## Qualify, Dont Rank Milind Sohoni Head, CTARA, IIT Bombay <u>sohoni@cse.iitb.ac.in</u>

Once again, students of class XIIth nationwide have been roiled by stress and uncertainty. This time it has come from the Supreme Court pronouncements of April 11 and April 29, 2016, ordering a review of its own earlier judgement of July 18, 2013 quashing the Medical Council of India (MCI) from holding NEET. It is interesting to note that these have come from a bench led by Justice Anil Dave, who was a member of the bench which gave the 2013 decision, but who had a dissenting opinion. Thus the situation has reverted back to what before July 18, 2013, i.e., when NEET was present. NEET is of course, the national examination to be held by MCI or its agent (CBSE, in 2016) to qualify and rank students who wish to undertake medical studies after XIIth. Every college, whether state or private, must now use NEET ranks for admissions. Specific reservation policies of states should now be implemented through NEET.

Let us briefly review the basis for MCI to conduct such an exam. MCI is a body recognized by the Govt. Of India (GoI) and charged with (among other things) the regulation and control of the quality of medical education across the nation. This authority is vested in the GoI by Entry 25 of the Concurrent List of the constitution of India. India began by Education being a domain of activity for individual states. However, by the 42nd amendment, the center may intervene in the items which are in the concurrent list, in this case, Entry 25, *Education, including technical education and medical education and universities, subject to the provisions of Entries 63, 64, 65 and 66 of List I; vocational and technical training of labour.* It is Entry 66 which applies and which we reproduce here: 66. *Co-ordination and determination of standards in institutions for higher education or research and scientific and technical institutions.* 

Thus, we see that the center can indeed intervene to create and maintain standards. This is the basis which allows the center to run various agencies such as the AICTE or the National Accreditation Council, or assign such roles to bodies such as MCI. In practical terms, this allows GoI to regulate admissions to colleges, i.e., restrict admission to students of a certain quality. Practically, this is to be implemented by holding a nation-wide exam called NEET. However, here is where the nub is. While we would expect NEET to come up with a test and a qualifying score, what will actually happen is that NEET will generate a ranking, i.e., a *merit list*, which is to be used to order students for admission. Even if we accept that a 6-hour multiple-choice test may be used to qualify students, it is unclear if a ranking is indeed possible and statistically sound. Qualifying a student is done one person at a time while ranking is a two-way comparison. It is also unclear if the right to regulate entry also comes with the right to rank. For example, if a state wishes to improve rural health delivery, it may choose to rank a rural girl from Buldhana district over an urban boy from Pune, or prefer those who will work in rural areas for a certain number of years after graduation,. And it would be useful for the states to have this power. The judgement of 2013 is very interesting for it discusses the nuances of maintaining standards, merit, fairness and the freedom of the state or private institutions to implement a social agenda.

The second important point is the curriculum for NEET or any of the other centrally administered competitive exams such as JEE(Mains), JEE(Advanced) or the earlier AIEEE. Usually, these base their curriculum on CBSE, a central board which caters to a largely urban middle-class student body. The curriculum of CBSE is designed by NCERT, and its guiding principles for the curriculum design of class XII are largely aspirational. Thus, e.g., there are more topics which relate to a universal version of science, e.g., in Physics, there is a stress on electricity, magnetism, modern and atomic physics, etc., as opposed to scientific issues faced by a rural or economically poor

household, e.g., water or cooking energy. In principle at least, a state is free to design a curricula which addresses such needs of its median student body. In summary, the design of state curricula have different objectives as that of CBSE.

In the meanwhile, the states have been using various mechanisms to administer admissions into professional colleges. In engineering, many states such as Maharashtra used the JEE Mains, another CBSE administered exam, and its earlier avatar (AIEEE) for ranking. However, in 2016, Maharashtra will run an MHT-CET, a ranking exam based on the state board's curriculum. At the other extreme, is Tamil Nadu which uses just the XIIth board marks to rank students for all admissions into its colleges. This is truly egalitarian and the outcomes deserve to be analysed carefully.

Possible futures after the (likely) imposition of NEET must be analysed carefully. The JEEs, (both Mains and Advanced), which are used to rank students for the IITs and NITs, and by other states for their own college admissions, offer a parallel. Both are nation-wide exams on CBSE curricula. While there are many centrally-funded institutions in the technical area, with the advent of the AIIMSs, the situation may be similar in the medical education area, i.e., a national pool and several state-wide pools of institutions. So, what does an analysis of the JEEs have to offer? A simple analysis of the data on the JEE sites tells us that in JEE (Mains) of 2012, only 33% of the applicants were girls, and the final pool of students had only 18% girls. For 2013, JEE (Advanced), only 12% of the selected students were girls. As opposed to that, 42% of of the students appearing for the CBSE board exam were girls, and of the top 1% students, more than 50% were girls. Only 22% of the JEE applicants come from villages and in the final composition, this number goes down further to 18%. Students with family incomes of Rs 5 lakhs are 6 times more likely to succeed in the JEE than those with incomes less than Rs. 1 lakh. More than 30% of the successful students admit to having undergone coaching. More than 50% of the selected students come from CBSE. All of these trends continue into 2014 and 2015. Thus, the curriculum does influence who will appear and who gets selected.

In CBSE annual reports, we see that the number of students appearing for class XII in 2013 was 8.08 lakhs which went up to 10.07 lakhs in 2015, a growth of about 25% in 2 years. In Chennai circle of CBSE, the growth was from 11,000 students to about 26,00 students. Students are indeed responding to the alignment of CBSE with national competitive exams. Thus, there does seem to be some evidence that NEET and other nationalised competitive exams will exclude the rural, the poor and girls, and that they conflict with the state's conduct of school education.

A more pernicious possibility is what has happened to engineering education. The JEE has spawned a huge coaching industry. Moreover, most students who get into the IITs are not interested in doing engineering for Indian needs after graudation. Instead, they seek big 'packages' and branded global jobs. An extreme situation of branding has now arisen: close to 90 of the top 100 JEE ranks now choose IIT Bombay or IIT Delhi. Thus, the JEE system seems to be used for detecting suitability for some other professions and socio-economic processes. This aspirational dysfunction and an absence of local students has disconnected the research in the IITs with regional problems. Faculty members have not been able to match their interest or the IIT mandate with the interest of students. The IIT research and teaching model has been copied by regional institutions and their regional relevance is diminishing too. Such a situation may well happen to medical education, with a few elite institutions dominating the choice of "national toppers" and an aligned placement of these graduates into executive and specialist jobs in multi-national companies in the health sector or in branded hospital-chains. This may well become the preferred outcome for graduating doctors and thus distort the basic tenets of the profession.

On the other hand, the dissenting note of Justice Dave does make some important points. The entry

of students with dubious academic standing into medical schools is indeed bad for the profession as well as for the health of the common person. Perhaps, a via media is for NEET to restrict itself as a qualifying exam and not as a ranking exam. This will allow for states to design their own social charter while respecting the responsibility of the center to maintain standards. States may use the state board exam (like in Tamil Nadu) or conduct its own test to rank students for admissions. It will also allow private colleges to function and implement their social agenda. Thus, allowing states to rank and GoI to qualify (by nation-wide exams or otherwise) may preserve the best of both worlds. In fact, this solution may well apply to the IITs and NITs! And it will help re-orient higher education into addressing regional needs as opposed to serving a global knowledge agenda of doubtful benefits for our common people.