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Imparting Nutrition Knowledge and Dietary Counselling Among Old Age People to Assess the Level of Adoption and Improvement in their Dietary Practices

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Abstract

Nutrition is a prime necessity to maintaining normal health in all age group of life cycle. Therefore various health and nutritional intervention are required to prepare for the elderly to face these physical alterations.

The present attempt has been formulate a 7 days nutrition intervention programme and implemented on 123 old age (from low income group) respondents from 600 huge. A pre-post experimental research deign was adopted to assess the impact of implemented intervention on their daily dietary practices. The results showed that pretest mean scores on required and selected aspects of nutritional care during old age (aspect no.1- A, 2- B, 3- C,4- D and 5- E) had gained by the respondents, out of 10 maximum scores, as: 5.36; 4.75; 3.43; 5.25 and 3.53 respectively. That scores were increases significantly, after intervention as: 8.43; 7.67; 7.28, 8.56 and 7.63 for the selected aspects on post- test as A1, A2, A3, A4 and A5 respectively. The t- test revealed that significant differences were found between the scores of pre- test and post – test, which indicates a good impact of nutrition intervention. The reveals of the present attempt has inferences that low income group is a factor but the ignorance about management of balanced and preventive diet, unhygienic house hold's environment and practices are more prominent factors leads malnutrition and other diseases. That requires a precise nutrition and health intervention to imparting awareness for improvement in quality of life and living of elderly.

Key words: Intervention, imparting knowledge, elderly, unhygienic, physical alteration, degradation.

Introduction:

Old age group has included in vulnerable section due to physical degradation resulted disease susceptibility. Ignorance about nutrition care and management during this age is a the leading cause of elderly malnutrition and ageing induced degenerative diseases. Maintaining wellness and fitness in old age group is a challenging task but its a right of elders. Old age in the life cycle is a natural process has many degradation in physical state mainly, that affects all wellness of body including mental health with social changes. Although the nutritional status of previous life or adult stage can affects the ageing process. But at the same time proper nutritional care can brings a healthy ageing and improve the consequence of old age among the elderly.

Old people with low economic group are mostly affected from malnutrition and survive with lots of consequence. Its a serious concern of nation which can only manage by imparting knowledge regarding required nutrition and health practices by intervention. Healthy ageing is a key of wellness in old age, that requires a modified balance nutrition and active life style for elderly from all economic status or income group. Nutritional care can manage even in poor economic condition of elderly but nutritional awareness is necessary for that with knowledge of maintaining sanitation and hygiene. The government has been developed and implemented various public health programmes with distributions of food or ration for low economic group of community, but no any specific nutritional intervention programme has been implemented for old age people.

Imparting right nutritional knowledge and preparation of low cost nutritional and medicinal value added food products with functional diet is a prime need to overcome the rate of morbidity from elderly. Therefore, the present attempt has been formulated an intensive nutritional intervention course for elders to assess its impact.

Methodology:

In the experimental research design a pre- post test method was adopted to assess the impact of implemented nutrition intervention for selected old age respondents.

Sampling: 600 old age (300 male and 300 females) people from poor community were interviewed from different villages of 5 blocks of Saharanpur district and selected 123 respondents those had the inclusion criterion of the study. The elderly became a sample those were agreed to participate in a 7 days dietary intervention course at their home. Then showed their highly interest for learning were selected as sample of the study.

The study comprises 4 phases: Pre-test exposure; formulation of nutrition intervention programme for elderly as accordance to their need; implementation according to intervention schedule; Post-test exposure. The data were collected by survey method with a modified questionnaire on 5 nutritional aspects, structured for pre – post exposure. Mean, SD, t- test etc. were used for data analysis to revealed the results.

Results:

The obtained results are presenting here in following ways:

1. Demography of elderly:

1.1 Gender wise classification of elderly:

Table no. 1.1 reveals that most (62.60%) of the females elderly were showed their high interest to participate in study and found in maximum. Although 37.39% elderly males were found to be highly interested to attend nutrition intervention course.

Table no. 1.1 Male and female percentage among the selected elderly-

Gender of elderly	N = 123	Percentage (%)
Male	46	37.39
Female	77	62.60
Total	123	100

1.2 Age wise distribution

The age group wise distribution of respondents has been showing in table no. 1.2 that maximum (73.98%) elderly found from 60 - 70 years age, followed by 23.57% from 70 - 80 years. Only 2.43% elderly from > 80 years age group had an interest to participate in this intervention under the study. This reveal indicates that the person on > 80 years age has decreases their interest for intervention.

Table no. 1.2 Age group of selected elderly

Age group of elderly	N = 123	Percentage (%)
(years)		
60 - 70	91	73.98
70 - 80	29	23.57
>80	3	2.43
Total	123	100

2. Results of pre-post test of Nutrition Intervention:

A 7 days nutrition intervention was formulated and applied on respondents, individually at their home. The mean scores of pre – post test on all selected aspects had analysed and findings are presenting in the following tables.

2. 1 Pre- test exposure (Awareness level of elderly respondents about the changing nutritional need for wellness in old age):

Table no.2.1 shows that the total of mean of scores gained by the respondents on the awareness regarding selected 5 aspects of right nutrition care practices was 22.23 out of 50 maximum. The mean scores were obtained as: 5.36, 4.75, 3.43, 5.25 and 3.53 on A, B, C, D and E aspects of nutrition respectively, on pre – test exposure.

Table 2.1 Knowledge level of respondents about nutrition for healthy ageing

Pre-test assessment on selected aspects of nutrition for	Pre-test Mean score	
healthy ageing	(Total Maximum Score = 50)	
(Maximum scores of each aspect = 10)	(N=123)	
About management of balance diet during old age. (A)	5.36	
Adoption of diversity in diet. (B)	4.75	
Inclusion of functional & medicinal foods. (C)	3.43	
About kitchen hygiene and cleaning practices at home. (D)	5.25	
About adoption of active life style with avoidance of	3.53	
alcohol, tobacco and other narcotic agent. (E)		
Total score	22.23	

2.2 Post – test exposure (Impact of Nutrition Intervention):

Table no. 2.2 shows that total score of post-test was exceeded (39.57) after intervention from total score of pretest (22.23). On the percent extent, the post test score has been showing about 34.68 % improvement on awareness level dietary practices of elderly after nutrition intervention. The scores on the A1, A2, A3, A4 and A5 aspects were found to be 8.43, 7.67, 7.28, 8.56 and 7.63 respectively.

Table no. 2.2: Post – test exposure of learning on selected aspects of nutritional care adopted by old age respondents-

Post-test response on selected aspects for Nutritional	Post-test Mean scores (Total	
intervention regarding wellness in ageing	Maximum Score = 50)	
(Maximum scores of each aspect = 10)	(N=123)	
About management of balance diet during old age. (A1)	8.43	
Adoption of diversity in diet. (B1)	7.67	
Inclusion of functional & medicinal foods. (C1)	7.28	
About kitchen hygiene and cleaning practices at home. (D1)	8.56	
About adoption of active life style with avoidance of alcohol,	7.63	
tobacco and other narcotic agent. (E1)	K /	
Total score	39.57	

3. Impact analysis of Nutrition Intervention:

Table no. 3 shows that the difference between total mean score of pre- test vs post-test (T vs T1) was found significant at 0.001 level, that showing a good impact of nutrition intervention. The t value analysis reveals that the differences in mean scores of the selected aspects of nutrition knowledge: a non significant difference was found on the aspect B pre-test and B1 post test (Adoption of diversity in diet). Whereas the highly significant difference on 0.5 level was seen on pre-post of aspect D, that means the old age respondents were better adopting the dietary hygiene practices after intervention. The significant differences on 0.001 level were showed on pre-post exposures of aspects A and E.

Table no. 3 The statistical differences (on mean scores) between pre- post exposure of elderly

Pre-test vs Post -test	Pre – test Exposure	Post test Exposure	t value
	(mean scores)	(mean scores)	
A vs A1	5.36	8.43	3.56878*
B vs B1	4.75	7.67	1.21405***
C vs C1	3.43	7.28	8.5906*
D vs D1	5.25	8.56	2.32111**

E vs E1	3.53	7.63	9.30146*
T vs T1	22.23	39.57	5.8593*

^{*}Significant at 0.01 level **Significant at 0.5 level ***Non significant

Conclusion:

The findings and results of present attempt has been concluded that the female elderly were more interested to participate in study than males. Maximum elderly had belonged to 60 - 70 years age group. The door to door nutrition intervention showed a good and significant impact on improving in knowledge of elderly thereby the dietary practices of old respondents have been changed as accordance to need of healthy ageing and suitable for wellness in old age. Therefore, it is proved that the individual nutrition intervention can better improve the knowledge and practices in right way to improving the quality of life of elderly.

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