



3<sup>rd</sup>  
**International Conference on Public Health  
2017 (ICOPH 2017)**

27<sup>th</sup> -29<sup>th</sup> July 2017, Kuala Lumpur, Malaysia

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Address : University of Jember, Indonesia.  
Paper ID : ICOPH - A - 188  
Paper Title : **ACCURACY COMPARISON OF ANTHROPOMETRIC FORMULAS OF HEIGHT ESTIMATION BASED ON SEVERAL LONG-BONES MEASUREMENT IN DEUTRO-MALAY ETHNIC**  
Date : 03<sup>rd</sup> of April, 2017

**NOTIFICATION OF ABSTRACT ACCEPTANCE ICOPH 2017 - A - 188**

Dear Ms. Ancah Caesarina Novi Marchianti,

Congratulations on the acceptance of your abstract for oral presentation and thank you for your interest in the 3<sup>rd</sup> International Conference on Public Health (ICOPH 2017). On behalf of the Conference Organizing Committee, I would like to formally invite you to attend the 3<sup>rd</sup> International Conference on Public Health 2017 to present your paper in Kuala Lumpur, Malaysia from 27<sup>th</sup> – 29<sup>th</sup> July, 2017. The conference is being hosted by Taylor's University and Mahsa University, Malaysia. It will be organized by The International Institute of Knowledge Management (TIKM) in collaboration with University of Sri Jaywardenepura, Sri Lanka, Sikkim Manipal Institute of Medical Sciences of India, Monash University of Malaysia and International Institute of Health Management Research of India.

The aim of this international conference is to provide a comprehensive dialogue for the scholars and practitioners to share and explore new heights in Public Health as the theme implies in overall. While researchers and academicians have the opportunity to present their research and on-going studies at this conference, practitioners also have the opportunity to share their experiences from the practical world.

All accepted abstracts and full papers (for those who register for the conference) will be published in the refereed Conference proceedings and Book of Abstracts with ISBN and ISSN after the conference. You have the option for including either abstract only or full paper in the proceedings. We will also make every effort to submit the proceedings to be indexed in the Thomson Reuters, SCOPUS, Mendeley, CiteULike, Cross ref and Google scholar for possible indexing.

Please visit the ICOPH website at [www.publichealthconference.co](http://www.publichealthconference.co) for more information. More details and instructions will be announced closer to the event.

We look forward to meeting you at the conference.

Yours sincerely,

**Isanka P. Gamage**  
Convener ICOPH 2017

**Conference Secretariat**

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**Invoice: 2017/CONF/ICOPH/274**

Invoice Date: 18<sup>th</sup> of May, 2017

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No	Description	Amount
1.	<b>Conference Fee: The International Conference on Public Health 2017</b> 27th -29th July 2017, Kuala Lumpur, Malaysia  - Paper ID : ICOPH - A - 188 - Paper Title : ACCURACY COMPARISON OF ANTHROPOMETRIC FORMULAS OF HEIGHT ESTIMATION BASED ON SEVERAL LONG-BONES MEASUREMENT IN DEUTRO-MALAY ETHNIC - User Registration : <b>Speaker</b> - User Category : <b>Delegate</b>	USD 475

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## 3<sup>rd</sup> International Conference on Public Health 2017



27<sup>th</sup> – 29<sup>th</sup> July 2017 - Kuala Lumpur, Malaysia

"Strengthening the Public Health Infrastructure towards Healthy Communities"



09.54 – 10.12	S10	The Empowering Elderly of Education Accompaniment to Reduce Disorder and Abundant Intellectual Depression Ahmad Ilham Nur Rahman (University of Jember, Indonesia)
10.12 – 10.30	S11	DRAQONS : Code Blue Radiofrequency Identification Card-Activated System Nurul Fadhliah, Hartono, Sarah E. Budika, Mona I. Putriani, Fadel Muhammad, Yose R. Ilhami (Andalas University, Indonesia)
10.30 – 10.50		Morning Refreshments

### TECHNICAL SESSION 32: Primary Health Care 2 (O)

Saturday, 29<sup>th</sup> July 2017 | 10.50 to 12.20 (Main Hall)

10.50 – 11.08	O8	Diabetes Knowledge, Health Beliefs And Health Behavior Among High-Risk Community Of Type 2 Diabetes In Balinese Rural Area, Indonesia Asrii, NM; Tabuchi, K ; Kobayashi, T (Hiroshima University, Japan)
11.08 – 11.26	O9	Barangay (Village) Health Board Assemblies: A Powerful Strategy to Engage Rural Communities towards Enhanced Participation and Change Larusan, LMA Fermin, ME; Mating, MM; Victorino, AA and Madino, LG. (Rural Health Unit, Kapangan Local Government Unit, Philippine)
11.26 – 11.44	O10	Demand Analysis of Using Community for First Level Health Facility Services at Program of The National Health Insurance Nuryadi; Artawan Eka Putra, Iwg (University of Airlangga, Philippines)
11.44 – 12.02	O11	Strengthening Public Health Services through Evidence-Based Practices for Saving Maternal Lives in Remote Tribal Area in India Archana Joshi, Akash Kumar Lal, Harshada Bhalerao (Public Health Training Institute, Deepak Foundation, India)
12.02 – 12.20	O12	The Integrated Model of Community Based Public Health Surveillance Arief Hargono, Kurnia Dwi Artanti (Universitas Airlangga, Indonesia)

### TECHNICAL SESSION 33: Sociology and Health (V)

Saturday, 29<sup>th</sup> July 2017 | 10.50 to 12.40 (Hall 1)

10.50 – 11.08	V1	Accuracy Comparison of Anthropometric Formulas of Height Estimation Based on Several Long-Bones Measurement in Deutro-Malay Ethnic ACN Marchianti, LS Arum and AHR Ainia (University of Jember, Indonesia)
11.08 – 11.26	V2	Seven Dimensions of Learning Culture: Enhancing Public Health Practice Through Formal Learning Ira Nurmala (Universitas Airlangga, Indonesia)
11.26 – 11.44	V3	Role of The Institution of Religion on Lifestyle and Health Behaviour: A Study of Sikhism in Malaysia Baloch Gul Muhammad (Taylor's University, Malaysia)
11.44 – 12.02	V4	Culture of Care and Health Concept of Postpartum Agustina A. Seran (Health Polytechnic Kupang, Indonesia)
12.02 – 12.20	V5	The Effect of Play Therapy Using Constructive Play Method toward Socialization Skill Improvement of Children with Mental Retardation Qamili Anindita, Yulis Setiyo Dewi, Hanik Endang Niheyati (Universitas Airlangga, Indonesia)



## ANTHROPOMETRIC STUDY IN DEUTERO-MALAY ETHNIC IN SEARCH OF ACCURATE HEIGHT FORMULAS FOR NUTRITIONAL STATUS ASSESSTMENT

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### ABSTRACT

Nutritional status can be assessed by knowing the height but because it is often difficult to quantify for example in bedrest patient or abnormal stature, it needs an alternative anthropometric measurement, such as height estimation based on long-bones measurement. Little information is available about the accuracy of these measurement, especially in deutero-malay ethnic. The present study aimed to compare accuracy for estimating height from several long-bones lengths to search an accurate anthropometric formula for nutritional status assessment. This study used an observational analytic method with cross sectional approach. The samples are students of Medical Faculty of University of Jember that meet the inclusion and exclusion criteria. Data were analyzed with Kolmogorov-Smirnov test, Pearson Correlation test and linear regression. The method is by measuring height with microtoise and bones length with medline. The result showed strong and positive ( $r > 0.5$ ) correlation between height and length of long-bones, so linear regression can be done. Among ulna, femur, humerus and radius bones, femur formula showed the highest accuracy both in men ( $r_{\text{right}} = 0.904$ ;  $r_{\text{left}} = 0.906$ ) and women ( $r_{\text{right}} = 0.911$ ;  $r_{\text{left}} = 0.900$ ). We conclude that anthropometric formula from estimation of height by length of femur is the most accurate from all formula, thus the most preferable to be used for height estimation in deutero-malay ethnic when assessing nutritional status.

**Keywords:** anthropometric formulas, height estimation, nutritional status, deutero-malay

Themes: Sociology and Health