Research Methods in Health Promotion Dr. Sweety Suman Jha Dr. B.C. Roy Multi-Speciality Medical Research Centre, Indian Institute of Technology Kharagpur Week 02

Lecture 07: Theory, Research and Behavior Change Techniques

So, hello friends this is lecture 7 of this course and in this lecture I will be talking on the theory research and different behavior change techniques ok. We will discuss regarding what is theory constructs and concepts then the different behavior change techniques that we can adopt. So, we will be covering the following concepts that is theory, concepts, constructs and variables, the models and the behavior change techniques. Now, we will start with the theory. So, what is theory? See a theory is a set of interrelated concepts definitions and propositions that present a systematic view of events or situations. So, first try to understand that a theory we can have several ideas, we can have several concepts, you know now while working, you know while discussing with our colleagues.

So, we can come up with different ideas and we can have different concepts related to health research or the public health research. So, basically so many ideas and concepts are there when we talk about the theory and one thing is very important it is quite you know a systematic view of events. ok I mean you have a you know a systematic framework you can say of what of any situations on any events by specifying relations among variables. So, you can have some variables.

So, the relations between two you know the different variables and why because in order to explain and predict any kind of event or situations. Now, theories are useful during the various stages of planning implementing and evaluating interventions. So, while you are planning any intervention activity. So, be it the planning stage, be it the implementation stage and obviously, at the end we all know that we have to evaluate and the evaluating stage theories are useful. Maybe you can have some concepts and ideas and you know you integrating and using some theories ok.

So, whenever you have decided that you are going to use a particular theory ok. So, in that case you have to keep in mind that that particular theory should be there in your mind while you are planning and also in during implementation and the evaluation stage. Now, you know program planners or the health promotion experts they can use theories to shape the pursuit of answers to why, what and how very important the three things why, what and how. So, see theories can be used to guide the search for why people are not following public health and medical advice or not caring for themselves in healthy ways. You can just think that you know

you can just think that why you know people are actually not you know maintaining I mean they are not like in COVID situation only in COVID pandemic.

There were some people who are who were you know actually were very you know like they will not use mask or they will not sanitize their hands or they will not practice you know the hand washing. So, it might be possible. So, through different theories we can understand that why they are few people, why they are some you know some category of people who are actually you know they are not following any preventive measure any you know the public health advice and not caring for themselves in healthy ways means they are not following the you know the guidelines. They are not you know maintaining the behaviors you know some positive behaviors it is not like one day you have done and from the next day you will not do. So, you have to maintain that particular behavior.

Another thing is that they can help pinpoint what now see after why we are talking about what. So, they can help pinpoint what one needs to know before developing and organizing an intervention program. So, as you know as a planner as health promotion planner as an expert. So, you have to know that what are the things you know you have to know before developing and organizing. I mean before you know you are thinking of you will be developing you will be designing you will be you know implementing and organizing an intervention program.

So, what are the things that one needs to know. So, theory will help you in this situation also. Now, next is they can provide insight into how to shape program strategies to reach people and organizations and make an impact on them. So, our aim is not only just to go you know and you know implement the intervention it should have an positive impact on them that is important that is our aim actually you know the positive outcome. So, after why and what it also help us you know the theory also help us to know that how can we you know how can we develop different strategies, how can we shape the program you know strategies to reach community to reach the people and you know organizations also and finally, we can have a positive impact on them.

Now, next is they can also help. So, apart from why what and how I have you know I have mentioned in the last slide that they can also help to identify what should be monitored measured and or compared in a program evaluations. So, you know the theory they can have a different constructs ok. So, it is important that what are the things that finally, you are going to measure, what are the things that you are going to regularly monitor and definitely to compare when you are going to actually evaluation. Now, see the first one is explanatory theories often called a theory of the problem. So, explanatory theories are known as theory of the problem it help to describe and identify why a problem exist you know the explanatory why such problem.

So, why such health issue or why such social issue are existing in the community. Now, these theories also predict behaviors under conditions. So, you know the theory of the problem on the explanatory theories it you know it helps to understand that under this situation under the circumstances the behavior you know it can predict that people will follow you know this behavior or they will not follow a particular behavior. So, why are actually problem existing and also to predict behaviors under a particular situation or circumstances. Now, they guide the search for modifiable factors you know the modifiable factors among the people the knowledge, awareness, attitudes and self-efficacy, social support then the resources and so on.

So, it also help you to you know search for the different modifiable factors means which you can actually modify. Next is the change theories or the theories of actions. Now, it guide the development of interventions. So, when you are you know finally, in the you know you have to develop some interventions. So, theories of actions it guides you in the development of interventions.

Then they also form the basis for evaluation pushing the evaluator to make explicit his or her assumptions about how a program should work. So, how actually you are going to evaluate a health promotion program, health promotion intervention program or health promotion activity. So, this is important and also you know as a expert you will be evaluating. So, as an evaluator you will have your some you know assumptions you will be having that how a program should work. So, it will help you theories of theories of actions in all these issues.

Now, implementation theories are change theories that link theory specifically to a given problem audience and the context. Now, concepts, concepts are you know these are the major components of a theory. There it is building blocks of primary elements. So, as I was saying you will have different concept you will have different you know the ideas will be generated. So, concepts are actually the major components and they are the main in the basic level thing the building block or you can say the primary thing the primary element.

So, we start with the concepts only. Then concepts can vary in the extent to which they have a meaning or can be understood outside the context of a specific theory. So, you know in the they have within the particular concept it can have a certain meaning or you know there are so many theories are there. For example, theory 1, theory 2, theory 3. So, particular concept you are you know using you are just making fit into a particular theory or outside the context of a specific theory you know it can be understood, it depends.

So, well you know the important thing is these are the theoretical thing. While you will be doing all these things practical you know then you will be you know more clear. So, when concepts are developed or adapted for use in particular theory they are called constructs. Now, you know when I will be dealing with particular you know the models you will see the different

constructs are there like in health belief model we have perceived you know susceptibility or in theory of planned behavior we have subjective norms. So, these are the constructs.

So, different concepts are developed or you can say you are adopting that concepts for use in a particular theory. Finally, actually in theory when you are using concepts and then ultimately it is you know becoming a construct like perceived susceptibility. A person's beliefs you know that whether he or susceptible to a particular disease, whether he or she is vulnerable to a particular disease. So, we know the concepts that whether a person you know he feels I mean he believes that he is vulnerable to a particular disease. And finally, after concept then what is the construct the name of the construct is perceived susceptibility.

So, I think now it is clear to you that from concepts what actually person believe regarding the vulnerability from that concepts we are actually getting into the construct that is perceived susceptibility. Now, variables variables are the empirical counterparts or you can say the operational forms of constructs. Now, see then after you have your constructs in a particular model or theory. So, after that you know you have to think that you have to measure it should be in a measurable form because finally, you have to measure it. So, those variables you know they specify how a construct is to be measured in a specific situation, in a specific problem you know you can take some like cervical cancer screening for health belief model.

So, variables now variables should be matched to constructs when identifying what should be assessed in the evaluation of a theory driven program. Now, you know a single construct can have more than one variable. So, you have to understand that finally, you have to assess in the evaluation phase of that particular theory driven program. Now, models you know health behavior and the guiding concepts for influencing it are far too complex to be explained by a single or unified theory. So, you will see in different literatures you know in different you know textbook they have mentioned that it is actually difficult.

So, health behavior you know it cannot be explained by a single unified theory. So, we can have more than one theory. So, we can have theories. So, models you know models draw on a number of theories to help understand a specific problem in a particular setting or construct. So, models actually here what we see that models it has more than one theory or the number of theories.

So, that we can understand we can you know focus on a specific issue or problem in a particular setting or context. So, they are often informed by more than one theory as I said as well as by empirical findings. Now, next we will talk about the behavior change techniques. So, what is behavior change techniques? Behavior change techniques are methods employed by the behavioral scientist or the psychologist or the you know the medical personnel and others to try to change the behavior of individuals or groups of people and other motivations or the factors or constructs that influence behavior. So, you know the techniques this is

basically behavior change techniques, there are so many methods are there which one can use to change the individual behavior or the you know the group behavior and also you know to increase their motivations and also to understand what are the determinants or the factors or the constructs which influence the particular behavior.

Now, according to Abraham and you know Michi there are 26 common methods that individuals can use to try to change the behavior of other people. Now, I have mentioned you know the 26 techniques or methods we will try to understand ok. Now, see like provide information the first you know 1, 2, 3 is on the providing information on what? So, first on behavior change we know that we have to keep in mind that you have to provide first information that particular person should know. So, providing information on behavior health link, what are the health problems, the health risk ok. Then on the consequences that if a person will perform the behavior then what will happen and if that particular person will not perform that particular behavior then what will be the consequence ok.

I mean you the positive and the negative thing. It may be beneficial to that person or it may be harmful then you know the provide information about others approval that you know other people your surrounding people whether they are actually approving or disapproving that particular behavior or not which we say you know the influencers or influence you know the social influence. Then prompt intention formation so, you know what happen as I said as a health promotion expert as a planner you have to understand that you have to encourage a particular individual ok. You have to encourage in such a way so, that they have the particular intention to perform a behavior. Barrier identification they you know that particular person or the you know the groups they might have some barrier this is also very important as much as you give them information as much as you encourage them you motivate them, but if they are barriers they will not follow you know it will be very difficult for you know a person to follow any actions if they are surrounded with you know many barriers.

So, barrier identification is very important and general encouragement, general encouragement is like you have to be very a kind of diligent you have to say well done you have done this you can do this. So, this is very important as a you know health promotion expert. So, to your audience to your people you have to keep on providing the encouraging I mean the important thing is you have to put some you know give some encouraging words then set graded task. So, for a particular behavior you should grade I mean you should have series of task you should make them understand these are the 1, 2, 3 you know these are the series of tasks that you have to do. Instruction definitely you have to provide that why they will do then how they will do this is very important any if you are trying to make them understand that you know hand washing importance of hand washing then you have to make them understand the hand washing techniques you have to instruct them they do not know the steps of hand washing.

So, you have to instruct next is model or demonstrate behavior. So, you also have to demonstrate the hand washing steps. So, it will be easier for the groups or for the individual. Specific goal setting is important these are the specific goals that you have to do not like you know a very broad and very a vague kind of thing you know these are the 2, 3 things otherwise if you just go and give them vague you know goals they will lost I mean they will not find any interest in you know maintaining that behavior change.

So, specific goal setting is important. Review of behavior goals is like you know the past whatever you have what behavior you have done you have some goals. So, you have to just see that these were my goals and these things I have done. So, that review is also very important next is self monitoring now this is something a bit difficult, but as a health promotion expert I am telling you if you can I mean if you try now you can implement a person self monitoring is very important. For example, I mean you know obese person now you know in a whole day what food he is eating what he or she is eating you know. So, he or she can maintain a diary self monitoring these are the food I am having and you know the amount of calories.

So, in this way they can have the self monitoring or regarding physical activity. So, morning 1 hour I have done you know I have done some physical activity in evening I have done risk walking. So, this self monitoring is important. Same I know a feedback in feedback one thing you have to understand that you have planned something that in coming days you will be doing this and you have done this. So, why you have not done this why? So, this feedback is important.

So, that further he or she can again move on with that particular behavior. Contingent rewards see in contingent rewards sometimes you know not in all cases we give some reward you know incentives be it monetary or non-monetary incentives. So, these are basically contingent reward if you do this you will be getting this if you do this behavior then you will be provided with such and such things. Teach to use prompts and cues this is I think most of us follow that I forget. So, you can you know keep a chart you can keep a poster in your room you get up in the early morning and you see ok.

So, that you know people do not forget like my aim is that I will get up in the morning at 6 am and I will go for jogging. So, you know you have to keep such prompts and cues you know in the form of poster or in a write up as you feel regarding time or something you have to put. So, that particular individual get do not forget and he keep on doing that behavior. Agree behavioral contract is bit you know it is not always that they will provide you written contract that yes I will be doing all these things every day. So, some verbal you know some you have to understand that yeah if that person has said that he will be doing.

So, kind of verbal, but most of the time I have seen you know in different literatures they have taken some written contract also behavioral contract. So, health as a health promote I mean in

a health promotion expert. So, to your audience it might be individual or groups you have taken some written contract. Prompt practice is see intentional practice. So, you have you know encourage them in prompt practice not the encouragement that encouragement to practice is important ok.

So, prompt practice is important. Use of follow up prompt sometimes you know I have seen people they as a health you know promotion expert they call them, they send them emails and they see you know the kind of follow up they are doing or not whether what they are doing and if not always with digital technology it is yeah I mean you can just go physically and you can talk to them you can discuss with them. Then for social comparison opportunity is like you know what happens you have some people you are surrounded with some people like in a group you can see it you know it is very relevant in group in a group they are 10 people 20 people you know students. So, what happened you can just compare that he or she has done this her goal was this you have done this you have not done this. So, an opportunity just to compare with other people ok. Plan social support and social change this is about that some social support you know your family it might it may be a family support ok.

It may be a friend support some short of support is also important for that particular individual. Prompt identification as a role model now this is I also feel this is important you know in school children you can do you can just choose one and you will say that ok. So, for today you are the role model of other students. Now what you have to do you have to demonstrate them hand washing techniques you know through persuasion or demonstration that particular student can give a talk on the importance of hand washing he can demonstrate he can motivate other people. So, it is just like that for a particular day he is a role model and he will give a talk through persuasion through demonstration.

Prompt self talk is mostly about the self encouragement I would say it is not like you have to always talk very loudly you get up in the morning and you say yes. So, today I will do jogging I will go for jogging for one hour. So, this is you know just for the self encouragement we say as health promotion expert we always say that before you start any kind of behavior activity you have you know you should have talked to yourself. So, you talk to yourself is also very important.

Relapse prevention is important. So, relapse prevention you know how in relapse prevention important thing is what are the problems or factors which is actually you know hindering a particular individual in maintaining that particular maintenance of behavior change. What happened you know people starts doing something people start you know doing physical activity after 2 days you will see they are not doing. So, actually they unable to maintain that particular action. So, reasons can be there. So, you have to understand the relapse prevention what can be done what facilitation what facilitating conditions can be induced.

So, that relapse do not happen. Stress management is also important you know if something is there that they have to do. So, they become stress. So, something you have to do that the individual you know the target audience they I mean they have to relax you know the stress buster you have to think in that way you know the anxiety level the anxiety level reduction is important. Next is motivational interviewing. Now, motivational interviewing you know the important thing is that you the main crux of this motivational interviewing is that to provide motivation to that particular public.

Now, how now in many ways we can motivate a particular people. So, actually it is said that motivational interviewing is also a kind of counseling. In counseling we know now we have to you know something we have to keep in mind empathy you have to provide support it is not like you will force somebody. So, these are the things you have to do from tomorrow. It is something you know you have to understand their views their problems and you know a sort of empathy is important the respect is important and by that way you can motivate and to avoid ambivalence.

It is something that yes positive they have to have you know the factor which will actually very specific and strict you know they have to be like they have they have to change that behavior. So, in that way you have to encourage you have to motivate ok. So, it is not like sometime he is positive sometime he is negative. So, ambivalence should be avoided and empathy is very important thing ok. So, whatever you know about the counseling is you know you have to remember in motivational interviewing also.

So, it is seen that you know the motivational interviewing has a very very important role in behavior change ok. So, whenever you are planning something keep this point also in your mind. Wherever say depending on the target audience, depending on the specific problem, depending on the target behavior and definitely how much resources you have as I always say how much it is also feasible for the you know those who are you know the researcher the expert who are going to implement. So, their resource is also important it is not only about the audiences you know resources. Then time management sometimes you know if you see it is a you know it is happening it happens with us also that oh from tomorrow I have to do this I have to maintain this behavior every morning I have to get up and I have to go for job jogging.

So, every night before I go to sleep I have to brush my teeth ok. So, every time I go for cooking I have to first wash my hands with soap and water. Now what happens sometimes you know people think that my God my I have my own schedule, schedule of work you know a schedule time schedule. Now so, what will happen adding some more thing you know in my day to day schedule what will happen my time management you know I would not be able to manage it might happen I will miss something. So, what happened this also you know this is something which also brings some kind of stress and anxiety among the individuals. So, this is very important as you know as an expert and as I say that you are the one who are actually trying to change the behavior ok, among the community members.

So, among all these behavior change techniques you have to keep in mind that how you can help them with the schedule their day to day schedule their day to day time management ok. So, these are all the points you know I have discussed. So, I think these are very easy points just whatever I have told you just try to keep this in your mind and whenever you do it practical you go and implement you try to use these techniques. So, now let us come to the conclusion concepts are the major components of a theory we know they are it is you know the primary elements or the building blocks and what is behavior change techniques? Behavior change techniques are matters employed by behavioral scientists, the psychologists and the public health expert, the health promotion expert you know the medical staff and others to try to change the behavior of individuals or groups of people and or the motivation and also the factors and determinants which influence that particular behavior. And theory is a set of interrelated concepts as we discussed concepts, definitions and propositions which present a systematic view of events or situation by specifying the relations among the different variables and why because in order to explain and understand and in the way you know we can predict some events or situations.

Then theories and models it explain behaviors and suggest ways to achieve behavior change this is the ultimate you know the final you can say the final line we can say that theories and models why these are important because they explain behaviors and suggest that what are the matters what are the ways to achieve that particular behavior change. So, friends go through all these resources. Thank you.