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**COST-EFFECTIVENESS ANALYSIS OF PUBLIC AND PUBLIC-
PRIVATE MIX DOTS TREATMENT CENTERS IN NEPAL:
A CASE STUDY OF KATHMANDU METROPOLITAN CITY**

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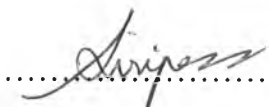
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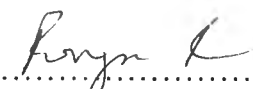
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วัณโรคเป็นปัญหาสุขภาพที่สำคัญปัญหาหนึ่งของเนปาล ประชากรร้อยละ 45 ติดเชื้อวัณโรค
โดยร้อยละ 60 เป็นกลุ่มอายุที่มีผลผลิตทางเศรษฐกิจสูง ผู้ป่วยจำนวนมากเข้ารับการรักษาในสถาน-
พยาบาลของเอกชน ตั้งแต่ปี พ.ศ. 2540 เนปาลได้ใช้แนวคิดของการบำบัดรักษาวัณโรคร่วมเอกชน (PPM)
ในการควบคุมวัณโรคภายใต้กลยุทธ์การรักษาแบบมีผู้สังเกตโดยตรง (DOTS)

วิทยานิพนธ์นี้ได้ทำการวิเคราะห์ต้นทุน-ประสิทธิผลของศูนย์บำบัดรักษาในมุมมองของผู้ให้-
บริการ ศูนย์บำบัดรักษาภาครัฐ 2 แห่ง และศูนย์บำบัดรักษาวัณโรคร่วมเอกชน 2 แห่ง ถูกเลือกเป็นตัวอย่าง
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สูงกว่าต้นทุนของศูนย์บำบัดรักษาวัณโรคร่วมเอกชนซึ่งมีค่า 47.4 เหรียญสหรัฐ ผลจากการศึกษาชี้ว่าต้นทุน
ด้านสินค้าทุนของศูนย์บำบัดรักษาทุกแห่งมีสัดส่วนไม่เกินร้อยละ 9.7 ในขณะที่ต้นทุนด้านแรงงาน
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วัณโรคร่วมเอกชนมีประสิทธิผลใกล้เคียงหรือสูงกว่ามาตรฐานขององค์การอนามัยโลก (WHO) และศูนย์วัณโรค
แห่งชาติ (NTC) ในขณะที่การบำบัดรักษาของศูนย์บำบัดรักษาภาครัฐมีประสิทธิผลต่ำกว่ามาตรฐาน
โดยสรุปแล้วอาจกล่าวได้ว่า ศูนย์บำบัดรักษาวัณโรคร่วมเอกชนน่าจะมีต้นทุนต่อประสิทธิผลที่ดีกว่าศูนย์บำบัด
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สาขาวิชา เศรษฐศาสตร์สาธารณสุข
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ลายมือชื่อนิสิต.....
ลายมือชื่ออาจารย์ที่ปรึกษา.....




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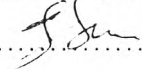
DEVENDRA PRASAD GNAWALI : COST-EFFECTIVENESS ANALYSIS OF PUBLIC AND PUBLIC-PRIVATE MIX DOTS TREATMENT CENTERS IN NEPAL: A CASE STUDY OF KATHMANDU METROPOLITAN CITY. THESIS ADVISOR: ASSOC. PROF. ISRA SARNTISART, Ph.D., 122 pp. ISBN: 974-17-0825-4

Tuberculosis is one of the major public health problems in Nepal. About 45% of the population is infected with TB, out of which 60% are in economically active age group. A substantial number of TB cases (about 40-50%) are being treated by private sector. To manage this bulk of active TB patients properly, PPM-DOTS service seems to be more important. Since 1997, Nepal has been practicing public-private mix concept in tuberculosis control, basically after implementation of Directly Observed Treatment, Short Course (DOTS) strategy.

This cost-effectiveness analysis was carried out in Kathmandu Metropolitan City from provider perspective. Two public and two public-private mix DOTS centers were selected for the study purpose. The evaluation period was first eight months of F/Y 2000/01. Data on providers' costs were collected from DOTS centers. Drug cost/ laboratory reagent cost/equipment cost were obtained from National Tuberculosis Center. Treatment outcomes were collected from DOTS centers.

The average cost per effectiveness in public DOTS centers was about US\$ 110.6, while that was US\$ 47.4 in PPM-DOTS centers. The results also show that capital cost of each DOTS center did not exceed more than 9.7% of total provider cost. But labor costs varied from 17-49%. In public DOTS centers the range of labor cost was 30-48%, while in PPM-DOTS centers it was 17-24% of total provider cost. The observed treatment outcome in PPM-DOTS centers seems to be effective. It was either approaching or better than the standard set by WHO/NTC, while that of public DOTS centers was far below from the target. In conclusion, PPM DOTS centers seem to be more cost-effective than public DOTS centers. In urban area, PPM-DOTS centers could help reduce tuberculosis related morbidity and mortality and hence to achieve National Tuberculosis Center's (NTC) objectives. NTC could increase the efficiency of its activities with private providers. Thus, this study could suggest the wider implementation of PPM-DOTS service for tuberculosis in urban area of Nepal.

Department Economics Student's Signature.....

Field of Study Health Economics Advisor's Signature

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Abbreviations

APCRC	: Anam Nagar Poly Clinic and Research Center
ARTI	: Annual Rate of Tuberculosis Infection
BPH	: Birendra Police Hospital
CEA	: Cost-effectiveness Analysis
DOTS	: Direct Observed Treatment , Short course
DTLA	: District Tuberculosis and Leprosy Assistant
FSB	: Friends of Shanta Bhawan
FY	: Fiscal Year
HHCN	: Helping Hands Clinic, Nepal
MDR-TB	: Multi-drug Resistant TB
NRs	: Nepalese Rupees
NTC	: National Tuberculosis Center
NTP	: National Tuberculosis Programme
PHC	: Primary Health Center
PPM	: Public-Private Mix
PPs	: Private Practitioners
RTLA	: Regional Tuberculosis and Leprosy Assistant
TB	: Tuberculosis
WHO	: World Health Organization