

## **Parental Psychological Distress after Prenatal versus Postnatal Diagnosis of Congenital Heart Disease.**

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### **Introduction**

A diagnosis of congenital heart disease (CHD) in a fetus or in a newborn triggers increased levels of psychological distress in parents. Results of previous studies have been inconsistent regarding the impact of pre- versus postnatal diagnosis in this respect. The purpose of this study was to investigate this and to compare with a group with uncomplicated pregnancies.

### **Method**

Participants were recruited from three hospitals in the western part of Sweden. They were divided into three groups; G1: pregnant women with a fetus diagnosed with CHD and their partners, G2: parents of children with postnatally diagnosed CHD and G3: pregnant women with an uncomplicated pregnancy and their partners. Data was collected during pregnancy within one month of inclusion (T1) and 2-6 months after delivery (T2). The instruments used were questionnaire measures: The Hospital Anxiety and Depression scale (HAD), Sense of Coherence (SOC-13) and Life Satisfaction (LiSat 11).

### **Results**

In total, 28 participants in G1 and 152 in G3 completed the questionnaire at T1: G1 scored lower on Sense of coherence (mean  $66.6 \pm 9.6$ ) compared to G3 (mean  $70.8 \pm 9.1$ ;  $p=0.044$ ). At T2, 15 participants in G1, 30 in G2 and 80 in G3 were included: G1 scored lower on Sense of coherence (mean  $59.6 \pm 12.6$ ) compared to G2 (mean  $72.5 \pm 7.5$ ) and G3 (mean  $70.4 \pm 2.57$ ; G1 vs G2  $p=0.001$ ; G1 vs G3  $p=0.001$ ). Both G1 and G2 had higher levels of anxiety compared to G3 (G1 mean  $7.6 \pm 4.69$ , G2 mean  $8.18 \pm 4.16$  and G3 mean  $5.05 \pm 3.15$ ; G1 vs. G3  $p=0.025$ ; G2 vs G3  $p=0.0003$ ). G1 and G2 scored higher on depression (G1 mean  $5.73 \pm 4.18$ ; G2 mean  $4.37 \pm 3.36$ ) compared to G3 (mean  $2.93 \pm 2.57$ ; G1 vs G3  $p=0.0018$ ; G2 vs G3  $p=0.048$ ). Life satisfaction at T2 was lower in G1 (mean  $44.9 \pm 9.9$ ) compared to G2 (mean  $56.5 \pm 5.0$ ;  $p<0.0001$ ) and G3 (mean  $52.4 \pm 6.2$ ;  $p=0.0004$ ).

### **Conclusion**

A prenatal diagnosis of congenital heart disease was associated with a lower level of sense of coherence and life satisfaction, compared with postnatal diagnosis. This motivates further efforts to improve counseling and support in ongoing pregnancies after a prenatal diagnosis.