

## TABLE OF CONTENT

|                                                                                   |           |
|-----------------------------------------------------------------------------------|-----------|
| <b>APPROVAL PAGE .....</b>                                                        | <b>2</b>  |
| <b>TABLE OF CONTENT .....</b>                                                     | <b>3</b>  |
| <b>LIST OF FIGURES .....</b>                                                      | <b>5</b>  |
| <b>LIST OF TABLES .....</b>                                                       | <b>6</b>  |
| <b>1. INTRODUCTION .....</b>                                                      | <b>7</b>  |
| 1.1 Background .....                                                              | 7         |
| 1.2 Problem Formulation.....                                                      | 8         |
| 1.3 Study Objective .....                                                         | 8         |
| 1.4 Study Benefits .....                                                          | 9         |
| <b>2. LITERATURE REVIEW .....</b>                                                 | <b>10</b> |
| 2.1 Definition.....                                                               | 10        |
| 2.2 Classification .....                                                          | 10        |
| 2.2.1 Primary Glaucoma.....                                                       | 11        |
| 2.2.2 Secondary Glaucoma .....                                                    | 12        |
| 2.2.3 Congenital Glaucoma .....                                                   | 13        |
| 2.3 Risk Factor .....                                                             | 13        |
| 2.3.1 Age .....                                                                   | 13        |
| 2.3.2 Race.....                                                                   | 14        |
| 2.3.3 Family History .....                                                        | 14        |
| 2.3.4 Myopia .....                                                                | 14        |
| 2.4 Diagnostic Tools .....                                                        | 15        |
| 2.4.1 OCT.....                                                                    | 15        |
| 2.4.2 Humphrey Field Analyzer (HFA) .....                                         | 17        |
| 2.4.3 Snellen Chart .....                                                         | 17        |
| 2.4.4 Tonometry.....                                                              | 18        |
| 2.5 Epidemiology .....                                                            | 18        |
| 2.5.1 Global Epidemiology .....                                                   | 18        |
| 2.5.2 National Epidemiology .....                                                 | 19        |
| 2.6 Staging of Glaucoma.....                                                      | 20        |
| 2.6.1 Functional Assessment .....                                                 | 21        |
| 2.6.2 Structural Assessment .....                                                 | 22        |
| 2.6.3 Structural and Functional Assessment (Global Glaucoma Staging System) ..... | 24        |
| <b>3. RESEARCH METHODOLOGY .....</b>                                              | <b>28</b> |
| 3.1 Study Design .....                                                            | 28        |
| 3.1.1 Procedure.....                                                              | 28        |

|             |                                                                       |                  |
|-------------|-----------------------------------------------------------------------|------------------|
| <b>3.2</b>  | <b>Study Design and Setting .....</b>                                 | <b>28</b>        |
| <b>3.3</b>  | <b>Study Population and Sample .....</b>                              | <b>28</b>        |
| <b>3.5</b>  | <b>Data Collection.....</b>                                           | <b>30</b>        |
| <b>3.6</b>  | <b>Study Variable .....</b>                                           | <b>30</b>        |
| <b>3.7</b>  | <b>Operational Definition.....</b>                                    | <b>31</b>        |
| <b>3.8</b>  | <b>Study plan .....</b>                                               | <b>35</b>        |
| <b>3.9</b>  | <b>Statistical and data analysis .....</b>                            | <b>35</b>        |
| <b>3.10</b> | <b>Ethical Consideration .....</b>                                    | <b>35</b>        |
| <b>3.11</b> | <b>Study Timeline .....</b>                                           | <b>36</b>        |
| <b>4.</b>   | <b><i>RESULT AND DISCUSSION .....</i></b>                             | <b><i>37</i></b> |
| <b>4.1</b>  | <b>Subject General Profile .....</b>                                  | <b>37</b>        |
| <b>4.2</b>  | <b>Intra-Ocular Pressure Profile.....</b>                             | <b>37</b>        |
| <b>4.3</b>  | <b>Visual Acuity .....</b>                                            | <b>38</b>        |
| <b>4.4</b>  | <b>Functional Profile .....</b>                                       | <b>39</b>        |
| <b>4.5</b>  | <b>Structural Profile .....</b>                                       | <b>40</b>        |
| <b>4.6</b>  | <b>Descriptive Analysis of Functional and Structural Profile.....</b> | <b>41</b>        |
| <b>4.7</b>  | <b>First Diagnosis .....</b>                                          | <b>42</b>        |
| 4.7.1       | Descriptive Analysis with Age .....                                   | 42               |
| 4.7.2       | Descriptive Analysis with IOP.....                                    | 43               |
| 4.7.3       | Descriptive Analysis with Functional Stages .....                     | 44               |
| 4.7.4       | Descriptive Analysis with Structural Stages .....                     | 45               |
| <b>5.</b>   | <b><i>CONCLUSION AND SUGGESTION.....</i></b>                          | <b><i>47</i></b> |
| <b>5.1</b>  | <b>Conclusion .....</b>                                               | <b>47</b>        |
| <b>5.2</b>  | <b>Suggestion .....</b>                                               | <b>47</b>        |
|             | <b><i>REFERENCES.....</i></b>                                         | <b><i>49</i></b> |