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Effectiveness of different extension media in imparting knowledge to rural women

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Abstract

The present study was conducted in two villages viz. *Padhiarkhar* and *Bund* of district Kangra of Himachal Pradesh to determine the effectiveness of different extension media in imparting knowledge to rural women. Pre and post experimental design was followed for carrying out the study. For intervention, a technology kit on 'Sun Drying of Vegetables' was prepared by the department of Home Science Extension Education of College of Home Science under All India Co-ordinated Research Project (H. Sc.). The experimental group was exposed to different media viz. 'lecture +demonstration', 'print media' and 'electronic media'. The utilization focused evaluation of different media in terms of gain in knowledge indicated that 'lecture+ demonstration' proved to be the most effective media followed by 'electronic media' and 'print media'. Thus, the extension functionaries should make concentrated efforts to disseminate the messages concerning 'Sun Drying of Vegetables' through these modes as per their magnitude of influence so as to quicken the flow of information and thus adoption.

Key Words: Intervention, knowledge gain, media, technology kit.

Introduction

India is the only country in the world, which produces diverse varieties of fruits and vegetables. According to some estimates, roughly 30 per cent of the harvested fruits and vegetables get wasted due to inadequate knowledge about post harvest management practices (Chakarborty, 2006). Thus, the best alternative to save these losses is to preserve the fruits and vegetables for use during off season.

There are different methods available for preserving fruits and vegetables and sun drying is one of them. Sun drying is a process of removing excess water content through evaporation. Fortunately, in our country sunshine is available in plenty throughout the year and at no cost. Thus in the modern era, sun drying of vegetables is the cheapest and easiest method of preservation that the housewives can use for home scale preservation of vegetables. Keeping this in view, a technology kit on the topic "Sun drying of vegetables" was prepared to impart knowledge to rural women. Communication with rural people/women is not only a difficult and challenging task but requires appropriate sustenance because of various traits of population like illiteracy, conservatism with limited exposure and poor contact with outside world (Sagwal and Malik,1995). To minimize the impact of these barriers, the messages can be conveyed through different media which encourages the audience to feel themselves involved in and to act upon it. No single method or any combination of methods is known to be effective in all kinds of situations, thus with this assumption the present study was carried out to study the relative effectiveness of different media in imparting knowledge to rural women about sun drying of vegetables.

Material and Methods

The study was conducted in two selected villages namely *Padhiarkhar* and *Bund* of Kangra district of Himachal Pradesh. A multimedia technology kit/package prepared on the topic "Sun Drying of Vegetables" constituted a booklet (printed material), a leaflet (to be given after conducting demonstration) and a video cassette (an electronic media). Interventions were carried out to test the effectiveness of the package in the field situation. For this purpose, all the contents of the media developed in the technology kit were translated/dubbed in Hindi so that the rural women can comprehend the message conveyed through these media in a better manner.

In the present study, pre and post experimental research design was followed. Village *Padhiarkhar* was selected as an

experimental group while village *Bund* as the control group. A total sample of sixty rural women i.e. thirty from each village with homogenous characteristics of education from primary to matriculation was selected. Before starting intervention on the experimental group, knowledge test was administered on both the groups.

For intervention, the experimental group was exposed to different media prepared in the technology kit one by one. The research design for the intervention on sun drying of vegetables has been depicted in figure-1.

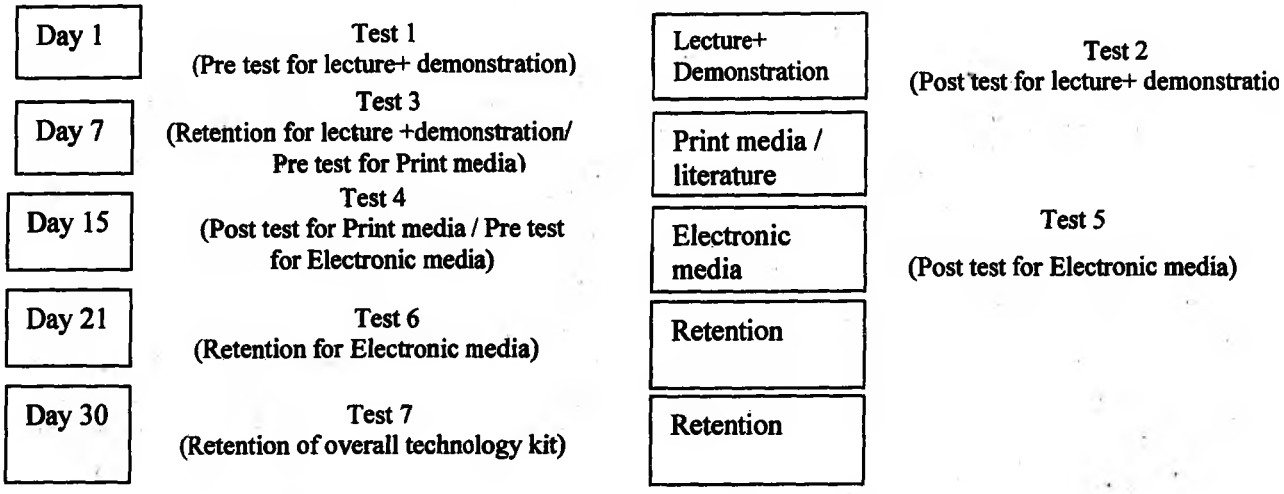


Figure 1. Research design for intervention of multi media package

As the control group was not to be exposed to any intervention, thus after conducting pre knowledge test on first day, two retention tests were also carried out on 21st and 30th day on the group. It was done to rule out any possibility of gain in knowledge by control group from any other source during this period.

The knowledge scores were computed by assigning one score for each of the correct answer and zero for the incorrect.

Gain in knowledge for experimental and control group was calculated by using the formulae as given below:

Overall gain in knowledge= Gain in knowledge in experimental group- Gain in knowledge in Control group.

Gain in knowledge in control group= Score of post test (Score on 30th day) - Score of pre test (Score on 1st day).

Results and Discussion

Interventions related to sun drying of vegetables were carried out separately for the experimental and the control group to study the comparative impact of the individual media regarding gain in knowledge by the experimental group along with the difference between knowledge gained by experimental and control group. Inferences drawn out of the intervention package are presented in the following tables. Table 1 depicts existing knowledge level of the respondents regarding sun drying of vegetables before exposure to the intervention package. The respondents were divided into three categories on the basis of knowledge scores attained by them which ranged from 0 -30.The categories formed were low (0-10), medium (11-20) and high (21-30). It is evident from the data that majority of the respondents both from control group (73.33%) and experimental group (50.00%) possessed low level of knowledge. It was further observed that 26.67 percent and 43.33 percent respondents, respectively fall in the category of those who had medium level of knowledge. Only 6.67 percent respondents from experimental group and none of the respondents from control group reported high level of knowledge regarding sun drying of vegetables.

The data pertaining to utilization-focused evaluation of multimedia technology kit in terms of gain in knowledge has been presented in Table 2. Immediately after administering pre knowledge test on the experimental group they were introduced to the topic through 'lecture + demonstration', followed by print media (booklet and leaflet) and in the end they were exposed to electronic media i.e. video cassette. The comparison between gain in knowledge through

Table 1. Distribution of rural women on the basis of level of knowledge regarding sun drying of vegetables

Categories	Knowledge score	Control group (N=30)		Experimental group (N=30)	
		f	%	f	%
Low	0-10	22	73.33	15	50.00
Medium	11-20	08	26.67	13	43.33
High	21-30	0	0	02	6.67

different media revealed that the respondents of experimental group had gained maximum knowledge from 'lecture+ demonstration' (14.60), followed by electronic media (6.26) and print media (4.30).

It can be concluded from the results that 'lecture +demonstration' appealed maximum to the respondents, may be because the learners participate in the demonstration process where they can get instant solution for their queries and also of the reason that in this method important points are repeated again and again. Further, video cassettes were reported to be comparatively less effective. No doubt, while viewing the video cassette maximum senses are involved but reason for its comparative less effectiveness may be that the respondents might have remained busy in viewing the clippings only and/or had not paid attention to the message disseminated. Print media exhibited least impact in terms of gain in knowledge may be because the respondents were casual in going through the material given to them or they did not get time to go through it. The calculated t-value indicated significant differences in gain in knowledge by the farmwomen regarding sun drying of vegetables through different media. Singh *et al.* (2003) reported similar findings in their study. Thus, it can be interpreted from the results that no media can substitute the other media because each media has differential impact on the knowledge gained by respondents.

Data furnished in Table 3 explains the mean gain in knowledge of experimental group and the control group regarding sun drying of vegetables. It was revealed from the table that mean gain in knowledge of experimental group was much more than that of the control group i.e. 13.50 and 0.30, respectively. The differences between mean pre test knowledge scores of control and experimental groups were non significant whereas in case of post knowledge scores, these differences were highly significant at one percent level indicating effectiveness of intervention package. The findings are in conformity with the findings of Sagwal and Malik (1995) who also reported significant effect of intervention on the knowledge level of the respondents. Thus, it can be interpreted that if knowledge on any topic is imparted through an intervention package, the respondents learn better than those who do not receive any kind of treatment.

Table 2. Utilization focused evaluation of different media in terms of gain in knowledge by rural wmen

Media	Mean pre- test initial knowledge score		Mean post-test knowledge score		Mean gain in knowledge		t value
	Control (N=30)	Experi-mental (N=30)	Control (N=30)	Experi-mental (N=30)	Control (N=30)	Experi-mental (N=30)	
Lecture+ Demo	9.96	11.86	10.20	26.46	0.30	14.60	14.56**
Print media / Literature	9.96	20.13	10.20	24.76	0.30	4.30	
Electronic media	9.96	24.76	10.20	31.03	0.30	6.26	

** Significant at 1per cent level

Table 3. Utilization focused evaluation of multimedia technology kit on sun drying of vegetables in terms of gain in knowledge by rural women

Groups	Mean pre test initial knowledge score	Mean post test knowledge score	Mean gain in knowledge
Control	9.96	10.20	0.30
Experimental	11.86	25.43	13.50
t value	0.052 NS	15.70**	

** Significant at 1per cent level

Conclusion

It can be concluded that all the media under study worked effectively and respondents had gained sufficient knowledge regarding sun drying of vegetables at post exposure stage. However, 'lecture+ demonstration' had helped the respondents to a greater extent in gaining knowledge than other two media viz. print and electronic. The acquisition of maximum knowledge through the exposure to 'lecture+ demonstration' implies that this combination of media adds more to clarity and improves knowledge. Lega (1989) and Sharma (1999) also emphasized that demonstrations are helpful in knowledge gain among the rural clientele. As regards impact of electronic media, it did not prove to be effective, as the audience might not be attentive regarding contents while watching the video. Thus, it is recommended that while imparting information through such media the extension functionaries should summarize all the important points at the end of the show.

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