

UNIVERSITI TEKNOLOGI MARA

THE QUALITY OF LIFE AND COST-EFFECTIVENESS OUTCOME OF DRUG DEPENDENCE UNDER METHADONE MAINTENANCE THERAPY PROGRAMME AT KUALA LUMPUR HOSPITAL VERSUS DETOXIFICATION PROGRAMME AT SUNGAI BESI REHABILITATION CENTRE

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ABSTRACT

Opioid dependence commonly results in significant cost to the society through unemployment, homelessness, social instability, criminal activities and loss of economic productivity. One of the main methods of treatment is detoxification of drug users at the rehabilitation centres under National Anti-Drugs Agency. However the relapse rate of detox method seems to be high. Consequently in December 2005 Ministry of Health, Malaysia initiated a drug substitution therapy (DST) with methadone maintenance treatment (MMT) programme to alleviate the problem of relapse. This study aimed to compare the cost-effectiveness of both programmes based on the positive urine test and quality of life (QoL). Eligible patients were enrolled from two addiction treatment centres providing either detoxification or MMT programme in Kuala Lumpur. The positive urine test was obtained from result of urinalysis during this study. QoL was evaluated using WHOQOL-BREF, which assesses *Overall QoL, Overall Health, Physical Health, Psychological, Social Relationship and Environment* issues (responses: 5-point Likert scale; higher scores = better QoL) at baseline and after 12 months. SPSS 15 descriptive and non-parametric statistics were employed for testing. Wilcoxon signed rank test was used for pre- and post- comparisons, where relevant. Groups were tested with non-parametric tests. Incremental cost-effectiveness ratio (ICER) was calculated based on the direct cost involved in both programmes. A total of 106 participants were recruited from Sungei Besi Rehabilitation Centres ($n = 55$) and Kuala Lumpur Hospital ($n=51$). Majority of the respondents were Malay (79.2%) followed by 12.3% Chinese, 6.6% Indian and 1.9% of other races. Most were heroin (69%) and cannabis (13%) addicts. The percentage of subjects with positive urine test for MMT and detoxification were 0 % and 10.9 %, respectively. Independent T-test showed, before treatment the three domains (psychological, social and environment) had similar level of quality of life for both centres. Only physical domain before treatment demonstrated significant

difference between both centres scores ($p < 0.01$). After one-year treatment, QoL of patients in Kuala Lumpur Hospital and Sungei Besi Rehabilitation Centre did not differ significantly in all domains. Thus the increase in QoL score was not attributed to different centre hence the different method used. However, MMT programme showed a cost saving of RM4317.46 per patient per year over detoxification programme. Even though QoL patients in both programme did not differ significantly, the implementation of methadone maintenance treatment in Malaysia showed a saving of expenses by the government in dealing with drug addicts. This information may be used by policy makers to plan future programmes to resolve drug addiction in the country.

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TABLE OF CONTENTS

	Page
TITLE PAGE	
CANDIDATE'S DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS	v
TABLE OF CONTENTS	vi
LIST OF TABLES	ix
LIST OF FIGURES	xii
LIST OF EQUATIONS	xiii
LIST OF ABBREVIATION	xiv
CHAPTER 1: INTRODUCTION	
1.1 Background of the problem	4
1.2 Methadone Maintenance Therapy (MMT)	5
1.3 Research questions	7
1.4 Problem statements	7
1.5 Objective of the study	8
1.6 Scope of study	8
1.7 Significance of the study	9
CHAPTER 2: LITERATURE REVIEW	
2.1 Drug dependence	10
2.2 Treatment of drug addicts	13
2.3 Methadone Maintenance Therapy (MMT)	17
2.4 Other opioid replacement treatments	27
2.5 Cost-effectiveness of Methadone Maintenance Therapy	28
2.5.1 Average or simple	31
2.5.2 Incremental cost-effectiveness ratio (ICER)	32