### Shortage of Medicines in the Traditional Medicine Units: A Case Study Deki Choden and Pema Dorji, BTM, Final Year.

#### Abstract

In Bhutan, the sMen-jong So-rig Pharmaceuticals (MSP) is the only traditional medicine manufacturing unit. Since the traditional medicine hospitals are now availing diverse treatment methods for the patients, they are attracting an increasing number of patients every year. This has resulted in the shortage of medicines in the traditional medicine clinics. This study aims to investigate the problems that cause the shortage of traditional drugs in the hospitals. Data was collected by interviewing and administering questionnaires to the stakeholders. The findings of the study indicated a mismatch between the demand and supply of medicines resulting in the shortage of some medicines and wastage of the others.

#### Introduction

Knowing the importance of the health system for the wellbeing of the people, the institutionalizing of traditional medicine in Bhutan was established with the first Indigenous Dispensary in 1968, followed by training programme for the sMenpas in 1971 and then for the drungtshos in 1978. The first mechanized Pharmaceutical Unit was established on 1982 (ITMS, 2010). It started producing pure herbal medicines with the raw materials available within the country and the quality of the medicine is constantly monitored. The raw materials are collected from Lingshi where sMen-jong So-rig Pharmaceuticals (MSP) has its own staff collecting the raw materials and it is even bought from the locality from Lingshi. It is also collected from Gelephu and Trongsa.

It is the only traditional medicine manufacturing unit in the country. The medicines to the traditional medicine hospitals across the country have been supplied by the MSP. Currently it produces 96 different types of medicines as per the demand from the hospitals (MSP, 2012). It has also been manufacturing medicines for commercial purposes. The 10% of the total medicine manufactured is being supplied to the private firms. The medicine that has been manufactured by MSP is directly sent to Drugs Vaccines and Equipments Division (DVED). The DVED supplies the medicines to the hospitals as per the demand from the traditional hospitals across the country.

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In recent times the traditional medicine units in Bhutan have been seeing an increasing number of patients compared to couple of years back. With the increasing number of patients visiting the traditional units every year, the traditional medicine system has become an integral part of National Health Care System. This is mainly attributed to the increasing knowledge and awareness on the benefits of traditional healing in the long run compared to the modern medicine. "It doesn't cause any side-effects", this is what some of the patients visiting the traditional hospital shared with us. As a result, timely supply of the medicines in sufficient quantities plays a crucial role in the delivery of quality services. With the growing number of patients visiting the hospitals every year, today there are traditional medicine units attached to every hospitals across the country.

With the increasing number of traditional hospitals the demand for the traditional medicine has been increasing over time. As per the MSP record the demand for traditional medicine has doubled over times. With the increasing demand in traditional medicine the MSP has been facing difficulty in meeting the demand.

# Objectives

The objectives of this study are to find out the following:

- 1. The factors that cause the shortage of traditional drugs in the hospitals.
- 2. To determine whether the demands of the drugs matches with the supply from the source.
- 3. To investigate whether the patients availing these drugs are using it effectively.

# Methods

In order to collect the required data for our study, we designed questionnaires to be administered to the staff of MSP and National Traditional Medicine Hospital (NTMH) at Thimphu. Questions were centered on finding out the records of the raw materials used to manufacture traditional medicines. We also interviewed some patients regarding the use of medicines. In addition, we collected data regarding the demand and supply of traditional drugs from the people working at the DVED. We used the data that were recorded by their office for the years 2011 to 2013. The data consisted of the demands received by DVED from the various traditional hospitals across the country and the supply of the same by the

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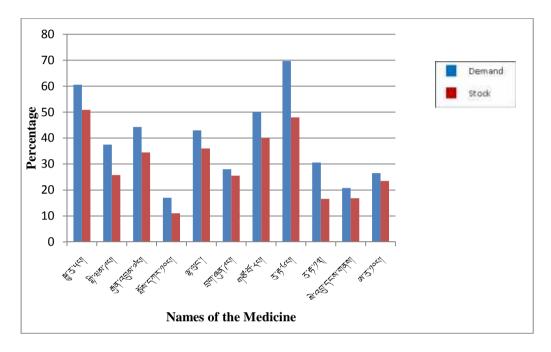
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MSP within a particular fiscal year. Data collected from various sources were analyzed by using Microsoft excel to make meanings out of them.

## Findings

The result of the study indicated a mismatch between the demand of traditional drugs from the hospitals and the supply of it from the source. Among the different types of medicines, the demand on *zla-shel-b.dud-rtsi-ma* has been increasing at a very rapid rate. As per the DVED record, the demand for *zla-shel-b.dud-rtsi-ma*, in the year 2012 was 400kgs from the hospitals across the country. The Traditional Medicine Hospital in Thimphu alone had demanded 100kgs but the amount received from MSP in the same fiscal year was only 60.70kgs. This shows a shortage of 339.3kgs. It is the most demanded and most prescribed medicine since it is prescribed for many ailments such as headache, ulcer, liver disorder, gastric problem, food poisoning, indigestion, worms, chronic fever, colic pain, eye problems, all kinds of chronic diseases, general tonic related diseases and liver treatments. Similarly, the *b.dud-rtsi-gsum-sbyor* is another type of medicine that had run shortage by 18.89%; which had resulted in the lack of the same medicine in the hospitals for more than three months.

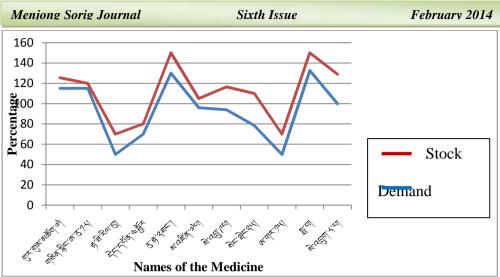
The next is *a-ru-10-pa* which is prescribed for kidney diseases, dysuria, pain in pelvic region, stiffness of legs and renal injury. *Se-'bru-dvang-nas* is prescribed when there is obstruction in channels of circulation, indigestion, and commonly used as an overall tonic and appetizer. *Ru-rta-13* is also a medicine which is used for parasitic infections of five hundred types, stomach disorder and colic pain. *Ba-b.sam-lha-lung* is also short by 14% from the total demand. There are also shortage of *Se-bru-dvang-nas, ru-rta-13, g.tso-bo-8-p, brag-zhun-9-pa,etc.* by huge margin compared to the demand for them as shown in Fig.1.



*Fig.1. Comparision of the demand and supply of medicines.* 

On the other hand, the findings of the study suggested that some medicines are not utilized fully as a result of low demand for them. Fig.2 shows the medicines which are excess in supply compared to the demand from the traditional medicine hospitals in the country.

Fig. 2. Comparision of medicines in stock and the demand from the hospitals.



Since there is a mismatch between the amount of medicines supplied and the demand from the consumers, it is very important for the MSP and DVED to study the demand for specific medicines and manufacture accordingly in order to maximize the benefits and minimize the wastage of underutilized medicines.

The findings also showed that in the recent years, knowledge on traditional medicine healing has increased, which has lead to a huge number of people visiting the hospital compared to the past. However, it varies from people to people and the community they live in. The study also found out that the shortage of medicine is attributed not only to the increasing number of people but also to the inadequate resources available for manufacturing them. The raw materials for those medicines grow in the high altitude areas which are inhabited by nomads. In the past, the nomads used to collect them to sell it to MSP, but nowadays the nomads have discovered better sources of income rather than collecting herbal plants for their livelihood. In addition, shortage of manufacturing equipment has been upgraded to a new technology at MSP, there is still a huge shortage in man-power, which causes the under utilization of the equipments.

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Fig.3. Empty Medicine Containers in the National Traditional Medicine Hospital.



### **Conclusion:**

In Bhutan the MSP is the only traditional medicine manufacturing unit. Since the traditional medicine hospitals are introducing new treatment facilities every year, it is attracting more numbers of patients, who generally belief that traditional medicine cures diseases more safely and effectively than the modern medicine. This has resulted in the shortage of many medicines in the hospitals, which makes it difficult for the practitioners to meet the healthcare demand of the people. However, there are certain kind of medicines which are found to be under-utilized due to low consumer demand.

Recommendation from the study:

- 1. The resources needs to be diverted from least used medicine to the most demanded ones, so as to overcome the shortage.
- 2. Educational programs need to be conducted to the people on the proper use of medicines as some people tend to waste them.

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3. Communication between Traditional Medicine Hospitals, DVED and MSP needs to be strengthened to overcome the mismatch between the demand and supply of medicines.

## References

Lhamo, N. (2011). Health Seeking Behavior Related To Sowa Rigpa in Bhutan.

National Institute of Traditional Medicine. Royal University of Bhutan.

Menjong Sorig Pharmaceuticals (2012) Traditional Medicine Formulary of Bhutan. Ministry of Health. Thimphu

Tandin, T. (2009) Information of Sorig Products. *Department of Herbal Products Rese arch*.Men-Tse-Khang

Wangchuk, P. (2009) Bio-prospecting in Bhutan: Its Scope and Challenges.

Men-Jong So-rig Journal. Thimphu. National Institute of Traditional Medicine.

Wangchuk, D. (2010) An Introduction To Traditional Medicine Services in Bhutan. *Men-Jong So-rig Journal*. Ministry of Health, Thimphu