Basics of Health Promotion and Education Intervention
Dr. Arista Lahiri
Department of Public Health
Indian Institute of Technology-Kharagpur

Lecture - 06
Concepts of Health Behavior

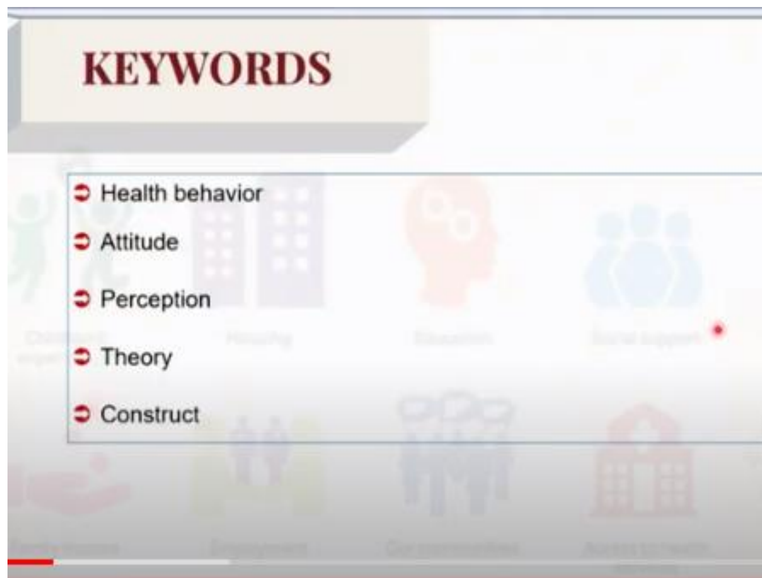
So welcome back to the second week of our course, basics of health promotion and education intervention. Now with this week, we will be moving forward with the concepts of health behavior. And then in subsequent weeks, we will be covering the concepts of health behavior, how behavior changes occur, and so on and so forth. So today, in this lecture, we will be discussing about concepts of health behavior.

So, we will be discussing about concepts and also we will be discussing about what is concept itself.

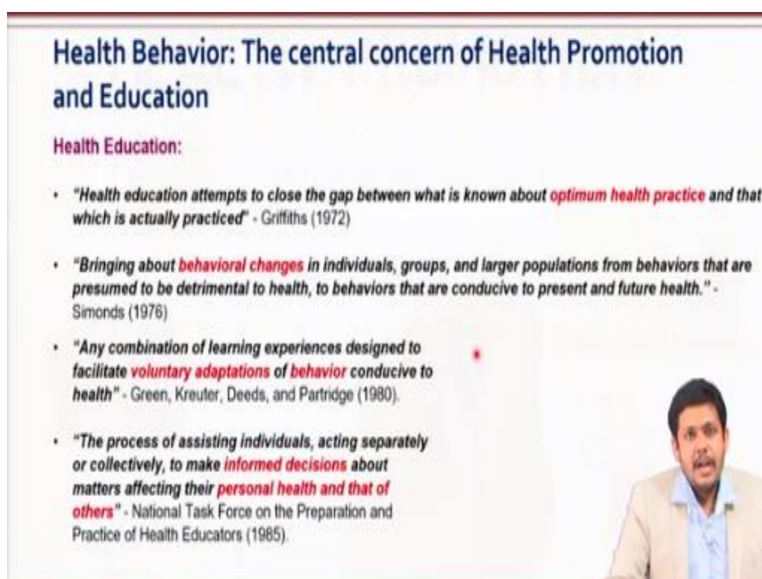
(Refer Slide Time: 00:47)

So we will be covering first definition of health behavior. Next, types of health behavior. Then components and influencers of health behavior. See influencers are very important in case of health behavior related subjects. And then theory in relation to research and practice in health promotion, because our parent discipline is in fact health promotion.

(Refer Slide Time: 01:11)



(Refer Slide Time: 01:13)



So let us start with health behavior. Before we define health behavior, we have to understand that this is a central concern. This is how the community expresses health behavior per se. This is central concern for health promotion, and also for health education. So before we define health behavior properly, let us first understand how health education and health promotion link to health behavior.

For that, we have several definition of health education pointed out here. See, these are different definition of health education, but what you can see is the common links, I mean what ultimately leads to health behavior. See in the first definition, you have optimum health practice, this speaks about practice. Next you have very explicitly stated behavioral changes in a later definition.

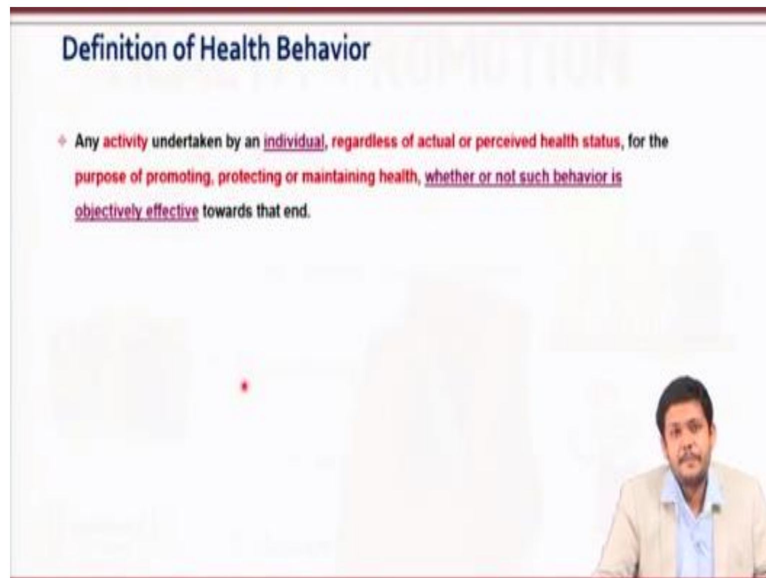
Also, you have voluntary adaptations of behavior. Then you also have these informed decisions about personal health, and that of the others. So, whatever be the definition, however health education will be defined, the basic essence of health education lies on behavior per se. And since this is health education, it is more focused on health behavior.

(Refer Slide Time: 02:39)

So, we have already discussed about Ottawa Charter in the previous week. So, Ottawa Charter defines health promotion. And you can see these are the essential parts of the definition of health promotion. See this is a process of enabling people to increase control over and to improve their health. Then another important part is reducing inequities, extending the scope of prevention and helping people to cope with the circumstances and to create environments conducive to health.

So how does this help? This helps in terms of a totally effective thing. It implies that health promotion is related to something which is doing in fact, not only thinking it is doing, doing something. So that is the basic essence of health behavior also. See, emphasize on voluntary informed behavior changes. The core idea therefore, is health behavior.

(Refer Slide Time: 03:33)

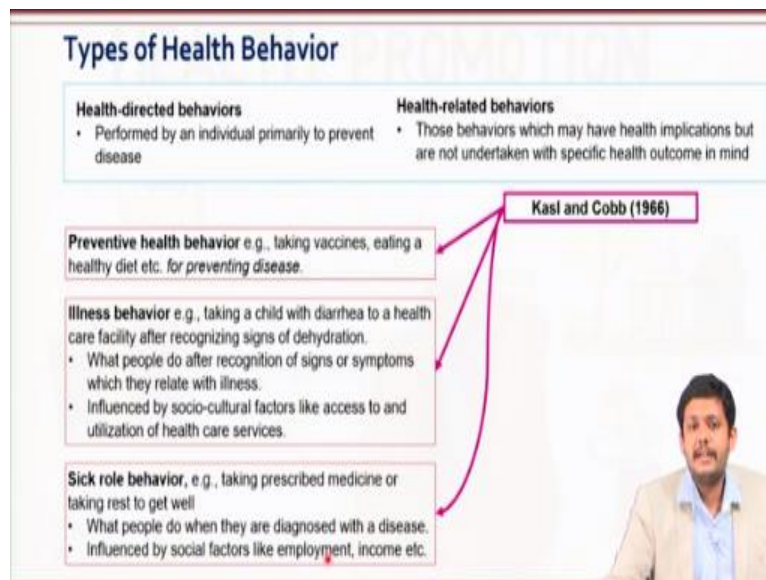


Now with this backdrop, let us define health behavior. It is any activity undertaken by an individual, regardless of actual or perceived health status, for the purpose of promoting, protecting or maintaining health, whether or not such behavior is objectively effective towards that end. So, this is kind of a very broad definition, but it has certain keywords like health behavior originates with an individual.

Then it is regardless of the actual or perceived health status. That means an individual can start regardless of the actual or perceived health status. Then it can be of several dimensions like promoting, protecting or maintaining health. And also, another key area of health behavior is that we are not sure whether such behavior is objectively effective towards that end.

Meaning that whether the behavior that is being initiated, will ultimately culminate into the promoting, protecting or maintaining health purpose or not.

(Refer Slide Time: 04:37)



So this leads to our next topic, which is types of health behavior. Now what we can say is that health behavior is basically of two types. First is health directed behaviors, the term directed is implied over here. And the next one is health related behavior. So how do we differentiate between health directed behaviors and health related behaviors. See in health directed behaviors, just follow the pointer.

It is performed by an individual primarily to prevent the disease. Next in health-related behaviors, which we will be in fact discussing more and more in our subsequent slides and throughout this course, are those behaviors which may have health implications, but are not undertaken with specific health outcome in mind. Now just go back to the previous slide.

Here you can see the last phase, which implies whether or not such behavior is objectively effective. Now relate that phrase to this one. Those behaviors which may have health implications, but are not undertaken with specific health outcome in mind. So now there are three different types of health behavior that has been defined in 1966 by Kasl and Cobb.

The first one is preventive health behavior. Next is illness behavior. And the third one is sick role behavior. Now it has a continuum in it. It has a continuum from risk to health promotion, we will be discussing that in our next lecture. But the basic essence of preventive health behavior, illness behavior and sick role behavior we have to understand. See preventive health behavior it implies prevention.

For example, you can take the example of taking vaccines, eating a healthy diet, regular physical activity, like this. Because these are all preventing something. Next is the illness behavior. Now what people do after recognition of symptoms or signs, which they relate with the illness? For example, see we are now living in the pandemic itself.

Now in pandemic people understand that anything related to cough and cold may ultimately lead to COVID-19 illness. So, when people are suffering from cough and cold, when the particular individual is suffering from that, he or she may recognize that these may be the symptoms of COVID-19. And the person may ultimately go to seek out for tests.

The person may go out to see a doctor to get some other tests done. Now these are all under this illness behavior purview. Next is sick role behavior. Now what is sick role behavior? The name implies sick role. So that means the individual who is taking up that behavior is in fact sick and that is the role for that individual, that is a sick role, that is being sick.

It is actually what people do when they are diagnosed with a disease. Now suppose that particular individual is diagnosed with COVID-19 illness. When the diagnosis is done, it then starts the sick role behavior itself. Now the person diagnosed with COVID-19 is taking up the role of sickness, being sick. So, it may in fact be influenced by social factors. Now here some social factors are pointed out like employment and income.

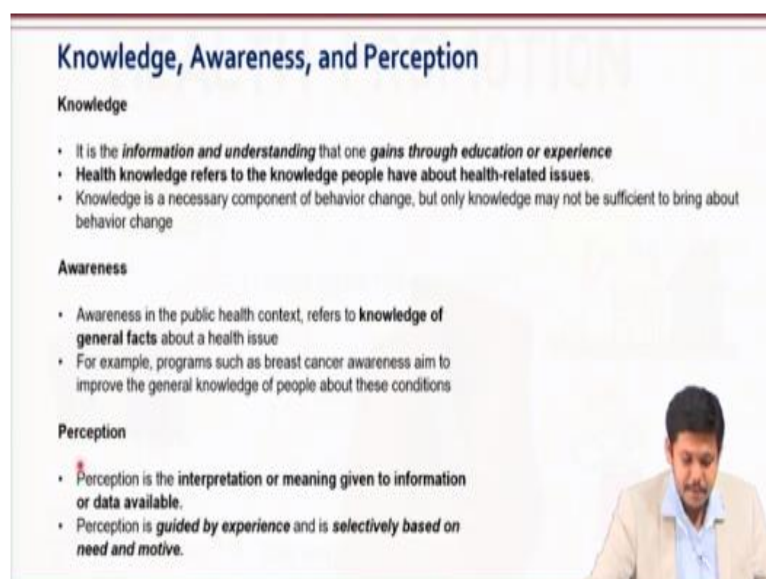
But if we still continue with our example of COVID-19 disease, we can consider that there are certain cultural beliefs that in fact got imbibed into the management of COVID-19 illness. And those beliefs sometimes regulated that particular behavior, the sick role behavior after getting diagnosed with COVID-19.

(Refer Slide Time: 08:17)

Now we move on to our next topic. That is components and influencers of health behavior. Some of it, we will be discussing in this lecture, and some we will be discussing in our next lecture. So, what we will be discussing is knowledge, awareness and perception; what are the differences between these terms. Attitude.

Culture, values, and beliefs, these three components we will be discussing in our next lecture, because they are more related to health promotion and health risk behavior kind of, these kinds of illness, these kinds of issues.

(Refer Slide Time: 08:47)



So now what are actually knowledge, awareness and perception? We start with knowledge. It is in fact the information and understanding, the key word here is information and understanding, that one gains through education or experience. So for

knowledge, it is not only education, your experience can also guide your knowledge. So, we are discussing with health behavior.

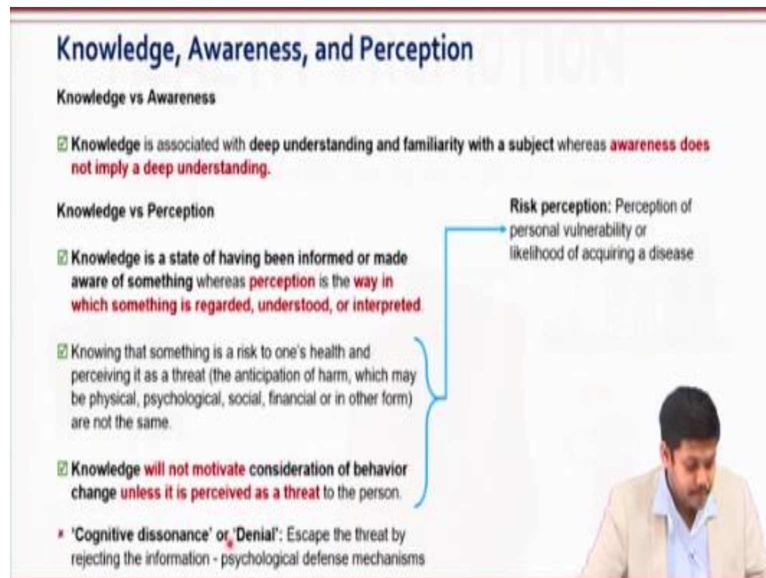
Now moving on with our discussion, knowledge regarding health or health knowledge, in fact refers to the knowledge people have about health-related issues See, we were discussing about health directed behavior and health related behavior. Knowledge mostly focuses on the health-related issue.

So, this is basically the essence of health directed and also the health-related part because it is the basic or the core of performing a behavior. Next, we come to awareness. Awareness is the public health context that refers to knowledge of general facts about a health issue. Here we already have the understanding about knowledge, which is indeed information and understanding.

Now with that awareness is basically knowledge of general facts about a health issue. See here we have given the example, like programs such as breast cancer awareness aimed to improve the general knowledge of people about these conditions. See here this is awareness, this is not knowledge, per se. And next comes the issue of perception.

See we will be discussing all the differences between knowledge and awareness and knowledge and perception bit later, but now we are introducing the terms knowledge, awareness and perception. After knowledge and awareness, we come to perception, which is the interpretation or meaning given to information or data available. As you can see, perception is guided by experience and is selectively based on the need and motive.

(Refer Slide Time: 10:51)



So now let us discuss about the difference between knowledge and awareness. The interesting part is knowledge is associated with a deeper understanding. So, whenever we have a deeper understanding and familiarity with subject, it pertains to the domain of knowledge. And see awareness was in fact a general issue. So, what awareness does is it does not imply a deep understanding.

Now next comes the issue of knowledge versus perception. So how knowledge is different from perception. We have several points outlined over here. See knowledge is a state of having been informed or made aware of something, right? So, information is there, understanding is there. That completes the domain of knowledge. Whereas in perception, it is the way in which something is regarded, understood or interpreted.

So, perception goes a bit farther in a philosophical term from knowledge. It encompasses the concept of how it is regarded or it is understood or how it is interpreted. Then knowing that something is a risk to one's health, and perceiving it as a threat, these are not all the same. So, this is how the perception of threat, which we will be discussing later on as threat perception, that is in fact perception.

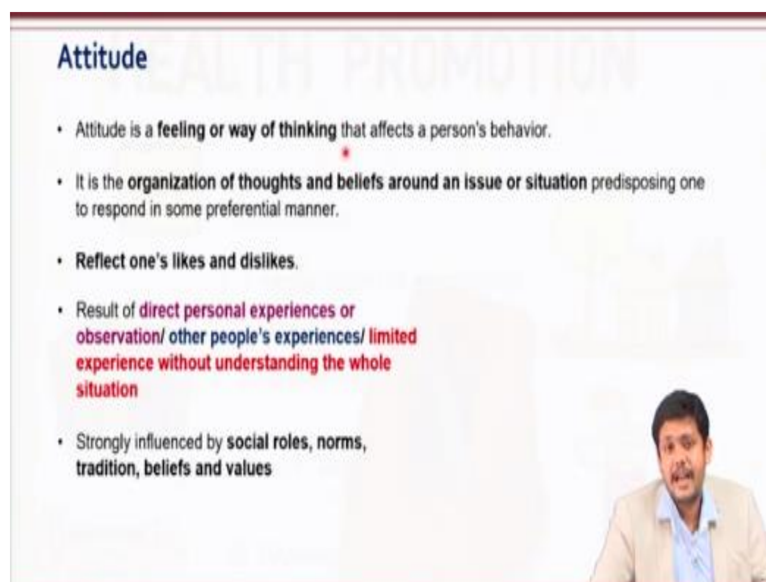
That is not knowledge and that is not awareness. But what is knowledge is that knowing something is a risk to oneself. For example, smoking is a risk to oneself. For example, consumption of liquor may be a risk to oneself. So, these, this fact is a knowledge. But when we are perceiving that in a way, that is we are understanding its effect, see how it is understood. So that becomes perception.

And also, knowledge will not motivate consideration of behavior change, unless it is perceived as a threat. So that is what we were discussing about threat perception. Of course, we will be discussing that in a bit detail, when we will kind of cover all the health behavior models. But the issue of perceiving something as a threat is very important and is at the very core of discussion in public health.

As I have already mentioned, these I mean constitute the concept of risk perception, perception of personal vulnerability or likelihood of acquiring any disease. However, there can be certain differences as you can understand. One such difference is I have outlined over here is denial. That is the person he understands, he knows that this is a threat, but the psyche or the inherent self, it escapes the threat by rejecting the information.

The information is there, but the person individually is rejecting that particular information. He is feeling that the information is false. In fact, denial is basically psychological defense mechanism, which emerges from within.

(Refer Slide Time: 13:47)



Now we come to the concept of attitude. Attitude is in fact a feeling or way of thinking that affects a person's behavior. So, when we consider a person's behavior, we have to consider about the attitude aspect which is in fact the value judgment context of it. So, when we discuss values, cultures, in our next lecture, the concept of value judgement, we will get a bit further clearer.

But for now, we will be going with two concepts. First is feeling or way of thinking. And from this, we will be kind of, you know we will be incorporating the concept of value judgment. That is how I feel whether this is right or wrong. This is my personal feeling that we should, suppose we should when we are driving, we should be driving slow and steady.

This may be my feeling; this may be my attitude towards driving. So, what happens is feeling or way of thinking it incorporates the judgment part. In fact, it reflects one's likes and dislikes. And here I have pointed out three different phrases. You can see the first one attitude is the result of direct personal experiences or observation.

So that means there may be some personal experience or personal observation that is what I am doing. If I am talking about my attitude, it may be originating from what I am doing. Next, it may be from others experiences. That means, suppose some other person has experienced something, and that other person has described those experience to me.

Again, the feeling is mine, but that is rooted on whatever the other person has said to me or the experience of the other person. Then the third component is limited experience without understanding the whole situation. Now this can be a very devastating situation.

(Refer Slide Time: 15:46)

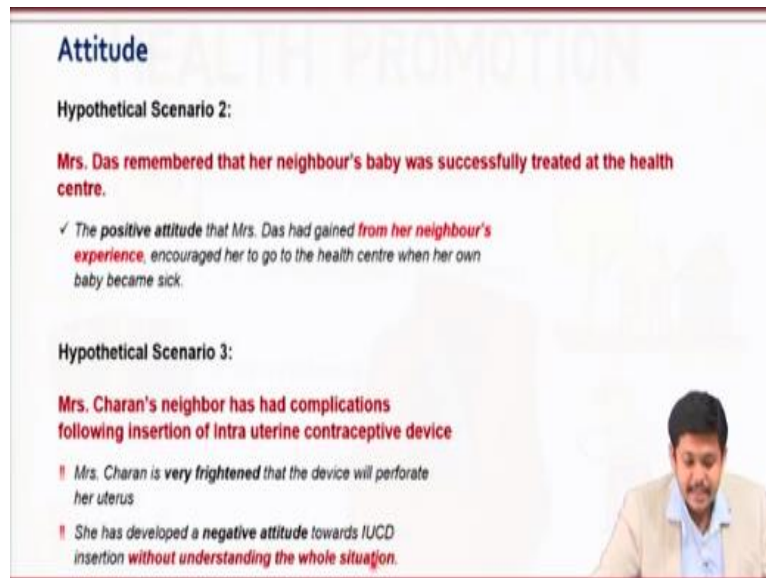
We will be coming to the examples now. Suppose, we consider this scenario, this is the case one. This patient has a baby and the baby is having a mild cough and running nose. So, she takes the child to the health center nearby. Now the staff on duty that day were very busy with the vaccination and all the other events and shouted over that patient. Now this Meera is another person.

Now the patient says, the staff actually said to the patient that, can you not see, we are very busy. We cannot waste our time now over a simple cold. Come back when we are less busy. What happens here is the shouting component, Ketaki being the mother, she did not like the shouting component, especially if the shouting is done towards the baby who is suffering.

Now this is the personal dislike. This experience, which is in fact the personal experience could lead to development of a bad attitude towards the health center staff and could ultimately discourage her from visiting the health center again, even if the need is there. But as I have mentioned over here, a single attitude does not always determine the behavior.

See here the attitude is that, okay the attitude is bad because the person did not like how she was treated. But it ultimately did not affect her care seeking behavior. By care seeking what we mean is how she was going to visit the hospital, in what frequency when the need was there. Why, the other aspects where she strongly feels that the drugs provided at the health center are very effective.

Now what this strong feeling is about? This strong feeling is about perception. And maybe some other attitudes were also playing a part in it. She might still go to the health center, despite her bad attitude towards the staff because the perception and the good attitude regarding those medicines and the treatment provided are still persisting.
(Refer Slide Time: 17:56)



Now in the next scenario, what happens is that Mrs. Das remembered that her neighbor's baby was successfully treated at the health center. Now in this example, we will be discussing about some good attitudes. See the experience itself is a very good experience. Mrs. Das remembered that her neighbor's baby was successfully treated. So, what actually happened was there was a positive attitude from her neighbor's experience.

But again, what I have told you earlier is whatever be the experience, but whoever's experience may I, I being the person or the individual who is having the attitude may find, but ultimately it is my feeling, it is my understanding of those experiences of those educations that will ultimately form my attitude. And the third scenario.

Perhaps a more dreaded scenario if we speak about public health interventions and health behavior change. What happens here? Here, Mrs. Charan's neighbor has had complications while insertion of IUCD or intrauterine contraceptive devices. Here you can understand that Mrs. Charan, who is the individual here, she does not have that kind of information about what actually happens when IUCD is inserted.

What are the complications or why the complications occur? These all informations are unknown to her. But what she has understood or what she heard that the neighbor has had a complication. Now this forms a frightening environment for the individual.

And as a result of this frightening environment, Mrs. Charan who is not aware of how IUCD is inserted or what are the complications of IUD insertion, or what may happen, what are the precautions. It may so have happened that the neighbor might have failed some precautionary behavior that the doctor has already mentioned.

But without knowing that Mrs. Charan has now developed a negative attitude towards IUCD insertion. This is a case where the bad attitude is developed without even understanding the whole situation. This is a very dreaded situation and for that we need to impart knowledge and awareness constantly so that this kind of misunderstanding does not happen.

(Refer Slide Time: 20:11)

Attitude

The ABC Model of Attitude:

1. Affective component: How an individual feels about something (e.g., "I am afraid of vaccinations")
2. Behavioral (or conative) component: The way the attitude influences how we act or behave (e.g., "I start sweating due to panic when I enter the vaccination room")
3. Cognitive component: This is about a person's belief and/or knowledge about an attitude object. (e.g., "I believe this vaccine is not safe")

- Changes in attitudes alone do not always change behavior.
- This is because attitudes are not motivations, but they are general perspectives or orientations that only predispose but do not activate.

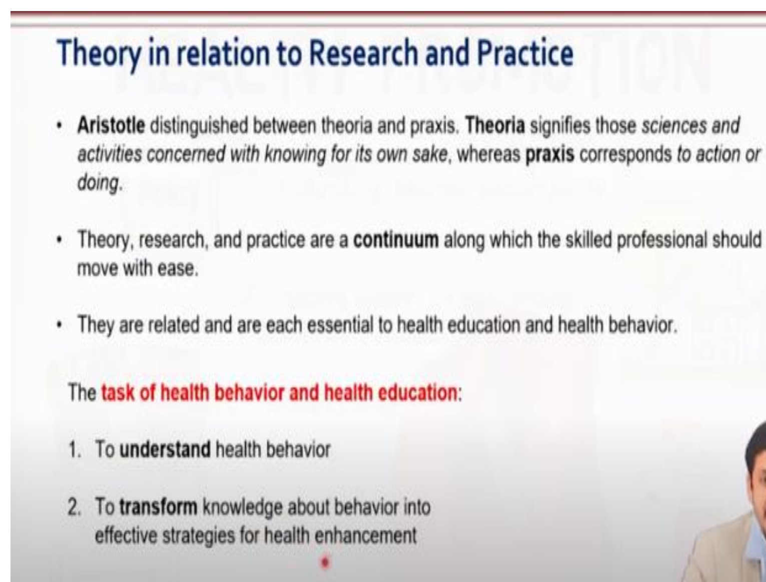
Before we conclude our discussion on attitude, we must remember that the ABC model of attitude is a very common model or per se, it is a very running model of attitude, because people are using this ABC model of attitude when thinking about attitude and discussing about attitude. It has three components. First is affective component then being behavioral component. And the third one is the cognitive component.

So affective component is about feelings. The behavioral component is about how to act or behave. And the cognitive component is about the person's belief and/or knowledge. Here the concept of belief we will be discussing in our next lecture. But these are the three components that ultimately shapes the attitude.

Now you can do one thing, you can just consider these three attitudes and you can go back to the previous three examples and work it out backwards, how these three components fit in with those three examples. But we must always remember that changes in attitudes alone do not always change behavior. Like only one attitude does not shape a particular behavior.

Similarly, if we change attitudes alone, it may not ultimately result in behavior change, because attitudes are in fact not motivations. Motivations ultimately lead to behavior change.

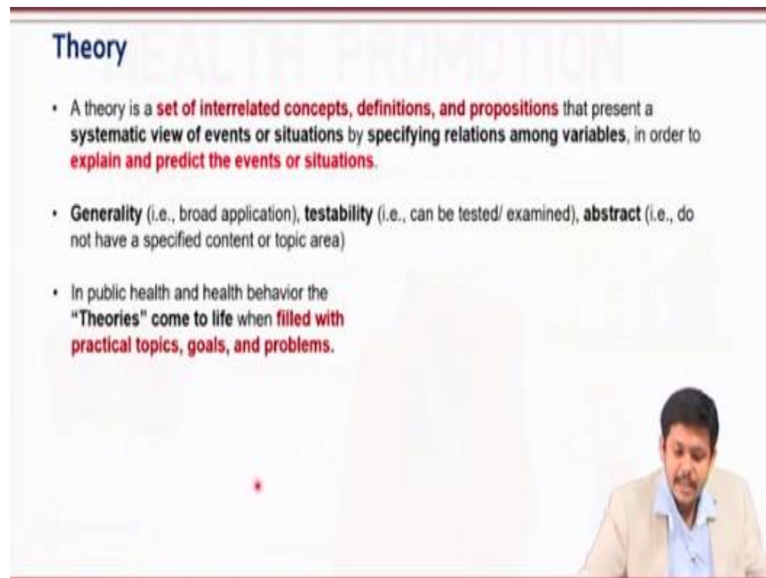
(Refer Slide Time: 21:31)



Now let us consider theory in relation to research and practice. Now these are the parts which are kind of theoretical, you know in terms of health behavior research and health behavior intervention, but we have to understand. So, it was first devised by Aristotle, the famous philosopher regarding theoria and praxis. Theoria in fact signifies sciences and activities concerned with knowledge for its own sake.

And praxis is in fact related to what we refer to as practice. So, the task of health behavior and health education ultimately is to understand health behavior, to transform knowledge about behavior into effective strategies for health enhancement. This part, we have to always keep in mind when we devise a health education or health promotion intervention.

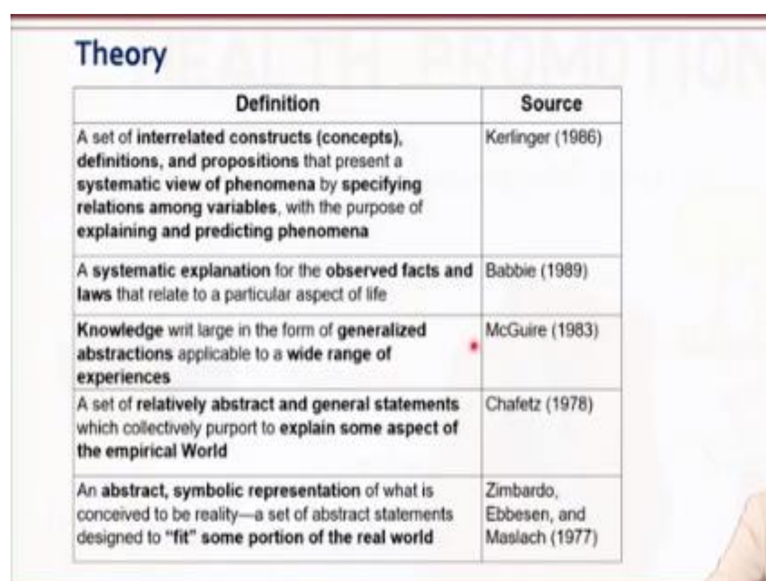
(Refer Slide Time: 22:19)



So, what is ultimately theory? We have several definitions of theory, but in fact, theory is a set of interrelated concepts, definitions and propositions that present a systemic view of events or situations by specifying relations among variables in order to explain and predict the events or situations. So, the basic component is theory are a set of interrelated concepts, definitions and propositions.

This is what guides the theory or drives the theory. The basic three attributes of a theory should be generality, testability and abstract. We must remember that theories only come to life when in fact, they are filled with practical topics, goals and problems. Without them theories are just only a set of knowledge you know.

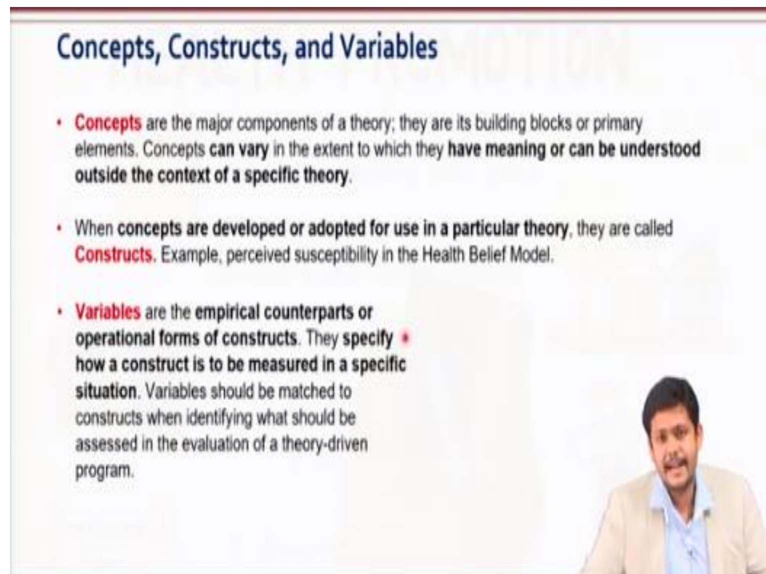
(Refer Slide Time: 23:08)


Theory

Definition	Source
A set of **interrelated constructs (concepts), definitions, and propositions** that present a **systematic view of phenomena** by **specifying relations among variables**, with the purpose of **explaining and predicting phenomena**	Kerlinger (1986)
A **systematic explanation** for the **observed facts and laws** that relate to a particular aspect of life	Babbie (1989)
Knowledge writ large in the form of **generalized abstractions** applicable to a **wide range of experiences**	McGuire (1983)
A set of **relatively abstract and general statements** which collectively purport to **explain some aspect of the empirical World**	Chafetz (1978)
An **abstract, symbolic representation** of what is conceived to be reality—a set of abstract statements designed to **"fit" some portion of the real world**	Zimbardo, Ebbesen, and Maslach (1977)

Now these are the different definitions of theory. I will not go into detail, but these are there for you. You can find all these definitions from the supplementary material also. You can go through them, but the major concept of three I have discussed.

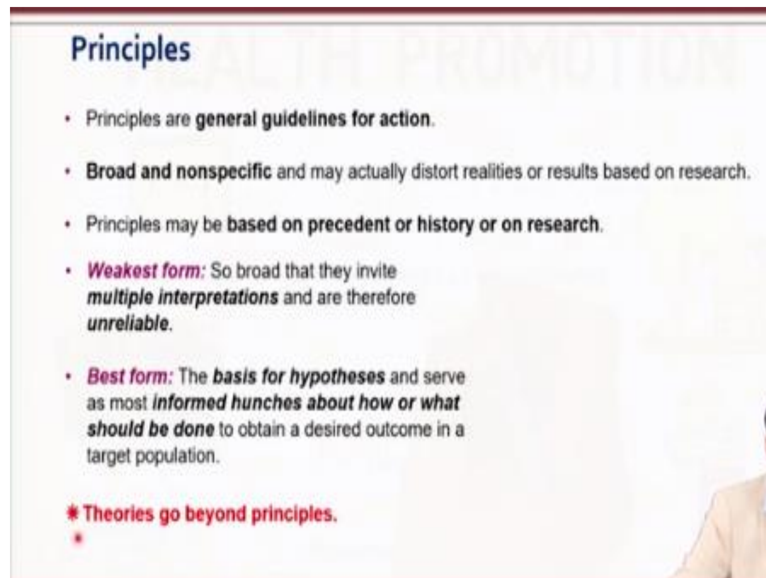
(Refer Slide Time: 23:22)



Now we will be discussing about concept itself. So what are concepts? These are the major components of a theory. This is the building block for a theory. They are its building blocks or primary elements. Concepts can vary in the extent to which they have meaning or can be understood outside the context of a specific theory. This leads to the more used topic of constructs.

Now concepts are developed or adopted for its use in practical theory, then those are called constructs. We will be discussing our constructs when we discuss about health behavior models. Now variables, these are more empirical counterparts or operational forms of these constructs. We are all accustomed to the term variables when we use behavior models or when we have used certain data and statistical analysis etc.

(Refer Slide Time: 24:19)

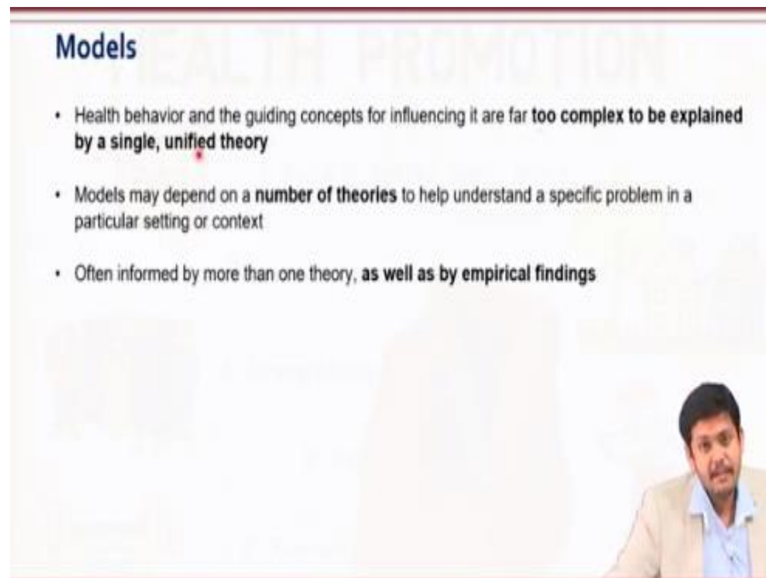


This brings to the next part of principles. Principles are in fact, a general guideline for action. But in the weakest form, they may be so broad that they invite multiple interpretations of a single thing. And in fact, if we have a multiple interpretation of a single thing, it may in fact be very much unreliable. But in the best form principles are the basis for hypothesis.

That is very important when we are discussing with public health concepts. And this server as most important, or sorry the most informed hunches about how or what should be done to obtain a desired outcome in a target population. That is principles in its best form guides how the health behavior change may be brought about.

That is why you see, when we discuss about theory, which are the more interrelated set of knowledge and other things, the theory is they in fact go beyond principles.

(Refer Slide Time: 25:21)



So, what are models? The health behavior and the guiding concepts for influencing it are far too complex to be explained by a single unified theory. Even though theories go beyond principle, but a single theory cannot explain all the events surrounding health behavior. For that we need a model. So how does the model function? Models may depend on a number of theories.

This is the basic essence. So we have building blocks for theories. Now theories are building models.

(Refer Slide Time: 25:55)

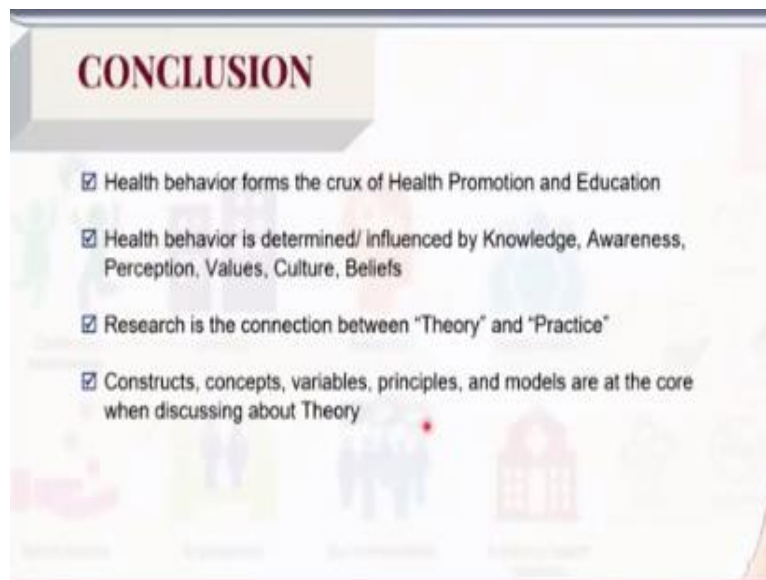
Next, we come to paradigms for theory and research. So, what do we mean by paradigm? The basic objective of keeping this part in today's lecture is to give you a glimpse of what we mean by paradigm because we often use the terms like paradigm

shift, a paradigm change, but what do we actually mean by paradigm? A paradigm in fact organizes our broadly based view of something.

These include theory, application, instrumentation and comprise models that represent coherent traditions of scientific research. In fact, you can see that the paradigms may not answer a particular question, but they do direct the search for those answers. They may be logical positivism in the concept of paradigm and they may be logical empiricism. So, when we discuss about paradigm there are certain emphasis.

Like use of induction or sensory experience, feelings, personal judgment, there are in fact deductive part of paradigms also. So, in that case deduction is the standard for verification or confirmation of a theory. Now these all, both the issues they relate to paradigms in terms of health behavior theory and research.

(Refer Slide Time: 27:20)



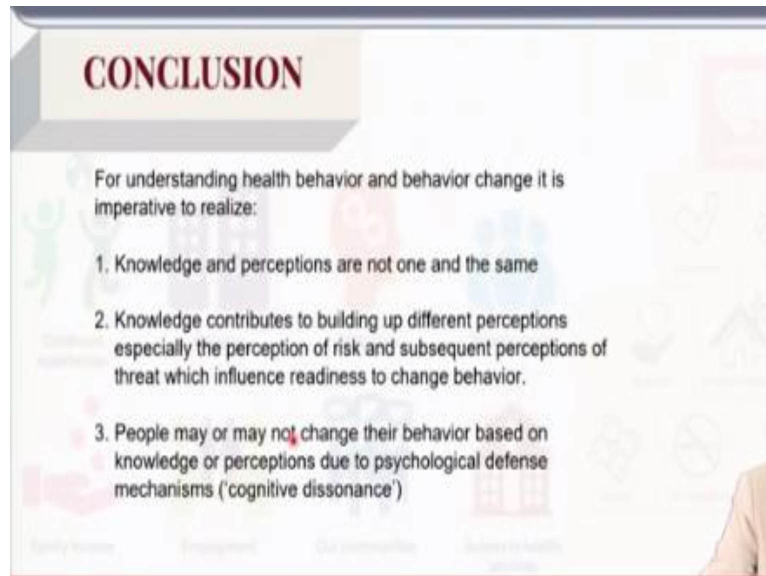
So finally, we come to the end of this lecture and we discussed several very important concepts that in fact will help us in doing this or further work with health behavior models. So, what we have understood? We understood that health behavior forms the crux of health promotion and education. So, health promotion and education ultimately are evolved through health behavior and it is also evolved from health behavior.

So, what happens is now next is health behavior is determined or influenced by knowledge, awareness, perception, values, cultural beliefs. The last three I will be

discussing in our next lecture. Research is the connection between theory and practice. Constructs, concepts, variables, principles and models are the core when discussing about theory.

One hand is that the theories are built through constructs and concepts and theories ultimately lead to models.

(Refer Slide Time: 28:16)



So, for understanding health behavior and behavior change, it is imperative to realize that knowledge and perception are not the same. Knowledge and awareness are also not the same. And another important thing is people may not change their behavior based on only knowledge or perception, or awareness due to certain psychological events like denial, as I have said. And attitudes only may not be sufficient to induce a behavior change.

(Refer Slide Time: 28:47)

RESOURCES

- Glanz K, Viswanath K, Rimer B. Health Behavior: Theory, Research, and Practice, 5th ed. San Francisco, Calif.:Jossey-Bass;2015.
- Dobe M. Health promotion and Education: Foundations for Changing Health Behavior.1st ed. Kolkata:Academic Publishers;2022.
- Health Promotion Glossary [Internet]. Who.int. [cited 8 September 2021]. Available from: https://www.who.int/healthpromotion/about/HPR%20Glossary%201998.pdf

So, with that, I will end this lecture. You can always go through the resources for this lecture. And that is it for this lecture. Thank you.