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Comparison of the effects of storytelling and creative drama methods on children's awareness about personal hygiene

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Abstract:

BACKGROUND AND OBJECTIVE: Maintaining and improving the health situation of children requires them to become more aware about personal hygiene through proper education. Based on several studies, teachings provided through informal methods are fully understandable for children. Therefore, the goal of this study is to compare the effects of creative drama and storytelling education methods on increasing the awareness of children regarding personal hygiene.

METHODS: This is an applied study conducted using semiempirical method in two groups. The study population consisted of 85 children participating in 4th center for Institute for the Intellectual Development of Children and Young Adults in Isfahan, 40 of which were randomly selected and placed in storytelling and creative drama groups with 20 members each. The data gathering tool was a questionnaire created by the researchers whose content validity was confirmed by health education experts. The gathered information were analyzed using both descriptive (average and standard deviation) and analytical (independent *t*-test and paired *t*-test) statistical methods.

RESULTS: The findings showed that there was a meaningful difference between the awareness score of both groups before and after intervention. The average awareness score of storytelling group was increased from 50.69 to 86.83 while the average score of creative drama group was increased from 57.37 to 85.09. Furthermore, according to paired *t*-test results, there was no significant difference between average scores of storytelling and creative drama groups.

CONCLUSIONS: The results of the current study showed that although both storytelling and creative drama methods are effective in increasing the awareness of children regarding personal hygiene, there is no significant difference between the two methods.

Keywords:

Children, creative drama, health education, storytelling

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Introduction

Awareness regarding personal hygiene helps people to have a full and healthy life in personal and social contexts, and following personal hygiene instructions can help one to maintain a suitable physical, mental, and social health level and to better accomplish the necessary tasks in one's family and society.^[1] Poor health among

school children is resulted from the lack of awareness of the health benefits of personal hygiene,^[2] personal hygiene education, and increasing health knowledge are the most effective methods to prevent or reduce many of the problems in the field of health.^[3] Personal hygiene principals provide one with a suitable framework that can be used to maintain personal health throughout one's life and early education of these principals to children at a suitable

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age helps in strengthening these principals in their minds.

Among various parts of the society children are one of the most important factors in improving the society's health situation due to their important role in learning and transferring personal hygiene principals.^[4,5] Teaching hygienic behaviors to children and improving their awareness in regard to personal hygiene plays an important role in preventing various diseases during their lives.^[6] An important factor to consider in health education is the demographic characteristics of the target audience such as gender, age, education, social class, economical background, job, health, and housing situations and other such factors. For example, children between ages of 6 and 9 prefer learning through experience, and therefore, books can be suitable tools for their education. To this end, the educator needs to use previous experience and personal judgment to select a method which is suitable to the characteristics of the target audience. In general, there are two types of education methods: formal and informal.^[7] Informal education is usually carried out in home or society by parents and other acquaintances while formal education is the duty of the education system including preschools, elementary schools, high schools, colleges, and universities and is carried out by teachers and educators.^[8]

Storytelling and creative drama are two of the informal education methods that can indirectly increase the children's knowledge and are thus useful for teaching personal hygiene. Storytelling includes live recitation and directing of stories in poetry or prose for listeners. The stories used in this method can be conversations, songs, rhymes, or stories presented with or without music or other helping tools.^[7] On the other hand, creative drama is a method in which the teacher recites a poetry, shows a picture, or plays a certain music for the students and then analyzes it along with the students and together they simultaneously create scenes, scenarios, characters, and conversations related to the initial material.^[7] Creative drama is an organized experience in which children recreate a problem or part of children's literature with the help of their teacher and then analyze and discuss the play afterward. This type of play does not need scenario, décor, makeup, or audience and the audience is the players themselves. Generally, the necessary equipment for creative drama is limited and only needs a qualified supervisor and enough space for the play to take place.^[9]

Several methods have been investigated for increasing the awareness of children and adults through education in Iran and other countries. These studies include school-based methods, methods deepening on

parents' cooperation, and other traditional or indirect methods.^[5,10-17] The results of several researches show the educational programs to be effective in improving the awareness of children about personal hygiene.^[5,10,15,16] Furthermore, the results of some studies showed that storytelling and creative drama are effective tools for children training.^[12-14,17]

Looking at previous works shows that use of alternative, indirect, and informal education methods has always been an attractive concept. However, few studies investigate the effect of these methods on teaching health-related concepts to children. Therefore, the goal of this study is to compare the effects of creative drama and storytelling education methods on increasing the awareness of children regarding personal hygiene.

Methods

This is an applied study conducted using semiempirical method in two groups. The study population consisted of girls between ages of 7 and 9 actively participating in the activities of 4th center for Institute for the Intellectual Development of Children and Young Adults in Isfahan, in year 2014. The inclusion criterion was being between 7- and 9-year-old while lack of desire for participation or lack of parental permission was the exclusion criteria for the population. The number of samples was determined using $n = \frac{(Z_1 + Z_2)^2 (2s)^2}{d^2}$. Forty children

were randomly selected and placed in storytelling and creative drama groups with 20 members each. The tool used in the study was a researcher-made test which was designed based on a book titled "Personal hygiene principles."^[18] The reliability of this tool was calculated using Kuder-Richardson method which showed a reliability score of 0.78. The questionnaire consisted of 43 questions with 3 answers of correct, somewhat correct, and incorrect for every question. Each correct answer was given 2 points, each somewhat correct answer was given 1 point and each incorrect answer was given 0 points; creating a score range of 0–86. Content validity of the questionnaire was confirmed by health education experts. Since the participating children lacked suitable literacy skills, the researcher asked the questions orally and recorded the answers. The texts for plays and stories were created by a literature expert based on the book titled "Personal hygiene principals of."^[18] Both storytelling and theatrical play interventions were carried out in 10 sessions with 30 min in each session. Two weeks after the last session, the posttest was carried out. To satisfy the ethical guidelines, along with confidentiality of answers, all of the parents of the participating children were asked for their permission. Data analysis was done through SPSS 20 statistical software (IBM Corp., Armonk, NY,

USA). using descriptive (frequency and standard deviation) and analytical (independent *t*-test and paired *t*-test) statistics. $P < 0.05$ was considered as statistically significant. The most important limitation of this study was the impossibility of conducting both storytelling and theatrical play interventions in the Institute for the Intellectual Development of Children and Young Adults. This limitation was solved by conducting the interventions inside a school attended by all of the participating children.

Results

To ensure a similar age distribution in both groups, Chi-square test was used. The result of Chi-square test is shown in Table 1. As can be seen by the $P = 0.93$, there is no meaningful difference between ages of the participants in two groups.

Table 2 shows the results of paired *t*-test for the personal hygiene awareness scores for participants in each group before and after intervention and independent *t*-test results for comparing the results of two groups. As can be seen from these results, the average scores of children were increased from 50.69 to 86.83 in storytelling group and from 57.37 to 85.09 in creative drama group after intervention. Furthermore, the results of independent *t*-test showed no significant difference between the awareness scores of the children of two groups before and after intervention.

Discussion

Personal hygiene is a large part of a healthy life and is also of great importance in disease prevention and treatment.^[19] Children are at an age which is greatly suitable for education and therefore can easily learn

Table 1: Frequency distribution table in two groups

Age	Frequency (%)	
	Storytelling	Creative drama
7	9 (45)	8 (40)
8	6 (30)	7 (35)
9	5 (25)	5 (25)
Total	20 (100)	20 (100)
χ^2, P	0.136	0.93

Table 2: Average hygiene awareness scores of participants in both groups

Personal hygiene awareness score	Groups						Independent <i>t</i> -test
	Creative drama group			Storytelling group			
	<i>n</i>	Mean	SD	<i>n</i>	Mean	SD	
Before intervention	20	55.69	3.22	20	57.37	2.92	$P=0.7$
After intervention	20	86.83	4.2	20	85.09	2.78	$P=0.73$
Paired <i>t</i> -test	$P<0.001$			$P<0.001$			

SD=Standard deviation

health and hygiene subjects and transfer their knowledge to their families and therefore to other members of the society.^[20] Given the fact that using active and experience-based teaching methods has proven to be successful in creating effective changes in the learning process for children and helps in achieving educational goals,^[21] this study aimed to compare the effects of two informal teaching methods of creative drama and storytelling in increasing the awareness of children regarding personal hygiene.

The findings of this study showed that there was a meaningful difference between the awareness of children about personal hygiene before and after intervention for both methods. On other words, both creative drama and storytelling methods were effective in increasing the awareness for the children. These results are similar to the ones reported by Ganji and Amirian,^[14] Roshan-Chesli,^[22] Mokhtar *et al.*,^[23] Vali,^[24] Walsh-Bower,^[25] Jaaniste *et al.*,^[26] and Jafari.^[27] Storytelling is an enjoyable method that can help in improving imagination and auditory and verbal abilities in children and can also teach them about social concepts, various customs and cultures, and different regional and national events and celebrations.^[28] Moreover, children require suitable experiences to live their lives and confront the future problems and since stories are reflection of the past experiences, they can express complex concepts in a simple and tangible manner, making them an important tool in education of children.^[29] For this reason, training courses for teachers, educators, and librarians consider storytelling as a teaching method and try to familiarize teachers and educators with this technique.^[28] Storytelling can be a powerful tool for communication, collaboration, and creativity. Storytelling supports the development of language, social, and cognitive skills.^[30] Storytelling is a means to support children’s development, to help them express and assign meaning to the world, to develop communication, recognition, and recall skills.^[31]

According to the findings of this study, creative drama was also successful in increasing the awareness of children about personal hygiene. Creative drama basically entails self-expressive, social interactions which emphasize speaking spontaneously in improvisations, thereby leading to better interpersonal communication skills.^[17] In creative drama, a narrative or nonnarrative subject is played with the help of the educator which helps members of the group to achieve their educational goals or else helps them understand otherwise intangible and abstract concepts. This education method can be used for children, young adults, and even adults and can be used for improving knowledge and skills of individuals about social, practical, artistic, or educational situations or improve their abilities for literature, history,

science, creative thinking or any other educational subject. Creative drama is a low-cost method that can have great effects on the education of children and prevents boredom from the process of education and learning and also helps prepare the children for entering the society.^[32]

The results of this study show no difference between the effects of storytelling and creative drama methods on increasing the awareness of children about personal hygiene. These results are similar to those reported by Zakariyai *et al.*^[21] and Amato *et al.*^[12] Generally, it can be said that both methods are suitable for teaching various concepts to children due to being appropriate for age and developmental characteristics of children.

Finally, it can be said that not only creative drama and storytelling methods can be applied in the area of health education for children but it is also possible to use these methods for psychological and social educations and for other age groups such as teenagers or even adults. Since use of creative drama and storytelling methods does not require excessive equipment or costs making it possible to use these methods in any suitable location with just the presence of teachers and children, using these two methods are a suitable solution for reducing the social and economical costs caused by lack of proper knowledge about personal hygiene during childhood years and can also help in reducing the costs of health education. These methods are currently being used in most centers of Institute for the Intellectual Development of Children and Young Adults in Iran by the librarian of each center and it is suggested to spread the use of these methods to schools or other places of education to make use of the benefits provided by these teaching methods.

Conclusions

Results of this study indicate that storytelling and creative drama are both beneficial to the increasing children's awareness about personal hygiene. Both storytelling and theatrical play interventions are considered to be appropriate methods for educating children due to being compatible with children's special age characteristics.

Ethical considerations

Ethical issues (including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission and redundancy) have been completely observed by the authors.

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Conflicts of interest

There are no conflicts of interest.

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