Impact of congenital heart disease on psychological aspect- An analysis of gender aspect

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ABSTRACT

Purpose: The paper analyzes the psychological state of patients with congenital heart diseases as related to age and gender. The aim of the study is to analyze the perspective of adolescents on the psychological aspect on a gender basis. The study was initiated to compare the gender attitude among adolescents (age 13-18 years), who can lead a normal life after corrective surgery/treatment. Methods: The data was collected from two reputed hospitals of Delhi, having paediatric cardiology department running for almost more than 10 years. A Questionnaire from PCQLI was used to collect data, with their permission. The questionnaire is already valid and reliable. The study was conducted, with permission from hospital authorities. A sample of around 30 patients was collected to study the quality of life aspect using various psychological parameters. An independent sample t-test was applied to compare the perspective of two groups. Findings: The result was analyzed between the perspective difference between male and female population on the psychological aspect. The data showed some psychological variables reflect the significant difference between male and female but some variables do not reflect any difference. Recommendation: The findings from the study indicate a need to peep into the psychological aspect of patients with congenital heart disease so that they can be helped to better manage their health prospective in future.

Keywords: Congenital Heart disease, Psychology, Gender aspects, PCQLI.

1. INTRODUCTION

Congenital Heart disease (CHD) is the structural/functional defect of the heart in neonatal by birth. The problem though prevalent by birth but sometimes detected in the later years of life. In India, about 8-10 children per 1000 live births are detected with CHD. It is one of the major reasons in India where the birth rate is very high. Approximately 10% of present infant mortality in India may be accounted for the CHD alone (Saxena, 2005). These statistics are based on the reported cases which came to light. Numerous others are not even detected or reported due to lack of awareness, deliveries at homes and lack of knowledge of the health practitioner.

Quality of life is a subjective matter and has different perceptions for different individuals. Many studies done by the researchers on quality of life deals with the individual perception towards his/her quality of life. As it affects the treatment of the patients it has become a matter of concern for such patients. Earlier this aspect of life was not given much consideration, it was seldom taken into account that, what factors should be considered to improve the quality of life of such patients.

Psychology of the patients was very much affected by the regular hospital visits and check-ups. Corrective surgeries for the disease also affect the psychological aspect, more over gender and age also affects the psychology, due to social stigmas being imposed due to disease.

The main objective of the paper is to consider the following objectives:

- To study the psychological aspect of male/female adolescent patients of CHD.
- To study the impact of their psychological behavior on treatment aspect

2. METHODS

The present study was conducted on the patients with congenital heart disease between the age group of 13-18 years. The total sample consists of 30 patients with congenital heart disease (male =21 and female =9) in the referred age group was collected to study the psychological impact of the disease.
For the purpose of the study, a questionnaire of PCQLI has been used with due permission from the author. The objective of the study was well explained to the subject before administration. A questionnaire from PCQLI was obtained to be used, by taking permission from concerned authorities. The patients visiting the paediatric department of two hospitals of Delhi, having a paediatric department for more than 10 years and the patients admitted for corrective surgery were taken into consideration. Selection of subjects was done with the help of medical professional and with ethical permission of the hospital authorities.

3. DESCRIPTION OF TOOL
PCQLI – A disease-specific measure of health-related quality of life for children and adolescents with congenital or acquired heart disease

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Age Range- 13-18 years (adolescents)

Duration – 20 minutes

Hindi Translation – Pratibha Verma Bagga

Structure - Total 29 items, 14 item taken for the psychological aspect

Description: The questionnaire consists of 29 items, but only 14 items were taken to consider the psychological aspect of the children

Data Analysis: Data was analyzed using SPSS (version 20.0) statistical program. Scores of various parameters were calculated on Likert 5 point scale based on the p-value obtained by independent sample t-test for male and female. P<0.05 was considered to indicate statistical significance.

Results: The analysis of data and the results are tabulated in the following table below. The sample consisted of 21 males (70%) and 9(30%) females. There was a limitation to the sample collected because of inclusion criteria. The patients admitted for corrective surgery and can lead a normal life after correction were considered for inclusion. Patients with age between 13 to 18 years were selected to fill up the questionnaire. Results show a significant difference between the perception of male and female on some variables while some showing no significant difference. Males mean value lies between 4.14 to 3.00 for various variables with S.D. value lying between 1.36 to .70. Whereas females mean value with S.D.value, indicating male reporting more influence on their psychology than a female with greater mean value.

Table 1 shows the various variable being considered for estimating psychological aspect of the sample taken, the age group 13-18 years (adolescence) was taken due to changes occurring at this stage.

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>MALE/FEMALE</th>
<th>N</th>
<th>MEAN</th>
<th>S.D.</th>
<th>P-VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel different from everybody in a bad way (Var 1)</td>
<td>Male</td>
<td>21</td>
<td>3.66</td>
<td>.91</td>
<td>.003</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>9</td>
<td>2.55</td>
<td>.72</td>
<td></td>
</tr>
<tr>
<td>I feel guilty about stress my heart disease caused to my family (Var 2)</td>
<td>Male</td>
<td>21</td>
<td>3.42</td>
<td>1.32</td>
<td>.075</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>9</td>
<td>2.55</td>
<td>.72</td>
<td></td>
</tr>
<tr>
<td>I get unwanted attention (Var 3)</td>
<td>Male</td>
<td>21</td>
<td>3.19</td>
<td>1.36</td>
<td>.088</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>9</td>
<td>2.44</td>
<td>.88</td>
<td></td>
</tr>
<tr>
<td>Grown-ups around me are overprotective (Var 4)</td>
<td>Male</td>
<td>21</td>
<td>3.00</td>
<td>1.14</td>
<td>.805</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>9</td>
<td>2.88</td>
<td>1.05</td>
<td></td>
</tr>
<tr>
<td>Other people are uncomfortable around me (Var 5)</td>
<td>Male</td>
<td>21</td>
<td>3.71</td>
<td>.84</td>
<td>.435</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>9</td>
<td>3.44</td>
<td>.88</td>
<td></td>
</tr>
<tr>
<td>I spend too much time dealing with my health (Var 6)</td>
<td>Male</td>
<td>21</td>
<td>3.90</td>
<td>.83</td>
<td>.099</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>9</td>
<td>3.33</td>
<td>.86</td>
<td></td>
</tr>
<tr>
<td>My condition is likely to get worse (Var 7)</td>
<td>Male</td>
<td>21</td>
<td>4.14</td>
<td>.72</td>
<td>.109</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>9</td>
<td>3.66</td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td>I get special treatment (Var 8)</td>
<td>Male</td>
<td>21</td>
<td>3.71</td>
<td>1.10</td>
<td>.706</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>9</td>
<td>3.55</td>
<td>.88</td>
<td></td>
</tr>
</tbody>
</table>
The independent t-test shows that there was no significant difference in perception of males and females on the psychological aspect. Except under three variables Variable 1 (.003), Variable 11 (.010) and variable 13 (.029). The results show that while treating this adolescence for CHD their psychological aspects should be taken into consideration.

### 4. DISCUSSION

The sample consisted of 21 males (70%) and 9 (30%) females. There was a limitation to the sample collected because of inclusion criteria. The patients admitted for corrective surgery and can lead a normal life after correction were considered for inclusion. Patients with age between 13 to 18 years were selected to fill up the questionnaire.

The results of the study show the necessity of paying attention to the psychological factors. It is felt that a focus on the possible cause of socio-demographic factors such as gender and age group is also significant while studying the psychological impact. Patients having congenital heart disease should undergo regular follow up at the concerned hospitals for the screening of any further complications of the disease. In a developing country like India social stigma also plays a vital role. While as observed during the study that gender bias still persists in the Indian society. No doubt psychology of the person impacts the health and also the prospective of getting better, negative feeling impact out health and also become an obstacle in treatment. So all these aspects of behavior should also be taken into consideration while treating CHD patients.

### 5. REFERENCES


