

Evaluation Of Iron Deficiency Anemia Awareness In a Rural Area: Results From a Survey In a Mediterranean Region Rural Area Of Turkey

Kırsal Bir Alandaki Demir Eksikliği Anemisi Farkındalığını Değerlendirme: Türkiye'nin Akdeniz Bölgesi Kırsal Bir Alanındaki Anketten Sonuçlar

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ÖZET

GİRİŞ ve AMAÇ: Aneminin bir çok etken ajanı vardır. Burada Türkiye'nin Akdeniz Bölgesi kırsal bir alanındaki insanların demir eksikliği farkındalığının ölçülmesi amaçlandı.

YÖNTEM ve GEREÇLER: Ankete 132 insan katıldı. Katılımcıların hiçbirisi sağlık çalışanı değildi. Anket çalışması Aksu'nun kırsal bir alanında yapıldı. Aksu, Antalya İli'nin bir ilçesidir. Antalya İli ise Türkiye'nin Akdeniz Bölgesi'nde bulunmaktadır. Anket çalışmasında 7 soru soruldu.

BULGULAR: 81 (≈61 %) katılımcı vücudun demir ihtiyacının en çok kırmızı etten alınabileceğini düşünüyordu. 42 (≈32 %) katılımcı vücudun demir ihtiyacının en çok sebzelerden alınabileceğini düşünüyordu. Ve 9 (≈7 %) katılımcı vücudun demir ihtiyacının en çok meyvelerden alınabileceğini düşünüyordu. Bunun yanında, 94 (≈71 %) katılımcı demir eksikliğine bağlı kansızlık olabileceğini biliyordu.

TARTIŞMA ve SONUÇ: Demir eksikliği anemisi (DEA) bir halk sağlığı sorunudur. DEA hakkındaki sosyal farkındalığı bilmek, DEA'yı azaltmak için sosyal programlar yapmada yararlı olabilir. Kırsal alanlardaki insanların demirden zengin besinler tüketilmesi konusundaki farkındalığının artırılması için sağlık organizasyonları düzenlenmelidir.

Anahtar Kelimeler: Demir eksikliği anemisi, farkındalık, Türkiye'nin Akdeniz Bölgesi, kırsal alan

ABSTRACT

INTRODUCTION: There are many causative agents of anemia. Hereby, it is aimed to evaluate the iron deficiency anemia awareness of the people in a rural area of Turkey's Mediterranean Region.

MATERIAL and METHODS: 132 people participated in the survey. None of the participants were health workers. The survey was conducted in a rural area of Aksu. Aksu is a district of Antalya Province. And, Antalya Province is in the Turkey's Mediterranean Region. 7 questions were asked in the survey.

RESULTS: 81 (≈61 %) participants thought that iron requirement of the body could be obtained mostly from the red meat. 42 (≈32 %) participants thought that iron requirement of the body could be obtained mostly from the vegetables. And 9 (≈7 %) participants thought that iron requirement of the body could be obtained mostly from the fruits. Besides, 94 (≈71 %) participants knew that iron deficiency could cause anemia.

DISCUSSION AND CONCLUSION: Iron deficiency anemia (IDA) is a public health problem. Knowing the social awareness about IDA may help to make social programs for reducing the iron deficiency anemia. Health organisations must be conducted to increase the awareness of people in rural areas about consuming iron rich foods.

Keywords: Iron deficiency anemia, awareness, Mediterranean Region of Turkey, rural area

INTRODUCTION

Anemia is one of the common findings of outpatient units. There are many causative agents of anemia. Iron deficiency, vitamin B12 deficiency, folic acid deficiency, gastrointestinal bleeding, malignancy, urinary bleeding, impaired gastrointestinal absorption, thalassemia, erythrocyte enzyme defects are some known reasons of anemia. Worldwide prevalence of anaemia was estimated as 24.8 % . A WHO(World Health Organization) scientific group reported a hemoglobine treshold for anemia as 12 mg/dL in adult non-pregnant females in 1968 (2). It was also reported a hemoglobine treshold for anemia as 13 mg/dL in adult males (2) . Lastly, the same aforementioned WHO scientific group reported a hemoglobine treshold for anemia as 11 mg/dL in pregnant adult females (2). Hereby, it is aimed to evaluate the iron deficiency awareness of the people in a rural area of Turkey's Mediterreanean Region.

MATERIAL and METHODS

132 people participated in the survey. All of the participants were 18 or over 18 years old. None of the participants were health workers. The survey was conducted in a rural area of Aksu. Aksu is a district of Antalya Province. And Antalya Province is a province in southern Turkey. In addition to this, Antalya Province is in the Turkey's Mediterreanean Region. 7 questions were asked in the survey. The survey questions and their answer choices are listed below. All of the participants have chosen only one answer choice for each survey question.

Question 1. Do you know that iron deficiency could cause anemia?

- a) Yes b) No

Question 2. From which foods below could the iron requirement of the body be obtained mostly?

- a) Vegetables b) Red meat c) Fruits

Question 3. In which of the below could iron deficiency be more frequently found?

- a) Women b) Men

Question 4. Which of the following could be caused by anemia ? (Choose only one choice)

- a) Pallor b) Weakness c) Fatigue d) Forgetfulness e) All of them

Question 5. Were you or any of the people around you diagnosed with iron deficiency by a medical doctor previously?

- a) Yes b) No

Question 6. Do you know there are drugs containing iron?

- a) Yes b) No

Question 7. Which of the following do you think could result in a lack of iron in the body? (Choose only one choice)

- a) Nutritional deficiency b) Gastrointestinal bleeding c) Menstrual bleeding d) All of them

RESULTS

94(≈71 %) participants knew that iron deficiency could cause anemia (Figure 1). 42 (≈32 %) participants thought that iron requirement of the body could be obtained mostly from the vegetables (Figure 2). 81(≈61 %) participants thought that iron requirement of the body could be obtained mostly from the red meat (Figure 2). And 9(≈7 %) participants thought that iron requirement of the body could be obtained mostly from the fruits (Figure 2). 126 (≈95%) participants thought that iron deficiency could be more frequently found in women (Figure 3). On the other side, 6(≈5%) participants thought that iron deficiency could be more frequently found in men (Figure 3).

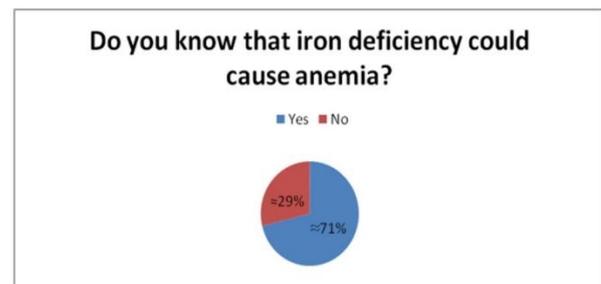


Figure 1. Distribution of the participants' answers to question 1.

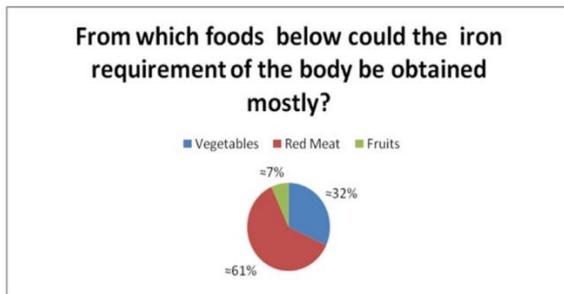


Figure 2. Distribution of the participants' answers to question 2.

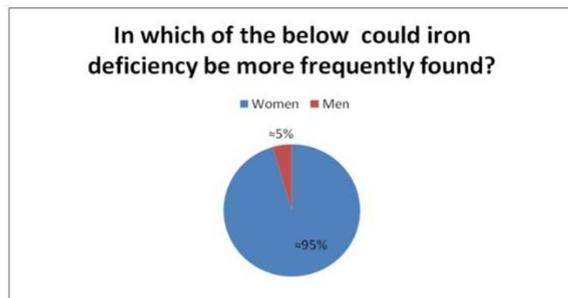


Figure 3. Distribution of the participants' answers to question 3.

85(≈65%) of the all participants thought that all of the choices in the fourth question could be caused by anemia (Figure 4). And distribution of the participants' answers to question 4 was shown in figure 4. 68(≈52 %) of the all participants answered "Yes" to the fifth question (Figure 5). And 64(≈48 %) of the all participants answered "No" to the fifth question (Figure 5). 52(≈39%) of the all participants did not know about the drugs containing iron (Figure 6). 45(≈34%) participants thought that all of the choices in the seventh question could result in a lack of iron in the body (Figure 7). Lastly, distribution of the participants' answers to question 7 was shown in figure 7.

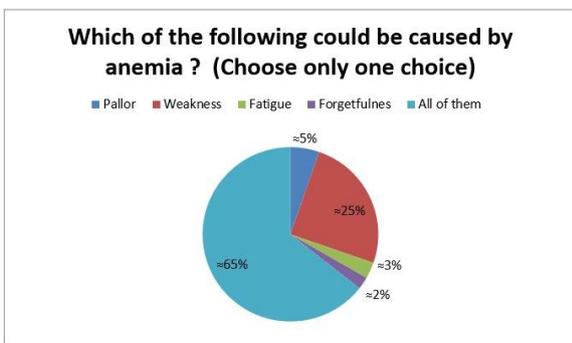


Figure 4. Distribution of the participants' answers to question 4.

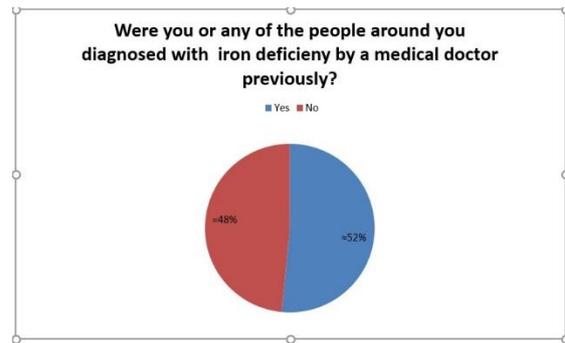


Figure 5. Distribution of the participants' answers to question 5.

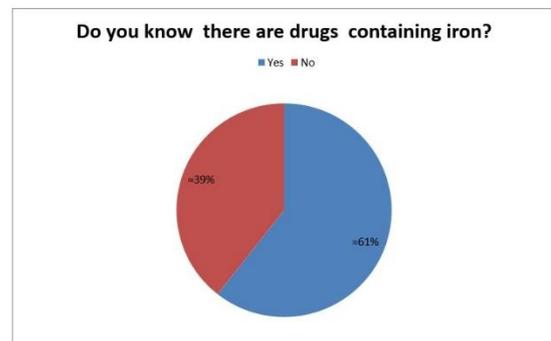


Figure 6. Distribution of the participants' answers to question 6.

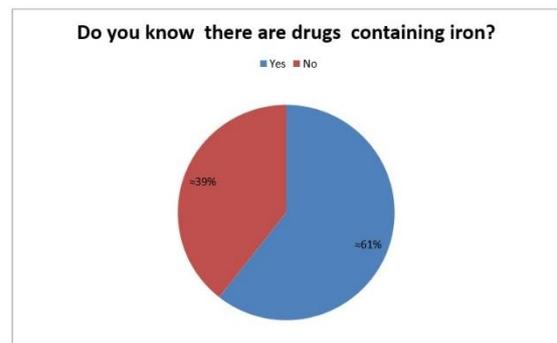


Figure 6. Distribution of the participants' answers to question 6.

DISCUSSION

Iron is an element and it is involved in hemoglobine synthesis. Hemoglobine carries oxygen from lungs to tissues. Gastrointestinal bleeding, menstrual bleeding and nutritional deficiency may cause iron deficiency. Malabsorption associated diseases such as coeliac disease and Chron's disease could also result in iron deficiency. On the other side, low iron stores and iron deficiency anemia are not the same things. Low iron stores could result in anemia. But, low iron stores could also be seen when hemoglobine levels are in normal ranges.

In addition to this, pica could also be seen as an eating disorder in patients with IDA (3,4,5). Hussain T et al. reported that 77.9% of the women participants in their study were aware of the term iron deficiency anemia (6). On the other hand, 94(≈71 %) participants in this study knew that iron deficiency could cause anemia (Figure 1). However, the participants in the study of Hussain T et al. were all women (6). In a study conducted to determine the nutritional knowledge among adolescent girls, it was found that 30% girls knew about the sources of iron (7). On the other hand, 81(≈61 %) participants in this study thought that iron requirement of the body could be obtained mostly from the red meat (Figure 2). And ≈39 % of the all participants in this study thought that iron requirement of the body could be obtained mostly from the vegetables or fruits (Figure 2). Most of the participants in this study were farmers. And these farmers mostly grow vegetables in the greenhouses. They also eat vegetables more than meat. So that their work and eating habit might have an effect on their answers.

CONCLUSION

Iron deficiency anemia is a public health problem. Knowing the social awareness about IDA may help to make social programs for reducing the iron deficiency anemia. Health organisations must be conducted to increase the awareness of people in rural areas about consuming iron rich foods.

List of Abbreviations

IDA: Iron deficiency anemia

WHO: World Health Organization

DECLARATIONS

Ethics approval and consent to participate:

The study was approved by the local ethics committee (Decision number: 2017-11/01). The name of the local ethics committee is ‘‘T.C. Saęlık Bakanlıęı Saęlık Bilimleri Üniversitesi Dr. Abdurrahman Yurtaslan Onkoloji Saęlık Uygulama ve Arařtırma Merkezi Klinik Arařtırmalar Etik Kurulu’’. Consent was taken from the participants.

Consent for publication: I give my full permission for the publication of this study.

Competing interests: No conflict of interest was declared by the author.

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