

INDIGENOUS KNOWLEDGE IN THE SCIENCE CLASSROOM: MORE THAN JUST AFRICAN IK

Reflections on a research visit to the Vaidyaratnam Ayurveda Foundation in Thrissur, India

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In an educational era where the 'decolonisation of the curriculum' or the 'Africanisation of the curriculum' receives a lot of attention, it is important to not only consider indigenous knowledge from an African perspective. South Africa, often touted as a Rainbow Nation with its diverse cultures also has a large Indian population, with their own rich indigenous knowledge system, notably that of Ayurveda, an aspect not previously considered as warranting integration into the South African Life Sciences curriculum.

On Monday 10 April 2017 Dr. Divan Jagals, Prof. Josef de Beer and Ms. Camantha Reddy (a NWU PhD student) embarked on a two-week long course on the basic principles of Ayurveda, offered by the Vaidyaratnam Ayurveda Foundation in Thrissur, India. The goals were to gain knowledge of this ancient knowledge systems (dating back 5000 BC), in order to:

- (a) Better contextualize Life Sciences education for the large number of Indian learners in South African schools (by assisting teachers in their pedagogical content knowledge development by means of a short learning programme that infuses Ayurveda principles in the CAPS themes);
- (b) Develop a more nuanced understanding of the similarities between African indigenous knowledge (and African medicine) and Ayurveda.

Ayurveda is an ancient system of medicine, and its starting point is not disease, but health. It is (like African indigenous knowledge) a holistic system of medicine, which contrasts the specialized, fragmented and reductionist approach of modern medicine. It aims to bring about positive health and fulfilment in life by suggesting precise yet practical ways in which humans should conduct their day to day and seasonal activities to avoid pain, disease and ultimately suffering. The emphasis of Ayurveda is on the physical, mental and spiritual wellbeing of an individual, achieved through a detailed design that focuses on a complete healing system for a specific person.

The three students received individualized instruction from a team of medical doctors, and they generally found the Sanskrit terminology challenging to master. The 12-day course provided an overview of both the theoretical and practical aspects of this indigenous knowledge system.



Above: Divan and Josef at the Vaidyaratnam Ayurveda Nursing Home, adjacent to the Foundation; Divan and Camy in the classroom. Below: Dr Reshmi; Dr Rincy; Dr Sudeesh; the students; Dr Navaneeth.

The *Tridosha* theory is the heart of Ayurveda – this entails the three biological energies of Vata, Pitta and Kapha. *Vata* is mainly distributed in the pelvic region of the body, and imparts enthusiasm, regulate respiration and movement of the body and reflexes such as the urinary reflex. *Pitta* again is predominantly located in the abdominal region. Pitta is responsible for controlling metabolism, notably that of digestion, absorption, and also regulating the body’s temperature. *Kapha* is predominantly located in the thorax. It is the only dosha with the property of stability. It controls growth, provide protection and moisturises (lubricate) the body. These three doshas easily become vitiated, which results in an imbalance in the body- which leads to disease. For instance, a pathological increase in vata could lead to pain, dilation of sphincters and blood vessels, insomnia or delirium, to name but a few. Increase in Kapha again lead to weight increase, a decrease in body temperature, and difficulty in respiration.

These basic principles of Ayurveda could be infused in the CAPS curriculum in order to better contextualize Life Sciences for Indian learners. We are planning a short learning programme for Indian teachers in Lenasia, where we will infuse these insights into the existing IK course of the Faculty. This will empower teachers to infuse such Indian IK in the CAPS themes. The research will then focus on the

teachers' lived experiences of this course, and also what transfer takes place in the Life Sciences classroom.



Above (l to r): Camy learning the practicalities of Ayurveda; The three students receiving their certificates from the Director of the hospital, Prof. Dr. Pillai.

The three students enjoyed the course very much, although the conditions of living in the hospital where training took place was a slight challenge- we had to take showers using buckets, and every evening our rooms were fumigated! However, it was a wonderful learning opportunity, and made us all grateful for the standard of living that we experience in South Africa.