The Impact of Health Education on Knowledge, Attitudes and Behaviors of Food Production and Distribution Center Operators with A High Risk Factor

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Abstract: Teaching can effectively on three dimensions: knowledge, attitudes and skills change in the behavior of the learner. This study aimed to explore the impact of health education on the knowledge and practices of operators of food production and distribution centers with a high risk factor has been done. In the Quasi-experimental study, 300 of the top risk factor classes selected. Knowledge and attitudes survey before training and 44 hours of documented training courses utilizes a team of experts and teachers of health was assessed again. While the officers before the training activity was monitored by the inspection team. Sanitary rules and regulations were completed during the period and at the end was monitored again. After the training has, 54% to 72% of the centers of health promotion period and the parameters of the 45% to 78% of personal health and hygiene parameters of vehicles from 48% to 62%. The structure of the company from 69% to 76% of incumbent’s center has improved. Subjects that resulted in improvement of the knowledge and attitude during the course. The loan officer performance in the field of food hygiene has been a 34% improvement. Health education courses traders using appropriate teaching materials can improve their knowledge and performance of the business and ultimately have a special role in promoting public health.

Key words: Education - Health Professions - Production of Food

INTRODUCTION

One of the main objectives of providing health services in developing countries is food sanitation. Of course, is always a priority in the national program on health care has been emphasized [1].

In any case, that the necessary transformation of human speech is the subject of tenderness issues raised health education. The general case for raising living standards and quality of people's participation in physical activity, psychological and social [2].

Along with other developments in the scientific, economic, social and cultural world gradually philosophy, objectives and methods of health education had also undergone many transformations by changing the size and health aspects of health education in recent years and its objectives were broadened and deepened.

Among the goals of health education is to help people to avoid the health problems position yourself in the best possible level of health protection and also to improve their health, their family members and society's activities. In other words, the goal of health education to achieve individual and collective behaviors appropriate to the sanitary equipment and specifically the planning and implementation of health education programs for groups and various segments of society. Currently, food hygiene training are scattered through the mass media runs out. Training classes are also other programs that are effective in improving food hygiene.

In the field of food hygiene training for students still no national program in some textbooks only briefly mentioned [3].

Statistics from the waste of food, disease and poisoning caused by tainted food, indicating the importance of food hygiene [4].

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Therefore, the production and storage, distribution and sale of food hygiene regulations made under. In addition to reducing the consequences of serious illness or injury of loss of workforce which in turn will prevent the economy comes [5, 6].

In the health and quality of bakery bread bakeries in the city of Yazd (a city in Iran) was found that the environmental health situation is not good, so that 50% of the comments on the definition of low or weak and only 9 percent are considered good as bakery, which have a good, low awareness and bread production they are worse. This study showed that trained bakers coupled with ongoing monitoring and control weaknesses and problems bakery in order to promote the health behavior is essential [7].

The effect of health education in the reduction of intestinal parasitic infections in Ilam (a city in Iran) using the model showed that apply the educational methods with intervention can reduce intestinal parasitic infections by 50% in the study group. Also in this study significantly increase the knowledge and the improvement in the treatment group compared with the control group occurred [6].

In another study conducted by Nowbahar et al. (2009) the training and regular meetings and a two-hour face-to-face with the training manual effective in reducing cholesterol levels and body mass index in patients with coronary artery disease [8].

Rineh et al., (1995) demonstrated that health education to people who are involved in food production can raise awareness and improve employee performance and health food [9].

The use of appropriate teaching methods (posters, pamphlets and face-to-face teaching) according to education level and other characteristics of the target group can be more effective in raising students' awareness. Given the importance of food hygiene training classes in relation to the expected the non-food consumption and reduced the number of patients with diseases caused by the consumption of such materials.

Studies show that health education can play a significant role in improving the knowledge and practices of the population [6].

This study aimed to investigate the effect of health education on knowledge, attitudes and ultimately behavior and performance trade operators in the food supply units have been designed and implemented with a high risk factor.

MATERIALS AND METHODS

This is a quasi-experimental study using pre-test and post-test was performed. The overall objective of this study was to determine the impact of trade on health education on knowledge, attitude and practice (behavior), health the centers of production and distribution of food to the risk factor is high and specific objectives of the research on the effect of health education unions in the parameters[13] of the Law on Amendments to the Food Hygiene Regulations Beverage Health, Beauty and include personal care, health care, the means and includes personal hygiene, sanitation and hygiene tools structure, also food hygiene and health and, ultimately, changes in the mentioned centers on the improvement of sanitary inspection.

The purpose of this intervention officers training centers, production and distribution of food with a high risk factor, including, restaurants, food cookery and so on juice and coffee, confectionaries make, dairy, slaughter and Baker cookery to 1,400 units in the city and that the statistical tables Cochran formula 300 sample of population was selected.

To select all the groups mentioned in the same city is divided into 4 regions and the share of each region was allocated 25% of the population studied, the proportion of the total population of each class and the number of research went into the classroom.

After determining the required number of centers in each region randomly edited by single operator intervention of choice and local inspections began.

Deterrents to prevent inspectors from the health center were Arak city.

The instrument used to measure the variables studied include provisions regulation health, attitude and knowledge questionnaire.

The validity of the content validity of the questionnaire, designed by experts on the subject and emphasize statistical consultant and reliability of the evolution of the audience as a pilot group of 10 questionnaires were obtained.

Within 6 months using various techniques of research on educational work was done and distribution of pamphlets, notices, prepare key message with style and charisma logical outcome of collective action group was determined and the influence.

In this regard, by providing training and 44 hours of educational booklet included: Food hygiene, sanitation, hygiene, disinfection conditions, safety, rules, principles;
taking advantage of the knowledge engineers and practitioners in the health professions schools and the distribution of pamphlets, notices and preparation key messages with style and charisma collective logical conclusion and to influence the group were determined. Notably, prior to the intervention of local health centers have been inspected sanitary rules and regulations of the complete class. In the opening session of the training course before taking the test and at the same time training course, face to face mission also carried out by the inspection team and to evaluate the process and ensure that you receive the original message in the intervention program was completed in the check-list.

After taking the test again at the end of the training period and health teams sent back to the desired location and Regulations Health Regulations completed.

Data collection and control coding and data entry using the software SPSS (Version 16) was used to analyze the results.

RESULTS

Based on the analysis forms Regulations sanitary regulations was 72% and 54% after intervention and before intervention respectively.

The statistical definitions of the terms of my health care individual health parameters and tools in compliance with the principles and standards of the care are institutionalized.

If separate regulations, sanitary regulations places inspected before and after the intervention, the following conclusions can be derived.

Parameters observe personal hygiene regulations in health questions was 78% and 45% after intervention and before intervention respectively.

Health parameters means the Regulations respecting health questions was 62% and 48% after intervention and before intervention respectively.

Structure of health care center was 76% and 69% after intervention and before intervention respectively.

These results indicate that the most effective training courses on personal health parameters. After that, tools and hygiene standards at the end of the unit.

During the inspection before and after the training and examination of food hygiene parameters following results were obtained: 34% indicates that the promotion of good practice in the field of food hygiene is incumbent on the issues raised (increased from 26% to 60%) (Table 1).

It can not be the subject of the opinion that the results in the tables above the influence, health professions and academic performance of special education in the knowledge, attitude and behavior of health officers. During that Table 2 and 3 show the effect of the knowledge and attitudes.

Table 1: Evaluate the performance of the operators in the field of food hygiene

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Before intervention</th>
<th>After intervention</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>N</td>
<td>Frequency (%)</td>
</tr>
<tr>
<td>Good</td>
<td>79</td>
<td>26</td>
</tr>
<tr>
<td>Average</td>
<td>169</td>
<td>56</td>
</tr>
<tr>
<td>Weak</td>
<td>54</td>
<td>18</td>
</tr>
</tbody>
</table>

Table 2: The operators' knowledge of food production and distribution centers before and after training with questionnaires

<table>
<thead>
<tr>
<th>Variable</th>
<th>Before intervention</th>
<th>After intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Frequency (%)</td>
</tr>
<tr>
<td>Knowledge</td>
<td>Good</td>
<td>180</td>
</tr>
<tr>
<td>Average</td>
<td>84</td>
<td>28</td>
</tr>
<tr>
<td>Weak</td>
<td>36</td>
<td>12</td>
</tr>
</tbody>
</table>
Table 3: The operators of food production and distribution of questionnaires before and after training

<table>
<thead>
<tr>
<th>Variable</th>
<th>Before intervention</th>
<th>After intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Frequency (%)</td>
</tr>
<tr>
<td>Attitude</td>
<td>Good</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>Weak</td>
<td>81</td>
</tr>
</tbody>
</table>

DISCUSSION

In view of the results and the implementation of the intervention strategy using a sensitive technique and attention to the health risks and the key messages with reasonable light, gravity, mass and specific conclusions, educational programs and the use of technology in the form of lobbying and negotiation and participation officers health indicators and improvement of food production and distribution centers with a high risk factor to significantly enhance and the situation resulting from the promotion of knowledge and attitude which contributes to healthy behaviors has been learned in the centers.

The increase of knowledge, attitudes and practices regarding the cost and time spent on food operators can the optimization method is also associated with greater impact.

Karimi et al. [3] and Ehramposh indicated in [12] the impact of health education on knowledge, attitude, performance, distribution and sale of food provider center operators have shown rates, but this effect is not known.

Kadivar (1999) in his review to the conclusion that overview sell food supply and distribution of centers of education had a 16% improvement [13].

It can be concluded that regular training objective and documented by a series of health education, including trade and utilizes the expertise, can improve their knowledge and performance of the business and the promotion of public health and health promotion have a special role in society. The impact of education on health behaviors in various other studies have shown similar results[6-14].

According to the results, the following suggestions are offered:

- All officers including food centers and public places are required to be certified and follow the teaching unions by inspectors during a visit of the same.
- A special course for graduate courses will be developed by the Center for Environment and Health.

- The participation of unions, chambers, industry, mining, commerce Subjects in the draw.
- Referenced classes for each grade specific and homogeneous form.
- The pre-course survey participants put on education.
- Use of teachers who have experience with the implementation process of the activity.
- The course fee is reduced by the number of periods.
- The input conditions and requirements for personnel certification activities, especially the health of the business.

CONCLUSION

Health professions education courses using educational literature can improve their knowledge and performance of the business and ultimately have a special role in promoting public health.

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