**Basics of Health Promotion and Education Intervention**
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Lecture-34
Health Education material Part II

In this session on the course of basics of health promotion and education intervention. We are going to talk about some more health education material.

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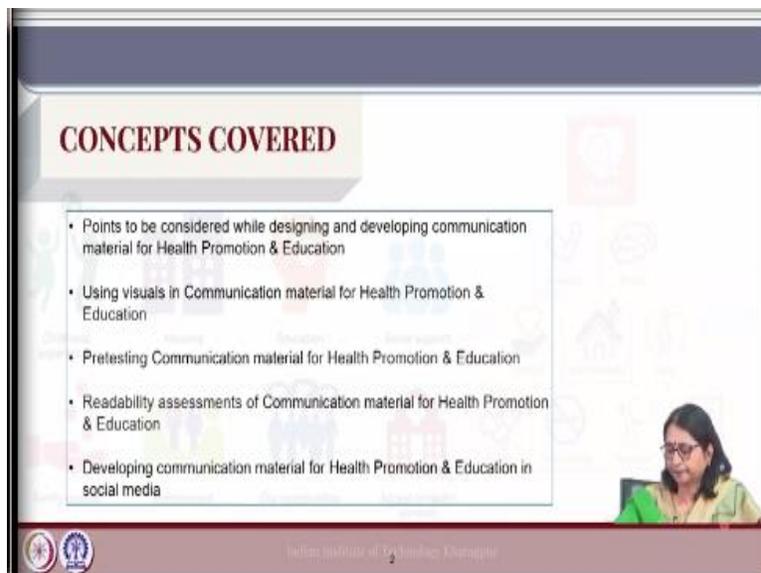
The concepts covered would be the points to be considered while designing and developing communication material itself for health education and health promotion. Using visuals in communication material, testing these methods, pre-testing these methods before use, readability assessments of communication material for health promotion and education. And finally, how do we develop communication material for social media which has now gaining increasing importance in conveying messages in health.

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Material Used for Communication in Health Promotion & Education

Designing and developing communication materials to increase knowledge or bring about a change in beliefs, attitudes, or behaviors requires messages that are clear, relevant, and appropriate for the intended audience.

Points to be considered while designing and developing communication material:

✓ The number of messages should be limited. Not be more than three or four main ideas per document focusing on what the audience needs to know and do. Details that are only nice to know, should be skipped. E.g. in a brochure on how to prevent HIV infection the audience need not be told how and when HIV was discovered. Instead, they should be told what to do to prevent it

✓ Develop one idea fully before moving to the next idea. People are confused when messages skip back and forth between ideas.

✓ Avoid lengthy lists. Short lists (3-7 items) should be made with bullets. People with limited reading skills tend to forget items in longer lists.

✓ The audiences should be told what they will gain from understanding and using the material.

✓ Audience should know – "What is in it for me?"

✓ For example: "You will learn what to do to have a healthy pregnancy and ways to prevent possib..."

So, material is used for communication in health promotion in education, we have already discussed several types of material which are used. Designing and developing communication materials is basically intended to increase knowledge or to bring about changes, changes in beliefs, changes in attitudes, changes in behaviours. And all these require messages which have to be very clear, which have to be relevant and which have to be appropriate for the intended audience.

So, it all starts with and ends with the audience which is so very important. So, there are points to be considered while designing and developing this communication material. What are they? One is the number of messages, sometimes we tend to overdo things, it is just because I know or I feel all this should be said that we cram one type of material with a lot of messages. That will not lead to the intended changes or comprehension.

The number of messages should be limited not more than 3 to 4 main ideas per document. We already from the formative research in the earlier stages we would be knowing what the audience needs to know, what the audience needs to do. So, just based on that what is the absolute must know and must do, those should be included. Details that are only nice to know should be skipped. For example, if you are producing a brochure on how to prevent HIV infection, we need not tell the audience when and how HIV was discovered.

Instead, just what to do to prevent it, that is most important and that should be included. So, the number of messages have to be limited let us start controlling what we want them to know and do and that also should be based on the formative research which we conduct on what they already know and do. Second thing is develop one idea fully before moving on to the next idea, partially saying something then going to something else.

Then again going to something else, this actually is the skipping between ideas is very harmful for people to understand, they are confused. So, people get confused when messages skip back and forth between ideas. So, once you are telling them that this is what is happening, second is you have to do this, third again is related to something related to knowledge fourth you go to the attitudes which you need to develop, no.

So, develop one thing fully before moving to the next idea. In order to do that the only thing which you have to remember is whatever material you use one material conveys limited number of messages with one idea that is the best rule which you can follow. Avoid lengthy lists, usually we try to cram in as much as possible but it is better to have a short list, 3 to 7 at most with bullets.

Particularly people with limited reading skills they will forget if we give long lists and elderly people also tend to forget, so long lists are of no use. The audience actually should be told in the message it should be clearly said what the audience will gain from this material, how will it help in their understanding? How will it help in their using this? How can they use this material in future? So, that has to be clearly told to the audience.

The audience also should know what is in it for me, how do I gain from changing my behaviour or improving my knowledge or doing this accessing the service, utilizing the service. So, clearly this has to be conveyed, so the idea with limited number of messages clearly mentioning what the audience should do and what are the promises, there should be a promise that well, if you go for regular antenatal checkups, you will have a healthy baby in the end.

This sort of promise, what is in it for me, how does it help me? That should be clearly stated. So, you see I have given you an example after you go through this material you will learn what to do to have a healthy pregnancy and ways to prevent possible complications. So, I know if I read this, I will learn how I can have a healthy pregnancy and how I can prevent possible complications, simple.

So, I will have to focus on this idea how to have a healthy pregnancy step 3 to 7 and how to prevent possible complications again within 3 to 7 bullets. Develop one idea first fully, move to the next idea next fully, so this is how we should develop and communication material, so that it becomes easily understood, usable, doable.

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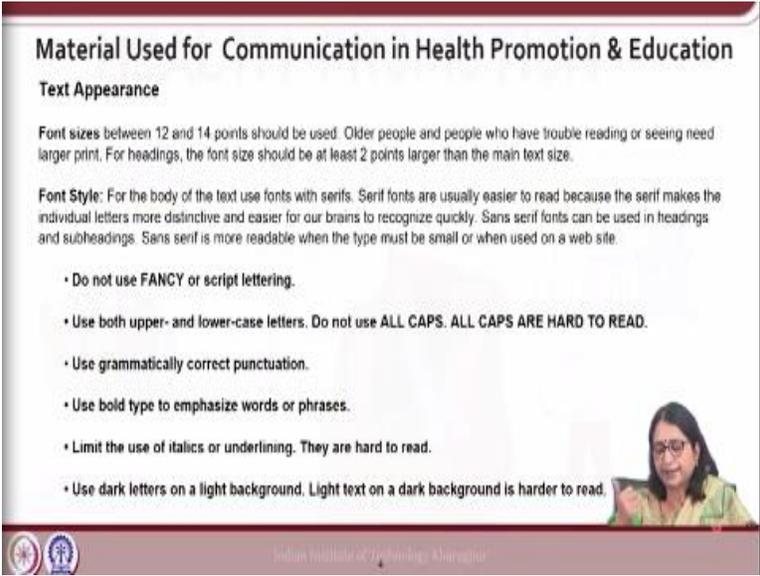
Now the text appearance, again this is something which we tend to overlook but font sizes between 12 and 14 points should be used, nothing smaller than that. In fact, older people and people who have trouble reading or seeing need larger print, for headings it should be 2 sizes more than the text size. Now, so remember if you try to cram in too much the font size goes down and it does not serve it is purpose at all.

Font style, now for the body of the text usually when for prints as well but even for projected material one has to use fonts with serifs. It is better to use that because serif fonts are easier to read, serif makes individual letters more distinctive, easier for the brain to recognize quickly.

Sans serif you can use in headings and subheadings but Sans serif is more readable when the type is small and can be used in websites, do not use fancy or script lettering.

That we can keep for our other purposes but not for use in print material for the communities. Why because they are difficult to read, all fancy lettering, all script letterings are difficult to read. And if you just do a testing, you would find that they are interpreted in very different ways because they hardly know how to read. Use both upper- and lower-case letters do not use all caps, all caps are very hard to read, this is proved.

Use grammatically correct punctuation; please take care to edit the material carefully before sending it for printing. Use bold type to emphasize words or phrases, only for emphasis but the entire thing in bold is not right also. Limit the use of italics or underlining again it has been proved that italics or underlining is hard to read. Use dark letters on a light background particularly those using PowerPoints should be very careful about this.

Light text on a dark background is harder to read, it might be nicer to see but it is harder to read, so use dark letters on a light background.

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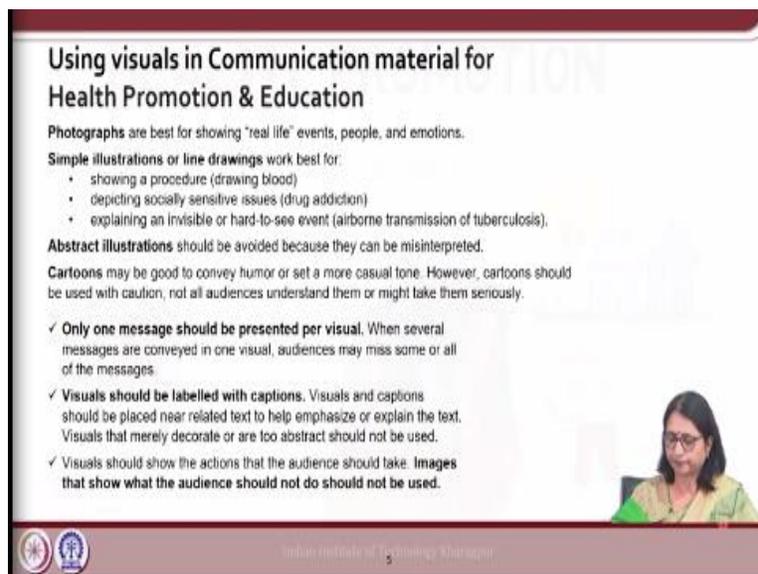
Now there are visuals also used in communication material for health promotion and education. We use photographs, photographs are best for showing real life events, people, emotions, one

photograph can take the place of 1000 words if it is taken properly and used properly. Now we also use simple illustrations or line drawings, sometimes if it is a procedure like drawing blood, the steps of drawing blood, it is better to use line drawings because it can be seen and understood better.

Or perhaps depicting socially sensitive issues where you cannot go and take photographs and often the situation is such that in actual situations you cannot take pictures of drug addicts. Explaining an invisible or hard to see event, say airborne transmission of tuberculosis, how can you take a photograph? So, you have to use line drawings for these situations, abstract illustrations though they are artistically superior, it is to be avoided in print material.

Because abstracts can be misinterpreted, visual literacy is something which varies, it is not related always to your educational literacy. Visual literacy depends upon how much familiar we are with that object, how we have seen it. In fact, many studies have been done in visual literacy and people like, there were wonderful findings like which are very, very truly retrospective thinking.

Like when people in a particular area who had never seen a refrigerator was shown one during training in cold chain, most of them inferred that it was an Albia because they never saw a refrigerator. There are places where bananas do not grow, so when they were shown a say a dozen of bananas, they said it were fingers, so it all depends on how familiar the audience is with that image.

So, abstract illustrations are actually people are not very familiar with them, so they are misinterpreted commonly. Cartoons, cartoons are good we are always looking at cartoons everywhere in the daily newspaper as well, it conveys humor, it sets a casual tone. However, humor is a double-edged sword, what is humorous for one might not be so for the other. So, cartoons have to be used with caution, all audiences might not understand them, they might take it seriously, they might think that they are being ridiculed at.

So, cartoons can only be used in very select populations after a lot of consideration. Repeatedly the importance of limiting the number of messages is being emphasized; only one message should be presented per visual. When several messages are given in one visual the audience misses some of them. So, it is good to be miserly in putting across messages, use only one in one visual, visuals should have captions, nothing is self understood.

Visuals and captions should be placed near the text to help emphasize or explain the text, we are using them with the text to explain the text further. If it is just to decorate or they are too abstract, it is better not to use visuals because they distract. Visuals should show actions that the audience should take, actually when you want people to do something it is better to show pictures of that. Images that show what the audience should not do, we usually do not prefer showing the wrong behaviours.

Like there are often pictures with a cross or a cancellation with a red pen of this food you should not have and this food you should have. Put the food which a person which should have and explain in text the food which they should not have. Because if you have that attracts attention more the red cross or the red striking through and people tend to of those who cannot read particularly are not able to distinguish between the 2.

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So, to ensure all this what we would like all people to do, all people who use educational material or would be using communication material is to test the material beforehand both print and audiovisual. So, it is a very simple process for determining the audience's reaction to, how they react to, how? Do they at all understand the messages or the information before producing it in final form?

Or even when you are trying it has been produced or you are using it in the local cultural context, it is always good to test it out and send the feedback as to how it should be modified, so that the intended audience understands it better. So, pre-testing reveals or say field testing reveals whether messages and materials are appropriate. It will help to ensure that there is the language is understandable, the illustrations are understandable and appropriate and the messages are effective.

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So, where though pre-testing will again be considered in detail later on but we have to remember that these are common things which people look at. The material has to be attractive otherwise we will not have a look at it. So, how will you assess the attractiveness? Whether the message or the material is commanding attention, actually throughout the day throughout 24/7 and every day of our lives we are coming across a sea of information is bombarding a lot of information into us from different sources.

So, our message has to stand out, it has to be novel, it has to be attractive, so like what do you like about this material, what do you not like about the message or what was the first thing that caught your eye? Something must catch the eye, must compel the person to look at it and think about it. Second is whether they are understood, not only understood, understood as intended, I might want the people to understand something and I have framed a message.

People while reading it might understand something else, so that has to be understood whether it is comprehensive or comprehensible and whether it is understood in the same way as I intend them to. Third thing is acceptance, visuals, words all these have certain social barriers, some social norms, some social mores make words, visuals etcetera culturally and socially acceptable.

The way the people dress, the way people carry children, the way people eat, the way people move all these have certain acceptance norms. So, whether the visuals are following those norms whether the words are in any way not in contradiction to these norms that has to be carefully looked into.

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Then comes the relevance, I am talking about something which is not at all relevant to the intended audience. So, that will not be accepted, so whether the information is of interest to the intended audience, that is a very important consideration, make it interesting or choose things

which are interesting to them. If it is something which will not interest this particular group but perhaps some other group this will not be used for this group then.

So, material which is relevant, carrying information which is relevant to a particular group of audience should be used for that particular group. The most important point is call to action, every message is intended to motivate the audience to do something, ultimately to change behaviour, to know more, to do something else then, do something in a different way than what they are doing right now. So, is the audience understanding what they are to do the call to action?

More often they are not, words or phrases are framed like these 6 injections prevent the 6 killer diseases, does it convey what the audience has to do? It does not or rather if you want your child or to be healthy and avoid them from having all these 6 diseases. Take the child to the nearest health center or to the nearest outreach clinic for immunization on these particular days. This is a specific message telling him or her what to do, perhaps not in these exact words but in this line.
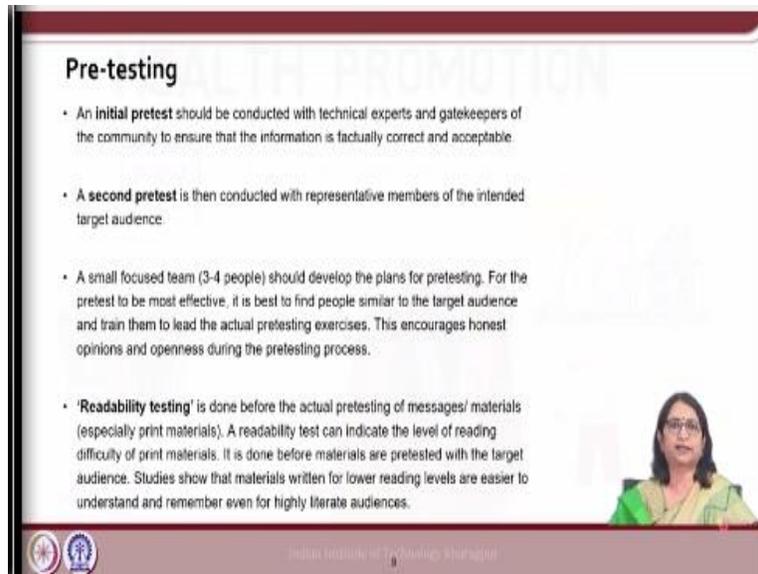
That sort of a call to action should be there instead of showed code, these types of generic remarks. So, there should be a persuasive element also, so many people are asking us always to do so many different things. So, we have to choose to do this thing in order to do that the message has to be persuasive, has to be appealing, there is something in it which compels me to do this. So, the words have to be the benefit has to be persuasive and appealing.

If we are able to formulate it in this way then people will definitely be persuaded to change. And it is not necessary that I have understood everything and framed it accordingly. Testing also gives us a scope of asking the people, the audience for whom it is intended for their suggestions on improvement and they do come out with wonderful suggestions. Once you try testing you would find the things which have escaped our mind, escaped our attention has actually come to their sight or in attention.

And they say these things and they have to be incorporated for improvement, the changes. Because more often than not they are very important points which would lead to better acceptance of these materials better understanding of these materials, simple things, small things

might be. But these things appeal to the audience, make them understand things better or provide the context in which they will work.

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So, usually pre-testing, for pre-testing and initial pre-testing should be done with the technical experts or the community gatekeepers, the informal leaders and the former leaders in the community. To ensure the information is factually correct, it is acceptable; this is done by a small group of people. Next, we take a second test with the representative members of the intended audience, select a group of people; it is not possible to do it in the entire community.

So, we select a group of representative people and do a test amongst them. A small focused team 3 to 4 people should do these pre-testing plans. For the pre-test to be more effective, it is best to find people from this community similar to the target audience and then train them as to how to do the pre-testing. In that case what happens is the actual audience would give more honest opinions, would be more open in their feedback and that is what we intend to get.

Now the other thing which is very important is also the readability test. Before actually pre-testing we can do a readability test to find out whether this material is difficult to read, it is done before pretesting. Studies show that the materials written for lower reading levels are easier to understand even for highly literate audiences. So, very difficult sentences with lots of joint words is very difficult to read and people tend to overlook them.

But if it is simple, they say the bible is the simplest reading material, so it is followed and widely used all over.

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So, pretesting methods are one can pre-test through individual interviews or focus group discussions, individual just select some formal leaders, informal leaders, just show them the material and one participant at a time you could do it in a private confidential setting. In focus group discussions we get 8 to 10 people per session where the material and messages are discussed in a group setting. We can also use expert reviews; you give the draft materials to experts for their opinions.

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Now readability assessments, there are various ways in which you can test readabilities there is the FoG test. The FoG test measures the readability by estimating how many years of formal education is required, is it can a 6-pass read this, can a 10-pass read this like this. So, actually the Robert Gunning who was an American textbook publisher, he observed that even high school graduates were unable to read most of the textbooks.

So, he started reading and he started working on this and his opinion was that newspapers and business documents were full of "fog" and unnecessary complexity, so that is why people were unable to read. So, he brought out this FoG index by spending the next few years testing and working with more than 60 newspapers and popular magazines.

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How to Assess Readability

In 1952, Gunning published a book, 'The Technique of Clear Writing' and created the Fog Index, calculated as follows.

- **Step 1:** Take a sample passage of at least 100-words and count the number of exact words and sentences.
- **Step 2:** Divide the total number of words in the sample by the number of sentences to get the Average Sentence Length (ASL).
- **Step 3:** Count the number of words of three or more syllables that are NOT (i) proper nouns, (ii) combinations of easy words or hyphenated words, or (iii) two-syllable verbs made into three with -es and -ed endings.
- **Step 4:** Divide this number by the number or words in the sample passage. For example, 25 long words divided by 100 words gives you 25 Percent Hard Words (PHW).
- **Step 5:** Add the ASL from Step 2 and the PHW from Step 4.
- **Step 6:** Multiply the result by 0.4.

The mathematical formula is: Grade level = 0.4 (ASI + PHW)

The underlying message is that short sentences written in simple language achieve better score than long sentences written in complicated language.

The ideal score for readability with the Fog index is 7 or 8. Anything above 12 is too hard for most people to read.

So, how to assess? Gunning actually published a book; the technique of clear writing and he created the Fog index. How do you do it? You take a sample passage of at least 100 words, count the number of exact words and sentences in it. In step 2 you divide the total number of words in the sample by the total number of sentences to get the average sentence length. Then you count the number of words with 3 or more syllables these are the ones which are difficult to read.

But they should not be proper nouns or combinations of words or 2 syllable words. So, these words with more than 3 syllables you divide by the number of words in the sample passages. So, 25 long words divided by these 100 words we have selected a sample of 100 words we will give 25% hard words. So, the average sentence length is added to the percentage of hard words and multiplied by 0.4 to give us the grade level.

So, basically it means that short sentences and simple language will give you better score than long sentences in complicated language. So, always when preparing this material or the messages keep the messages in short sentences with simple language. Ideal is 7 to 8, anything above 12 is too hard for most people to read.

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There is another one the SMOG readability test. Here it is with smaller pieces, you take 30 sentences, count words with more than 3 syllables and use a formula, I am not discussing it here, you can go through the resources for understanding it better. For written materials at least 30 sentences in length you select 10 sentences from the beginning and in the middle and near the end in this sample you collect, count the number of words with 3 or more syllables and then the total number of words count divided.

For written materials less than 30 sentences you can just read or count all the numbers all the words with 3 or more syllables.

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And this is a rapid estimate this was done by Harold McGraw from schools. If the total polysyllabic word count is 0 to 6, it is useful only for low literate. For 7 to 12 it needs at least primary school educational level, for 13 to 30 it requires secondary school educational level, for 31 to 72 it requires higher secondary school and 73+ would be university or postgraduate education.

Unfortunately, in some of the studies which we have conducted for readability tests most of the posters and material which have been used here ranges between secondary and higher secondary. So, there are lots of joint words, polysyllabic words, so we need to change these, modify it for primarily low literate audiences here.

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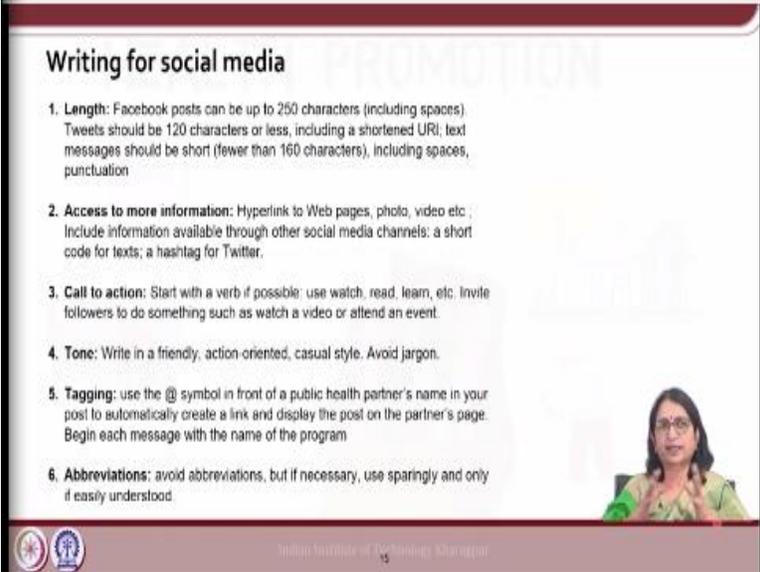
Lastly, I think we should discuss a little bit about writing for social media because this has become a source of information on health. A lot of misinformation and also bringing about infodemics, particularly the experience as COVID-19 has taught us. So, we have to be careful in writing for social material firstly about the length, Facebook posters can be up to 250 characters, tweets should be 120 characters or less, we should have a short URL, text messages should be very short including spaces punctuation etcetera.

People do not really have time to go through a lot of things. And if people need access to more information there should be hyperlink to web pages, photos, videos etcetera or you could include

information available through other social media channels hash tags for Twitter, short code for texts etcetera. Call to action should always be there, so start with a verb, if possible, use, watch, read, learn etcetera.

Invite followers to do something such as watch a video, attend an event, most of you have been doing it, so just to recap a few important issues. Write in a friendly action oriented casual style, not to use jargon that is the least understood and overlooked. Tagging is important, we can use the at symbol in front of the public health partners name in your post to automatically tweet a link and display the post on the partners' page.

But begin each message with the name of the program and one very cautionary note about abbreviations, avoid abbreviations, if necessary, use them very sparingly and only if it is easily understood. So, that was a lot about use of different types of material be it print, be it the electronic versions.

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We have to be very cautious, there are some practical steps which we can take for planning, designing and use of different communication material, these have been highlighted. So, that we can in future facilitates effective community level health education interventions. For this testing, pre-testing and readability assessments especially print material assessments is vital before we scale up the productions.

We produce crores of material but they come to no use, with increasing use of social media for whole health communication and the evolving challenge of infodemics as I mentioned. Health education also needs to follow certain guidelines for appropriate writing in social media to meet the needs of the future. So, let us all be geared up for the future with all these skills and knowledges and put it to good practice.

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These are the resources for further reference, thank you.