

UNIVERSITI TEKNOLOGI MARA

**ASSESSING THE UTILIZATION
AND COST-UTILITY OF THE
“SKIM PEDULI KESIHATAN FOR
THE B40 GROUP” (PEKA B40)
PROGRAM AMONG FELDA
RESIDENTS AT KEDAH: A MIXED-
METHODS STUDY**

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ABSTRACT

In response to the increasing prevalence of non-communicable diseases (NCDs) among the Malaysian population, the government has introduced the Skim Peduli Kesihatan untuk Kumpulan B40 (PeKa B40) program. However, the prevalence of the utilization of this health service was reportedly low. This study aims to examine the factors influencing the utilization of the PeKa B40 program and perform a cost-utility analysis (CUA). This study used a sequential explanatory mixed methods design. It involved a quantitative cross-sectional study to examine participants' sociodemographic, socioeconomic, health status, and health-seeking behaviors. Then, focus group discussions (FGDs) were conducted to explain the quantitative results based on the participants' experiences, understanding, and perceived benefits of the program. The study included 237 samples through convenience sampling for the quantitative part and 10 samples through purposive sampling for the qualitative part. This study was conducted at Felda Lubuk Merbau from January to April 2023. The determinant factor for utilization of the PeKa B40 program was analyzed using multiple logistic regressions. The CUA was presented as the average cost-utility ratio (ACUR) and incremental cost-utility ratio (ICUR), while the qualitative part was analyzed through thematic analysis. Data integration was performed to elucidate the quantitative findings with qualitative insight. This study found that the prevalence of the PeKa B40 program utilization among Felda Lubuk Merbau residents was 41.8%. The factors of utilization of the PeKa B40 program were positively associated with age (adj. OR: 1.064 [95%CI: 1.03, 1.10]), the female gender (adj. OR: 2.32 [95%CI: 1.15, 4.66]), presence of chronic diseases (adj. OR: 2.621 [95%CI: 1.28, 5.37]), persistent pain that mildly disturbs daily activities (adj. OR: 3.30 [95%CI: 1.31, 8.33]), and high disturbance of daily activities (adj. OR: 14.34 [95%CI: 2.18, 94.26]). The factors that were negatively associated with the utilization of the PeKa B40 program are poor self-rate health (adj. OR: 0.05 [95%CI: 0.01, 0.47]), intermediate self-rate (adj. OR: 0.25 [95%CI: 0.06, 0.95]) and good self-rate (adj. OR: 0.22 [95%CI: 0.06, 0.82]). The qualitative findings revealed low awareness of the PeKa B40 program among Felda Lubuk Merbau residents, with reliance on healthcare providers for information. The program helped to detect the undiagnosed conditions of chronic diseases. The challenges in the implementation of this program included limited promotion, rural demographic barriers, and stigma surrounding chronic diseases, which may hinder individuals from utilizing the program. The economic evaluation indicated that the total annual health expenditures for individuals utilizing the PeKa B40 program were significantly lower, at RM 571.74, compared to RM 728.74 for those not enrolled. The ACUR for the PeKa group was RM 618/QALY, while non-PeKa is RM 768/QALY. The ICUR for the PeKa B40 program was RM 6452.44 per QALY, which was below the Malaysia GDP as recommended by the World Health Organization (WHO). In conclusion, this study determined that the prevalence of the PeKa B40 program uptake among Felda Lubuk Merbau residents was higher compared to both the national and state levels. The program's success in this locality can be attributed to the proactive participation of healthcare personnel and Felda management in its implementation within the community. The economic evaluation indicated that the PeKa B40 program is cost-effective; hence, it should be continued in the future to benefit the low socioeconomic group in Malaysia.

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CHAPTER 1

INTRODUCTION

1.1. Research Background

Since attaining independence in 1957, Malaysia, a developing nation in Southeast Asia, has made tremendous strides towards becoming a middle-income country. The lower income categories experienced a significant reduction between 1970 and 2013, according to an analysis of the distribution of households by income class (Hatta & Ali, 2013). The share of households earning less than RM500 (USD 107.735) declined dramatically, from 89.3% in the 1970s to just 5.7% in 2014. This decline was considerably more pronounced in urban areas, from 77.2% to 3.6%. The percentage of households earning less than RM500 (USD 107.735) decreased from 94.1% to 12.9% in rural areas during the same period (Nair & Sagar, 2015).

Malaysia's estimated population in 2021 was approximately 32.7 million (DOSM, 2021a). Based on their household income levels, the population was divided into three distinct income groups: bottom 40% (B40), middle 40% (M40), and top 20% (T20; (Abdul Rahman et al., 2021). The top 20% (T20), representing the top 20% (top-income earners), comprises 1.46 million households; the middle 40% (M40), representing the medium 40% (average income earners), comprises 2.91 million households; and the bottom 40% (B40), representing the bottom 40% (low-income earners), comprises 2.91 million households. In several states, such as Sabah, Sarawak, Kelantan, and Kedah, the B40 category is the most common, which includes the lowest-income segment (DOSM, 2021a).

The Federal Land Development Authority (FELDA) is part of the National Economic Policy (NEP) to improve the quality of life (QoL) and economic opportunities for these communities (Hussin & Abdullah, 2012). FELDA focuses on developing new land and resources, enhancing rural areas, promoting rural urbanization, establishing new growth centers, and expanding industrial activities (Golam Hassan, 2007). Despite governmental assistance, income levels in FELDA neighborhoods remain low due to several factors. The main issue is the location of these