CARLA O'SULLIVAN
COMMUNITY MEDICINE

APPENDIX 3: SSC 5c (Elective) Assessment (part1)
Name: Dates of elective: 01/04/2012- 28/04/2012
Elective address: Dharamsala, India
Elective contact / Supervisor: Doug Wysham and Kjersten Gmeiner
Contact address / Telephone / E-mail of elective placement: info@himalayanhealth.com
Subject: Community Medicine

I was fortunate to gain a place on the Himalayan Health Exchange, a US programme composed of roughly 30 medics who set up clinics within remote regions of the Indian Himalayas. During this expedition our team helped bring medical/dental care to 3149 patients situated within six villages, three monasteries and a Tibetan settlement.

1. To describe the pattern of disease/illness of the population in Himachal Pradesh and discuss this in comparison to the UK.

During the clinics I noticed that certain conditions were very prevalent and made up about 80% of the complaints. In the adults these were musculoskeletal pain (mainly lower back and knees), gastro-oesophageal reflux disease (GORD) and painful watery eyes. In the children it was otitis media, helminths and tinea. There was also a wide variety of other more chronic conditions such as asthma, COPD, hypertension, anaemia etc. We were fortunate to come across one or two cases of possible rheumatic heart disease and suspected TB which were sent for further investigations.

I wanted to compare this to the general population of HP and found a study conducted by the Department of Health in India which found the top ten leading causes of disease burden within the area, as listed below in Table 1.

Table 1: *Leading causes of diseases burden (disability-adjusted life year DALY) in males and females of Himachal Pradesh.*

Disease/ Condition (Male)	**%**	**Disease/ condition (Female)**	**%**
Chronic Obstructive Pulmonary Disease	15.22	Iron deficiency anaemia	12.95
Iron deficiency anaemia	8.28	Chronic Obstructive Pulmonary Disease	11.03
Other unintentional injuries	7.14	Diarrhoeal diseases	8.39
Dental caries	4.13	Other unintentional injuries	8.16
Diarrhoeal diseases	3.59	Other infectious diseases	7.48
Asthma	3.46	Dental caries	4.70
Other infectious diseases	3.05	Asthma	3.77
Upper Respiratory Infections	2.80	Tuberculosis	3.61
Lower Respiratory Infections	1.89	Road accident	3.46
Otitis media	1.33	Upper Respiratory Infections	3.07

(DoH&FW, 2003)

I am very surprised not to see more peptic ulcer disease within these statistics because of the vast numbers of patients we saw who presented with chronic gastritis/ reflux symptoms. The % of unintentional injuries is as I would have predicted due to the vast numbers of work related musculoskeletal pain that we witnessed. Anaemia is a prominent illness within these statistics; we did diagnose a number of patients with this condition using our crude Hb testing kit though I'm sure many more would have been undiagnosed through only testing the symptomatic patients. Dental caries was certainly a problem and we were fortunate to be joined by a dentist for 3 of the clinic days who performed vast numbers of teeth extraction due to this. We did see a fair number of respiratory conditions which is in keeping with these results. I expect that if we looked at the different age ranges tinea and helminths would feature in the younger age groups.

In the results table TB is the seventh most common cause of disease burden in women. We saw around 8-10 likely cases out of the 3149 patients that we saw. These were difficult to manage because there is still a large stigma attached to TB here and we were not allowed to directly tell the patient that we suspected it, just that they needed to go for further testing. We were told that the Department of Health would need to be informed to go to the patients home if they did not attend further follow up in order to prevent spread.

Comparing these results with that of the UK there are some large differences. A study conducted by Green and Miles in 2007 demonstrates the top ten causes of disease burden in the UK which are listed below.

Table 2: *UK top ten causes of DALYs*

Disease/ Condition	**%**
Ischamic Heart Disease	8.6
Unipolar depressive disorders	7.8
COPD	4.9
Cerebrovascular disease	4.8
Alcohol use disorders	3.7
Alzheimers and other dementias	3.7
Hearing loss, adult onset	3.3
Trachea, bronchus, lung cancers	3.0
Lower respiratory infections	3.0
Drug use disorders	2.1

(Green and Miles, 2007)

This in comparison to the HP is very remarked especially with regards to mental health. There was no mention of mental health services within the state when we were there so the results may be skewed due to lack of detection rates rather than anything else. Alcohol/ drug abuse again features in the UK and I found that within the villages the females did not drink at all and very few men because within their society it was largely frowned upon. Drug abuse did not seem to be present at all within the communities apart from potentially marijuana which was able to grow within these regions but is still illegal. The other clear difference is that of ischaemic heart and cerbrovascular disease. Here differences in lifestyle go some way to explaining the contrast. The population eat a very good diet- with lots of vegetables, little meats, sugars or fats. They are also very active due to the vast distances and heights that need to be travelled to get to other places and their main occupation within the fields and cultivating the land. Very few people smoked out in the villages, some men reported that they did but no females I came across smoked.

2. To describe the pattern of health provision in Himachal Pradesh compared to the UK.

As within the UK healthcare is free to the people within HP, but prescriptions must be paid for. The rural healthcare system here is basically composed of three levels. At the most basic is the in the health sub-centre, which triages and refers patients to the next level, which is the primary health centre (PHC). At a PHC, a physician and other health workers provide primary care. Lastly is the Community Health Centre, which is the most specialised of the three systems, it functions similarly to the PHC, but caters to a larger population with more expert services (Dhillon, 2011).

On our journey we came across one local PHC which supplied one of the villages but otherwise there appeared to be no local services. Within this centre was a full time nurse and an unqualified practitioner. I was quite surprised that an actual Dr did not work there especially as the PHC is supposed to be the first point of contact for many people in the community and for those who need further clinical input being referred from sub-centres. We were told that many of these centres are new and it will take time to get them functioning at higher levels with better staffing.

Some of the patients who we saw had already received medical input for a particular complaint in the past. None of the patients seemed to know the results of any of the tests or what medications they were taking. On

speaking with the translators it seems that the Drs in India did not tend to involve the patient in any decision making during consultations. This is very different to the Dr-patient relationship here where we aim to empower and work alongside the patient as much as possible.

In the monasteries mainly Tibetan medicine was practiced however the monks discussed that they have been combining this with western medicine and were very happy to work together to provide health care. The Tibetan medicine seemed to be mainly based on observations of the patients rather than any testing; there was one method they discussed known as pulse reading. Here they were able to feel at a number of pulse sites (namely the radial) and decipher the diagnosis based on this and history. The treatment was based on traditional medicines from natural plants and minerals and other therapies such as meditation and acupuncture.

3. To learn, develop and apply practical skills in non-traditional settings

The biggest part about the clinical experience was the environment that we practiced in. We set up our own tents within the small villages and therefore had no facilities for follow up or to carry out routine investigations such blood tests/ imaging etc. This combined with using translators to gain the histories meant that we really had to use our clinical skills in order to come up with a diagnosis. We did have some basic bed side equipment such as urine dip sticks, a basic haemoglobin set and a hand held ECG. So we were able to use these alongside the history to aid our clinical diagnosis. This was difficult at first but later my confidence grew and I realised that most importantly you were able to differentiate between the well and unwell and treat/ refer accordingly.

The amount of clinical exposure that we got was excellent; only the students clerked the patients and then presented to the particular Dr managing the tent. We took the histories, did the examinations, thought of the differentials (with help if needed) and even wrote the prescriptions. Based on our interests we could see a wide variety of patients or stick to one speciality because of the different tents set up at each site. There was always a triage tent and pharmacy, then depending on the population normally about three medical tents, a paeds one and one for O&G. So we were able to rotate through these or if you had any preference you could ask to go to what tent you wanted and in most cases this was always arranged.

4. To better understand cultures and lifestyles in these remote rural areas

I really enjoyed being with the villagers and their way of living. The pace of life was very different compared to the West, it seemed much slower and relaxed. They all had such a genuine nature about them and made us feel so welcome and appreciated. The villagers would often greet you in the street and a number of people, especially in the higher mountains, would invite you in to their homes for chai or food.

Religion played a large role within the different settlements. We saw a number of different religions as we passed through the district; namely Hindu and Buddhism. We were able to see their places of worship- the Hindu temples and Buddhist monasteries. The monks kindly let us observe prayer and spoke with us about their daily regime and the vast number of hours per day that they study for.

Summary

I thoroughly enjoyed the experience both medically and culturally. Going to such remote areas really improved my clinical judgement and skills and revealed a very different way of living. I would recommend the trip to all medical students, especially those seeking some adventure and wanting to improve their clinical skills through practising medicine in non- traditional settings.

References

Department of Health and Family Wealfare (DoH&FW). Himachal Pradesh. 2003. Himachal Burden of Disease - A Study.
Accessed online at:
http://hphealth.nic.in/burdiese.htm
[May 20th 2012]

Dhillon, Sheiry (2011) "From Policy to the Periphery: A Look at India's National Rural Health Mission," *The Meducator*: Vol. 1: Iss. 18, Article 6.
Available online at:
http://digitalcommons.mcmaster.ca/meducator/vol1/iss18/6
[May 20th 2012]

Green. S, and R, Miles. 2007. The Burden of Disease and Illness in the UK
A preliminary assessment to inform the development of UK Health Research and Development Priorities. Oxford.
Available online at:
http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_085152.pdf
[May 20th 2012]