

Research Methods in Health Promotion
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Lecture 40: Pretesting of an intervention tool

Hello, we were discussing regarding the designing of intervention materials and the different materials and methods of implementing the intervention in our very own health promotion research. In this lecture we will be covering the pretesting of an intervention tool. That means, we will be focusing on how to pretest the intervention tool that we have designed and that we are about to implement in the field settings. So, for this lecture we will be covering first the concept of pretesting, next pretesting and revision that means, how do we revise after pretesting, the steps of pretesting, pretesting guide and the pretesting methods. These are the main areas that will be covering and some of the areas we will be covering as part of the steps in pretesting. So, first a question is what is actually pretesting? As you can understand pretesting means pretest that means, before you finally, implement something or before you are finally, going to implement your intervention you have to just check it out whether the intervention is going to be implemented as you have planned or not.

So, basically pretesting is a process for determining a target groups reaction to an understanding of the health messages or behavior change information before the materials are produced in final form. That means, before you are actually going to implement it before that pretesting process comes in it determines the target groups reaction and the understanding and how they are going to react to the intervention material that we have already prepared. So, during pretesting members of the target group are asked to react the example that we have typically taken is the BCC or these are the traditional intervention materials that we use in the in the health promotion interventions. So, the stakeholders or the participants or beneficiaries from the target group they come into action in this step and they are asked to react to the to the pre final or the draft intervention material that we have prepared.

I mean what do we mean by the reaction or what do you mean by the responses that we will come to later on because there are certain things that we need to check before intervention is finally, implemented. So, those points will be covering on the aspects that we need to pretest, but it is based on those aspects that we tend to log the reaction of the participants. Then we analyze the responses and based on the analysis for example, again we take the example of a poster because this is one of the simplest intervention materials that we have. Suppose this is the heading, this is the body of the poster and this is an illustration. Now we have given this poster to one of our beneficiaries and the beneficiary has reacted to the poster the when you can identify that the beneficiary for example, is not able to read the heading of the poster properly.

Now if the beneficiary is not able to read the heading of your poster the chances are very little that he or she will go on read all the material that you have provided in the body of your poster. So, based on this what we will do we will just revise the material. How? We will note why the beneficiary is actually not able to read that thing. Is it because of the small fonts, is it because of the style of the fonts that we have used or is it because of the language simply the language is too hard for the beneficiary to understand. So, we have to note that aspect and then we can revise this into new poster format ok.

So, when the new format is developed or new draft is developed it is a revised version ok. So, revised version is again important and is particularly an outcome of a pretesting. You know it may so happen that you may need to conduct several time several pretesting episodes or cycles before you can finalize a material, but in only a little only some situations your material that you have developed before pretesting is the final material because even after pretesting you do not get sufficient areas to revise or the material is developed in such a way or in by such an experienced persons that there is only hardly something to revise or nothing at all to revise. Remember if you have even a single line to revise after the pretesting exercise it is your responsibility to revise that single line and to develop that final material from the insights that you get from the pretesting. So, it is basically a cyclical process which can recur again and again or it can be a single process in certain situations.

Next comes the question why do we need to pretest? So, the first question was what is pretesting we discussed the different steps not the steps perhaps, but the core idea of pretesting we discussed that this is a process. Now we discuss why do we need this process of pretesting because we need to make the materials appropriate, appropriate how, appropriate for the individuals, appropriate for the cultural beliefs, appropriate for the society, appropriate for the beneficiaries to understand, appropriate for the cognition level of the beneficiaries you can think of any type of appropriateness as you can think and all of those appropriateness we have to ensure through pretesting that is the basic goal of pretesting you have to make the materials appropriate. And some things are related with this appropriateness that is you have to make the material reproducible as well. So, not only appropriate you have to make it reproducible why reproducible because it is this material that you are going to implement in different communities in your health promotion research. If you have say 10 communities for as the part of the intervention arm then appropriateness means it is not only culturally socially and contextually appropriate for a particular community it should be appropriate and reproducible in other communities.

Now here comes the catch see if the communities you selected are you know heterogeneous in terms of for example, they are culturally diverse. Now in that situation the reproducibility may not be ensured by appropriateness of your material to only one community in that situation for example, this is one cultural group this is another culture we have selected say 6 communities in this group and you have selected 4 communities in this group. Now what happens is if you have to make your intervention reproducible then first you have to pretest your intervention material for this cultural group next you have to separately pretest your

intervention material for this culture. That means, your pretest and your intervention material should be pretested separately in the 2 diverse culturally diverse groups. So, that they are appropriate for each of those groups and they are reproducible within that cultural milieu.

Now see because of the separate pretesting it may so happen that the intervention material that you are going to implement may be different from the other one that is the basic reason we tend to avoid the difference in the intervention materials and that is the basic reason why we intend to choose certain homogeneous groups. So, that we do not get variation within the intervention materials among themselves then it is our responsibility to ensure that the variation that we have in the intervention material after the pretesting exercise is carried out because see here the intervention material this is the intervention material at first we have developed a single intervention material, but because we have to ensure cultural appropriateness in 2 different regions the final product the final intervention materials that comes out of the pretesting exercise may be different. Now it is our responsibility to ensure that the difference is not significant in terms say the message that is being delivered through the intervention it changes from one community to the other it should not be that and we have to ensure that. So, that is the main reason why we have mentioned the second bullet point. Pretest helps to ensure that the materials contain understandable language appropriate illustrations and effective messages.

That means, even though we have if at all we have 2 different intervention materials after pretesting now the effective messages that we intend to channel through these interventions they remain the same although they the intervention package the intervention material overall may be bit different based on the cultural circumstances. So, that is the very essence of performing a good pretesting exercise. As a result it helps increase the impact of the materials by you know determining if what has been designed is suitable for the audience. That means, appropriateness reproducibility effective message and then you decide on the suitability. So, see suitability and appropriateness they somewhat you know they are related to each other and also in terms of the suitability concept is somewhat related with the cognitive level of the community as well.

So, these are the aspects that the pretesting exercise that takes into account and that is why it helps sharpen your intervention. So, that it is ultimately effective for the beneficiaries that you have targeted. And as a result because now the intervention is more robust and it is more to the point or more crisp it saves money time and energy of repeating the intervention multiple times to a single group or repeating the intervention going on changing it over and over again just by doing a single pretest exercise. Remember single pretest exercise may also contain the process of pretesting for multiple times, but single pretest exercise means after that you have developed your final intervention material. So, after pretesting you tend to save the money time and energy that you might have lost if the intervention material was directly implemented in the community without even testing for the appropriateness or the effectiveness or you know the understandability whether the participants are able to understand the messages all these aspects if you had done if you have implemented the intervention without testing all these

aspects you might have lost the time energy and money you might have lost the resources that you are saving by performing the pretest.

Now, after how and why we come to the next question who should conduct the pretest. See a pretesting should be conducted that means, should be implemented by 3 or 4 people from the key program staffs. So, you have a program implementer this person is the implementer sitting over here and you have a group of staffs over here who will be actually implementing the program. For example, they will be implementing the program to a rural audience this is a rural audience ok these are your program staffs. Now they are the people who should conduct the pretesting remember as a researcher you should better avoid pretesting the intervention by yourself why because it may incur certain biases and also it may you may be prone to understanding something in a tag bit different way than a normal program staff who is unbiased or who is un inclined to any of your decision making through the interventions that is why it is a better to implement your pretesting exercise through the program staffs.

Obviously, you have to train your staffs on how to implement the pretesting, but they should implement the pretesting exercise. Typically a small group of people that should be a small focus team typically 3 to 4 people they should implement the pretesting you may consider including only 2 or 3 people as well depending on the on the on the size of intervention material on the objective of your study or the nature of the intervention that you are going to implement you can choose your small focus team. It is best to find people who are mostly similar to the priority audience. That means, we are going to implement the intervention among the rural audience. Now we have selected for the pretesting purpose a group of these rural audience.

Now say the mother of the under 5 children they are our priority groups or they are our target groups. So, from this rural audience we select the mothers only for the pretesting exercise ok. So, by selecting the mothers only now the program staff can implement the intervention or implement the you know the pretesting exercise among the representative group. So, that is a very important thing because you really cannot pretest your intervention focused on mothers of under 5 children say among a group of elderly individuals that is not how pretesting the intervention works and through that you will not gain sufficient insights to revise your intervention material as well. So, that is why population who are similar to the priority audience or the target population it is important.

It may so happen that you just pretest your intervention in a different region altogether not in your targeted area, but in a different region altogether that is accepted, but the group should be mostly similar to what we are going to test. For example, if we are trying to pretest an intervention among the tribal mothers for example, then or we are going to implement the final intervention on the tribal mothers then the pretesting population should not be non tribal mothers because being a tribal mother there are certain cultural social norms that should be included in our health promotion research. So, the tribal mothers from different region who are mostly similar in different social and cultural practices to your main target area they can

be your pretest population. Typically the pretest population is only a small number of people not say for example, 1000 and 2000 people you are going to study in your intervention no we do not pretest on all those 1000 and 2000 people we take for example, for 30 or 40 individuals for the pretesting exercise. Next question is when should pretesting be conducted? As we have discussed already that it should be conducted before the components of the communication campaign or the intervention or the BCC or HBCC campaign is finalized produced and disseminated.

That means, say this poster this poster has to be finalized then it will be printed and then it will be distributed. So, before this step this means the finalization you have to conduct your pretesting and you have to revise. Remember pretesting takes time and how much time it will take it depends typically on the objectives and the needs. If you have too many objectives or too much structured objective that it needs to address certain nitty gritty of your study then the pretesting may take some more time because the the finesse of the intervention material that depends on how much time and how many cycles you allow to your pretesting exercise and also based on your needs how precise you want your intervention to be obviously, that depends on the analysis of your audience. Next we come to the steps in pretesting of a health promotion and education tools.

Now the health promotion and education tool the steps in pretesting this is typically these are the steps that we follow basically this is part of the whole health I mean health promotion research that we are going to conduct this step is conducted when we are about to implement the intervention. So, in the baseline you might have collected a data this is the baseline then you have developed your intervention this is the intervention is developed after that you are going to implement your intervention as we have mentioned before implementation we have to conduct our pretesting stage. That means, these 7 steps they come after the baseline survey they follow through the intervention development and before actually implementing the intervention typically even after intervention development till implementation these 7 steps are conducted. How the first step is you have to outline your pretesting objective next you have to choose your pretesting method next you have to prepare for your preparation for the pretesting because you have to depend on certain resources that you need you have to prepare the resources as well then you have to develop a pretesting guide we will come to the pretesting guide during the discussion of step 4. Next you have to develop the questions for the target audience to understand what went wrong with the intervention that you have developed this is intervention that you have developed you have to ask your audience what really went wrong or what you could improve for the audience to make the intervention more encouraging more engaging and more understandable.

Next you have to analyze the data and interpret the results. So, after asking questions to the audience and noting down the responses you get the get the information you convert it to data and you have to analyze the data to finally, arrive at your conclusion on what are the things that you need to change. Say for example, if you have the same poster now you note that say regarding the heading 90 percent of your respondents said that the heading is this font size of

the heading is very small. Now you know through the analysis that since 90 percent of your respondents have mentioned that the font size is small you have to change the font size to a larger one right. Say 50 percent have mentioned that no it is not only the font size it is also the font style that you need to change then you have to act on that too.

So, you have to interpret the results in a way that you can improve your improve your intervention material without changing too much of changing the content because the content is basically the message that you have designed, but again you have to make it more in line with the audience. Finally you are going to summarize the result because remember whenever you are implementing your intervention the summary of your pre testing what you have gathered through the pre testing exercise that should be kept separately because based on those summary you have to check whether any of those mistakes are being implemented during the implementation phase. If any of those mistakes that the summary results are pointing out is implemented during the implementation phase you have to immediately stop the implementation intervention and again you have to revise because only the final material intervention material that you have developed after checking all the boxes of corrections in this summary and in interpretation phase of pre testing then only you can implement the intervention as a whole. So, outlining the pre test objectives what should be the objectives we have taken the example of the posters we should start with two different versions of the poster for example, with a larger heading and a smaller heading now this is just one technique of pre testing you can devise a technique of your own and another with a slightly larger font size. So, these are the two alternative versions you give your beneficiaries a similar nature of the beneficiaries with both of these version and you note which of the which version the beneficiaries they prefer and what are the points.

So, basically here what you are doing you are doing a comparison a comparative observation perhaps and based on this you have to set your objective on what do you want to determine through your pre test you want to check the language or the readability the expressions that you are giving whether they are more in line with the with the culture and the values of the community or not the appropriateness that we discussed in the previous slides again the context of content font size the sources or the references that you are going to cite the appeal that you have mentioned whether they are appealing enough whether they are encouraging and you know whether they are in line with the change objectives because ultimately you are going to implement your behavior change intervention in the community. So, whether the inter material that you have presented to the beneficiaries whether that is in line with the change of the objectives or not. So, typically here you need a little more you know inclined and engaged audience for pre testing because if an audience is not at all engaged or inclined with the study that you are going to perform then you may not get sufficient and good results of your pre testing right. So, it is again important to set the objectives in a proper way based on your target audience. Next comes the question of choosing the pre test method.

So, these are the headings or these are the you know points based on which you get to choose your pre test method you have to find out the purpose first the type of material that you are

going to pre test as we have previously mentioned in the last slide the audience characteristic what is the nature of the audience. For example, what is the educational status of the audience what do the audience do how do they prefer to view the different illustrations like this. Then you have to already also mention the available resources the nature of the message whether it is complex or sensitive or barely simple one line message or a clearly defined change objective like this and how the material will be used these are the issues that you need to consider when you are choosing the pre test method. So, for example, purpose methods like individual interviews provide more detailed inputs. So, if you need a detailed input on a particular individual factors then individual interviews motivational interviews they may be a very good method of of of implementation of the intervention and you should include that in the pre testing as well ok.

Remember this method is for pre testing this is not the intervention method per say ok. Then if you want to have a community level interpretation then FDDs may be giving you a broader insights. For example, if your intervention is targeted to certain groups of people then it is better to pre test the method through different FDDs or group discussions and if it is focused on the individuals then you can consider including the individual interactions. How difficult the material is or how long the material is will be also determines how you are going to pre test it because a longer material individuals may not be that much engaged into and if it is at all see the audience characteristic. Now some some people may be you know based on the different cultural values and also the context of your research may be not inclined to respond freely if there question regarding some issues for example, sexual practices in a group.

In that scenario your pre test is best suited through the individual approach. Now see in this case it is not only your pre test should be directed through the individual approach also the delivery of your final intervention should be directed through the individual approach. That means, the pre testing method that you are going to actually implement it gives you a fair bit of idea on how your final implementation or how the final intervention material you can implement the method for final implementation as well you are getting an idea through choosing the pre test methods only. We discussed that if you have a complex material or a sensitive material it depends on what group you are choosing. That means, it depends on the available resources and also depends on the audience characteristics because without focusing on the audience you really cannot pre test the the nature of the message because as we mentioned there may be two different groups culturally diverse groups and finally, the intervention material may get changed based on pre testing in the two culturally different groups.

So, it is better to check your message or to check the intervention material separately in those two groups without mixing them together because what happens if you mix them together for example, the sensitive issues you really cannot pre test them or some difficult material hard to comprehend material one participant may think I am not able to read this thing, but someone else may read that particular aspect in a more better way. So, that gives you a problem because in that scenario participants may not respond freely and in the pre testing exercise in itself may

be dependent on certain social desirability bias. So, the individual interviews and the focus group discussions we were discussing now there are certain other methods that we can implement that is the readability assessment this particularly focuses on the readability aspect this is one of the methods of pre testing which can be included and integrated with the two most common methods that is individual interviews and focus group discussions or group discussions whether the participants are able to understand the message that you are providing or not. That means, it determines the level of difficulty in understanding material that is written for example, in terms of a poster or a dialogue per say. You can also have an expert review you can ask the experts to review the draft materials typically what happens is even after an expert review you may require to pre test your material at the field level to get the exposure of the particular community or the cultural area that you are going to implement your intervention.

As we have mentioned preparation for pre testing means you have to gather around all the resources and you have to check the resources and plan on how you are going to utilize the resources typically here for pre testing because pre testing again if you consider this as a small scale study then the resource utilization for your pre testing will give you a fair bit of idea on how you can intervene or implement the intervention you know through this material. Now, how do we develop a pre testing guide? Pre testing guide means it has the background information it should have the pre test objectives it must have a pre test plan the pre test questions see the questions here are those questions what we are we were going to ask the beneficiaries and the plan for use of information gather. That means, how we are going to summarize the information how we are going to summarize the data and how we are going to take the corrective actions based on the information that we got from the pre testing exercise. So, this considering all this is called a pre testing guide this should be there with the pre testing team before implementation of actually the pre testing.

Now, you have to develop the questions. So, you know the goal of pre testing a question is to understand the value of the materials. That means, the intervention materials that we are going to implement you have to under you have to develop the questions for not only for the research team, but also for the audience questions will be how effective are these posters in influencing young parents to practice bird spacing. For example, for intervention was something that is related to practice of bird spacing we may ask the question that how effective are these posters see here the posters are our intervention material. Now, how effective are these posters in influencing this is how you tend to develop your questions. Now, these questions should directly be answered by the summary that you get from your pre testing guide.

So, you can now understand that these steps the step 3, 4, 5 they are somewhat related amongst themselves and each of them are complementary with each other. Finally in step 6 we analyze the data of pre testing and interpret the results that we were discussed we have to understand any trends in the response whether there are any end touching or median response in the in the in the questions that you have put a put forward regarding the intervention materials that may indicate that the participants are not at all engaged with your intervention

material or in fact, even the pretest question that you have put forward is not properly formed. So, again that may require certain changes and after that you can again carry out the pretesting exercise. You have to find out the flaws with the design the messages or the format that are highlighted and then you get to change those things. So, the final idea is to redesign or revise the material into its final form.

So, finally, in step 7 at the end of the pretesting exercise we summarize the results and typically the objective is to redesign or revise the material in its final form. What do we do? We put a short background why we pretested then we highlight the main points that we have got through pretesting, we describe a bit the findings what are the how many people responded in a favorable way or how many people asked for a change in certain aspects of the intervention material we have to highlight those areas and you have to briefly describe them. So, that who is actually changing the intervention material who is actually designing the intervention material can understand what has transpired and what changes needs to be done. Then in the conclusion the patterns that came up or the major differences that were observed across the individuals we have to list them say in a bullet point or in a in a numbered list. Finally we have to provide the recommendation for those the recommendation is put forward for those who is for those who are actually changing the intervention material to its final form.

In the beginning of the lecture we mentioned that there are certain aspects or there are certain questions that the audience need to be asked on the intervention material and these are the different aspects that we are actually going to pretest. In a very brief attractiveness comprehension acceptance relevance call to action persuasion and improvement these are the points that we check while we pretest an intervention material. So, attractiveness what what do you mean by attractiveness actually you know whether it engages the people whether it seeks for attention of the participants. Comprehension whether the information is understandable as we want to want to make them understand and acceptance whether the material is culturally and socially acceptable. So, the values the social norms they come into play relevance whether they are relevant to the audience because an information regarding say healthy aging is relevant to an elderly group of people or who are approaching in the age group, but that may not be that much relevant for an adolescent or for an early teen.

So, relevance is also another factor that we want to assess and typically this is as a not really assess through questionnaires we have to check it ourselves as researchers call to action whether the audience understands what changes they are being asked to make. Persuasion whether you are able to pursue the audience in taking that change objective seriously and making the behavioral change. So, persuasion is again a key area of pretesting whether the message is persuasive enough whether the intervention implemented strategy is persuasive enough we have to check it. And the improvement if and how the material needs to be improved because the improvement the suggestions for improvement should come from the beneficiaries as a whole. So, that is again another area which should focus which you should focus during the pretesting.

So, what we discussed basically is the we developed a message then we are going to pretest it and we are revising the message. The interesting part over here is even after pretesting we have to retest the existing material before reproducing. So, previously we mentioned that the message should be reproducible that is why this is important because we have to retest to ensure that no other change is required and then only we can reproduce. So, in conclusion we discussed about pretesting that this is a process this basically finalizes the draft intervention that we have developed after the baseline and the draft intervention development phase. It may be a cyclical process you may require to implement different cycles of pretesting and you know pretesting should end when your intervention material is finalized.

Usually retesting component is included in pretesting because without retesting the intervention you really cannot comment whether the pretesting process is complete or not. It can be individual based it can also be focus group discussion based and also remember that readability assessment is a very important area when we are discussing the health promotion interventions because if the people are not able to understand the message that you are providing your intervention is going to miserably fail. So, these are the resources for this particular lecture. Thank you.