

Interview with Prof Praveen Mishra

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Prof. Dr. Praveen Mishra was born in November 11, 1962 in Pipara, Mahottari district. He completed BDS from University of Bombay in 1985, MDS (Orthodontics) from Manipal Academy of Higher Education in 1995 and Post-doctoral Fellowship from MAHE (Mangalore) in 1996. Currently, he is the Professor and Head, Department of Orthodontics at Kantipur Dental College. He has served as Head, Department of Dental Surgery at NAMS (Bir Hospital); Chief of Oral Health Focal Point; Dean, National Academy of Medical Science; and Secretary, Ministry of Health & Population, Government of Nepal during 2009-14. He has also served as the President of Nepal Dental Association, Founder President of Orthodontics and Dentofacial Orthopedic Association of Nepal, Executive Member- Nepal Medical Council. He is the Visiting Professor at BP Koirala Institute of Health Sciences, Dharan; University Dental College, Dhaka. He is the Fellow of Academy of Dentistry International, International College of Dentists and Pierre-Fauchard Academy.



Prof Praveen Mishra

Q: Welcome, Prof Dr Praveen Mishra, would you please highlight on your service to Dentistry and Health System in Nepal?

A: Thank you Dr Rabindra and Dr Asal. It is my privilege to be here with you for this interaction about the profession and I think this is my thirty second year in the profession of dentistry and twenty second year in orthodontics. After I completed my graduation, I joined government health service as a Dental Surgeon in 1986. During those days in mid 80's, the nation was really in need of dentists for taking care of dental health service of the people, which was not easily available outside Kathmandu. For the first time, I was posted in Sagarmatha Zonal Hospital where I saw very poor oral health status of the people, which not only led to the problem regarding their livelihood in day-to-day work but also affecting general health conditions. In those days most of the problems used to be solved by tooth extractions and to some extent by replacing it with partial dentures. Oral health was not given much priority; however the situation has changed now and it has reached to a level where we have so many dental colleges with post graduate studies and specialists in various parts of the country.

Q: Sir, what have been your contributions to Orthodontics and Health System?

A: Well, I was involved in teaching-learning as a postgraduate teacher from 2007 onwards in Nepal; even earlier in 2000, I was involved in neighboring countries India, Bangladesh. I am happy as I could contribute for the starting of postgraduate program in Nepal. In 2007, PG program was started for the first time at NAMS (National Academy of

Medical Sciences). This was the milestone and breakthrough point in the postgraduate dental education of Nepal. However, there was lot of challenges because when you start something new, you don't have everything prepared but with the cooperation of government and other stakeholders; we could manage to start PG program in the country. We could bring out very good postgraduates of first batch from NAMS who are doing very well in their career. It shows that we are at par globally in dental education at the graduate/postgraduate level.

Regarding my contributions to the health system, as I was involved in the government job for several years, I happened to become Dean of NAMS for a period of 9-10 months, then I became Health Secretary of Government of Nepal where I got the opportunity to contribute to the general health of the people. I tried to change in policy matters for the betterment of quality health service. Now we have oral health policy in place which was framed in 2004, revised in 2014; it has guided me to complete some tasks like posting of dental surgeons to district hospitals and regulate postgraduate dental education. During my tenure as Health Secretary, Nepal was awarded with UN award, GAVI (Global Alliance for Vaccination & Immunizations) award for reducing the maternal and child mortality.

Q: In your opinion where does the service of dentistry stand in the health system of Nepal?

A: When I joined, dentistry was in a very primitive stage now it has advanced. At present we are at par with our neighboring countries though not at par with the western world. Still we have to move ahead in order to make the availability and

accessibility of oral health service at grass root level; for this we need to regularly hammer the government. During my tenure we introduced health insurance scheme with oral health component. When health insurance scheme comes into play, automatically oral health services will be made available to the people. Earlier, dental services were not available as essential health package of the government health service; which was included later. In last ten years we have really achieved a lot, I hope in another ten years there will be landmark progress in oral health.

Q: Yourself being an Orthodontist, how do you think that Orthodontics can contribute to oral health and wellbeing of an individual?

A: When we consider a country like Nepal where 25% people are still below poverty line; reaching to the unreached is the challenge. Regarding orthodontics; it seems impossible but we can have some sort of innovative approach which I think is not very difficult to achieve in reaching the rural areas. One thing has been in my mind for a long time, which I want to suggest is "Community orthodontics program." To prevent the malocclusion to occur and intercept it in the initial stages, we need to design or engineer some sort of programs and policies, which are very innovative. Programs like serial extraction, interceptive orthodontics, functional jaw orthopedics can be implemented through dental surgeons working in the community area. Some guidelines need to be formulated because I remember when we brought Auxiliary Nurse Midwife (ANM) for the delivery at the health post/sub health posts, it was a big hue and cry from the gynecologists. It was designed in such a way that, ANMs were given adequate training and there was a clear indicator for them to follow. Now lots of delivery take place at rural hospitals conducted by ANMs and Auxiliary Health Workers with successful outcome. Likewise we can start some sort of innovative approach. Time has come we need to formulate strong indicators for community orthodontics program which can deliver good outcome and quality health Service to the common people.

Q: Specifically how can "community orthodontic service" be made accessible and available to the common people?

A: I think dentistry itself is a specialized branch and orthodontics being a highly specialized branch of dentistry. We need not go below the level of dental surgeons while designing such innovative package and developing the indicators. Dental surgeons can be trained for 3-6 months who can reach to the unreached at grassroot level through the community orthodontics program. You know the nature has given the stomatognathic system in such a way that it balances most of the things by itself. I have seen the cases with just activator or bionator; the occlusion can be managed so excellently that you need not go for fixed orthodontic treatment.

Q: Sir, are you satisfied with the present orthodontic service and education system in Nepal?

A: Yes, however we are not perfect at present but we are striving for the perfection. We are moving towards the perfection of the profession and I think that the excellence is a gradual process. We need to see how best we can achieve that through the best clinical practice, best academic programs and quality service to the people. If you see the development of orthodontics through Angle's time it was not one day or one year game, it took decades to develop. Now if you place ourselves in context to Nepal, I think we are quite satisfactorily moving forward and in future we will be at par with the global standards. We need to put our efforts not only as clinician but also as academician and the innovative researcher. We need to see that our students are more positive towards doing something new in the field of dentistry.

Q: Do you think that our orthodontists and residents are adequately exposed to the recent advancements in Orthodontics?

A: We are having a very limited resource regarding the equipment, journal availability, advanced training in different areas of orthodontics; but what I feel is residents should be exposed to everything in general. They should at least master one technique confidently with the overall knowledge on what is happening in the world. Learning is a continuous process. In three years of postgraduate program they cannot learn everything but we should make their view panoramic so that tomorrow when they go to the practice they think of betterment of the patients. They should have a very broad view. They may conceive the things which will lead tomorrow to the betterment of the humanity and achieve excellence and perfection as well.

Q: How is the role of Orthodontic society in Nepal?

A: It was my privilege to be the Founder President of ODOAN. At that time we were very few to start with. I am very much impressed and hopeful the way it is moving forward. I am sure, it is going to be one of the most professional body; which will help the profession as well as government/non-government bodies and general people in time to come. It will reach the quality health service in the field of orthodontic and multidisciplinary orthodontics such as cleft lip and palate involving Maxillofacial Surgeons, Otorhinolaryngologists, Plastic Surgeons, etc. We should come forward and move together for the betterment of the people in a collaborative approach. The time has come to see how best we can engage different disciplines of medicine in order to have our professional recognition for our self-perception and for the service of humanity.

Q: Sir, are you keeping track with the Nepalese orthodontic publications?

A: Yes, I am very happy to see that our publications are regular. It is also indexed and I must appreciate Dr Rabindra and team for your contributions. You have helped us in bringing out the journal contributing your time and effort. I think this is a very good way that we are moving forward in achieving the excellence. However I suggest building a good regional cooperation and exchange among different countries so that we can share our views to their readers and they can share their views to our readers.



Prof Praveen Mishra (left) with Chief Editor Prof Rabindra Man Shrestha during the interview

Q: Thank you sir for your kind words of appreciation and motivation. Now I shall move to clinical orthodontics; how do you decide extraction vs non-extraction in your practice?

A: As the time is moving, the paradigm of orthodontic practice is changing. When we were at the initial stage of practice; we used to treat many cases with extraction mechanics. We used to find that in some cases non-extraction would have been better and in other cases we realized that extraction was required. In cases of Class II malocclusions, we should not hurry for the extraction. We should take into consideration about muscle, bone, joint, dental component and soft tissue profile. Patients themselves are very cautious about soft tissue profile. I suggest that, we should not treat with the norms, we should treat according to need of the patient. There may be one prescription for any disease in medicine but in orthodontics every individual is unique, no other face in the world exist the same. The treatment plan should be centered as per the patient's need. Norms are there to guide where to go but how to go and what to do is completely the business of an orthodontist. When I came in the mid 90's; nearly 80% of the cases used to be extraction, now it has come down to less than 50% in my practice. Non-extraction is getting more common as we know the etiology of the problem. Secondly, when we catch the young patients there are chances for growth modulation. Previously, most of the patients used to be adult but now we have lot of young patients; in whom we can do a lot, we can mold them as we like. If the etiology of the problem can be removed; I think many patients can be treated as non-extraction.

Q: Which appliance system do you generally follow in your practice?

A: When I graduated; I finished as an edgewise-trained person. But with time I gradually shifted to preadjusted

edgewise regimen. One thing I will tell you; in order to know the preadjusted system and to achieve the best result, you need to know the basics of standard edgewise. Like, even if you take a flight to reach a destination, you need to walk in order to reach that particular place. So, that walking is given by standard edgewise technique. Now I have shifted my practice to Roth. I used to work with .018 slot, now I am using .022 slot. Though the Roth prescription is excellent at present time, we still encounter many clinical problems. In fact, the bracket prescription will not do everything, we need to incorporate different bends as required. The first, second and third order bends are very necessary. In my practice, I use lot of myofunctional and orthopedic appliances, and sometimes use completely standard edgewise brackets only; especially in Class III cases where camouflage has to be done. Brackets are generally available for Class II mechanics, hardly any brackets are available for Class III. Once you are well aware about Standard Edgewise system then any technique like MBT, Begg, Roth will be much easier to reach the final destination.

Q: As per your experience, what is the role of muscles in orthodontic diagnosis and treatment?

A: Regarding the involvement of muscles, I encounter lot of Class II cases. In Class II Division 2, commonly there is posterior path of closure of the mandible; which is because of the interference from the upper incisors. If we get to see younger patients, it is easy to treat such cases. Sometime they may refer to ENT surgeons; but the patient will not get rid of finitus, TMJ problem or earache; eventually the patient will revert back to us. And, we find that the reason is posterior part of closure of the mandibular, condyle is impinging on the glenoid fossa in the posterior aspect and it is creating the whole set of problem. Muscles are always strained with the wrong positioning of the mandible. The moment

you align the anteriors, bite is opened up, mandible drops down, neuromuscular reflex gets broken down, mandible will fly forward; as a result, all the problems will be corrected. Within 6 months time the patient's profile will change from posterior divergent to orthognathic without any extraction; merely with correct diagnosis on correct time with correct mechanics. Leveling and alignment create miracle in Class II Division 2 cases. In Class II Division 1 cases also; we should not be in a hurry for extraction, because most of the problems are due to narrowed inter-canine width. The moment we align it and increase the inter-canine width, the mandible will move forward. Initially mandibular inter-canine width is wide, maxillary inter-canine is narrow; so mandible cannot fit and it moves in backward or lateral direction creating full set of problems. Hence in Class II cases; after leveling and alignment we should once again review the case for extraction decision.

Q: Which protocol do you follow for space closure in extraction treatment?

A: In my practice I try to control and conserve whatever anchorage is indicated. I do retraction of canine both by loop mechanics and sliding mechanics. But sometimes we need to modify the mechanics. Sometimes I go for canine retraction immediately after the extraction in order to reduce the treatment duration and at the same time, leveling and alignment is in progress. In such situation, normally I band second molars and take anchorage from the chromosomal arch. When in need, we should be able to incorporate bends like 'tip back bends' even in preadjusted system. It helps in en masse retraction. Specifically for non-extraction case, MBT system is very good; however if the patient cooperation is not good MBT alignment takes longer time. If you do not give much time in alignment phase then the friction arises, which itself cause either the rotation of the molar or anchorage loss. Sometime depending upon the patient cooperation, I also decide the bracket prescription. If the patient is very cooperative, I do retraction mechanics with MBT even for space closure.

Q: In spite of doing a very good case, how often do you encounter relapse?

A: There are few things that we need to consider regarding the relapse; and sometimes we cannot avoid it. Relapse not only depends on treatment plan and mechanics, it also depends on patient cooperation. I feel that, when we move the teeth much further like in extraction cases we should consider fixed retainers. Patients should be encouraged to use retainers. Most of the relapse occur when we don't do percision in corrected rotated tooth, when muscles are not in favor, and where the underlining habits are not corrected. Hence, unstable muscles play big role in relapse. Sometimes, overtreatment is good to prevent relapse.

Wherever there is a need, we should go for permanent long-time retention. Also lower incisor positioning is very important for stable dentition. We should maintain lower incisors to the mandibular plane angle and contact between the teeth should be well maintained.

Q: Sir, if your patient comes back to you with relapse, how will you address it?

A: Sometimes patients do report with relapse; may be less than 5%. I ask them whether the retainers were worn regularly. In such case I review my own treatment plan and rarely I have retreated in order to get the patient satisfaction and to maintain my own professional perception. I do not charge them for that. If we encounter such situation, I suggest that if you take the patient in confidence you can overcome all problems.

Q: What are the rights of the Orthodontic patients?

A: The right of the patient is related to consumers' right. Government has already come up with the law on consumers' rights. We are no more in the age of nineteenth century where everything we do is considered correct. We need to justify. If the patient handovers himself to a professional for its betterment; it is our duty to explain up to what extent the expectations can be fulfilled. I feel that, in orthodontics everything cannot be done; only 50% is at our endeavor; rest 50% depends on patient compliance. If patient cooperates well, we will be able to treat them well on time with good results. However, where the patient cooperation is poor, it is difficult for us to manage the case. We should document every step so that if a patient goes to court or consumer forum, we should be able to defend our work. We should be very much cautious regarding patient consent. Consent paper needs to be signed explaining the patient about the duration of the treatment, tooth extraction, appliance used, treatment cost, and all other necessary details. We should be treating the case for the betterment of humanity maintaining the quality health service. At the same time we should be cautious so that we are not sued, and if at all we are charged we should have enough evidence and documents to support us that we were completely on the right track. In fact, these days any professional may encounter such situation.

Q: Lastly, any suggestion to the new generation?

A: I think new generation doctors are much smarter and they are doing very good job. In need of the society and nation, they should consider the profession not only as their livelihood but they should contribute directly or indirectly. They should strive for the professional, social and national upliftment.

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