

TABLE OF CONTENT

TITLE PAGE	i
APPROVAL PAGE	ii
AUTHENTICITY STATEMENT	iii
PREFACE	iv
TABLE OF CONTENT	v
LIST OF TABLES AND FIGURES.....	viii
LIST OF ABBREVIATIONS	ix
LIST OF APPENDICES	x
INTISARI	xi
ABSTRACT.....	xii
CHAPTER I INTRODUCTION	
I.A. Background	1
I.B. Problem Formulation	2
I.C. Research Question.....	3
I.D. Research Authenticity.....	3
I.E. Research Objective.....	5
I.F. Research Benefit.....	5
CHAPTER II BIBLIOGRAPHICAL REVIEW	
II.A. Bibliographical Review	6
II.A.1. Mitral Stenosis.....	6
II.A.2. Pulmonary Hypertension	15
II.A.3. Pulmonary Hypertension in Mitral Stenosis.....	22
II.B. Theoretical Framework.....	25
II.C. Conceptual Framework.....	26
II.D. Hypothesis.....	26

CHAPTER III RESEARCH METHODOLOGY

III.A. Research Design.....	27
III.B. Sampling and Data Collection.....	27
III.C. Subject and Population.....	27
III.D. Research Variable.....	28
III.E. Operational Definitions.....	28
III.F. Sample Size Calculation.....	30
III.G. Place and Time of Study.....	31
III.H. Research Instruments.....	31
III.I. Research Procedure.....	31

CHAPTER IV RESULT AND DISCUSSION

IV.A. Result.....	33
IV.A.1. Characteristics of the Subjects.....	33
IV.A.2. Correlation Between Mitral Valve Area and Mean Pulmonary Artery Pressure.....	34
IV.A.3 Correlation Between Mitral Stenosis Severity and Pulmonary Hypertension.....	36
IV.B. Discussion.....	37
IV.B.1. Characteristics of the Subjects.....	37
IV.B.2. Correlation Between Mitral Stenosis Severity and Pulmonary Hypertension.....	38
IV.B.3 Correlation Between Mitral Regurgitation and Pulmonary Hypertension.....	39
IV.B.4 Research Limitation.....	41

CHAPTER V CONCLUSION AND SUGGESTION

V.A. Conclusion.....	43
V.B. Suggestion.....	43

REFERENCES	44
APPENDICES	46

LIST OF TABLES AND FIGURES

Table 1	List of previous studies	4
Table 2	Wilkins scoring system for mitral stenosis severity	11
Table 3	PAP classification based on PVAT value	19
Table 4	Characteristic of the subjects based on sex, age, mitral regurgitation, hypertension, diabetes mellitus, and the severity of the mitral stenosis	34
Table 5	Correlation test result between the mitral valve area (MVA) and mean pulmonary artery pressure (mPAP).....	35
Table 6	Chi-square test result	30
Figure 1	Pressure half-time (PHT).....	14
Figure 2	Correlation between the mitral valve area (MVA) and mean pulmonary artery pressure (mPAP) presented in scatter-plot.....	36

LIST OF ABBREVIATIONS

- AR : Aortic Regurgitation
- ECG : Echocardiography
- LV : Left Ventricle
- LVEDP : Left Ventricle End Diastolic Pressure
- MS : Mitral Stenosis
- MVA : Mitral Valve Area
- mPAP : Mean Pulmonary Artery Pressure
- PAP : Pulmonary Artery Pressure
- PAH : Pulmonary Artery Hypertension
- PCWP : Pulmonary Capillary Wedge Pressure
- PH : Pulmonary Hypertension
- PHT : Pressure Half Time
- PVAT : Pulmonary Velocity Acceleration Rate
- RHC : Right Heart Catheterization
- RV : Right Ventricle
- RVSP : Right Ventricle Systolic Pressure
- TPG : Trans Pulmonary Gradient
- TTE : Trans Thoracic Echocardiography

LIST OF APPENDICES

Appendix 1. Normality test.....	46
Appendix 2. Descriptive statistics of the subjects.....	46
Appendix 3. Statistical analysis of Spearman test between the mitral valve area (MVA) and mean pulmonary artery pressure (mPAP).....	47
Appendix 4. Baseline characteristics of the subject.....	47
Appendix 5. Chi-square test result and cross-tabulation of mitral stenosis severity and the mean pulmonary artery pressure (mPAP).....	51
Appendix 6. Ethics committee approval	53