

## TABLE OF CONTENTS

TITLE PAGE .....	i
APPROVAL PAGE .....	ii
AUTHENTICITY STATEMENT .....	ii
PREFACE .....	iv
TABLE OF CONTENTS .....	vi
LIST OF TABLES .....	ix
LIST OF FIGURES .....	x
LIST OF APPENDICES .....	xi
LIST OF ABBREVIATIONS .....	xii
ABSTRACT .....	xiii
INTISARI .....	xiv
CHAPTER I INTRODUCTION .....	1
A. Research Background .....	1
B. Problem Formulation .....	2
C. Aim of Research .....	2
D. Study Authenticity .....	2
E. Study Benefit .....	4
CHAPTER II LITERATURE REVIEW .....	5
A. Literature Review .....	5
1. Congenital Heart Diseases .....	5
2. Cardiac Murmur .....	10
3. Echocardiography .....	16
B. Theoretical Framework .....	17
C. Conceptual Framework .....	18
D. Research Hypothesis .....	18

CHAPTER III METHODS OF RESEARCH .....	19
A. Research Design.....	19
B. Time and Study Setting.....	19
C. Population and Subject.....	19
1. Inclusion criteria.....	19
2. Exclusion criteria .....	20
D. Variable and Operational Definition of the Variable.....	20
E. Sample and Collection .....	22
1. Sample Size.....	22
2. Data Collection.....	23
F. Research Flow .....	24
G. Data Analysis .....	24
CHAPTER IV RESULT .....	25
A. Result .....	25
1. Univariate Analysis.....	25
2. Diagnostic Value of Cardiac Murmur Compared to Echocardiography as The Gold Standard in Various Type of Congenital Heart Disease .....	27
B. Discussion .....	34
C. Study Limitations.....	40
CHAPTER V CONCLUSION AND SUGGESTION .....	41
A. Conclusion .....	41
B. Suggestion.....	41
REFERENCES.....	42
APPENDICES .....	45
Appendix 1. ASD .....	45
Appendix 2. PDA.....	45
Appendix 3. PS .....	46

Appendix 4. TOF .....	46
Appendix 5. VSD .....	46
Appendix 6. Normality Test: Age .....	47
Appendix 7. Normality Test: Weight .....	48

## LIST OF TABLES

Table Number	Title of Table	Page
Table 1	Study Authenticity .....	2
Table 2	Levine & Freeman's 6-level Murmur Grading Scale ...	11
Table 3	Operational Definition .....	21
Table 4	Baseline Characteristics.....	25
Table 5	Diagnostic Value of Cardiac Murmur Compared to Echocardiography Result as the Gold Standard .....	28

## LIST OF FIGURES

Figure Number	Title of Figure	Page
Figure 1	Theoretical Framework.....	17
Figure 2	Conceptual Framework .....	18
Figure 3	Research Design .....	24

## LIST OF APPENDICES

Appendix Number	Title of Appendix	Page
Appendix 1	ASD .....	45
Appendix 2	PDA .....	45
Appendix 3	PS .....	46
Appendix 4	TOF .....	46
Appendix 5	VSD .....	46
Appendix 6	Normality Test: Age .....	47
Appendix 7	Normality Test: Weight .....	48
Appendix 8	Ethical Clearance.....	49

## LIST OF ABBREVIATIONS

AHA	: American Heart Association
ASD	: Atrial Septal Defect
BMI	: Body Mass Index
CHD	: Congenital Heart disease
ES	: Ejection Systolic
LA	: Left Atrium
LR +	: Positive Likelihood Ratio
LR -	: Negative Likelihood Ratio
LV	: Left Ventricle
NPV	: Negative Predictive Value
PDA	: Patent Ductus Arteriosus
PPV	: Positive Predictive Value
PS	: Pulmonary Stenosis
RA	: Right Atrium
RV	: Right Ventricle
SN	: Sensitivity
SP	: Specificity
TOF	: Tetralogy of Fallot
VSD	: Ventricular Septal Defect