

# A Survey of Cholesterol Disease Management in Pediatric Cardiology



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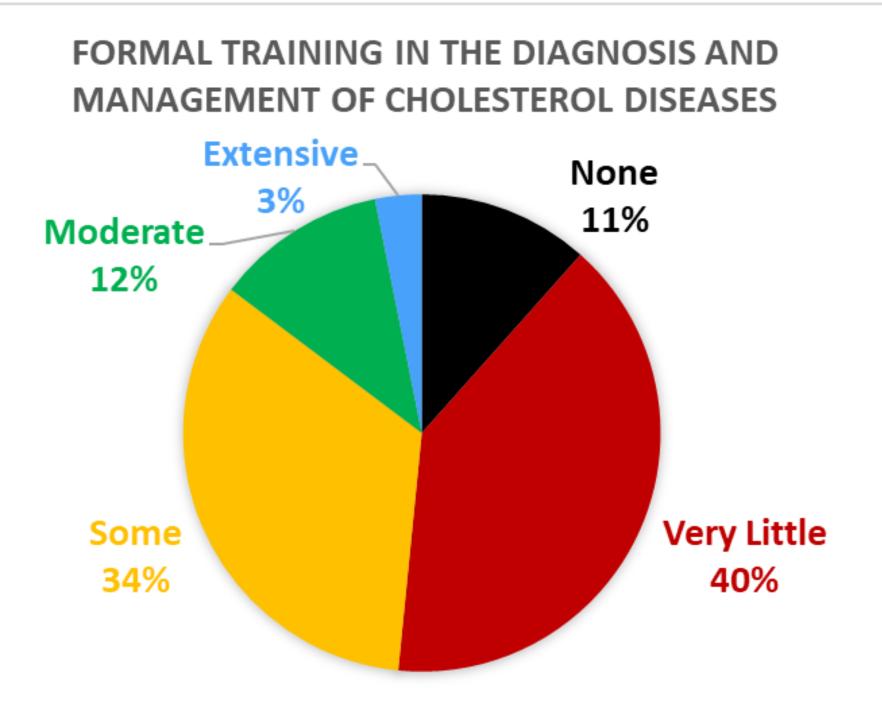
#### BACKGROUND

Genetic cholesterol diseases are very common and frequently unrecognized. Although adult heart disease is the most common cause of death in the US and has its origins in childhood, pediatric cardiologists may not be consistently addressing this issue in their clinical practice. Little information exists regarding the management practices of cholesterol diseases by pediatric cardiologists.

### METHODS

We sent an anonymous online survey to the American Academy of Pediatrics Section on Cardiology and Cardiac Surgery and the Pediheart online community regarding the diagnosis and management of cholesterol disease in children and adolescents.

Respondents' clinical recommendations in five clinical vignettes were compared to published American Heart Association (AHA) guidelines. We received 100 responses which could be analyzed.



Although genetic cholesterol diseases are common, serious and have their origin in childhood, many pediatric cardiologists have limited training and comfort treating them.

#### RESULTS Respondents' Recommendations for Statin Therapy in An Asymptomatic 15 year old Treat with a Statin Do Not Treat with a Statin 2019 AHA Scientific Statement **Cholesterol 200, LDL 140 after six** months of lifestyle modifications AND **No Statin Recommended** 23 (24%) 71 (75%) Obesity **Family History of Early Heart Disease** 41 (44%) 53 (56%) **No Statin Recommended Insulin Dependent Diabetes** 77 (81%) 18 (19%) **Statin Recommended Giant Coronary Aneurysm** 83 (88%) 11 (12%) **Statin Recommended** Cholesterol 260, LDL 195 after six months of lifestyle modifications (Presumed Familial Hypercholesterolemia) 16 (17%) 78 (83%) **Statin Recommended**

Respondents' Estimates of the Incidence of Familial Hypercholesterolemia\*

1 in 1,000

12

1 in 2,500

1 in 5,000

1 in 500

31

1 in 100

1 in 250

**37** 

\*roughly 1 in 250 patients in most populations

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## CONCLUSIONS

Although most pediatric cardiologists made clinical recommendations consistent with published guidelines, considerable training deficits and knowledge gaps remain.

Many pediatric cardiologists underestimate the incidence of familial hypercholesterolemia.

Many pediatric cardiologists are uncomfortable treating cholesterol disease with statins.

We would like to thank our survey respondents and Vivian Thorne at the American Academy of Pediatrics.