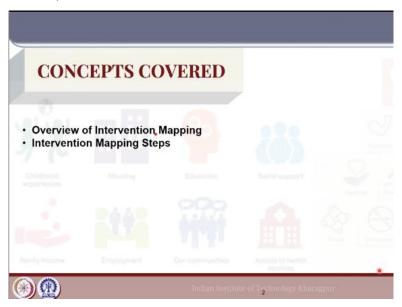
Basics of Health Promotion and Education Intervention Dr. Sweety Suman Jha Dr. B C Roy Multi Speciality Medical Research Centre Indian Institute of Technology, Kharagpur

Lecture - 21 Planning HPE Intervention: Part I

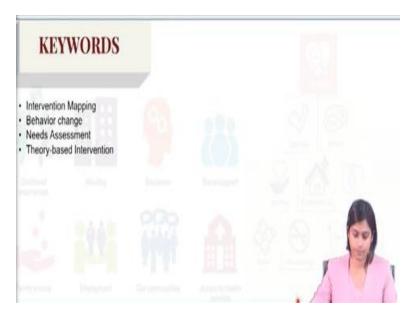
Hello everyone. So, today's topic is planning HPE intervention. That is planning health promotion and education intervention. Now this is part 1 of this topic and after completion of this part 1 then we will discuss the part 2 of this particular topic.

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Now we are going to cover the concepts of overview of intervention mapping and the intervention mapping steps. So, for this topic that is planning for HPE intervention we will follow the intervention mapping approach.

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Overview of Intervention Mapping

- Intervention Mapping serves as a way to map the path of intervention development from recognizing a need or problem to identifying and testing potential solutions.
- 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.
- The steps and tasks included in Intervention Mapping provide 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. Intervention mapping aims to
 help health promoters develop the best possible intervention.



Now overview of intervention mapping: So, actually, what is the purpose, what is the utility of intervention mapping approach now this intervention mapping it serves as a way to map the path of intervention development from recognizing a need of problem. So, first what we have to do that first we have to understand we have to identify what is the problem that problem can be of any health issues or any behavioural problem what is the need like in previous lecture you know we discussed about the needs assessment.

So, here also we will talk on that needs assessment. So, first we need to identify and recognize a need or a problem and then to identifying and testing potential solution. So, after you identify a particular problem or a particular issue then what actually we do next that we have to identify first that what can be the solution what solution can we apply. Then definitely we have to see that whether those solutions or whether that solution is actually appropriate or not.

That is why first of all you have to identify a need a problem then to identifying and testing potential solutions. So, testing is also important. Then the purpose of intervention mapping is to provide health promotion program planners with a framework. So, like you know the researchers or the health promotion planner they actually they need a proper framework. So, this intervention mapping basically provides them with a proper framework for effective decision making at each step-in intervention planning then implementation and evaluation.

Now the thing is if you target a problem in a community and then you have like you have to implement a solution or a health promotion activity you have to implement. So, whatever you implement whatever you target or do a proper planning is very essential. Now planning is like you know still evaluations I mean how are, you actually the prior planning everything you have to keep in mind.

That who are the target audience? Who will be the target audience? Your team; what materials actually you are going to need then the; implementation plan also, when, how and where actually you are going to implement or how you are going to take that action. So, that is important then evaluation plan is also important. Because you have planned an activity then you have implemented but you have to evaluate.

If you do not evaluate then you will not understand that whether your objectives you have to set some goals and objectives for any activity for any health promotion activity. Then if you do not evaluate then you will not be able to understand that whether those solutions or whether those actions which you have taken whether that implementation was actually beneficial or not beneficial.

So, evaluation is important and through evaluation you will also be getting the feedback. How to

improve further right that is very important. So, the planning of everything is required be it

evaluation or implementation everything you have to plan. Now the step and task included in

intervention mapping provide a framework for making and documenting decisions about how to

influence change in behaviour.

And conditions to promote health and to prevent or improve a health problem. So, you see what

is the important key point here that for intervention mapping like in my subsequent slide I will be

talking on the intervention mapping steps and task. Now those tasks are important because it

provides a framework, we were talking about the framework so, it will help you in making and

documenting decisions that actually how to influence change in behaviour how can you change

you know communities of particular person's behaviour and conditions.

Why? Because you have to promote health. You have to prevent any disease and also to improve

a health problem. Now intervention mapping aims to help health promoters develop the best

possible intervention now this is very important. Why intervention mapping is important for

health promotion planners? Because they provide framework, they provide the steps and what

are the tasks that has to be done.

So, it helps the health promoters basically to develop and definitely to implement the best

possible intervention. See if you develop an intervention very well and you if you have a very

clear understanding clear picture of actually what are you going to implement then definitely it

will be the best possible intervention for that particular behaviour or in any community.

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Overview of Intervention Mapping

- The level 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.
- By making explicit the pathways and means by which change is expected to occur and by examining the assumptions and decisions made in each step and task of the Intervention Mapping process, program planners, users, and participants can better explain why a program succeeds or fails.
- Thorough planning at the beginning of a project can lead to creative developmental and production processes, enhance the intervention's deliverability, and result in the desired outcomes.



Now the level 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, this is also important that how much you are specific you know the level of specificity in each of the products of intervention mapping that means all the steps and task that should be very specific.

So, what it actually enhances your possibility that whatever program you have planned will be effective in accomplishing its goals and objective. Like you will be setting some goals and objective. So, it will help in the effective accomplishment of the particular goals and objective. Now by making explicit the pathways and means by which change is expected to occur and by examining the assumptions and decisions made in each step.

And task of the intervention mapping process, program planners and the users and the participants can better explain why a program succeed or fails. So, the program planners it can be a team right that a team of program planners the participants can be a target audience. Now users also you know in the users some effectiveness some stakeholders can be the users like for any health workers like you have also targeted the community members.

And you have also targeted health workers because that health workers again in future will actually help in dissemination of that particular knowledge or information to the target audience

or the participants. So, all the three is important. Now thorough planning at the beginning of a project can lead to creative development and production process, enhance the intervention's deliverability, and result in the desired outcome.

So, as I was talking in my previous slide the thorough planning at the beginning of a project. So, thorough planning and very specific and in detail planning is very important at the beginning of any project. So, it can lead to a creative development and production process you can develop well then you can produce and also you can implement a well activity, well-planned health promotion activity and finally it enhances the interventions deliverability.

Like you will be delivering that intervention or you will be implementing that. So, and ultimately, it will result in the desire outcome. Like you know your goals and objectives that is a desire outcome that what actually you want to do. Why are you actually developing a health promotion activity? Why are you going to implement that health promotion activity? So, your desire outcome will be like you know it will result in your desired outcome whatever you have thought whatever you have targeted that will happen.

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Intervention Mapping Steps

- Each step of Intervention Mapping comprises several tasks. The completion of the tasks in a step creates a product that is the guide for the subsequent step.
- The completion of all of the steps serves as a blueprint for designing, implementing, and evaluating an intervention based on a foundation of theoretical, empirical, and practical information.

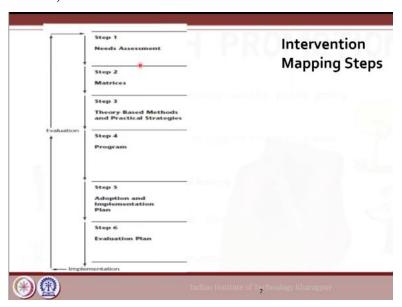
Now here we will talk on the steps on the intervention mapping steps. So, the very most important thing is, its step of intervention mapping it has several tasks. So, like first step for the first step you have some tasks then again for the second step you have some tasks which a

program planner has to plan and definitely they have to do also. So, the completion of the task in a step creates a product that is the guide for the subsequent step.

Like whatever you have done in your first step then after completion of your planning of your first step then you can move on to next step. I mean step 2 then again step 3 step 4 like that way. So, this is important, completion of the task in a step again it creates a product so that it can guide you for your next step. Now see 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, all the steps are important and actually all the steps planning it will serve you as a blueprint. The blueprint for the designing so, you have to design first and the implementation plan then evaluating of that intervention plan. So, based on the foundation of any theoretical or the practical information.

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Now just look at this figure this figure is actually you see the steps. The step 1 needs assessment then step 2 is matrices. So, I will discuss the steps in my subsequent slide what I want you to see is see the first step is done then only you can move to next step. So, just look at the arrows. Till step 6, I mean the evaluation plan. So, these are the all steps now one by one arrow is just

moving and you see after you plan then comes the actual implementation after implementation actually what you have to do you have to evaluate.

Now you are evaluating and you are also implementing but look at the step 5. You must have the implementation plan in your hand prior to your implementation and you also must have the evaluation plan prior to your actual conduction of evaluation. Now this arrow after Implementation then it is evaluation and again after getting feedback you can further you know the positive and the negative things whatever you can include further in your next slot in your next round of that activity planning.

So, again, this arrow is moving here. So, these are the basically steps and also the implementation and the evaluation thing.

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Intervention Mapping Steps

- The six fundamental steps of the Intervention Mapping process are the following:
- 1. Conduct a needs assessment or problem analysis
- Create matrices of change objectives based on the determinants of behavior and environmental conditions
- 3. Select theory-based intervention methods and practical strategies
- 4. Translate methods and strategies into an organized program
- Plan for adoption, implementation, and sustainability of the program
- 6. Generate an evaluation plan



Now here see there are six fundamental steps of the intervention mapping process. The first is conduct a needs assessment or problem analysis. So, first thing as always, I have said in my lectures that the very important and first thing is that you have to understand what is the problem. What are the health issues need assessment is very important because if you do not know what is the need assessment. What are the needs of that community? What are the problems prevailing in that community? Then you will not be able to move further. I mean without knowing the problem you cannot set your goals, targets you know you cannot design any materials or matters

for your intervention in fact you cannot move any step further. So, the first thing is conduction of

needs assessment. Then next is create matrices of change objectives based on the determinants of

behaviour and the environmental conditions.

So, both is important your determinants of behaviour and the environmental context. The

importance of environmental context we have discussed in the previous lectures. Now then the

next step is select theory-based intervention methods and also the practical strategies you have to

select. Then the fourth step translate methods and strategies into an organized program into an

organized programming actually what action and how and where you are going to take those

implementations or the actions.

The fifth one is you have to plan for adoption, implementation, sustainability of the program. So,

sustainability of the program is very important because it is not about like once you have planned

and you have conducted. The sustainence how much you can sustain that is important. At the end

you have to make a or you have to design or generate an evaluation plan because after your

implementation of intervention how actually you are going to evaluate.

Evaluation is always important whatever we do if we do not evaluate then we will not understand

that what you know what benefits or whether we actually whether we could be able or we

actually fulfil those objectives or not. So, whatever we goal whatever the goals and objectives we

have set that has been fulfilled or not so evaluation plan is very important. Now I will discuss

briefly one by one all the steps.

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Intervention Mapping Steps

Step 1: Needs Assessment

- Establish a planning group that includes potential program participants and plan the needs assessment.
- Conduct the needs assessment to analyze health and quality of life problems and their causes and to decide on priorities.
- Balance the needs assessment with an assessment of community capacity.
- Link the needs assessment to evaluation planning by establishing desired program outcomes.



Now see the first step the step 1 like need assessment or problem analysis also you can say but we often use the word needs assessment. So, this is more appropriate. Now for needs assessment what do we need. We have to establish a planning group that includes potential program participants and plan the need assessment. Now for a community you know the community members they are the program participants.

You can include some frontline health workers some other stakeholders like community village leaders or the Grama Panchayat anybody like if you are aiming that you are you will be doing the need assessment for a village. So, you have to see that who are actually the potential program participants. So, first you have to establish that. Then the next thing is that you have to conduct the needs assessment to analyse health and quality of life problems.

The quality of life problems and their causes and to decide on priorities. Now in my previous lecture you know I discussed that what are the ways by which you know you can do need assessment like quantitative qualitative survey so many things I have discussed. So, in that way you know community own voice that is important. You might have so many statistical data that is fine but also you have to mix up with that community you have to you know do a survey you can do an in-depth interview with the community members.

So, to understand the actually what is their need. So, statistical data and community voices both are important. Then and definitely their causes you know the quality of life problems and what are the factors which is actually causing those problems that is also important like these are the you know these are the issues which I discussed in my previous lecture also. That through qualitative exploring all the factors all the determining factors you can explore and you can identify and then you have to decide on the priorities.

Like for a community you have found so many you know health issues or quality of life problems. But then actually you have to fix some priorities that these are the things these are the problems of which we are going to address. Then the next is balance the need assessment with an assessment of community capacity. So, that is very important how much you know like you cannot just implement intervention which will not be able to I mean which will not be acceptable for that community.

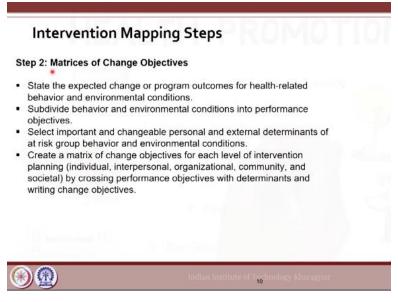
Or that intervention you know the acceptance will not be feasible. So, feasibility you know acceptability, adaptability everything is important here. So, whatever you find or whatever assessment of need you know need assessment you have done you have to balance with the community capacity. So, that is important. How much that community can accept and cope up with all those things.

Now then link the need assessment to evaluation planning by establishing desired program outcome. Now as you have targeted you know you have decided on the priorities you have targeted some priorities that these are the four problems. You have seen that the children of that community they are actually consuming unhealthy foods. So, now that is one of your need assessment.

So, now in future I mean after you implement any kind of health promotion activity or intervention you have to evaluate also. Now so here only you have to make evaluation planning. What evaluation plan at the end definitely you will be designing and you will be writing properly the indicators and you will be making the checklist. But in the first step only when you are assessing the needs of the community and you are targeting the priorities of the community.

Here only you have to start that these are the things I am targeting. So, these are the things that I have to evaluate also and so see by establishing the desired program outcome. So, you have you know as a researcher as a health promotion planner you have some targets these are the targeted outcome or the objectives. So, like that you have to keep in mind that you have to evaluate. So, a basic evaluation planning you have to do that proportion of children or the number of children after your intervention who actually. Then you can see that how many children or the percentage of children who are now taking the healthy diet or they are consuming the proper food or proper diet.

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Now after step 1 you see step 2 is matrices of change objectives. So, I was you know talking about the goals and objectives like for whatever we do. We always set a goal that I have to complete this by this I may have to gain this or I have to do that you know you set some goals and objectives for any kind of task. So, here also you have to do the same. Now matrices of change objectives for that you have to do some tasks.

What are the tasks first of all you have to state the expected change of program outcomes for health-related behaviour and environmental conditions. What are actually the change you are expecting or the outcome related to the health behaviour and also the environmental factors and environmental context that is also important. Now then you have to sub divide I mean you have set now you have to sub divide.

Sub divide; the behaviour and environmental conditions into performance objective. You have to be more specific now you have set a goal you have set some expected change that you know as a goal you have said but now you have to be very specific and you have to subdivide into a various thing like you know you can keep two or three objectives. Actually, performance objective like you want that these are the; you know adult men.

And you want that they should quit smoking just for an example I am giving. So, these are the performance objectives you have to keep. Then the next thing is the select important and changeable personal and external determinants of at risk group behaviour and environmental conditions. Now you have to also look further what are the actually important you know the determinants or the factors that can be personal and also the environmental or the external factors that you have to select.

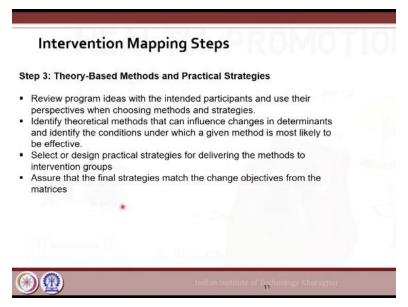
Now that factor should be important. Focusing on what you are going to you know what objectives you are going to set and also that can be like changeable the which you can change or modifiable you can say. So, that you have to like at least group behave and also for the environmental context, that you have to select. Then the next is you have to create a matrix. Now you all know a kind of you know matrix you have to create why because you will be creating a matrix of change objectives.

Now this term you know this is very important, the change objectives. Actually, this change objective you I mean you will be developing that these are my change objectives and this will be your immediate target of an intervention. Immediately you want to target these things, I mean the two or three change objectives you have to target. So, this is very important. Now see create a matrix of change objectives for each level of intervention planning.

Now each level you know individual in social ecological model also I explained you the multilevel what is the importance of multi-level approach and the multi-level interventions also. So, the individual then the interpersonal, organizational, societal, community everything. Now this you have to create the matrix how you will be creating for each level like for the individual you have to create then again for the interpersonal you have to create like that.

So, by crossing performance objective determinants a particular person you know that you want a particular person to perform this to perform a certain behaviour positive behaviour definitely. So, then along with that you also have to put in that change objective matrix the determinants. In some factors the environmental of the external factors that you have to create and definitely then you will be writing that you have to write the change objectives.

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Next step is theory-based methods and practical strategies. Now the 3rd step is like theory-based matters and practical strategies. Now for the behaviour change you know like behaviour change theories are their models are there. We have discussed on that the models the health behaviour change models and theories. So, that also, we have to keep in mind because you are going to change the behaviour.

So, be it the individual or the community level you have to keep in mind some theories. Like you have to be rational that in that particular issue or in that particular situation and whatever objectives you have said based on that you have to select a proper and rational I mean you know the framework or the any kind of model you can select or any kind of theory health behaviour change theories you can adapt.

So, see review program ideas with the intended participants and use their perspective. So, like you have targeted somebody I mean you have targeted audience you have targeted these other like adult men so for quitting smoking you have targeted just for example that you have targeted adult. Adult men and so their perception is also important. So, you have to keep that also in your mind that what are their perspectives.

So, while choosing methods and strategies as I was saying that you have to be very rational in that. You have to review I mean you have to think that what are the program ideas you have actually what you have thought in your mind is that you can review with the intended participants also. Definitely with your team own team but also with the intended participants. Targeted audience the community members the health workers you have to keep them also.

And their perception is very important because you are going to change them so their perception is always important. And then with that you can choose methods and strategies. Now you have to identify theoretical matters that can influence changes in determinants and identify the conditions under which a given method is most likely to be effective. So, you are planning you are a planner so this is very important which you have to keep in your mind that a given method is most likely to be effective.

Whatever you are planning whatever you are going to implement that should be very effective. So, that is very important. So, in that way only you have to identify any theories or theoretical methods or any models you know. Select or design practical strategies for delivering the matters to interventions group. You can you know if you think that I can I should use trans theoretical model you can use or the theory of planned behaviour or any other models there are so many theories and models you can use.

So, that you have to identify and not only that selecting that or identifying that model is important how are, you going to implement so practical strategies. What are you going to use you may use different types of medias you know materials what channels of communication you

will be using so the entire method part of intervention is important. So, you have to select and design those practical strategies.

Like if you want to use a theory of planned behaviour what are the things you are going to do. So, also you have to select the strategies. Now then you have to be assured that the final strategies, like finally you have you know you have discussed with your other planners and researchers and finally you have developed a strategy that is a final strategy. So, you have to be very sure that the final strategies which you have built or you have planned they should match the change objectives from the matrices.

So, you have to keep those parallelly. These are your strategies and these are the things which you have to change. So, this is very important you have to keep them side by side then only you can be assuring that, this strategy is going to work. It is not something like you have kept the objective something else and you are preparing your practical strategies or any kind of you know theory you have adopted a theory something else you have to keep both in mind. Otherwise, your intervention will not be effective.

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Intervention Mapping Steps

Step 4: Program

- Consult again with the intended participants for a health education and promotion program and bring their preferences to program design
- Describe program scope and sequence, themes, and needed program materials
- Prepare design documents that will aid various professions in producing materials that meet the program objectives and adhere to specific guidelines or parameters for particular methods and strategies
- Review available program materials for possible match with change objectives, methods, and strategies
- · Develop program materials
- · Pretest program materials and oversee the final production



Then then step 4 is about the program. The action on the program. Now see consult again why again is written because you have to again consult with the intended participants. In the previous steps also, you have consultant here also you have to consult. For a health education promotion

program and bring their preferences to program design. As I said and as I always said that; whatever you are developing or whatever you have targeted that you are going to implement something any activity or an intervention. Whether those particular people whether those targeted audience they are going to accept or not whether their preference is actually you have to know their preference. You just cannot force somebody or force a community to adopt something. So, their perceptions as I said their beliefs you know their values is very important and as same their preferences are also important to program design.

Whether you are going to you know you are what actually intervention material you are going to use then what are the methods what channels of communications it can be health counselling or you can use mass media or the group the group approach. So, these are the things which actually depend. Obviously as a health promotion planner you will be you know developing and you will be planning but the preference and perception of that particular intended participants is very important.

Because they are the one who is actually going to accept that intervention. Now the next is describe program scope sequence, themes and needed program materials. Now definitely now you have to describe. You have to discuss and describe what are the sequence we, will be doing this then that I mean first we will be delivering this lecture then we will go for you know role play or something just for an example I am giving you.

So, the sequence what are the themes you are going to use and the needed program material so many materials you will be needing you know you will be needing so many program materials to implement a health promotion intervention plan. Then is prepare design documents that will aid various professions in producing materials that meet the program objectives and adhere to specific guidelines or parameters for particular methods and strategies.

So, you might be requiring you have to prepare some aid like audio visual, visual whatever anything you can prepare. So, are the document or materials and it might happen that you need somebody else you know of different professions you know graphic designer etc. you will be

needing. So, here you have to see the prepared design document that will add various professions in producing the materials.

So, you have to produce and you have to develop those materials. That actually meet your program objectives always you have to keep in mind that you have to fulfil those objectives which you have set. Then review available program materials for possible match with change objectives matters and strategies. Now you have design and you have developed some materials but again you have to review with your team you have to review those materials.

So, that you it can be in a cross chat it can be you know evaluated that those materials are actually going to fulfil my objectives and whether those materials are appropriate matching my practical strategies which I have you know planned and the methods, so this is also important. Then finally you develop your program materials. Your entire program materials finally you have you have to develop you have to plan that.

These are the things you are going to do these are the things you will be keeping in your intervention. And pre-test, pre-testing is very important so that planning is also important that you have to plan before only that you have to pre-test all those program materials and oversee those all the final production.

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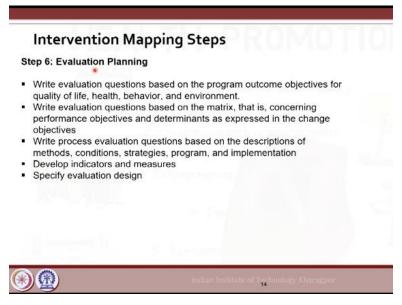
Intervention Mapping Steps Step 5: Adoption and Implementation Identify potential users of the health promotion program Specify performance objectives for program adoption, implementation, and sustainability Specify determinants of adoption, implementation, and sustainability Design interventions and organize programs to affect change objectives related to program use.

Next step 5 is adoption and implementation. Now here you have to identify the potential uses of the health promotion program it can be you know the health workers the village leaders all the users all the potential users you have to keep in mind. Then specify performance objectives of program adoption, implementation and sustainability. So, what actually you want what behaviour what I mean what behaviour performance actually you have set so that you have to specify.

Because whatever program you are going to whatever action you are going to conduct that has to be adopted and implemented properly. And definitely the system in sustainability is also important. Then specify determinants of adoption, implementation and sustainability. All the determinants you have to keep in mind. Then design interventions and organize programs to effect change objectives related to program use.

So, you have to design the interventions and organize the programs, all the organizers what are the things you are going to be required that has to be kept in mind and in that way only you have to plan.

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The last step is the evaluation planning. Whatever you are going to evaluate that has to be planned well. So, you have to write the evaluation question that is very important in checklist yes, no form anything you can keep. Based on the; program outcome objectives for quality of life, health behaviour and environment. Then you have to write the evaluation questions based on

the matrix that is concerning performance objectives and determinants as expressed in the change objectives.

So, for change objectives also you have to keep some questions. You can keep in a checklist form or any type of questions you can put. Then you have to write the process evaluation questions. You know based on the description of matters conditions strategies program and implementation. Like during the process of implementation when you are conducting. So, that how are actually that program is going on.

So, that process evaluation question also you have to keep that whether it was intended for that particular duration in that way where it was intended to be done. So, that process evaluation question also you have to put. Among whom and how where when all these things you have to put in that evaluation plan that is process evaluation. Then the develop indicators and measures you have to set some indicators percentage of children.

You know like you know after your intervention who started consuming fruits and vegetables every day in that way so many examples are there. So, some indicators you have to keep and measures also. And the evaluation design how are you actually going to evaluate you can use checklist you can use some other kind of questionnaires. So, that you have to specify.

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CONCLUSION 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. Combination of performance objectives for each level and selected personal and external determinants produces change objectives, the most immediate target of an intervention. The planner completes an evaluation plan that is actually begun in the needs assessment and is developed along with the intervention map.

So, let us conclude on 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. The combination of performance objectives for each level and selected personal and external determinants produces change objectives as I discussed in my previous slide and which is the most immediate target of an intervention.

Then the planner the health promotion planner completes an evaluation plan that is actually begun in the need assessment and is developed along with the intervention map.

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You can go through all these learning resources. Thank you.