

ISBN: 978-602-1004-71-5



PROCEEDING OF
2ND INTERNATIONAL CONFERENCE
IN HEALTH SCIENCES

FROM LIVING WELL
TO AGING WELL:

A MULTIDISCIPLINARY APPROACH

Purwokerto, 4-5 November 2017



UNIVERSITY OF JENDERAL SOEDIRMAN
INDONESIA
2018

*Proceeding of the 2nd
International Conference in Health Sciences (ICHS)*

**FROM LIVING WELL
TO AGING WELL :
A MULTIDISCIPLINARY APPROACH**

Purwokerto, Indonesia, November 4-5, 2017



**Penerbit
UNIVERSITAS JENDERAL SOEDIRMAN
PURWOKERTO
2018**

Proceeding of the 2nd International Conference in Health Sciences (ICHS)
**FROM LIVING WELL TO AGING WELL :
A MULTIDISCIPLINARY APPROACH**

© 2018 Universitas Jenderal Soedirman

Cetakan Pertama, April 2018
Hak Cipta dilindungi Undang-Undang
All Right Reserved

Reviewer:

Suratman, SKM., M.Kes, PhD
Dr.sc hum Budi Aji, SKM., MSc
Dr. Saryono, S.Kp., M.Kes
Mekar Dwi A, S.Kep, Ners., MKep., PhD
Dr. Muhamad Salman Fareza, M.Si
Hendry Wasito, Sfarm., MSc., Apt
Yunita Sari, S.Kep., M.Kes., PhD
Dr. Ngadiman, M.Kes

Perancang Sampul:

Panitia

Penata Letak:

Panitia

Diterbitkan oleh:

UNIVERSITAS JENDERAL SOEDIRMAN
Jalan Prof. Dr. H.R. Boenyamin 708 Purwokerto
Kode Pos 53122 Kotak Pos 115
Telepon 635292 (Hunting) 638337, 638795
Faksimile 631802
www.unsoed.ac.id

Dicetak oleh:

BPU Percetakan dan Penerbitan
Universitas Jenderal Soedirman
Telepon: (0281) 626070
Email: unsoedpress@yahoo.com

x + 225 hal., 21 x 29 cm

ISBN : 978-602-1004-71-5

Dilarang mengutip dan memperbanyak tanpa izin tertulis dari penerbit, sebagian atau seluruhnya dalam bentuk apapun, baik cetak, photoprint, microfilm dan sebagainya.

Dean's Welcome Note

Dear all the conference participants,

Welcome to 2nd International Conference in Health Sciences 2017. In this very good occasion I would like to extend my warm greeting to you all, the speakers as well participants. It is a great honor for Faculty of Health Sciences to host this international conference. This becomes our positive contribution in facilitating the spread of research work from scientist and practitioner in health sciences. It is also our way to provide scientists and practitioners with an understanding of key issues in health and nursing, medical treatment and health technology, health policy and health services, health promotion as well as economic, social cultural and ethical aspect of health.

Knowledge and research will always walk side by side that we cannot gain new knowledge without conducting research. All those attempts act as a respond to the increase of health demand in our community. I hope in this conference which entitled “ *From Living well to Aging Well : a multidisciplinary approach*”, we will obtain new knowledge about health sciences from many perspectives.

I do hope you enjoy your stay in Purwokerto and be able to see the beauty of this city. And most important, you can build a good networking with other participants which will be benefit for your field and research area.

Best Wishes,

Dr. Warsinah, M.Si., Apt

Conference Chair's Welcome Note

Dear Delegates,

On behalf of the organizing committee, we are pleased to welcome you to Purwokerto, Indonesia for the 2nd International Conference in Health Sciences (ICHS) 2017, held this year by Faculty of Health Sciences, University of Jenderal Soedirman. Theme of this event is *"From Living Well to Aging Well: a Multidisciplinary approach"*. We raise this special theme since the population ageing is a global issues which interesting for researchers, academic, policy makers, practitioners and governments. We want to have more people around the world are living longer healthier lives than our previous generations.

In this event, we are delighted to welcome this year's Plenary speakers : Representative of Ministry of Health Republic Indonesia, Prof.Dr. Gert Storm (Department of Pharmaceutical Sciences, Faculty of Science, Utrecht University), Prof. Jing-Jy Wang (Professor & Chair Department of Nursing, College of Medicine, National Cheng Kung University, Taiwan) and Chalernpol Chamchan, Ph.D. Assist. Prof. (IPRS Mahidol University, Thailand) and also Indonesian speakers.

We would also like to take this opportunity to thank the organising team for all their hard work to make this event run smoothly.

I know just how much time and effort goes into making such an event happen.

I hope all of us are going to enjoy this conference. Thank you for attending the meeting!

Kind regards,

Siwi Pramatama Mars Wijayanti, Ph.D

*Proceedings of the 2nd International Conference in Health Sciences (ICHS)
Purwokerto, Indonesia, November 4-5, 2017*

The 2nd International Conference in Health Sciences (ICHS)

ISBN 978-602-1004-71-5

These are the full proceedings of The 2nd International Conference in Health Sciences (ICHS). Every effort has been made by the editors, publishers and printers of these proceedings to see that no inaccurate data, opinion, or statement appears in the proceedings, but the data and opinions appearing in the articles herein are the responsibility of the author(s). In the case of errors, or omissions, please contact the respective author(s) directly.

Copyrights of the papers remain with the author(s) of each article.

Accordingly, the publishers, printers, and editors accept no liability whatsoever for the consequences of such inaccurate or misleading data, opinion or statement if any.

Editors

Suratman, S.KM., M.Kes., PhD

Yunita Sari, S.Kep., M.Kes., PhD

Hendri Wasito, S.Farm., MSc., Apt

Members of Scientific Committee

Suratman, SKM., M.Kes, PhD

School of Public Health, Faculty of Health Sciences, UNSOED

Dr.sc hum Budi Aji, SKM., MSc

School of Public Health, Faculty of Health Sciences, UNSOED

Dr. Saryono, S.Kp., M.Kes

School of Nursing, Faculty of Health Sciences, UNSOED

Mekar Dwi A, S.Kep, Ners., MKep., PhD

School of Nursing, Faculty of Health Sciences, UNSOED

Dr. Muhamad Salman Fareza, M.Si

School of Pharmacy, Faculty of Health Sciences, UNSOED

Hendri Wasito, S. Farm., MSc., Apt

School of Pharmacy, Faculty of Health Sciences, UNSOED

Yunita Sari, S.Kep., M.Kes., PhD

School of Nursing, Faculty of Health Sciences, UNSOED

Dr. Ngadiman, M.Kes

School of Physical Health Education and Recreation, Faculty of Health Sciences, UNSOED

Conference Staff

Advisory Board	Dr. Ir. Achmad Iqbal, M.Si Dr. Warsinah, M.Si, Apt. Prof. Dr. Ir. Mas Yedi Sumaryadi, MS.
Conference Chair	Siwi Pramata Mars W, S.Si, M.Kes., Ph.D
Conference Co-Chair	Made Sumarwati, S.Kp., MN
Secretary General	Rahmi Setiyani, MN Afina Rachma, S., SGz., MSc Dian Anandari, SKM., M.KM
Treasurer	Siti Masfiah, SKM., M.Kes Oktriana, SE Yun Antari WW, SE
Organizing Committee	Dian Susmarini, S.Kep., MN Drs. Waidi, MBA Widya Ayu Kurnia P., S.Gz., Msi Dika Betaditya, S.Gz., M.Ph Nia Kurnia Sholihat, Sfarm., M.Sc., Apt
Public Relations	Anas Sumeru, Skep, Ns., M.Kep Masita Wulandari S, MSc., Apt Sidik Awaludin, S.Kep., M.Kep Harun Azis, S.Kom Dwi Susanto Khadirin
Accommodation & Transportation	Ibnu Zaki, S.Gz, MGizi Agis Taufik, S.Kep, Ns., M.Kep Koernia Nanda P, Ns., M.Kep., Sp.Kep.Kom Arif Perdana Y, SE Sutarno Ikhsan Akh. Masruri Haris
Logistic	Yovita Puri S.Gz, Dietisien, M.PH Murwandari, S.Sos Rini Agustina, SH Nindita Rizki NA, SE

Table of Contents

The Experience of Parents with Blind Children achievement in SLBN-A Bandung	1
Self-Perception Identification of Students in Athlete High School Ragunan Jakarta.....	8
Measurement of Mental Health Literacy Among Insitutit Ilmu Kesehatan Medika Persada Bali Student, A Multi Component Approach	15
The Factors Influenced the Hand Hygiene of Health Care Provider at Inpatient Areas	23
The Micro-Computed Tomography Study of Bone Loss in A Rat Chronic Periodontitis Model	30
Map of <i>Aedes aegypti</i> Vector Resistance in Central Java	38
Dietary Flavonoid Intake Estimation of North Sulawesi Adults	44
Kinesthetic Perception, Physical Activity and On-Task Behavior in Thematic Learning.....	50
Food Advertising on Adolescence: Brand Logo Recognition Related Food Preference and Food Behavior among Senior High School Teens in Yogyakarta.....	53
The Extract of Sargassum Sp. Increased the Expression of BMP-2 in Fractures of Tibia in <i>Rattus norvegicus</i>	58
The Development of PE Teacher's Performance Instruments for Junior High School	65
Continues Technical Guidance Based on Health Promotion Training Evaluation for Public Health Center Officer in West Java Province (Mixed Methods Research)	73
Description of Immunization Management Officer in Vaccine Management Support In Puskesmas in Brebes District	80
Bottleneck Analysis from Selected Intervention Improving the Effectiveness of the First 1000 days of Life Movement in Semarang 2016.....	85
The Effect of Low Intensity Interval Swimming on Increasing of Motor Development and Cognitive Intelligence of Secondary School Swimmer	92
Nursing Students' Medical Errors in Clinical Education Phase.....	98
Control of <i>Aedes Aegypti</i> Mosquito as A Dengue Health Feast Vector (DBD) Based Duku Plant (<i>Lansium domesticum</i> Corr)	105
The Health Factors Correlated to Intelligence Quotient of School Children	111
The Difference of Glycemic Index after Consuming White Rice (<i>Oryzasativa</i>), Cilembu Sweet Potato (<i>Ipomoea batatas</i> cultivar cilembu) and Purple Sweet Potato (<i>Ipomoea batatas</i> cultivar ayumurasaki).....	117
The Difference of tooth Demineralization after Soaking in Human Milk and Infant Formula Milk using Scanning Electron Microscope.....	122
Ovarian Failure Affected Leukocytes Profile in Peripheral Blood and Gingival Fluid (In vivo Study).....	128
Practice of Smooking Adolescent at Nurul Huda Az Zuhdi Islamic Boarding School in Semarang City.....	137
Improving the Cognitive Function of Elderly by Reading the Al-Qur'an.....	143
Family Support toward the Nutritional Management of Patients With Diabetes Mellitus	148
	ix

***Proceedings of the 2nd International Conference in Health Sciences (ICHS)
Purwokerto, Indonesia, November 4-5, 2017***

Determinant on Characteristic Associated With Disability of Leprosy Patients in Rural Area West Java Indonesia	152
Post-Power Syndrome Tendency in Civil Servant's Retirees in Central of Java, Indonesia.....	159
Water Pollution in Bedadung Watersheds Area and Diseases in Elderly People.....	170
The Effect of Early Mobilization on Pain Intensity after Sectio Caesarea Operation an Hospital in Bengkulu City	175
The Effectiveness of Topical Breast Milk Application Toward the Neonates Umbilical Cord Separation Time in Rahma Room PKU Muhammadiyah Hospital Gombong	178
Geographical Information System: Distribution of Diarrhea Disease on Community Health Center in Bantul Yogyakarta	183
The Effect of Oil Sardine (<i>Sardinellalongiceps</i>) on Alveolar Bone Mineralization Process in Rat Post Periodontal Infection	189
Prevalence of Depression among the Elderly People Living in A Social Shelter Agency in West Java Province	194
Factors Associated With The Use Of Contraception Dual Protection In Couple Of People Living With Hiv/Aids	200
Applying Task-Technology Fit Model to The PrimaryHelth Care : a Case Study of Nutrition Information System.....	208
Biomarker Cytokines / Pro-Inflammation And Neurotropik As A Depression Parameter In Elderly : Literature Review	215
The Efektiveness of Asam Kandis (<i>Garcinia Parvifolia</i>) for full thickness wound healing in Mice	221

Post-Power Syndrome Tendency in Civil Servant's Retirees in Central of Java, Indonesia

Yeniar Indriana¹, Dinie Ratri Desiningrum¹

¹Faculty of Psychology, Diponegoro University
Jl. Prof. Soedarto SH, Tembalang, Semarang, Indonesia
Email: dn.psiundip@gmail.com

Abstract

Retirement is a time that will be experienced by all civil servants after reaching the age of 56-70 years, depending on the institution and type of work. Post-power syndrome is a symptom that often arises when a person enters retirement. They appear to be weak, unhealthy or sickly and not eager to perform various activities. In severe conditions, they may suffering stroke or depression. This study aims to see the tendency of post-power syndrome to retirees from various institutions and regions that are entirely retired civil servants who are incorporated in the Association of Wredhatama Republic of Indonesia (PWRI). Data collection using Post power syndrome scale, consisting of 48 valid items ($\alpha = 0.918$). The number of subjects is 294 retirees, determined by cluster sampling. The data analysis technique used was Kruskal Wallis (Nonparametric) test, besides found the categorization of each subject group. The results showed that there was a difference in Post-Power Syndrome tendency of the six groups, whereas the Semarang group subjects had larger mean than all subject groups, and the Cirebon group subjects had a larger mean compared to the Jepara group subjects. This means that Semarang retired groups tend to show symptoms of post power syndrome is lower than other groups of subjects. Descriptive test results show differences in category, ie post-power syndrome tendency in PWRI Semarang low, Jepara high, Banjarnegara low, high Cirebon, high Tegal and low Undip. From the interview results, there are many factors that affect the post power syndrome condition of the subject, including the decline in income, the amount of free time, loss of power, and lack of social support.

Keywords: retirement, post-power syndrome tendency, civil servant.

Introduction

Retirement will definitely be experienced by all individuals who work after reaching the age of 56-70 years, depending on the department and field of work. Schwartz (in Hurlock, 2009) stated that retirement acts as either the end of one's life pattern or transitional period to a new pattern of life. Referring to Indonesia Dictionary, retirement is defined as a condition when individuals stop conducting a job because they have reached the age limit set by the law or for any other reasons so that individuals are forced to quit their job. There are several reasons why an individual decided to retire, two of them are personal reasons (illness, time freedom) and institutional reasons (condition to retire). Retirement can be seen as two sides of a story, from its positive and negative points of view.

Retirement always relates to changing of roles, desires and values, and individual patterns of life (Papalia, Old, & Feldman, 2008). Retirement period is always started with elderly period and aging process. The process of aging is a natural process characterized by physical, psychological and social decline, which have an effect on one another. The situation tends to cause health problems to the elderly. Commonly, the elderly experience changes or deterioration of psychological functions, in terms of the ability to think, feelings as well as their behavior. This psychological condition will definitely affect an individual's life.

A research on a group of elderly retired from their job suggests that retirees experience a decline in their cognitive flexibility, compared to those who keep busy (Grip, Dupuy, Jolles, & Boxté, 2015). Besides that, they also face changes in their routines, as suggested in a

research that many elderly have sleeping disorders such as sleep deprivation or other disorders due to their excessive free time. (Yu, Mahendran, Abdullah, Kua, & Feng, 2017). Changes faced by elderly in their retirement are aimed to the desire of achieving successful aging for the elderly, so that supports from family and community are important (Desiningrum, 2010).

Another research suggests that during the elderly, there is a decline in health characterized by the emergence of various diseases such as diabetes and hypertension (Liu, Lv, Li, Lib, He, 2017; Seow, Subramaniam, Abdin, Vaingankar, and Chong, 2015). Retirement can be seen as “the golden years” since the retirees can go on vacation and enjoy freedom. Yet, there are some opinions stating that retirements is a period of darkness, boredom, and meaningless. Negative perceptions on retirement results in high level of anxiety and depression, which is known as post-power syndrome. (Indriana, 2012).

Besides physical changes, there is a specific condition experienced by retirees. The condition is characterized by a feeling of powerless and being not respected by the children. The feelings mentioned above are several symptoms of post-power syndrome. Post-power syndrome is defined as a set of symptoms of illness, injury, physical and mental destruction which is progressively observed on an individual and the individual with the symptoms can no longer think realistically. These symptoms are usually experienced by individuals who feel that his/her power or position is over. During the retirement period, an individual might experiences changes in his/her role or patterns of life that might cause anxiety. (Rini, 2001; Kartono, 2002; Suardiman, 2011).

According to Setiati (Dinsi, Setiati, dan Yuliasari, 2006) *syndrome* is defined as a set of symptoms while *power* is defined as authority. *Post-power syndrome* is a set of post-power symptoms in the form of psychological symptoms or emotions that are less stable and the symptoms are usually negative. Those negative symptoms will get worse of individuals experience physical disorder (Elia, 2003). They appear to be weak, unhealthy and not eager to perform various activities. Under severe conditions, they may experience stroke or depression. A study on 515 elderly suggests that the elderly are susceptible to depression and anxiety (Yu, et al, 2017). The elderly who has retired from work usually experience post-power syndrome, yet, many people has succeed through this phase quickly and can accept the reality cooperatively. However, in certain cases, the individual is unable to accept the facts, added with the urgent demands of life. If the individuals are the breadwinner, the risk of post-power syndrome is getting higher. Support and understanding from family and environment are important in providing help for the elderly (Desiningrum, 2010), besides, emotional maturity is essential for retirees to face the challenges of post-power syndrome (Wardhani, 2006).

The research is expected to develop community knowledge on post-power syndrome and its symptoms as well as its influencing factors. Thus, the post-power syndrome tendency will not get worse. It is expected that community can have better understanding of post-power syndrome so they handle it well during their retirement period. In addition, it is expected that there will be follow-up from the government, related to policies on retirees, such as financial benefits for the retirees (Graham, C. 2010.)

The research was aimed to observe post-power syndrome tendency in government retirees from various institutions. The research involved 208 elderly subjects, both male and female, who are government retirees enlisted as member of Persatuan Wredhatama Republik Indonesia (PWRI) from five different areas in Central Java.

Research Methodology

The subjects of the research are government retirees from different fields of work and various organizations of retirees known as Paguyuban Wredhatama from different areas. Data

*Proceedings of the 2nd International Conference in Health Sciences (ICHS)
Purwokerto, Indonesia, November 4-5, 2017*

were collected and categorized based on post-power syndrome scale prepared by the researchers. The post-power syndrome scale is applied in the research was derived from the theory of post-power syndrome based on Osborne research results (2012), Kartono (2012) and Dinsi (Dinsi, Setiati, dan Yuliasari, 2006). With aspects, namely: low self-esteem, loneliness and despair. The number of items is 50 items.

Researchers were distributed to choose subjects from different branches of PWRI, under the circumstances that the subjects are government retirees. The data obtained from each researcher were presented in the categorization of post-power syndrome tendency, namely, very low, low, high, and very high. All data were then compiled and categorized based on the criteria as follows.

1. Very low if within the interval of $\text{Mean} - 3 \text{ SD} < X < \text{Mean} - 1,5 \text{ SD}$
2. Low if within the interval of $\text{Mean} - 1,5 \text{ SD} < X < \text{Mean}$
3. High if within the interval of $\text{Mean} < X < \text{Mean} + 1,5 \text{ SD}$
4. Very high if within the interval of $\text{Mean} + 1,5 \text{ SD} < X < \text{Mean} + 3 \text{ SD}$

The subjects of the research were:

1. Government Retirees enlisted as members of PWRI Gajah Mungkur sub-district, Semarang.
2. Government Retirees enlisted as members of PWRI Pecangaan sub-district, Jepara Regency.
3. Government Retirees enlisted as members of PWRI Purwareja sub-district, Klampok Banjarnegara.
4. Government Retirees enlisted as members of PWRI Cirebon Branch.
5. Government Retirees enlisted as members of Paguyuban Pensiunan Pendidikan, Tegal Regency.
6. Government Retirees enlisted as members of Paguyuban Wredhatama Universitas Diponegoro Semarang

The data, which were first tested for normality and homogeneity test, were analyzed using One-Way Anova (Parametric) Test. When the data failed to meet the assumption of One-way Anova, Kruskal-Wallis(Nonparametric) Test was applied to analyze the data.

Result

Table 1. Overview of Mean, SD and the Number of Research Subjects

	Semarang	Jepara	Banjarnegara	Cirebon	Tegal	Undip
Mean	135,93	92,62	97	99,69	98,24	95.2297
SD	15,67	14,5	12,04	12,30	11,96	9.86976
N	42	44	50	39	45	74

The first research was conducted by Ariyanti (2014) who focused on the tendency of post-power syndrome in Government Retirees enlisted in PWRI Gajahmungkur sub-district, Semarang. The result shows that the tendency of post-power syndrome is low, observed in 55% subjects of 45 research subjects. The details are presented in the following categorization:

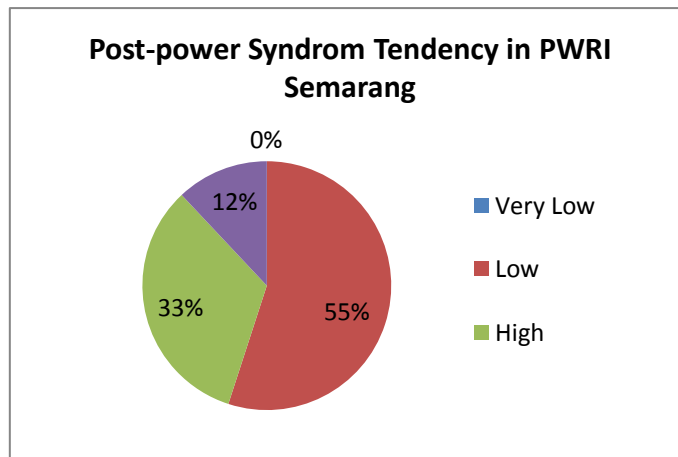


Figure 1. Categorization of Post-power Syndrome Tendency in PWRI Semarang

The second research was conducted by Ni'mah (2014) who focused on the tendency of post-power syndrome in government retirees enlisted in PWRI Pecangaan sub-district, Jepara Regency. The result shows that the tendency of post-power syndrome is high, observed in 41% subjects of 44 research subjects. The details are presented in the following chart:

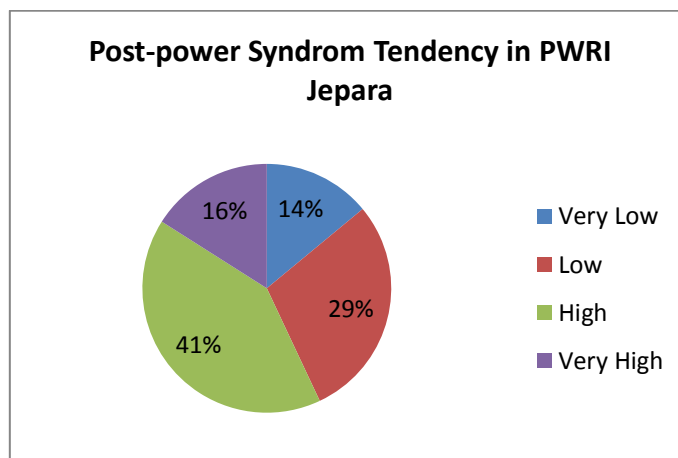


Figure 2. Categorization of Post-power Syndrome Tendency in PWRI Jepara

The third research was conducted by Hapsari (2014) who focused on the tendency of post-power syndrome in government retirees enlisted in PWRI Purwareja sub-district, Klampok, Banjarnegara. The result shows that the tendency of post-power syndrome is low, observed in 52% subjects of 50 research subjects. The details are presented in the following chart:

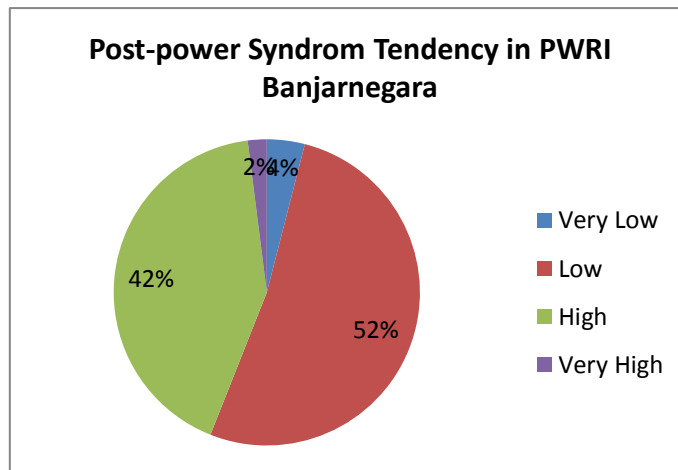


Figure 3. Categorization of Post-power Syndrome Tendency in PWRI Banjarnegara

The fourth research was conducted by Nurhayati (2014) who focused on the tendency of post-power syndrome in government retirees enlisted in PWRI Cirebon Branch. The result shows that the tendency of post-power syndrome is high, observed in 46.15% subjects of 39 research subjects. The details are presented in the following chart:

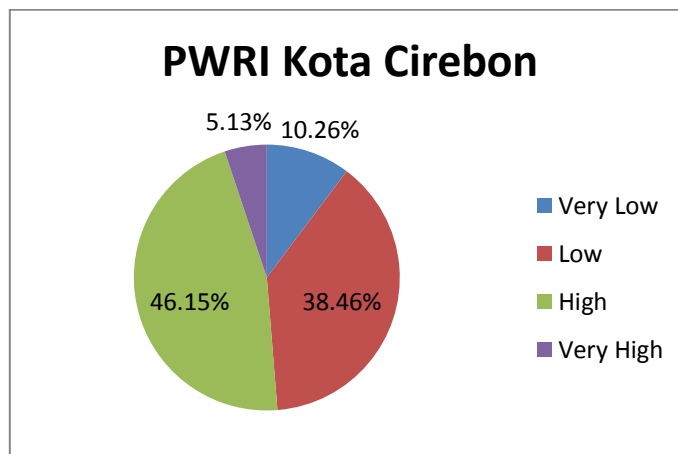


Figure 4. Categorization of Post-power Syndrome Tendency in PWRI Cirebon

The fifth research was conducted by Herani (2014) who focused on the tendency of post-power syndrome in government retirees enlisted in Paguyuban Pensiunan Pendidika, Tegal Regency. The result shows that the tendency of post-power syndrome is high, observed in 46.15% subjects of 45 research subjects. The details are presented in the following chart:

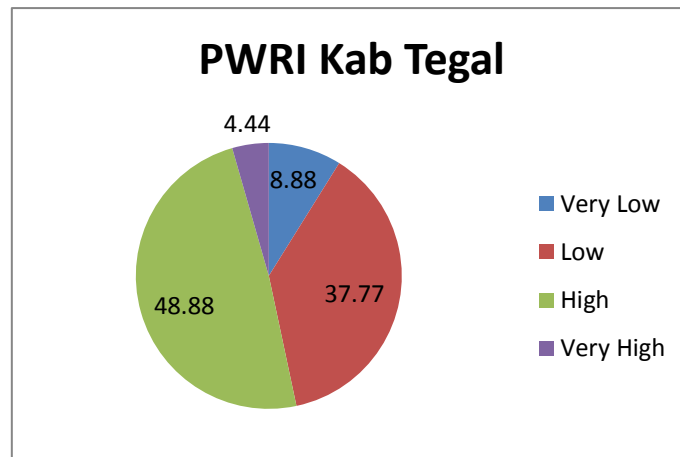


Figure 5. Categorization of Post-power Syndrome Tendency in PWRI Tegal

The sixth research was conducted by Indriana (2012) who focused on the tendency of post-power syndrome in government retirees enlisted in Paguyuban Wredhatama Universitas Diponegoro Semarang. The result shows that the tendency of post-power syndrome is low, observed in 42% subjects of 74 research subjects. The details are presented in the following chart:

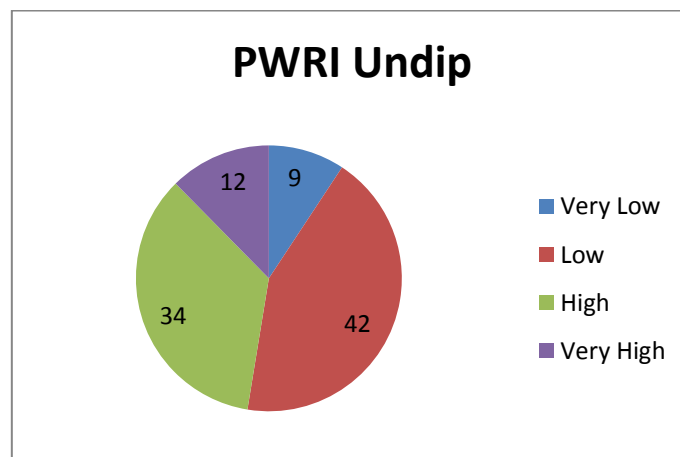


Figure 6. Categorization of Post-power Syndrome Tendency in PWRI Undip Semarang

Data obtained from six researches were analyzed using One-Way Anova (Parametric) Test to observe differences or compare the tendency of post-power syndrome showed by each group of subjects. When the data failed to meet the assumption of One-way Anova, Kruskal-Wallis (Nonparametric) Test was applied.

One-Way Anova Assumption Test

Test of Normality

Table 2. Test of Normality

Group	Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	Df	Sig.	Statistic	Df	Sig.	
subject score	SMG	0,163	42	0,007	0,914	42	0,004
	JPR	0,115	44	0,170	0,953	44	0,072
	BJR	0,073	50	0,200*	0,986	50	0,812
	CRB	0,081	39	0,200*	0,977	39	0,595
	TGL	0,114	45	0,176	0,966	45	0,208
	UND	0,074	74	0,200*	0,985	74	0,539

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Table 3. Result of Normality Test

Group	Sig	Remark
Semarang	0,007	Not normal
Jepara	0,170	Normal
Banjarnegara	0,200	Normal
Cirebon	0,200	Normal
Tegal	0,176	Normal
Undip	0,200	Normal

Notes: There is a not normal data group; it is Semarang group, so that the assumption of normal-distributed data is rejected.

Test of Homogeneity

Table 4. Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
1.982	5	288	.081

The significant value shows 0.81 ($p > 0,05$) means that the data is stated as homogenous.

1. One Way Anova

After assuming that the data of 5 (five) groups are normal and homogeneous distributed, then One Way Anova test is conducted to see the difference of the five groups: Jepara, Banjarnegara, Cirebon, Tegal and Undip. For the Semarang group, because the data are not normal, data were then analyzed by using Kruskal-Wallis analysis. The following table shows the results of One Way Anova test in 5 (five) groups: Jepara, Banjarnegara, Cirebon, Tegal and Undip:

Table 5. One Way Anova test result on 5 groups of Research Area

	Sum of Squares	Df	Mean Square	F	Sig
Between Groups	1325,422	4	331,356	2,320	0,058
Within Groups	35278,145	247	142,826		
Total	36603,567	251			

From result of data analysis shows sig value of 0,058 ($p > 0,05$) so it can be concluded that there is no difference from the five groups. The following is a description table of the data being tested:

Table 5. Descriptive Data

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
JPR	44	92.61	14.487	2.184	88.21	97.02	66	118
BJR	50	97.00	12.036	1.702	93.58	100.42	66	131
CRB	39	99.69	12.301	1.970	95.70	103.68	75	129
TGL	45	98.24	11.960	1.783	94.65	101.84	72	119
UND (SMG)	74	95.23	9.870	1.147	92.94	97.52	72	116
Total	252	96.35	12.076	.761	94.85	97.85	66	131

The overall mean of the data shows the number 96,35 with the deviation standard of 12,076 and the minimum subject score is 66 and maximum subject score is 131.

b. Kruskal-Wallis Analysis.

Further data analysis used Kruskal-Wallis analysis due to assumption of normality was not fulfilled in Semarang data group. The result of Kruskal Wallis analysis is as follows:

Table 6. Kruskal Wallis Analysis Result

Test Statistic	
Asymp. Sig	0,000

The significance value above shows the number 0.000 ($p < 0.05$). This means that there is a Post-Power Syndrome difference between Semarang group and the other five groups. The results of the analysis are as follows:

Table 7. Semarang and Jepara Groups

	Semarang	Jepara	Remark
Mean Rank	66,31	22,68	Different
Sum of Ranks	2743,000	998,000	
Asymp. Sig (2-tailed)		0,000	

Table 8. Semarang and Banjarnegara Groups

	Semarang	Banjarnegara	Remark
Mean Rank	71,07	25,86	Different
Sum of Ranks	2985,000	1293,000	
Asymp. Sig (2-tailed)		0,000	

Table 9. Semarang and Cirebon Groups

	Semarang	Cirebon	Remark
Mean Rank	59,95	20,59	Different
Sum of Ranks	2518,000	803,00	
Asymp. Sig (2-tailed)		0,000	

Table 10. Semarang and Tegal Groups

	Semarang	Ceribon	Remark
Mean Rank	66,19	23,29	Different
Sum of Ranks	2780,000	1048,00	
Asymp. Sig (2-tailed)		0,000	

Table 11. Semarang and Undip Groups

	Semarang	Undip	Remark
Mean Rank	95,36	37,58	Different
Sum of Ranks	4005,00	2781,00	
Asymp. Sig (2-tailed)		0,000	

Discussion

Retirement is a time to be faced by all employees who work in an agency. This retirement period can cause problems because not everyone is ready to deal with it. Retirement will stop someone from a routine activity that has been done for years. In addition, it will break the social chain that has been established with colleagues and the most important is the disappearance of someone's identity that has been attached for so long (Agustina, 2008). In retirement, a person will experience a change of life, both changes in lifestyle and role. Retirement is often regarded as an unpleasant reality so that by the time it arrives, some people already feel anxious because they do not know what kind of life will be faced later (Rini, 2001).

There are symptoms that accompany retirement, such as the emergence of various physical illnesses such as minor to chronic and acute diseases. Symptoms of this disease can be caused by stress (tension, inward pressure), a sense of disappointment and fear that disrupts organic and psychic functions resulting in a variety of diseases, progressive injuries and damage (continuously growing or expanding). Fuller power syndrome is much faced by retired people, former retired, and former employees. Because of this, they are unable to make a healthy adaptation to the demands of new life conditions in retirement.

Agustina (2008) mentions the characteristics of people who are prone to suffer post power syndrome are as follows:

- a. People who are happy to be honored and respected by others, whose requests are always granted and are willing to be served by others.

- b. People who need recognition from others because of lack of self-esteem, so if the individual has a position he/she will feel more recognized by other people.
- c. The people who put their life meaning on the achievement and on the ability to manage the lives of others and to rule over others. Those people consider that power is everything or is a very significant thing in life.

From the results of research and analysis of this research data, it appears that the tendency of post-power syndrome on retired civil servants differ in different areas. The tendency of post-power syndrome on retired civil servants is in low category in Semarang city, including Undip, and Banjarnegara. This is different from the tendency of post-power syndrome on retired civil servants in Jepara, Cirebon and Tegal districts.

Nevertheless, the results of data analysis using one-way anova technique show that post-power syndrome tendency in retired civil servants in different cities is no different. The average value and the spread of their scores are not much different. This indicates that the post-power syndrome tendency of retired civil servants is different but not significant. The high and low tendency of post-power syndrome in some areas is only a difference within their scope but it is not different when viewed or compared with other regions.

The low post-power syndrome tendency shows a quite encouraging picture that elderly retired civil servants are relatively able to adapt to post-retirement conditions. No visible pressure, stress, or depression. Decreased incomes and relatively narrow daily activities, including the empty cage syndrome that is common in the elderly, are well received and without many complaints so they are relatively healthy. This contrasted with a cross-sectional study of 488 elderly people aged 60-92 years in China, who found that there was a correlation between mental health and the factors affecting the empty cage syndrome. This means that this syndrome can affect the mental health of the elderly (Guo, Zhang, Huang, Zheng, Pan, and Zheng, 2016).

Differences appeared in Semarang group is different with the other five groups. This could be due to the Semarang group who are retired civil servants PWRI members of Gajah Mungkur District Semarang are varied. They live in the middle of town, there are elite groups and there are middle-class groups so they are difficult to unite and more than half are never present in the activities held. The reasons for their absence are illness, shame and lack of confidence to get together with others. It is in contrast to other PWRI groups whose members seemed enthusiastic to follow the activities undertaken. Members assume that the activities are fun for them. In addition to gather with people on the same age so that they can share many things, they can also obtain important information about elderly life. This is contrary to a study of retired people in the Netherlands, that individual education influences the decline in the speed of information processing (Grip, Dupuy, Jolles, and Boxté, 2015). This means that the higher a person's education, the more be avoided from post power syndrome.

Conclusion

It can be concluded that post-power syndrome tendency in PWRI member of Semarang group is low, Jepara is high, Banjarnegara is low, Cirebon is high, Tegal is high and Undip is low. There is no significant difference in post-power syndrome tendency in the Jepara, Banjarnegara, Cirebon, Tegal and Undip groups. While Semarang group has tendency of post-power syndrome which is different from five other group; those are Jepara, Banjarnegara, Cirebon, Tegal and Undip groups.

***Proceedings of the 2nd International Conference in Health Sciences (ICHS)
Purwokerto, Indonesia, November 4-5, 2017***

References

- Agustina, M.C. 2008. Pensiun, stres, dan bahagia. <http://all-aboutstress.com/2008/03/22/pensiun-stres-dan-bahagia/> (diunduh 13 Maret 2016)
- Ariyanti, M. 2014. Hubungan antara hardiness dengan kecenderungan *post-power syndrome* pada lansia pensiunan PNS anggota PWRI Kecamatan Gajah mungkur Semarang. *Skripsi*. Fakultas psikologi Universitas Diponegoro Semarang
- Desiningrum, D.R. 2010. Family's social support and psychological well-being of the elderly in Tembalang. *Anima, Indonesian Psychological Journal*. 26 (1): 61-68.
- Dinsi, V., Setiati, E., and Yuliasari, E. 2006. *Ketika pensiun tiba*. Jakarta : Wijayata Media Utama
- Elia. 2003. *Post power syndrome*. <http://www.sabda.org/publikasi/e-konsel079>. Diunduh pada tanggal 21 November 2013
- Graham, C. 2010. Accounting and the construction of the retired person. *Accounting, Organizations and Society*. 35 (1): 23-46. <https://doi.org/10.1016/j.aos.2009.03.001>
- Grip, A, Dupuy, A, Jolles, J, and Boxtte, M. 2015. Retirement and cognitive development in the Netherlands: Are the retired really inactive? *Economics & Human Biology*. 19: 157-169. <https://doi.org/10.1016/j.ehb.2015.08.004>
- Guo, YQ, Zhang, CC, Huang, H, Zheng, X, Pan, XJ, and Zheng, JZ. 2016. Mental health and related influencing factors among the empty-nest elderly and the non-empty-nest elderly in Taiyuan, China: a cross-sectional study. *Public Health*. 141: 210-217. <https://doi.org/10.1016/j.puhe.2016.09.005>
- Hapsari, E. 2014. Hubungan antara kepuasan pernikahan dengan kecenderungan *post-power syndrome* pada pensiunan pria PNS anggota PWRI Kecamatan Purwareja Klampok Banjarnegara. *Skripsi*. Fakultas Psikologi Universitas Diponegoro Semarang.
- Herani, U, and Indriana, Y. 2014. Hubungan antara regulasi diri dengan kecenderungan post power syndrome pada pensiunan pegawai negeri sipil anggota paguyuban pensiunan pendidikan kabupaten tegal. *Skripsi*. Fakultas Psikologi Universitas Diponegoro Semarang.
- Hurlock, Elizabeth B. 2009. *Psikologi perkembangan suatu pendekatan sepanjang rentang kehidupan*. Jakarta: Erlangga
- Indriana, Y. 2012. *Gerontologi dan progeria*. Yogyakarta: Pustaka Pelajar
- Kartono, K. 2002. *Patologi sosial 3*. Jakarta: PT Raja Grafindo Persada.
- Liu, M, Lv, X, Li, Y, Lib, J, and He, Y. 2017. Prevalence and control status of diabetes and related risk factors among 4196 Chinese male older elderly aged ≥ 80 years. *International Journal of Gerontology*. Online 30 August 2017. <https://doi.org/10.1016/j.ijge.2017.08.005>
- Ni'mah, D.I. 2014. Perbedaan kecenderungan *post-power syndrome* pada lansia pensiunan PNS anggota PWRI Kecamatan Pecangaan Kabupaten Jepara ditinjau ari jenis kelamin. *Skripsi*. Fakultas Psikologi Universitas Diponegoro Semarang
- Nurhayati, I and Indriana, Y. 2014. Harga diri dan kecenderungan post power syndrome pada pensiunan pegawai negeri sipil anggota PWRI cabang kota Cirebon. *Skripsi*. Fakultas Psikologi Universitas Diponegoro Semarang.
- Papalia, D.E., Old, S.W & Feldman, R.D. 2008. Ninth Edition. *Human development*. McGraw Hill Companies.
- Rini, J.F. 2001. *Pensiun dan pengaruhnya*. www.e-psikologi.com/pensiun.htm. Diunduh pada tanggal 2 Oktober 2016
- Semiun, Y. 2010. *Kesehatan mental 3 gangguan-gangguan yang sangat berat, simtomatologi, proses diagnosis, dan proses terapi gangguan-gangguan mental*. Yogyakarta: Kanisius
- Seow, LSE, Subramaniam, M, Abdin, E, Vaingankar, JA, and SA. 2015. Hypertension and its associated risks among Singapore elderly residential population. *Journal of Clinical Gerontology and Geriatrics*. 6 (4): 125-132. <https://doi.org/10.1016/j.jcgg.2015.05.002>
- Suardiman, S., P. 2011. *Psikologi usia lanjut*. Yogyakarta : Gadjah Mada University Press.
- Yu, J, Mahendran, R, Abdullah, FNM, Kua, EH, and Feng, L. 2017. Self-reported sleep problems among the elderly: A latent class analysis. *Psychiatry Research*. Available online 30 August 2017. <https://doi.org/10.1016/j.psychres.2017.08.078>

Water Pollution in Bedadung Watersheds Area and Diseases in Elderly People

**Zahreni Hamzah¹, Ari Tri Wandyo Handayani¹, Berlian Prihatiningrum¹, Tohirun²,
Dyah Indartin¹, Heru Ernanda³, Nadia Kartikasari⁴**

¹Jember University, Faculty of Dentistry

²Jember University, Faculty of Public Health

³Jember University, Faculty of Agriculture Technology

Kalimantan 37, Jember, East Java, Indonesia 68121

zahreni.fkg@unej.ac.id; aritri.fkg@unej.ac.id

⁴Universitas Airlangga, Faculty of Dental Medicine

Prof. Dr. Moestopo 47 Surabaya, East Java, Indonesia 60132

Abstract

Water pollution involves the pollution of surface waters and/or groundwater. Water pollutants are moving slowly into the watersheds, carrying bad affect for large areas. Accumulation of water pollutant in the body, especially in elderly, could have serious health impacts, which may cause a series of diseases. The diseases caused by water pollution include diabetes type-2, uric acid, rheumatic disease, vascular diseases, myocardial infarct, nervous system damage, liver damage, and cancer. These factors can accelerate aging process. The aim of this study is to analyse the diseases of elderly people in the Bedadung Watersheds area, Jember, Indonesia. These are needed to develop an aging health care strategy. This study is conducted by interviews and questioners in the elderly who live in the Bedadung watersheds area randomly (n=77), who are willing to fill in informed consent. The source of drinking water for the community consumption comes mainly from the dig wells. Groundwater contamination for Bedadung watersheds area is mostly caused by sewage households, plastics waste, natural waste, styrofoam, chemical waste water, baby diapers and menstrual pads. Elderly who consumes drinking water from dig wells generally suffer more than one disease. Diseases suffered by elderly in the Bedadung watersheds area of are uric acid, hypertension, cholesterol, gastric ulcers and skin diseases (five common diseases). Elderly who suffering diseases are 62.79%. Accordingly, educational and awareness programs should be organized to control the water pollution.

Keywords: degenerative diseases, water pollution, elderly people, water consumption

Introduction

Water is one of the important natural resource in human's lives.¹ One person a day needs minimum of 7.5 litres of water to fulfil their needs for drinking, preparing food, and personal hygiene. Standard requirement of water per person is 50 litres to ensure all their needs.² One of the source of the water is a river but in many developing countries, river is heavily polluted mainly due to human activity.³ Water pollution will change the water quality which leads to environment damage and decrease quality of human health.¹ Drinking water from ground water, although generally has low pathogen concentrations, because the water is filtered during transit through underground layers by sand, clay, or rocks, but water-soluble chemicals can harm health body.³ Besides that, there are nonpoint-source pollution involves many small sources that combine to cause significant pollution. It is very difficult to control and may come from different sources like sewage from households, pesticides, fertilizers, industrial wastes, etc. Non-point source pollution is the main and leading cause of water pollution.⁴

PROCEEDING OF
2ND INTERNATIONAL CONFERENCE
IN HEALTH SCIENCES

**FROM LIVING WELL
TO AGING WELL:
A MULTIDISCIPLINARY APPROACH**

Purwokerto, 4-5 November 2017

