Study on Perception of University of Traditional Medicine Students on Physical Medicine Subjects

Principle Investigator and Department

Daw Wint Theingi

Assistant Lecturer

Physical Medicine Department

University of Traditional Medicine, Mandalay

Co-Investigators and Departments

- Prof. Maung Maung Thet (Professor Emeritus)

  University of Traditional Medicine, Mandalay
- Dr Kyaw Ko Ko Htet, Research Officer, Epidemiology Department, Department of Medical Research, Pyin Oo Lwin Branch
- Daw Kit Kit Htwe

  Assistant Lecturer, Ulcer and Sore Thearpy Department, University of Traditional Medicine, Mandalay

Background

- Traditional medicine (TM) is the sum total of the knowledge, skills and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness.(WHO, 2014)

Background (Cont.)

- Human resource development of traditional medicine is major concern for every personnel who takes responsibility and traditional medical service. The responsible person realized that effectiveness and continuity of services are impossible without properly trained practitioners.

Background (Cont.)

- The traditional medicine practitioner who has conceptual orientation to traditional medicine and technical competency will only be able to carry over such medical profession from one generation to another.

Background (Cont)

- Research activity is considered one of the high-impact of educational practices in that the vital skills and attitude for lifelong learners can be cultivated through inquiry.

- Research activities by undergraduates are a powerful way of enhancing medical students' basic skills and attitude necessary for future professional practice.

Background (Cont.)

- Inquiry and an evidence-based medicine (EBM) approach are complimentary processes in that they include recognition of important questions, search for the best research evidence, critical appraisal of the evidence, and application of the evidence to practice. (Imafuku R, 2015)

- Research in knowledge, attitude and practice (KAP) of traditional medicinal students exposed to subjects of physical medicine department including Myanmar massotheray, Panchakarma therapy, Traumatology (Abhigata) and Acupuncture therapy is important from many perspectives including improvement in KAP and teaching skills, together with capacity building and curriculum development.

- In the implementation program, studies on university students' knowledge, attitude and safe practices are essential for traditional medicine in health care and to promote the role of traditional medicine.
- Hence, this study was conducted to assess knowledge, attitude and practice toward the subjects of physical medicine department of freshman of students of university of traditional medicine, Mandalay.

Objectives

General objective

To study the perception of University of Traditional Medicine students on physical medicine subjects

Specific Objectives

- To assess University of Traditional Medicine students' perception on understanding on each subjects and students' attitude on subjects of physical medicine department

- To evaluate the perception of University of Traditional Medicine students on physical medicine subjects

Method or Procedure

- The study design is Cross-sectional study and Third year and Fourth year students, Interns of University of Traditional Medicine (Mandalay) were taken as population.
- The survey was administered during the time span of September 2017 to March 2018.
- A total of 176 responses have been collected from the population of all students of University of Traditional Medicine.

Method (Cont.)

- The research questions were investigated using a quantitative research design that included self-administered questionnaires.
- Third year, fourth year students and interns of university of traditional medicine were selected to participate administered the questionnaire.
- The selected students were contacted and given an explanation about the purpose of this research.

Method (Cont.)

- 20 questionnaires allow students to determine how much their understanding in subjects and an administered questionnaire to be answered by score 0-100.

Scores:

between 76 – 100 means highly understand.

between 51 - 75 means student understand.

between 26 - 50 means less understand.

between 0- 25 means lack of understanding.

Method (Cont.)

- 7 questionnaires to determine their attitudes on subjects based on the four options of as:
  - Agree,
  - Strongly agree,
  - Disagree and
  - Strongly disagree.

Data collection and analysis

- The data were collected over the course of semesters.
- Data were collected using structured self-administered questionnaires and the result was analyzed using SPSS with percentages in appropriate tables and uni variate analysis to display the descriptive part of the study.

Ethical consideration

- Prior to the commencement of study, the proposal was submitted to Ethical Review Committee, Department of Traditional Medicine, Ministry of Health and Sports.
- The Ethical clearance for this study was obtained from the Ethic Review Board.
- Each participant of the study was informed about confidentiality. Each participant of the study was chosen voluntarily basic and given written consent to participate. Participants were allowed to discontinue the research process if they don't wish to participate any

Result

- Data analysis has been done through statistical package SPSS version 21. The Cronbach's alpha correlation coefficient for 27 items yielded 0.921 which is more than the prescribed cutoff of 0.70. Thus, the association in reliability analysis is high, the scale gives consistent results and it is reliable.
- The data were analyzed by descriptive type to more closely investigate the relationship between students' perceptions of learning and effective teaching plan.
- There were a total of 176 students and only 2 students dropped out in this study.

Demographic Characteristic of Students

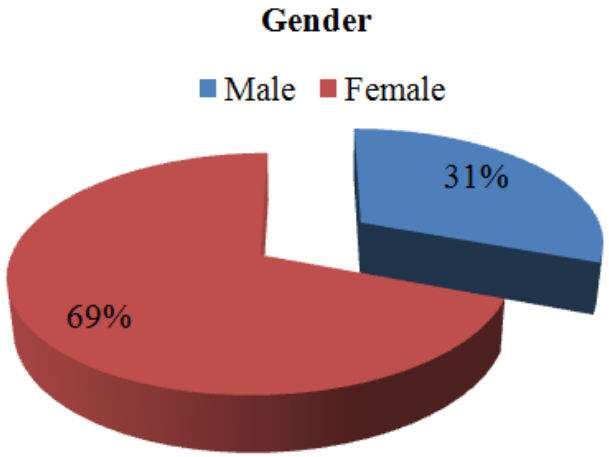


Figure 1 Gender of Students

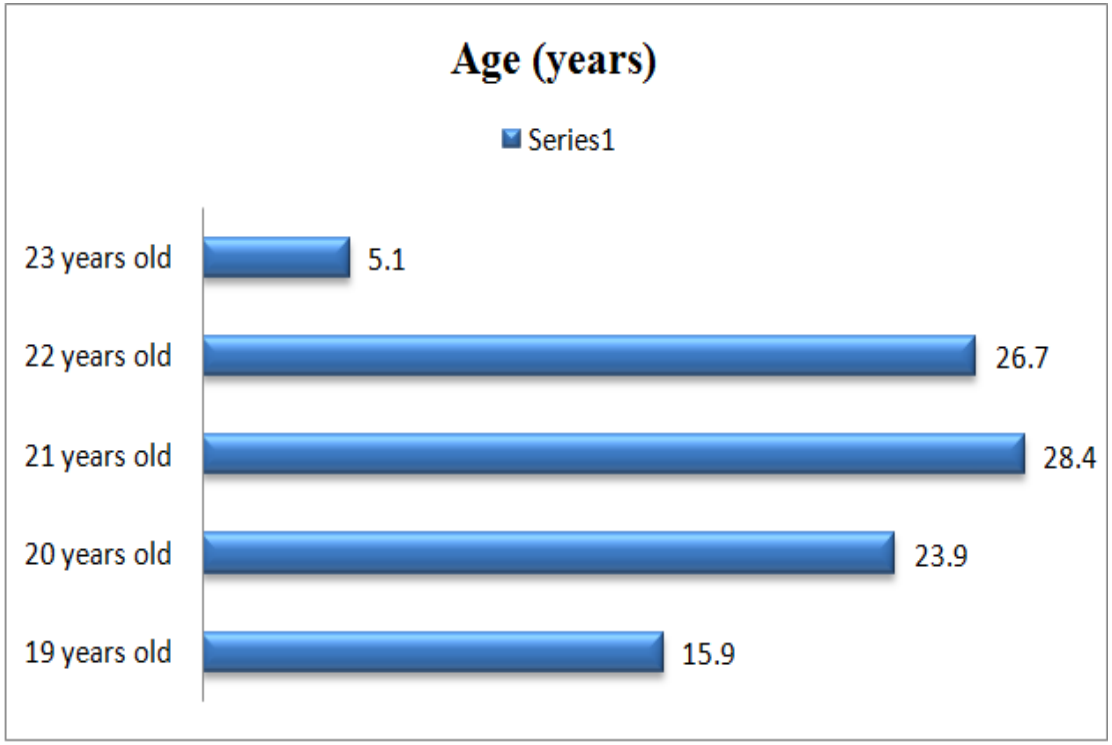


Figure 2 Age of Students

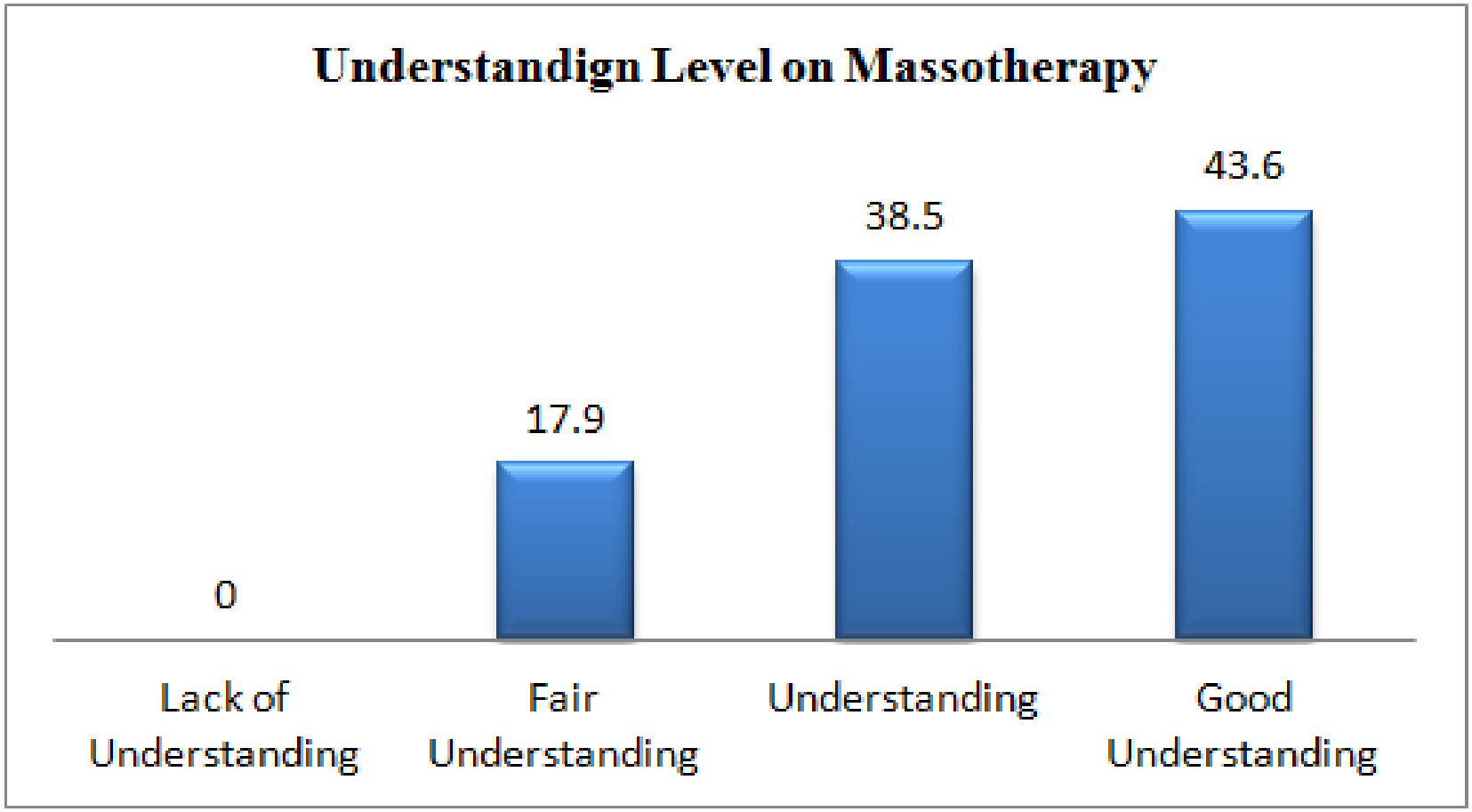
Academic Year	Frequency	Percent
Third Year	48	27.3
Fourth Year	51	29
Interns	77	43.8
Total	176	100

Uni variate Analysis on Massotherapy

Variables	Academic years			P value
	Third year	Fourth year	Interns	
	Mean ± SD	Mean ± SD	Mean ± SD	
Understanding on basic principles of Myanmar massotherapy?	72.9 ± 14.1	73.6 ± 12.8	70 ± 14.2	.240
Understanding anatomical aspect and surface marking of the pressure points of the body to locate the pressure points?	69 ± 14.1	74.4 ± 15.4	69.3 ± 16.3	.115
Providing therapeutic massage based on the guidelines and concepts for various pressure points?	66.8 ± 14.8	70.3 ± 15.9	68.1 ± 14.3	.502
Providing massotherapy to patients can you decide kind of pressure, pressure intensity and preparation of the patient?	68.7 ± 13.9	73.9 ± 16.5	73 ± 16.1	.205
Understanding ethics for massotherpaists?	80.5 ± 16.6	80.4 ± 16.6	80.7 ± 15.6	.993

- In Univariate analysis, there was no significant difference in Questions for Massotherapy among the students in different academic years.
- The highest average score in understanding on massothreapy was observed in fourth year students except on ‘Understanding ethics for massotherapists’ with a little difference.
- The average of all mean score was over 66.

Understanding Level on Massotherapy



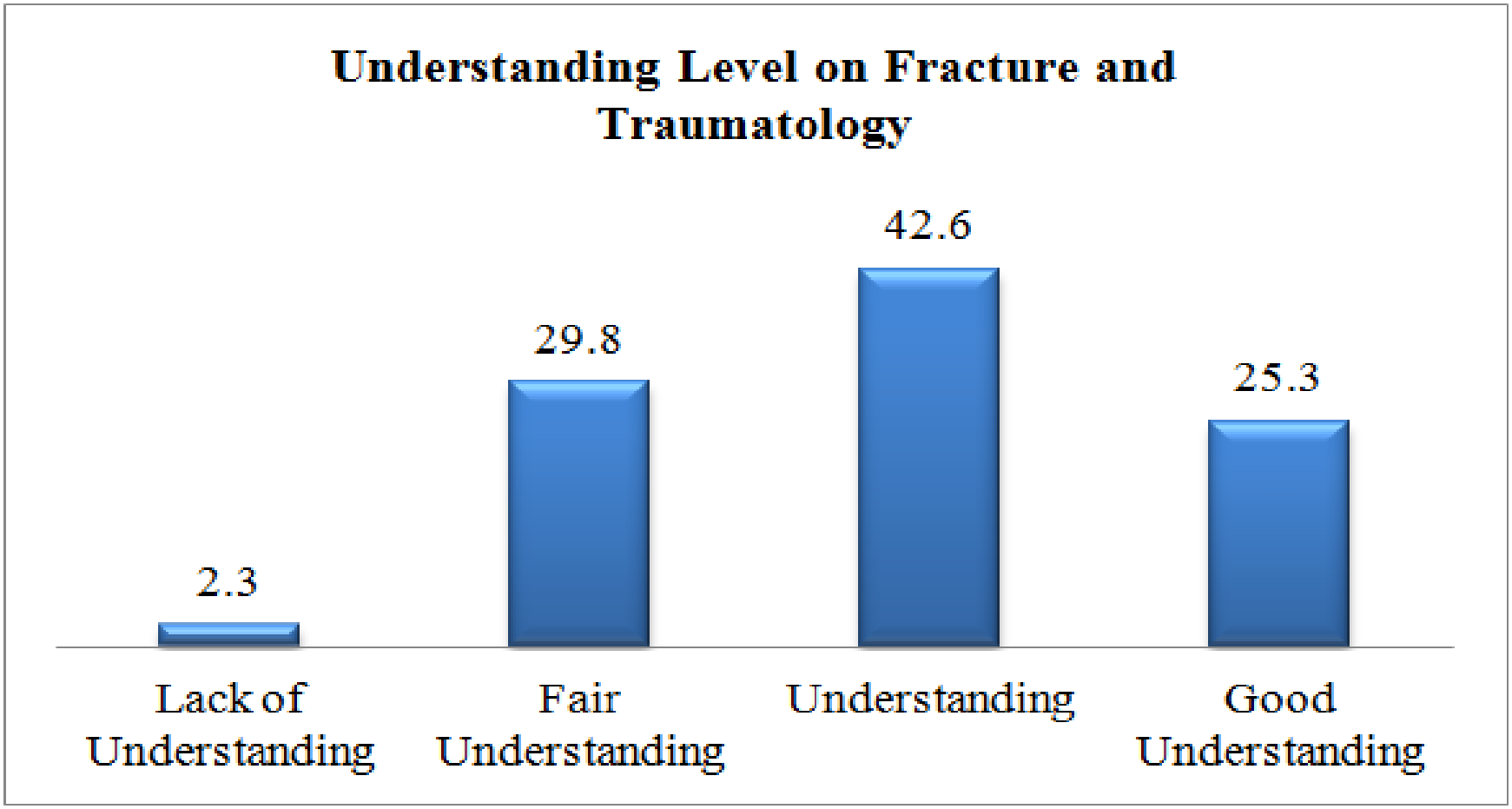
Uni variate Analysis on Fracture and Traumatology

Variables	Academic years			P value
	Third year	Fourth year	Interns	
	Mean ± SD	Mean ± SD	Mean ± SD	
Understanding on concepts and principles of fractures and traumatology (*Abhigata*)	63.4 ± 15.2	67.0 ± 14.9	61.3 ± 16.5	.149
Performing examination for types of fractures	66.4 ± 14.2	62.9 ± 15.6	55.1 ± 19.4	.001
Understanding on types of facture by the perspectives of traditional medicine	67.9 ± 15.4	70.1 ± 17.8	63.9 ± 20.4	.155
Observing fractures can you decide appropriate treatment regimen	67.0 ± 13.3	69.7 ± 15.3	60.0 ± 18.2	.002
Providing management for fracture systematically to the patient	65.8 ± 14.5	71.1 ± 17.1	58.7 ± 20.8	.001

- The highest average score in understanding on fractures and traumatology (*Abhigata*) was observed in fourth year students except on ‘Performing examination for types of fractures’ and followed by third year students than interns.
- The average of all mean score was greater than 55.

- Moreover, interns answered less understanding in this subjects than other academic years, according to hospital data there was less patients with fracture than other diseases such as hemiplegia, low back pain etc in Physical Medicine Ward of Traditional Medicine Teaching Hospital. Therefore, they did not have many experiences for fractures.

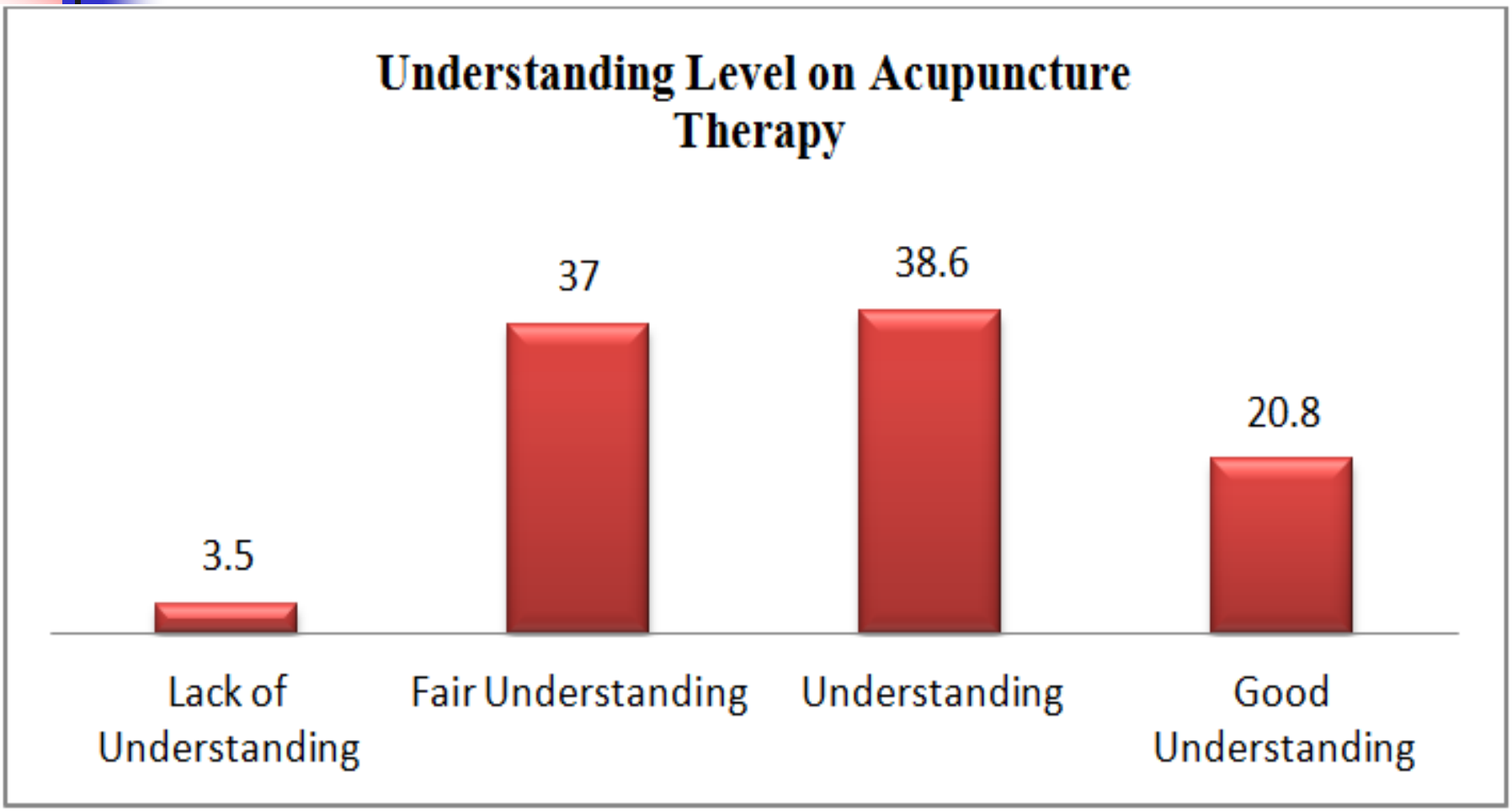
Understanding Level on Fracture and Traumatology



Uni variate Analysis on Acupuncture Therapy

Variables	Academic years			P value
	Third year	Fourth year	Interns	
	Mean ± SD	Mean ± SD	Mean ± SD	
Understanding on basic concept and principle of TCM (Traditional Chinese medicine)	62.3 ± 15.2	68.4±17.4	55.5±18.4	.000
Describing methods of diagnosis by TCM	59.1±16.2	64.5±16.3	48.9±18.6	.000
Describing anatomical aspect and surface marking of the acupuncture points of the body to locate the acupuncture points	61.3±16.0	71.8±15.3	60.1±20	.001
Assessing the therapeutic effect of acupuncture points based on their locations	60.6±15.7	69.9±14.1	54.8±19.7	.000
Understanding on how to select acupunctures points in various disorders	56.0±16.7	70.5±15.1	57.4±20.5	.000

Understanding Level on Acupuncture Therapy

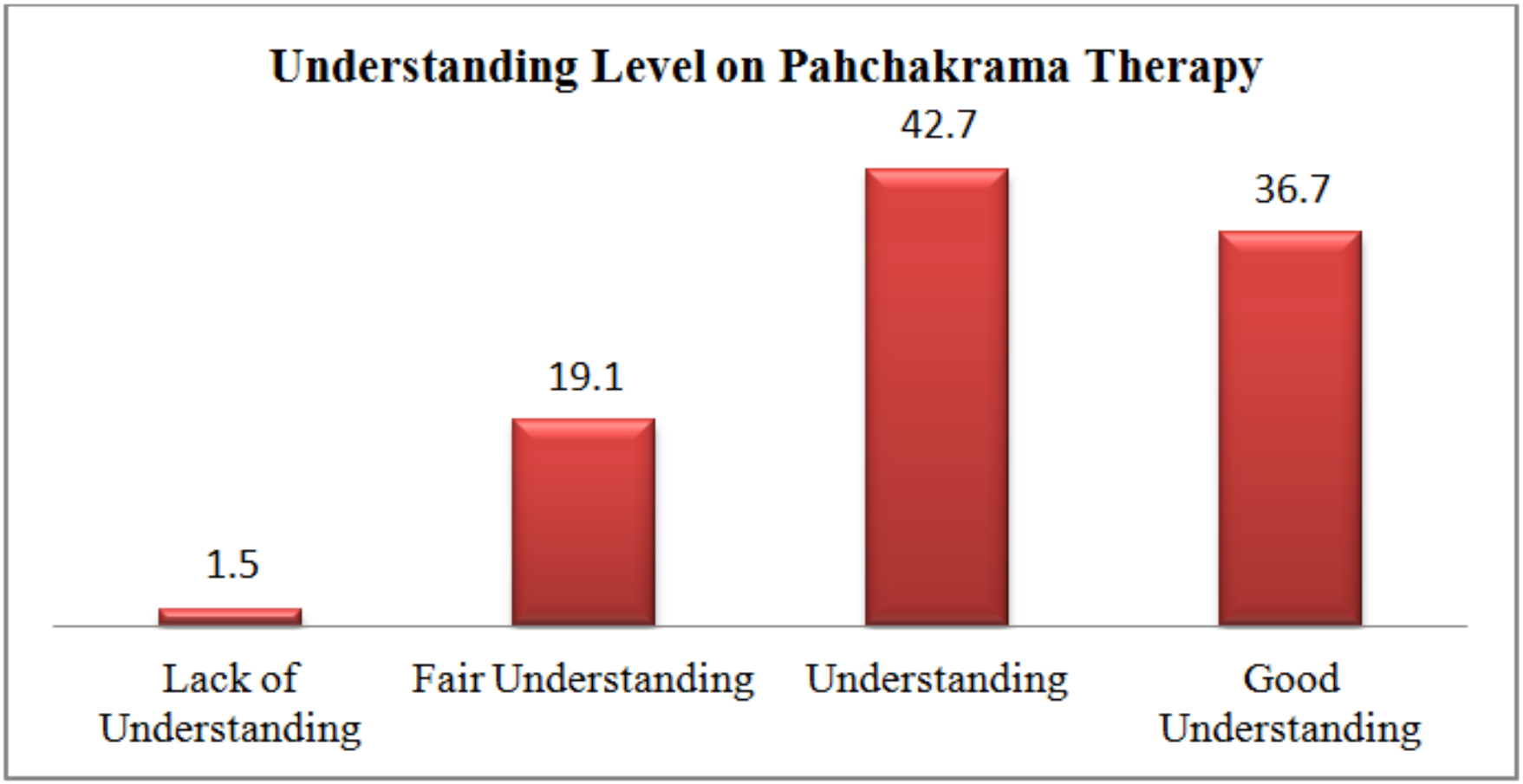


Uni variate Analysis on PanchakarmaTherapy

Variables	Academic years			P value
	Third year	Fourth year	Interns	
	Mean ± SD	Mean ± SD	Mean ± SD	
Understanding the basic principles of *Panchakarma* therapy	64.6± 17.7	68.6±15.7	72±16.1	.052
Define and classify *Panchakarma* therapy	70.9±18.5	72.0±16.0	70.1±17.9	.836
Decide to prescribe *Panchakarma* therapy based on signs and symptoms of the patients	61.0±17.8	69.9±16.8	74.4±13.1	.000
Perform therapeutic procedure of *Panchakarma* therapy	57.8±18.8	69.0±17.8	75.8±13.8	.000
Assess and decide the symptoms of proper effect, inadequate effect or excessive effect of *Panchakarma* therapy as mentioned in literature	59.9±15.7	68.8±15.3	69.8±17.1	.003

- The highest average score was observed in interns and followed by fourth year students than third year students.
- Only one statement of fourth year students on ‘Define and classify Panchakarma therapy’ higher than interns.
- The average of all mean score was over 57.

Understanding Level on PanchakarmaTherapy



Uni variate analysis on students' attitude

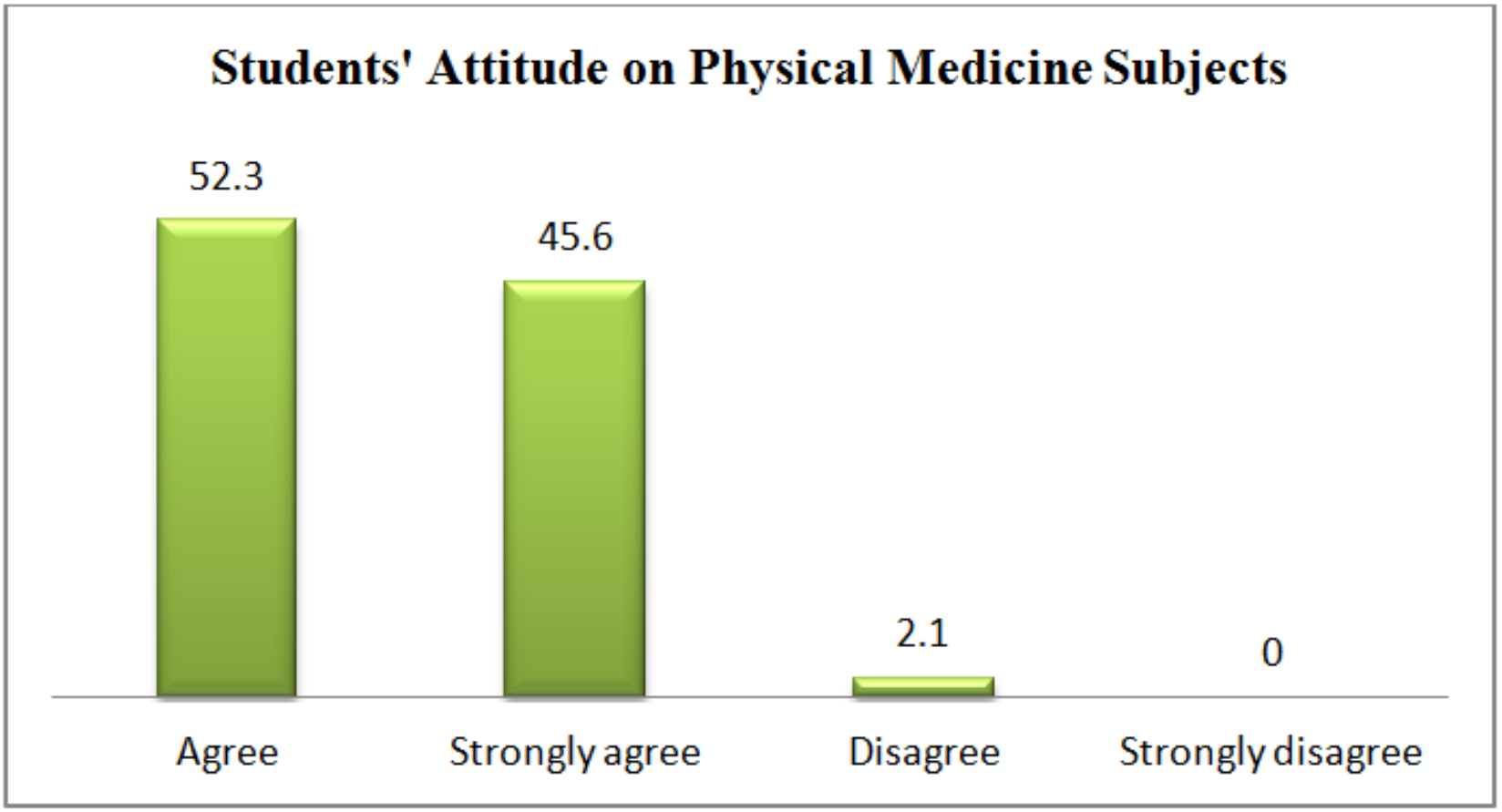
Students' Attitude		Academic Years						
		Third Year		Fourth Year		Interns		P value
		N	%	N	%	N	%	
Trustworthiness of a student as a traditional medicine practitioner	Agree	20	20.8	28	29.2	48	50.0	.125
	Strongly Agree	26	33.8	22	28.6	29	37.7	.089
	Disagree	2	66.7	1	33.3	0	0.0	.012
	Strongly Disagree	0	0.0	0	0.0	0	0.0	
You can display self-reliance, self-learning and interested in research related to physical medicine and therapy	Agree	32	27.4	36	30.8	49	41.9	.476
	Strongly Agree	12	23.5	13	25.5	26	51.0	.506
	Disagree	4	50	2	25.0	2	25.0	.869
	Strongly Disagree	0	0	0	0	0	0	

Students' Attitude		Academic Years						
		Third Year		Fourth Year		Interns		P value
		N	%	N	%	N	%	
You need to acquire continuous learning in physical therapy (TM) of the other related countries.	Agree	23	23.7	33	34.0	41	42.3	.055
	Strongly Agree	21	28.8	16	21.9	36	49.3	.027
	Disagree	4	66.7	2	33.3	0	0	.258
	Strongly Disagree	0	0.0	0	0.0	0	0.0	
You display to collaborate with other medical professionals and be able to do knowledge sharing.	Agree	24	27.9	27	31.4	35	40.7	.402
	Strongly Agree	23	26.4	22	25.3	42	48.3	.293
	Disagree	1	33.3	2	66.7	0	0	.775
	Strongly Disagree	0	0.0	0	0.0	0	0.0	

Students' Attitude		Academic Years						
		Third Year		Fourth Year		Interns		P value
		N	%	N	%	N	%	
Compare and correlate knowledge of other therapeutics.	Agree	23	27.1	22	25.9	40	47.1	.773
	Strongly Agree	25	28.1	28	31.5	36	40.4	.682
	Disagree	0	0.0	1	50.0	1	50.0	.685
	Strongly Disagree	0	0.0	0	0.0	0	0.0	
Realize the importance of these subjects in treatment of diseases	Agree	21	24.4	19	21.1	46	53.5	.062
	Strongly Agree	27	30.3	31	34.8	31	34.8	.060
	Disagree	0	0.0	1	100	0	0.0	.050
	Strongly Disagree	0	0.0	0	0.0	0	0.0	

Students' Attitude		Academic Years						
		Third Year		Fourth Year		Interns		P value
		N	%	N	%	N	%	
You promote to apply effectively these treatments in patient's care..	Agree	20	26.0	27	35.1	30	39.0	.590
	Strongly Agree	27	28.1	23	24.0	46	47.9	.590
	Disagree	1	33.3	1	33.3	1	33.3	.705
	Strongly Disagree	0	0.0	0	0.0	0	0.0	

Students' Attitude on Physical Medicine Subjects



Discussion

- In this research, understanding level on Massotherapy, the majority of students was observed ‘good understanding’. In the others subjects, Fracture and Traumatology, Acupuncture therapy and Panchakrama therapy, the majority of students were observed ‘understanding’.
- The majority of students were distributed in agreement and strongly agreed, while a few student responses were of disagreement. Therefore, the students’ perceptions and attitude are positive influenced.

Discussion

- However, it will need to do focus group discussion research to know the exact reason for their description, to solve their needs and to get more outcomes positively for ‘less understanding level’ and disagreement students.
- Although final course examination scores have been the primary criterion for establishing the validity of student evaluations, the scores reflect only a limited view of student learning outcomes.

Discussion

- More comprehensive indicators of student learning would go beyond a single exam score, which typically reflects only narrowly defined course objectives.
- Such indicators might include student perceptions of their increased interest in the subject, critical thinking skills, interpersonal outcomes, intrapersonal outcomes and other broad course outcomes.
- This study indicates that student learning is highly influenced by the effort students put forward.

Discussion

- Although a teacher can do much to facilitate learning and can certainly provide some motivation, ultimately students themselves must take some responsibility for their learning in a course.
- These findings could provide insights into the potential for implementation research in health professions education, which can further enhance students' deeper approach to learning and cultivate their basic skills necessary to continuing professional development.

Acknowledgements

- I would like to offer my sincerest gratitude to Dr Myint Htwe, Prime Minister, Ministry of Health and Sports, Naypyitaw, Dr Yi Yi Myint, Former Director General and U Kyaw Thein Htay, Acting Director General, Department of Traditional Medicine, Naypyitaw, Dr Kyaw Oo (Deputy Director General (Retired), Department of Human Resources for Health) and all members of the Ethical Review Committee of Department of Traditional Medicine for the acceptance of this protocol and for allowing me to conduct this study.

Acknowledgements

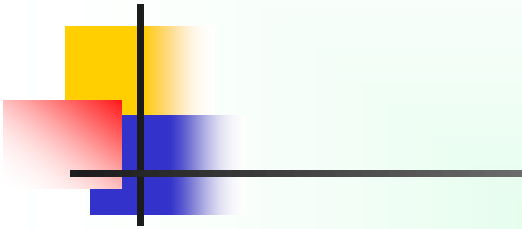
- I am immensely grateful to Facilitators, Dr Theim Kyaw, Rector, U Tun Myint, Pro-rector (Admin), Dr Kyi Kyi Oo, Deputy Director (Research), Research and Development Division and U Than Oo, Lecturer and Head of Department of English of University of Traditional Medicine for their kind guidance and energetic encouragement.

Acknowledgements

- I would like to express my special thanks to Daw San Thida Moe, Tutor, Department of Physical Medicine, University of Traditional Medicine, Daw May Zun Myint Wai, Daw Kay Zun Theint, Daw Naw Lu Di, Daw Nan Aye Su Pan, Daw Hnin New Aye, Daw Ei Ei Mar for helping me to collect and entry data.
- I want to mention my special thanks to all students of University of Traditional Medicine for their cooperation in this study.

References

- DPM, 2005. Department of Physical Medicine, University of Traditional Medicine
- Hook, 2010. Traditional Medicine in Union of Myanmar
- Rintaro Imafuku, Takuya Saiki, Chihiro Kawakami and Yasuyuki Suzuk, 2015. IJME, How to students' perceptions of research and approaches to learning change in undergraduate research.
- WHO, World Health Organization. Traditional medicine strategy, 2014-2023. Traditional and complementary medicine



Thank you!