.126
General quality of life	446.13 ± 133.47	481.87 ± 126.98	0.007*	459.27 ± 109.69	463.00 ± 113.62	0.702

The general quality of life scores of the intervention and control group were the same undergo increase. Though, based on the

average of the general quality of life scores increase of the intervention group is greater than control group (fig. 1).

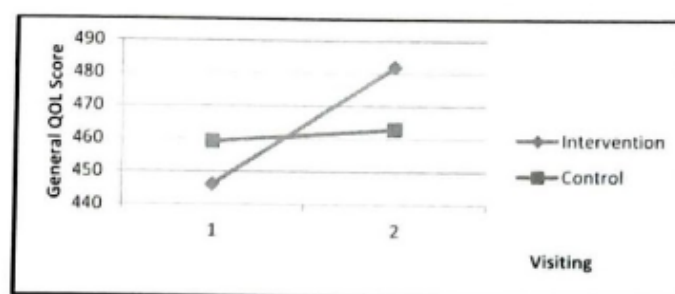


Fig 1. The average increased of quality of life scores on the intervention and control group

## CONCLUSION

Based on these findings, this study concludes that pharmacist's counseling can be improving quality of life of hypertensive patients. Additional research should be conducted to evaluate the efficacy of long time period

pharmacist's counseling for the management of hypertension.

## ACKNOWLEDGEMENTS

We express our gratitude to all of the staff PKU Muhammadiyah Bantul Hospital



and Patients who helped us to complete this study

## REFERENCES

- Alfian, R., Akrom, Darmawan, E., 2013, Pharmacist Counseling Intervention By Oral Can Increase The Patients Adherence And Decrease Systolic Blood Pressure Of Ambulatory Hypertension Patients At Internal Disease Polyclinic PKU Bantul Hospital, Indonesia, *Proceeding Of The 3rd International Safety Management Of Central Cytotoxic Reconstitution*, Indonesia, Editor: Widyaningsih, W., 21-26
- Biradar, S.S., Rajasekhar, K., Srinivas, R., Raju, S.A., 2012, Assessment of Pharmacist Mediated Patient Counseling On Medication Adherence In Hypertension Patients of South Indian City, *IRJP*, 3(5) : 255-251
- Cavalcante, M.A., Bombig, M.T.N., Filho, B.L., Carvalho, A.C.C., Paola, A.A.V., Povao, R., 2007, Quality of Life of Hypertensive Patients Treated at an Outpatient Clinic. *Arq Bras Cardiol*; 89(4):245-50.
- Kearney, P.M., Whelton, M., Reynolds, K., Muntner, P., Whelton, P.K., He, J., 2005, Global burden of hypertension: analysis of worldwide data. *Lancet*; 365: 217- 223.
- Ogunlana, M.O.O., Adedokun, B., M.D., Odunaiya, N.S., 2009, Prevalence and predictor of health-related quality of life among hypertensive patients in south-western Nigeria, *Cardiovascular Disorders*, 9:25
- Ong, K.L., Cheung, B.M., Man, Y.B., 2009, Prevalence, Awareness, Treatment, and Control of Hypertension Among United States Adults, *Hypertension* 49(1):69-75
- Palaian, S., Mukhyaprana, P., Ravi, S., 2010, Patient Counseling by Pharmacist Focus on Chronic Illness, *Pak Pharm. Sci.*, pp: 19(1): 62-65
- Rahajeng, E., Tuminah, S., 2009, Prevalensi Hipertensi dan Determinannya di Indonesia, *Laporan Penelitian, Penelitian Biomedis dan Farmasi Badan Penelitian Kesehatan Departemen Kesehatan RI, Jakarta*
- Shahina, P.T., Revikumar, K.G., Krishna R., Jaleel, V.A., Shini, V.K., 2010, The Impact Of Pharmacist Intervention On Quality Of Life Of Patients With Hypertension, *International Journal Pharmaceutical Sciences Review and Research*, Volume 5: 031
- Testa, M.A., Simonson, D.C., 1998, Assessment of quality-of-life outcomes. *N Engl J Med*, 334: 833-840.