

**Research Methods in Health Promotion**  
**Prof. (Dr.) Madhumita Dobe**  
**Chairperson,**  
**Foundation for Actions and Innovations Towards Health Promotion**  
**Week 09**  
**Lecture 42: BCC and SBCC (Part II)**

In this session as we talk about behavior change communication and social behavior change communication another extension with which we are now concerned. We will talk about some theories which we can use for planning research for planning the interventions for BCC programs. We will provide some examples of how we can link theory research and implementation of BCC interventions. So, these are very vital in today's world and it gives some structure to the interventions some scientifically valid structure. So, that is why people who are now working in public health who are now working with behavior change should be more and more involved in using these theories. So, using theory is very important for BCC program planning research why because it will provide a road map.

We usually have to know where we are going or where do we want to go before we embark on a journey. So, when studying problems developing interventions and evaluating them if we know where and how which is the road we should take and becomes easier. Now, these roads are many and theories they provide some directions just like our various apps which show us where to reach and how to reach and what is the time taken which are the difficulties. So, theories which are used will provide us with that road map.

It informs the planner during all stages offering insights for translation into stronger programs. So, if it is based on a valid framework the intervention is obviously, stronger. It explains the dynamics of health behaviors processes for changing them and the influence of forces that affect those behaviors. So, for a long while we have been talking about informing for change does not happen simply for another long while we have also been thinking of supportive environments for bringing about that change that too is difficult because there are complex interplays of many many factors. So, all these forces which affect including the social and physical environment have to be studied in order to be able to change them.

It helps planners identify the most suitable target audience methods for fostering change and outcomes. So, as I said if you have a plan a framework it is easy to fit into it to try to fit into it and see whether it gives you better results. So, theory again helps to identify which are the indicators which we can monitor which we can measure for evaluation. So, you can see it really provides a better structure to the research. So, theory guides the search for reasons why people do or do not engage in certain health behaviors.

It also helps to pin point what planners need to know before they develop programs for health behavior change. And finally, it suggests how to devise program strategies that will reach target audiences and have an impact. So, as you would agree understanding and using theories for BCC program planning research is very very useful effective and should be done. So, and they are more likely to succeed than those developed without the benefit of a theoretical perspective. So, there are two types of theories usually which is commonly used one is explanatory theory and the other one is change theory.

In your lectures you have been taught about different types of these theories and you are well aware that there are some explanatory theories which can give you ideas of why what can be changed etcetera or there are also some change theories which can help you identify the strategies, can help you identify messages to be given and help you with the assumptions about how a program should work. So, right from planning or rather right from understanding the situation you can understand it based on a theoretical framework, conduct your research based on a theoretical framework, you can plan based on a theoretical framework, you can evaluate with developing indicators based on a theoretical framework. So, that is how you can use these theories. This is one theory which you are now aware of the trans theoretical model or stage of change and this is just an example of how this can be used. So, this we have given you for smoking, this can be used for any other long standing addictions or any other long standing behavior.

So, perhaps this is a reiteration, but I just wanted to recapitulate your thinking about using theories. So, stage of change was used for planning a smoking cessation program for its by a company for its employees, there were 200 people who were smoking. So, they put up cessation clinics at various locations, but several months later only 50 of the smokers gave up. So, what did they say? They were worried why are there what is happening to the remaining 150 who were not participating and they use the stage of change model to understand and explain why they are not attending the clinics. So, they found that some were not interested in quitting smoking, they were still not aware of the problems of smoking.

So, they were in the pre contemplation phase, some were even if they started thinking they were not thinking of quitting soon. So, they did not feel an urge to go to those clinics, some were not ready to plan how you will quit how they will quit smoking that is they were not in the preparation phase or some were actually planning to do that, some were in the process of trying to quit smoking that is in the action phase. So, they were the ones who wanted to come and someone some others were also trying to stay smoke free despite a lot of stimulants to go back to their old habits. So, you see whatever you do a clinic itself only a clinic will not address all these concerns. So, responses pinpoint where these 150 people are on the continuum of change.

So, for each of these levels our plan should tailor messages, tailor strategies and tailor programs appropriate for the needs. Like individuals who are enjoying smoking and they are

not interested in trying to quit, they will not attend a smoking cessation clinic. So, that we will have to have educational interventions to inform them about the risks so that they move from pre contemplation into contemplation. For example, you can use carbon monoxide testing to demonstrate the effect of smoking on health. So, what we really want to say is that here theory has directed how or what strategies we will use for different people at different levels, how messages can be tailored for different people at different stages.

So, this can be used for various programs. Another very commonly used theory is theory of reason action and plan behavior TRATPB. These two you have been well acquainted with by this time, where we know that there are some behaviors which are actually determined by the intention to change. Any behavior is pre formed by the behavioral intention and that behavioral intention depends upon the attitude towards the behavior, the subjective norm which again is the normative beliefs of people around, the motivation to comply and the finally, the perceived control. How I perceive that I can control the change, I can be able to change which again depends upon control beliefs and perceived powers.

So, this has been discussed at length when theories of behavior change have been discussed, but we can use this again. This is an example like surveillance data in a survey showed that young women are more likely to get pap tests than those who are older. And the health department decides to implement a cervical cancer screening program targeting the older women who are not getting the pap tests. So, they conducted a survey first, a formative research first to find out what beliefs, attitudes and intentions in this population among the older women are associated with seeking a pap test. So, they did the survey to find out when the women received their last pap test, how likely they are to seek the pap test, the behavioral intention, their attitudes about getting a pap test, whether most people who are important to them would want them to get a pap test that is a subjective norm and whether getting a pap test is something that is under their control perceived behavioral control.

So, you see here the questions or what they wanted to know was determined by the theories constructs. So, theory helps you the constructs of the theory help you in designing questions in what you would really want to know in order to fit it into the framework. The department then compares the survey results with data about who has or who has not received the pap test to see which are the factors which are predicting the behavior of seeking a pap test. So, these sorts of things can be easily done, you have a model, you have some constructs which in quantitative term variables. So, these constructs are then isolated appropriate questions formed to identify how much of these constructs are existing in what degree and then trying to fit it in and seeing whether at all it is operating in the same way as the theory says or is there something else which is happening and then take appropriate interventional steps to address the gaps, the barriers and where the thing is not working.

So, these are ways in which you can really do it. Whereas another model also which is very commonly used particularly during the COVID scenario this precaution adoption process

model though this is given as a linear model this is not necessarily one stage precedes the other in linear succession. So, here is how people take a decision and unaware people who are there might be people who are unaware of the issue say mask used during COVID vaccination. They are in stage 2 they are aware, but still unengage people do not give importance still. Stage 3 they are still undecided about acting though they have said that you will not be allowed to enter this such and such places without wearing masks.

And then finally, they might decide well I will not use a mask come what may I feel very hot I feel very sick etcetera or they might decide to act they might go for acting, but still they might have problems with maintenance. So, we have to appropriately design questions to find out what stages are people in and to see whether the thing is happening according to the model or is something else a new model can evolve if we find something else. So, this PAPM has been applied to an increasing number of health behaviors like osteoporosis prevention colorectal cancer screening mammography hepatitis B vaccination etcetera. So, on the HIV this was a study which I looked into it has the 7 distinct stages. So, in the first stages of PAPM an individual may be completely unaware of a hazard like the link between unprotected sex and HIV.

The person may subsequently become aware of the issue, but remain unengaged I know it happens, but I it will not happen to me. Next the person faces a decision about acting stage 3 may decide not to act or may decide to act. So, we can just test it against this model and see whether similar things happen for these situations. The other important issue or model which is also commonly used is when we try to introduce a new behavior a new health behavior new vaccine say. We can try it against this diffusion of innovation model you know whenever something new is introduced some people jump in and do it immediately they are the innovators.

Some people wait a bit see what happens to the innovators and then go in the next stage they are the early adopters. Now the majority the early majority is people who have seen these 2 sets of people seen that nothing has happened and then they go and do it. There are another group who wait still longer still further and then and then only they are the wise ones or they are the actually they do a lot of pros and cons before they go and adopt that behavior. And still there is always some who keep waiting it happened with precaution dose of vaccines it is still happening who keep waiting to see whether at all these information the misinformations everything they are balancing. So, this happens with everything.

Now who or how does these speed and extent of an innovation diffusion happen? In fact, these can be your questions. The relative advantage of the new introduction is this innovation better than what it will replace sometimes something is done which is in place of something else and we find that people do not adopt it. So, then we can have these questions and see. Compatibility, does the innovation fit with the intended audience? Is it easy for this audience to adopt it? Complexity, is it easy to use? If it is very difficult the access the use becomes very

difficult then people tend to wait or not use it at all. Trial ability, can the innovation be tried before making a decision to adopt? Actually people would like to see it tried somewhere else and then they decide to adopt.

And observability, which is quite a difficult situation in the public health scenario, but more easy in the clinical as I said. Are the results of the innovation observable and easily measurable? So, these things actually influence the communities adoption of an innovation. So, when you are looking for such studies you can apply the diffusion of innovation model and see whether it happens. Now like a program to help elementary school children cultivate healthy lifestyle habits and avoid chronic disease. They address the foods that children ate by modifying the fat and sugar content of school lunches.

So, and they what they did along with that was taught important health information through classroom based health education curriculum and they also encouraged physical activity. So, it was a total package. Now it was a highly successful program there were follow up studies and that showed that children who went through the program continue to have healthier habits and adolescence than those who did not attend that program. But to achieve a broader impact to diffuse this innovation program planners have to those four things the comparability, the observability, the trial ability etcetera. So, they have to demonstrate the relative advantage of the program that this is better than the one which was there earlier showing its positive outcomes.

Show compatibility by demonstrating that state policy makers have approved its material. So, something which has been approved by the government or a credible source is more adopted and accepted. The programs complexity can be limited by creating user friendly materials. So, always remember for teachers, cafeteria workers making the materials available in website all these enhance trial ability. So, when you are dealing with such projects or programs for behavior change we have to keep these in mind and ultimately of course, demonstration of the program components to create an element of observability.

We do all this adopt these strategies for diffusion of new innovations based on the learnings from this model. And this of course, has been widely discussed. So, I will just touch upon it that for planning any communication intervention program be it IC, be it BCC, be it other communications we usually adopt this for planning the proceed model. You are already aware of it, but remember that this is like a bible we need to go through the stages, we need to be aware, we need to move chronologically in order to get the best information from social diagnosis to epidemiological assessments to behavioral and environmental diagnosis. Because that will give us the information the basis on which we need to work then try to fit it into then do the educational and ecological assessments find out what are the predisposing factors, what are the gaps in them, the reinforcing factors, what are the gaps in them, the enabling factors and what are the gaps in them.

Then try to apply some strategy based on a theory or a model. Having done that those are the interventions if we find out that health education IC, BCC whatever you name it is the strategy which we will apply we use models to do that to get results to monitor to evaluate etcetera. And we also require to approach through advocacy for policies, regulations, organizations etcetera. So, intervention does not only mean targeted to the community for health education IC or BCC. It also means that we approach the policy makers, the administrators, the regulatory bodies etcetera to change the environments according because as we said in the beginning BCC is also about supportive environments.

So, we have to remember these stages might appear complex in the beginning, but once when we get into the habit of it, it becomes very very easy much easier than prescribing for a disease. So, we are aware that theory guides search for reasons, we all we are doing in all research is we are trying to find out why, how, when, where etcetera. So, the reasons and theory will help us in this search, why people do certain things or do not do certain things. These have been in place for several years now, some have been more used, some have been less used, some have a lot of scope and potential for use. So, it is up to us to use them to pin point to the planners what they need to know before they can develop or modify programs.

Most of the programs now are running in the we do have a lot of programs in the last mile or elimination phases. So, it is best that we adopt some of these theoretical frameworks to find out what is still going wrong, because that would be the scientifically valid explanation which we can provide and which if worked upon or acted upon will give us the desired change, the desired impact, the desired outcome. So, it is very important to also suggest how to devise program strategies that reach target audiences and have some impact, because for a long while I mean we never prescribe without an algorithm do we. We have a certain algorithm that this is what we will do, this after that and then this after that and this is the follow up, but when we try to change people's behaviors we approach in a very arbitrary way. I mean it is like each intuition, each person's intuition or hunch working, but that is not how things should operate.

There are basis scientifically valid basis on which we can plan and develop, implement, evaluate and provide good feedback for the policy makers and program planners to make it happen. So, that is what we need to do and by using theories and models and frameworks this work becomes much easier. So, understanding theory and using it for behavior change is very important. So, BCC program planning, implementation and monitoring processes based on theory are more likely to succeed than those which are not using theoretical perspectives. And both explanatory change and explanatory theories and change theories can be used for this research and effective implementation.

But always remember that while planning we can always also use the or we should use the proceed-proceed model and introduce the theoretical frameworks or use theoretical frameworks at the appropriate stage of this model. So, that we can plan again plan, implement, monitor and evaluate all our educational or behavior change interventions for a better outcome,

more efficient implementation and better feedbacks. So, that programs and policies become more efficient and effective. So, there are lots of work, lots of references some of which are here, but these have actually been I mean Karen Glantz, Prochaska these are like bibles of health promotion workers. And I would suggest that some of you please go through those who are interested please go through them for greater depth of knowledge.

And try what you might in your future researches might not be very complex theories, but use simple theories. Use simple theories, understand how you can use theories, be very clear about what a theory can do or not do for your research, choose the appropriate theory. So, that you can apply it properly and do apply it to get better results in future. So, using theories in behavior change interventions are absolutely vital and it should be done more and more in the coming days. Thank you.