

Research Methods in Health Promotion
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Lecture 13: Models of Individual Health Behavior- II

Music So, hello everyone and this is the lecture 13 of this course. So, in last lecture we discussed about the models of individual health behavior few models we discussed and this is the part 2 of this particular lecture. So, here also we will be discussing few models. We will be covering health belief model, the protection motivation theory and the trans theoretical model of change. Now, regarding health belief model it was initially developed in the year 1950s by a group of social psychologist in the US public health service. Now, at that time you know they I mean there was research into failure of large number of eligible adults to participate in the screening screening of what tuberculosis.

So, actually there were many adults who actually did not participate in the tuberculosis screening program even after you know there was no charge and the mobile x-ray units were conveniently located in their neighborhood. So, researchers were concerned with identifying factors that were facilitating or inhibiting participation. So, they started thinking that what factors actually inhibited the participants and some participants you know they went for the screening program. So, what were the factors which actually facilitated them.

Now, health belief model or HBM it contains several primary concepts that predict why people will take action to prevent to screen for or to control illness condition. So, this is one of the individual level model which has different concepts and they predict that why an individual why people will take action to prevent from some disease or to screen for or to control any illness or condition. Now, this is the framework of health belief model. So, at the extreme left you can see that these are the external variables or you can say these are the modifying factors age, age, socioeconomic status, knowledge etcetera. And here are the different constructs ok.

Now, it is assumed that these external you know these modifying factors they basically you know affect these perceptions ok, they have some effect on individuals perception. So, the first one is the perceived threat actually the perceived susceptibility and perceived severity of the disease combining the two thing we get the perceived threat. Then the next is the perceived benefit sorry then perceived barriers, perceived self efficacy and finally, here you can see action that is individual behavior and before behavior you can see this box that is cues to action we will discuss one by one in our next slide. Now, the very first thing is that what is perceived susceptibility. This is basically perception of risk of contracting an illness how much a person

you know what is his or her belief that he perceives that he is at risk of contracting any disease you know perceived vulnerability, perceived susceptibility.

Then perceived severity now it is about the beliefs concerning the seriousness of consequence of contracting an illness death, complication, disability and pain. So, it is about the severity if something happens how much severe will that disease be or how much severe the complications will be. So, combining the perceived susceptibility and the severity we have perceived threat, threat perception we can also say threat perception. Now, next is the perceived benefit now see it is about the beliefs regarding the effectiveness of various available actions or the preventive measures or the precautionary measures in reducing the disease threat and also the non health related benefits also there. Now, the important thing is that if some preventive measure is there ok.

So, just for an example any vaccination. So, it is that particular persons believes that whether that particular preventive measure you know it may be a wearing mask or it may be like a vaccination. So, how much that particular preventive measure is effective in preventing from some disease ok. So, that is why it is perceived benefit, benefit of that particular measure or the behavior. Then barriers perceived barriers.

So, this is spontaneous cost analysis which occurs when the individual evaluate preventive actions that may be expensive, dangerous, unpleasant, inconvenient, time consuming and so forth. So, these are just few examples you know actually any kind of barrier that a particular person you know believes or he or she perceives that here this is the barrier ok. Just for an example for the screening of cervical cancer ok. So, that woman she can feel that my god the health center where the screening is done is too far from my home, then I have to take a vehicle you know the public transport. So, there is the issue of you know money.

So, cost is also there sometime you know it may be inconvenient you do not have time ok, you have some other different work you have some other designated work. So, what happens anything a person can perceive that here this is my barrier ok. So, for me it is I feel it is difficult for me to go for screening or I feel it is difficult for me to perform that particular preventive behavior. Next is cues to action, now cues to action you can say it is a kind of stimulus which needed to trigger the decision making process and to accept a recommended health action or health behavior. Now, in a so many you know mass media campaign or some awareness programs are going on, then sometimes you know people what they do they keep something which reminds them of doing that particular behavior.

So, cues to action is you know which basically triggers you which triggers that particular individual to perform a particular behavior ok. Then self efficacy this concept introduced in 1977 by Adora refers to the conviction that one can successfully execute the behavior required to produce the outcomes. Now, this refers to the level of a person's confidence in his or her

ability to successfully perform a behavior. I have already discussed in my last few lectures that self efficacy is all about your confidence a person's confidence ok. Now, for performing a particular behavior self efficacy is very important how much that particular person is confident that he or she can perform a particular behavior and along with that also how much a person is confident that he or she can overcome the barriers you know there can be different challenges and barriers.

So, he or she is confident that yeah he will just overcome those barriers and then he will be able to perform a particular behavior. So, now, we will talk about protection motivation theory. In protection motivation theory you will find that there are you know the perceived threat some concepts or constructs you will find similar to health belief model, but not all there are some other concepts and constructs which you have to understand. Now, in health belief model one thing is that there the one assumption is that all the participants they have the equal information of that particular disease ok. So, that is also important that you have to keep in mind regarding health belief model.

Now, here it is protection motivation theory. So, the protection motivation theory was first introduced by Rogers to understand mechanism by which people adopt protective behaviors to reduce perceived threat ok. Now, it was initially developed then what happened you know several changes happened. So, this model has been revised several times with improved capacity in predicting the health related behaviors. Now, this PMT or protection motivation theory it consists of constructs organized as two pathways this is important as two pathways linking perceptions to behavior.

Now, the first one is the threat appraisal pathway ok and the second one you can see the coping appraisal pathway. Now, the threat appraisal pathway it is basically an evaluation of a person's perception of the threat of certain behaviors or disease. And the coping appraisal is an evaluation of a person's ability to cope with the threat ok. So, it is about the coping with the threat. It is about the coping with the threat.

Now, the first one is the threat appraisal pathway. So, the threat appraisal pathway you can what did you understand it is about that how much a person you know evaluate that yeah these are the susceptibility this is the you know the perceived threat. So, by this we learn that there are threat appraisal pathway. Then the coping appraisal pathway is evaluation of a person's ability to cope it will be cope ok. So, with the threat now how much a person feel I mean how much he thinks that he has the ability or how much a person you know thinks that yeah definitely I have some resources to cope up that is very important.

Now, this is the framework not just do not get confused why it is written intention it is about motivation it can be behavioral motivation or intention. In some of the books some of the documents you will find motivation in some documents and in some books you will find

intention, but it is all about how much a person has intended how much of a person is motivated ok. So, the external you know the variables we know that we have the knowledge experience of a person then the first block you can see it is about the threat appraisal. So, threat appraisal by now we know the perceived threat is about the perceived vulnerability and the perceived severity or vulnerability you can also say perceived susceptibility. Now, here it is mentioned about the intrinsic and extrinsic reward now what happens if any kind of behavior any kind of response of behavior.

So, it might give you a some kind of reward now what we feel now that yeah I am getting you know a satisfaction self satisfaction or I am getting a bodily pleasure. So, this is basically intrinsic reward and extrinsic is basically your surrounding you know the social approval like we often think now that yeah the society there are some social norms that these things should be done. So, whatever you do we first think that what basically a benefit you can say what reward I am getting you know the intrinsic reward ok. As I said it can be you know a kind of self satisfaction it can be it can be you know bodily pleasure whatever you do and reward is extrinsic is like you know the external thing that is a social approval that here somebody you know the society they approve the social norms. So, it is about the social approval.

Now, the next is the coping appraisal regarding coping appraisal first let us talk about the response efficacy now what is response efficacy? It is about that if a particular you know preventive measure. So, that person how much he feels that particular measure will be effective. So, effectiveness of a particular measure you know the precautionary behavior of preventive measure is basically the response efficacy and self efficacy by now you all know that it is about one confident I mean his or her confident that whether he will be he or she will be able to perform that particular behavior or not and also overcome barriers and can perform a particular behavior or not. Now, response cost is it can be anything it is mentioned cost, but do not get confused that only it is about the you know the monetary loss or something it is about whatever I do it can be you know response cost it can be inconvenient a very unpleasure it can be you know if you do something you know and if you see that my go these are the problems which can happen my money will be you know more money will be spent time consuming basically it is very inconvenient to perform or very you know unpleasure. So, it can be anything response cost is basically whatever I have explained now.

Now, the thing is when for a see there are some behavior some response which adaptive there are some which are maladaptive ok. So, what happened if that behavior for example, there is a disease X and for that prevention of that particular disease X we have to perform a behavior B. So, here behavior is B now the thing is first of all you have to think about a particular disease that disease X. So, what is the threat how much do you know your own perceived severity your own perceived vulnerability is important. So, how much you perceive that particular perceived threat is high at the same time you can also understand that yeah, but the behavior B it gives me this pleasure it gives me you know this kind of self satisfaction of the social approval.

So, it is some I mean my next slide I will show you I will explain that if the threat of a disease is very high ok. And if there is some positive you know positive behavior and the if you think that yeah you are getting something from doing that particular behavior also the extrinsic reward is there for that particular behavior then what will happen just because your threat is also high you will definitely try to perform that particular behavior to decrease the threat to prevent the perceived threat to decrease the threat because you have you know that you have to perform that particular behavior then only you know you will not be vulnerable to that disease or if that disease happens you would not be you know that disease will not get severe. So, this is very important to understand it is all about you know how you know in how individual psychology how they decide that whether they are going to take that particular action or not. In coping you see you should also have you know an idea that yeah I have these kind of resources I can cope I have the ability. So, first you will see that yeah that particular behavior is effective in preventing a particular disease or combating that disease also you have the self efficacy I mean you are confident that yeah this particular behavior is effective and I am also confident that I can perform I can perform that particular behavior and if when your response cost is not that much is very low then you will not hesitate to perform that particular behavior because you see that no I do not have to you know pay anything for this I do not have to give so much of time and it is not that inconvenient it is more or less convenient I do not have to spend money also and on the other hand that preventive you know measure is effective and I am also confident that I can perform I can overcome any such challenges or barriers in that case what happened your coping is very high that you will be able to perform your motivation your intention to perform that particular behavior will increase and finally, what happened then you will perform that particular behavior.

In fact, if you go through some literature you will see that for the any pandemic in any emergency situation this protection motivation theory this has been used several times. Now, there are 6 sufficient conditions that are prerequisite to eliciting protection motivation and coping behavior. So, just look at this paragraph an individual must believe that the threat is severe. So, the first one is that there is severe perceived threat then he or she is vulnerable the perceived vulnerability perceived severity vulnerability then he or she can perform the third one is he or she can perform the coping response like you have the ability you think that here you can perform then the coping response here coping response in the sense you have to understand any behavior which you will perform a sudden emergency you know sudden some disaster occurs some in a pandemic epidemic it occurred then how will you cope. So, you know that this coping response is whatever I am going to perform to cope with this particular situation.

So, the coping response is effective then the rewards associated with the maladaptive response are outweighed by the factors decreasing the probability of making the maladaptive response. Now, see the fifth and sixth point, sixth point you see the cost of the adaptive response are outweighed by the factors which increases the probability of making the adaptive response. So, basically I explained you know that if you see that the response cost this is not that much problematic to you then definitely the probability of performing a particular good behavior in that case you can say the adaptive response will be more and when you see that you know

there are some maladaptive behavior it can be in both way ok. So, try to understand if for a maladaptive behavior it seems that here you are getting a very good intrinsic and extrinsic reward and in the same time your perceived threat is low then what will happen your perceived threat is low and the same time for that particular maladaptive behavior your rewards are high. Then what happened at that point of time a person thinks that then this is I am getting all kind of you know pleasure and social approval as I said intrinsic and extrinsic reward then I will perform this behavior I will keep on performing this behavior.

So, this is all about to understand that there are some condition which are prerequisite to eliciting the protection motivation coping behavior. Actually in this particular framework only we discussed each concept and we try to understand that when in what situation which will be high and which will be low then a person will perform a particular behavior. Now, next is the trans theoretical model of change the trans theoretical model uses stages of change to integrate process and principles of change from across major theories of intervention ok. So, here this model is you know often you will see it is also written somewhere as the stages of change stages of change model. So, basically this model it uses a stages of change to integrate different principles of change what will be the you know the stages from first stage to last stage and from major theories from different theories of intervention basically we integrate different theories and then the trans theoretical model was basically developed.

Now, it was called trans theoretical because concepts come from different theories of human behavior and views of how to change people. So, now, you can understand why it is called trans theoretical because here from different concept from different theories we are actually taking the concepts and in the view that here how things go on how a person you know how the change how what are the stages of change of a particular person. So, stages of change is behavioral change can be seen as a progression through a series of stages. So, we will discuss different stages in our next slide. So, the stages of change is all about that they are different from one to last stage.

So, how a behavioral change occurs from the first to last stage. Now, before I discuss the stages you first look at this a figure. So, the first is the precontemplation. Now, this is the linear progression through the stages. So, the first stage is precontemplation, then contemplation, then preparation, action, maintenance, termination is also there.

In the next one you will see it is about the circular progression why same thing is happening see a person enters here precontemplation, contemplation, preparation, action, maintenance, but sometimes what happen you know this relapse again what happen see what I have mentioned fall back into old patterns of behavior. So, again it gets relapse. Now, see the different stages what is precontemplation basically at this stage you do not have any intention to take action and they have mentioned about some time frame. So, no intention to take action within the next 6 months. So, you do not have any intention that you are going to take some action.

In contemplation you now have some intention intends to take action within the next 6 months. Now, you have intention and you are now in the preparation phase. So, preparation is intends to take action within the next 30 days and has taken some behavioral steps in this direction. So, your preparation is over finally, after preparation you are at action stage. So, action is about changed overt behavior for less than 6 months.

Now, see when we have started doing something ok. So, now, you are taking actions, but we will say that here you are maintaining that behavior change. So, the maintenance stage is about changed overt behavior for more than 6 months ok. So, for the last you know for more than 6 months that particular person is doing that particular behavior. Now, termination is about no temptation to relapse and 100 percent confidence.

Now, here I will just show you that well keep on maintenance in linear progression we can see what I have mentioned see that there is no temptation to relapse and the person is 100 percent confident that is why after maintenance he or she will not relax he will keep on doing when he or she is confident that he will keep on doing that particular thing. But sometimes what happened now here you see in precontemplation what we have mentioned no intention of changing behavior then in contemplation now you think that yeah there are some problem exist now that person intends that yeah something should be done, but there is no commitment to action, but in preparation that person is completely intended ok, intend upon taking action and also see do not get confused here also he is completely intended, but here actually he is now aware that your problem exist. So, when a problem exist now he has he is getting some intention to perform, but here that time he is not that you know committed that he will perform something, but in preparation in preparation phase a person gets into when he is basically now he is very intended and he has also started doing you know some preparations that how actually the different steps you know the small steps of that next big step ok. So, now, he has that he is preparing and he has a very good intent upon taking action.

Now, he takes action. So, maybe it you know some old bad behavior was there, but now he is doing action he is in the active mode. So, active modification of behavior is being done maintenance is about sustained change new behavior replaces old. Now, maintenance as I said for more than 6 months ok. So, it is being done. So, now, there is sustained sustainability it is maintained and if a person gets relapse or if he or she does not get relapse you know if it is no temptation to relapse or you know if is 100 percent confident then it is ok, but sometimes what happen that relapse occur ok.

And if that relapse occur that means, fall back into old pattern of behavior again he is getting fall back into old pattern of behavior. So, again he has to start from pre contemplation. So, it was all about the 3 different models which we discussed the health belief model, the protection motivation theory and the trans theoretical model. Trans theoretical model you can you know mostly if you see the different text books or documents you will see that they have used for

the quitting smoking or for you know tobacco addiction for that they have used that here these are the different stages. So, in conclusion the HBM contains several primary concepts that predict why people will take action to prevent to screen for or to control illness condition.

The trans theoretical model uses stages of change to integrate process and principles of change from across major theories of intervention. And then the protection motivation theory was first introduced by Rogers to understand mechanism by which people adopt protective behaviors to reduce the threat. These are the learning resources you can go through all the learning resources. So, the first one you can see the Rogers. So, here you can have a very very good idea about the protection motivation theory. Thank you.