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# Awareness of Congenital Cardiac Anomalies in South Indian Population- A Questionnaire Based Study

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#### INTRODUCTION:

The deformities which occurs in the heart from the time of birth is known as congenital cardiac anomalies or congenital cardiac defects. Congenital heart disorder, in a definition proposed by Mitchell et al. [1], is "a gross structural abnormality of the heart or intra-thoracic great vessels that is actually or potentially of functional significance." Although congenital heart disease is the most common human birth defect, the etiology of the vast majority of congenital heart diseases remain unknown. There are several types of congenital heart disease depending on which part of the heart the deformity occurs. For some types of congenital heart disease, the recurrence risk can be high as 10% to 15% [2]. The incidence of congenital heart disease appears to be about 1 per 100 liveborn infants [2]

Congenital cardiac disorders may include rapid breathing, bluish skin, poor weight gain and feeling tired [3]. The main cause of congenital cardiac disorders is still unknown [3]. Certain cases may be due to infections during pregnancy such as rubella, use of certain medications or drugs such as alcohol or tobacco, parents being closely related, or poor nutritional status or obesity in the mother [4,5].

Congenital heart defects are partly preventable through rubella vaccination, the adding of iodine to salt, and the adding of folic acid to certain food products[4]. Some defects do not need treatment[6]. Other may be effectively treated with catheter based procedures or heart surgery[7]. Occasionally a number of operations may be needed[7]. Occasionally heart transplantation is required[7].

This survey was conducted for the purpose of increase in awareness about the disease among the people so that it is not any dreadful disease but a manageable and curable disease.

### MATERIALS AND METHODS:

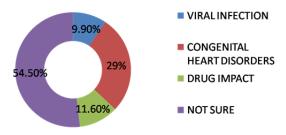
The survey was conducted randomly through online using survey planet link. The survey was undertaken by 126 people belonging to the south Indian population. The study involved around 17 questions which includes about symptoms and its complication and their personal awareness about the disorder.

### RESULTS AND DISCUSSION:

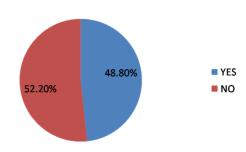
The survey was undertaken by 126 people, the data was then analysed and has been tabulated along with charts for

each question. 48.8% of the population was aware about congenital heart diseases, and 52.2% was not aware of any disease [GRAPH:1]. 13% of the population knew people affected by congenital heart diseases, 66.7% did not know any people affected by the disease, and the rest 20.3% was not sure about it [GRAPH:2]. 35.5% of the population are aware that congenital heart diseases are present from birth ,35.5% was not aware that congenital heart disease are present from birth and the rest 29% was not sure about it [GRAPH:3]. 24% of the population knew congenital heart diseases occur when mothers themselves have congenital heart disease, 9.9% believed that when mothers are prone to viral infection, 11.6% of the population mentioned due to drug impact and the majority 54.5% was not aware [GRAPH:4]. 39.2% of the people are aware that affected babies would have less weight and 11.7% had a perception that they would have more weight and the rest 49.2% was not aware about it[GRAPH:5]. 46.3% of the population knew the fact that congenital heart disease was manageable, 16.5% was not aware that it was manageable and the rest 37.2% was not sure about it [GRAPH:6]. 47.9% of the people marked that babies born with congenital heart diseases could survive, 12.4% believed it was impossible and the rest 39.7% was not sure about it [GRAPH:7]. 42.6% of the population was aware that surgery was the best treatment for the disease, 20.5% of the population chose that proper medications will help, other ways such as transplantations were opted by 7.4% of the population and the rest 29.5% was not sure about that [GRAPH:8]. 12.5% of the population mentioned that people affected by congenital heart disease could survive longer without a surgery, 31.7% believed that it was impossible and the majority of 55.8% was not sure about that [GRAPH:9]. 21.4% of the population has a perception that the life span of a person affected by congenital heart disorder will be less than 20 years, 32.5% of the population mentined it will be less than 40 years and the rest was unaware about it[GRAPH:10]. 67.2% of the population knew that people having congenital heart disease will undergo shortness of breath and fatigue, 27.7% was not sure about it [GRAPH:11]. 39.6% of the population was aware that congenital heart disease will have effect on skin and 37.4% was not sure about it [GRAPH:12]. 60% of the population knew the fact that congenital heart diseases and blood pressure were related, 7.8% of the population believed it was not related and the rest 32.2% was unaware[GRAPH:13]. 47.8% of the population was aware that exercise will have a positive outcome on congenital heart disorders, 18.3% of the population had an opinion that there is no relation between them and the rest 33.9% was not sure about that [GRAPH:14]. 35.7% of the population knew the fact that congenital heart diseases will have effect on mental health, 21.7% believed that there was no such relation and the rest 42.6% was not sure about that [GRAPH:15]. 35.3% of the population marked that diabetes mellitus and congenital heart diseases were related, 26.7% mentioned that there was no relation and the rest 37.9% was not sure about it[GRAPH:16]. 19% of the population was aware that cancer could be later outcome when a person is affected by congenital heart disorder, the majority 47.4% was unaware about cancer and congenital heart disorder [GRAPH:17].

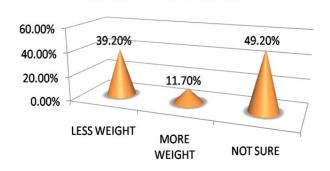
GRAPH 4: CONGENITAL HEART DISEASES IN BABIES CAN DEVELOP WHEN MOTHERS HAVE?



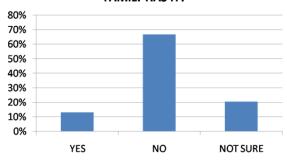
GRAPH 1:DO YOU KNOW ANY CONGENITAL HEART DISORDERS?



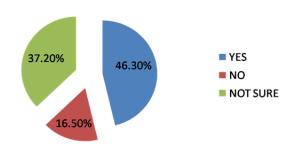
GRAPH 5: BABIES BORN WITH CONGENITAL DISORDERS HAVE?



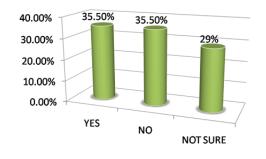
GRAPH 2: DOES ANYBODY IN YOUR FAMILY HAS IT?



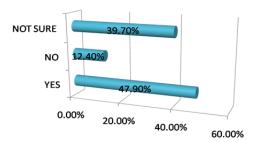
GRAPH 6: IS CONGENITAL HEART DISORDER MANAGEABLE?



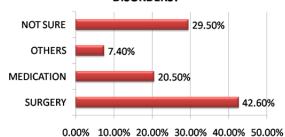
GRAPH 3: IS CONGENITAL HEART DISEASES PRESENT FROM BIRTH?



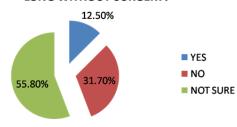
GRAPH 7: IS CONGENITAL HEART DISORDERS SURVIVABLE?



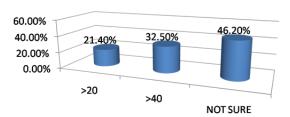
### GRAPH 8: WHAT WILL GIVE BETTER TREARTMENT FOR CONGENITAL CARDIAC DISORDERS?



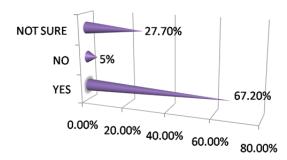
GRAPH 9: CAN A PERSON AFFECTED WITH CONGENITAL CARDIAC DISORDERS LIVE LONG WITHOUT SURGERY?



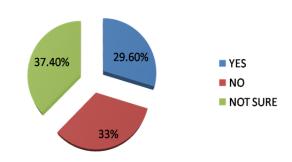
GRAPH 10: WHAT DO YOU THINK THE LIFE SPAN OF A PERSON WHO HAS CONGENITAL CARDIAC DISORDERS WILL APPROXIMATELY HAVE?



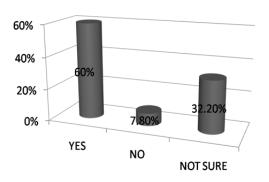
GRAPH 11: WILL CONGENITAL CARDIAC DISORDERS CAUSE FATIGUE AND SHORTNESS OF BREATH?



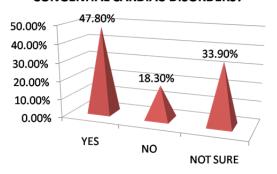
GRAPH 12: WILL CONGENITAL HEART DISORDERS HAVE ANY EFFECT ON SKIN?



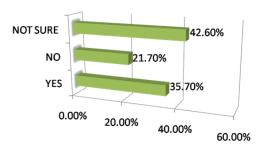
GRAPH 13: IS BLOOD PRESSURE RELATED WITH CONGENITAL HEART DISORDERS?



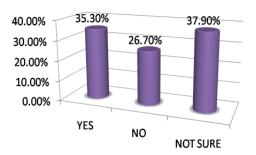
GRAPH 14: WILL EXERCISE HELP IN CONGENITAL CARDIAC DISORDERS?



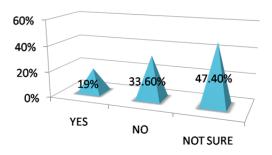
GRAPH 15: WILL CONGENITAL CARDIAC DISORDERS HAVE ANY EFFECT ON MENTAL HEALTH?



# GRAPH 16: IS DIABETES MELLITUS AND CONGENITAL CARDIAC DISORDERS HAVE ANY RELATION?



## GRAPH 17: DOES CANCER AND CONGENITAL CARDIAC DISORDER HAVE ANY RELATION?



### **CONCLUSION:**

This survey revealed that the awareness about congenital heart anomalies among the south Indian population is very less. There is a urgent need for the awareness initiative for congenital heart disorders at the grassroots level in primary educational institutions, colleges and among adults in the implementation of the fact that congenital heart anomalies are manageable and survivable.

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- [5] Dean, SV; Lassi, ZS; Imam, AM; Bhutta, ZA (26 September 2014).
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