

## ORIGINAL ARTICLE

# Effectiveness of train the trainer module in delivery of HIV prevention messages for Homoeopathy and Ayurveda practitioners

Divya Taneja, Adeline Nyamathi<sup>1</sup>, Anil Khurana<sup>2</sup>, N. Srikanth<sup>3</sup>, Chaturbhujaya Nayak<sup>4</sup>, M. M. Padhi<sup>5</sup>, Maya Padmanabhan<sup>6</sup>, Richa Singhal<sup>7</sup>

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## ABSTRACT

**Introduction:** A 2-day training program was developed to train Homoeopathy and Ayurveda practitioners to impart HIV/AIDS prevention messages to their clients. The purpose of the study was to evaluate the effectiveness of this training program based on train the trainer modality.

**Materials and Methods:** Ten primary participants were enrolled in each one day and two day training program. Both the groups were instructed to impart further training to 10 participants each. The knowledge of and attitudes toward HIV/AIDS were measured in primary participants before and immediately after training and at the end of 3 months and in secondary participants before and immediately after training by a 21-item questionnaire.

**Results:** In 1-day group, the pre-training and post-training assessments were completed by all the 10 participants, where as the 3 month assessment was completed by only seven participants. In this group, mean overall knowledge score was 15.9 which increased to 17 post training and reduced to 16.7, 3 months post training. In 2-day group, the pre-training and post training assessments were completed by 10 participants, where as the 3 month assessment was completed by nine participants. In this group, the pre-training score of 17.4 increased to 19.8 immediately after training and decreased to 18.4, 3 months after training. From the 1-day group and two day group, seven and nine participants respectively, conducted secondary trainings. In case of secondary trainees, the cognitive knowledge scores showed a statistically significant difference before and after trainings in both the groups.

**Conclusion:** The training module on HIV/AIDS was useful in enhancing the knowledge of physicians of Homoeopathy and Ayurveda on cognitive and transmission related aspects of the disease and on its ethical, social and legal implications. With such training programs the homoeopathic and ayurvedic practitioners can play a vital role in prevention of HIV infection by undertaking appropriate patient education and counselling.

**Keywords:** Ayurveda, Educators, Homoeopathy, HIV/AIDS, Physicians, Train the trainer

Research Officer (Homoeopathy),  
<sup>2</sup>Deputy Director (Homoeopathy),  
<sup>4</sup>Former Director General,  
<sup>6</sup>Statistical Assistant, Central  
Council for Research in  
Homoeopathy, New Delhi, India,  
<sup>3</sup>Assistant Director (Ayurveda),  
<sup>5</sup>Deputy Director (Technical),  
<sup>7</sup>Statistical Assistant, Central  
Council for Research in Ayurvedic  
Sciences, New Delhi, India,  
<sup>1</sup>Professor, University of California,  
Los Angeles (UCLA) School of  
Nursing, USA

**Address for correspondence:**

Dr. Divya Taneja,  
Research Officer (Homoeopathy),  
Central Council for Research in  
Homoeopathy, 61-65, Institutional  
Area, Opposite D Block, Janak Puri,  
New Delhi - 110 058, India.  
E-mail: [drdivyataneja@gmail.com](mailto:drdivyataneja@gmail.com)

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## INTRODUCTION

The train the trainer approach is widely used in various public health programs because of higher resource efficiency ensuring a larger outreach. However, the transfer of messages has to be consistent throughout the process so as to ensure program effectiveness. Central Council for Research in Homoeopathy (CCRH), an autonomous body of Ministry of Health and Family Welfare, Government of India, prepared a training module for training of ayurvedic and homoeopathic practitioners and educators in delivery of HIV prevention messages to their clients and students. This module was formed in collaboration with the research team from University of California, Los Angeles (UCLA). The 1-day module focused on the clinical and medical knowledge aspects of the disease and its prevention. A 3-day module was developed to encompass legal, ethical, social issues associated with the HIV disease and on the behavior change communication so as to enable the practitioners to deliver the prevention and HIV counseling message effectively to their clients. Both the modules were successfully tested on more than 200 ayurvedic and homeopathic practitioners in Delhi. Findings of the study<sup>[1]</sup> revealed that both the one and three-day primary trainees significantly increased their HIV/AIDS knowledge and attitude scores from pretest to immediate post test with ongoing improvement in both groups over the 3 and 6-month period. A total of 26% of primary trainees in the 1-day and 36% of primary trainees in the 3-day program trained secondary trainees. This program was independent of the National AIDS Control Program in the country and focused on identifying a strategy for capacity building of Ayurveda and Homoeopathy practitioners, only.

It was important to identify an optimum duration, where in the training objectives are achieved, while at the same time, the regular functioning of the practitioners is not affected. Subsequently, CCRH, while keeping the same components, reduced some activities and compacted the 3-day module into a 2 day training module of 12 hours duration. A study was undertaken to evaluate the effectiveness of this training program based on train the trainer modality. The module was, therefore tested in comparison with the 1-day training module (6 hour duration) to identify its effectiveness on the primary and secondary trainees. Assessing the knowledge and

attitudes of the primary and secondary trainees on an identified questionnaire, before and after training, tested the effectiveness of the train the trainer methodology.

## MATERIALS AND METHODS

### Design

A culturally-sensitive HIV/AIDS education and training program of 1- day duration and of 2- day duration was developed. Participants were randomly assigned to the two groups and in each group 10 participants were trained. Both the groups had both ayurvedic and homoeopathic practitioners and educators. No distinction was made between the ayurvedic and homoeopathic practitioners, and the training focused on risk assessment and delivery of HIV prevention message to the patients/clients rather than on the treatment aspect. Knowledge and attitudes of primary trainers thus trained was assessed using a 21-point questionnaire as developed and used in the previous studies during the development and testing of HIV/AIDS training module by the CCRH in collaboration with the UCLA.<sup>[2,3]</sup> This assessment was done immediately before the training, immediately after the training and at 3 months after the training. The participants were encouraged to conduct further training sessions of 10 participants each (secondary trainees) and the knowledge and attitudes of these secondary trainees was assessed using the same 21-point questionnaire, immediately before and immediately after the training. The research study was approved by both the Scientific Advisory Committee of the CCRH and the UCLA Human Subjects Protection Committee.

### Sample and setting

The training sessions for the primary participants were organized by CCRH at its Regional Research Institute for Homoeopathy (RRI), Mumbai. The qualified practitioners as per the regulatory requirements of India were identified through two homoeopathic medical colleges, one ayurvedic medical college and practitioner associations in Navi Mumbai. Out of 26 practitioners who responded and agreed to participate in the study, 24 were chosen randomly and allocated in the 1-day and 2-day groups using simple random number allocation. Ten participants in each group were invited for the trainings and training dates were informed in advance.

The importance of conducting secondary training was emphasized in both the groups and the participants were encouraged to conduct secondary training sessions and apply the assessment questionnaire to their participants. The primary participants recruited secondary participants by convenience sampling to conduct their training sessions.

### Procedure

The Indian members of the research team from Delhi, three members which had conducted the 1-day and 3-day trainings in the previous study<sup>[1]</sup> were again involved in conducting the training. A counselor from Mumbai was additionally involved, to conduct a half day (2 hour 30 minutes) session on counseling and behavior change communication for the two day training participants which ensured that role plays were conducted in local languages and local sensibilities were taken into consideration.

The Delhi team, prior to the training sessions, explained the objective and the procedure of the study and took written informed consent from the participants. The pre-training and immediate post training assessments were made at the beginning and end of the training session. Assessment at the end of 3 months was made by postal communication.

The primary participants thus trained conducted the training session of 1 day (6 hours) duration for 10 participants within 1 month of the training. These secondary trainees were also informed of the objectives and procedure of the study and consent was taken from these secondary trainees. Pre-training and a post training assessment of these secondary trainees was applied by their respective primary participants.

### Primary training sessions: One day and two day

The 1- day training session was of 6 hours duration and covered topics on epidemiology of HIV/AIDS, HIV virus, transmission of HIV/AIDS, natural history of HIV diseases, clinical manifestations and opportunistic infections, laboratory diagnosis, management of HIV positive persons, role of alternative systems of medicine, prevention of HIV/AIDS and case studies. The 2-day training session was of 12 hours duration. In addition to topics covered in the 1-day training program, sessions on personal, social, legal and ethical issues related to HIV infection were also conducted [Figure 1].

The learning methods adopted were open discussions, case scenarios, etc., to maximize participant interactions and understanding of real life situations [Text box 1].

An HIV counselor conducted a detailed session on behavior change communication. Role plays related to HIV counseling and prevention were conducted by the participants in groups to encourage self-learning and discussions [Text box 2].

Prevention of HIV/AIDS was discussed using culturally sensitive case scenarios such as "A mother comes to you for taking medicine to prevent pain while getting her daughter's ears pierced (a practice common in India), what advice will you give her?" This scenario, for example, identified the risk of infection associated with sharing of infected needles and use of unsterilized needles. Case discussions and role plays on personal, social, legal, ethical

### Text box 1: Sample open discussion questions and case scenarios

#### Knowledge questions

- What is the major difficulty in making a vaccine against the virus?
- What does 'Opportunistic Infection' mean?
- What are the conditions which can cause immunodeficiency, apart from HIV
- Why is sexual intercourse with condom a low risk activity and not a no risk activity?
- Why is HIV not transmitted by mosquito bites or insect bites?
- Can a new born infant get infected from HIV from his/her HIV positive parents by cuddling or kissing?
- A 24-year-old man gives a history of unprotected sexual exposure 3 days back. He gets his HIV test done from a local laboratory. What do you think the test result would be, considering that there is no other pertinent history of sexual exposure or blood transfusion or injection use

#### Clinical care case scenarios

- A 30-year-old male presents with white patches in mouth. His X-Ray chest shows evidence of miliary tuberculosis. Patient has not received any antibiotics or immuno-suppressive drugs in immediate past. Is there sufficient evidence to label him as symptomatic HIV infection?
- An 8-month-old infant is seen with inability to feed and excessive salivation. The infant has lost considerable weight in last 2-3 weeks. Father of the infant died 1 year back after a protracted illness. Infant is found to have extensive oral thrush. Infant is primarily on mother's milk. There is no history of receiving antibiotics or steroids over the last month. How will you manage?
- 24-year-old male presents with painless genital ulcer since 1 week. Gives history of sexual promiscuity, but says he has used condoms at all times. What will be your line of management?
- A 28-year-old AIDS case is seen with high grade fever since 3 days, severe diarrhoea since 4-5 hours. On examination the patient is found to be moderately dehydrated, semi-conscious and loss of orientation to time, place and person. What would be your line of management?

METHODOLOGY	METHODOLOGY	ONE DAY TRAINING SESSION	TWO DAY TRAINING SESSION
	QUESTIONNAIRE	PRE-TRAINING ASSESSMENT	PRE-TRAINING ASSESSMENT
	MICRO-TEACHING & LECTURE USING POWERPOINTS SLIDES AND QUESTION ANSWERS	PROGRAM OVERVIEW & PRE-TRAINING ASSESSMENT	PROGRAM OVERVIEW & PRE-TRAINING ASSESSMENT
		EPIDEMIOLOGY	EPIDEMIOLOGY
		HUMAN IMMUNODEFICIENCY VIRUS	HUMAN IMMUNODEFICIENCY VIRUS
		TRANSMISSION OF VIRUS	TRANSMISSION OF VIRUS
		NATURAL HISTORY OF HIV/AIDS	NATURAL HISTORY OF HIV/AIDS
		CLINICAL MANIFESTATIONS & OPPORTUNISTIC INFECTIONS	CLINICAL MANIFESTATIONS & OPPORTUNISTIC INFECTIONS
		LABORATORY DIAGNOSIS	LABORATORY DIAGNOSIS
		MANAGEMENT OF HIV INFECTION	MANAGEMENT OF HIV INFECTION
	CASE SCENARIOS	CLINICAL CARE	CLINICAL CARE
	CASE SCENARIOS	PREVENTION OF HIV/AIDS	PREVENTION OF HIV/AIDS
	GROUP ACTIVITIES	-	PREVENTION OF HIV/AIDS
	CASE SCENARIOS & DEBATE	-	IMPACT OF HIV INFECTION
	CASE SCENARIOS & ROLE PLAYS	-	COUNSELLING & BEHAVIOUR CHANGE COMMUNICATION
LECTURE	CONDUCTING FURTHER TRAINING	CONDUCTING FURTHER TRAINING	
QUESTIONNAIRE	POST-TRAINING ASSESSMENT	POST-TRAINING ASSESSMENT	

**Figure 1:** Content coverage in one day and two day training sessions

issues and HIV counseling and preventions were conducted [Text box 3].

### Secondary training sessions

The secondary trainings were similar to the one day training conducted and had sessions on epidemiology, virus, transmission, natural history, clinical manifestations and opportunistic infections, laboratory diagnosis, management, prevention, case studies and role of alternative systems of medicine.

Power point presentations and a booklet of resource material were given to the primary trainers to

conduct these sessions. The primary trainers were free to adopt any method of training, participatory or lectures.

### Instruments

Socio-demographic characteristics, collected on a form designed for this purpose, included gender, education, age, system of medicine (Homoeopathy or Ayurveda), and site of employment and are reflected in Table 1. Knowledge and attitudes were assessed on a modified 21 item Center for Disease Control (CDC) questionnaire.<sup>[4]</sup> In a previous study conducted

### Text box 2: Sample role play scenarios

#### Talking to Adolescents

Your school going son wants to go to a late-night party with his friends. How would you talk to him?

#### HIV risk assessment and behavior change communication

18 year old male with complaints of backache, muscular pains  
Athlete, football player  
Lives with mother and brother  
Good student  
Occasional beer at parties  
Frequent smoking  
Some of his playmates have used injected steroids to increase strength  
Sexually active since 2 years, has had 4 partners  
Doesn't know risks of partners  
Condom use: sometimes  
Other history: has frequent fever  
Dominating mother  
No one to talk to  
No blood transfusions

#### Ante-natal care

24 year old female married for 1 year.  
Presenting with amenorrhoea of 2 months. Excited about pregnancy  
Slight nausea in morning for 15 days  
Non smoker. Never had alcohol  
Sexually active since 4 years  
Partners: 2; Husband since one year, one male friend before marriage  
Was sexually active with a friend before marriage. Wanted to get married to him, but family disagreed. No contact with him since marriage. Risk status not known.  
Risk status of husband not known

#### Care of care givers

58 year old female, complaining of dermatitis.  
Son died of HIV infection. Is living with daughter-in-law  
Income is on son's pension received to daughter-in-law  
One grandson 8 years old and one grand-daughter 10 years old, both HIV negative  
Worried about her own and family's future  
Daughter in law remains unwell with frequent cough, fever, etc.

in India, the internal consistency (Cronbach's alpha) of the overall knowledge scale when used with physicians of Homoeopathy was 0.81 and the internal consistency for the knowledge of transmission subscale was 0.88.<sup>[2]</sup> The possible range for the overall scale was 0-21 while, cognitive and transmission scale range, 0-10 and 0-11, respectively. The subsequent assessments were a retest of the same questionnaires.

### Data analysis

Within the two groups of primary trainers, changes in overall AIDS knowledge, and in the cognitive and transmission subscales, between pretest and post test were examined with repeated

### Text box 3: Group activities and discussions for sessions on prevention of HIV infection and sessions on legal and ethical issues

#### Group activities to develop IEC material

- Making a flip chart for imparting correct messages for prevention of sexual transmission of HIV
- Developing a handout for counseling clients for prevention of parental transmission of HIV
- Poster for display on prevention of perinatal transmission of HIV

#### Sample scenarios for discussion for prevention of HIV infection

- College going student complains of sexual abuse in hostel. What are his/her risk of HIV infection?
- Your friend wants to get a tattoo. She asks you about the risk of tattooing
- A mother of 8-year-old child tells you that her son has been bitten by a child in the school who reportedly remains generally unwell and sick. She is afraid that her son might have got some infection
- A medical social worker tells you that she got a small prick in her finger with the needle, which she had used for a prick on a patient, to make a slide for malaria. How would you advise her?

#### Sample discussion and debate questions on legal and ethical issues

- You are treating an HIV infected person. He is not willing to disclose his HIV status to his family and his wife. He reports that his wife is pregnant. Can you disclose his HIV status to his family or his wife?
- You are treating an HIV infected person. He tells you that his family wants him to get married soon. How will you handle this situation?
- A pregnant woman at the antenatal clinic is diagnosed to be HIV infected. Who should be told of her diagnosis? Her mother-in-law accompanies her on every visit? Should she be told of the diagnosis in the presence of her mother-in-law? Can her mother or sister be told of the diagnosis if they accompanying her? Should her husband be told of her diagnosis?
- Discuss and debate 'Should HIV infected persons be treated in special OPD or in hospital wards specially designed for HIV infected persons?'

measure Analysis Of Variance (ANOVA). Changes in scale scores across the three time periods for both groups were assessed by multilevel linear regression analysis controlling for age, gender, and practice site. The changes in knowledge and attitude scores are reflected in Tables 2 and 3.

Within the secondary trainees of these two groups, changes in overall AIDS knowledge, and in the cognitive and transmission subscales, between pretest and post test were examined with paired *t*-test and are reflected in Table 3. The statistical analysis was done using SPSS version 20.

## RESULTS

### Socio-demographic characteristics

The mean age of the practitioners in the 1 day group was 30.2 years (SD = 4.37, Range = 23-39 years) and in 2 day group was 32.7 years (SD = 6.42, Range = 25-

**Table 1: Socio-demographic characteristics of primary trainees**

	One day group		Two day group	
	N	%	N	%
Age (years)				
21-25	1	10	1	10
26-30	3	30	4	40
31-35	5	50	2	20
36-40	1	10	1	10
41-45	0	0	2	20
Male	6	60	7	70
Female	4	40	3	30
Education				
Graduates in Homoeopathy/Ayurveda	4	40	5	50
Post graduates in Homoeopathy/Ayurveda	6	60	5	50
Site of employment				
Clinic	8	80	9	90
Hospital	1	20	1	10
Both	1			

**Table 2: Knowledge scores of all one-day and two-day primary trainees**

Knowledge	1-day group			2-day group		
	N	Mean	SD	N	Mean	SD
Overall knowledge						
Baseline	10	15.9	1.7	10	17.4	3.09
Post training	10	17	1.7	10	19.8*	1.13
3 months <sup>§</sup>	7	16.7	1.4	9	18.4	1.39
Cognitive knowledge						
Baseline	10	6.1	1.4	10	7.5	1.84
Post training	10	6.7	1.8	10	9.1	0.87
3 months	7	5.8	1.4	9	8.2	1.39
Transmission knowledge						
Baseline	10	9.8	1.2	10	9.9	1.59
Post training	10	10.3	0.9	10	10.7	0.67
3 months	7	10.8	0.3	9	10.2	1.39

\* $P=0.041$ ,  $^{\S}P=0.008$

42 years). The number of male participants was more than female participants. Almost all the participants were practicing in clinical settings.

### HIV/AIDS knowledge

In the 1 day group, the pre-training and post training assessments were completed by all the 10 participants, where as the 3 month assessment was completed by only seven participants. Mean overall score was 15.9 which increased to 17 post training and reduced to 16.7 at 3 months post training. In the 2-day group, the pre-training and post training

**Table 3: Knowledge scores of one-day and two-day primary trainees**

Knowledge	1-day group			2-day group		
	N	Mean	SD	N	Mean	SD
Overall knowledge*						
Baseline	7	15.86	1.77	9	17.67	3.162
Post training	7	17.00	2.00	9	19.67	1.19
3 months	7	16.71	1.38	9	18.44	2.01
Cognitive knowledge <sup>§</sup>						
Baseline	7	5.71	1.38	9	7.67	1.87
Post training	7	6.86	2.19	9	9.00	0.87
3 months	7	5.86	1.46	9	8.22	1.39
Transmission knowledge						
Baseline	7	10.14	1.21	9	10.00	1.66
Post training	7	10.14	1.06	9	10.67	0.71
3 months	7	10.86	0.38	9	10.22	1.39

\* $P=0.001$ ,  $^{\S}P<0.0001$

assessments were completed by 10 participants, where as the 3 month assessment was completed by nine participants [Table 2]. In both the groups, statistically significant difference was seen in overall scores with respect to time ( $P = 0.008$ ). The mean overall knowledge scores for the 2-day group increased significantly from pre to post test ( $P = 0.041$ ).

When the knowledge scores for only completers [Table 3] is considered, multilevel analysis revealed a statistically significant difference between the two groups ( $P = 0.001$ ). The cognitive knowledge scores between the two groups showed a statistically significant difference ( $P < 0.0001$ ) which could probably be due to a higher difference between the cognitive knowledge scores at the pre-training level itself. When knowledge scores of transmission component is considered, the change in the scores in both the groups over a period of time is not significant.

In terms of actual questions assessed and the number of responders giving a correct reply, the HIV/AIDS transmission scores were higher than cognitive knowledge scores in both the groups. Three items in the cognitive knowledge questions had the least number of correct responders, being "AIDS can damage the brain", "A person can be infected with the AIDS virus and not have the disease AIDS" and "A person who has the AIDS virus can look and feel well". The scores in these questions improved immediately post training, but leveled off at 3 months.

### Secondary trainings

Amongst the participants trained in the 1-day

**Table 4: Transfer of training from primary trainees to secondary trainees**

1-day group		2-day group	
Number of primary trainees who imparted training to secondary trainees	Number of secondary trainees who were trained	Number of primary trainees who imparted training to secondary trainees	Number of secondary trainees who were trained
7 (70%)	70	9 (90%)	90*

\*15 participants were dropped out from analysis of HIV/AIDS knowledge because their pre-training or post training assessment was not complete

**Table 5: Socio-demographic characteristics of secondary trainees**

	Secondary Trainees of 1-day group (n=70)		Secondary Trainees of 2-day group (n=75)	
	N	%	N	%
Age (years)				
21-25	8	11.42	23	30.66
26-30	30	42.85	34	45.33
31-35	13	18.57	6	8
36-40	11	15.71	8	10.66
41-45	4	5.71	1	1.33
45-50	3	4.28	2	2.66
>50	0		1	1.33
Male	40	57.14	33	44
Female	30	42.85	42	56
Education				
Graduates in Homoeopathy/Ayurveda	31	44.28	21	28
Post graduates in Homoeopathy/Ayurveda	34	48.57	48	64
PhD	1	1.42	0	
Others	4	5.71	6	8
Site of employment				
Clinic	46	65.71	19	25.33
Hospital	19	27.14	16	21.33
Both	4	5.71	3	4
University	0		4	5.33
PG college	5	7.14	26	34.66
Others not specified			07	9.33

group, seven participants, functioned as trainers and conducted secondary trainings. Amongst the two day group participants, 9 participants conducted secondary trainings. Each participant trained further 10 participants, bringing a total of 160 secondary trainees [Table 4]. These secondary trainees were also homoeopathic and ayurvedic practitioners.

**Socio-demographic characteristics of secondary trainees**

The mean age of the secondary trainees trained by of primary trainees of 1-day group was

31.04 years (SD = 6.97, Range = 24-47 years). The number of graduates and post graduates in the respective disciplines were the same. Most of the participants were practicing in clinical settings. The mean age of the secondary trainees trained by of primary trainees of 2-day group was 29.37 years (SD = 7.61, Range = 23-63 years). Most of the participants were continuing their post-graduation studies and were working in the college hospital [Table 5].

**HIV/AIDS knowledge secondary trainees**

Table 6 gives the scores of 70 participants, trained by primary trainees of 1-day group.

Table 7 gives the score of 75 participants trained by primary trainees of 2-day group.

As in the primary trainees, the items “AIDS can damage the brain”, “A person can be infected with the AIDS virus and not have the disease AIDS” and “A person who has the AIDS virus can look and feel well” scored low in the secondary trainees. The correct response to the item “AIDS can damage the brain” increased post training, but there was no change in the number of correct responses in the other two items.

The cognitive knowledge scores showed a statistically significant difference before and after trainings in both the groups ( $P = 0.007$  in 1-day group,  $P = 0.000$  in 2-day group). The total scores [Table 8] and transmission knowledge scores were also significantly higher in the trainees of one day participants ( $P = 0.000$  for total score and 0.012 for transmission knowledge score). The total scores and transmission knowledge scores did not however show a statistically significant improvement pre- and post training in the participants of the 2-day group.

**DISCUSSION**

A review of interventions for educating traditional healers about STD and HIV<sup>[5]</sup> concluded that

**Table 6: HIV/AIDS knowledge secondary trainees of 1-day group (n=70)**

Query	Pre training		Post training	
	N correct	% correct	N correct	% correct
Cognitive knowledge				
AIDS can reduce the body's natural protection	67	95.7	70	100
AIDS can damage the brain	25	35.7	42	60
AIDS is an infectious disease caused by a virus	58	82.9	58	82.9
Teenagers cannot get AIDS	66	94.3	63	90
A person can be infected with the AIDS virus and not have the disease AIDS	30	42.9	33	47.1
Looking at a person is enough to tell if he or she has the AIDS virus	55	78.6	52	74.3
A person who has the AIDS virus can look and feel well	39	55.7	39	55.7
A pregnant woman who has the AIDS virus can give the AIDS virus to her baby	49	70	46	65.7
There is a vaccine available to the public that protects a person from getting the AIDS virus	53	75.7	62	88.6
There is no cure for AIDS at present	41	58.6	54	77.1
Transmission knowledge				
A person will get AIDS or AIDS virus infection from				
Living near a home or hospital for AIDS patients	70	100	70	100
Working near someone with the AIDS virus	65	92.9	68	97.1
Eating in a restaurant where the cook has the AIDS virus	63	90.0	67	95.7
Shaking hands, touching, or kissing on the cheek someone who has the AIDS virus	66	94.3	68	97.1
Sharing plates, forks, or glasses with someone who has the AIDS virus	62	88.6	67	95.7
Using public toilets	60	85.7	66	94.3
Sharing needles for drug use with someone who has the AIDS virus	67	95.7	61	87.1
Being near someone who coughs or sneezes and has the AIDS virus	51	72.8	56	80
Attending school with a child who has the AIDS virus	67	95.7	70	100
Mosquitoes or other insects	59	84.3	68	97.1
Having sex with a person who has the AIDS virus	66	94.3	62	88.6

AIDS: Acquired immune deficiency syndrome

training workshop increased the knowledge about HIV/AIDS of traditional healers. With regards to behaviour change, a study conducted in South Africa<sup>[6]</sup> detected a significant difference in traditional healers' reports of managing their patients.

The basic training of ayurvedic and homoeopathic physicians in India exposes the practitioners to both the modern concept of the disease as well as the traditional/philosophical concept of disease. The treatment approaches in both the systems focus on the individual constitution or *Prakriti*, examination of which is important for assessing individual's state of health or disease. Further decision on preventive and curative regimen is based on this.

The participants in this study had lower cognitive knowledge scores than transmission knowledge scores. This training module, although focusing on the modern medicine concept of disease, took into consideration the ayurvedic/homoeopathic approach of the disease as well.

This study identified a statistically significant change in the pre-training and post training scores of the participants. However, the change was not statistically significant after 3 months of training. The study conducted in the past<sup>[1]</sup> had also shown significant change in knowledge and transmission scores from pre-training to immediately post training, the scores, however increased at 3 months, leveling off at 6 months. In this study, the statistically significant change in scores of secondary trainees implied, that though the primary training was successful and correct messages could be imparted and delivered further, the change has not sustained over a period of time possibly due to the reason that they did not get clients to provide prevention counseling. Therefore, lack of exposure to the topic in daily practice cannot be ruled out.

Although, the training programs have been beneficial for both the primary and secondary participants, to sustain the enhancement in knowledge and practice

**Table 7: HIV/AIDS knowledge secondary trainees of 2-day group (n=75)**

Query	Pre training		Post training	
	N correct	% correct	N correct	% correct
<b>Cognitive knowledge</b>				
AIDS can reduce the body's natural protection	74	98.7	75	100
AIDS can damage the brain	26	34.7	54	72
AIDS is an infectious disease caused by a virus	63	84	64	85.3
Teenagers cannot get AIDS	70	93.3	65	86.7
A person can be infected with the AIDS virus and not have the disease AIDS	44	58.7	46	61.3
Looking at a person is enough to tell if he or she has the AIDS virus	54	72	55	73.3
A person who has the AIDS virus can look and feel well	48	64	55	73.3
A pregnant woman who has the AIDS virus can give the AIDS virus to her baby	50	66.7	53	70.7
There is a vaccine available to the public that protects a person from getting the AIDS virus	58	77.3	57	76
There is no cure for AIDS at present	41	54.7	57	76
<b>Transmission knowledge</b>				
A person will get AIDS or AIDS virus infection from-				
Living near a home or hospital for AIDS patients	73	97.3	72	96
Working near someone with the AIDS virus	73	97.3	69	92
Eating in a restaurant where the cook has the AIDS virus	67	89.3	67	89.3
Shaking hands, touching, or kissing on the cheek someone who has the AIDS virus	73	97.3	70	93.3
Sharing plates, forks, or glasses with someone who has the AIDS virus	68	90.7	69	92
Using public toilets	68	90.7	70	93.3
Sharing needles for drug use with someone who has the AIDS virus	62	82.7	62	82.7
Being near someone who coughs or sneezes and has the AIDS virus	63	84	63	84.7
Attending school with a child who has the AIDS virus	72	96	71	94.7
Mosquitoes or other insects	65	86.7	71	94.7
Having sex with a person who has the AIDS virus	70	93.3	66	88

AIDS: Acquired immune deficiency syndrome

**Table 8: Overall knowledge scores of secondary trainees of one-day and two-day group**

Knowledge	One-day group			Two day group		
	N	Mean	SD	N	Mean	SD
<b>Overall knowledge</b>						
Baseline	70	16.8	2.66	75	17.06	2.8
Post training	70	17.74*	1.8	75	17.75	2.9
<b>Cognitive knowledge</b>						
Baseline	70	6.9	1.4	75	7.01	1.8
Post training	70	7.41 <sup>§</sup>	1.4	75	7.75 <sup>#</sup>	1.7
<b>Transmission knowledge</b>						
Baseline	70	9.9	1.8	75	10.0	2.9
Post training	70	10.34 <sup>@</sup>	1.1	75	10.0	1.9

\*P=0.000, <sup>§</sup>P=0.007, <sup>#</sup>P=0.000, <sup>@</sup>P=0.012

behaviors, training programs need to be more consistent. Continued medical education trainings (CMEs) would be more beneficial, as compared to single isolated trainings.

Train the training model is frequently used in a number of HIV/AIDS related training programs and target different focus groups.<sup>[7-9]</sup> However, few

articles have reported its effectiveness as it relates to the percentage of participants who actually go on to conduct trainings.<sup>[10]</sup> It has been identified that most of the participants trained in the primary training actually conduct the secondary trainings.

In this training, the one day program was specific to focusing on the disease-based aspect primarily. The 2-day program was more elaborate and focused on the disease-based aspect and on social, ethical and legal aspects of the disease. The participants of 2 day program showed a higher change than the one day group in the primary trainings. For the secondary trainings, the participants were told to focus only on the disease based aspect for both the groups that is the 1 day trainees had to replicate their program as it is. The 2 day trainees had to replicate part of their program and not the total program. The secondary trainings conducted by participants of 1 day program were more effective than those conducted by participants of 2 day program. This implies that secondary trainings are more effective, when the

participants are to replicate their programs as it is, rather than when they have to identify some areas and skip the others.

Inclusion of practitioners in public health program would be useful if repeated CMEs are conducted to update with their knowledge. Further, in case of train the trainer approaches, the primary trainings need to be very similar in all aspects to the secondary trainings that the trainees are expected to conduct.

The primary trainings needs to be intensified focusing on both cognitive and transmission knowledge which can then percolate to secondary trainings as well. Specific quality checks needs to be incorporated to assess the quality of secondary trainings.

This study, therefore, identifies a model for inclusion of Ayurveda and Homoeopathy practitioners in the public health program of the country. With more than 5 lakh Ayurveda and homoeopathic practitioners in India,<sup>[11]</sup> the potential resource of traditional medicine practitioners can be utilized in the public health programs of the country, especially in the wake of epidemic conditions such as HIV/AIDS. There is a strong need for collaboration between these practitioners and the modern medicine practitioners, so as to manage the HIV epidemic effectively. The combined health care team thus evolved can develop strategies for prevention and treatment of disease effectively.

## CONCLUSION

The training module on HIV/AIDS was useful in enhancing the knowledge of physicians of Homoeopathy and Ayurveda on cognitive and transmission related aspects of the disease and on its ethical, social and legal implications. With such training programs the homoeopathic and ayurvedic practitioners can play a vital role in prevention of HIV infection by undertaking appropriate patient education and counseling. The training module is available on the website of the CCRH ([www.ccrhindia.org](http://www.ccrhindia.org))

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## होम्योपैथी एवं आयुर्वेद अभ्यासकर्ताओं में एचआईवी की रोकथाम के संदेशों के वितरण में प्रशिक्षक मॉड्यूल प्रशिक्षण की प्रभावकारिता

सार:

**परिचय:** लोगो में एचआईवी/एड्स की रोकथाम का संदेश देने हेतु होम्योपैथी और आयुर्वेद अभ्यासकर्ताओं को प्रशिक्षित करने के लिए एक दो दिवसीय प्रशिक्षण कार्यक्रम का आयोजन किया गया। अध्ययन का उद्देश्य प्रशिक्षकों के प्रशिक्षण साधन पर आधारित इस प्रशिक्षण कार्यक्रम के प्रभाव का मूल्यांकन करना था।

**सामग्री एवं विधियाँ:** दो दिवसीय प्रशिक्षण कार्यक्रम में प्रत्येक दिन दस प्राथमिक प्रतिभागियों को पंजीकृत किया गया। दोनों समूहों के प्रत्येक 10 प्रतिभागियों को आगे के प्रशिक्षण के लिए निर्देश दिये गये। प्राथमिक प्रतिभागियों का प्रशिक्षण से पहले और प्रशिक्षण के तुरंत बाद एवं 3 महीने के अंत में और द्वितीय प्रतिभागियों में पहले और प्रशिक्षण के तुरंत बाद एचआईवी/एड्स से संबंधित ज्ञान और व्यवहार को 21 मद प्रश्नावली द्वारा मापा गया।

**परिणाम:** एक दिवसीय समूह में, पूर्व प्रशिक्षण और बाद के प्रशिक्षण आंकलन को सभी 10 प्रतिभागियों द्वारा पूरा किया गया, वही 3 महीने के आंकलन में केवल सात प्रतिभागियों ने पूरा किया। इस समूह में, ज्ञान स्कोर 15.9 था जो कि प्रशिक्षण के बाद बढ़कर 17 और 3 महीने प्रशिक्षण के बाद घटकर 16.7 हो गया। द्वितीय समूह, में पूर्व प्रशिक्षण और बाद के प्रशिक्षण आंकलन को 10 प्रतिभागियों द्वारा पूरा किया गया वही 3 महीने के आंकलन में केवल नौ प्रतिभागियों ने पूरा किया। इस समूह में, प्रशिक्षण से पूर्व ज्ञान स्कोर 17.4 था जो प्रशिक्षण के तुरन्त बाद बढ़कर 19.8 और 3 महीने के प्रशिक्षण के बाद घटकर 18.4 हो गया। एक दिन और दो दिन समूह से सात और नौ प्रतिभागियों ने माध्यमिक प्रशिक्षण का आयोजन किया। माध्यमिक प्रशिक्षुओं के मामले में, संज्ञानात्मक ज्ञान स्कोर से दोनों समूह में प्रशिक्षण से पहले और बाद में एक महत्वपूर्ण सांख्यिकीय अंतर देखा गया।

**निष्कर्ष:** एचआईवी/एड्स पर प्रशिक्षण मॉड्यूल रोग और उनके नैतिक, सामाजिक और कानूनी निहितार्थ से संज्ञानात्मक और ट्रांसमिशन संबंधित पहलुओं पर होम्योपैथिक एवं आयुर्वेद चिकित्सकों के ज्ञान को बढ़ाने में उपयोगी था। इस तरह के कार्यक्रम से होम्योपैथिक चिकित्सक उपयुक्त रोगी शिक्षा और परामर्श द्वारा एचआईवी संक्रमण की रोकथाम में महत्वपूर्ण भूमिका निभा सकते हैं।

