

## Clinical obstetrical rotation at Tygerberg Hospital in Cape Town, South Africa

The very first moment I walked into the labor ward at Tygerberg Hospital I felt like “this is why I became a doctor”. All my enthusiasm from medical school bubbled inside me. There were no computers and no extra admin piling up. There was just me, my knowledge, my two hands and the very sick patient. The labor ward was often full, with all beds occupied and many women with their big pregnant bellies sitting on chairs, waiting for someone to have time to address their concerns.

Since I am a last year trainee in OBGYN at Södersjukhuset in Stockholm I was quite confident that I would be able to jump right into the clinical work. But it turned out quite quickly that this was a false hope. I realized that back home I have always had back-up from the whole team of colleagues, midwives, nurses, pediatricians etc. But here I often, especially during afterhours and night shifts, had to do every task myself without quick assistance from somebody else. I must draw all the bloods and walk down the hospital corridor-maze to the blood bank to fetch blood products if that was needed. I must be able to put up that peripheral iv line for the patient with BMI 55 who is extremely edematous due to severe pre-eclampsia. You just continue to try until you succeed otherwise she won't get her magnesium sulphate and Neprezol. You run to get the ECG machine from the other side of the hospital and you try to remember where to correctly attach the stickers and the leads. You interpret the ECG. Are there signs of right ventricular dysfunction suggesting a lung embolus? You interpret the chest x-ray yourself. I realized that my knowledge and skills in basic internal medicine and radiology were very rusty and quickly had to be refreshed. When I delivered a baby needing resuscitation it was me and only me in charge of the situation, the pediatricians were often busy with multiple other babies. The advice I got from my local colleagues was “either you swim or you die”.

Pretty much everything in the labor ward was different than what I was used to back home. They don't work in teams with midwives in the same way as we do, I would say they work parallel to each other. It was very hard to get an overview of the ward. The doctors manage the labor during an induction, during latent and active labor until the patient was fully dilated. The second stage was then managed by midwives who called the doctor if the second stage became prolonged or if the CTG became pathological. There was no such thing as “very urgent cesarean sections” since the theaters were pretty much always running on full capacity with many patients awaiting urgent surgery. There was almost no access to epidurals, only occasionally in women with BMI:s over 50 or in women with an underlying heart condition, with a risk for decompensation during labor. The only pain relief that was offered was Petidin. The cesarean section rate was as high as 50% due to the high number of pathological pregnancies. Bilateral tubal ligation or insertion of a Cu-IUD was commonly performed during the c section.

How did I end up here in the first place? Well my contract for my trainee program included the opportunity to do a three month long clinical rotation abroad. I chose Tygerberg Hospital in South Africa because it is an English-speaking country with third world obstetrics but in a university hospital environment. The hospital is known to be an excellent teaching hospital with high academic standards. It is a level 3 hospital which means that all the most severe high-risk pregnancies are referred. The hospital has 8000 deliveries per year. They have a blood bank and an intensive care unit (OCCU = obstetric critical care unit) with four beds. I spent half of my time in the labor ward and half in OCCU.

Since Tygerberg is a referral hospital that accepts only high-risk pregnancies every single patient was more or less sick. Up to 30 % of the fertile female population has HIV but

fortunately 95% of them were on anti-retroviral therapy. However, it was not a rarity to receive pregnant women with fulminant AIDS complicated with for example Pneumocystis carinii pneumonia or other opportunistic pathogens, tuberculosis and systemic candida. Sadly, AIDS is one of the leading causes of maternal deaths in the western cape in South Africa. Many patients had extremely high BMIs and at the moment obesity is a real epidemic in South Africa. Approximately 40% of the female population in South Africa has a BMI over 30. This fact of course has a tremendously negative effect on the disease burden in obstetrics with an increased risk for high blood pressure, pre-eclampsia, type 2 diabetes, complicated surgery, pre-term birth, malformations amongst others. Pathologies that I frequently encountered during my rotation were severe pre-eclampsia complicated with eclampsia, abruptio with fetal death, pulmonary edema, HELLP syndrome and intra-cerebral hemorrhage. I learned a lot about post-partum hemorrhage in a third world setting, complicated with hypoperfusion and hypoxia of the kidneys thus leading to acute kidney injury post-partum. Post-partum hysterectomy was much more frequently performed than back home due to PPH and morbidly adherent placentas.

One difference that I want to highlight is the level of theoretical knowledge and skills that the trainees in OBGYN at Tygerberg have in comparison to the average level amongst trainees in Sweden. First of all, the trainees have to pass a very demanding entry exam when they start their training, which means that the basic theoretical level is set. Then, during their training, every round is a teaching round where the consultant interrogates the junior doctors about the pathologies and the differential diagnosis that the patients present with. Many times the juniors get challenged with detailed questions, which exposes the knowledge gaps. This way of problem-based learning, where the senior doctor puts some well-meant pressure on the junior colleague, is an extremely educating environment. They also have multiple tutorials and journal clubs every week where the doctors discuss different topics and present interesting cases.

Lastly, I want to thank the NFOG fund from the bottom of my heart for supporting me financially and thus making this dream come true. I have learned so much during these two months and it has been a life changing experience for me. I also want to thank my home clinic for the opportunity to do a rotation abroad. I do not take it for granted. I believe it is a very wise investment to make this kind of training possible for the junior doctors. It creates a platform for tremendous development, not only regarding theoretical knowledge and practical skills, but also as a human being.

Best regards

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