

Association between public financing of health and out of pocket expenditure

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Sandhya Venkateswaran:

Good morning, everybody. On behalf of the centre for social and economic progress a very warm welcome to all of you today to this discussion. I want to particularly welcome and thank our esteemed panellists. Yesterday somebody messaged me saying – wow, what a rock star panel. And actually, it is. It is indeed quite the rockstar panel. We have a collection of... it is an enviable pool of knowledge and expertise and insights on what is happening in health in the country. Both at the national level and specific to some states. So, I am really looking forward to this discussion. And I am sure everybody else is as well. Let me quickly introduce our guests. I will start from that side. Dr. Indrani Gupta who is a professor at the Institute of economic growth and head of the health policy unit. Mr C K Mishra who has been secretary, well most recently secretary ministry of environment, but before that secretary health and also department of health in Bihar. Girija Vaidyanathan, former chief secretary, government of Tamil Nadu, before that health secretary government of Tamil Nadu and Dr Nachiket More, who is the visiting scientist at the Banyan academy of leadership in mental health as well as a commissioner with the Lancet commission on reimagining India's health system. Rajeev is on his way. So, in his absence let me introduce him. Rajeev Sadanandan is former additional chief secretary health, government of Kerala. So, as you can see, we have a very varied experience, national level and some key states which should add a lot of colours to this discussion. What we are going to focus on today is how health is financed. Where are the expenditures on health coming from and this has been a conversation that has happened for long. Much of it around two separate strands. One is why is public spending on health so low in India. Which it has indeed moved very, very slowly. And at the same time, why our out-of-pocket expenditures are so high. So, these have been the two strands. What we decided to look at is the association between the two. Not in terms of causal relationships but look at how the trends in public health expenditure have moved. And in what way does that align or not with the trends in out-of-pocket expenditure. And to see what might be mediating the two. So, in particular we were looking at the utilisation of services, public versus private to see... when we look at these three variables, is there a coherent story that is emerging out of this, in terms of as the trends we see increasing public health expenditure, do we see declining out of pocket expenses etc. you know the recent national health accounts came out and there was a discourse at that point that GHE has gone up and accordingly out-of-pocket has come down. So, we are just trying to see what

is happening in particular in India's very diverse context. Because each state is different, we see in some states the government expenditure is very high. In other states not so much. So, how well is that... how well is that translating in terms of out-of-pocket expenditure. We have spent some few months doing some analysis on this issue. And we are going to share that analysis and then we are going to ask a few questions of our panellists. The questions that we were not very clear on as we did that analysis and we hope to deepen the thinking through this discussion. Before we start, I just want to lay out three or four caveats if I can call it that. One is, I mentioned we are not looking at this as causal, we are not saying that increase in GHE is the cause of let us say decrease in out-of-pocket. Because we understand OOP is a complex variable and many issues contribute to that. We are looking at whether there's some relationship or not, how the trends have moved together. The second is that the data that we use which is NSSO, the last data set we have is 2017-18 and it's been 5 years since then. So, we do recognise that the world has moved in the last five years. So, it may well happen that some of you may feel that the data that is being presented, that is not quite the situation right now. That is fine. Please point it out. But the reality is that there isn't a more recent data set. So, that is the second. The third issue is that what we have done is, we have used per capita. As we are looking at government health expenditure as we are looking at out of pocket expenditure, there are many different ways of doing it. We have chosen to look at it in terms of per capita expenditure. Other researchers have seen it in terms of a percentage of GDP, a percentage of THE etc. There is no right or wrong, there are many different ways of doing it and it is complex. No matter how you look at it. So, what would also be useful, if our panellists would share with us the pros and cons of one methodology versus another and Alok will talk about this more. There was a fourth one which is now slipping my mind. Doesn't matter. Those are some of the caveats. And with that I was actually going to request Laveesh Bhandari who is our president to say some welcoming words. But Laveesh thought this was at Habitat centre because... Rajeev please come... because that is where our another recent seminar was. So, he will be here in a few minutes. But let us start. I would request Alok Kumar Singh, who is research associate at CSEP to share some of the key sort of findings that we have come up with. After which we are going to maybe try and ask some tough questions of our panellists. Welcome Rajeev. We just finished with welcome and a little bit of context setting. You know it also. I don't have to say anything. Alok, over to you.

Alok Kumar Singh:

Hello everyone. As Sandhya has mentioned we have mainly focused on trends between health expenditure and health seeking behaviour. The key objective of the study was to understand if there has been links between the movements in public health expenditure and that in the out-of-pocket expenditure. And to address the objectives the key questions that we have identified was to see whether there is an association between public health expenditure and out of pocket expenditure and whether the association is mediated through public facility utilisation. That is if public health expenditure is associated to increase in public facility utilisation and declining out of pocket expenditure. So, the data sources we mainly use as Sandhya mentioned was National sample survey data for 2014 and 18. And for out-of-pocket expenditure and public facility utilisation, public and private facilitation and national health accounts report for government health expenditure per capita and rural health statistics and national profile data for infrastructure development. And additionally, IPS report on out-of-pocket expenditure to get the standardised OP across three years. 2004, 14 and 18. Both the GHE and OOP per capita

have been used at 2018 prices. The method of analysis was mainly the descriptive statistics to examine the strength of association between the three key variables. The findings of the descriptive statistics were triangulated with simple linear regressions between the key variables. As Sandhya mentioned, we have preferred per capita health expenditure for both GHE and OOP over GHE's percentage of GSDP and OOPs percentage of THE because initially we started with GHE as percentage of GSDP and OOP as percentage of THE, but what we found is for example, during 2014 and 18 there were some three states like Madhya Pradesh, Uttar Pradesh and Karnataka where it showed that GHE has not moved. There was no change in GHE but in terms of per capita GHE we found that there was considerable increase for this period. Similarly for OOP as percentage of THE for example Himachal Pradesh showed that there was decline in OOPs percentage of THE but in terms of per capita OOP was actually increased during that period. So, it was not giving us the true impression about the cost of healthcare. So, that was the reason actually to choose per capita health expenditure over percentage GSDP and THE.

Now, we present some of the findings. As you can see as government health expenditure increased over the years, 2004 to 18 across all the states, but still, it is variable across the states. Whereas in terms of OOP you see that it increased during 4 to 14 but then it decreased between 14 and 18. During 4 to 18 you will see there is a slight increase in overall mean OOP per capita. What we found is that while GHE increased with increasing GHE there is a slight increase in OOP during this same period. In order to understand whether the infrastructure has had a role to play in the association, we found that public health infrastructure has increased across all the level of care. But primarily the focus was on the secondary and tertiary care. But, when we see the association between GHE per capita and human resources that is doctors' availability of doctors in primary health centres and community health centres, we didn't find any association between the two. So, the top row the two graphs, the right two graphs are for doctors in THE & . The second and third row is the shortfall in mainly primary health care. So, you see that with increasing GHE per capita, the shortfall has decreased. So, there is a positive association between increasing GHE and availability of primary public health infrastructure.

Now we look into the utilisation of public facilities. Whether increasing infrastructure has played any role in utilisation of public facilities and we found that with increasing public health infrastructure public facility utilisation for both inpatient and outpatient has increased across 2004, 14 and 18. But we found that for the EAG states we found that interestingly the increase in inpatient utilisation was mainly for childbirth. When we exclude for child birth we see that the inpatient utilisation was decreased for most of the EAG states. Similarly for outpatient, in outpatient utilisation you see even the majority of the states seen increasing outpatient utilisation with increasing GHE per capita. But still the overall utilisation of outpatient is lower for majority of the states. It is less than 40% for most of the states. The red dots are basically for EAG states and the blue dots are for non-EAG states. So, to recap, what we have seen in this slide is that increase in GHE has been associated with increase in infrastructure. And also, with increase in public facility utilisation. However, we don't see any association with the human resources.

So, now we look at the implications of this on OOP. As we have seen that government facility utilisation has increased for most of the states but overall mean of the OOP per capita due to inpatient has not decreased for most of the states. The next question is, when we looked at OOP due to inpatient in government facilities, we have seen that it has decreased. But overall mean OOP per capita has not decreased in most of the states. Similarly for outpatient utilisation you

will see the trend is similar. With increase in outpatient utilisation, your mean OOP due to outpatient has not decreased in most of the states. There are outliers like Chhattisgarh, Uttarakhand, Gujarat, Jammu and Kashmir, Karnataka and Maharashtra where you will see the mean OOP capita due to outpatient has decreased. But for most of the states it has increased. Now we want to return to... in the fifth slide we have said that OOP has actually decreased during 2014 to 18. And we saw that the public facility utilisation has actually increased during this period. So, the increase in government facility utilisation is definitely one of the explanations behind the drop in OOP. But you will see that the overall utilisation of hospitalisation has decreased during 2014 and 18. And that could be another possibility behind dropping of OOP. But this needs to be examined carefully because it is suggestive of dropping OOP. (Audience question unclear). Yes, overall. What we found is that OP is not merely the function of private facilities but also the function of public facilities. So, you will see that when we disaggregate an OOP component, we found that medicine and diagnostics were not in the zone diagnostics here. But medicine and diagnostics, both are the greater contributing factor for increase in OOP. Both in government and in private sector facilities. So, this is mainly a data for inpatient. But for both inpatient and outpatient you will see that medicine and diagnostics has a greater role to play in overall OOP. Now the question is whether economic status of the state plays any role in health seeking behaviour. We found that... this is for inpatient utilisation... we found that as GSDP per capita increases private inpatient utilisation also increases. You can see that the red dots are for EAG and the blue dots are for non-EAG. So as the GSDP per capita increases your private inpatient also increases. But you don't see similar trend in outpatient. In case of outpatient, you will see a private outpatient utilisation is higher for most of the states irrespective of GSDP per capita.

Now this is important. We find that most high-income states have high public expenditure on health on the one hand, but low utilisation of public facilities and respective high OOP. We also find that mean OOP has a weak association with GSDP per capita which reinforces the point that it is not only due to private facilities but it is also being incurred in government facilities. As compared to EAG states we find that most of the high-income states except Punjab and Maharashtra have higher GHE per capita and in terms of facility utilisation almost all high-income states except Himachal and Tamil Nadu have high private outpatient utilisation and high private inpatient utilisation. In terms of OOP except Gujarat and Karnataka high income states of higher OOP than EAG states. In case of Kerala and Tamil Nadu we found the interesting fact was you will see that the short fall in infrastructure and human resources is lower than most of the states. But despite that, private facility utilisation especially in Kerala is higher for both inpatient and outpatient. So, when we look at the literature, we found that one of the major factors for lower utilisation of government facility is the quality and quality of provisioning public facilities and long waiting time. In case of Tamil Nadu, we have seen interestingly OOP is very low as compared to all other states for both inpatient and outpatient it is in government facility especially the OOP is very low. But despite that the utilisation of private facilities is considerably high as in around 46 to 49% for both inpatient and outpatient. So, based on our analysis, we can say that neither increase in public expenditure nor increase in public facility utilisation has been associated with declining out of pocket expenditure. But when we run the regression analysis and we have also checked with unit level data and we found that when we increase GHE per capita significantly it leads to greater outpatient utilisation and which has the potential to reduce OOP. So, based on our analysis we can say that there is need to increase GHE significantly first. Second there is need to focus on primary

healthcare as we have seen that the focus has been mainly on the secondary healthcare and also, we need to identify the levers to shift the health seeking behaviour especially non-EAG states. And also, there is need of a better targeting of public expenditure and increase the accountability to decrease out of pocket expenditure. Thank you.

Laveesh Bhandari:

Thank you. I won't give my opening remarks. I have been of course following all the work that we have been doing and it is really great to see all of you here. I mean it is a very young program and it is taking enormous strides. But in the process, there are some thoughts that have been emerging. I mean, I have worked on health issues in the past. And the question is essentially related to that, when we will have this discussion. I am sure this is going to be a really great discussion. Solutions to the problems are known, the solutions are known. But essentially the systems that we have are not correcting themselves. So, the problem really all of these that we study, the problems of the outcomes and outputs and so on are more related to the lack of our ability to build self-correcting systems. So, the issue then I mean if you go further there, is it a problem that information is not flowing across the system? Is it a problem that you don't have flexibilities assigned at the right nodes in the system? Or is it just an issue of accountability and incentives? Of course, the safe answer is that all of these matters. But sometimes by just changing one or two elements the rest can also be addressed. So, just these are thoughts. I am not really saying that I have the solutions and so on. But just something that I mean these thoughts have been growing the more I read some of our work. I won't take any more of this audience's time. But this is really, really exciting. Our work is really exciting. The contributions that you give to us add further energy to it. So, thank you, look forward to this.

Sandhya Venkateswaran:

So, with that, we are going to move to a discussion with our panellists. And the discussion is in the form of specific questions. Feel free to comment on anything that you have heard. But we have some specific questions and while the questions are for a particular person, if anybody else wants to comment, feel free to do that by raising your hand or anything. I am going to begin with Girijaji. Girija in Tamil Nadu, use of private facilities for inpatient care has been high. It's been higher than states like Rajasthan, Orissa, MP etc. Despite high growth in GHE and a focus on building public infrastructure, why is private inpatient facility high? Tamil Nadu is known for a good public health system. And before you respond I just want to say that there is a school of thought that believes that a good public health system creates greater demand for medical services which sometimes leads people to access private services. Do you think this is a case of that or it is a bit of an erroneous school of thought?

Girija Vaidyanathan:

I think many of the questions were answered there also and you have mentioned a part of the answer here. The fact is that Tamil Nadu has a very good private healthcare system also. And it has a reasonably good public healthcare system. For the record between the 71st and 75th round with the NSSO, with the caveat that the 75th round needs to be read and interpreted with caution because it was not as good as the rounds that went before it. We went up from 34% utilisation of public sector for inpatient care to 49%. So, there was a substantial increase, but I am not going to count on that as a real answer because I think that only when you get the next NSSO just something like waiting for a heavenly event to occur. It is still not there in the

horizon. But there has been increase but I agree with you that it is not commensurate... why is it not? For instance, what happened in Tamil Nadu in childbirth in public health using delivery services in public sector was because we introduced certain things, certain changes and there is a list of changes that were done including maternity benefit scheme that was only eligible for those who went to the public sector. A little bit of hand twisting. You gave them 12000 rupees if they went to the public system. We went up substantially, we are somewhere around 70% now. And there were like a 15% increase over five years. Use of the public system for delivery care went up substantially. We are seeing this in this NSSO, but I said in the absence of further evidence I will not count on that. I agree with you that there is definitely what was put up here, drivers of choice of private health care. Once private healthcare is not available, because if you are compared to the EAG states, very often it is a question of not having choice. There is no alternative. Here there is an alternative. And our studies show that there are all kinds of alternatives. The word private healthcare is not just the corporate hospitals. It is the tiny guy with a one man five bedded clinic to the ___. So, the person looks and as you rightly said waiting times, perceptions about government, everything is there. So, the person with just enough money to go to the private sector goes to the private sector. We also have an excellent transportation system and I think that is adding to the fact that I can reach the nearest town without batting an eyelid, so I don't have to rely on this. And the worrisome features are not only that 40% are accessing private healthcare, it is if you take a quintile wise analysis, even the poorest, it is roughly about 40% who are reaching private health care. So, there is some work to be done and as you have pointed out many times, I have discussed with you also this that it is not just increasing government expenditure. There is no direct pathway between just increase and that is in all the literature. You can't increase government health expenditure and expect that everything is going to set itself into the right... Bhandari also pointed it out... there are many answers that we all know. The pathway is not at all direct. One way is by increasing infrastructure there are places to go. And you also, I am going to answer the next part on why the OOP is not coming down. This is, as soon as people can afford it, they choose to find private healthcare if it is available. We believe that if this 34% to 49% shown in this period is correct, we might be somewhere around there. We might be around 50 to 55%. But as I said our work should be to make sure that no one cannot afford healthcare. Because what is going to happen if they can't go to private healthcare and... I will be presenting some of the numbers... the difference Tamil Nadu is a star contrast of the public and private sector. And I will be answering that in the next question. But it is so stark. In other states the range is not so stark. In our state the range is really stark. So, it is as she says extremely surprising that people are choosing to go to private healthcare. But my answer is that it is because it is available as soon as people think they can afford it, they move and they choose to do it. If it were not at all available perhaps, they would be stuck with us. That is the answer.

Sandhya Venkateswaran:

Thank you Girija. We will come back to the question of choosing. But just one quick point. You mentioned the income quantile wise analysis. We did try to do that and for both Kerala and Tamil Nadu we find the gap between the poorest and the richest is actually, it is not very high. So, exactly to the point that...

Girija Vaidyanathan:

We have been doing that for every NSSO. And that is what...

Sandhya Venkateswaran:

Mr Mishra I was first going to ask you a question on only Bihar, but I am clubbing Bihar and UP together as they often are. This first round of questions is state specific because you all have insights on specific states. And then we will ask a second round more general. So, in Bihar and UP have low GSDP. Yet private facility use is high. For outpatient one could assume that it is a lot of the informal providers. But even for inpatient Bihar has higher private facility use than states like Chhattisgarh, Orissa, West Bengal, assam etc. What are your thoughts on why that is happening? And we had a chart where we showed, we tried to do this analysis of looking at whether the state income level is related to private use and we found that as states go higher up the income level, private use increases. But in both Bihar and UP that hypothesis is not quite panning out. So would like to hear your thoughts.

C K Mishra:

I thought I will first respond to the issue of out of pocket. But I will let that be for the next question. Let me just talk about what you mentioned. Let me take off from where you left. You mentioned that in Bihar and UP private sector access is better than a public sector access. Yes, it is, because a system has to exist for anybody to access it. If there is no system existing in the right kind of quantity, people will go somewhere. Number one. Number two, I don't know why. We always get so unduly worried about private and public. If access to healthcare is there without increasing the level of poverty or without shooting up the out of pocket, why are we unnecessarily getting so worked up on whether X is accessing a public facility or a private facility. You guys just said that, if you pay 12000 for maternal benefit, you can go anywhere. So, what you are doing effectively is empowering that person to seek healthcare at an appropriate place that he likes. This is not happening in Bihar and UP. So, now, in fact let me just get back, I was reading this morning an article by Bibek Debroy. He's argued basically about the multidimensional poverty index report. And he says the Bihar states which is largely Bihar and UP, we can now drop the rest for a while...Bihar includes Jharkhand, yeah. Bihar includes Jharkhand, it is like the legal documents which say he includes she. (Laughter). You know, Bihar and UP and he has argued in that article that the actual fact is that the deprivation levels have come down in this state. And his second argument is it is not income. He says it is not income, it is targeted government schemes which have been implemented properly in UP which has led to this. So, his argument is that as the deprivation goes further down, there will be a definite improvement in health indicators. Also, because the base is very low. So, the jump will be quantum. Let us not get into that. So, the point is, Bihar and UP traditionally have been states where access to healthcare has been poor. Now one of the reasons largely has been that for decades these states have depended on central funding for their healthcare provisioning. You know, on a budget paper you see a lot of money being spent here and there. But if you carefully examine that, both states have thrived on NHM. and their expenditure of the state budget has largely been on personnel in the medical colleges and so on and so forth. Situation in Bihar changed during period 2009-14 so to say, where the locked-up PSEs and the subcentres opened up again and people started going to the public health facilities. Now let me make a caveat here. When you talk about people accessing public healthcare and when you make that point about the health expenditure going up, let us also remember that your second point about health seeking behaviour. Let us remember that we need to carefully examine where was that expenditure made. Look at the last decades expenditure on health. Large portion of the expenditure is on secondary and tertiary care. And health seeking behaviour is about primary

healthcare. We need to keep this distinction in mind when you are talking about it. 2009 to 14 for example Bihar, the footfalls increased. And the only reason was because there was a doctor to examine them and there was very good availability of drugs and diagnostics. Slowly as we went along and this is the story with many states, the diagnostics part which was outsourced to the private sector crashed because we did not have a proper system in place. The drug availability reduced and therefore even with the infrastructure that was created the access to public health facilities reduced. But we cannot deny even in Bihar and UP the access to public health facilities has had a huge impact and whether it is the MMR, IMR, NMR whatever you want to say, I don't see that private sector has played a huge role in these basic indicators. But when you calculate your out of pocket it matters. Now, if you are out of pocket, the largest portion is drugs and diagnostics. Then what are you talking about. You are talking about a state like Bihar or UP being strong on a delivery system. It is not about facility creation, it is not about spending money, it is about a delivery system. And unfortunately, in these two states that delivery system has been weak. Therefore, I don't see a direct connect between GHE and access. There may be in terms of infrastructure creation and expansion. So, in Tamil Nadu for example mobility is not a problem. In Bihar and UP in certain areas mobility may be a problem. So, health seeking behaviour will depend on how far you have to travel. So, what really matters and the rest of the issues if you want me to cover the health checking behaviour right now? Ok. So, now health seeking behaviour and expenditure. Actually, let me just complete Bihar and UP first. What Bihar and UP need is not just higher spend. They need two critical elements. They need to improve the delivery mechanism at the primary healthcare level because I always feel that government's responsibility lies 100% in providing primary healthcare, preventive, promotive health care. We are seeing the opposite in recent times when more expenditure is being made on creating tertiary centres of excellence etc. My theory always has been in particularly in states where affluence is low, every pie of expenditure should go on ensuring that the person doesn't fall sick rather than investing in sick care later. That concept is not happening. Will not happen in UP and Bihar, because it is not politically relevant as to what expenditure you make on primary healthcare, it does not reflect in acceptance in votes, so, therefore the story has changed in those things. So, you need to create a good delivery mechanism there and I think the second thing we need to do is try and see how much of penetration we can get from the private sector into our own labels. It can't be one. The kind of population that resides in these two states, it can't be one. Particularly when you are talking about NCDs and etc. Now access. I mean, converting a sub centre into a health and wellness centre does not increase either footfall or health seeking behaviour or proper treatment. Doesn't naturally convert to that.

Girija Vaidyanathan:

It does only if you do it right.

C K Mishra:

What is the first point? Let me now throw a question. What is the first point of contact for a person in Bihar or UP in a remote rural area? The quack. Perhaps for many, it is the last point of contact also. But we just want to turn a blind eye to that huge massive resource however maligned that we have and you don't want to use it in our system. We want to just out right reject it. Fair call. But if Bihar and UP want to reject that system and tell people that you cannot go to a quack, they necessarily need to build facilities for them. You can't just say that you

can't go there, but I don't have a place. So, it means huge investments, it means private sector and it means more than anything else a good delivery system which can reach out. I think rest of the issues come on later.

Sandhya Venkateswaran:

Thank you, Mr Mishra. This is really useful. Rajeev I was actually going to ask you a question on Kerala in the spirit of the first set of being state based, but we will do that later.

C K Mishra:

No, the tragedy of Bihar Sandhya, is that it is always surrounded by Tamil Nadu and Kerala. You start comparing Bihar UP with Tamil Nadu and Kerala.

Girija Vaidyanathan:

Sandhya, since C K has raised some issues, I just wanted to highlight this thing that government health expenditure not being one monolith, but going elsewhere. We did an analysis once and tried to do it back of the envelope type calculations and while it does go up almost uniformly, the bulk seems to come from tertiary care, these new buildings of these new hospitals and even schemes like an insurance scheme or a maternity benefit scheme like he says, it is to going to impact either access or OOP directly. So, the direct linkage, the pathway is very complex. I just want to say, we did it and we saw that increase in GHE is much more complex than we think.

Sandhya Venkateswaran:

I want to build on what Mr Mishra said and what you said Girija as well. That, it is not about the quantum of money. It is about where that money is going. And for example, the extent of focus on secondary, tertiary rather than primary. We also showed in one of the slides that while infrastructure increased, but the health workforce didn't really increase. So that is another point apart from the focus on secondary. So, Rajeev, now forget Kerala for a minute. But just looking at India as a whole, I know it is hard to forget Kerala. Would you say, to what extent would you say the reason for a lot of people accessing private care? And I will come back to what is the problem with private. There is no problem, but we will come back to that. Is because the public investments have gone in one direction but not really looked at what else is needed in order to effectively use the investments that have been made. So, for example if the money is being used to create infrastructure but if the doctors are not there, the medical supplies are not there, then that is not useful. So, to your mind to what extent has that impacted the, let's say the suboptimal use of public services and the move towards private?

Rajeev Sadananadan:

I have problems with framing this whole discussion around a linear link between a government health expenditure and the consumption pattern. The framework I would use would be a theory of market. It is essentially a kind of market function that is happening. All the factors that professor Indrani would normally use for analysis, the market is what I think we need to look at. The first thing that we should have done is and is something that I always keep doing is... in a market it is a propensity to consume and that is a major driver. After I got your paper and since I had problems with some of the analysis, one of the things I did was to look at the number of ailments reported by people in different states. Because that is a starting point. If I don't recognise my situation as a sickness, I won't access care. The rest of it follows from there.

Whenever your researchers have time just take a look at this table. The number of ailments reported per thousand persons, rural and urban. And that to a large extent determines the combined expenditure. Not private not government. The overall size of the market starts from there. The second part is another question on the NSSO where they are asked – if you did not access treatment why did you not access treatment. And there again once you take that question about ailment not considered serious, take that out. The rest of it is what matters to a policy maker. That is what I used to look at as health secretary. If let us say... let me just pull that out... if it says that quality is an issue, then we have a problem. That is something that you need to work on. But if too much of crowding is a problem, then the solutions are different. So, just imposing a linearity between GHE and consumption pattern is not correct. Again, as Dr Girija said, as someone who has analysed Kerala's health budget from 1960 to 1990, you find that the political economy of decision making which kind of drives investment to areas that are considered important for people like us, elderly male, that a very clear pattern you will see. The investment will go into what is considered important for my age group especially the males. So, that political economy kind of determines how the money will get spent. To imagine that this whole thing can be determined by one or two variables is being too simplistic. Having said that, if there is a demand for healthcare, what Mr Mishra also mentioned, if there is a demand for healthcare it has to be met. So, then what will happen is that if the demand grows over time from 2004 to 2014 to 2018, the size of the market bulges outward. Then what you will see will be as your point of your study, if even if the government health expenditure goes up, the private will also go up. Because if X was in 2014 and 2018, they became 2X, and why is the government investment, if it is to keep the rate as it is and the private sector will be X minus Y. So, to keep by the time this total size of the market goes to 2X, for to maintain the same proportion government expenditure has to go to 2Y. But even then 2X minus 2Y would still be greater than Y. So, that is going to happen. A simplistic analysis is not what I would recommend. It is more determined by the way the market behaves. And the propensity to consume will certainly determine increase in expenditure in both government and private. That is my take on this. Thank you.

Sandhya Venkateswaran:

Thank you, Rajeev. We did make a reference to that actually when Girija spoke exactly the point you are making and in terms of the linearity before you came, we did mention that as a caveat that we do recognise that there are many factors. So, point well taken.

Rajeev Sadanandan:

One more small thing. When we look at the growth of health expenditure you will find that again that doesn't grow in the same way as let us say CPI grows or even WPI grows. It will always be higher. And there is also certain amount of exponential growth that happens because as people's familiarity with healthcare goes up, the demand for more complex treatment will happen. So, as you go ahead, which I have been arguing with the likes of Mr Mishra, don't say Kerala is well off. Kerala is in a bad shape because the demand for complex care actually makes our life more difficult. And the changing demographic and epidemiology profile. So, when you do well in one sector, the demand for healthcare is going to go up and mind you, it is not determined by need, it is determined by demand. And the demand is up to the consumer and not to rationally exogenously determined standard. So, the way the market will grow in health

will be like the way demand for luxury cars go up. We started with Maruti, now everybody wants a BMW X7. So, that graph changes, the pattern of growth changes.

Sandhya Venkateswaran:

We are going to move away from Bihar surrounded by Kerala and TN. Nachiket, given the discussion that was just happening in terms of market forces influencing the expansion of the market and who goes where, we have seen that rising economic levels see a movement towards greater use of private facilities. We have also seen that, states that are economically better off have a higher component of GHE. Now, one repercussion of a higher GHE could be that you are improving the public health system and pulling people into the public health system. If that is not happening, another outcome of high GHE could be that your improved public health system is creating a competitive environment for private facilities. Do you see this anywhere? If it is not happening, why isn't it happening? And if it is happening, where is it happening?

Nachiket Mor:

Thank you very much, for inviting me to come in. One thing I must say, I am very impressed with the kind of questions and debates we are having without the data and analysis that was done, you can't have that content for discussions. That is why I do take Rajeev's point that we need more complexity in the analysis. But I am very pleased with the very high focus on data. I have not seen these kinds of conversations happening at fora. Most people are giving non-evidence based opinion. I am one of them as well. Now there is evidence to anchor it to and you have to ask to answer these questions much more carefully. There is fortunately in India multiple natural experiments in progress in each state. I think using this kind of analysis is going to be quite important to show it. I do want to talk a little bit about Himachal since you told me to focus on it. And I spent some time looking at it. I know that is not your question.

Sandhya Venkateswaran:

I want to come back to Himachal. But go ahead. I was going to come back.

Nachiket Mor:

So, you know one thing interesting about state like Himachal and I really enjoyed the conversation that I have heard so far. These are the people that made policy in real time. It is really quite insightful to see how they are thinking and why they are thinking about it. Himachal I was actually very fortunate to be a member of a commission led by Dr Bang. The late doctor Bang. And we had Dr Vinod Paul as vice chairman and Randeep Guleria as a member. It is a puzzling state. Because, one of the papers that we have published recently shows, somewhat shows is a very strong a word, but it points or hints at the fact that many states in India are actually spending in government expenditure enough for UHC. There are fourteen states that we feel are already spending enough. But certainly, it is a puzzle. Why a state like Himachal that is spending according to our analysis more than enough money on healthcare from government expenditure. It doesn't have the kind of one could argue Meghalaya, Nagaland, they may be spending enough money, but the underlying poverty is so high that health indicators don't improve necessarily because while sir said that IMR, maybe has not had private sector has not as much of an impact. I would submit to you that actually the perinatal component of IMR hasn't really moved that much in Bihar. Or UP and that is actually the only thing that the government system impacts. Post perinatal IMR particularly NMR within the first month is

all private sector. Because of excessive use of antibiotic, you have seen the post perinatal IMR collapsed in a state like Bihar. Really much of the IMR decreases post perinatal. Perinatal IMR has not fallen because actually the government system and there is a nice paper you might have seen from Dr Subramanyam and others, that does a counterfactual analysis using some clever statistics of what would have happened if JSY was not there. They argue, I am not a co-author so, I am happy to have you attack it. But they argue that actually IMR would have fallen faster in those states because women were sent to unprepared facilities and ill prepared facilities. In Himachal the reality is, there is enough money, everybody is doing everything correctly, there is adequate expenditure, why are we not seeing, one is that outcomes are stuck because one could argue private or public, why does it matter. When in Himachal there is no private, it's mostly public, outcomes are stuck, the DALY rate for Himachal is stuck at 27 or 28 thousand per hundred thousand. My own sense is that in these 14 states Himachal included, in particular Himachal included, the real challenges are not to do with money as many have pointed out. It seems more like a design issue. This idea that what C K Mishra also said, madam also said, that when people are given a choice, they might make different choices. And why should we constrain that. I think that is a core design flaw that we allow people to make those choices. Because most high performing health systems actually take away their choice. If you see France and Germany, I have a paper on this that looks at why virtually identical countries, France is spending 10% less and getting 10% better outcomes relative to Germany is that they don't have the choice. The people are forced to go to a primary care facility that has been chosen for them or they can change the choice off but in a limited set over a limited time. They can't go to any other facility without actually having gone through the system. None of the high income states today have that reality. And in fact, one of the issues that we are stuck with in these states including Himachal, we build the health system for MNCH. This is a Sri Lankan problem. Once MNCH problems got taken care of our systems don't know what to do. And much of the expenditure is coming from NCDs, is coming from... if you see Himachal today, number one, ischemic heart disease, number two, COPD, one could imagine why in that open air of Himachal, why are people getting COPD. The COPD is driven by in-home smoke and heating mainly. There is a big issue and wood usage is the main issue. If you take out wood and even substitute it with other forms of fuel which is drier you don't get this broadcast of actually not of so much smoke ma'am, particulate matter. Poorly burnt wood that is driving COPD. They have lots of primary care. In fact, one of the issues that we pointed out in our commission's report is that Himachal is one of the states that, you said that primary care is important, they overdid it. You can see one facility from the next facility. Largely empty, not many patients in these facilities. They have also I feel on the MNCH front perhaps not done enough. If you look at for example a marker of C sections as an availability of care, particularly since private sector is not there, you don't see many districts that have crossed I would say the 20 – 25% mark. There are many at 6% or 8%. They are not as bad as Bihar, UP, Chhattisgarh because... I would say Kerala more so than Tamil Nadu. But indeed yes. It is getting there. You are right. Actually, Himachal many districts are on the completely wrong side. Of course, people like UP and Bihar I would say, I would agree with sir that perhaps there is investment in hospitals taking place. But actually, the data is that, government is more urban in terms of its focus on hospital investments than the private sector. In fact, it is the private sector investing in rural areas in UP and Bihar. Government investing in the public in the cities. So, if you see Lucknow C-section rates, in the public sector, they are through the roof. But if you see public sector C section rate in the other districts of UP and Bihar, they are actually quite low. Himachal has continued that

problem a little bit that you do see not enough investment in MNCH. So, the question is where did the money go? Because if they are spending enough money for UHC, I am pointing out deficiencies in NCD care and MNCH care. My sense is, Himachal is one state, excessive investment in non-used primary care. Doctors are sitting there, facilities are there, but it is not being used because part of the problem and I think ma'am said or somebody said, merely relabelling one thing to another thing is not going to help. In fact, the modern definition of primary care is changed from OPD, because that is our mental image of primary care, to even in curative, going out there are making sure it happens. For example, if you see, I work a little bit in mental health...bipolar disorder, lithium which is a 1949 drug, relatively fewer side effects, are quite efficacious. 60% of bipolar disorder patients go off medicine within a few months of starting. Good primary care, somebody is sitting in your home and making sure and the best example actually that I cite in one of my papers on primary care, is Iran. Iran actually did not and particularly post 1979 revolution did not imagine primary care is clinic based. It imagined primary care as being out there and ensuring adherence. They in fact took the view that diagnosis is simple. Diabetes you can tell fairly quickly. Yes, random blood sugar, should it be this or that, broadly speaking you know what the right answer is. It is really adherence and making sure you were actually examined and I think Himachal has not done that. Himachal has built the old-style primary care. If the mother is in labour, she will definitely come. But actually, that is not good for NCD care. And I would submit to you, this is perhaps the problem in both Tamil Nadu and Kerala are facing that they have high government expenditure, high out of pocket expenditure but out of pocket expenditure coming lot of it from medicines and other things. Because for NCD care actually it is indeed what you need more than meeting a doctor. What do you achieve by meeting the doctor often? If you have diabetes, it will be always there. You have to now actually consume medicine and the only way to deal with it is an outward oriented primary care. Gatekeeping, making sure you cannot bypass it, and I think these are missing in Himachal which is why you see government expenditure going up but not enough reduction in GHE and in OOP and not enough reduction in DALYSSs. Health outcomes.

Sandhya Venkateswaran:

The OOP is the second highest in the country actually.

Nachiket Mor:

Yeah, I mean because the reality is NCD care. If I have COPD for example, I need salbutamol and I will need it for the rest of my life. The thing about these diseases is they are not curable. You need this medicine again and again and again. And if no other system is willing to provide it you have to spend it. In fact, you know I have a new paper that should come out any day now in which I argue that the pharmacy is the most important primary care provider. Neither the quack nor the government, not the solo private provider. It is the medicine shop that is the number one provider of primary care in this country because indeed that is where the medicine comes, that is where... You know, France which is what has used pharmacies as primary care provision has 35 pharmacies per 100000, India has 65 pharmacies per 100000. Of course, Bangladesh is even double of ours. So, it is a high density of primary care providers which have a refrigerator, which have amoxycillin. There is a very nice study of district of Ujjain. That looks carefully at what is there actually in a pharmacy. There are quite a few things. There is a new study that Anushka and team did for Orissa that you were involved in. Again, it finds this is a reality. That is the channel that is producing OOP. Not necessarily helping everybody

because DALYs are still high and I am excited about Himachal mainly because I think it offers a real opportunity without the distractions of the private sector to try and fix it.

(Question by Girija Vaidyanathan not clear)

Nachiket Mor:

OOP expenditures are very high in the public sector. Because the reality is that public sector conception is mini hospitals. If you are sick you come to me. I don't go to you daily to get my medicine and nobody comes to me to say because there is a lot of undiagnosed diseases. Why is ischemic disease mortality high? Because if this is all being taken care of at OOP, the disease burden should have fallen. Yes, financial protection level would have been low, because people are spending money. Unfortunately, these states are delivering lose-lose on both. I am getting poor outcomes and high OOP.

Girija Vaidyanathan:

There is an interesting question in NSSO. So, this is what proportion of care was free in the public sector. Tamil Nadu is the highest. 94%. So, that variable is also there. One is like totally agree on the demand side. People don't know they are unwell enough to seek care and they going to the pharmacy for day to day. But Tamil Nadu over all the NSSOs from the 60th or 52nd round have been showing above 90% of people saying they get free care. It's been a policy. Free care including drugs. Interesting. I don't think it is an answer. It is just a policy.

Rajeev Sadanandan:

How much money is spent on outpatient care... (unclear conversations)

Sandhya Venkateswaran:

So, Girija, I want to repeat the question the question I asked Nachiket to you. Which is, given that Tamil Nadu has a strong public care system, public system, in what way is it creating a competitive environment for the private system? Because just going back to the conversation, clearly there are two schools of thought even here. One believes that it doesn't matter whether its public or private which is true as long as it not impoverishing as long as the use of the private system is not further impoverishing people. But the other school of thought is that actually it is the public system that needs to be the stronger in order to deliver effective health care. But if we were to put that aside for a moment, my question is, in what way has the strong public system in Tamil Nadu created a competitive environment for the private healthcare providers in terms of let us say bringing down prices of drugs etc?

Girija Vaidyanathan:

Let me start with two things. One is access and the other is affordability. I think the two axes of it. The two of the three axes of it. There are two clear questions here. One he says access should be ensured, we also think affordability should be ensured. But ultimately coverage should be of the maximum number of diseases should be ensured. So, there is really not two schools of thought. There is one school of thought. As regards Tamil Nadu definitely does the presence of the public sector strengthen the private sector? We have done an early study. I think when I entered doing these kinds of studies. 20 to 25 years ago we did one in Pudukkottai. Where we found out where the public sector is strong and private sector is strong. This was because the doctors from the public sector in Tamil Nadu can do private practice. So, actually

found every town where there was a good hospital actually had private clinics. So, it is sort of a conundrum that you can... if a state allows the government doctors to do private practice, we actually find that both develop and as we built up our insurance scheme, one of the side effects which has happened is a lot more of smaller hospitals which came in for insurance but are providing other types of services also. Does it bring down prices? Now Tamil Nadu is a case that proves it does not. Because I think it is partly also the story which Rajeev said that – as you increase the demand for services the need for better BMW type of services, you want to save your life, I think you will go for the best MRI, the best. Because we did find for instance one of our examples of a strong public sector bringing down price is when we started... the Tamil Nadu medical services corporation started diagnostic service. Paid diagnostic services. It was just in the public sector but it was offered to everyone as well. We brought down the price of both ultrasound and CT as we introduced it through the public sector. That is, we created what is called a base price which the private sector which was then charging enormously brought down. Just an example. It happened long, long ago. But right now, if you see for example in Tamil Nadu, it is stark. I have to show it to you. Between the 71st and 75th round, the inpatient cost in public sector was 600 rupees for medical costs. That actually came down to 484 in the 75th round. Medical costs. But the private sector in Tamil Nadu is one of the highest. 27228 going up to 35500.

Nachiket Mor:

Ma'am, one question to you. Sorry to interrupt. Just based on what you are saying, one of the benefits Sri Lanka has had... why Sri Lankan economists don't worry about their OOP as much because they argue that it is progressive. Which is that the poor they argue that this produces a natural queueing. Which is the poor get free care, they wait. The rich are the ones that are driving the OOP up. And so, we should not be as concerned about it.

Girija Vaidyanathan:

This is again as Sandhya also pointed out, we have done enough equity studies on this. And we would be happy if the majority of the poor are going only to the public sector. That is not happening.

Nachiket Mor:

No, they may still go to private. But has the aggregate out of pocket expenditure fallen?

Girija Vaidyanathan:

We have done that also. We have actually broken down per capita OOP in each quintile. Unfortunately, except for the lowest quintile the private sector OOP continues to be through the roof.

Indrani Gupta:

In Delhi we find that one of the __ government doctors actually set up their clinics and... same, no? the trust factor is very high. In a way they have a catchment population there.

Girija Vaidyanathan:

We have all that. But I think Nachiket question I have the analysis. The first quintile alone. We also worry that there might be an access issue that some of them are not knowing that they are

unwell. But second third and fourth quintile and fifth, all the four quintiles it is not progressive. It is progressive in the sense that public sector is largely used by the poor. If you want to present a benefit incidence analysis, it shows as progressive. But if you actually breakdown per capita OOP it is not.

Sandhya Venkateswaran:

We also found that actually. The gap, both for Tamil Nadu and Kerala it is very little between the poorest and the richest quintile.

Girija Vaidyanathan:

With this, __ by private sector does build... there is some sort of the thing that we have a strong public sector, there will be demand created, probably awareness created, people will go. We are not now provided that much competition in order for people to move across when the cost is too high or for the private sector to actually moderate their rates because the public sector is offering them competition. That is not happening. That has not happened even in insurance. Even in those diseases. We haven't proved with the data yet. But within the NSSO we look at people covered by insurance and not covered by insurance. We are not seeing that fall of OOP even for inpatient care. So, something as he said it is a design issue. What he pointed out is correct. We built our PHCs for MNCH, RMNCH and the work there is now slightly different and they are really not equipped. We now have a program called "Makkalai thedi maruthuvam". Go to the houses for NCD care. I am also working with an evaluation on that. And it is so tough to do. Because it was mentioned __. We know the answer. We have seen in TB. And we feel from our heart about Tamil Nadu's performance in TB. I don't think that report is even out. We need a state level survey. We went out of the way, we spent money from our own resources. TB survey nationally is done for the country. We felt that unless we see districts data, it won't be used for policy purposes. So, we did a state level survey. We have kept it in hiding. It is the government now has kept it in hiding. Because it shows that it is not enough to have a robust health system. As he says you need to take it out to the people that need the service and you need to get the service done and we are all at the stage where the BMWs are running and we are not able to get the cycle rickshaws run.

Rajeev Sadanandan:

Tamil Nadu TB was always a problem right from 1990s. why the issue is?

Girija Vaidyanathan:

We will discuss it later. But what I am saying, I am just saying that the public sector, a strong public sector does create demand. It also creates infrastructure in the private sector. Now also thanks to insurance. But it has not shown itself in providing low-cost, affordable care. So, I am on the board of now two or three trusts, which do health care. We struggle. We almost die. Without donations we wouldn't exist. We are not able to balance this concept of affordable care. We don't even know whom we are competing with, but we are not able to break certain lines because we are trust hospitals, we are not dead yet. I mean, thanks to corona actually we did a great job in covid and our hospital is now... I work with VHS where we have come out of the red and we are in the black. But what I am saying is that the concept of providing affordable care as well as quality care within a system is much more difficult than it looks.

Rajeev Sadanandan:

But your cost is holding. Your cost from 71st to 75th in OOP and in IP is holding. It is stable.

Girija Vaidyanathan:

OOP, the public sector it has fallen and private sector it has gone up. The private sector has gone through the roof. Public sector is holding. Because drugs are coming at affordable costs. As he said there is being some... we are not doing as well on the drugs and diagnostics front as we can because newer and newer technologies are coming in and pulling out people from where they come from. The presence of a public sector as he says gives us an opportunity. I think Rajeev, myself and CK are all retired. But we all are hopeful people. We are not cynical and we believe that there is hope.

Rajeev Sadanandan:

We don't assume responsibility for what we have done.

Girija Vaidyanathan:

That is what... we are so relieved, that is why we are all here and smiling.

Rajeev Sadanandan:

Something I should have said in the beginning itself. 2018 for which Kerala's __ has been done, there is conflict of interest. I was the health secretary at that time. So, whatever I defend or praise, I will actually be blowing my own trumpet.

Girija Vaidyanathan:

But what he is saying is the point is true. There is hope, when there is a system, only then you can talk about what he is talking about. I completely agree with him that people have to now change the narrative completely. Identify the main diseases, take it to the people and make it work. His question on if you have a good health and wellness centre. For one and half years we ran in three blocks, IIT madras ran... we here means IIT madras... we ran an experiment and we actually proved people will come if you offer them basic services. And they changed. We were able to reduce cost and we didn't any rocket science. We did not offer all the services which government of India promises. We offered just basic outpatient services there and referral and preventive care. And we actually showed a complete transformation but unfortunately as he said during the election it was not at all exciting for the state government. So, they went over and they announced mini doctor clinics which was exact opposite of what we had written which was a paramedical trained workers based clinic. Thank you.

Nachiket Mor:

One question, sorry to just ask. One thing that has changed in Tamil Nadu, but not so much in Kerala, is access to credit. It is possible there with the credit constraint removed people can borrow at low incomes and go to private. Maybe that is why you are not seeing. Because what you are describing...

Girija Vaidyanathan:

Haven't yet seen it in NSSO because NSSO does look at source of financing and we have not seen that shift happen. But that was still 2017-18. But we do see it in reality. We see it in our maid servants and all that. Healthcare is one of their main causes for borrowing.

Indrani Gupta:

But they are not borrowing from the market?

Girija Vaidyanathan:

No. they are borrowing from home loan sources.

Nachiket Mor:

Market or no market, the reality is they are borrowing from somewhere.

Girija Vaidyanathan:

But it will come out. Because there is a nice question there, which is, what is the source.

Sandhya Venkateswaran:

Thank you. I want to move to Mr Mishra. One of the slides that we showed at a national level was between 4 and 14 OOP went up but there was a drastic reduction between 14 and 18. Again there can be two schools of thought here. One is that utilisation of public facilities both inpatient and outpatient went up considerably. So that could have contributed. But there is also a school of thought that has looked at data on overall consumption of hospitalisation and shown that actually that reduced which makes a case for perhaps they have forgone care. This was the time just after demonetisation etc. What are your thoughts on what were the main drivers of the reduction in OOP and I am going to look at Indranil because he has done some of this work and Indrani has been looking at this question? So, you should also both feel free but first to Mr Mishra.

C K Mishra:

Before I get into that let me just quickly respond to a few issues. Thank you Nachiket for that excellent perspective. You know, what I like best in your statement is that MNC has done what next. This is the dilemma that public policy is facing today. When the 2017 health policy for the country was being written, days and days the debate was on only two things. One was whether to put 2.5 of GDP or not and the second was what to do.

Sandhya Venkateswaran:

And nobody knows where the number 2.5 came from.

C K Mishra:

This 2.5 came from all kinds of analysis which I don't know what data was used. But the country is stuck to 2.5 and incidentally, now that she has asked it... the Prime Minister asked me, he was not in favour of immediately saying this will be a guarantee of 2.5. So, he asked me how have you arrived at 2.5? I was as fudgy then as I am right now.

Rajeev Sadanandan:

So, anyway let me just answer. There were two reports that came out. One was the report the high-level advisory commission Dr Srinath Reddy and the other one was the Sujatha Rao's commission Macroeconomics. These are the two reports in which this number I saw for the first time.

Audience:

They also had referred to some other report. They are not the ones calculating it. (Multiple persons discussing)

C K Mishra:

2.5 is good enough and let us reach there first. To your second issue Nachiket, I have a slightly different point of view. Not so much in terms of statistics and arriving at a decision because you have a set of data before you. But more as a person who has seen how it works in the field. How it works. You know, minds of people who are not too well is not determined in a particular way that we think that health system needs to take it. It works in various ways. So, when you say you made that comparison between France and Germany to say choice versus forced, I fully agree on the design part. Yes, it is a design fault that... but when you say that the results have been much better, we presume that if I am forcing you, I have a place where you can be accommodated. In a state like Bihar or UP for example, where I do not have a place to accommodate you, I myself don't have a choice, what choice can I give you?

Nachiket Mor:

Which is why I was referring to Himachal and Kerala and Tamil Nadu. I fully recognise what you are saying.

C K Mishra:

On that question of Himachal also this overdrive of primary healthcare may not have resulted in the best possible things subsequently, but at least gave Himachal a much better health life compared to other places. So, I would not worry too much on that extra wasted expenditure so to say. But we should have the ability in our policy parameters to convert that expenditure and get something better out of it subsequently. On the third issue of this debate on C-section. Merely having more C-sections does not necessarily mean a good health care delivery system. In fact, I would say, having higher than normal C section is an aberration in healthcare. What would justify that is the survival at the birth. If that is improving you can justify the C section. If that is not improving, I think wherever the resources for C section comes from, whether it is public or it is personal or it is whatever, that resource we can put to better use if unnecessary C sections are done away with. So, this is my point on that. Access, affordability on health everybody talks about. Let us add two aspects to it now since he says the demand in Kerala is changing. One is quality. And the fourth aspect which we do not discuss and that is the glaring problem in healthcare delivery is equity. Access, even where access has been created in rural areas remotely in Bihar and UP, one question which needs to be asked is, is it available to the women of that village. Most of these...these are issues we need to very carefully look at. And I found this very interesting that in Tamil Nadu private practice of the doctors is leading to a push in both the public health facility and the private health facility. In Bihar, the private practice allowance has actually led to the decline of the public health facility. The reason is that those who are doing private practice hardly go to the public health facility. They expect everybody to come to them. So, it means different things to different places. That is why I said initially that how the mindset reacts on the ground level is very critical when we are talking about healthcare. So, I always feel that public funds need to be catered to be used differently in different places. And when the national health mission parameters used to be set, the unfortunate part was that we thought that the same thing will work everywhere. I mean, much

that we tried we were not able to change. So, I really don't know how we have gone about this. And to be very honest that is the only program which has withstood the test of time and done well. Indrani it will for the simple reason that with the same kitty you are trying to work on something else. They are unable to decide. That is the biggest problem. Now, in Bihar, in particular this whole issue of hospitalisation and reduction in hospitalisation is a factor of two things. One is much of it does not get captured in Bihar. There is a huge hospitalisation from Bihar happening outside Bihar. Which many of the surveys do not capture. I don't know what the data sets show. It does not in no way mean that Bihar is out of the... into the neuro aspect. No. There could be two situations A) where you are not capturing the data of hospitalisation and B) where we are allowing for treatment at places where our facilities do not exist, at places which do not get recognised and therefore do not get captured. I still believe that in healthcare delivery India has moved ahead very much. But we have not been able to do our basics still right. And that is to decide who needs what. That is a very complex exercise. (Multiple persons speaking) Indrani is been quietly sitting and noting down everything.

Sandhya Venkateswaran:

Indrani is coming at the end. So, that is why.

C K Mishra:

And she wants to do the final bouncers in the final over. You would have done all the batting by then. Anything else I missed out which you want me to respond to?

Sandhya Venkateswaran:

Actually, you missed out my question completely. What you said was very helpful. What happened between 14 and 18?

C K Mishra:

2009 to 14 were years... because you compared from the base... were years which were phenomenal for the health sector in Bihar. It really turned around. And I mentioned earlier also that 14 onwards we have seen a decline in that and it is a factor of accessibility and affordability only and nothing else. If you do not make things accessible this will happen. If you do a study on 18 to 20, you will find the same trend and perhaps a more sharper _.

Sandhya Venkateswaran:

This leaves me with a last question to the panel Rajeevji. I did say I think before you came in that the data we have used is NSSO the last data set is 17-18. There has been movement in Kerala since then. The family health centres etc. To what extent has that changed the public private utilisation mix?

Rajeev Sadanandan:

The reason I tried to opt out of this is that once you get me going, you will over shoot the time. That is why I want to... 2014... actually what we looked at was 2014 NSSO data. I took that to the finance minister who was my macro professor. In spite of all the great things we are saying about Kerala public sector only 34% of the people go to the government sector and when you look at the reasons for why people don't go, the reason given was not quality. Quality is even now very low. Quality is considered to be excellent in government hospitals. The reason

was that the required specialties are not available. And too much of crowd. I said look this is what is being _ . Our finance minister is a great admirer of NHS. I said, do you know the number of people per primary care team manages? 4098. Do you know in Kerala how much it is? 30 to and it goes on. He said how many do you want? I want one per 5000. He said forget it. I can give you one per 10000. So, that is what we did. For one primary health centre we had three doctors, four nurses, two lab technicians and two pharmacists. What Nachiket said was the assumption also that we actually go out, proactive primary care for the registered population. But again, the problem is that we don't factor in all the factors that will come in. The moment we increased the primary care, what happened was the number of curative cases just went up. The outpatient care just shot up. And because we are offering high end diagnostics in primary health centres like HPA1C and so on, there is lot of shifts that happened from private into government for those areas which would suit them. So, if you are giving insulin they will go get diagnosed in the private hospital, pick your insulin from here. Lots of things. So, the danger of policy making without looking at the factors and expecting that the condition at T plus 1 in which... at T 0... at which you design your policy will hold a T plus 1 is nonsense. But if you can keep tracking and identifying why this is happening and then take corrective functions that works. But the good thing that happened was that when covid stuck because there were three doctors and four nurses at the primary health care, our first line treatment centres could be managed at panchayat levels. And that was a huge positive spin off of what happened. So, I know I think I bypassed your question. But... ok. One more small thing. When I looked at the growth of the health sector in Kerala, after 1975 I have argued in an EPW paper, that it was a private sector that kept Kerala healthy. When government withdrew after the fiscal crisis in 1975, the private sector... because the demand had already been created. The private sector stepped in to address the need. And again because... as Nachiket said... because government investment was happening in larger hospitals and cities, these husband and wife teams would move to smaller towns, set up their hospitals. It is these hospitals that kept Kerala healthy. But after 90s, there is a study that my current organisation hopes to take up soon, the mode of financing of private sectors changed. Now corporate hospitals are coming in and they are eating up the small hospitals. So, the whole pattern of healthcare is changing and we have not studied the... one thing that we hope to study because this is public data... is to look at the investment patterns. And many of you know that many of the hospitals are not owned by Indians. They are owned by a venture capital in south Africa, in Hong Kong and so on. So, nobody has studied this. So, the way the health sector is changing, the private sector is changing, at least in the metros and the southern states is something that I think will have a large impact on how health sector will grow. We hope to produce a study and this is the first cut on how that will happen.

Sandhya Venkateswaran:

Before Indrani comes in, although to what you said Rajeev, thank you, a follow up question could be around the health workforce. But maybe we will talk about that over lunch. We should take some questions and then Indrani can do her bouncers. Is anybody also keeping track of questions that are coming online?

Audience:

You said pharmacy is more important than anything else. So, is it possible to have a pharmacy distribution through __ and to reach the patients? Is it possible to make it reach the patients, the medicines instead of going to hospital?

Nachiket Mor:

He is saying is it possible to have medicines reach people rather than them coming to hospitals.

Rajeev Sadanandan:

Let me say that a pharmacist dispensing a schedule H drug is illegal in India. Unlike in US and Japan, where there is a physician assistant formulary which the pharmacist can dispense. In India a schedule H drug cannot be prescribed or dispensed by a pharmacist.

C K Mishra:

The second point. The number of the pharmacies that we are talking about in India is actually a medicine shop. Because there is no pharmacist in every pharmacy. (Discussion by more panellists not clear)

Nachiket Mor:

I was making a slightly different point which is that, pharmacist is already there in the community. The Ujjain study and the Orissa study point it out. The average citizen is not more than a half hour walk from a pharmacy, a well-equipped pharmacy. Including the medicine shop. But it all has medicines. The medicine shop is also not empty. The point of course being made is that are they qualified to do what they are doing. The opportunity today which I explored in my paper is because we have newer guidelines of telemedicine, we have newer guidelines and there are actually players on the ground today, this is an entity called GEO for example that is working on this on the ground. It has used the pharmacy as the place where a lot of pre diagnostic work is done. Then connect via telemedicine to an authorised physician. And then once the prescription is available again come back to the pharmacy. The government has also launched a very nice program which I am hoping become more popular. On a diabetes educator, which is a five day program. Short program which again the pharmacy is in a very nice position to operate. There are actually 40 countries which you can study through the report which have explored how pharmacies can be turned into powerful engines. Nigeria amongst four countries, Indonesia and of course France has virtually made them full service primary care providers.

Girija Vaidyanathan:

The not so successful TB program we tried to use pharmacies. I think that part really worked. We tried to find out data of which are the people receiving TB drugs so that we could at least contact them as he said go after them. That said, our TB program has much more work to be done but the pharmacy did provide a lot of information because again our problem with TB is follow up and making sure that the people complete their TB treatment.

Sandhya Venkateswaran:

Indranil, you had a question. Sorry before Indranil...

Parth (Audience):

Thank you for the great discussion. My name is Parth. Two points which I feel were not very well discussed. One is quality of care and impact on OOP and one is medical education. A few experiences I want to share. I have worked in CMC Vellore. When I graduated from there, I

was there in Tamil Nadu for eight years. I have received patients coming all the way from West Bengal in an ambulance. Coming all the way to Vellore for treatment. I am now in Maulana Azad medical college. I am doing MD in community medicine. Around Maulana Azad medical college itself I have seen five informal healthcare providers. So, going out in the community, informal providers sitting 100 meters away from where I sit. And I don't get those patients. He gets all of them. So, quality of care again and to quote people they have said – doctors don't know how to talk. Which again I feel no matter how much we invest in health system... which brings me to the point of medical education and training which is severely impacted in our country. Like you mentioned medical cost is mainly drugs and diagnostics. Now medicine in my personal experience is not as much as clinical as it was previously where diagnosis was more clinical. Now it is more diagnostic based. So, what role does medical education play in this because I personally feel it is impacting out of pocket expenditure quite significantly. And how do we address that.

Sandhya Venkateswaran:

Indranil, would you also share your question and then we will request them to respond.

Indranil Mukhopadhyay (audience):

I am Indranil. Very enlightening conversation and a very good paper. I think like the core part of the paper there is also this element that the NSSO data needs to be looked at the way the methodology needs to be revisited. And there is a conversation and why I am saying it apart from many other reasons, the ability of NSSO to capture NCD related or chronic care expenditure needs to be re-looked at. Because we are a country where public expenditure is almost static and we are seeing overall health expenditure going down as a percentage of GDP. There could be a measurement issue here as a whole. Other are two quick observations. I liked Nachiket Mor saying that choice is something which needs to be revisited and choice and comprehensive service provision go hand in hand and we cannot depend on choice only. But I the role of public and private they are not dichotomous and it has come through and the whole public investment has been to strengthen private sector growth. Growth of market in healthcare without much regulation. I think we need to look at this also significantly. Why so much tertiary care? Because it is the design to create more specialized care and the market for it and I am not saying there is somebody doing it consciously, but there is that complementary relationship. We have created two distinct products. One is a public sector where MNCH services will be provided and people go and know that this public facility in most part of the country will not provide NCD care. So, they are not seeking care. That product distinction has been created at micro level and also at the larger level which needs to be looked at very systematically. One small observation and I will close. The role of public investment in bringing down prices, we have seen that in Rajasthan also. Our WHO study when the Rajasthan free medicine initiative came in and this I quote, all the pharmacies were finding it difficult to make business. They have boards 30% concession on MRP, 40% and one of the private pharmacy persons said that – before I never used to get to eat one time food peacefully. Now I am eating 5 times food without disturbance. In the sense I didn't have the time to even eat. One private pharmacy near a medical college hospital. So, that is the reality, it brings down prices, but I think we need to consciously like many of you are saying the product mix has to be now reestablished and comprehensiveness needs to be brought in.

Sandhya Venkateswaran:

Rajesh very quickly. That should be the last and very quick question.

Rajesh (audience):

Just to add a few observations in line with all that have been discussed. A few things that I would recommend to be considered on the table if you are looking at the impact of public financing on health. Primarily with little investment and focus around regulation, both at the central and the state level, especially when we are looking at out of pocket expenditure, the kind of prescription practices, or the availability of drugs. A little investment around PFM systems that actually govern fund flows and how funds are utilized at the service delivery unit level. And investments along that probably help improve the health outcomes with the same set of resources that we have. And finally looking at a serious work around a comprehensive public investment management framework. With all the money that is going into capital investments through 15th finance commission, through PMABHIM, and all other sources, through the life cycle of these investments we do not have a perspective plan. And probably that is impacting the kind of outcomes that we are looking at.

Sandhya Venkateswaran:

Thank you, Rajesh. Thoughts and responses very quickly.

C K Mishra:

Most of them were suggestions and observations. But something that has got my imagination is his statement that “doctors don’t know how to talk”. One of the causes of the low footfall in public sector in many of the states has been the interaction or the behavioral issue between the doctor and the patient. And this is something unfortunately no medical syllabus has inbuilt into it. I will give you an example. Successively for about three times or four times in two months doctors in Safdarjung and RML got beaten up by angry attendants. Very unfortunate. This standard response would be overcrowding, no facility, we can't tell. I went deep into it. And realized that there was a behavioral issue as well. How you talk to the attendant of a patient to whom he is so emotionally attached and is at the last stage or whatever criticality is very, very critical. In fact, that is why in 2018 we made it mandatory that all CHS doctors of central government will have to do a course post their MBBS at NIIFW which would be an induction course for them so that we get some people to talk about these issues. It is not just and there are various things that impact a person going to a public health facility.

Girija Vaidyanathan:

Example of CMC Vellore, is a case in point. One is the attitude, the overall culture there is different. But I completely agree that if you take western countries for instance, NHS with all its problems the doctors are specifically trained in how... one of their things is they treat the patient wrong, it is very serious. Indranil’s point, I just wanted to enforce it, what you said about free medicine scheme. It was not just government expenditure. It was government expenditure in a particular item that will definitely reduce out of pocket. So, government expenditure I said is not a monolith and a scheme which goes to reduce take medicines for NCDs or take medicines to the people will definitely impact out of pocket expenditure. And that is the kind of, what should I say, granularity we may need to discuss.

Nachiket Mor:

One response to the medical education of doctors and what they should do. See, the reality is that these are all market forces operating. We can say where you will hear many people say such and such is important in Bihar, such and such is important, gender balance has to be better, men have to be more friendly, good statements of intent, no actionability. Because you can't do anything about these. These are what system theory we call gravitational forces. That need to change but it would take 200 years to change it. The view I have taken in one of my papers is that I feel we have a poor understanding of primary care. If we think the primary care equal to doctor, in my paper I identify 17 characteristics of primary care. Half of these is the doctor. It is an important component. But it is not the most important component. In fact, the countries that have been more successful I cite two examples, one from Iran and one from Alaska, they don't use doctors. Because how will a doctor ensure adherence? How will a doctor ensure... doctor will ensure you came in, I spent 30 seconds, I gave you this medicine. Actually, the journey doesn't even begin there. Did you come for the right thing? Did you continue to take your medicine? I would say we need to think a little bit more differently. In that paper we report a very nice experiment with ANMs in Pune in Maharashtra. Palghar district. That somebody did very successfully. Thinking about how to make a protocol based primary. And that is the other point that was made. It's moved from clinical to diagnostics which means it has moved from the doctor who is a black box AI, we don't know how he reached his judgement. And I cite evidence of massive errors. The UK GP, 70% under referral of cancer. because he has got a population of 1500 people. How is he going to see all the cancers? Statistics, risk scoring has replaced judgement in primary care. Secondary tertiary care, clearly there is lots more unknowns that people have to respond to. So, maybe the answer is not changing medical education for doctors but actually giving them a very different role consistent with their instinct towards doctors being medicine people, but not people-people to try and see what can be done. This issue that you raised about public sector having played a role. I certainly believe like you that because in healthcare people talk about regulation. I come from a finance background. I used to also be a regulator for a while. On the board and not directly as member of a team. I feel we over emphasize what laws can do, what enforcement can do, what punitive action can do. There is a lot of interest in accountability, right? A doctor ultimately you want him to be discretionary, voluntary, to have the best interest of the patient. You cannot force him to be nice. That doesn't come together. And I believe benchmark competitors is important. Why does Kerala have a terrific private sector? I believe it is because people like Rajeev ensured that it has a terrific public sector. Because now there is a benchmark. Within Kerala you might see the differences. Right? Ma'am is looking deeply at Tamil Nadu and she might not be as persuaded. But if she looks across... I believe one of the reasons why Bihar has a very bad private sector because it has a bad public sector. Bad public sector crowds in an even worse private sector. Because now there is no benchmark competitor. Whereas in Kerala, what Rajeev said I have personally experienced also. It is an outstanding public sector. Which means it is a true benchmark competitor for price and quality. But obviously ma'am's data is an important one. We have to re-examine to see where does it have a rule. But I have a strong belief that where states don't have money, even if they build little like Andhra has done, do a good job of it. Don't try to cover the whole country. That will pretty crowd in good private sector.

Sandhya Venkateswaran:

Thank you Nachiket. No additional questions. Rajeev, quick response to any of the questions that came? No? So, everybody is very keen to hear Indrani. So, I am going to pass this over to her.

Indrani Gupta:

Sandhya, I wish that hype didn't happen. Thank you first of all, Alok and Sandhya for a very thought provoking paper. Because I think this has raised so many questions. So, I will talk like a researcher for a while and then I would go on to actually sum up some of the important points that emerged. I think the title of the paper is basically the answer. The state differences and what we have been hearing since the morning, we have been hearing that there are major state differences in how the health sector functions. Now, one message that should not and I know Sandhya you have been emphasizing, it should not be taken away from this is that health spending does not matter because it does not impact out of pocket spending. Health, total health spending is done for many reasons. One of them being to reduce out of pocket spending. So, I think we have been hearing that over and over again. Your results are very interesting. I would just say one point as a researcher that this last round of NSSO is not to be believed. No country has ever shown a dip in hospitalization rates. Moving forward, so, I think that some of the results that you are getting could be coming out of there. But at the same time, if you look at micro studies on out of pocket spending, I will just quote from something I was reading yesterday, the main determinants of out of pocket health expenditure are demographics like age, gender, place of living, education and income level, household size and presence of comorbidities. Other determinants from a medical status insurance as payments for medical supplies and pharmaceuticals and distance to health facilities. I am quoting directly from a referee journal article. Now that really means that if you are going to look at three periods differently placed in time, so many things have changed in the meantime that you actually cannot draw a robust conclusion on the link between health spending and out of pocket spending. Because it is *ceteris paribus* anymore. Things have changed. Comorbidities have changed, NCDs have come in, your demographics have changed, elderly population has gone up, so, there are numerous other things that are coming in between so that while you are saying it is an association, it is not. You are not doing a deterministic model which is absolutely well accepted. I think the focus on these intermediary factors are equally important. Therefore, even I am not surprised that you are finding what you are finding frankly. Because you can't really look at that in that sense. But it throws up a lot of questions. First, government spending is going to impact on out of pocket, will ultimately link up with out of pocket spending but with a lag. So, your investment today so that other issue with this kind of correlation is that what you spend today, you can't observe a reduction in out of pocket spending at the same time period. So, in a more nuanced analysis probably you will need to do some time lag analysis and we don't know, I mean this is anybody's guess how many years it takes for government investment to show up in out of pocket spending. But sooner or later it will. But maybe moving forward you can think of an analysis where you are able to take into account that time lag. Because it is not contemporaneous. You can't do it that way. The other thing that came out from this discussion is that out of pocket spending matters, but health outcomes matter I think more. Because the models of Tamil Nadu, Kerala, Himachal Pradesh, they show that while your private sector is thriving and people are seeking care in the private sector, your health outcomes are also improving. So, what should we worry about? Should we worry about health expenditure of the government influencing out of pocket spending totally or out of pocket spending of the

poor. So, if we are only going to think about out of pocket spending of the lowest quintile of the population, I think that is where our energy should be focused. Because if the others want to pay out of pocket, it is a normal good. Private healthcare, healthcare is a normal good. Your incomes go up you are going to seek care in this changing world with technology etc. But something else that came up again and again is that it is not only that incomes increase your out of pocket spending on health, it is a big factor called trust. It is not as though the poor will if their incomes increase or do not increase, they are not going to go to the private provider. They might, because they believe more in the private provider. So, there are other factors that matter besides of course, incomes, where incomes do matter. Now, the main point that I was taking away from this is that we saw post covid that government health spending globally surged. There are WHO papers to show that etc. And out of pocket spending was muted. It did not increase because of the lockdown because people could not seek care. What does that show? It shows what Nachiket has been saying, that the market was closed, right? So, there was no market. So, your health expenditure is going up but your out-of-pocket expenditure did not go up. Now, health expenditure of course during covid went up because of all these other reasons including vaccination etc. But the point is that it is entirely possible for health expenditure in one period to go up and not observe anything in out-of-pocket expenditure. So, I would say that we have to very careful what implications we draw from there. The other point is, it has also been proved during covid that countries that spend well on primary care had better health outcomes. There are numerous papers to show that, which really means the spending on primary care is actually... it continues to be the main piece in all our discussions, especially in India in the context of our country. So, maybe in going forward in one of your... I am sure there are three or four papers that this discussion will bring out... one thing could be you can focus on expenditure on primary care and see whether that is impacting on your out-of-pocket spending with a lag and also your health outcomes. Because that is where the states are very differently placed. I was actually looking at health spending comprises your basics on infrastructure, personnel and your rural health statistics that is that only government source that still one can rely on, sorry for saying that... shows huge gaps in Bihar, UP definitely and in many other states. So, suppose you were to invest on personnel and infrastructure today and whether 2.5 came from whoever it doesn't matter, but you do double up your expenditure, will you immediately see a decline in out-of-pocket spending? You may not. Because you are just trying to beef up your primary care. And you have to wait to see what effect it has. In the first instance it might even increase out of pocket spending, if you don't have a continuum of care that is well done. So, something that you were saying actually, that if your primary care is well strengthened but your secondary tertiary care you haven't paid any attention to, then obviously it is going to end up increasing your out-of-pocket spending. So, the second or third message from this discussion was that you not only have to... there is no... I don't think it's really incremental in that sense. Today we will do primary care, later we will take care of secondary. You can't do that. Because that will increase your out-of-pocket spending. So, I think, the continuum of care we have been hearing about a long time, but we haven't functionally used it, which is that when you invest on health and wellness clinics, you also have to invest on all the other parts. Because where they will go from the health and wellness clinic? There is no secondary or tertiary. So, that is going to increase your out-of-pocket spending. So, basically the point I am trying to make here is that government has to spend on surveillance, on health infrastructure, on health personnel, on medicine, supplies, research, vaccination, all of that. The direct link with out-of-pocket spending would be what you are spending on the health coverage program. You may

think of a study where you only look at let's say PMJ or health and wellness centre and PMJ, and the impact on out-of-pocket spending, because that is the direct link of the total expenditure of government with the out-of-pocket spending. Rest of them it takes a lot of time to work through the system and impact. Ultimately if you beef up your primary, secondary and tertiary care in the government sector, sooner or later like Tamil Nadu and Kerala you will see outcomes improving. It may not see out of pocket spending improving because as we have been hearing again and again that a good government sector actually invites a good private sector as well and there is no reason for us to think therefore in states that have a good private and public sector there is any reason to expect out of pocket spending to be lower. Because... but if in those states if you can study if the poor are actually not suffering financial hardships. Because that is their objective is to see what is happening to the poor. Himachal's objective is to see what is happening to secondary and tertiary, going out of a mother and child, Bihar and UP can do something else because they have missing gaps from primary to tertiary, so they have to invest on all of these things. So, I think I just don't want to take too much time. I want to say as the last thing that one point I want to say is that this quality people were asking about. In states where equality is a design issue as Nachiket was saying, quality of care is critical and this is the least studied item in research. Nobody actually studies quality of care. I don't know why that is so. Because it is very difficult, I think to do anything on quality. But whether the doctors are giving less time, more time, taking one minute and writing six drugs and saying go to the diagnostics and get the diagnostics done. All of this is part of quality care. If CSEP can think about doing something on quality as well. Lastly, I would just say that we should encourage state governments and I was speaking to Girija about it, to do their own surveys. NSSO isn't going to happen anytime soon. We will run out of data sets and as I said 75th was also a flawed data set. Let me say something about National Health accounts because that is something I have also been depending on. See, the NHA has a fundamental flaw. And I am part of the NHA committee. And I am still saying it. Which is that, you are using the same data to churn out annual numbers. That is internally inherently a flawed thing. Because your hospital rate is stuck at 2%, right? Sooner or later, you are going to see out of pocket spending coming down as a share of governments, in the total health expenditure. So, I don't think we can rely for national estimates or state estimates on an unchanging set of parameters which is what is right now happening with our thing. So, states have to invest on tele med, their own service to get the right answers on out-of-pocket spending and health outcomes. We should. And health outcomes I think the last point is that, let us also move beyond out-of-pocket spending because one thing has been well established that out of pocket spending is not the most important indicator of better health outcomes. So, we need to kind of go to two points. Outcomes, especially outcomes for the poorest. Thanks.

Sandhya Venkateswaran:

Thank you Indrani. That was amazing. I had promised Mr Mishra that we will not go beyond one. So, I am not going to take time and just going to thank everybody for coming, for being a part of this and for this very, very rich discussion. Lots of new potential strands for our work. Let us see where that gets us. Thank you so much.