

ACTIVITY 153

You can obtain 3 CEUs for reading the article: "OBESITY IS ASSOCIATED WITH ANAEMIA AND IRON DEFICIENCY INDICATORS AMONG WOMEN IN THE RURAL FREE STATE, SOUTH AFRICA" and answering the accompanying questions. This article has been accredited for CEUs. Ref number: DT/A01/P00008/2020/00006

1. Which of the following are true for iron deficiency and obesity?

- a) Obesity, not iron deficiency, is a major contributor to the global burden of disease.
- b) Iron deficiency is the most prevalent micronutrient deficiency in the world, while obesity is considered a global pandemic.
- c) Obesity and iron deficiency have not been linked.

2. Contraception may decrease iron deficiency anaemia risk in which of the following ways?

- a) By reducing the number of pregnancies as well as the time interval between consecutive pregnancies, while the amount of blood lost during menstruation may also be reduced.
- b) By reducing the number of pregnancies, as well as the time interval between consecutive pregnancies, while the amount of blood lost is not affected.
- c) Neither reducing the number of pregnancies and the time interval in between pregnancies.

3. With regard to nutritional anaemias:

- a) Global data concerning the contribution of both iron deficiency and folate deficiency towards the development of anaemia are available.
- b) Global data concerning the contribution of folate deficiency, but not iron deficiency towards the development of anaemia are available.
- c) Global data concerning the contribution of iron deficiency, but not folate deficiency towards the development of anaemia are available.

4. The World Health Organization reference values for defining anaemia, iron deficiency and iron deficiency anaemia were used in the current study. Which of the following is true for defining iron deficiency anaemia?

- a) Haemoglobin < 12.0 g/dl and ferritin < 15.0 ng/ml
- b) Haemoglobin < 12.0 g/dl
- c) Ferritin < 15.0 ng/ml

5. The majority of women aged 25–64 years in the current study were found to:

- a) Present with a BMI in the overweight and/or obese category, a waist circumference measurement greater or equal to 88 cm, in contrast to a body fat percentage in the lower to upper acceptable range.
- b) Present with a BMI in the overweight and/or obese category, a waist circumference measurement ranging between 80 and 87 cm as well as a body fat percentage in the too high range.
- c) Present with a BMI in the overweight and/or obese category, a waist circumference measurement greater or equal to 88 cm as well as a body fat percentage in the too high range.

6. Compared to other studies, the anthropometric measurements of women in the current study:

- a) Are similar for overweight and obesity prevalence as well as waist circumference and body fat percentage.
- b) Are similar for overweight and obesity prevalence but not for waist circumference and body fat percentage.
- c) Are similar for overweight and obesity prevalence as well as waist circumference but not for body fat percentage.

7. With regard to menstruation and contraceptive use in the present study:

- a) Majority still menstruated regularly and made use of injectable contraceptives.
- b) Just over half still menstruated regularly and made use of injectable contraceptives.
- c) Just over half still menstruated regularly and made use of oral contraceptives.

8. In the current study, very few women presented with anaemia and low ferritin levels, and of these:

- a) Only one woman could be classified as suffering from iron deficiency anaemia and two women as suffering from iron deficiency only.
- b) Only two women could be classified as suffering from iron deficiency anaemia and one woman as suffering from iron deficiency only.
- c) All three women could be classified as suffering from iron deficiency anaemia.

9. In this study, a significant association was found between haemoglobin levels and whether women menstruated regularly or not and:

- a) Haemoglobin levels were found to be lower amongst those who menstruated regularly compared to those who did not.
- b) Haemoglobin levels were found to be higher amongst those who menstruated regularly compared to those who did not.
- c) Haemoglobin levels were not found to be lower amongst those who menstruated regularly compared to those who did not.

10. Associations were not found between all the measured blood markers and anthropometric measurements in this study; however:

- a) Generally, inverse associations were found between MCV, MCH, transferrin saturation as well as ferritin with categories of BMI, waist circumference and body fat percentage.
- b) Generally, inverse associations were found between MCV, MCH and transferrin saturation with categories of BMI and waist circumference only.
- c) Generally, inverse associations were found between MCV, MCH and transferrin saturation with categories of BMI, waist circumference and body fat percentage.

11. In the current study, few women presented with low ferritin levels, indicative of low iron stores. When interpreting this finding:

- a) It can be concluded with certainty that very few women suffered from iron deficiency.
- b) It is important to note that iron deficiency in the women may be masked by the presence of inflammation since obese adults have been found to present with increased levels of pro-inflammatory molecules which may impair iron status.
- c) It is important to consider that iron deficiency may be over reported in the current study since CRP was elevated in almost half of the women, and a significant association was found between whether CRP was elevated or not and ferritin levels.

12. The following may partly explain the differences in the prevalence of anaemia, iron deficiency as well as low iron stores in this study when compared to other studies:

- a) Older median age, almost half of the women not menstruating at the time and well as a large proportion making use of injectable contraceptives.
- b) Older median age, almost half of the women not menstruating at the time and well as a small proportion making use of injectable contraceptives.
- c) Older median age, almost half of the women not menstruating at the time and well as a large proportion making use of oral contraceptives.

13. Deficiencies of other micronutrients may also contribute to the development of anaemia. Which of the following is true for the current study?

- a) A quarter of the women presented with elevated levels of MCH which may be a result of vitamin B12 deficiency only.
- b) A quarter of the women presented with elevated levels of MCH which may be a result of folate deficiency only.
- c) A quarter of the women presented with elevated levels of MCH which may be a result of vitamin B12 or folate deficiency.

14. Results of the current study suggest which of the following?

- a) A predominant pattern of malnutrition, characterised by overweight and obesity, high rates of abdominal obesity, but healthy body fat percentages, as well as inflammation.
- b) A predominant pattern of malnutrition, characterised by overweight and obesity, but low rates of abdominal obesity and healthy body fat percentages, as well as inflammation.
- c) A predominant pattern of malnutrition, characterised by overweight and obesity, high rates of abdominal obesity and unhealthy body fat percentages, as well as inflammation.

15. The authors of the study recommend the following:

- a) Focusing interventions on addressing the problem of obesity through changing the perceptions regarding the health effects thereof by promoting physical activity and appropriate diet and lifestyle.
- b) Focusing interventions on addressing the problem of obesity through changing the perceptions regarding the health effects thereof by promoting physical activity only.
- c) Focusing interventions on addressing the problem of obesity through changing the perceptions regarding the health effects thereof by only promoting appropriate diet and lifestyle.

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Full member of: ADSA: yes no NSSA: yes no SASPEN: yes no