

WHAT IS THE ROLE OF EDUCATION TECHNOLOGIES IN INCREASING INFORMATION LEVELS ON NUTRITION AMONG PRIMARY SCHOOL TEACHERS?

Alpay SEZENLER, Mehmet ÇAĞLAR

SUMMARY

Nutrition is indispensable for human beings from the day they were born to the day they die. Besides having the right information for a balanced diet, it is also important to know how to use such information. This paper evaluates the nutritional knowledge of primary school teachers in Guzelyurt district. The questionnaire was given to 71 teachers in total and it was filled using face-to-face questionnaire techniques. The results have shown that 54.1% of the teachers in the district knew about a balanced diet and were informed about nutrition. However, it was confirmed that there is a need to organise a sustainable training programme for teachers in order to bring them up-to-date with new information and technological developments regarding nutrition.

Key Words: Nutrition, primary school teachers, technology

INTRODUCTION

Education starts at home by birth, moves to streets (outer environment) through childhood and then to school. Children's behaviour is fundamentally shaped in school as they spend most of their time there. Thus, evaluating the nutritional observations of teachers, who are in close contact with students, and updating their knowledge would help to change bad dietary habits and in turn prevent diseases like childhood obesity¹. It is necessary to exploit technological advancements especially the IT, in order to ensure that our teachers acquire the precise information on nutrition so that they can orient the children rightly.

MATERIAL AND METHODOLOGY

This research was carried out as a population research under the T.R.N.C Ministry of Education among primary schools in the district of Guzelyurt. The research sample was identified as the primary school teachers in the district. Total of 71 teachers working in the district schools have volunteered to participate in the research. The aim was to try and identify the teachers' level of nutritional knowledge and information. The research questionnaire was filled using face-to-face questionnaire techniques with the teachers who volunteered to take part. The questions were prepared in consultation with two medical doctors and a nutritionist in order to ensure that they were easy to understand. There were 16 questions about nutritional knowledge and its implementation in total. When evaluating the results, teachers who answered less than 4 questions correctly were categorized as unsatisfactory; those who answered 4-5 and 6-7 were categorized as developable and satisfactory respectively.

FINDINGS

7 out of 16 questions in the questionnaire were related to nutrition and 9 were about implementation of the nutritional knowledge. The sample group, who volunteered to answer the questions, consisted of 48 female and 23 male teachers. 51 (% 71.8) out of 71 teachers were classroom teachers and 20 (% 28.1) of them were speciality teachers. When we look at the duration of their teaching experience, 16 (%22.5) were teachers over 20 years, 30 (%42.2) were between 10-20 years, and 25 (%35.2) have been teaching less than 10 years.

38 (%53.5) teachers gave the right answer to the first question and defined a healthy diet correctly.

37 (%52,1) teachers said that a healthy diet includes at least 5 meals a day.

When asked, which type of food need to be consumed more, 40 (%56.3) teachers said food with less fat and more fibre.

When asked about their daily dietary habits, 31(%43.6) teachers said they regularly eat vegetables and white meat, 24 (%33.8) of them said that they always eat home cooked meals, 14 (%19.7) teachers often eat home cooked meals and ready meals only during weekends, and finally, only 2 (%2.8) of them said they always eat ready meals.

When asked how long on average they spend for having breakfast, 44 (%61.9) teachers said 10 minutes, 13 (%18.3) said 20 minutes, 1 (%1.4) said 45 minutes and 9 (%12.6) said that they do not have breakfast.

When asked what kind of sport activities teachers themselves exercise, 9 (% 12.6) of them said that they walk regularly everyday, 31 (%43.6) said they walk when they have the chance, 14 (% 19.7) of them said that they do

not do any kind of sports while 17 (%23.9) teachers stated that they do not have enough time for sports because of all the housework.

43 (%60.5) teachers who participated in the research said that in between classes students consume fruit juices and sandwiches, 10 (% 14.0) of them said students eat fresh fruits, 15 (% 21.1) said that they consume crisps and coke while 3 (% 4.2) stated that they don't have an opinion about the question.

24(% 33.8) teachers stated that they always talk about nutrition with their students, 36 (% 50.7) of them said they discuss it when they have the chance, 1 (%1.4) teacher said that she/he doesn't have the time and 11 (%15.4) stated that it's not included in the programme.

2 (% 2.8) teachers have stated that they obtain nutritional information from newspapers, 3 (% 4.2) from magazines, 5 (%7.0) from TV, 12 (%16.9) from doctors or nutritionist, 1 (% 1.4) from internet whereas 48 (% 67.6) teachers replied as 'all of above'.

When asked how frequently teachers talk about healthy nutrition during snack time, 25 (% 35.2) teachers said always, 37 (% 52.1) said when they have the chance, 1 (%1.4) said he/she does not have enough time, and 8 (% 11.2) said that its not included in the programme.

When asked about organising a training on new nutritional information, 3 (% 4.2) teachers in the working said it was not necessary, 37 (% 52.1) agreed that it was a good idea and 31 (% 43.6) thought it was necessary.

When asked about the sport activities available in school for students 40 (% 56.3) teachers stated that it was not enough, 20 (%28.1) said that it was satisfactory, 8 (% 11.2) of them stated that it was satisfactory but needed further planning, and 3 (% 4.2) teachers said that they do not have any information on the subject.

Table 1: Resources from which teachers acquire their knowledge on nutrition.

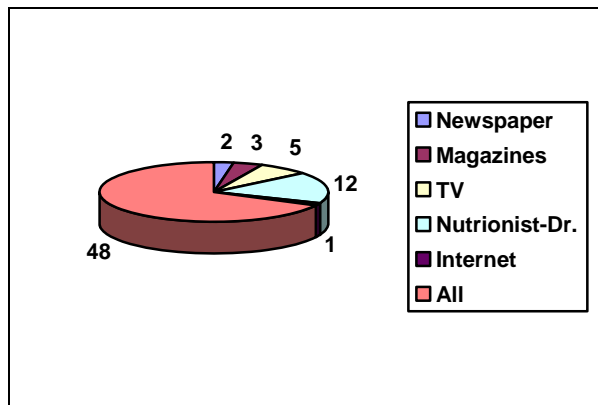


Table 2: Number of right answers.

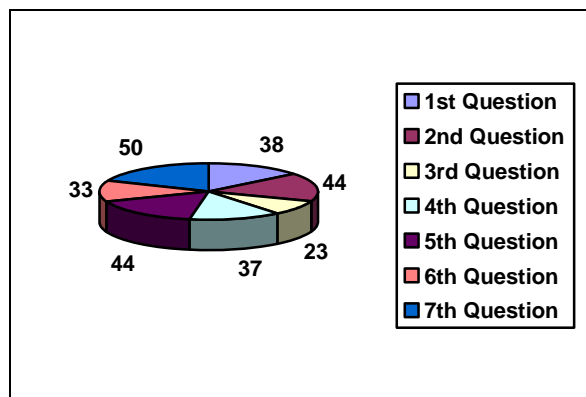
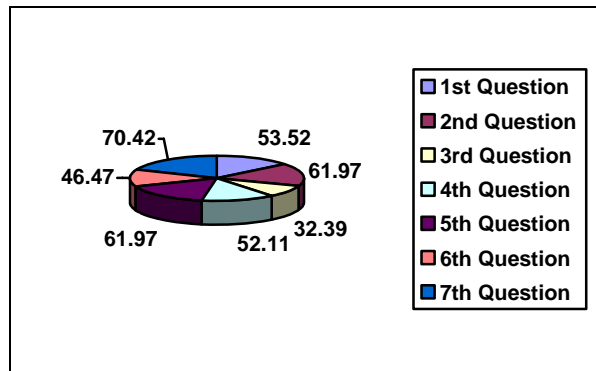


Table 3: Percentage of right answers.



ANALYSIS

The chosen sample of teachers for this questionnaire is not representative for all the primary school teachers. They are primary school teachers within the district of Guzelyurt who volunteered to take part in the research.

The 3rd question in the questionnaire, which asked about the right distribution of daily energy intake vis-à-vis various food types, obtained the least correct answers with %32.3. This shows that teachers need to explicate information on distribution of daily energy further. The 12th question about consuming food with more fibre and less fatty ingredients obtained 77.5% correct answers.

Dietary habits change depending on geography and culture. However, knowing which food types are to be consumed in smaller or larger amounts is important especially when considering today’s dietary preferences which are rich in fats².

Various important factors like Cypriot food culture influence the dietary habits of the working group. Results show that a large proportion of people consume locally produced vegetables which are high in fibre and as an island in the Mediterranean Sea, fish is also consumed widely³.

The research shows that only 2 out of 3 teachers have sufficient information on principal food. When asked about principal food and their consumption, 61.9% of the teachers rightly said that consumption of proteins, carbohydrates and fats are all necessary. However, the fact that the percentage of the correct answers was not a hundred proves lack of fundamental information.

According to some research, it is asserted that intake of fats has increased and it is this change in dietary composition that causes obesity. Besides energy intake and changes in dietary composition, another factor that influences obesity is the amount of energy spent^{1,4}. Research carried out in recent years shows that there is a significant decrease, approximately up to 15% to 25%, in total energy spent among children⁵. The 5th question which aimed to examine this particular knowledge held by teachers was answered 61.9% correctly. Accordingly, this proves that %38 of the teachers need to be informed further on the subject.

Other researches have shown that % 57 of women of all age groups are overweight, % 11.0 of children below the age of 5 are short, and % 1.9 are underweight^{1,6}.

Other than that, commercials used in visual and written media affect our dietary habits negatively.

For example, the research carried out by Baysal and his/her friends shows that coke, pizza, hamburgers and fries/chips have replaced ayran (yoghurt drink), fruit juices and meat balls⁷.

This research has also showed that %60.5 of the students eat sandwiches with fruit juices, %21.4 crisps with coke and only % 14.0 eat fresh fruits during recess periods in school.

The research carried out by Dağ et al demonstrates that conveying information is not enough for attaining a healthy community, but change in attitudes and habits is necessary⁸.

Şaşmaz et al's research showed that although %71.8 of the teachers believed nutrition training would be effective, only 31.6% participated in regular trainings⁹. In our research, training demands of the teachers correspond with their daily practices.

The fact that there was 97.3% participation in the research, proves that majority of the teachers are interested in nutrition, and sharing and up-dating their nutritional knowledge. In general, 54.1% of the all questions, received correct answers. This figure, which is above average, is nevertheless pleasing. Providing a fast and sustainable training programme for our teachers, who demonstrated their enthusiasm for bringing their nutritional knowledge up-to-date, would help them draw a healthy picture of the future.

CONCLUSION AND SUGGESTIONS

Early habits for a healthy community with healthy individuals are formed firstly in schools through students' interaction with their teachers and it continues on. Thus, teachers, who with sufficient information can help developing a healthy community, assume a bigger responsibility than parents in this respect. It is important to exploit IT, internet and other educational technologies in order to support teachers self-training and also help them give their students nutritional education.

The research revealed that, even though more than half of the teachers acquire general nutritional knowledge and information from mass media tools such as newspapers, magazines and TV, other up-to-date or new nutritional information like daily energy intakes or numbers of daily meals are less widely known. Furthermore, as a few teachers can acquire such information via using internet, there is a significant need to convey new and up-to-date information to each and every teacher.

1-) There should be internal trainings provided for new teachers and especially for classroom teachers on children's nutrition needs, its importance and the role of education for a healthy nutrition.

2-) Teachers need to be encouraged to use computers actively. Teachers need to drive the benefits of IT and computers in order to acquire accurate and comparative information fast and continuously.

3-) Computer trainings should be organized in order to increase the use of computers among teachers.

4-) Internet access need to be provided in schools in order to ease teachers access to information.

5-) Seminars need to be organized in collaboration with the respective ministries and the ministry of Health through out the school terms. Furthermore, teacher working groups should be established in order to evaluate the results and encourage active participation

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