

## EDITORIAL

# Whither Nuclear Medicine Training in Pakistan?

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I hear there is stirring in the usually ossified halls of nuclear medicine higher learning and those at the helm of affairs are realizing, or saying that they are realizing, the importance of teaching cross-sectional anatomy to the young trainees of this fascinating specialty. This is the only way of keeping nuclear medicine physicians relevant.

Hats-off to the current PSNM executive council to have taken on this project with something of a missionary zeal, and thus the plethora of short courses in cross-sectional anatomy. While this is good, it does not replace need of formal training for young trainees and retraining with some sort of certification and assurance of basic competence of the practitioners of this art.

As an examiner of the Asian Nuclear Medicine Board, I get to interact with young (and some not-so-young) nuclear medicine physicians from many countries of Asia. I have yet to be impressed by a candidate from our country. In the small sample that I have had the privilege of interacting, I have realized that it is not only the lack of knowledge that distinguishes our candidates, it is the lack of "thinking", the lack of trying to use all of the available information and the lack of confidence in clinical problem solving and the lack of any understanding of a CT or MR image. Why is this resistance to learn cross-sectional imaging, hasn't it been an issue for almost 20 years [1].

It hurts because I see so many highly intelligent physicians doing nuclear medicine. That they should be so mediocre when reporting a nuclear medicine procedure is

disappointing and even demoralizing.

Our statistics say a lot, something that I have been heckled at for quoting. Even today our trainee numbers show a depressing trend with only 17 FCPS trainees and 14 MS trainees; MD training positions remain unfilled as do the PET fellowship positions. Generally, we have had more faculty in nuclear medicine than trainees, and that is also true today. Being "faculty" looks good on your CV and who cares if you earn your title or not.

In a country that graduates over 14000 physicians annually, a country where radiology has about a thousand trainees at any given time, less than 30 nuclear medicine trainees means that this specialization is not attractive. Everyone who argues otherwise is misguided at best.

In fact we conducted a professional satisfaction survey in 2013 and found that almost 60% of practicing nuclear medicine physicians were unhappy professionally, most commonly with the quality of training they had received [2]. Of those who trained in nuclear medicine, almost a fifth changed their specialization [3], something quite unheard of in any other specialty. This was something that should have sent our faculty at institutes of training into a huddle. They did huddle, but to circle their wagons instead of trying to figure out what to do to address this issue. One gentleman from one institute suggested that the placement of nuclear medicine training opportunities in a shared newspaper ad was the reason for lack of interest.... I wish he was

joking but he wasn't. Another very senior person starts all nuclear medicine training discussions with his opinion that the PAEC's mandate does not include nuclear medicine or nuclear medicine training..another gentleman, again a shining tower of nuclear medicine training sat for several years on a file with a new training curriculum.

As we slowly reach a critical mass of PET scanners and, as attractive business models develop that can justify this investment, we will attract another kind of attention, that of our imaging big brothers, the radiologists.... I have heard the argument as I am sure all of you have too, that they are already trained in cross-sectional anatomy; they have trained in the PET technique and they can chase a hot spot as well as any nuclear medicine physician... so it makes sense for them to take ownership of this technique and the associated resources.

This has already happened in many places, and in the US there was a move to do away with nuclear medicine residencies altogether, thankfully this was aborted in the face of international opposition from the nuclear medicine community. The clamour has died down for now, but surely not for long and we will see turf battles and new wars for resources.

PET-CT will live on, patients will continue to get services, and very competently I am sure, but whereas radiology is solid, structured and overt, nuclear medicine is subtle and abstract and has one eye always on the lab bench.

Nuclear medicine physicians can join dots that are only faintly visible, their conclusions are often interpolative and their art is at acquiring moving targets, biochemistry, radiochemistry, pathology, physiology, etc., which all interplay before a nuclear medicine opinion is formed... it would be unfortunate if nuclear medicine physicians were to become extinct, to be replaced only by full time researchers in labs and full time radiologists in the imaging suites.

After this jeremiad, you would expect me to come up with solutions too.... Well here is what comes to mind. Strengthen, strengthen, strengthen the training programmes, make it more broad based. It takes time to overcome inertia of changing curriculum at the university or college level, but a Pakistan School of Nuclear Medicine, sponsored by the PSNM but not controlled by it so that it can remain

non-partisan and focused only on its job, would be one solution. The only job that the school would have is look at the weaknesses in the current training programs and offer certification courses to fill these knowledge gaps. We can get this expertise locally or use our network with the Asian School of Nuclear Medicine to get faculty and courses. I am very happy that this idea (initially floated by the present President PSNM) is getting traction among those in the Pakistani nuclear medicine community who feel there is need to fix things.

Frankly I think those at the helm of training affairs have played their innings and need to go home. A changing of the guards is long due, let younger, more mentally agile, more committed members of the community take on the training challenge. We need someone new, someone who can rise to the challenge; design a new curriculum, weed out the obsolete and include the relevant. We should look at the success stories around us, even Iran, living under such heavy constraints for so long has managed to train superb nuclear medicine physicians (an Iranian lady physician stood first in the last year's ANMB exam); India can boast of world class facilities manned by world class personnel. What have we not that the others have? Only the will to give all; once we have that will, I am there will be no turning back.

PS: Please disagree, I would love to see opinion to the contrary and hope this would be published in these very pages.

## References

1. Sabih D. Nuclear Medicine in the Third World; Which way to go? Nucl Med Commun, 1997; 18: 2.
2. Sabih D. Professional satisfaction survey among young nuclear medicine physicians of Pakistan. the Challenges ahead. PJNM, 2012; 2(2): 6.
3. Sabih D. Future Nuclear Medicine Physicians in Pakistan. Rare and Valuable or Extinct and Unnoticed? PJNM, 2012. 2(1): 3.

## Note

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