## Research Methods in Health Promotion Dr. Arista Lahiri Dr. B.C. Roy Multi-Speciality Medical Research Centre, Indian Institute of Technology Kharagpur Week 01 Lecture 04: Process of Health Promotion Research: Integrity and Rigor

Hello, in this lecture in this course on Research Methods in Health Promotion, we will be discussing on the different value principles that are involved in the process of health promotion research. In the previous lecture we discussed about the different steps that are involved in health promotion research and in this one we will be focusing on the three key value principles we call it. Our major focus will be on integrity and rigor in this one and the next lecture that will be taken by Dr. Sweety Suman Jha will be focusing on the ethics part. So, let us start discussing. As I mentioned we will be focusing on the values in health promotion research and we will be focusing on scholarships, grantsmanship and ethics, integrity and rigor in research.

You will also come to know or I mean we will be discussing although in a very brief way, but it will be interesting to understand how scholarship and integrity are related, how grantsmanship and rigor are related. We will be not be focusing on ethics too much in this lecture because we believe ethics is a very important aspect in health promotion research and we have devoted a full lecture for you to go through the different aspects of ethics that will be the just the next lecture. So, the high value principles in health promotion research. As a health promotion researcher we have to keep I mean we have to pay attention to three different issues.

First is the integrity, rigor and ethics that I have already told you in the beginning of this lecture. So, how do we pay attention to integrity? Equity is best demonstrated through scholarships, rigor it is best observed through grantsmanship and ethics. You know that there are different institutional ethics committees or independent ethics committees they are basically empowered to provide your research or your research protocol with the certification that this is ethically ok ethically permissible. So, the approval of the empowered ethics committee prior to start of the research that demonstrate the adherence to the ethical principles, but also you have to maintain you have to actually implement the ethical principles that you

have mentioned in the proposal in the field level work. So, what is the relationship between scholarship and integrity? Now, integrity in a very loose way we use it in everyday word that you have integrity you are sufficient I mean you are true to yourself you are reporting the true findings you sufficiently I understand that you have integrity or we usually call a man of integrity like this.

So, in research how this integrity is related to scholarship is a very interesting phenomena. See if you have gone through different scholarship applications they typically ask you to provide statement or a personal statement where they ask you to provide certain messages regarding integrity they want to understand what is the status of integrity in a particular candidate it is kind of a similar. And in fact, here we are talking about scholarships regarding these different research proposals or regarding pursuing a career in research something like that in terms of a health promotion perspective. But the basic requirements of scholarships although from a health promotion perspective they rarely vary from what is there in terms of the general scholarships. So, follow this line scholarship implies that the researcher poses an inherent curiosity regarding the research questions and a dedication to expanding the knowledge base in health promotion.

So, scholarships in any discipline should I mean it should be the prerequisite from the applicants part or the researchers part that the researcher is having an inherent curiosity or a curiosity since long time regarding that particular aspect. And you know it should focus on certain things or certain plans on how that curiosity is going to improve or move that research field forward. For example, here the research field is health promotion. If I am mostly interested in physics and I am now willing to pursue a health promotion research and suddenly I am asking for a scholarship for pursuing that research. But I am unable to provide certain statements that how my knowledge in physics or my curiosity in physics is actually going to advance the field of health promotion then it will not be really acceptable for a scholarship.

In other words what you can understand is although I may have a good integrity with me, but that integrity is not sufficiently advocated for in this particular scholarships. The scholarship committee or the scholarship provider will consider you will not consider your integrity because you do not have that much integrity for this particular discipline. What I am trying to tell you is when we discuss integrity in terms of research it usually follows the particular discipline. That means, you should have your curiosity in that particular discipline and it should not be only your curiosity for doing research for the sake of research with no output no that is not what we do in health promotion. So, your curiosity must help the discipline move forward and how health promotion can move forward by doing or by you know by helping the people get a better life or preventing the diseases or illnesses that means, the good of the people and good of the society.

That is how the integrity component is related to seeking scholarships for different proposals or your research career or something like that. As we were discussing that this integrity it is a key feature of scholarship. In other words if you have secured a scholarship on certain particular topic it may demonstrate usually that this person is having a certain degree of integrity. Often you can see that if you have secured certain scholarships the next scholarship or the next application it becomes easier for you to get. Why? Because the next agency or the next sponsor now assumes that since you have already secured these two basic scholarships.

So, they assured that you do have the integrity that is required for this discipline. Obviously even if you have secured those scholarships a priory or even if you have the experience prior to applying for a new scholarship or a new sponsorship obviously, there also you have to provide certain degree of you know information on how your research is actually going to benefit the people and how you are the best possible candidate that suits the need of the sponsors. So, in a way integrity if you have already demonstrated it helps you to demonstrate further degree of integrity to move up the ladder of sponsorship or as scholarships and similarly we will be coming to it later on the application of research grants right. See what we have already discussed integrity in the researcher ensures a fair test of the research questions. So, the sponsors or the different agencies they want to understand whether the researcher basically understands the research question that they are proposing or not that is demonstrated through the integrity. When a particular person is I mean applying for a scholarship for the first time, then it is very difficult to demonstrate integrity, but it is also very interesting is there you have the scope of detailing what exactly you see in the in your research proposal and how you plan to pursue the research proposal and how your journey will help the discipline of health promotion. And this part will be shortened if you already have certain amount of sponsorships and scholarships before you have applied to the next one. Integrity implies that any preconceived desire to prove or disprove study hypothesis is not allowed to interfere with the research process. Now, here we are coming more to what we actually want from a researcher who is having a high degree of integrity. Because in health promotion research it is not only regarding health promotion research, it is almost in every research that the process or the protocol that the researcher have proposal or not they have followed each and every step that they have mentioned with the research protocol or not.

So, this part where the research team or the researcher is being true to what is actually being carried out is very much essential. Now, if the team is not having sufficient amount of integrity or the team is basically lacking in integrity what can happen the team can false report what actually has occurred. Maybe certain intervention they were given to only a group of people for example, they were an intervention it was supposed to be given to 100 people the intervention was given only to 50 people. But when the research team is reporting it or disseminating the findings they have mentioned the no no we have given intervention to 100 people. This is an classical example of false reporting where you do not have integrity in the research team because they are doing this false reporting.

Since from a researcher point of view or from the point of view of science as a whole we want the reporting to be true because these reportings will help generate evidence regarding the gaps that may be there in the literature or regarding the future questions. Because in the previous lecture we mentioned that the health promotion research will lead you to another question you have answered your research question, but it will lead you to another question. Now, what happens in this case if there is a false reporting or the research team is not having adequate amount of integrity with them and they are keep on keeping on doing this false reporting part. The question that may come out of that particular study will not be a valid

question. For example, the researcher may say that no we have implemented this intervention among 100 people and we have found out that no this intervention is not working fine.

But actually they have implemented the intervention in 50 people and they have analyzed the data of all the 100 even without implementing the intervention in the other 50 people. What happens here is you are misdirected and you see why the intervention is not working. But the actual situation may have been that had the intervention been implemented on all of the 100 people it may have happened that no the intervention is actually working then your research question might have been something different how to make the intervention even better how to make people access the intervention even more. What happens since your research question is misdirected the next resources that you are going to utilize they will be bad utilization of resources because those resources were not required to be utilized for this wrong research question in the first place. But since the preliminary report that was wrong or there was not enough integrity with the research team now the policymakers or the other group of researchers they are misdirected.

So, that is why integrity is so much important with the researchers. And what happens with the with the you know the sponsored studies or the these kind of scholarships no funding agency or sponsor would like to fund a particular individual or a team who do not have integrity because then that particular fund will be you know invested for reporting something which is actually not fully true. It is in general understanding of the funding agencies that they intend to provide fund to somebody or certain team who will actually report what is actually what is what is it true the truthfulness of it. So, that is how scholarships and integrity they are eventually linked. Now the component of integrity it is also related to grantsmanship that will be coming to discuss now, but grantsmanship is more related to the concept of RIGER.

Why? Because integrity you can have integrity and complete a research if you are willing to follow the steps rigorously. If you are lacking RIGER and also lacking integrity then your research will be like a mess. So, integrity and RIGER they are linked and if you have to have integrity you must have RIGER and if you want to have RIGER in your research if you want the findings to be robust the methods to be very much rigorous then you need some amount of

resources and what are these resources? These resources are the fundings or the sponsorships that we get. So, the grantsmanship they are mostly related to the RIGER. Why? Because the grantsmanship it is from the point of view of the funding agencies.

The scholarships that we have discussed in the previous slide that is the point of view of a researcher. So, from a point of view of a researcher securing a scholarship it is mostly you know linked with the integrity that is lying within the researcher and the grantsmanship that is basically the securing the funding from external agencies it is the point of view of those external agencies. What they will see? They will see certain rigorous aspects or rigorous proposal from your end or who is going to seek the fund from their end. Basically that is why we say that this grant the demand for grant it is basically an implicit demand because it arises when you know when you think of certain resources that you have to utilize. See the difference is it is not what you want to utilize.

The need for grant arises when you find that these are the resources that you have to utilize again the principle of parsimony comes into play. And when you have the implicit demand and you have the source of this grant or you have certain resources with you it leads to what we call the research enterprise ok. The commonest example of these different research enterprises are the different funded project that we usually do ok. As we have already been discussing that executing rigor is expensive and it is resource driven because if you have to follow the protocol line by line and if you have to make every measurement accurate and if you have to be very measurement count then you have to be not only be very precise you have to be very much specific and your manpower needs to be well trained your devices needs to be well equipped all of it. So, all of these they require the resources and whenever you require resources obviously, they are going to cost you.

So, that is why we say that executing the rigor it is not only expensive it is also resource driven as well. So, the obtaining funds for health promotion research is basically a very competitive process. Now, this is basically an understatement because obtaining funds for any kind of research is a competitive process because funds are limited, but there are a lot of research ideas going on floating around. So, if you have to secure the funds firstly you have

to have that the first one the first component that is integrity demonstrate with your research team and then it has to be rigorous. So, that the funding agency can see this proposal it is worth funding right.

In health promotion as well what happens is since the health promotion concept it is mostly related to preventing certain diseases or certain illness. There are certain you know gradient of or what I shall say a disparity regarding the clinical funding or the funding that is directly related to cure of a disease to this particular preventive part right. So, since the funding with this preventive part or this health promotion part is already a portion of what actually is available with you know the larger majority or with the discurative mode of action this makes funding in health promotion even more competitive for the researchers. So, for that you have to demonstrate integrity and rigor in the proposal very thoroughly and very precisely also the idea needs to be novel, but that we will be discussing later on as we move through this course. So, this is you know with the rigor component of this health promotion research.

Now, as we have been discussing regarding this grantsmanship we have mentioned here that in addition to factors for example, the quality of the research proposal how actually the research proposal is written where the rigor is implemented in it. The relevance of the topic whether the topic is applicable or generalizable to the population or whether it is going to actually bring something good because see we have mentioned in terms of integrity whether it is going to help the people or not. So, here also these are the things that that is required and you know in some cases the funding agencies may ask you what is the status of the idea or concept that you are pursuing. In technology terms this can be you know equated with the concept of technology readiness level the TRL level that often the technology funders or they follow. So, health promotion research also advocates that you first develop an idea and you pilot test it or you test it somehow.

So, that it is in such a state that now you can actually implement it and test whether this intervention is going to work on a general population or not right. So, that is the idea of what is the status of the idea concept that is being pursued, but either way you have to have integrity in you and also the component of rigor. Now we come to the last part or the or the third value

that we have mentioned in the beginning of this lecture that is attention to ethics. Why because health promotion research it aims to do good for the community for the people and therefore, we have to pay attention because our motto is first do no harm. We may not be able to help all the people, but our intervention should better not harm anybody ok.

We want to prevent the diseases our intervention should not be something that will ultimately escalate the chances of disease or in disability. So, that is why we have to pay special attention to ethics when we are discussing something related to health promotion. As we have mentioned the health promotion research is highly regulated by local and federal organizations that protect the rights of the research participants sometimes we call them the gatekeeper organizations. There are certain gatekeeper organizations or the NGOs as we call them they protect the right of certain groups of people. Now they are also one of the ethical checkpoints from health promotion perspective because you may have certain ethical issues implicitly present in your study and the ethics committee that you have ultimately going to present your study to may not have raised any objection yet.

But if you have discussed this issue with a gatekeeper organization or who is actually working on those for example, marginalized population you can get an idea of those implicit or inbuilt errors in your proposal or the ethical problems that may arise later on. For example, you are going to provide certain health promotion intervention to a person, but that health promotion intervention if that if that person is actually going to follow that health promotion intervention may ultimately lead to loss of livelihood situations may happen like this. But still that health promotion intervention it will help the people it will improve the health, but the if the livelihood is gone then there is no money with the with that particular individual and the and that particular individual will not be able to carry on living. So, these are certain perplexing and complex situation where we have to focus on the moral principle of first do no harm. First the health promotion intervention should not be something that will actually you know cripple the individual from doing any regular activity that the person is going to do.

That means, then we have to focus on devising a newer strategies in health promotion that is why these ethical principles are more or less related because the ethical principles they are not always black and white like right or wrong they are more related to what is appropriate for your study population. And since health promotion we deal with a large number of people the ethical principles they come more and more into the play. So, in this lecture we basically have discussed regarding the three aspects the integrity component the Reiger component and also the ethics. We discussed about the scholarship and grantsmanship areas scholarship is from the point of view of the researcher and the grantsmanship is from the point of view of the funding agencies. Now we discussed that how the Reiger and integrity they are related with the scholarship and this grantsmanship component as well.

Remember that scholarships are usually there to showcase the integrity of the researcher. So, it is our job to showcase the integrity because it is our owners to prove that whatever we are reporting it is true and it is actually what is being done and what has actually occurred. And remember it is the research grants the funding agencies they are providing you with the grants that is going to pay for the rigorous attempts that you are making at conducting those researches. Ethics we have very briefly discussed ethics is a much bigger and very important component. In the basics aspect of the health promotion this basically this first week we will be discussing on ethics in the next lecture.

So, I hope the concepts that we have discussed in the steps in health promotion research and also in regarding these values of health promotion research they are clearer to you. Similarly I again urge you to go through the first resource that I have mentioned over here because they have a very good you know chapter and certain resources to make you understand how these individual steps they are related to demonstration or actually conduct of the research and how specifically integrity and Reiger can be demonstrated and you can implement integrity and Reiger in your research perhaps. So, thank you for your patient hearing that is all for this lecture. Bye.