

# Quality of life in adults with congenital heart disease: what matters?

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Advances in medical treatments for adults with congenital heart disease (ACHD) has resulted in reduced mortality, i.e., an increase in patients' life expectancy. Consequentially, questions concerning quality of life (QoL) and its determinants paralleled this medical progress. The development of standardized and validated questionnaires facilitates the measurement of factors differentially influencing QoL.

QoL is a broad concept that comprises a range of life domains, such as social relationships, role functioning, engagement in daily activities, environmental aspects, physical abilities and mental health functioning. In adults with congenital heart disease there is a lack of evidence regarding the extent to which quality of life is affected by the underlying disorder itself, psychological factors, social circumstances, and cultural factors.

Recently Apers *et al.* published data from the APPROACH-IS (Assessment of Patterns of Patient-Reported Outcomes in Adults with Congenital Heart Disease-International Study) consortium including a cohort of 4028 adults with congenital heart disease from 15 different countries (1). The aim of the study was to evaluate whether country specific characteristics may have an impact on quality of life. The main findings were a generally good QoL in ACHD, being relatively higher in Australia and relatively lower in Japan. Factors associated with low QoL were older age, lack of employment or disability, no history of marriage and poor NYHA class. Country-specific characteristics influencing QoL were not observed (1).

However, the picture of QoL remains incomplete when psychological QoL, and psychological factors potentially influencing overall QoL are not assessed. QoL is a latent and multidimensional construct comprising physical,

social and psychological aspects, thereby representing the patients view on their physical and psychosocial well-being. Several studies observed a negative influence of psychiatric disorders on QoL, pointing to the importance of measuring psychological factors such as mental disorders for the interpretation of QoL.

The European Study of the Epidemiology of Mental Disorders (ESEMED), a large epidemiological cross-sectional study, with >20.000 participants from six European countries, reported lower QoL and increased sick leave with most mental disorders (2). In particular, psychological QoL was negatively affected by the presence of mood and anxiety disorders. In a meta-analysis by Baumeister and colleagues comprising 65 studies, substantially reduced psychosocial and physical QoL was reported in medically ill patients with comorbid mental disorders (3).

A recent study including 150 ACHD patients revealed higher than normal comorbidity rates with mood and anxiety disorders. In particular, 24.7% fulfilled the diagnostic criteria of major depressive disorder, 10.7% for dysthymia (a chronic subtype of depression), and 9.3% for generalized anxiety disorder. Psychiatric diagnosis was thoroughly assessed using a structured clinical interview, and a clear relationship between the presence of mental disorders with poor QoL was observed. In particular, poor QoL was observed in ACHD patients comorbid with either mood disorders, anxiety disorders or substance use disorders, when compared to ACHD patients without any mental disorder (4).

Mental disorders have a deleterious impact on employment and social relationships. Therefore, it would be interesting to know whether patients without employment or without marriage history in the Apers *et al.* study were those with

psychological problems.

It was reported that mental disorders are underdiagnosed and undertreated in ACHD (4,5). Current recommendations of the European Society of Cardiology endorse a psychologist to be available at “Centers for Grown-up Congenital heart diseases’ in Europe” (6). With respect to the interaction between mental health and QoL, inclusion of mental health measurements may be recommended in clinical practice and in studies dealing with QoL in ACHD patients.

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### References

1. Apers S, Kovacs AH, Luyckx K, *et al.* Quality of Life of Adults With Congenital Heart Disease in 15 Countries: Evaluating Country-Specific Characteristics. *J Am Coll Cardiol* 2016;67:2237-45.
2. Alonso J, Angermeyer MC, Bernert S, *et al.* Disability and quality of life impact of mental disorders in Europe: results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project. *Acta Psychiatr Scand Suppl* 2004;(420):38-46.
3. Baumeister H, Hutter N, Bengel J, *et al.* Quality of life in medically ill persons with comorbid mental disorders: a systematic review and meta-analysis. *Psychother Psychosom* 2011;80:275-86.
4. Westhoff-Bleck M, Briest J, Fraccarollo D, *et al.* Mental disorders in adults with congenital heart disease: Unmet needs and impact on quality of life. *J Affect Disord* 2016;204:180-6.
5. Diller GP, Bräutigam A, Kempny A, *et al.* Depression requiring anti-depressant drug therapy in adult congenital heart disease: prevalence, risk factors, and prognostic value. *Eur Heart J* 2016;37:771-82.
6. Baumgartner H, Budts W, Chessa M, *et al.* Recommendations for organization of care for adults with congenital heart disease and for training in the subspecialty of 'Grown-up Congenital Heart Disease' in Europe: a position paper of the Working Group on Grown-up Congenital Heart Disease of the European Society of Cardiology. *Eur Heart J* 2014;35:686-90.