



Journal of Applied Environmental and  
Biological Sciences  
**(JAEBS)**  
ISSN 2090-4215

Journal of Applied  
**Environmental**  
&  
**Biological Sciences**



Text Road Journals Publications

Volume  
Number  
January 2011

 Main Menu
Home
Journals
Instructions to Authors
Submit Article
Join Us
Editorial board
Archive
Manuscript Submission
Abstracting/Indexing
Contact us

## Editorial Board

### Editor -in-Chief

#### William Ebomoyi

Ph.D., Professor, Department of Health Studies, College of Health Sciences, Chicago State University, USA.  
E-mail: [editor@textroad.com](mailto:editor@textroad.com)

### Associate Editors

#### Prof. Dr. Sanaa T. El-Sayed

Ex Head of Biochemistry Department, Professor of Biochemistry, Genetic Engineering & Biotechnology Division, National Research Centre, Egypt

#### Saeid Chejani Azar

PhD of Veterinary Physiology; Faculty of Veterinary, Department of Physiology, Ataturk University, Erzurum 25010, Turkey.

#### Prof. Dr. Sarwoko Mangkoedihardjo

Professor, Professional Engineer of Indonesian Society of Sanitary and Environmental Engineers, Indonesia

#### Prof. Dr. Ashraf Latif Tadross

Head of Astronomy Department, Professor of Star Clusters and Galactic Structure, National Research Institute of Astronomy & Geophysics (NRIA)

#### Dr. Chandraselar Raman

Research Associate, Department of Biochemistry & Molecular Biophysics, Biotechnology Core Facility, 238, Burt Hall, Kansas State University, Ma

#### Dr. YUBAO CUI

Associate Professor, Department of Laboratory Medicine, Yancheng Health Vocational & Technical College, Jiangsu Province, P. R. China

#### Dr. Muhammad Altaf Khan

Department of Mathematics, Abdul Wali Khan University Mardan Pakistan

#### Dr. Fahrettin Tilkı

Assoc. Professor, Artvin Coruh University, Faculty of Forestry, Department of Forest Science, Artvin, TURKEY.

#### Dr. Ibtisam abd el ghany hammad

Associate Professor of Genetics, Faculty of Science, Helwan University. Egypt.

#### Dr. Charalambos Tsekeris

Department of Psychology, Panteion University of Social and Political Sciences, Athens, Greece.

#### Dr. Elsayed E. Hafez

Associate Professor, Molecular Biology, Plant Molecular Pathology & Arid Lands Institute, Egypt.

#### Dr. Naushad Mamode Khan

University of Mauritius, Reduit, Mauritius.

#### Mirza Hasanuzzaman

Department of Agronomy, Faculty of Agriculture, Sher-e-Bangla Agricultural University, Dhaka-1207, Bangladesh.

#### Dr. Hala Ahmed Hafez Kandil

Professor Researcher, National Research Centre, Plant Nutrition Dept. El-Bhouth St. Dokki, Giza, Egypt.

#### Dr. Yule Yue Wang

Biotechnology and Medicinal Biochemistry, Division of Life Science, The Hong Kong University of Science & Technology, China

#### Dr. Aziza Sharaby

Professor of Entomology, Plant Protection Department, National Research Center, Cairo, Egypt.

#### Dr. Sulaiman

Assistant Professor, Department of Biochemistry, Abdul wali Khan University Mardan, Khyber Pakhtunkhwa, Pakistan.

#### Prof. Dr. Amer A. Taqa

DB'S. Department, College of Dentistry, Mosul University, Iraq.

## Editors

#### Dr. Asghar Khan

PhD under split program (University of Peshawar and Columbia University, New York)  
Lecturer, Department of Regional Studies, University of Peshawar, Khyber Pakhtunkhwa, Pakistan.

#### Maulin P Shah

PhD-Microbiology, Chief Scientist & Head Industrial Waste Water Research Laboratory, Division of Applied & Environmental Microbiology, E 393002, Gujarat, India

#### Dr. Josphert N. Kimatu

Department of Biological Sciences, South Eastern University College, Kenya.

#### Dr. Mukesh Kumar Meena

Assistant Professor (Crop Physiology), Department of Crop Physiology, University of Agricultural Sciences, Raichur-584104, Karnataka, India

#### Jehngir Khan

Lecturer in Zoology Department, Abdul Wali Khan University Mardan (AWKUM), Buner Campus, Buner, Khyber Pakhtunkhwa, Pakistan.

#### Syed Muhammad Nurulain

Medical Research Specialist, FMHS, UAE University, **Emirates**

**Dr. Ayman Batisha**

Environment and Climate Research Institute, National Water Research Center, Cairo, **Egypt**.

**Dr. Halkeem Ullah**

Assistant Professor, Department of Mathematics Abdul Wali Khan University Mardan **Pakistan**.

**DR. DATTA ASARAM DHALE**

Assistant Professor, Post Graduate Department of Botany, Ghogrey Science College, Dhule, Maharashtra State, **India**.

**Dr. Muhammad Ismaïl Mohmand**

Tutor/Administrator in the Excellence Training Den College in Newcastle, **United Kingdom**

**Prof. Dr. Valdenir José Belinelo**

Department of Health Sciences and Postgraduate Program In Tropical Agriculture, Federal University of Espirito Santo (UFES), São Mateus, ES, **B**

**Siva Sankar. R**

Department of Ecology and Environmental Sciences, School of Life Sciences, Pondicherry University, **India**.

**Dr. Tarig Osman Khider**

Associate Professor, University of Bahri-Sudan, College of Applied and Industrial Sciences, Department of Pulp and Paper Technology, **Sudan**

**Dr. Ali Elmaeim Musa**

University of Bahri, Sudan College of Applied and Industrial Sciences, **Sudan**

**Dr. Basharia Abd Rub Alrasoul Abd Allah Yousef**

Deputy Dean at Faculty of Engineering, University of Bahri, Khartoum, **Sudan**

**Dr. Khaled Nabih Zaki Rashed**

Pharmacognosy Department, National Research Centre, Dokki, Giza, **Egypt**

**Govinda Bhandari**

President, Progressive Sustainable Developers Nepal (PSD-Nepal) Chief, Research and Training Environment Professionals' Training and Research

**Semra Benzer**

Assistant Professor in Gazi University, Gazi Education Faculty, Department of Science, Ankara, **Turkey**.

**Ahmed Hashim Mohaisen Al-Yasari**

Department of Physics, College of Education For Pure Science, University of Babylon, Hilla, **IRAQ**.

**Dr. Hafiz Abdul Wahab**

Assistant Professor of Mathematics, Department of Mathematics, Hazara University Mansehra **Pakistan**.

**Dr. Sohrab Mirsaedi**

Centre of Electrical Energy Systems (CEES), Faculty of Electrical Engineering (FKE), Universiti Teknologi Malaysia (UTM), 81310 Skudai, Johor, **M**

**Prof. Md. Amin Uddin Mridha**

Ph.D. DIC (London), Plant Production Department, King Saud University, P.O.Box 2460, Riyadh 11451, **Kingdom of Saudi Arabia**.

**Jasem Manouchehri**

Ph.D. Candidate in Sport Management, University of Tehran (UT) & Instructor in Sport Management, Islamic Azad University, Central Tehran Bra

**Dr. Muhammad Akram**

Faculty of Agriculture, Department of Eastern Medicine and Surgery, University of Poonch, Rawalakot, Azad Jamu and Kashmir, **Pakistan**.

**Dr. Dana A Mohammed Barznji**

BSc. In Agricultural Science-Soil and Water Science Department, MSc. In Environmental Science-Water Pollution, MPhil/PhD In Environmental and Researcher, University of Sulaimani-Iraq-Kurdistan, Faculty of Agriculture, University of Plymouth-UK, Marine Science and Engineering.

**Dr. Meena M.K.**

M.Sc.(Agri), Ph.D., Assistant Professor, Department of Crop Physiology, University of Agricultural Sciences, Raichur-584104, Karnataka, **India**.



## View issue as eBook

AMARA Moussa and BENABDELI Khaloufi

**A Geobotanical and Phenological Study of Zizyphus lotus in the Naama Region (South-Western of Algeria)**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 1-8. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Yuly Peristiwati and Yenny Puspitasari

**Acute and Subchronic Toxicity Tests of Papaya Leaf (*Carica papaya* linn) Methanol Extract on Wistar Strainwhite Mice**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 9-14. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Mekhloufi Moulay Brahim and Benabdeli Khéloufi

**The Breeding, Pastoralism, the Sedentary and the Sustainable Development of the Steppe in the Region of El-Bayadh (Algeria)**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 15-21. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Abeer Imam, Dr. Faisal Tehseen Shah

**Effect of Employee Silence on Employees' Attitudinal Outcomes in Higher Education Sector of Pakistan**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 22-29. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

R. N. H. R. Ismail, A. A. Khan, A. N. M. Karim

**Improvement of Material Removal Rate and Surface Roughness for Steel Grade 760 Using Magnetic Field Assisted Al<sub>2</sub>O<sub>3</sub> Powder-Mixed EDM**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 30-37. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Yetrie Ludang, Alplan and Ajun Junaedi

**The Sequestration Rate of Carbon dioxide on Jelutung (*Dyera lowii* Hook. F.) Tillers in Central Kalimantan**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 38-42. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Waqas Ahmed, Maqsood Ahmad, Omer Iqbal

**Development and Challenges during Shale Gas Exploitation**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 43-48. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Hizbullah Khattak, Noor Ul Amin, Ikram Ud Din

**LeafPop: Leaf-Popular Caching Strategy for Information-Centric Networking**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 49-52. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

H. Khoshghaliba, M. Babaeib, M. Yoosefzadeh-Najafabadi

**How Different Concentrations of Humic acid, Zinc, Nitrogen and Boron Influence Quantitative and Qualitative Yield of German Chamomile (*Matricaria*)**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 53-59. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Mozaama Naseer, Dr. Muhammad Shabbir Ch., Dr. Zahira Batool

**Exploratory Study of the Factors Responsible for Glass Ceiling in Public Sector of Punjab, Pakistan**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 60-65. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Minami Nur Trilita, Muchlisiniati Safeyah, Novirina Hendrasarie

**The Characteristic of Liquid Film Flow on Disc in Rotating Biological Contactor**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 66-71. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Muhammed Nasri Abdul Rahman, NurAisyah Hamzah, Wan Farahiyah Wan Kamarudin, Zaidawarni Irwan, Mohd Rabani Yaafar, Noor Erni Fazlina Mohd Akhir

**Solar Photocatalytic Degradation of Orange G Dye Based on Zinc Oxide**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 72-78. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Unays Siraj, Gul Rukh, Aneela Tayyab, Ayesha Irshad, Kainat Jauhar, Uroosa, Ruqayya Naz and Bilal Ahmad

**Maternal Hemoglobin Value and Other Risking Factors during Pregnancy in Selected Areas of Pakistan 2016-2017**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 79-87. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Mohd Talmizie Amron, Nurul Syafinaz Mohd Salleh

**User Requirement and Design of Appointment System with Email Alert Notification**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 88-92. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Muhammed Farman, Muhammad Umer Saleem, M.O. Ahmad

**An Approach for Artificial Pancreas to Control the Type-1 Diabetes Mellitus**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 93-102. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Tri Ratnäningsih, Chatarina Umbul W., Hari Basuki, Anis Catur

**Self Efficacy, Collective Efficacy and the Role of the Community on Mother Positive Deviance in Nutritional Fulfillment of Toddler**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 103-109. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Wan Mardiana Wan Musa, Noorimah Misnan

**Breastfeeding Facilities Policy at Work: Between the Cup and Lip**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 110-114. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Tariq Mahmood, Muhammad Shabir, Saba Ayub, Shahida Bashir

**Regular and Intra-Regular Semihyper Groups in Terms of L-Fuzzy Soft Hyperideals**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 115-137. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Naheed Zahra, Nadeem Akmal, Nusrat Habib, Saima Rani, Mubashira Nazir and Irum Raza

**Impact of Climate Change Hostilities on Livelihood Strategies: A Case Study of Rainfed Pothwar Area of Pakistan**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 138-143. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Ahmed Suffian Mohd Zahari, Norhaslely Mohammad, Raja Mariam Raja Bariamin

**Job Satisfaction among Staffs at Universiti Sultan Zainal Abidin (UniSZA), Terengganu, Malaysia**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 144-152. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Mukhamad Rajin, Herin Mawarti, and M. Zulfikar Asumta

**Toxicity Study of Aloe vera Extract for Multi Drugs Resistant (MDR) of Tuberculosis**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 153-156. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Ali Akbar Dadvar, Mohammadreza Bayati, Amir H. Afkari-Sayyah, Mansour Rasekh

**Some Physical and Mechanical Properties of Bergamot (Citrusaurantium)**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 157-164. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Norsimaa Mustafa, Muhammad Zaffwan Idris

**Assessing Accuracy of Structural Performance on Basic Steps in Recording Malay Zapin Dance Movement Using Motion Capture**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 165-173. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Elga Renjana, Helga Lusiana, Fatimah, Sri Sumarsih, Ni matuzahroh

**Co-Utilization of Molasse and Glycerol as Carbon Sources on the Production of Biosurfactant by Isolate Bacteria LIJ61**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 174-180. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Suhaily Maizan Abdul Manaf, Siti Rapidah Omar Ali, Nur Shafini Mohd Said, Wan Mardiana Wan Musa

**Observing on the Student's Obedience Towards the Rules of Regulation: Analysis in UiTM Terengganu**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 181-185. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Nuh Huda and Dhian Setya Rachmawati

**Elderly Health Perception in the Area of the Coastal Area of Surabaya Using Logistic Regression**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 186-189. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Bambang Djinarto, Arsono Laksmiana, Mudjilah Rahayu, Bambang Widjanarko Otok

**Fixed Effect Model on Company Value in Manufacturing Company Indonesia Stock Exchange**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 190-194. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Ayaz Ahmad

**National Integration and Ethnolinguistic Polarity in Afghanistan**

*J. Appl. Environ. Biol. Sci.* 2017 7(11): 195-199. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Muhammad Suliman, Irfan Ullah, Muhammad Nisar, Dilkash Sapna

**Women's Employment Discrimination: A Gender based Deterrence in Industrial Sector Mingora (Swat), Pakistan**  
*J. Appl. Environ. Biol. Sci.* 2017 7(11): 200-206. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Anas Baryal, Kiran Seeneen, Muhammad Babar Akram, Zia Ur Rahman

**Police and Juvenile Justice System A study of Khyber Pakhtunkhwa Police regarding knowledge of JJSO-2000**  
*J. Appl. Environ. Biol. Sci.* 2017 7(11): 207-213. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Umar Draz, Tanq Ali, Sana Yasin, Low Tan Jung, M. Ayaz Arshad

**Towards Exploring the Combined DNA and RNA Sequences with Motif Pair Detection Technique**  
*J. Appl. Environ. Biol. Sci.* 2017 7(11): 214-221. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Asghar Khan, Ashfaq Ur Rehman, Shughla Ashfaq

**Repatriation of Afghan Refugees Living in Pakistan: Constraints, Challenges and Prospects**  
*J. Appl. Environ. Biol. Sci.* 2017 7(11): 222-229. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Mr. Muhammad Asif Ayub, Dr. Abdul Zahoor Khan

**The Role of Leadership of Imran Khan in the Genesis and Evolution of Pakistan Tehreek-E-Insaf**  
*J. Appl. Environ. Biol. Sci.* 2017 7(11): 237-242. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---

Karwal Bilal, Dr. Faisal Tehseen Shah

**Organizational Resilience Capacity as a Mediator between Entrepreneurial Orientation and Organizational Performance: A Case of Textile Sector of Pa**  
*J. Appl. Environ. Biol. Sci.* 2017 7(11): 243-253. [[Abstract](#)] [[Full-Text PDF](#)] [[Full-Text XML](#)]

---



## Elderly Health Perception in the Area of the Coastal Area of Surabaya Using Logistic Regression

Nuh Huda\* and Dhian Satya Rachmawati

High School Health Science Hang Tuah, Surabaya, INDONESIA

Received: June 21, 2017

Accepted: September 12, 2017

### ABSTRACT

Increase in the number of elderly will need a serious handling because naturally elderly will experience setbacks, both physically and biology, or his mental. The increased number of elderly create health problems facing will be more complex especially related to the issue of aging. Efforts to produce a healthy aging population is not easy and requires the cooperation of the parties. The purpose of this research examines the factors that affect the perception of the health of the elderly with logistic regression approach. The results of the study showed that the perception of the health of the elderly influenced by the health of the physical, psychological, social relations and the environment. Psychological factors and physical health is the dominant factor in influencing the perception of the health of the elderly, each with odds ratio of 12.701 and 10.224. The perception of the health of the elderly tend to have positive relationship with the health of the physical, psychological, social relations and good environment.

**KEY WORDS:** elderly health perception, logistic regression, odds ratio

### • INTRODUCTION

Being old is a natural phenomenon as a result of the aging process. This phenomenon is not a disease but a condition fair which are universal. The aging process is regressive and includes the process of organobiologis, psychological and sosiobudaya. To be the elders determined genetically and influenced by someone [1]. According to [2], in general physical condition of a person who has entered the elderly decline. This can be seen from some changes: (1) changes the appearance on the face of the hands and the skin, (2) changes inside the body such as the nervous system: the brain, the contents of the stomach: the spleen, heart, (3) changes senses come: sight, hearing, smell, taste, and (4) motoric changes among others diminished strength, speed in moving. These changes are generally lead on diminish psychological and physical health in general will have an effect on daily life activities [3].

Elderly population (elderly) has increased including in Indonesia that was originally only occurred in the developed countries. Improvement of the inhabitants of the elderly is caused by due to increased life expectancy and increased life expectancy is caused by 3 things: (1) progress in the field of health, (2) increasing economic social and (3) increasing community knowledge [4]. Increase in the number of elderly will need a serious handling because naturally elderly is experiencing setbacks, both physically and biology, or his mental. Decrease the function of various organs of the body will make the elderly become vulnerable to the disease is acute or chronic. In addition on elderly also often occur physical dependence, will no longer be able to perform daily activities by themselves because of the disease. The increased number of elderly will also create health problems facing will be more complex especially related to the issue of aging.

The improvement of the inhabitants of the elderly start felt since 2000 namely the amount of elderly 14.4 million people with increased 7.18% with age of living hope 64.5 years. In 2006 the number of elderly 19 million people with an increase of approximately 8.9 percent by the age of living hope 66.2 years. 2010 inhabitants of elderly is expected as much as 23.9 million people with increased 9.7 percent by the age of living hope 67.4 years. And is expected in the year 2020 population of elderly in Indonesia will reach 28.8 million people with an increase of approximately 11.34 percent and the age of the living hope 71.1 years. Is expected in the years 2020-2025 Indonesia will be located in the four stages of the world under China. India and the United States [3].

Someone to stay healthy until the elders, since the young people need to be taught healthy lifestyle. Healthy Lifestyle can be done with consume nutritious foods balanced, physical activity/sports properly and orderly and not smoking. Healthy Lifestyle this must have been done since still young so that when entering the elderly someone can live their lives happily avoid many health problems. Such is the case with the lifestyle that one can affect among other health drink less water less movement, consume food that high calorie beverages, break habits that do not regularly and smoking habit [5][6].

According to [7], through the lifestyle that is not good can cause various diseases. Lifestyle changes such as the consumption of fast food, diet is not good, smoking habit and lack of physical activity physical activity the classrooms is practically one of the triggers for the emergence of dangerous diseases such as Diabetes Mellitus High Blood Pressure (hypertension), heart disease and stroke.

Individually the influence of the process of the oldness cause problems. One of the problems associated with the inhabitants of the elderly is health problems, for travel on elderly disease has its own characteristics which is unfortunately,

\*Corresponding Author: Nuh Huda, High School Health Science Hang Tuah, Surabaya, INDONESIA.  
email: badawiff@gmail.com

the more severe and often recurrence. Elderly health issues are varied in addition to closely related with degenerative diseases also progressively the body will lose power hold against infections, besides with age appears psychological issues. In line with the increasing age of the elderly is no longer productive, the ability to physically and mentally began to decline, is not able to do the work of a more serious entering retirement period, sends her dead spouse, stress face death, depression, the emergence of various diseases etc.[8][9].

According to the World Health Organization, less healthy lifestyle can be a 1 from 10 causes of death and disability in the world. More than two million deaths every year due to the lack of moving or less physical activity, this is because the calories that entered is not comparable with calories out so that more and more calories to accumulate and become a burden for the body and the body to be disturbed which then cause physical setbacks that may eventually cause various diseases such as Diabetes Mellitus, high blood pressure, heart disease and stroke [10].

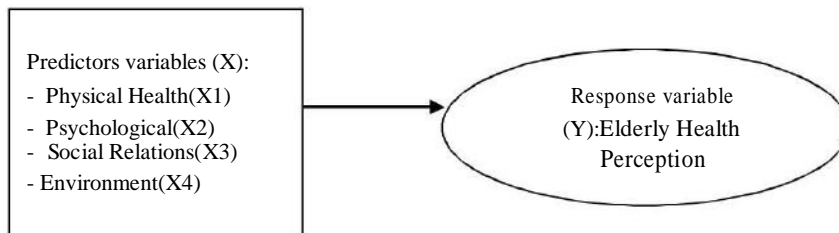
Some research results about the lifestyle and the perception of the elderly in Indonesia among others, which were held in the Clinic Pekayon Jaya Bekasi City shows that the health status of low on elderly health clinic Pekayon target Jaya of 66,9%. The results of the analysis bivariat shows no relationship between physical activity with health status values (p=0.004) and the habit of rest with health status (p=0,000 value). Based on the results of research and it is recommended to increase the knowledge of the elderly about the lifestyle and the impact on health status through the promotion of health in the target areas the clinic Pekayon Jaya Bekasi city [11].

Research [7], give description that the health status of the elderly obtained 10% health status of the elderly is good, 83,3% health status of the elderly enough and 6.7% health status of the elderly less. Overall the results of research explains that the need to provide information about health [2]. According to the results of research done [9] in 27 provinces in Indonesia obtained the results of the percentage of elderly women (53.0%) is greater than the percentage of elderly men (47%). But the percentage of the elderly sick more on elderly men than elderly women. The majority of elderly admits of no health failure during the 1 weeks before loading data and only 27.5% farmers percent elderly who have health complaints such as cough, runny nose, hot and headache repeatedly that to interfere with the daily activities.

Efforts to produce a healthy aging population is not young and requires the cooperation of the parties, among others: elderly itself, family, community, government organization and the welfare of the observer and to health professionals what is more important is that the active role of the elderly themselves and family in implementing healthy lifestyle. Along with the growing population of the elderly, the government has formulated various policies. Health Services at the community level is the Posyandu elderly health services elderly base level is a health clinic and health services advanced level is the Hospital [10]. Based on explanation above, this research examines the factors that affect the perception of the health of the elderly with logistic regression approach [12].

• **METHODOLOGY**

The population in this research is the elderly in Surabaya City. Samples in this research as much as 89 senior citizens in the coastal areas: Kenjeran Sub-district and the orphanage wreda: Hargo Dedali, UPT Liponosos Whitish with a method simplerandom sampling [13]. Independent variables in this research is the physical health (X1), psychological (X2), social relations (X3) and the environment (X4). Physical health covers the activities of daily living, reliance on drug materials and medical assistance, energy and fatigue. Mobility pain and discomfort, sleep and healthy working capacity. Includes the description of the body and psychological appearance, negative emotion, positive feelings, awards themselves, spirituality / religion / personal beliefs, thinking, learning memory and concentration. Social relationships include the personal relationships, sexual support, sexual activities. Environment include financial resources, physical security and security, health and the environment and social concerns the house, the opportunity for new information and skills, participation and opportunities for recreation, physical environment (population / voice / mobility / climate change), transportation. The dependent variables in this research is the perception of the health of the elderly (Y) that it consist of positive and negative perception, with the framework of the following concepts [10][11].



**Figure 1.** The Conceptual Framework of Health Elderly Perception

Logistic regression model describes the probability or risk from an object, served as follows [12][14]:

$$• (x) = \frac{e^{(\beta_0 + \beta_1 x_1 + \dots + \beta_k x_k)}}{1 + e^{(\beta_0 + \beta_1 x_1 + \dots + \beta_k x_k)}}$$

In the regression model linier, it is assumed that the observations of the response variable expressed as:



$$= E(Y_x) + \varepsilon,$$

With  $E(Y_x) = \beta_0 + \beta_1 X_1 + \dots + \beta_k X_k$  is mean population and  $\varepsilon$  is random component that shows the deviation from mean

observations. Odds from the result between the individual with  $x = 1$  is defined as  $\frac{P(x=1)}{1 - P(x=1)}$ . Similar to the odds of the result between the individual with  $x = 0$  is defined as  $\frac{P(x=0)}{1 - P(x=0)}$ . Odds ratio, shortened OR, is defined as the ratio of the odds for  $x = 1$  to odds  $x = 0$ , and given from the following equation [14][15]:

$$= \frac{\square\square1\square\square\square1 - \square\square1\square\square}{\square\square0\square\square\square1 - \square\square0\square\square}$$

## RESULTS AND DISCUSSION

Research variable frequency distribution consists of the perception of the health of the elderly, health physical, psychological, social relations and the environment is presented in the following table.

**Table 1.** Research Variable Frequency Distribution

Independent variables	Elderly Health Perception				
	Positive		Negative		Total
	f	%	f	%	F
<b>Physical Health</b>					
Good	33	94.3	2	5.7	35
Good enough	33	61.1	21	38.9	54
<b>Psychological</b>					
Good	54	80.6	13	19.4	67
Good enough	12	54.5	10	45.5	22
<b>Social Relations</b>					
Good	44	86.3	7	13.7	51
Good enough	22	57.9	16	42.1	38
<b>Environment</b>					
Good	45	90.0	5	10.0	50
Good enough	21	53.8	18	46.2	39

Table 1 shows that the elderly with good physical health has a positive health perception (94.3%) and negative (5.7%), while physical health good enough to have a positive health perception (61.1%) and negative (38.9%). Elderly with good psychological perception tend to have positive health (80.6%) and negative (19.4%), while the psychological good enough have a positive health perception (54.5%) and negative (45.5%). Elderly with good social relationships tend to have a positive health perception (86.3%) and negative (13.7%), while social relations good enough have a positive health perception (57.9%) and negative (42.1%). Elderly with good environment tend to have a positive health perception (90.0%) and negative (10.0%), while the Environment good enough have a positive health perception (53.8%) and negative (46.2%).

The relationship of physical health, psychology, social and environmental with elderly health perception is done with test dependencies. The results of analysis presented in the following table.

**Table 2.** p-value on the relationship of independent variables with elderly health perception

Independent variables	Chi-Square	P value
Physical Health	12.195	0.000
Psychological	5.865	0.015
Social Relations	9.151	0.002
The Environment	14.944	0.000

Table 2 shows the relationship between the independent variables with the dependent variables, all values Asymptotic Significance (2-sided) smaller than  $\alpha = 0.05$ . This can be interpreted that physical health (X1), psychological (X2), social relations (X3) and the environment (X4). There are significant relationships with health elderly perception. Then the estimation of the parameters of binary logistic regression model with Maximum Likelihood Estimation method (MLE) presented in Table 3.

**Table 3.** The p-value and Prevalence Risk Simultaneously

Predictors variables	Estimator	P value	Prevalence of risk
Physical Health	2.325	.025	10.224
Psychological	2.542	.003	12.701
Social Relations	1.653	.014	5.222
Environment	1.680	.048	5.368

Table 3 shows that of all the variables thought to be related to the perception of the health of the elderly found a significant statistic with  $\alpha = 0.05$ . The health of the physical, psychological, social relations and the environment. Physical health just given positive health perception on elderly obtained Odds Ratio (OR) = 10.224 means a good physical health will give positive health perception on elderly of 10.224 times compared with sufficient physical health. The results of the analysis on psychological variables with the perception of the health of the elderly shows the p-value = 0.003 with OR = 12.701 psychological means that both will give positive health perception on elderly of 12.701 times compared with enough psychological. The results of the analysis on the variable social relations with the perception of the health of the elderly shows the value  $p = 0.014$  with OR = 5.222 means good social relations will give positive health perception on elderly of 5.222 times compared with the social relations that enough. The results of the analysis on the environment variables with the perception of the health of the elderly shows the value  $p = 0.048$  with OR = 5.368 means good environment provide positive health perception on elderly of 5.368 times higher compared with the Environment enough. This is in accordance with [16] stated that the quality life depends on cultural norms and perceptions of relative population. The quality of life related to health includes functional limitations that physical or mental and physical welfare positive expression, mentally and spiritually. Health-related Quality of Life (HQL) can be used as an integrative size that unites the morality and morbidity and are the various elements of the index that covers death, morbidity functional limitations and healthy state peace.

### [1] CONCLUSION

The results of the study showed that the perception of the health of the elderly influenced by the health of the physical, psychological, social relations and the environment. The perception of the health of the elderly tend to have positive relationship with the health of the physical, psychological, social relations and good environment. Psychological factors and physical health is the dominant factor in influencing of elderly health perception,

### REFERENCES

- [10] Tamher, S. Noorkasiani. (2011). *Kesehatan Usia Lanjut dengan Pendekatan Asuhan Keperawatan*. Salemba Medika. Jakarta
- [11] Efendi, Ferry & Makhfud. (2009). *Keperawatan Kesehatan Komunitas Teori dan Praktik dalam Keperawatan*. Jakarta: Salemba Medika
- [12] Nugroho, Wahjudi. (2002). *Keperawatan Gerontik*. EGC: Jakarta
- [13] Kushariyadi. (2010). *Asuhan Keperawatan pada Klien Lanjut Usia*. Salemba Medika. Jakarta.
- [14] Pranarka, Kris. (2010). *Buku Ajar Geriatri (Ilmu Kesehatan Usia Lanjut) Edisi ke 4*. Balai Penerbit Fakultas Kedokteran Universitas Indonesia: Jakarta
- [15] Stanley, Mickey. (2006). *Buku Ajar Keperawatan Gerontik*. Alih Bahasa; Nety Juniarti, Sari Kurnianingsih. Editor; Eny Meiliya, Monica Ester. Edisi 2. EGC. Jakarta.
- [16] Wulan Widiyastuti, veronica, dkk (2012). *Hubungan Tingkat Pengetahuan Tentang Senam Lansia dengan Keaktifan Mengikuti Senam Lansia di Unit Rehabilitasi Sosial Wening Wardoyo Ungaran*. *Jurnal Ilmu Keperawatan dan Kebidanan Vol.1/no.1/2012 Juni.Semanrang*
- [17] Azizah, Lilik Ma'rifatul. 2011. *Keperawatan Lanjut Usia. Edisi 1*. Garaha Ilmu. Yogyakarta.
- [18] Darmojo B. (2009). *Geriatri Ilmu Kesehatan Usia Lanjut*. Edisi keempat. Jakarta: Balai Penerbit FKUI
- [19] R. Maryam,S, Fatma, M.dkk. (2008). *MengenalUsia Lanjut dan Perawatannya*. Salemba Medika. Jakarta
- [20] Mubaraq, Chayatin, Santoso. (2011). *Ilmu Keperawatan Komunitas Konsep Dan Aplikasi*. Salemba Medika. Jakarta
- [21] Hosmer, D.W, & Lemeshow, S. (2000). *Applied Logistic Regression*. New York: John Wiley and Sons, Inc.
- [22] Levy, P.S., and Stanley, L. (1999). *Sampling of Populations: Methods and Applications*. Third Edition. John Wiley and Sons. Inc. New York.
- [23] Agresti, A. (2002). *Categorical Data Analysis* (Second ed.). New York: John Wiley & Sons
- [24] Diyah Arini, Bambang Widjanarko Otok, Dwi Ernawati. (2016). The Modeling of Acute Respiratory Tract Infections (Rti) On Children 6-12 Months with Multinomial Logit Approach. *J. Basic. Appl. Sci. Res.*, 6(9).1-6, 2016
- [25] Hikmawati.Eny & Akhmad Purnama (2008). *Kondisi Kepuasan Hidup Lanjut Usia*. *Jurnal PKS Vol.VII.No 26*.

