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Trachoma in Kenya
Reflections of Ramadan

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التراخوما في كينيا
انعكاسات رمضان

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Editor's Note: *The hegemony in the biomedical field is currently held by evidence-based medicine, which excludes subjective and intuitive inputs. Counteracting this trend, as medicine is inescapably social and for the matter cultural, there has been increasing interest in an approach that is more patient-centered and takes into account the diversity of human culture. The present discourse presents all the drama and paradox of doctors in rural Kenya serendipitously observing how socio-cultural teaching plays a role in mitigating trachoma in a region where it is often considered as endemic.*

We almost became lunch for crocodiles! We travelled 2 days for medical outreach just before Eid El-Fitr. After a less than 2 hour flight, we slept in the nearby town, and then next day hired a vehicle for a treacherous 3 hour journey, accompanied by armed guards with AK 47s to ward off any bandits. After that we walked for 2 hours through ankle-deep mud and then had to cross a river now flooded with torrential rain in this otherwise dry desert terrain. We crossed in a canoe-for-hire, which was actually a leaking dug out tree trunk. The river was infested with hungry crocodiles. Our head guide/guard, Abdalla, kept reminding us what would happen if we capsized: our son would only be a 'snack' while even both of us adults would probably only make a modest lunch for one crocodile!

Once on the other side of the river, we walked a further 40 minutes in the rain, slipping as a usually dusty footpath turned to mud. With no umbrellas, the heat of the desert fortunately quenched the rainwater that soaked our clothes and left us feeling cool. We got to our destination just in time to attend the lunch time prayers in a modest mosque. After prayers, we spent the next 2 hours providing a health clinic for these remote villagers.

There were lots of illnesses to care for: the usual malaria, wounds, diabetes and unusually high numbers of urinary retention due to prostatitis and benign prostatic hyperplasia (BPH) amongst very young men (in their 40s). On the women's side of the mosque, there were the usual maternity issues: family planning, vaginal discharges, breast lumps, and paediatric issues: respiratory infections, fever, and gastroenteritis.

It was so gratifying to be of service in this remote area where the nearest doctor is way back in the little town we flew into at the beginning of our overland journey. One unusual striking feature of this clinic: no ophthalmologic cases. Not a single case of trachoma! It struck us as unusual, as this was an area known for its dryness, lack of basic amenities and poverty, all of them well-known basic ingredients for trachoma.[1] In all remote medical camps, we always see lots of blindness from trachoma. We also see many trachoma sequalae: trichiasis, conjunctivitis, blepharitis, entropion and

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ectropion, which lead to blindness. Trachoma is the second major leading cause of blindness after cataract in our African setting,[2] so why was there no trachoma here? We reflected on this as we traveled back. It was the same setting, same terrain, same weather patterns, similar African peoples, same everything, except no trachoma.

Then it struck us; these people were Muslim! With all the dirt and filth of the environment; with all the poverty and lack of water; these people MUST wash their faces, hands 5 times a day before prayers. The community is 100% Muslim. So they all wash and consider hygiene as a prerequisite to godliness. Then once a day they wash their bodies as part of the ritual preparations for salat prayers! We felt like shouting, "Eureka!" Such a simple thing, yet we had missed it. To our knowledge we haven't seen this written up anywhere. The simple fact of being a serious Muslim, dedicated to prayer, one of the 5 pillars of Islam, is a way of warding off trachoma and its consequential blindness.

In the other places where we had run medical camps, the people were either Christian or animist. People simply do not have enough water to bathe! They have only enough to drink and cook with. In fact, one is lucky to bathe once a month. In one place, the kids could go for months or years without bathing! We reminisced on our ophthalmology rotation in surgery, 20 years ago in medical school.

Trachoma is a leading cause of blindness in the world, caused by the organism, *chlamydia trachomatis.*[1] Transmission is through direct contact with infectious ocular or nasopharyngeal discharges on fingers or contaminated objects such as towels, clothes and material soiled by secretions from infected people.[3] Repeated infections establish clinical disease, which is characterized by a follicular reaction in the superior tarsal conjuctiva. As the follicles resolve, they leave subconjuctival scars. This causes opacification of cornea. In other cases, you have inflammation of eyelid margins with a foreign body sensation. The lid margin becomes distorted and scarred. Chronic corneal abrasion ensues, visual impairment and blindness follows. The treatment in early disease is simple Azithromycin, Erythromycin, Doxycycline, Tetracycline or other Macrolides.

Prevention is simple daily face washing! Why cannot local communities exchange blindness for simple face and hand washing? Realizing all this, the World Health Organization designed the SAFE strategy (Surgery for trachomatous trichiasis; Antibiotics, Facial cleanliness and Environmental improvement) in 1996, with the goal of eliminating blinding trachoma by the year 2020.[3] The effectiveness of this strategy requires to be evaluated and is bound to be different depending on the chlamydial strain prevalent in various epidemic and endemic regions.[4]

In 1995, WHO first published data on global blindness and reported that 15% of cases were due to trachoma. This translates into an estimated 146 million individuals in need of care for active trachoma. Of these, 10 million are in need of surgery for trichiasis (eye lashes touching the globe) and 8 million already blind.[5] Since the bulk of trachoma burden is endemic in poorer rural communities in developing countries (still widespread in the Middle East, Nothern and Sub-Saharan Africa, India, South East Asia and China, but only pockets in Latin America, Australia and the Pacific Islands),[1] an urgent prevention strategy is imperative.

In the light of the SAFE initiative, the F (Face and hand hygiene) is a simple, effective and a cost effective public health endeavour. Using religious norms (such as face and hand washing as part of religious prayers) to effect this trachoma prevention activity is a worthwhile venture. This interface of religion and medicine is a lesson we had not previously conceptualized in trachoma control.

But there is a question we mused over. Why in Northern Kenya do we have so little trachoma, yet to the north east of us in Somalia there is trachoma? There is even more trachoma in Afghanistan.[1] Both countries are over 90% Muslim as much as our Northern Kenya territory (which is 98% Muslim). Why this discrepancy in trachoma prevalence on similar religious terrains?

One easy answer would be security. In Somalia and Afghanistan, the ravages of war and conflict have left its toll on the people. The insecurity means a lack of basic amenities of life (water, food, shelter) as well as less ability to maintain regular 's'alat's' (with the usual ablutions) due to the war problems. Besides, basic hygiene (waste disposal, clean drinking water) is a big challenge in both countries. Insecurity always disrupts community life and displaces people from their regular habits, places and countries.

There may be other reasons for this observation. Some people identify changing weather patterns, different people groups, geographic terrains, socio-eco-

nomic status, religious sects (Sunni, Shia) and available resources as some of the reasons. In our considered view, these do not apply to our situation. The people in Somalia (with high trachoma prevalence) have similar characteristics to the Northern Kenya communities we visited: same sect (Sunni), same terrain, same language, same culture and same people group. The only difference is one of security. In other medical entities, insecurity is a risk for increased prevalence. Could this be the factor we are seeing here? We welcome your views.

Now that was quite a trip. We learnt a simple lesson that medical school did not impart to us. And we had to risk being lunch for crocodiles to learn it!

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