#FHaware2020 - FH Awareness Day quiz questions developed by the patient community in collaboration with medical experts and the European Atherosclerosis Society.

1. FH stands for
    a. Familial Hyperlipidemia
    b. Frequent Hypercholesterolaemia
    c. Familial Hypercholesterolaemia
    d. Frequent Hyperdislipidemia

2. FH is associated with
    a. Elevated LDL-cholesterol
    b. Elevated HDL-cholesterol
    c. Elevated Triglycerides
    d. All of the above

3. What are the most common signs and symptoms of FH?
    a. Elevated LDL
    b. Premature heart attack or stroke
    c. Premature atherosclerosis
    d. Xanthomas and xanthelasmas and corneal arcus
    e. All the above

4. Most adults with FH have an untreated LDL-cholesterol level
    a. > 3.0 mmol/L
    b. > 3.5 mmol/L
    c. > 4.0 mmol/L
    d. > 4.5 mmol/L

5. Most children with FH have an untreated LDL-cholesterol level
    a. > 3.0 mmol/L
    b. > 3.5 mmol/L
    c. > 4.0 mmol/L
    d. > 4.5 mmol/L

6. What are xanthomas?
    a. Wart like lesions on the ears.
    b. Bumps or lumps around the knuckles, elbows, and knees, formed when excess cholesterol deposits on tendons or under the skin. They may be noticed by a dermatologist.
    c. Yellowish areas around the eyes, which may be noticed by an ophthalmologist.
    d. A scaly rash similar to psoriasis.

7. How frequent is FH?
    a. 1 in 500 persons
    b. 1 in 200-300 persons
    c. 1 in 1000 persons
    d. It is a rare condition, 1 in 300 000

8. Elevated LDL-cholesterol in FH is primarily caused by
    a. lifestyle habits – a high cholesterol diet and lack of physical activity
    b. LDL receptor dysfunction as a result of a genetic mutation
    c. a genetic condition that increases cholesterol absorption from the gut
    d. a genetic condition that forces the liver to make extra cholesterol.

9. What is the chance of a parent with heterozygous FH will pass the condition onto his/her child?
    a. 10%
    b. 25%
    c. **50%**
    d. 100%

10. Autosomal dominant inheritance means
    a. Only males can inherit the condition.
    b. The adverse gene may be inherited, but any adverse effect is only present if 2 adverse genes are inherited, one from each parent.
    c. If the gene is inherited, the condition will be expressed.
    d. The impact of the adverse gene can only be expressed if it is passed on for one more generation.

11. FH is vastly underdiagnosed, with only an estimated ... of the global population with FH being identified.
    a. 5%
    b. 30%
    c. 10%
    d. 25%

12. It is estimated there about ... people impacted by FH globally.
    a. 15 million
    b. 20 million
    c. 25 million
    d. 30 million

13. The most common gene mutation in FH is related to the
    a. LDLR gene.
    b. APOB gene.
    c. PCSK9 gene.
    d. APOE gene.

14. When both parents have a mutation for FH, the chance of their child developing homozygous FH (or compound heterozygous FH) is
    a. 25%
    b. 50%
    c. 75%
    d. 100%

15. Homozygous Familial Hypercholesterolaemia
    a. is present in about 1:300,000 people.
    b. can cause heart attacks in childhood.
    c. is associated with aortic stenosis.
    d. all of the above

16. In people with FH, high cholesterol begins
    a. in adulthood.
    b. in the teenage years
    c. in childhood.
    d. during fetal life.

17. Over 50% of men with untreated FH will have a heart attack by age
    a. 20 years
    b. 40 years
    c. 50 years
    d. 60 years

18. At any level of LDL-cholesterol, those who carry the FH gene and are not treated have how much higher a risk of a heart attack than those without FH?
    a. The same risk.
    b. Double the risk.
    c. Triple the risk.
    d. Ten times the risk.

19. The recommended first drug to be used to lower LDL-cholesterol in FH is
    a. fish oil.
    b. a statin.
    c. ezetimibe.
    d. a PCSK9 inhibitor.

20. The age at which treatment for FH should begin if LDL-cholesterol is over 5 mmol/L (or 190 mg/dl) is
    a. 2 years.
    b. 6-10 years.
    c. 20 years.
    d. 40 years.

21. Cascade screening refers to
    a. Screening everyone who has come into contact with a person who has a particular condition.
    b. Testing the parents of someone with a genetic condition to see which one gave the patient the genetic condition.
    c. Doing a genetic test for FH on someone with LDL cholesterol > 5 mmol/L.
    d. The testing of first-degree relatives of a patient with an autosomal dominant genetic condition to find undiagnosed cases.

22. A clinician should suspect FH, when a patient has
    a. an LDL cholesterol above 190 mg/dL in adults and above 160 mg/dL in children and a family history of an early heart attack or high cholesterol.
    b. has a heart attack before 45 years of age.
    c. shows visible symptoms xanthomas, xanthelasmas and or corneal arcus.
    d. all the above.

23. Treatment of homozygous FH should begin
    a. at the time of diagnosis.
    b. at age 10 years.
    c. at age 20 years.
    d. at age 30 years.

24. Risk is further elevated in those with FH if they have
    a. low Lp(a) levels.
    b. additional conventional risk factors such as diabetes, smoking, or hypertension.
    c. are female.
    d. a diagnosis made at a young age.

25. A finding on lipid testing typically NOT associated with FH is
    a. lower than average HDL cholesterol.
    b. elevated Lp(a) levels.
    c. severe hypertriglyceridemia.
    d. high ApoB levels.