#### CONCLUSIONS

Based on the findings and discussions, the following are some of the important conclusions of this study.

#### 1. Sample Features

There were equal males and females in the study at 90 each; however the ratio excluding maternity ward was 59% males to 41% females. Most of the patients were young ones with mean age of 32.4 years. 55.6% of sample was illiterates. 78.2% of sample population were in low income bracket of < Nu.5000 (about \$110) per month. 35% of patients were farmers. 36% among inpatients were Ngalongs, the western Bhutanese. Khengpas were the least at about 9.4%. Though a referral hospital, 56.1% of the admissions were self-referred to this centre out of which about 66.7% were admitted for the first time. 58.3% were admitted for acute conditions. The mean admission duration during the time of survey was 10.8 days. Most of the sample features here point out that epidemiology of diseases in this centre seems to be still restricted to communicable ones.

#### 2. Satisfaction Levels in the NRH.

91.7% of in-patients in the NRH were found satisfied; 8.3% were dissatisfied as per this cross sectional study. Surveyed physicians guessed that dissatisfaction level was higher among patients in this centre. Only 2 of the 16 physicians surveyed and one key informant had guessed dissatisfaction level at 5%; levels ranged from 5% to 30%. There seems to be a conceptual lacuna between perceptions of complaints and expressed dissatisfactions.

# 3. Satisfaction Levels for Different Service Domains at Different Wards

In terms of overall satisfaction, cabin had 66.7% of respondents at high satisfaction level, followed by EENT at 64.7%, surgical at 62.1% and maternity at 60.0% respectively. The last was orthopedic ward at 30% high satisfaction level. All these differences in levels of satisfaction were statistically significant at p values of 0.029. While computing for satisfaction levels for hospital milieu alone, cabin, maternity, EENT and surgical wards topped the list at high satisfaction levels at 55.6%, 53.3%, 52.9% and 51.7% respectively. Differences in these satisfaction levels were statistically significant at p value of 0.020. For satisfaction levels in the provider aspect, order for high satisfaction levels were cabin at 77.8%, EENT at 67.6%, surgery at 62.1% and maternity at 56.7%. Orthopedic ward was the last with satisfaction level of 36.7%. These differences showed only marginal statistical significance at p value of 0.093.

#### 4. Factors for Satisfaction

#### 4.1 Factors with statistically significant associations

Under the hospital milieu, age, ethnicity and duration of hospital stay had statistically significant associations with satisfaction in relation to accessibility. The p values were 0.003, 0.041 and 0.014 respectively. In regards to satisfaction with waiting time, gender, referral status and admission history had statistically significant associations at p values of 0.047, 0.009 and 0.007 respectively. Referral status and admission history had statistically significant associations at p values of 0.026 and 0.021 respectively with comfort in the ward.

Among service domains under provider aspects, disease status and ethnicity had statistically significant associations at p values of 0.025 and <0.001 respectively for satisfaction in respect to nurses' competency and doctor-patient relation.

Age had a significant association with overall provider aspect at p value of 0.014. In terms of overall (combined) satisfaction, again age and duration of hospital stay had significant associations at p values of 0.046 and 0.045 respectively.

Test of differences between means of satisfaction in relation to hospital milieu (3.9127) and provider factors (4.0264) was significant at a p value of <0.001. This implied that satisfaction level in the present study was more driven by provider factors. This further implied that for improving patient satisfaction, hospital milieu factors needed more attention in the future.

#### 4.2 Factors for satisfaction as responded by satisfied patients:

The study proved that free health care that inpatients receive in NRH is still the overriding factor contributing to their satisfaction (49.1%). Helpful, kind and friendly attitude of care providers, their competencies in providing good medical and nursing care were others pointed out in the study (33.5%). They were also satisfied to be receiving treatment from the apex hospital in the country (8.1%). Competent health care workers, doctors willing to listen and give proper advices were other factors (about 7%). Most of these factors related to service domains under provider aspects. Cleanliness of wards and hospital as a whole was also one of the factors.

## 5. Factors for Dissatisfaction as Responded by Dissatisfied Patients

One of the main factors for patient dissatisfaction was in the social support domain viz. excessive restriction to visitors and relatives who wanted to visit them. Others pointed out were inadequate cleanliness of toilets, tasteless food, inadequate communication between doctors and patients, lack of effective crowd and noise control and long waiting time. By and large, dissatisfaction was found to be multi factorial outcome. Only two respondents had one over riding factor each for their dissatisfaction.

# 6. Recommendations for Improvement of Inpatient Services and Patient Satisfaction

Recommendations from satisfied group of patients were analyzed and found to be more focused towards hospital milieu related factors. This was also proved statistically significant, as mean score for service domains under provider aspect was higher as compared with mean score under hospital milieu aspect. The difference was significant with a p value of <0.001. One of the main recommendations was to improve communications between physicians and patients in the provider's aspect (17.2%). Others were provision of a proper bed/resting place for patient attendant at night (14.2%). Improvement in cleanliness of toilets (13.4%), decreased restrictions on visitors (11.2%), noise control and provision of hot water in winter were some other recommendations. Some even recommended provision of TV in the wards as in the OPD (6%). Improvement in attitude of some staff towards illiterate patients and quality of food were others among the recommendations.

### 7. Summary of the Interviews with Key Informants

Manpower shortage was stated as an overriding constraint in not being able to fulfill patients' expectations. However, they were open to suggestions and had always taken complaints or dissatisfaction and other patient and quality related issues urgently and incorporated changes accordingly. Educating Bhutanese patients to value free heath care services was an urgent agenda and the concept of "Bhutanese Doctoring" needed nurturing, advocacy and practice in the socio-cultural and other value system of Bhutanese society. They were also very clear that government is committed to continue free health care for still some time to come.

# 8. Questionnaire Survey of Physicians at the NRH.

The survey showed that physicians were clear in their perceptions of factors for patient satisfaction. They also highlighted lack of adequate staff for their inability to fulfill patient expectations and to optimally follow the twin motto of "Service with Humane

Face" and "Professionalism". Dissatisfaction levels that they guessed were quite high ranging from 5% to 30%. 91 % said that patient satisfaction was associated with theirs, which, hopefully, will remain the driving force for them to work better in a system where there are no private practices.

## 9. Some Limitations of the Study

Some limitations of the study could be discussed as follows:

- 9.1 Surveys are few and far between in Bhutan especially in the domain of health care. The topic of satisfaction was found to be sensitive and subjective in light of free health care and thus a true perception of satisfaction may not have been achieved given the fact that most of our patients are shy to express opinions on care providers.
- 9.2 Inpatients satisfaction surveys are usually conducted after they are discharged from hospital or during time of discharge. Often these are conducted as telephone interviews or mailed self-administered questionnaires both of which were not practicable in the contexts of NRH and present study.
- 9.3 Cut off point of three days hospital stay was used for inclusion of sample population in the study. This may not have been enough. It usually takes some time for patients to evaluate services and form an opinion/perception of satisfaction or dissatisfaction.
- 9.4 The time of data collection was winter and there were not enough patients as compared to summer. This was more so in terms of pediatric patients as some structural modifications were also going on during the time.
- 9.5 20 critical or very serious patients were excluded from the study on ethical grounds and as advised by treating physicians. This would have confounded some results of the present study.

- 9.6 Some of the questions especially on service domains under provider aspect may not have been comprehensible to respondents despite best of explanations. This would have created some response biases.
- 9.7 Nurses who are the backbone of our inpatient care could not be included in the study for various reasons.
- 9.8 The study had some preset objectives and hence not all the information that could be analyzed was put under the rigors of higher statistical scrutiny for a complete and wholesome analysis.