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 08: Intervention Mapping

So, hello everyone and this is the lecture 8 of this course. Now today I will be talking on Intervention Mapping. Now the thing is that for you know the for proper planning implementation and evaluation of any health promotion intervention you know package, two things are very important that you have to know. The first one is intervention mapping and the second is proceed-proceed model which I will discuss in week 3. So, let us start with intervention mapping today. So, we will be covering the overview of intervention mapping and also the various intervention mapping steps.

Now what is intervention mapping? So, intervention mapping is a process to design develop and evaluate behavior change interventions. So, very important the way you plan, you design, you develop and evaluate any behavior change interventions. So, you know the intervention mapping the entire steps and under each step we have to do some task. So, the entire intervention mapping steps is all about the planning, designing, you know developing and implementing and evaluating the behavior change intervention.

Now intervention mapping it provides guidance regarding the steps that should be taken when developing an intervention. So, whenever you know you are thinking that you will be developing and implementing an intervention. So, you have to remember the various steps I mean see intervention mapping is just like you know a guide it guides you that how can you you know what are the things what are the task or steps you have to do to develop an intervention. The intervention mapping it serves as a way to map the path of intervention development from recognizing a need or problem to identifying and testing potential solutions. You see we all know that first we have to understand first we have to you know find out what is the problem or need assessment you know the situational analysis, health problem, the social problem.

So, first thing is that you have to recognize a particular need, a particular issue, a particular problem then till identifying the solution of that particular problem and then definitely testing that solution whether it was effective or not. So, the purpose of intervention mapping is to provide health promotion program planners with a framework. Now see what is the importance of intervention mapping it you know it helps us with a very specific and very you know very clear and specific framework. Why for effective decision making at a step in intervention planning implementation and evaluation. So, the important thing is that the three important thing the planning implementation and evaluation and intervention mapping you

know it provides us with a very specific and clear framework for effective decision making at all the three you know steps important steps.

Now the steps and task included in intervention mapping it provides a framework for making and documenting decisions about how to influence change in behavior and conditions to promote health and to prevent or improve a health problem. So, as I was just saying that it provides us with a framework. So, that we can develop and also we can document decisions that how to influence change in behavior right in a community you see you know in community there are so many problems are there which are prevailing ok. You know the worm infestation, the anemia among the reproductive age group women and etcetera the so many you know infectious diseases the non communicable diseases. So, whatever be the problem in that case you have to understand that what are the things that has to be done to influence the change in behavior and conditions or situation why to promote health right our main aim is to promote health and to prevent or improve a health problem.

Now intervention mapping, it aims to help health promoters develop the best possible intervention this is very important. So, you know being a health promoter being health promotion you know expert whenever you think that you are going to develop intervention. So, that this intervention mapping will help you to develop the best possible intervention. Now the label of specificity included in each of the products of intervention mapping enhances the possibility that a planned program will be effective in accomplishing its goals and objectives. So, you know it is something like the thing is that each and everything you know steps and task of intervention mapping you know I mean the label of specificity they are very specific.

So, what happens it actually enhances the possibility that a planned program whatever plan you know whatever health promotion program you are planning that will be effective what is the main aim that any kind of health promotion program it should be effective. So, it should be effective in achieving its goals and objectives we have to set you know goals aims and objectives we all know. So, our main aim is that it can achieve its goals and objectives. Now by making explicit the pathways and means by which change is expected to occur and by examining the assumption and decisions made in each step and task you know as I said on the each step we have certain task to do of the intervention mapping process program planners, the users and participants can very well explain why a program you know succeeds or fails. Now thorough planning at the beginning of a project can lead to creative developmental and production process enhance the interventions deliverability and result in the desired outcome.

So, the thing is ultimately the entire thing you know the thorough planning of program or project and the process it actually enhance the intervention delivery how see it is not like you have just developed you also have to deliver right you have to deliver that particular intervention. And finally, the desired outcomes as I said so, to enhance the interventions you know deliverability and also to result in the desired outcomes. Now regarding intervention mapping steps each step of intervention mapping has several task. Now the completion of the

task in a step in a step creates a product that is a guide for the subsequent step we all know first we have to complete the first step you know and on the first step we have some tasks to do and we have completed and finally, it guides you in the second step you know. Then the completion of all the steps serve as a blueprint for designing implementing and evaluating an intervention based on a foundation of theoretical empirical and practical information.

So, I will discuss each step, ok. Let me start with the steps then I will go to this slide and then I will show you the you know this figure I will just try to make you understand. Now there are 6 fundamental steps the first one as I said the first we need to do you know need assessment or the situation analysis or the problem analysis. So, conductor needs assessment or problem analysis. Then create matrices of change objectives based on the determinants of behavior environmental condition.

Now, I will explain change objectives when I will discuss the second step in details. Select theory based intervention methods and practical strategies. The fourth one is translate matters and strategies into an organized program. Then the fifth is that you have to plan for the adoption implementation and definitely for the sustainability of the program. Then generate an evaluation plan.

So, what is the first step? First is the needs assessment. Now you have to establish a planning group which includes you know the potential program participants and then what you can do you can just plan the needs assessment. So, first also you know you need a proper group a proper team unit. Then next is the conduct the needs assessment to analyze health and quality of life problems and their causes and to decide on priorities. Now when we talk about the needs assessment or you know what are the problems prevailing.

So, at that time we think that what are the health problems prevailing in a particular you know community in a particular area. Then the quality of life problems and why these problems are occurring and then we can also decide on priorities. In a community you can you can find ten twenty problems, but according to you know your resource definitely and according to your own objective you can have some priorities of problems. Then you have to balance the needs assessment with an assessment of community capacity. Now the thing is that you have you know these are the problems you have prioritize assessment of community capacity is also important in both ways.

Why first of all in needs assessment as I said it is not only about analyzing that what are the health and quality of life problems also the factors the causes you have to understand. Now community itself can provide you with very you know a good amount of resources. They community itself has so many things you know community can provide you with workforce you know with some materials etcetera. And so, two thing is very important if you want that you have some resources you would be utilizing from community you know some voluntary

leaders community leaders how much they are going to support you. And also you know the community it is not like there are some you know thing there are some solutions it is not possible to implement what I want to say that how much that community is ready, how much that community you know itself is very you know they have the capacity to accept something.

They can adopt something that is also important. So, you have to prioritize your problem in that way. Link the needs assessment to evaluation planning by establishing desired program outcome. This is important you know whenever you are you know coming out with the problems of a particular community or area. So, you also have to keep in mind that at the end you have to do evaluation.

So, you have to link all the needs assessment with the what you are going to evaluate to the evaluation planning. And definitely you should have you know you will be having some outcomes that these are the outcomes. So, you have to link the needs assessment to evaluation planning by establishing the desired program outcomes. As a health promoter as a researcher what are the program outcomes that you desire for. Then next is the matrices of change objectives.

Now see the thing is that we know that after you know analyzing problems what are the problems prevailing we think about the objectives. What are the aims and objectives we are going to put. So, state the expected change of program outcomes for health related behavior environmental conditions. Now, intervention mapping you know I will just explain you one by one it is very important to know that these are the external determinants. So, you have to be very very careful it is not about that me being an individual person it is just only about me that I will be performing a certain behavior.

I am surrounded with so many people with so many barriers and also with, you know, so many facilitators also. So, my, you know, the environmental condition the external determinants you should have that you know the list of all the external determinants also you should have according to your project, according to your planning activity. Now, subdivide that behavior environmental conditions into performance objective. So, a particular behavior like we often talk about you know the wash. So, water and sanitation, hygiene and everything.

So, in that we can have 4 or 5 behaviors that we aim to change. And also some external determinants for example, there is no toilet only in the community there are no proper water supply. In school if you go to implement wash you see that no safe water is there, no proper place is there where they can dispose ok. I mean like if you want to you know implement some menstrual health, menstrual hygiene management practices then we can just see that here these are the problems. The external factors are lacking no toilets you know no separate toilets for girls and boys, no proper water facility, no proper dust bins where you know the girls can just dispose of the sanitary napkins.

So, many things are there it is not about that you have to do this yeah he or she you know they are motivated, but the problem is they are not getting a proper environment. It is not possible for them to create everything. So, proper environment is important. Now, select important and changeable personal and external determinants this is the main crux. So, what I was trying to make you understand that there are some personal you know which we can think of that here at individual level we can change, but also some external determinants.

Personal determinants and external determinants both are important of at risk group behavior and the environmental conditions. So, what is important here you have to create a matrix of change objectives. One thing is very important just look at the last line what I have mentioned actually you know the change objectives is the most immediate target of an intervention. Now, what is change objectives? So, create a matrix of change of objectives for each level of intervention planning, each level individual interpersonal organizational community and society. It is not only about the school student it is also about the teachers the school authorities ok.

In fact, the community the community also should support. So, at each level what you have to do you have to just chalk out which are the performance objectives it is not that we will just tell the student you have to do this. We also have to tell the teachers you know. So, we have to make them understand then obviously, the school authority in the community the society every at every level you know involvement should be there. Then what I have mentioned here crossing by crossing performance objective with determinants.

Now performance objectives with determinants is actually the change objectives ok. So, finally, we have we have to develop the matrix of change objectives at each level. And finally, change objectives as I said is the most immediate target of an intervention. So, as I say it is not about the performance objective it is about the change objectives which you have to target. Then in step 3 we you know we will be discussing on the theory based matters and some practical strategies.

See whenever we plan any health promotion activity now we have some theory based you know matters and something we also have to think in a practical way these are the practical matters these are the practical strategies that we have to implement. So, review the program ideas with the intended participants and use their perspectives when choosing matters and strategies. What does it mean that you have to involve the participants also and their perspectives their opinion views and perceptions are very very important. So, while you are thinking that which strategies we are going to use which matters are we going to use to deliver this particular health promotion intervention program.

So, you have to involve them, ok. So, review program ideas whatever you whatever ideas of that program just review with the participants. Then identify theoretical matters that can influence changes in determinants and identify the conditions under which a given matter is most likely to be effective. So, you can have some theoretical matters which you think that here it can you know influence the changes in various determinants of factors and also you have to understand that what kind of you know what you have to understand the situations that under these situations or this condition which matter is actually going to be effective I mean the mostly effective ok. Then some practical strategies you have to develop for delivering the matters to intervention groups ok. The how you are going to develop you will be going to the community you know.

So, you will be having some lecture matters the discussion role play and so many things you can you know you can adapt. So, some practical strategies also for delivering to the intervention group you have to select and design and assure that the final strategies match the change objectives from the matrices. So, that is you know this is very that has to be done because according to your change objectives you will be developing the strategies. Finally after you know the brainstorming and you know reviewing ideas and everything you will be having strategies. So, those strategies are finally, you will be developing the final strategies and that should be you know in line with the change objectives.

It is not like you have some you know something different change objectives and you are you know you are just developing your matters or the practical strategies or something different that has to be aligned. Then the next is that it is mentioned that consult again with the intended participants for a health education and promotion program and bring their preferences to program design. It is said that you have to basically the important practice is that with the intended participants you have to consult again and again. So, that you do not miss a very important thing. So, as I said there you know their views is very important.

So, coming to own voices because they are the one who can you know they are the best one who can say that here these are the things we can adopt and these are the things we cannot adopt these are the feasible options for us that we can do and we can have and these are the things that we can never think of. So, this is very important. Now, also you have to describe programs scope and sequence the themes and needed program materials. So, you can understand you are going to implement. So, in that you have to be very clear you have to just you know note it down you have to note it down everything how the program what is the scope of the program how one by one first these thing this will be done then the next these things will be done themes and the needed program materials all the materials you have to just write it down.

And the prepared design documents that will aid various professions in producing materials that meet the program objectives and adhere to specific guidelines or parameters for particular matters and strategies. Basically you have to prepare and design certain documents. Now, see

you have to prepare some materials intervention materials and you know nowadays we involve some you know professionals who can develop these materials you know be it the print form or you know in a online form. So, there are various professions I mean professionals who will be basically.

So, before that we have to design the documents ok. Then finally, those materials will be produced and that should meet the program objectives. And definitely that should you know adhere to the specific guidelines or rules for whatever matters and strategies you have developed or you have planned that you are going to implement. Then review available program materials for possible match with change objectives matters and strategies. So, whatever you know for some particular problems or issues some program materials are available. So, that also you have to review then finally, you are developing the final program materials.

And after developing obviously, you should have the you know we all know that we always have to pretest. So, you have to see that pretest the program materials and oversee the final production. So, finally, you pretest and you see that this is the final production. Now, in step 5 they have like you know it is that adoption and implementation. So, identify potential users of the health promotion program.

So, definitely now at this step because you are thinking of implementation. So, you should be very very clear that these are you know these are the people you know these are the group of people who will be the actually potential users of a health promotion program. So, you have to very clear it is not like you know the way thing you cannot keep the very broad and very vague. So, you have to be very specific that these are the potential users. Then definitely you have adopted and when you are thinking of implementation you should have the performance objective of program adoption implementation and sustainability.

Again very very specifically that these are the performance objective hand washing it can be hand washing. So, specify the determinants of adoption implementation and sustainability. Now for adopting implementing and sustainability of any health promotion program. It is very important as I said to have all the very very specific and clear determinants. So, you should have all these things in your hand you know written properly.

Then design interventions and organize programs to effect change objectives related to program use. Now see I have mentioned design interventions and organize programs to effect change objective related to program use. Now, last time we have you know with brainstorming and everything with pre testing consultation with expert we have some intervention material. Now, finally, when we are going to implement we should have you know written we should have the entire thing that these are the interventions finally, you know at the when you are going to implement. And you also have to organize you can it has to be like you have to

organize a group discussion session you have to organize a lecture you have to organize some counseling sessions.

So, you have the you know the all the designed interventions very clearly to be written and also you have to organize. So, that you can think that yes to effect as I said change objective is a main target of your interventions to effect change objectives related to program use. Now, at the end we know the evaluation planning now you will be evaluating, but the planning should be done before hand it should be very clear that by this way we are going to by these are the issue these are the things that by which we are going to evaluate. So, here you know write evaluation questions based on the program outcome objectives for quality of life or for the health the behavior and the environment. So, you should have all the evaluation questions in your hand related to the outcome objectives of your program.

Then write evaluation questions based on the matrix as I discussed that performance objectives and determinants and finally, as expressed on the final one the change objectives. So, related to that also you should have sorry the evaluation questions survey checklist anything. So, write process evaluation questions based on the description of methods conditions strategies programs and implementation. Why process evaluation as I said you know if you go through any you know the health and promotion planning or any program planning you will see that the process it is not about the final outcome it is also about the process of that particular activity you also have to evaluate that. Now, based on that you have to write you know you have to keep some indicator you have to write some you know in the form of checklist of questions you can just put that matters what matters will be using and the conditions what are the strategies how the program will run, how what are we going to implement, how to implement.

In fact, you know how many you know the beneficiaries arrived in a group discussion session, how many you know the health worker you involved to implement the health promotion activity. So, how many health worker finally, you know involved then to how many you know the secondary audience it is not only about the primary audience also it is about the influencing audience that how many influencing audience you could cater I mean you could you know involved. Finally, obviously, we should have the indicators and measures now that should be developed before hand only and specify the evaluation design that this is the way I am going to evaluate the entire health promotion activity health promotion program. So, before I go to the conclusion this is the intervention mapping steps you can see the step 1 need assessment, step 2 the matrices for the change objectives as I discussed the step 3 is the theory based methods, then program, then adoption and implementation, final evaluation. So, you can just see the arrow here it is just coming down from the step 1 from step 1 to step 6 you can see the arrows are coming then you have planned everything whatever you have planned that has to be implemented right we all know that whatever we have planned.

Now finally, it has to be implemented after implementation you see again the arrow is going up the evaluation. So, you know the planning implementation evaluation then again the arrow you see after here again it is coming to the step 1. So, after evaluation you will find some shortcomings from your end or from some other issues also the feedback in a very very simple language we say the feedback. So, that feedback has to be utilized again you have to keep in mind that these are the problems these were the issues it is not only about the negative thing some positive thing also you can keep in your mind. So, in that case for you know for next cycle of in I mean the planning implementation you know to if you have you know if you have aimed that again you will do some planning and you want to just modify and again you will start with the proper need assessment.

And again you have to plan everything you have to implement and evaluate ok. So, once you have done you will find some shortcomings. So, you should use you know that shortcomings to make your planning in a further you know in the next step in next session mostly in the next session to be more appropriate. So, in next you know in one village you have done again in another village if you go.

So, that you have to keep in mind that I will do the need assessment. In fact, all the steps starting from the need assessment situation analysis is very important it is not about just the what problems are prevailing you have to go in details that these are the issue these are the problems these are the determinants. So, by this way the entire cycle goes on. So, this is all about intervention mapping. So, let us conclude intervention mapping is a process to design develop and evaluate the behaviour change interventions we have discussed. And the purpose of intervention mapping is to provide health promotion program planners with a framework for effective decision making at each step in intervention planning implementation and evaluation.

And the important thing combination of performance objectives for each level and selected personal and external determinants it produces the change objective which is the most immediate target of an intervention. So, this is all about intervention mapping the important thing is that as much as you read theory it is you will be knowing so many things, but the important thing is that you have to do it yourself practically. When you will be doing this practically then you know it will be more clear then you will understand it more that oh this is the problem I have done. So, I should do in this way or that way you can rectify yourself only right.

So, these are the learning resources just go through all the resources. Thank you.