

Social History of Medicine in Colonial India

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Lecture 05

Initial Attitudes Towards Indigenous Systems

Hi, hello and welcome again to a new lecture, and it is a very interesting topic today because we are going to talk a lot - almost entirely - on indigenous systems of medicine or rather not only indigenous systems, but what the British felt about the indigenous systems of medicine. In an earlier lecture, we were talking about how initially they were and they were bound to be having some kind of a positive attitude towards Indian systems - indigenous traditions of medicine. We will see how all that panned out in a very detailed way. Then of course, we will be seeing it in a separate unit, in a most detailed form later on towards the end of the course. But these are what were the initial reactions, initial attitudes. So, as I said initially it was positive and then later on it became more denunciatory, castigating - very negative. And of course, as you would expect, there would be parallel reactions from the indigenous side. So, there are all kinds of resistances and also resilience, the desire to stand up and to give a fitting, fighting response in spite of the asymmetry - there are different kinds of asymmetries - and this of course also induces further changes on the other side as well.

So, all of these together as we can imagine, produce the grounds for very long lasting contest and intersections of various systems which by the way extends to this day where western biomedicine is still having a dominant span, but at the same time there is a vibrant sustenance and even challenge from various forms of indigenous traditions including folk and tribal traditions. So, this gives a kind of a historical background to what is happening now. As I have been saying, initially the British in a sense, had to look up, it is not they were nice or open, objective, but there are several reasons where they in fact had to, they had the necessity to look up to Indian systems or practitioners of indigenous forms of medical traditions. So, what were those reasons? One, as I have already mentioned a couple of times, indigenous systems had a very rich past going back to several centuries, very tested and tried and we will see, they very empirical and the materia medica was renowned. It was very rich - whatever forms - whether it is Unani or Ayurveda or what later came to be called as a Siddha system.

So, in different parts of the country wherever they were, so they had very rich and very effective kind of materia medica. So, since the cures in most of the cases were effective, it was only wise and smart to retain or to look up to what was already available locally and as I said in an earlier lecture, this golden principle of local malady, local remedy, - there was a belief that nature would have endowed a particular place with particular disease with also the potential remedy, the potential medical material through plants, herbs or whatever means - to address that disease and not only that belief, but it was also thought that it was very logical, more appropriate to seek as much as possible locally available remedial measures for the diseases of that locality. And also at this stage, so we are talking about the 17th century, 18th century - at this stage, western medicine's understanding of the causation of disease was not all that different, the same kind of aetiology (which as I said is the study of the cause of disease). The western world, at this time, by and large, still continued with what came from ancient times, the humoral theory of disease: the body is not supposed to have four different kinds of humor, blood, phlegm, yellow bile and black bile and any disease is attributed to the imbalance between these four humors. As long as they are balanced, everything is healthy - the challenge is to keep the balance between the humors. In the Indian case, something similar, so instead of the three we had for instance in Ayurveda the three Doshas - three humors (somewhat – though not exactly the same)

So in terms of aetiology, so there was not much of a difference. In fact, this can be better said if we bring here the fact that (as I said we have to be very cautious about the history, so we should not be jumping too much forward, so we should not bring things of the 19th or 20th or 21st centuries to the times you are talking about. So, we have to be conscious for instance), the germ theory of diseases was not known at that time. When it happened in the 1880s, the end of the 19th century, that gave a clear edge to biomedicine, but all that is a long way away. So at this point of time, there was not too much of a difference and they could not afford too much to look down in spite of the asymmetry we are talking about.

Of course, it is always there.. like talking about the superiority of the mission to 'civilize' and all that, but in spite of all that, at the ground level, there was not too much ground to seriously look down. And of course, as I said, there were many practical reasons for adopting and making good use of whatever is already there. And one of the criticisms that was made later on, as you will see, about Indian systems was that they were just empirical - empirical as you know is something which is based on observations, repeated confirmation of the same things happening. In this case, a particular kind of remedy being tried, works - of course you constantly improve, you learn by trial and error. That is just purely empirical without, (the point that is insisted here is that without), knowing how it actually works - you just know it works, it has worked for so many years, for so many centuries - to that extent it is valid, it is believable, you can try

it, it will work, but without knowing how it works, what are the principles, scientific principles behind it. So, if that is the case, at this stage, so even the western world was not all that very different, so even one of the most important advances happening around 1800 which is introduction of the smallpox vaccine by Edward Jenner - even there that was actually, strictly speaking, just empirical. He just found out that somehow this cow pox material would help mitigate the challenge of smallpox. They just found out as you know like it was they just found that people who were very close to the cows, like people milking the cows and milkmaids whose lives were very close to the cows, were more immune - that was just an empirical observation and then they of course they reasoned out and figured out there is a connection between something from the cow and its particular disease the cow pox and the human smallpox. But they did not know how exactly it worked - for instance, to put in modern terms, they did not have the kind of the science of immunology to explain in a true rational sense - the reasoning of it. So in that sense, in several ways, western medicine was not all that too much developed with the yawning gap, so that they could reasonably look down upon (indigenous). And not only that, because of this there was a lot that could be learnt - apart from other reasons. So practically, empirically it was seen that most of the medications were quite useful, efficacious - where particularly western medicine had no clues - as I was saying in another lecture. For instance, we can give a particular example here, for leprosy biomedicine at that time still did not have (of course they were talking in terms of asylums, how to somehow separate, isolate those people and keep them away without), much direct cure that could be practiced. In that case actually there was a particular indigenous substance called the cholemodra oil, which was very efficacious and which the colonial state and its medical establishment did not hesitate to use. So, that was another reason and of course, this is a point which we have been repeating: import substitution is also commercially, economically smart and viable - to not to try to bring too many personnel or material from back home from Britain, try to use as much of whatever is possible locally, that is the personnel or the material or the tools. And not only that, very interestingly, as I said, the colonizers placed lot of premium on knowledge and not only did they come to know things through local intermediaries, they also then got into the business of even training Indians themselves in course of time. In this case they trained them in indigenous or in mixed methods - it is a kind of a hybrid: some part of western and part of indigenous stuff. Then, of course, there are particular reasons for this. One is that as they were expanding, as more and more British were settling in various guises as men of commerce, military, administration, judiciary all that, lots of western bodies now exposed to the vagaries of Indian climate which we were discussing in an earlier lecture. So there was a huge need to take care of those bodies and as I said, it is not very viable to bring too many people from Britain itself just to take care of these bodies. Of course, there were surgeons and others who came, but locally the challenge was to produce as much of a local personnel. But at the same time, in some ways, western bodies had to be

left to the care (at some level if not at the top level at some level), to care of Indians. It is important to not expose western bodies to totally untrained men, so therefore the training, even if meant training Indians on their own (traditions). It is not enough that there were some kind of a tradition, some rich materia medica, some well-tried, tested empirical methods. But how do we formalize and train? In fact they set up, as we will see later, institutions like the Native Medical Institution to formalize and to train Indian themselves. That was also another way of attracting them to western system instead of directly exposing them to western system. This is in several ways, is another ploy which administrators also follow: try to speak in the language of the ruled, first you go to a new place and you talk in their language, try to convey to them that you are open to them, you are ready to operate at that level, speak their own language, empathize with them.. these were the psychological parts of it apart from the knowledge part of it, so that Indians do not feel totally alienated when the colonizer tries to instruct them, train them in more organized forms of medicine. So, they started with that and not with the idea of doing it in the long term, just limiting it to that, but eventually also to bring the western systems of medicine, but this is a good way to begin, so that is another reason why these kinds of training started apart from making sure that bodies, especially western bodies, were in the care of trained hands, but also kind of opening up of roots to eventually make them attracted towards what they (British) had to offer. And of course, another reason why the colonizers or outsiders felt they should be interested was just sheer curiosity, that applies to any human being - whatever it is, just a curiosity to know and especially it is a sign of a 'cultured' mind because they were talking a lot about culture, about civilizing mission and all that, so it is a sign of any cultured person, cultured mind to have that kind of curiosity in knowing about how other people did other things at other times historically or contemporaneously, so that was another reason. And of course, as I have been saying in a different context, so this was a very calculated ploy not to antagonize Indians, especially in the early stages when they were settling down or rather go the other side and patronize or be seen to be patronizing. All this also leads to something (as of course, this is another important word): eclectic. Eclectic is the tendency to take the best from different things like for instance we have the famous case of the religion that Akbar founded, Din-Ilahi religion which took the best practices from several religions, Islam, Hinduism, Christianity and other religions. Same way in medicine also, it was eclectic medicine, taking the best from all apart from western medicine, whatever was available indigenously. That was also a smart thing because health as we are seeing is a huge challenge and the more you have in the armory, the different kinds of tools, the arrows you have in your quiver, the more it is helpful. Having this eclectic approach is also practically very smart. But as I said, all this was in the beginning. Of course, in some of those trends also we cannot draw clear lines: like this is a particular point, this was it, then after this particular year it was all negative. Of course, some trends continued, but as you would expect as they settled down, became more secure, gained

greater foothold, the attitude became more denunciatory. And of course, as you can also imagine, it is not just the case of settling down politically or militarily, it is also the greater comfort, the greater knowledge-level they reached with regard to medicine itself. Especially whenever in a particular field, whenever a new form was developed, a better form was developed, a better means was developed in the western case, then suddenly like whatever even what was earlier appreciated would suddenly become 'crude', 'barbaric'. For instance, as you would later see, even in vaccination itself, before vaccination, there was something called variolation which we will see in detail when we talk about epidemics and particularly smallpox. Vaccination was an advance over variolation and variolation was something which the colonizers themselves practiced and in fact it was also practiced in many other places outside India also. It was very highly spoken about, but once vaccination came as an alternative, as better alternative, suddenly all that became very 'crude', 'barbaric', so that kind of attitudes ..settling and becoming more secure means - in several senses, not just politically or militarily, but more importantly as they gained more knowledge in the concerned sciences, the attitude changed and became more castigating. For instance here in Indian case, the things that they were earlier appreciating, whatever good they found in the indigenous systems, they were seen as remnants of what was once very shining, very vibrant systems, but now in a state of decay and decline. Indigenous systems were criticized for having mixed medicine with too much of religion and too much of religious practices and symbolisms and materials, chantings and other things including some of the related habits like untouchability. They were saying once upon a time Indians did dissection, surgery, touched dead bodies, but then there were all kinds of ideas of impurity, misgivings about touching the dead body which would lead to loss of purity and those kinds of things. So, that is why they said in the olden days there was an excellence. They did recognize Sushruta and other such traditions of the past, but now the contemporaneous generation of indigenous practitioners were seen as very complacent, just banking on old reputation and old and then subsequently misrepresented texts. And also, there was this growing contrast being made between indigenous systems which continued to be practical, they said empirical, just practical knowledge, just empirical and the western system of knowledge which was becoming now more scientific. Because they said the key thing is finding out the reason - what actually is working, how it is working. For instance if you take the case of Materia Medica, Materia Medica as a field is basically - as you can guess from the name - is a study or production (or dealing with the kinds) of substances related to cure of diseases - medical herbs or other such things, substances it can be mercury or herbs or whatever substances, but mostly related to the plant world. It is both the field as well as the corpus of the medical materials. Indian Materia Medica was seen to be steeped in dark empiricism - now you can guess what is 'dark', what is the darkness: there was no 'light' on the underlying reason - how it works - so it was just a dark empiricism. It was empirical - but it was also called 'crude' empiricism - it was not

‘sophisticated’ because it lacked the understanding of the reason. So, in this field, for instance, the scientific equivalent - that is knowing the actual reasons - was called the field of pharmacology - I will explain that with an example. Of course, here we have the definition of what is *Materia Medica*, which is a study and extraction of medicinal matter and substances. For instance, they found for malaria, Cinchona was an effective cure. The problem here is that, they took the Cinchona bark from the tree. Through repeated trial and error they found out there is a connection between it and the cure of malaria. But then the point here is the entire bark was taken, had to be taken, they knew it cured but without knowing what exactly the cure was that within that bark which cured. So, the challenge here, the scientific challenge which is what distinguishes pharmacology from *Materia Medica* is identifying that particular medicinal ingredient.

So, in this case quinine - that particular substance in the Cinchona bark, which is connected to malaria in whatever ways - and so trying to extract that. And then finally, going one step further - the challenge is - if we can actually produce it quickly, synthetically without even having to go to the tree itself, Cinchona tree itself. So, that is the highest, the acme of the pharmacological approach - using various chemicals - in this case - the production of alkaloids with quinine base or quinine-like kind of synthetic alkaloids. That is just an example of how once you make progress then you look down upon - and in doing such things such having and holding such denunciatory attitude - the British were just reckless. And as you know it is also part of the cultural game, so it is all part of the asymmetry which was there and the asymmetry which was sort to be further widened by this constant denouncing - making the colonize feel inferior. It was important to be saying all these things and that every possible opportunity for instance the opportunity I gave you know like the kind of distinction that could be made between variolation, vaccination or between from Cinchona to quinine and its synthetic alkaloids. So, when such opportunities presented, they were made good use of, and magnified to denounce. In some cases they just they are so reckless they did not even make the distinction between say, for instance, a more established, more text based tradition like Ayurveda and Unani and the hundreds of other folk traditions which were just practiced and orally transmitted and which did not have texts or commentaries. All of them were lumped together and they were all called /termed as quackery. Of course quackery is something again which we will be revisiting - what we now call the fake doctors - which is seen even now. Quackery is a persistent problem now. We have lots of fake doctors of different kinds either claiming to be holding particular degrees or practicing some kind of methods which are very dubious. So, that again is a long history, but here the British constructed quackery in a sense. All of them are called quacks and Indian practitioners were blamed of resorting to all kinds of reckless poisonous substances like arsenic and aconite. And interesting thing/ irony is that the British themselves did not hesitate to use such dangerous measures like copious blood letting - letting out the blood or violent

purges - emptying the stomach through all kinds of chemicals sent into the digestive system. Of course they justified those kinds of 'heroic measures' as a kind of response to the severity. We were talking in an earlier lecture about how the tropics are particularly disease-causing and especially the degree of the disease was seen to be particularly pronounced with excessive heat. So, matching that excessive effect of the excessive heat there had to be this kind of excessive measures.. heroic measures. So, that was the justification they gave. While they were using those kinds of excesses, they did not hesitate to criticize Indians for using what they thought were dangerous measures. And of course, they also criticized certain other specific aspects of indigenous practice like midwifery. Midwifery.. midwives are those who help pregnant mothers in the delivery of the baby. The Indian way of doing it was seen as a too crude - just handling it without forceps. Of course, before that, they were also doing the same way, but once they come across with new things like forceps and later on with the coming of rubber gloves and all that, all this now looked crude. So, THAT was more like scientific midwifery and HERE it was (seen as) very crude and barbaric and posited as one of the important reasons for maternal ill-health and infant mortality and other such things. What we can say finally is that, after having started with the kind of effusive or at least, a reasonable openness, praising of Indian systems, gradually a more denunciatory attitude was creeping in. We come to a stage where Indian medicine was just seen as more of interest..something of an interest to a 'cultivated' mind - just to know what happened, rather than any utility. But of course, as I said, these are not things static. One of the things you should remember throughout this course is: nothing was static. Everything was dynamic and nothing was just one way. Things were happening in multiple ways. You should not be stuck up with the monolithic entities of 'colonizer' and the 'colonized'; 'east' and the 'west'. Lot of the borders were very porous and therefore, these attitudes also changed and everything will be changing. For instance, later on they found out ways of making best use of whatever was still they thought was good. In fact, they arranged exhibitions, even brought out catalogues of very useful medicaments and cures from the indigenous systems and tried to incorporate them, but as far as possible not recognizing them as proper systems. Thus, as I said, by and large, what we have dealt with here in this lecture is the initial attitude and the initial beginning of the denunciatory attitudes and throughout the course we will see more of it unfolding. And that is it for now in this lecture. See you in the next one. Bye.