



2nd ICMHS & 2nd LSC

PROCEEDING

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The 2nd International Conference of Medical and Health Sciences (ICMHS) and The 2nd Life Sciences Conference (LSC) 2016

*"Towards a Better Quality of Life
through Interdisciplinary Research"*

Yogyakarta, 9th-10th December 2016
The Alana Hotel and Convention Center

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**The 2nd International Conference of Medical & Health Sciences
and
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Committee of ICMHS & LSC 2016

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Partner	Dr Zahid Iqbal, Ph.D
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**Chair person of The 2nd International Conference of Medical and
Health Sciences and The 2nd Life Sciences Conference 2016**



Welcome to Jogja, sugeng rawuh!

For the second time, the Faculty of Medicine and Health Sciences Universitas Muhammadiyah Yogyakarta is going to conduct the 2nd International Conference of Medical and Health Sciences (ICMHS) this December in vibrant Yogyakarta, Indonesia. This year we are going to collaborate with the Life Sciences Society of Pakistan for their 2nd Life Sciences Conference (LSC) with Dr. Zahid Iqbal as the general secretary.

This year's conference theme "Towards a better quality of life through interdisciplinary research" will be celebrating an era of seamless interdisciplinary integration and collaboration in scientific innovations with the involvement of more extensive topics and disciplines in the conference. We aim to exhibit the products of that kind of approach in solving challenges, improving the quality of life, and creating sustainable developments. We are happy to announce that our conference is filled with Invited speakers from Pakistan, United States of America, Uni Emirates Arab, Malaysia and Indonesia. Presentations will be conducted in oral as well as poster that covers topics from medicine, public health, dentistry, pharmacy, biomedical to agriculture. To put more credibility to the conference we are collaborating with Isra Medical Journal and the Asian Journal of Agriculture and Biology to publish selected papers from the event. Other paper will be published in the ISBN Proceeding book.

The last but not least, enjoy the conference, start networking and sharing ideas, and let immerse yourself to the heritage cultural ambient of Jogja, sumonggo!

Yogyakarta, 1st December 2016

dr. Iman Permana, M.Kes, Ph.D.

**The 2nd International Conference of Medical & Health Sciences
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**Dean of Faculty of Medicine and Health Sciences,
Universitas Muhammadiyah Yogyakarta**



Assalamu'alaikum Wr. Wb.

Science, especially in the areas of health and life growing more rapidly. We need to work together in the research of various disciplines to the advancement of science and to provide benefits to human life.

After successfully organized international scientific meeting last year, the Faculty of Medical and Health Sciences Universitas Muhammadiyah Yogyakarta, held the second scientific meeting ICMHS along with "2nd Life Sciences Conference". In this second scientific meeting, FKIK UMY collaborates with various researchers, among others from Pakistan, Malaysia, and the United States. Taking the theme "Towards a better quality of life through interdisciplinary research" we hope to establish cooperation with various parties to be able to contribute ideas to the civilization of human life.

Finally, we congratulate the scientific meeting in the city of Yogyakarta Indonesia. Enjoy the beautiful city of Yogyakarta with priceless historical relics. We hope that this meeting can run smoothly and provide benefits to the advancement of knowledge.

Wassalamu'alaikum Wr. Wb.

Yogyakarta, 1st December 2016

dr. Ardi Pramono, M.Kes, Sp.An.

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Rector of Universitas Muhammadiyah Yogyakarta



Assalaamu'alaikum Wr. Wb.

Ladies and Gentlemen,

Welcome to the 2nd International Conference on Medical and Health Science in conjunction with the 2nd Life Sciences Conference 2016

Welcome to Yogyakarta City of Tolerance

Our Faculty of Medicine and Health Sciences has been doing such international conference almost every year for the last ten years. This and other previous conferences are the things that supporting our vision as an excellence and Islamic university, a young and global university. We will always try to keep monitoring the development of science through sending more lecturers to do the sabbatical leave overseas, doing international research collaborations and also the international conference. Each department should do this strategy of internationalization so that each department has its own network. Faculty of medicine and health science is one of the most progressive units in implementing this strategy by inviting international experts on a regular basis. This program will certainly strengthen our vision.

International conference on medicine and health sciences is a smart choice to offer our lecturers access to the most recent development of the subjects. The participants will also gain the same knowledge and latest information on medicine and health sciences. As everyone knows that the development of science and technology are faster today compared to the previous period. Information technology, computer, and other development havefastened the transformation of medicine and health science into the different and more complex stage.

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Cellular technology, for instance, can be used for several functions including those that directly impacts our daily life. There is no long distance call anymore today because cellular phone can do everything we need to contact other people far from where we stand anytime anywhere. People will finally innovate cellular phone for the sake of personal health services. We will in the future using our simple cellular phone to detect our body temperature, blood pressure, even how much fat we have in our body and how much it is supposed to be. We may also be able to check the health of our body without leaving our house and order medicine without going into the drug store. Everything is almost possible as long as we think hard for the better of people in the future. Enjoy the conference and don't forget to visit our rich tourist destinations, mountains, beaches or caves (underground waterways).

Thank you

Wassalaamu'alaikum Wr. Wb.

Prof. Dr. Bambang Cipto, MA

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Keynote Speech

**by Head of Provincial Health Office Special Region of Yogyakarta
in International Conference
of Medical and Health Sciences and Life Sciences Conference**

The Alana Hotel and Convention Center, Yogyakarta, December 9-10, 2016

The honorable:

- Rector of Muhammadiyah University of Yogyakarta,
- The Dean of Medical and Health Sciences Muhammadiyah University of Yogyakarta,
- The chairman of organizing committee of the international conference of medical and health,
- Distinguished guests and colleagues.

Assalamu'alaikum Warahmatullahi Wabarakatuh,

First of all, we thank God for His blessings that today we may attend the International Conference of Medical Health Towards a Better Quality of Life Through Interdisciplinary Research in Yogyakarta.

My distinguished colleagues,

In Indonesia National Long Term Development Plan (2005-2024), the Indonesian Ministry of Health have determined a paradigm shift that have governed health services in health development plan. There has been a shift from Curative Health Services to Preventive and Promotive Health Services.

Recently, Indonesia suffers from a triple burden of diseases as health development challenges. The triple burden of diseases are: 1) the backlog of common infections, undernutrition, and maternal mortality; 2) the emerging challenges of non-communicable diseases (NCDs), such as cancer, diabetes, heart disease; and 3) mental illness, and the problems directly related to globalization, like pandemics and the health consequences of climate change.

Dear colleagues,

Here are some data that show several health problems in Indonesia:

1. Maternal mortality rate in 2015 is 4,809 cases, infant mortality rate in 2015 is 22,267 cases;
2. Regarding to children under the age of five, the national stunting rate is 37.2% which consists of 18% for very short dan 19.2% for short (Risksedas 2013);

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3. HIV testing coverage is 14% dan antiretroviral (ARV) therapy coverage is 65.58% (Directorate General of Disease Control and Prevention Ministry of Health, 2015);
4. Tuberculosis (TB) notification rate in 2015 is 73.5% and tuberculosis treatment success rate is 72% (Directorate General of Disease Control and Prevention Ministry of Health, 2015).

Distinguished guests,

Indonesia Health Development Program in 2015-2019 strengths in improving human quality life through Health Indonesia Program with family approach. The Indonesian Ministry of Health issued The Minister of Health Regulation (Permenkes) No. 39 Year 2016 as a Guideline of Implementation of Health Indonesia Program with Family Approach. This program has 12 main indicators as markers of a family health status. Currently, many health programs have been implemented by Indonesian Ministry of Health, Provincial Health Offices, and District Health Offices. However, many health problems, some as mentioned above, still become health burdens. We may ask a question whether the programs that we conducted have answered the health problems we have in Indonesia.

It would be better if all health programs that we implement based on scientific health research, especially interdisciplinary research. The research should be related to detection, prevention, and treatment of diseases or problem solving for better health.

My dear colleagues,

Being a province with speciality, Special Region of Yogyakarta placed Traditional Medicine as one of the priority programs in Provincial Medium Term Development Plan (2017-2022). We still encounter many challenges in developing Traditional Medicine, especially in providing services which are based on scientific evidence.

Distinguished colleagues,

We look forward to results of interdisciplinary research which would support health problem solving, especially by developing traditional medicine in Yogyakarta. We believe that collaboration in interdisciplinary research would improve quality of human life.

Finally,

Thank you for your attention. We wish you a successful conference.

Wassalamu'alaikum Warahmatullahi Wabarakatuh,

On behalf of
the Head of Provincial Health Office
Special Region of Yogyakarta

Drg. Pembajun Setyaningastutie, M.Kes

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**SPEAKER OF
INTERNATIONAL CONFERENCE**

Zahid Iqbal

Al-Nafees Medical College Isra University Islamabad Campus Islamabad, Pakistan
“One Health Program for Public Health Benefit”

Prof. Dr. Abdul Khaliq

Professor, Department of Agronomy, University of Agriculture, Faisalabad
“Role of Agriculture in Poverty Alleviation of Rural Areas”

Fitri Arofati

Universitas Muhammadiyah Yogyakarta, Indonesia
“Continuing Professional Development of Practicing Nurses in Indonesia”

Tri Wahyuliati

Universitas Muhammadiyah Yogyakarta, Indonesia
“Diabetic Neuropathy - A Chance Towards A Better Treatment”

Mohammad Khalid Ashfaq

University of Mississippi, USA
“Natural Products –Use or Misuse”

Muhammad Mukhtar

American University of Ras Al Khaimah, United Arab Emirates
“Emerging Biotechnologies and Genomic Medicines in Human Health and Well-Being”

Muhammad Sasmito Djati

Brawijaya University Malang, Indonesia
“Herbal Medicine a Holistic Approach: in case of food supplement formulation of Sauropusandrogynus and Elephantopuscaberto modulate immune and hormonal system in pregnant Salmonella typhi infected mice”

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REVIEWER

1. Dr. Zahid Iqbal, Ph.D (Isra University, Islamabad, Pakistan)
2. Prof. Dr. Abdul Khaliq (University of Agriculture, Faisalabad)
3. Dr. Mohammad Khalid Ashfaq, DVM, DTVM, MS, Ph.D (University of Mississippi, USA)
4. Dr. Muhammad Mukhtar, Ph.D (American University of Ras Al Khaimah, United Arab Emirates)
5. Dr. Ir. Muhammad Sasmito Djati, MS. (Brawijaya University Malang, Indonesia)
6. Fitri Arofiati, S.Kep., Ns., MAN., Ph.D (Universitas Muhammadiyah Yogyakarta, Indonesia)
7. Dr. SN Nurul Makiyah, S.Si., M.Kes (Universitas Muhammadiyah Yogyakarta, Indonesia)
8. dr. Iman Permana, M.Kes, Ph.D (Universitas Muhammadiyah Yogyakarta, Indonesia)
9. Dr. dr. Ikhlas M. Jenie, M.Med, Sc (Universitas Muhammadiyah Yogyakarta, Indonesia)
10. Dr. dr. Arlina Dewi, M.Kes, AAK (Universitas Muhammadiyah Yogyakarta, Indonesia)
11. dr. Oryzati Hilman, M.Sc, CMFM (Universitas Muhammadiyah Yogyakarta, Indonesia)
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13. Dr. drg. Tita Ratya Utari, Sp. Ort (Universitas Muhammadiyah Yogyakarta, Indonesia)
14. Dr. dr. Tri Wahyuliati, Sp.S, M.Kes (Universitas Muhammadiyah Yogyakarta, Indonesia)
15. Dr. Elsy Maria Rosa, M.Kep (Universitas Muhammadiyah Yogyakarta, Indonesia)
16. Dr. dr. Titiek Hidayati, M.Kes (Universitas Muhammadiyah Yogyakarta, Indonesia)
17. Dr. Shanti Wardaningsih, M.Kep., Ns., Sp.Kep.J., Ph.D. (Universitas Muhammadiyah Yogyakarta, Indonesia)
18. Dr. dr. Sri Sundari, M.Ke (Universitas Muhammadiyah Yogyakarta, Indonesia)
19. Dra. Lilis Suryani, M.Kes (Universitas Muhammadiyah Yogyakarta, Indonesia)
20. Drh. Tri Wulandari K, M.Kes (Universitas Muhammadiyah Yogyakarta, Indonesia)
21. Dr. dr. Wiwik Kusumawati, M.Kes (Universitas Muhammadiyah Yogyakarta, Indonesia)
22. Sabtanti Harimurti, S.Si., M.Sc., Ph.D., Apt. (Universitas Muhammadiyah Yogyakarta, Indonesia)

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**SPEAKER OF
INTERNATIONAL CONFERENCE**

**Assessment of Interprofessional Communication and
Collaboration: Using Multi Methods**

Sri Sundari

Medical Education Department, Faculty of Medicine and Health Sciences,
Universitas Muhammadiyah Yogyakarta

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Abstract

IPE is meant to instill the knowledge, skills, attitudes and values necessary for interdependent collaboration and teamwork with a focus on the efficient delivery of high quality patient centered care. The link between IPE and equipping students in healthcare for collaborative practice has been made for several years. The aimed of this study to examine appropriate methods for the assessment of interprofessional learning communication skills and collaborative for clinical students of medicine, dentistry, and nursing who practice collaboration interprofessi. Design of this study is using quantitative method. During September – October 2014, 25 medical students, 20 community nursing and 16 dentistry students in the clinical rotation Faculty of Medicine and Health Science UMY involved in the implementation of a program of interprofessional collaboration. All students will undergo an IPE learning for 1 week. Students will be divided into several groups, and each group consisting of students from 3 courses. The teaching learning process of IPE is using bed site teaching, tutoring, case reflection, and case presentation. Each learning process will consist of an assessment of the clinical tutorials, case presentations, case reflection. Communication and collaboration capabilities are assessed when students do bed site teaching, tutorial and presentation of clinical cases using checklist. The results of the statistical analysis showed that the tutorial score is a significant difference between medicine and dentistry students ($p < 0,05$), medicine and nursing students ($p < 0,05$), while no significant difference between dentistry and nursing students ($p > 0,05$). The score of the case presentation is significantly different between medica and dentistry students ($p < 0,05$), medical and nursing students ($p < 0,05$), while no significant different between dentistry and nursing students ($p > 0,05$). Medical student case reflections score is significantly different from the score of nursing student ($p < 0,05$), but not different between medical and dentistry students ($p > 0,05$). The final grades were significantly difference between medical and the nursing students ($p < 0,05$), as well as between nursing and dentistry students. The conclusion of this study d showed that different needs, competencies led to different designs for educational assessment. Using many varied methods of evaluation will be assess many competencies of the students.

Keywords: assessment, interprofessional communication, collaboration.

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INTRODUCTION

Undergraduate medical, nursing, and dentistry education should enable the development of communication and team working skills and reflective practice, which should be assessed and continued into professional practice. This study aimed to examine appropriate methods for the assessment of interprofessional learning communication skills and collaborative for undergraduate students in Family Medicine, Community Nursing and Dentistry to involve in this process

MATERIALS AND METHODS

During September – October 2014, 25 medical students, 20 community nursing and 16 dentistry students in the clinical rotation faculty of Medicine and health science UMY involved in the implementation of a program of interprofessional learning and assessment. All students will undergo an IPE learning for 1 week. Students will be divided into several groups, and each group consisted of three students from the course. The teaching learning process of IPE is using Bed site teaching, tutoring, case reflection and case presentation. Bed site teaching process will be implemented in collaboration between the profession and mentored by faculty from all of the courses involved. Each learning process will consist of an assessment of the clinical tutorials, case presentations, case reflection, and MCQ exams. Bed site teaching used to give the formative assessment (feedback) for the student. And MCQ are an assessment methods were used to explore the potential to develop common activities and standards for all professions.

In the tutorial given assessment using a Likert scale. Each component is assessed in each learning process can be shown there is table 1. Final grades of students consisted of 40% of the tutorials score, 30% of the score of MCQ, 20% of the score of case presentation, and 10% of the score of case reflection. Students pass if the final score ≥ 60 . Quantitative data were analyzed using SPSS 17.

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Table 1. The methods and Components of assessing.

No	Method	Components	Score
1	Bed Site Teaching	1. Basic clinical skills a. History taking and Physical examination b. Pharmacotherapy assessment 2. Selection of investigation and Decision making 3. Management	Feedback (Formative assessment)
2	Clinical Tutorial	1. Ability of expression / presentation 2. Ability of analysis (consistent with the role of the profession) 3. Ability to communicate arguments 4. Ability settlement of disagreements with other professions 5. Value the opinions of other professions and joint decision	60 - 80
3	Case Presentation	1. The ability of systematic organization of the material, solid and clear. 2. The ability to present a systematic, concise and clearly both in writing and oral 3. The ability to discuss important matters relating to the issues suffered by the patient, including Clinical reasoning, and explained based on EBM.	60 - 80
4	Case Reflection	1. The ability of systematic Organization of the material, solid and clear. 2. Ability to evaluate, analyze and summarize the problem based on the best evidence. 3. The ability to plan follow up.	60-80

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RESULTS

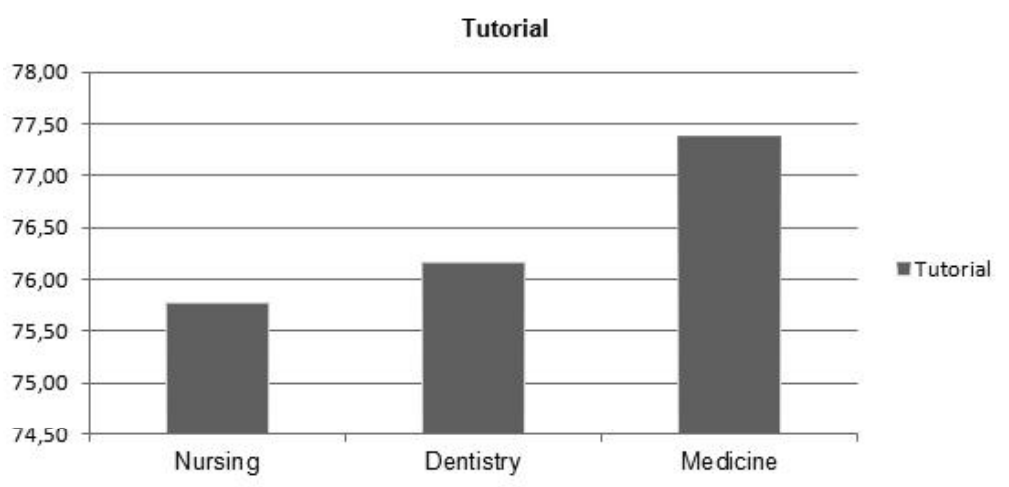


Figure 1. The Average of Tutorial Score of Each Profession

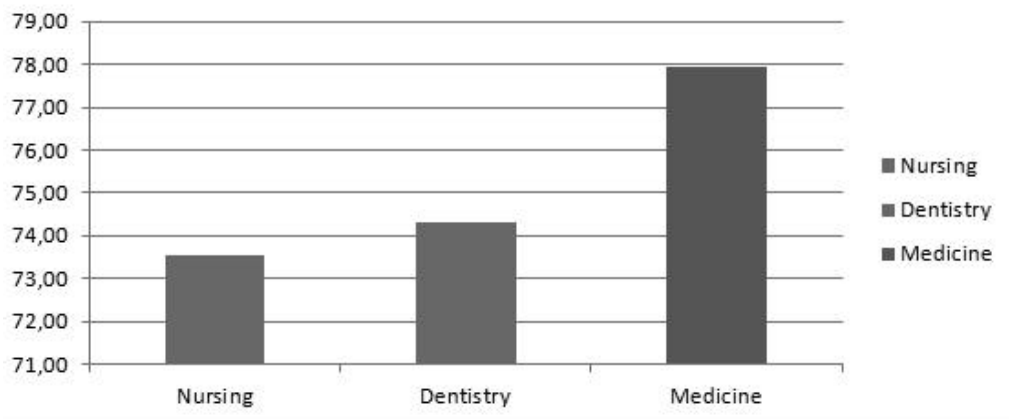


Figure 2. The Average of Case Presentation Score of Each Profession

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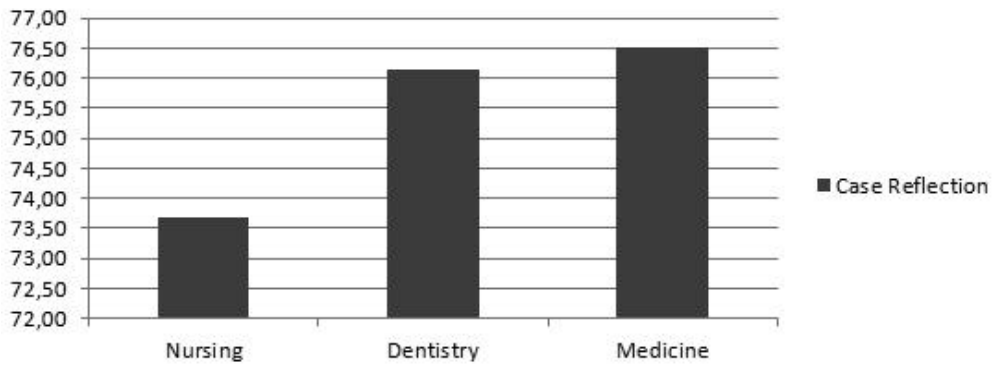


Figure 3. The Average of Case Reflection Score of Each Profession

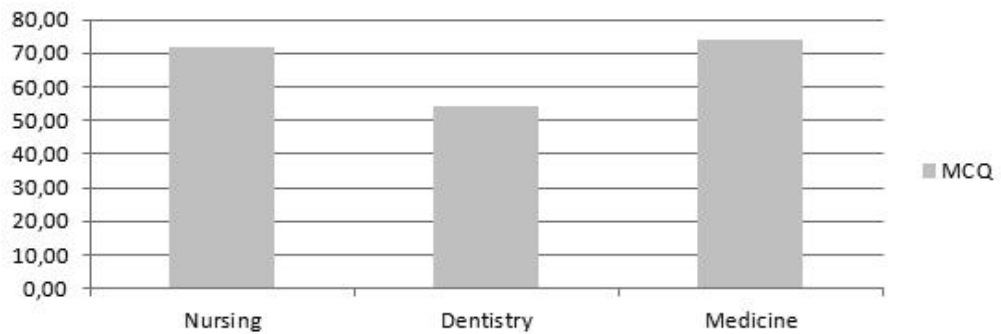


Figure 4. The Average of MCQ Score of Each Profession

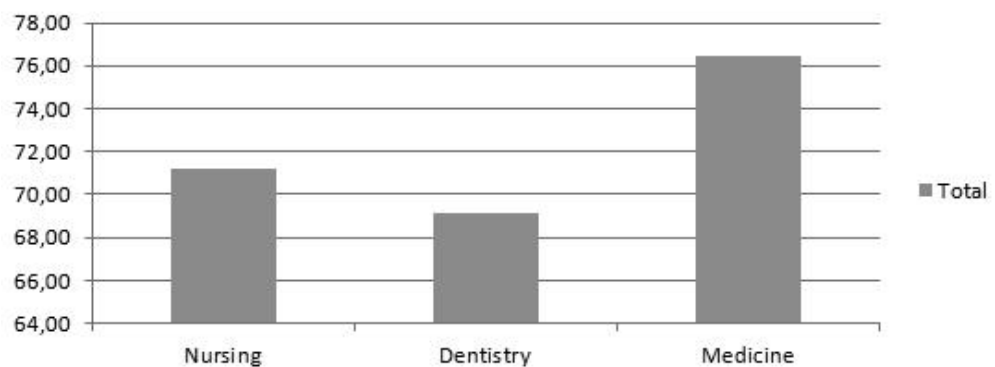


Figure 5. The Average of Final Grade Score of Each Profession

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DISCUSSION

All students respond positively to the learning IPE. The results showed that medical school students had the highest score on the tutorials, MCQ and final score. The results of the statistical analysis showed that the tutorial score is a significant difference between students of medicine and dentistry students and nursing students ($p < 0,05$), while between dentistry students and nursing students no significant difference ($p > 0,05$). The score of the case presentation is significantly different between medical students and dentistry and nursing ($p < 0,05$), while the score of student case presentations dentistry and nursing is no different ($p > 0,05$). Medical student case reflections score is significantly different from the score of nursing student ($p < 0,05$), but not different from the score of case reflection of dentistry ($p > 0,05$). MCQ scores of medical students did not differ with the score of MCQ score of nursing students ($P, 0,05$), but differ significantly with dentistry students ($p > 0,05$). The final grades were significantly difference between medical students with final grades nursing students ($p < 0,05$), as well as between nursing students with dentistry students. There are many method of assessment that are used to asses communication and collaboration competency in Faculty of Medicine and Health Science of UMY. All of the methods showed the result of score of the student's competency consistently. Using many varied methods of evaluation will be many competencies that can assess.

CONCLUSION

Interprofessional education can provide rich teaching and learning opportunities for students in a variety of health care disciplines. Medical students have the highest score in all competencies than other health disciplines. Different needs, competencies led to different designs for educational assessment. Using a combined method of assessment allowed for a richer understanding of the needs of these distinct learner groups, prompting further investigation.

REFERENCES

- Berger, J. Karen and Williams. 1999. *Fundamental Of Nursing; Collaborating for Optimal Health*, Second Editions. Apleton and Lange. Prenticehall. USA
- Bridges, D.R., Davidson, R.A., Odegard, P.S., Maki, I.V., and Tomkowiak, J., 2011. Interprofessional collaboration: three best practice models of interprofessional education. *Med. Educ.* Online. 10.3402/meo.v16i0.6035.
- Dochterman , Joanne McCloskey PhD, RN, FAAN. 2001 *Current Issue in Nursing*. 6th Editian . Mosby Inc.USA
- Morison, S.L, and Stewart, M.C., 2005. Developing interprofessional assessment. Blackwell Publishing Ltd. *Learning in Health and Social Care*, 4, 192–202

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The 2nd Life Sciences Conference 2016**

- Simmons, B., Lee, E.E., Wagner, S.J., Esdaile, M., Baker, L., And Reeves, S., 2011. Assessment of interprofessional learning: the design of an interprofessional objective structured clinical examination (iOSCE) approach. *Journal of Interprofessional Care*, 25: 73–74.
- Siegler, Eugenia L, MD and Whitney Fay W, PhD, RN., FAAN , alih bahasa Indraty Secillia, 2000. Kolaborasi Perawat-Dokter ; Perawatan Orang Dewasa dan Lansia, EGC. Jakarta
- www. nursingworld. Sieckert. 2005 Nursing - Physician workplace Collaboration. Diakses pada tanggal 12 Maret 2015
- www.nursingworld. Canon. 2005. New Horizons for Collaborative Partnership. Diakses pada tanggal 12 Maret 2015
- www. Nursingworld. Gardner. 2005. Ten Lessons in Collaboration. Diakses pada tanggal 12 Maret 2011