



Nepal Medical College Teaching Hospital (NMCTH, नेपाल मेडिकल कलेज शिक्षण अस्पताल

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ELECTIVE REPORT (STUDENT SELECTED COMPONENT 5C)

HEMA BUDHA
BARTS AND THE LONDON

Nepal at a glance

Nepal is a small underdeveloped country wedged between the Republic of China in north and the rest is outlined by India. Sprawling at an area of 14,7181 Sq. Km, it has been ecologically divided into three regions namely, Mountain, Hill and Terai. According to census 2001, it has a total population of nearly 23 million with an annual growth rate of 2.26%. Average life expectancy is of 59.8 years and almost 90% of the population still live in rural areas and 38% live below the poverty line. Whilst its two giant neighbours are seeing rapid economic growth, Nepal still lingers behind with an annual per capita income of US\$ 240. Nepal is a home to 103 caste and ethnic groups who are largely Hindus (86.2%), Buddhists (7.8%), Muslims (3.8%) and others (2.2%). Although intermingling between these various groups, has occurred over centuries, each group have their own intricate details of cultures and adaptations.¹

Background of mental health in Nepal

In the past mental illnesses in most under developed countries including Nepal, particularly in the rural areas had be largely neglected. Mental illness hardly drew any attention of policy makers or health authorities. Around 1962, a small unit of psychiatry with four beds was established in Bir Hospital which was later expanded to fourteen beds in 1966 and the unit started to run as an autonomous department from the department of medicine. Prior to this, those who could afford treatment, they would go to Ranchi, India. Later, in 1984, a national mental hospital was established with a capacity of forty beds in Kathmandu Valley. At that time only a handful of psychiatrists were present.²

Current Situation of mental health in Nepal

At first, Institution of Medicine affiliated with Tribhuvan University started to offer an undergraduate course in medicine, MBBS. It now also offers post graduate studies including MD in psychiatry. There are three other medical colleges running under this university. The next institution to offer such course is Kathmandu University which has got both undergraduate and post graduate training in psychiatry. Seven medical colleges, including Nepal Medical College, NMC were started under this university. In addition, there are three autonomous institutions for medical sciences training. Now from all across Nepal psychiatric facilities are available with modern medication.²

Within Nepal approximately 2% of the population suffers from serious mental illness. Out of total population, 56.7% (male 7,692,134 and female 7,320,059) is between the ages of 15-64 years. Therefore, the total number of people being affected by serious mental illness is approximately 300,244 in this age group. Similarly, 10%-14% of the total population suffers from depressive illness followed by 4.5% of anxiety disorder. It means between 150,000 to 700,000 people out of 15,012,193 belonging to age group of 15-64 years suffer from depression in Nepal.¹

Describe epidemiology and impact on public health in Nepal because of mental illness such as depression.

According to the World Health Organisation, one in four of the world's population suffer from different forms of mental, behavioural and neurological disorders. It further states that mental disorders account for six of the twenty leading causes of disability worldwide for the 15-44 age group, the most productive section of the population. The WHO has estimated that depression

affects, at any one time, almost 340 million people globally³. By 2020, depression is expected to be the second most important cause after heart disease in contributing to global burden of non-infectious disease. Therefore, it is without a doubt; becoming vital that depression is included as a part of public health for disease prevention and health promotion.⁴

Although no epidemiological studies have been carried out about mental illness in Nepal, an annual report published by the Department of Health for the year 2008/2009 showed that anxiety disorder was the leading cause of morbidity followed closely by depression. Other causes included were psychosis, conversion disorder(hysteria), mental retardation, alcoholism and epilepsy.⁵ A three day mental health camp run at a provincial town in south-east Nepal found that out of 202 patients, 30% suffered from depression. The commonly diagnosed condition after depression was anxiety disorder. Although, this is a small sample and does not represent the entire picture of mental health in Nepal, it does give some kind of evidence indicating the disease prevalence in Nepal.⁶

How does treatment of various mental illnesses including depression differ in Nepal from UK?

Most treatments for mental illnesses are very similar in Nepal to UK. For example ECT is only used in a severe depression which is resistant to drug therapy. Also, Clozapine is only used in a refractory case of schizophrenia and a routine blood test is done in order to assess the risk of agranulocytosis. The patients are warned about side effects and are asked to see their doctors immediately if they notice any sore throat or started having fever. These patients are closely followed up in the outpatient clinics. When there is a compliance issue in patients with schizophrenia then a four weekly depot of flupenazine which is similar to UK is used. Similarly, benzodiazepine is used as a part of treatment for alcohol withdrawal syndrome and lithium is a treatment of choice for bipolar disorder.

With regard to the treatment of depression, those suffering from severe depression are closely monitored at hospital like the forty six year old gentleman from Birgunj, a small town about 300 km from Kathmandu, who had presented with severe depression with psychotic features. He was kept in as an in-patient for several weeks on antidepressant such as Fluoxetine. Other medications included Olanzapine and benzodiazepine. As he had a poor appetite and was not eating well, he was also provided with a good nutrition. Whilst the choice of SSRI as a first line treatment for depression is the same as in UK, a high-intensity psychological intervention such as cognitive behaviour therapy or interpersonal therapy as recommended by National Institute of Clinical Excellence, NICE guideline is less frequently offered in Nepal.⁷

Although there is a substantial evidence to support the use of psychological therapies, particularly cognitive behaviour therapy in the treatment of depression and anxiety, like the UK, Nepal faces challenges in delivering CBT and other psychological interventions due to various reasons including not having enough therapists, expenses associated with the service, lack of knowledge about such therapy, long distance travelling and the unpredictable numbers of session which may be required. Recently, there have been suggestions that self-help strategies are useful tools for delivering psychological therapies⁸, on the basis of which a number of non- governmental organisations are operating across the valley.

Explain different co-morbidities that patients suffering from mental illness present with in Nepal.

Headache is the most common somatic symptoms that patients present with in the psychiatric outpatients in NMC. The descriptions of such headache provided by the patients are not only vague but are also widely variable from one patient to another. Headaches have been established as an independent risk factor for depression and there is a growing appreciation of the fact that depression may coexist with headache⁹. The potential cause for this association may be due to three basic mechanisms: (i) that psychiatric disorders are a causal factor in the development of headache such as migraine; (ii) that migraine causes the development of psychiatric conditions due to repeated and intense pain leading to anticipatory anxiety, perceived loss of control, and other behavioural or cognitive changes; and (iii) that the two conditions may have a common shared aetiological factor such as common genetic factor concerning neurotransmitter which explain the co-occurrence of both syndromes without a causal association between them.¹⁰

Patient presenting with a headache of longer duration (>6 months) are known to have an increasing likelihood of having depression. Simon et al reported that the majority (69%) of patients with a major depressive episode who visit primary care settings complain of somatic symptoms rather than voluntarily admitting that they suffer from psychological symptoms. Identifying depression in those presenting with headache is crucial as treating depression may help to improve psychiatric symptoms as well as headaches and hence decrease functional impairment¹¹. It can be argued that patients in Nepal may not necessarily want to admit that they have psychological problem and hence, show up in other departments such as emergency and neurology. However, it could equally be that patients do not recognise their symptoms which are arising from psychiatric problem due to lack of awareness and only when it takes a physical form, they consult the doctor.

Other co-morbidities which could be frequently seen after headache are hypertension and diabetes. As diabetes is a chronic condition requiring a long term treatment regimen as well as life style changes, it is not surprising that diabetes could be one of the contributing factors towards depressive illness. A recent study involving large community sample of adults aged >55 years has indicated that depression may increase the risk of diabetes by 65%. This finding was statistically significant at 0.04 despite having potential confounders such as family history of diabetes or body mass index controlled. The study also found that such increment in the risk of diabetes mellitus is more significant in individuals with nonsevere depression. This may be because non severe depression is often under diagnosed or under treated.¹²

A similar result was found by Mezuk et al. who conducted a meta-analysis to assess the relationship between diabetes and depression. The study concluded that whilst there is a weak relation between diabetes predicting depression, there is a strong connection between depression and incidence of type 2 diabetes. This may be because the former is associated with poor health behaviours such as smoking, physical inactivity and high calorie intake. It is also related to increased obesity and impaired glucose tolerance as well as potentially impaired physiological changes including activation of the hypothalamic-pituitary-adrenal axis, sympathoadrenal system, and pro-inflammatory cytokines, which can induce insulin resistance and contribute to risk factors for diabetes.¹³

How is patient's understanding of their illness affected by cultural background?

With the literacy rate just over 50%, most Nepalese do not necessarily know that being well does not only mean being physically healthy and absence of disease or infirmity but also include mental health and social well-being as defined by the WHO.¹⁴ Even if they realise that it could possibly be mental illness, the patients may not be aware of the medical support that is available. Due to illiteracy followed by ignorance mental illnesses are seen as being cursed or possessed by evil spirit. In addition lack of manpower and a difficulty in accessing the healthcare, they are often known to have approached the faith healers.¹⁵

Over the last fifty years or so, the face of psychiatry has changed in Nepal. The awareness about mental health in general population has gradually grown. Furthermore, health care personnel such as paramedics are being given a basic training in management of psychiatric cases. The availability of modern day drugs has added a new dimension in management of mental illnesses. Therefore, the psychiatric practice in such a heterogeneous culture with some of the strongly held beliefs is indeed interesting, challenging and at the same time very rewarding.

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APPENDIX 1

SSC 5c (Elective) Placement Registration (to be handed to your assessor/ supervisor at the receiving institution as you start)

Student's name and contact details: Hema Budha
Ha06330@qmul.ac.uk

Elective subject: Psychiatry

Elective location: Nepal Medical College Teaching Hospital
Attarkhel, Jorpati

Supervisor's name and contact details: Prof. Charkavarty
Head of Psychiatry Department
Attarkhel, Jorpati
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OBJECTIVES SET BY SCHOOL

1. Describe epidemiology and impact on public health in Nepal because of mental illness such as depression.
2. How does treatment of various mental illnesses including depression differ in Nepal from UK?

OBJECTIVES SET BY STUDENT

3. Explain different co-morbidities that patients suffering from mental illness present with in Nepal.
4. How is patient's understanding of their illness affected by their cultural background?

APPENDIX 2

SSC 5C(Elective) Assessment

Student's name and contact details: Hema Budha
Ha06330@qmul.ac.uk

Elective Subject: Psychiatry

Elective location: Nepal Medical College Teaching Hospital, NMCTH

Elective dates: 11/04/2011-13/05/2011

Supervisor's name and contact details: Prof. Kajal Charkavarty
Nepal Medical College Teaching Hospital
Attarkhel, Jorpati
Phone number: 4911008 ext. 215

Date of receipt of elective report:

The student should have provided you with a report restating their objectives and no more than 1200 words that address these. A free text area is also provided if you wish to provide further information on the student's performance.

Please rate the student's report: (Circle as appropriate)

A=excellent; B=good; C=satisfactory; D=poor; E= unsatisfactory

(If a D or E grade has been awarded for any of the above categories please give details of the reasons for the poor grade)

General comments on the students performance

Supervisor's signature: Kajal Charkavarty
Pr. D. Kajal Charkavarty, M.D. (PST)



Please return to student while they are with you or e-mail this form back to the student with a copy direct to: mmbs-year5-admin@qmul.ac.uk within one week of receipt. Many thanks for your help (It is generally preferable to complete this form before the Student completes their electives if possible)