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A Preventative Guidance Program To Reduce Cardiac Arrest Risk In Sports Competitions

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Abstract

This study aims to develop a preventative guidance program to reduce the risk of cardiac arrest in competitive football players in Iraq. The researcher used a descriptive survey methodology . The primary study sample consisted of 660 individuals, including 60 medical personnel and 600 players. After applying statistical analyses, the researcher concluded that there were deficiencies in the level of medical examination procedures, health education, and health support provided to players within sports clubs to protect them from the risk of cardiac arrest. There was also a weakness in the players ' health awareness regarding protecting the heart from cardiac arrest , as well as a weakness in their knowledge of first aid for cardiac arrest. The study identified the four pillars of the preventative guidance program to protect players from the risk of cardiac arrest: (1) health awareness regarding regular medical checkups for the circulatory system and heart; (2) health awareness regarding nutrition, vitamins, and supplements to support heart health; (3) health awareness regarding sleep, rest, and the application of regular healthy recovery practices; and (4) health awareness regarding methods and techniques of first aid for cardiac resuscitation.

Keywords: Preventive guidance program, cardiac arrest in sports competitions, sports medicine.

Introduction

Ahmed Nasr El-Din (2009) points out that sports training leads to various physiological changes in almost all body systems. The level of athletic performance improves as these changes become positive, achieving physiological adaptation of the body systems to perform physical loads and endure performance with high efficiency and economy of effort. The coach must understand the types of these changes in order to plan training in a way that achieves physiological balance for the athlete's body. (1:142)

As Muwaffaq Asaad and Muhammad Qasim (2019) explains stated that the heart is one of the main organs in the body and plays an active role in the general health of humans, whether at rest or during high physical exertion. Therefore, studying the condition of the heart is of utmost importance for coaches because it helps them to develop correct training programs that are appropriate to the abilities and capabilities of the players. (3:2)

Rachel also agrees Taylor Rachael Taylor et al (2004), and others Sun Shumei Sun et al (2002), Janet Fulton Janet Fulton et al. (2001), and others , organization health The World Health Organization (2000) stated that cardiac arrest is the leading cause of death in general. This condition occurs when there is a blockage in one of the vital arteries supplying the heart muscle, and at that point the heart muscle lacks oxygen and nutrients. It has been found that there is a relationship between many diseases and negative changes resulting from unhealthy habits such as smoking by athletes, eating fast food, and the failure of proper physiological adaptations to occur cardiac arrest. (13:1228), (12:654), (9:115), (15:13)

Mansour Saeed (2016) explains that it is necessary to conduct periodic medical examinations on "practicing" players before the activity, in order to identify the condition and health of the various body systems (circulatory system - respiratory system - muscular system - skeletal system - nervous system, etc.). (2:125)

Yahya stands out Lantern and Paul Dorian Yehia Fanous, Paul Dorian (2019) states that sudden cardiac arrest is a complete and sudden loss of heart function and oxygen pumping, leading to loss of consciousness . This condition is usually caused by a disturbance in the heart's electrical system, where pumping activity is disrupted and blood flow to the body stops . Cardiac arrest differs from a heart attack, in which blood flow to part of the heart muscle stops . However, a heart attack can sometimes cause a disturbance in the heart's electrical system, which in turn leads to sudden cardiac arrest. Exercise is sometimes considered a cause of this. (14:788)

As Megan explains descriptive Meagan Wasfy et al (2016) and others found that the nature of cardiac arrest in sports activities depends largely on the physiology of the body's elimination of excess heat, where blood flows to the outer capillaries on the skin's surface. As a result of the increased blood flow to eliminate excess heat, the level of blood flow in the working muscles decreases, leading to a decrease in performance level. This occurs in competitions longer than 15 minutes, while shorter ones are not significantly affected by temperature. Also, an increase in body temperature leads to heat exhaustion and muscle cramps. The heat hit him, and the player shows signs of heat exhaustion due to a decrease in venous blood flow to the heart, which leads to a decrease in cardiac output and a decrease in blood flow to the brain. This is what happens when training in hot weather and then standing to rest, as the muscles stop pumping blood to the heart, and the player shows an increase in heart rate with cold skin. In this case, the coach should put the player in a lying position in a cool place and give him fluids to replace what he lost through sweat. (11: 76, 77)

From the above, it is clear that there are many causes that may result in a player being exposed to a heart attack, which requires the medical staff in sports teams to prepare early for the

medical examination of players and verify the periodic follow-up of the health condition, and provide health needs during training in the hot climate, as well as closely monitoring the players to ensure that the players eat healthy meals, get sufficient rest and use healthy recovery methods, away from taking drugs and stimulants.

Flavio points out Dasenzi Flavio D'Ascenzi et al. (2022) and others have shown that structural or electrical abnormalities cause sudden cardiac arrest in athletes. These abnormalities may be inherited or undiagnosed . For athletes with underlying heart conditions, exercise can be a trigger. In some sports, a severe blow to the chest can lead to sudden cardiac arrest , and interventional cardiology states: "Currently Heart attacks affect people who are in good physical condition. They follow a healthy and active lifestyle. Because of the extraordinary physical exertion . (8:299-301)

Adel Khalifa (2022) adds states that the heart has a capacity for a certain level of exertion, and the athlete constantly strains it, the chance of increasing the thickness of the heart muscle is higher. According to the Sports Institute at the University of Washington in Seattle, 1 or 2 out of every 100,000 active athletes suffer from sudden cardiac arrest each year, and the institute says that males are at greater risk than females. (4:90)

While both Amit and immediately Amit Vora et al (2018) , Kimberly Harmon Kimberly Harmon et al (2015) and others have stated that there is no completely reliable way to predict heart problems in athletes . All high-performance athletes are constantly evaluated , and in the case of professional footballers like Eriksen, clubs conduct sophisticated medical assessments, and players' fitness is constantly monitored . Because medical assessments may not help detect underlying health problems, some experts insist on electrocardiogram (ECG) scans to detect heart abnormalities that can increase the risk of sudden cardiac arrest. (5:138), (10:11-13)

As the results of the Elegant study show What is with you Aneeq Malik et al (2023) and others aimed to identify the causes of stroke. heart The surprise I have athletes and strategies to improve Preparing athletes, and concluded that it is necessary to train athletes to increase health awareness of healthy living, and first aid for CPR. (6:1059)

From the above, it is clear that it is important to increase health awareness among athletes and develop health services that protect the health of athletes in sports clubs. Through the experience of the researcher, who works in the field of injuries and physical rehabilitation of athletes in Iraq, he noticed the low level of health services provided to players in sports clubs, as well as the weak level of health culture among players regarding the risks of exposure to heart attacks. This prompted the researcher to conduct a scientific study by examining health practices within sports clubs, as well as determining the level of players' actual practices of healthy habits to prevent the risk of exposure to heart attacks, in order to determine the axes of a preventive guidance program to reduce the risk of exposure to heart attacks for players in the future.

Study objective

A preventive guidance program was developed to reduce the risk of cardiac arrest in sports competitions for football players in Iraq by verifying the following duties:

(1) To identify the reality of sports clubs' practices in providing health services to protect players from the risk of cardiac arrest.

(2) Identifying the reality of players' practices of healthy habits to prevent the risk of heart attack.

(3) A preventive guidance program was developed to reduce the risk of cardiac arrest in football competitions .

Research questions

(1) What is the reality of sports clubs' practices in providing health services to protect players from the risk of cardiac arrest?

(2) What is the reality of players' practices regarding healthy habits to prevent the risk of heart attack?

(3) Is it possible to develop a preventative guidance program to reduce the risk of cardiac arrest in football competitions?

Terms definition

Preventive guidance program: It is a health program planned according to scientific health principles to protect players from the risk of cardiac arrest by introducing them to healthy ways of eating, healthy habits of sleep, rest, recovery and first aid for cardiac arrest.

Cardiac arrest: David Eugene Chung David Lee, Eugene Chung (2016) defined it as " the heart ceasing to pump blood and oxygen to the brain, other organs and tissues." (7:11)

Materials and Methods

Areas of study:

Time frame: The study was conducted during the 2023 season, from August to November. Spatial field: The study was implemented within sports clubs in Iraq by visiting clubs in a sequential manner in the governorates of Iraq. The human sphere: The study was applied to the medical equipment in Iraqi clubs and players, with a total of (800) individuals in Iraqi clubs at the first division level.

Study sample:

The study sample was selected purposively from both medical staff and players in sports clubs participating in the first division competitions in the first division league at all levels. (720) questionnaires for the study were sent out, and the final study sample included those who completed the questionnaire completely, so that the total study sample was (80) individuals from the medical staff, and (640) players. The sample was divided into a pilot study sample and a main study sample.

First: The exploratory study sample: To verify the validity and reliability of the questionnaire, a random sample was selected from within the study population and from outside the main study sample, amounting to (20) individuals from the medical equipment, and (40) players, with a total of (60) individuals.

Second: The main study sample: The basic study sample consisted of (660) individuals, including (60) medical staff and (600) players.

Data collection tools

The researcher used the questionnaire as the main tool in his study to collect data and information that would allow for the identification of health and medical practices to protect players from the risk of cardiac arrest.

First: Personal Interviews: The researcher resorted to personal interviews to collect data as follows:

1. Personal interviews with cardiologists and public health professionals to identify the most important points that clubs should do to protect players from the risk of cardiac arrest.

2. Personal interviews with sports health experts from physical education colleges to identify the most important health practices to promote general health and prevent the risk of players being exposed to cardiac arrest.

Second: The study questionnaire: Medical Devices Survey:

A survey of the reality of sports clubs' practices in providing health services to protect players from the risk of cardiac arrest. The survey consists of (15) items for (3) main axes including (medical examination - health education - health support for players).

Player survey: A survey of the reality of players' practices of healthy habits to prevent the risk of cardiac arrest. The survey consists of (14) items for (2) main axes that do not include (health culture to protect the heart from exposure to cardiac arrest - health culture for first aid for cardiac arrest). The quest ionnaire was of a closed type, which involved assessing the extent to which the sample members agreed with the statements through three responses , each with a score, as follows :

Table 1. Three-point Likert scale

Three-point Likert scale					
Opinion trend	Average	Opinion trend	Average	Opinion trend	**Average**
No	**1-1.66**	**to some extent**	**1.67-2.33**	**Yes**	**2.34-3**

After completing the questionnaires for both medical equipment and players, the researcher verified the validity and reliability of the questionnaires as follows :

The questionnaires were administered to a sample of (20) individuals from the medical staff and (40) players, who were randomly selected from within the study population and from outside the main study sample, with the aim of :

- paragraphs expressing the elements used in the evaluation are appropriate .
- Verifying the validity and reliability of the form (scientific standards).

Scientific procedures for questionnaires : -

The survey results were accurate: Validity is considered one of the most important conditions for a good test, and its degree is the most important factor in terms of test quality criteria. The researcher relied on : The validity of internal consistency and the stability of Cronbach's alpha: A survey of the reality of sports clubs' practices in providing health services to protect players from the risk of cardiac arrest was conducted. The internal consistency coefficient and Cronbach's alpha reliability were determined for the survey, which was based on expert opinions, on a pilot sample of (20) medical personnel from outside the main study sample, as shown in the following table:

Table 1. Internal consistency coefficient and Cronbach's alpha coefficient to assess the reality of sports clubs' practices in providing health services to protect players from the risk of cardiac arrest, n = 20

Survey topics	Consistency factor internal	Alpha coefficient Cronbach
Medical examination	0.709*	0.785*
Health education	0.698*	0.761*
Health support	0.705*	0.759*

Table (1), which pertains to the internal consistency coefficient and Cronbach's alpha coefficient for the axes comprising the questionnaire on the reality of sports clubs' practices in providing health services to protect players from the risk of cardiac arrest, and the statements comprising it, show high values of the internal consistency coefficient, which ranged between (0.698 to 0.709). These values are significant at the 0.05 level. This indicates the validity of the scale, and the reliability of the scale is evident through the calculation of the alpha coefficient, where the values of the reliability coefficient ranged between (0.759 to 0.785), and these values are significant at the level of 0.05, which indicates the reliability of the questionnaire.

A questionnaire assessing the reality of players' practices of healthy habits to prevent the risk of heart attack was used. The internal consistency coefficient and Cronbach's alpha reliability were determined for the questionnaire, which was derived from expert opinions on a pilot sample of (40) players, both from outside the main study sample, as shown in the following table:

Table 2. Internal consistency coefficient and Cronbach's alpha coefficient to assess the reality of players' practices of healthy habits to prevent the risk of heart attack, n = 40

Survey topics	Consistency factorinternal	Alpha coefficient Cronbach
Health education to protect the heart from heart attacks	0.711*	0.746*
Health education for first aid in cardiac arrest	0.691*	0.741*

Table (2), which pertains to the internal consistency coefficient and Cronbach's alpha coefficient for the axes comprising the questionnaire on the reality of players' practices of healthy habits to prevent the risk of heart attack, and the statements comprising it, show high values of the internal consistency coefficient, which ranged between (0.691 to 0.711). These values are significant at the 0.05 level. This indicates the validity of the scale, and the reliability of the scale is evident through the calculation of the alpha coefficient, where the values of the reliability coefficient ranged between (0.741 to 0.746), and these values are significant at the level of 0.05, which indicates the reliability of the questionnaire.

Basic study

The questionnaire was applied to the study sample individually, whether it was for medical devices or players. The scale was applied after explaining the instructions for responding to the scale by choosing one answer for each item. After completing the application of the questionnaire to the study sample, the data were extracted and statistical treatments were carried out.

Statistical analyses

The appropriate statistical analyses for this study were used using SPSS version (21), and they are as follows:

1. Correlation coefficient.
2. Cronbach's alpha equation.
3. The arithmetic mean.
4. Chi-square (K2).
5. Percentage.

Results

Presentation and discussion of the results of the first question: What is the reality of sports clubs' practices in providing health services to protect players from the risk of cardiac arrest?

Table (3)

Frequencies, percentages, arithmetic mean, chi-squared value, and effect weight for the first axis (medical examination, n=60)

No.	Paragraph	Mean	Chi²	Impact ratio	Trend
1	The club conducts medical examinations for the players at the beginning of the season.	1.566	16.032*	52.22%	No
2	There is ongoing monitoring of the players' health through regular check-ups.	1.483	14.943*	49.44%	No
3	There is a mechanism to monitor the health status of players throughout the season.	1.783	18.241*	59.44%	To some extent
4	There are records to monitor the players' health status.	2.083	21.673*	69.44%	To some extent
5	There is a clinic inside the club to provide immediate first aid to players in case of any health problems.	1.866	19.246*	62.22%	To some extent

***Chi² significance at the 0.05 level = 5.99**

Table (3) shows that b. Arithmetic mean, chi-squared value, and impact ratio on the reality of sports club practices in providing health services to protect players from the risk of cardiac arrest In the first axis (medical examination) , the direction of opinions was somewhat in paragraphs (3-4-5) and was not in paragraphs (1-2), and the value of the chi-square ranged between (14.943 – 21.673) and the effect percentage was between (49.44% to 69.44%), which indicates the weakness of preventive measures to reduce the risk of exposure to cardiac arrest for players within sports clubs.

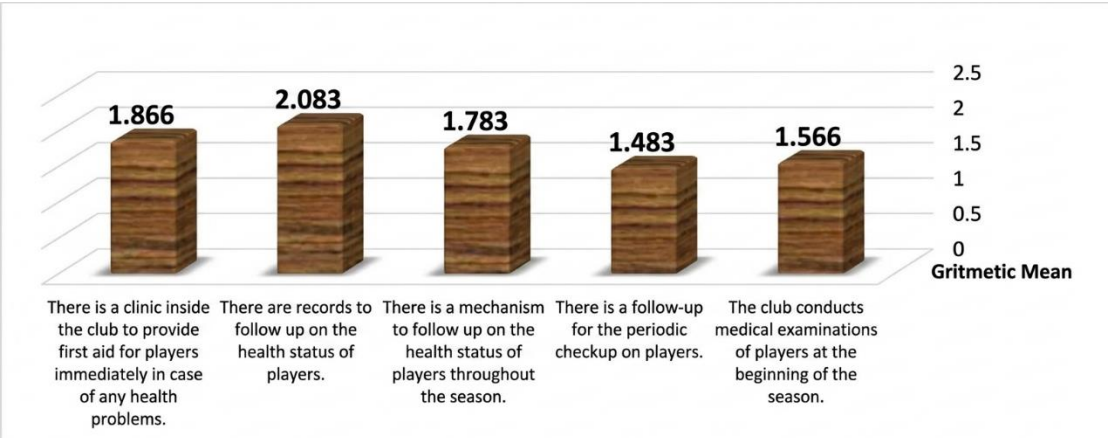

Figure (1). The arithmetic mean of medical device responses is shown on the first axis.

Medical examination

Table (4)

Frequencies, percentages, arithmetic mean, chi-squared value, and effect size for the second axis, health education (n=60)

No.	Paragraph	Mean	Chi²	Impact ratio	Trend
1	Health awareness seminars are held for players about the health risks resulting from unhealthy behaviors.	1.383	13.148*	46.11%	No
2	Seminars are held to educate players on first aid for CPR.	1.333	11.111*	44.44%	No
3	Health seminars are held to educate players about the importance of healthy nutrition and its role in protecting the heart.	1.433	14.256*	47.77%	No
4	Health seminars are held to educate players about the risks resulting from personal habits (smoking , insufficient rest , etc.).	1.350	12.461*	45.00%	No
5	Health seminars are held to educate players about the role of nutritional supplements, rest and recovery, and their role in enhancing athletic performance and protecting the player from the risk of injuries and diseases.	1.350	12.461*	45.00%	No

***Chi² significance at the 0.05 level = 5.99**

Table No. (4) shows that b. Arithmetic mean, chi-squared value, and impact ratio on the reality of sports club practices in providing health services to protect players from the risk of cardiac arrest In the second axis (health education) , the direction of opinions was "no" in all items, and the value of the chi-square ranged between (11.111 – 14.256), and the effect percentage was between (44.44% to 47.77%), which indicates the weakness of preventive measures to reduce the risk of exposure to heart attacks for players within sports clubs.

Figure 2. The arithmetic mean of medical device responses is shown on the second axis. Through health education

Table 5 . Frequencies, percentages, arithmetic mean, chi-squared, and effect ratio for the third axis, Health support n=60

No.	Paragraph	Mean	Chi²	Impact ratio	Trend
1	The club provides players with vitamins and health supplements that support heart health continuously throughout the season.	1.516	15.146*	50.55%	No
2	The club provides healthy recovery methods to protect players from the risk of exhaustion and muscle fatigue that cause injuries and circulatory diseases.	2.250	23,500*	75.00%	To some extent
3	The club provides players with healthy meals	1.566	15.095*	52.22%	No

	before and after training.				
4	The club is keen to keep track of the players' personal lives through continuous monitoring of them.	1.283	10.271*	42.77%	No
5	The club management provides medical examination procedures for blood and heart tests on a regular basis.	1.250	9.241*	41.66%	No

*The significance of the chi² test at the 0.05 level is 5.99

Table No. (5) shows that b. Arithmetic mean, chi-squared value, and impact ratio on the reality of sports club practices in providing health services to protect players from the risk of cardiac arrest In the third axis health support, the direction of opinions was somewhat positive in the second paragraph only, and was negative in the rest of the axis paragraphs. The value of the chi-squared ranged between (10.271 – 23.500) and the effect ratio was between (42.77% to 75.00%), which indicates the weakness of preventive measures to reduce the risk of exposure to cardiac arrest for players within sports clubs.

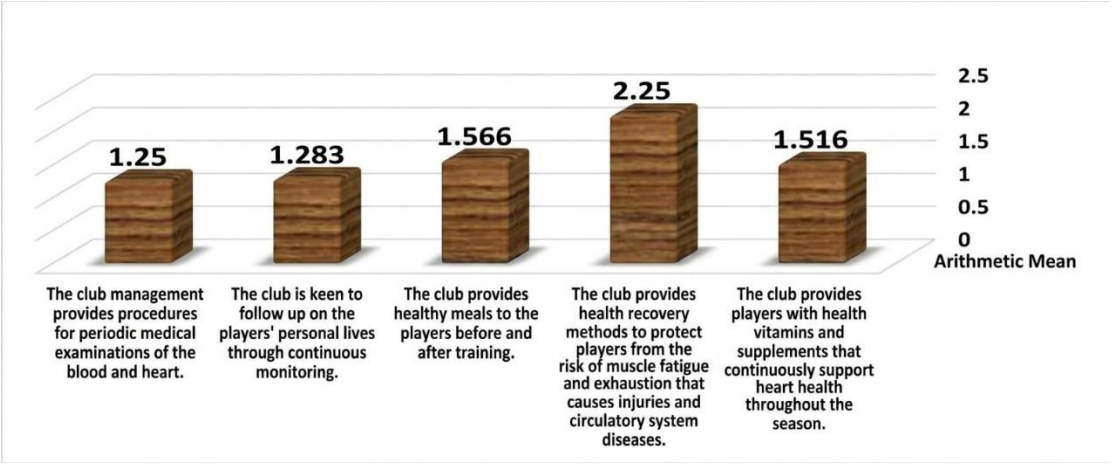

Figure 3. The arithmetic mean of medical device responses is shown on the third axis related to health support.

Presentation and discussion of the results of the third question: What is the reality of players' practices of healthy habits to prevent the risk of heart attack?

Table 6 . Frequencies, percentages, arithmetic mean, chi-square test, and effect weight for the first axis: Health culture for protecting the heart from heart attacks, n=600

No.	Paragraph	Mean	Chi²	Impact ratio	Trend
1	Do you make sure to eat healthy meals at the specified times throughout the day?	1.766	10.918*	58.86%	To some extent
2	Do you make sure to take vitamins and health supplements that promote heart health?	1.325	8.467*	44.16%	No
3	Do you make sure to drink water and healthy fluids regularly, appropriate to the temperature, and protect your blood from the risk of becoming viscous and dehydration?	1.965	10.113*	65.50%	To some extent
4	Do you know which unhealthy foods affect blood and heart health and avoid them in your diet?	1.666	9.625*	55.53%	No
5	Do you care about having regular medical check-ups of your heart?	1.462	9.352*	48.73%	No

6	Do you prioritize sleep and rest in your daily workout routine and understand its importance for physical and heart health?	1.144	7.491*	38.13%	No
7	Do you care about using proper recovery techniques continuously during sports competitions and training, and do you know the importance of this for the health of the body and its organ systems?	1.471	9.892*	49.03%	No
8	Do you avoid sitting in enclosed spaces where there are smokers, and are you aware of the negative impact of smoking on heart health?	1.321	8.313*	44.03%	No
9	Do you know about unhealthy practices that negatively affect heart health and avoid them?	1.317	8.553*	43.90%	No
10	Do you know the dangers of energy drinks and some sports supplements that may expose the heart to cardiac arrest?	2.316	17.156*	77.20%	To some extent

*The significance of the chi² test at the 0.05 level is 5.99

Table (6) shows that b. Arithmetic mean, chi-squared value, and effect ratio on the reality of players' practices of healthy habits to prevent the risk of heart attack in the axis The first (health culture to protect the heart from exposure to cardiac arrest) showed that the direction of opinions was somewhat in paragraphs (1-3-10), and was not in paragraphs (2-4-5-6-7-8-9), and the value of the chi-square ranged between (7.491 – 17.156) and the effect percentage was between (38.13% to 77.20%), which indicates the weakness of the health culture of the players in exposure to cardiac arrest.

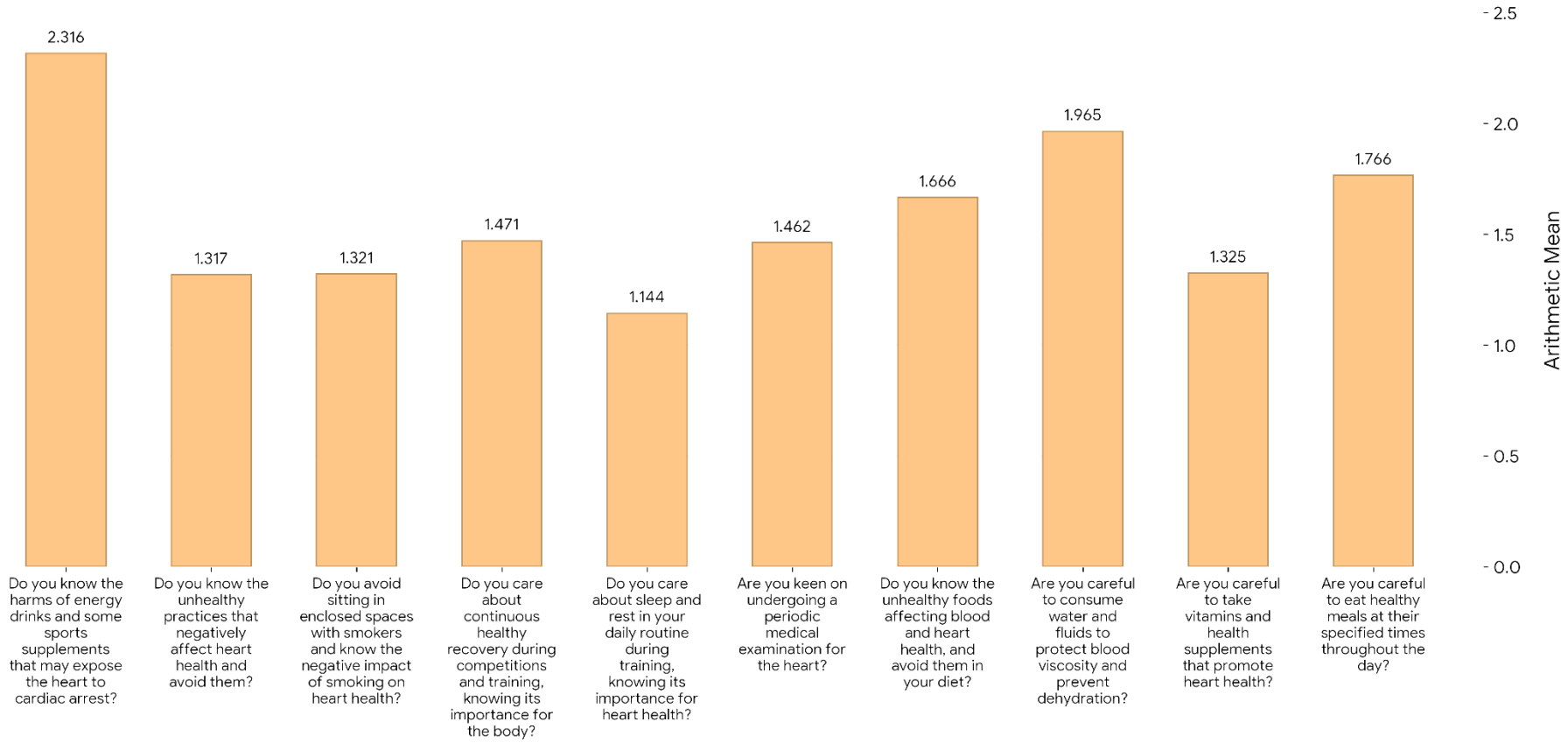

Figure 4. The arithmetic mean of the players' responses on the first axis, which pertains to health culture for protecting the heart from cardiac arrest, illustrates this.

Table 7 . Frequencies, percentages, arithmetic mean, chi-squared value, and effect weight for the second axis: Health Culture for First Aid in Cardiac Arrest, n=600

No.	Paragraph	Mean	Chi²	Impact ratio	Trend
1	Do you know the causes of heart attacks?	1.168	7.791*	38.93	No
2	Have you attended any lectures on the causes of cardiac arrest?	1.224	8.611*	40.80	No
3	Do you know the methods of cardiopulmonary resuscitation (CPR)?	1.123	6.313*	37.43	No
4	Have you received training in CPR techniques?	1.215	8.115*	40.50	No

*The significance of the chi² test at the 0.05 level is 5.99

Table (7) shows that b. mean, chi-squared value, and effect ratio on the reality of players' practices of healthy habits to prevent the risk of heart attack in the axis The second health culture for first aid for cardiac arrest showed that the direction of opinions was "no" in all the items that make up the axis, and the value of the chi-square ranged between (6.791 – 8.313) and the percentage of effect was between (38.93% to 40.80%), which indicates the weakness of the health culture of the players in exposure to cardiac arrest.

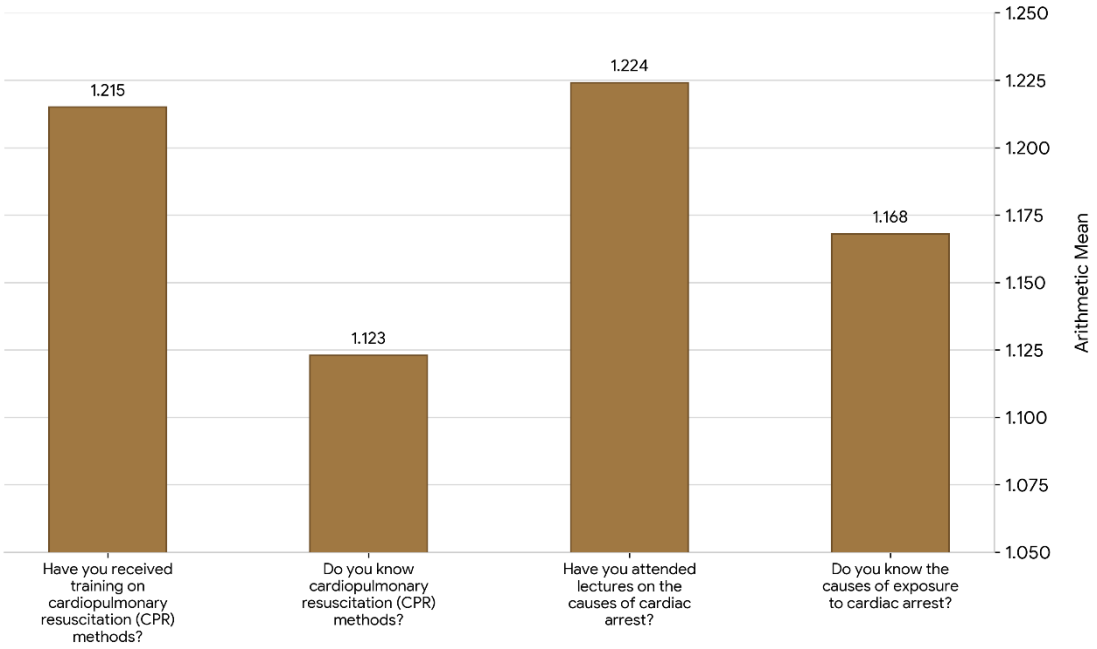

Figure 5. The arithmetic mean of the players' responses on the second axis, which pertains to health culture and first aid for cardiac arrest, illustrates this.

Is it possible to develop a preventative guidance program to reduce the risk of cardiac arrest in football competitions? After presenting and discussing the results of the first and second research questions, it became clear that there is a significant decrease in the level of health services provided by sports clubs in Iraq to football players in protecting them from the risk of cardiac arrest. The medical staff's opinion was limited to (somewhat - no). The players' responses also revealed a weak level of health awareness regarding the risk of cardiac arrest, both in terms of health awareness for protecting heart health and first aid

for cardiac arrest. Based on the above, the researcher identified the program's axes in light of the results obtained from the study:

The first focus: Health awareness regarding regular medical check-ups for the circulatory system and heart. This includes:

(1) Medical tests including electrocardiogram with stress test.

(2) Blood test.

(3) Regular follow-up.

(4) The players' medical records.

The second focus: Health awareness regarding food, vitamins, and health supplements to support heart health. This includes:

(1) Providing meals for players that are appropriate to the volume of training and physical exertion.

(2) Develop nutritional programs for the players.

(3) Raising awareness and educating players about healthy food and how to obtain it.

(4) The role of fluids in protecting the body from the risk of heat stress, especially in the summer.

(5) The importance of taking vitamins and nutritional supplements that support heart health.

(6) Pay attention to eating extra meals during training camps and high-intensity physical activities.

Third axis: Health awareness of sleep and rest, and the regular application of healthy practices. This includes:

(1) Educating and raising awareness among players about the importance of rest in achieving functional adaptations to training loads.

(2) Educating and raising awareness among players about the importance of recovery in functional restoration and physiological adaptations of the body's vital systems.

Third axis: Health awareness regarding first aid methods and techniques for cardiac resuscitation. This includes:

(1) Educating and raising awareness among players about the symptoms of heart disease and cardiac arrest.

(2) Training players in first aid for cardiopulmonary resuscitation (CPR).

(3) Educating and raising awareness among players about the medications (blood thinners) that should be taken if they experience symptoms of a heart attack.

(4) Educating and raising awareness among players about the relationship between personal life and heart health and support.

Conclusion

In light of the results obtained by the researcher from analyzing the data of the current study, the following conclusions were reached:

(1) Clubs are failing to conduct regular medical checkups on players to protect them from the risk of heart attacks .

(2) Clubs are failing to provide health education to players to protect them from the risk of cardiac arrest .

(3) Clubs are failing to provide adequate health support for players to protect them from the risk of cardiac arrest .

(4) health awareness regarding protecting the heart from cardiac arrest among players is weak .

(5) have a weak level of health awareness regarding first aid for cardiac arrest .

(6) The preventive guidance program to protect players from the risk of cardiac arrest has been developed and consists of four main points as follows:

a) Health awareness for periodic medical check-ups of the circulatory system and heart.

b) Health awareness of food, vitamins and health supplements to support heart health.

c) Health awareness of sleep and rest and the application of healthy recovery on a regular basis.

d) Health awareness regarding first aid methods and techniques for cardiac resuscitation.

Recommendations

Based on the study's findings, the researcher recommends the following:

(1) Sports clubs in Iraq should pay attention to health services that help protect players from the risk of heart attacks.

(2) Implementing the guidance program within sports clubs to protect players from the risk of cardiac arrest.

(3) Conducting more scientific research that focuses on the health of athletes in Iraq.

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