



## EFFECT OF AUDIO-VISUAL (A-V) AIDS ON LEARNING

### SWASTHAVRITTA SUBJECT

Dalvi Prachi D<sup>1</sup>,

Borkar Sneha P<sup>2</sup>,

Ghanghav G. Shraddha<sup>3</sup>

<sup>1</sup>Dalvi Prachi D., Associate Professor, Dept. of Swasthavritta, Shree Ayurved Mahavidyalaya, Nagpur, Contact No.-91- 9987155771, Email-drprachidalvi@gmail.com

<sup>2</sup>Borkar Sneha P., Assistant Professor, Dept. of Swasthavritta, Shri Ayurved Mahavidyalaya, Nagpur, Contact No.-91-9975405822, Email sborkar49@gmail.com

<sup>3</sup>Dr. Ghanghav G. Shraddha, Assistant Professor, Dept. of Swasthavritta, CSMSS, Ayurvedic college, Aurangabad, Contact No.-91-9970934915, Email- sghmukne25@gmail.com

#### ABSTRACT

**Audio-visual education** is instruction where particular attention is paid to the audio and visual presentation of the material with the goal of improving comprehension and retention. In this modern world we use digital tools to improve the teaching-learning process. The most common tool we use in classroom these days is PowerPoint slides, which makes the class more interesting, dynamic and effective. **Aim**-To evaluate the applicability and Usefulness of A-V Aids in teaching the topic “Sewage treatment” of *Swasthavritta*. **Materials and methods**-LCD Projector, classroom, A-V Aids computer, Questionnaire. This was an Opinion Survey, a qualitative type of research and was cross sectional study. Third year BAMS students were included and taught a topic of *Swasthavritta*. **Observations and Results**-The class was attended by 34 students out of 63 students, questionnaire was filled after attending the lecture and the response was recorded. Results were drawn according to the observations. **Conclusion**- A-V Aids is more simple and effective than traditional Methods of teaching.

**Keywords** Audio- visual aids (A V aids), learning, chalk and talk method

**INTRODUCTION:** The few topics of *Swasthavritta* e.g., Sewage management, Disposal of Solid waste etc., are quite boring and difficult to understand. Conventionally these topics are taught by chalk and talk method. Due to this the students do not find interest in these topics and tend to neglect them or put these topics for an optional. Nevertheless these topics are important and essential from environment point of view and hence are included in the curriculum of community health. So if the A-V Aids are coupled with didactics and monotonous lectures, the students might gain interest in these topics. Also these aids make these topics easy to understand and simple to explain.<sup>1</sup> For this purpose the questionnaire were

prepared and an opinion survey was taken by the students.<sup>2</sup>

#### AIMS AND OBJECTIVES:

##### AIM:

To evaluate the applicability and Usefulness of A-V Aids in teaching the topic “Sewage treatment” of *Swasthavritta*

##### OBJECTIVES:

- To make the topic easy to understand.
- To make the topic simple to Explain

#### MATERIALS AND METHODS:

##### MATERIALS:

1. 34 students of Shri Ayurved Mahavidyalaya, Nagpur
2. LCD Projector classroom, A-V Aids computer
3. Questionnaire

#### METHODOLOGY:

The topic excreta disposal was taught to the 3<sup>rd</sup> Yr. BAMS student with help of A-V Aids. Immediately after the lecture questionnaire was given to the Student and with help of the questionnaire scores Conclusion was drawn.

#### STUDY DESIGN:

This is Opinion Survey, a qualitative type of research and it's a cross sectional study it will generate the Hypothesis for further study

Target Group: 3<sup>rd</sup> yr. B.A.M.S. Students

Total duration of study: Cross sectional study.

Ethics committee approval: Institutional Ethics committee approval was taken.

Inclusion criteria: Whole 3<sup>rd</sup> yr. BAMS class

Exclusion criteria: Those who were absent on that lecture and those who were not willing to fill the Questionnaire were excluded from the study.

Place of work: Shri Ayurveda College, Hanuman Nagar, Nagpur

#### OBSERVATIONS:

The class was attended by 34 students out of 63 students, questionnaire was filled after attending the lecture and the response was recorded which was as follows

**Table No.1 - Response recorded by the students:**

Sr. No	Name	Age	Sex	Class	Score									
					Q.1	Q.2	Q.3	Q.4	Q.5	Q.6	Q.7	Q.8	Q.9	Q.10
1	SamikshaDeshmukh	20	F	3rd BAMS	3	2	3	3	4	4	3	2	2	3
2	MadhuriSomkuwar	21	F	3rd BAMS	3	2	3	3	4	3	3	2	3	4
3	VaibhaviZade	21	F	3rd BAMS	3	3	3	3	4	3	3	3	1	3
4	Bharati Nakade	21	F	3rd BAMS	3	4	4	3	4	4	4	1	3	4
5	Sonalikumar	21	F	3rd BAMS	4	4	4	4	4	4	4	1	1	3
6	SanketBansod	21	M	3rd BAMS	3	2	3	3	3	4	3	2	3	3
7	Sameer Inamdar	20	M	3rd BAMS	3	3	3	3	3	4	3	2	2	3
8	DikshaKapgate	20	F	3rd BAMS	2	2	3	2	3	3	2	3	2	3
9	Misbah Khan	20	F	3rd BAMS	3	3	3	3	3	3	3	2	2	3
10	NehaShende	21	F	3rd BAMS	3	3	4	3	4	3	4	2	2	3
11	SamikshaChandore	21	F	3rd BAMS	3	3	3	3	4	4	3	2	3	3
12	PoojaPatle	20	F	3rd BAMS	3	4	3	3	4	4	4	2	3	3

13	KalyaniSaindane	21	F	3rd BAMS	3	2	3	2	3	4	3	2	1	3
14	DevyaniBonade	20	F	3rd BAMS	3	3	3	3	4	4	3	2	2	3
15	RhutikaBagade	21	F	3rd BAMS	3	4	3	3	4	4	3	2	2	2
16	YogeshewarKapga	20	M	3rd BAMS	4	4	4	3	4	4	4	1	2	3
17	MrunalAjane	19	F	3rd BAMS	3	3	4	3	4	4	3	2	3	3
18	SamikshaBhure	21	F	3rd BAMS	4	3	3	3	4	3	4	2	3	3
19	TanushriDhote	22	F	3rd BAMS	3	3	3	4	4	3	3	2	3	3
20	Dafisha Khan	20	F	3rd BAMS	3	3	4	3	4	4	4	2	3	3
21	Sadaf Ansari	21	F	3rd BAMS	3	3	2	2	2	3	3	2	2	3
22	AshwiniAgarwal	20	F	3rd BAMS	3	2	4	3	4	3	3	2	1	3
23	AnkitaBobade	21	F	3rd BAMS	3	2	2	3	3	3	3	2	2	3
24	RupeshwariRathod	20	F	3rd BAMS	2	3	4	3	4	4	3	2	4	2
25	PallaviPallewad	21	F	3rd BAMS	3	3	3	3	4	4	3	2	3	3
26	AishwaryaKapgate	21	F	3rd BAMS	3	3	4	3	3	4	3	2	2	4
27	PriyankaPande	20	F	3rd BAMS	3	3	3	3	2	3	3	3	1	2
28	SanjanaJevlani	21	F	3rd BAMS	3	3	3	3	4	4	4	3	2	3
29	AkrojaGhubade	21	F	3rd BAMS	4	3	3	3	4	3	3	2	1	3
30	RitikaShahu	21	F	3rd BAMS	4	4	4	4	3	3	3	1	1	3
31	TejasreeDambhare	21	F	3rd BAMS	4	4	4	4	4	4	4	3	3	3
32	SumedhaKambale	21	F	3rd BAMS	3	2	3	3	3	3	3	2	2	2
33	KarishmaKhakhkhr	26	F	3rd BAMS	4	4	4	4	4	4	3	1	1	3
34	SnehaKarhade	22	F	3rd	3	3	3	3	3	4	3	2	2	3

				BAMS								
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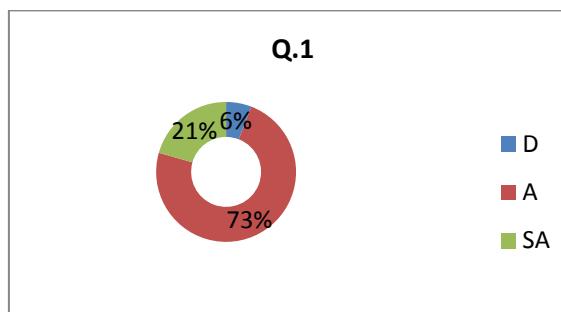
**Table No.2 - Collective Graded response by the students:**

Questions	Score 1	Score 2	Score 3	Score 4
	SD	D	A	SA
Q.1	0	2	25	7
Q.2	0	8	18	8
Q.3	0	2	20	12
Q.4	0	3	26	5
Q.5	0	2	10	22
Q.6	0	0	14	20
Q.7	0	1	24	9
Q.8	5	24	5	0
Q.9	8	14	11	1
Q.10	0	4	27	3

**Graphical representation of the response recorded by the students:**

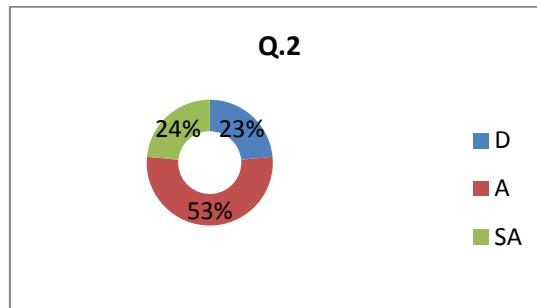
Q.1 I understand the topic very quickly than traditional Chalk & Talk method

From table No. 2 , out of 34 students 25 students are agree(A), 7 students strongly agree(SA) and 2students disagree(D) with this statement .



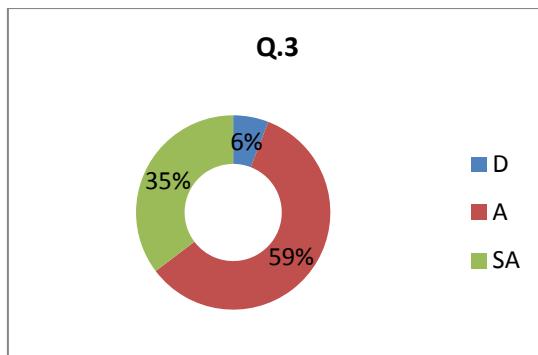
Q.2 I feel it makes learning permanent  
From table No. 2 , out of 34 students 18 students are agree, 8 students strongly

agree and 8 students disagree with this statement .



Q.3 It makes learning easy than traditional Chalk & Talk method  
From table No. 2 , out of 34 students 20 students are agree, 12 students strongly

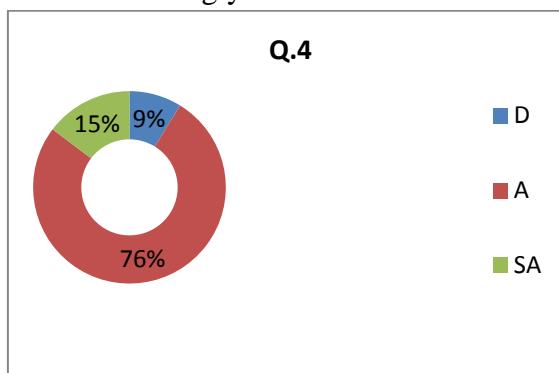
agree and 2 students disagree with this statement .



Q.4 I am confident of what is taught

From table No. 2 , out of 34 students 26 students are agree, 5 students strongly

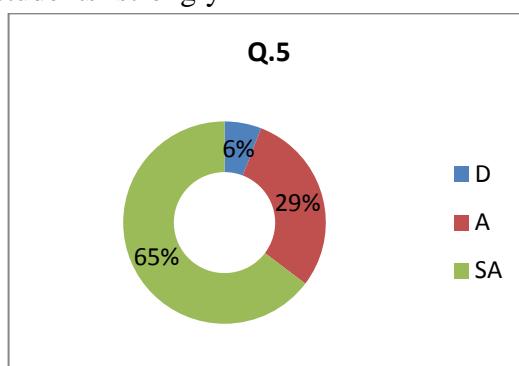
agree and 3 students disagree with this statement



Q.5 It makes topic realistic

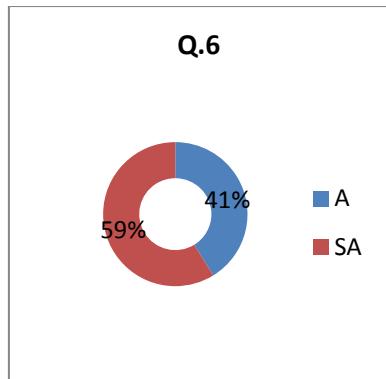
From table No. 2, out of 34 students 10 students are agree, 22 students strongly

agree and 2 students disagree with this statement.



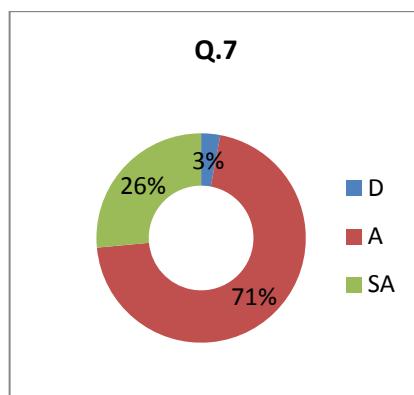
Q.6 Learning process become interesting

From table No. 2, out of 34 students 14 students are agree, 20 students strongly agree with this statement.



Q.7 I am happy with this method of teaching agree and 1 student disagree with this statement .

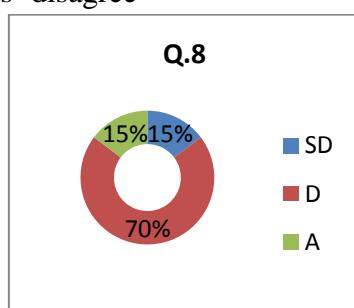
From table No. 2 , out of 34 students 24 students are agree, 9 students strongly



Q.8 The old methods of teaching are more effective and simple.

and 5 students are strongly disagree(SD) with this statement

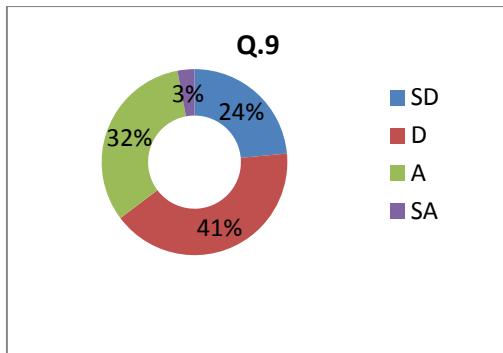
From table No. 2, out of 34 students 5 students agree and 24 students disagree



Q.9 Understanding is not dependent on the teacher's explanation.

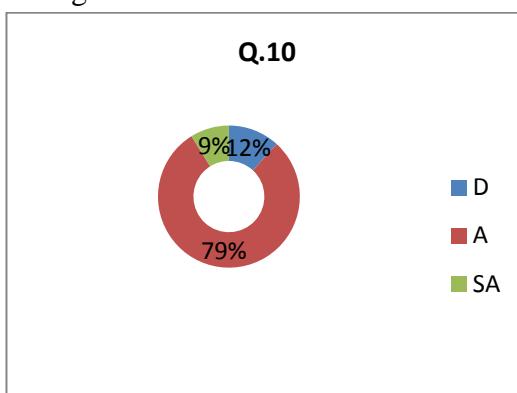
students are strongly disagree and 1 student is strongly agree with this statement

From table No. 2 , out of 34 students 11 students agree and 14 students disagree , 8



Q.10 Notes can be taken very easily  
From table No. 2 , out of 34 students 27  
students agree , 4 students disagree and 3

students are strongly agree with this  
statement



### Results:

1. Out of 34 students 25 students were agreed that this method is quick to understand than traditional chalk and talk method.
2. More than half of the students assenting to this method that it make learning permanent.
3. Out of 34 students 32 students are agreeing that It makes learning easy than traditional Chalk & Talk method
4. Maximum Students are granted that they are confident of what is taught.
5. Most of the students found that this method is realistic.
6. Students found that learning process became interesting by A-V Aids teaching.
7. 99% Students were happy with this method of teaching
8. Students were disagreeing with the old methods to be simple and effective
9. A-V Aids improvise the effect of teaching however teacher's explanation

plays important role in spite of best of AV aid.

10. A-v aids help students very effectively to take notes easily and in fast pace.

### DISCUSSION:

A good power point presentation consists of theory as well as images related to the topic. A unique image or video makes a lasting impression on the brain.<sup>3</sup> It makes the quick understanding of the subject.

83 % of our brain processes visual data. According to the recent discovery at the University of Michigan's Biopsychology Program confirmed that the brain behaves selectively about the processing of new information that enter through our five senses. If this new information proves useful, it becomes permanent memory. Hence teaching through Audio Visual Aids helps in permanent learning.<sup>4</sup>

The topic of excreta management was taught to the student in this survey

study. This topic is very challenging when taught with traditional chalk and talk method. Through power point presentation the topic was efficiently taught with the help of different picturization of the content and videos clips of working of sewage treatment plant. This aids in easy learning and good retention ability. Hence maximum students were agreed with this method. Also students were very confident after the lecture.

Images and videos along with the theory of the topic in power point presentation helped the students to visualize the topic successfully. This made the topic very interesting to the students.

After learning the topic with AV Aids the students were happy as they were confident with what they taught. Traditional chalk and talk method could not be effective in case of this topic due to lack of images and videos in this method. Diagrammatic representation also depends upon the instructor's skill and many time diagrams cannot be provided due to limited time of lecture. Hence Students were disagreeing with the old methods to be simple and effective.

While explaining, the students were not distracted, they were not talking to each other and they are paying full attention, however teacher's explanation remains a big issue in spite of having the best quality A-V aids, if teachers cannot explain effectively then A-V aids have limitations, also quality and contents of A-V aids also plays an important role in learning.

Maximum students were agreed that the notes can be taken very easily. Because the theory portion is very concise in power point presentation. So the students could easily understand and take notes.

## CONCLUSION:

Learning and Teaching with the help of A-V Aids is more simple and effective than traditional Methods of teaching. Visuals like, pictures, videos and animation related to the topic are more effective in understanding the topic. In traditional chalk and talk method, poor hand writing of teacher can be a major issue. Diagrammatic presentation cannot be provided frequently. In chalk and talk method, visualization of the subject is not as effective as in power point presentation method. Chalk and talk method cannot aids in easy understanding of each and every topic. Chalk and talk method cannot make a permanent learning because brain processes eighty three percent of visual data. Visualization makes the topic realistic and make it long lasting. Hence Use of intelligent A-V aids is effective source in learning.

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### Appendix:

#### 1. Questionnaire:

Name :

Age:

Sex :

Class :

**Please rate the questions (student's response will be recorded in terms of the grades)**

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

**After attending the class of A-V Aids teaching...**

Sr.No.	Questions	Score
1	I understand the topic very quickly than traditional Chalk & Talk method	
2	I feel It makes learning permanent	
3	It makes learning easy than traditional Chalk & Talk method	
4	I am confident of what is taught	
5	It makes topic realistic	
6	Learning process become interesting	
7	I am happy with this method of teaching	
8	The old methods of teaching are more effective and simple.	
9	Understanding is not dependent on the teacher's explanation.	
10	Notes can be taken very easily	

**Date :**

**Signature of Student**

**2.**

Abbreviations
SA: Strongly Agree
A: Agree
SD: Strongly Disagree
D: Disagree

**3.**



Ethics Comitee Approval.pdf

**Corresponding Author:** Dr. Dalvi Prachi Datta, Associate Professor, Dept. of Swasthavritta, Shree Ayurved Mahavidyalaya, Nagpur. Email: drprachidalvi@gmail.com  
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