

THE IMPLEMENTATION OF CHRONIC KIDNEY DISEASE PREVENTION PROGRAMS IN PRIMARY HEALTH CARE SERVICES IN LAMPUNG PROVINCE

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ABSTRACT

Chronic Kidney Disease (CKD) is a major public health problem due to its progressive nature, high treatment costs, and increasing prevalence. Prevention efforts at the primary healthcare level remain suboptimal due to limited screening facilities, inadequate health promotion, and insufficient policy support. To analyse the implementation of chronic kidney disease prevention programmes and identify barriers and strategic solutions in primary healthcare services in Lampung Province. This study employed a qualitative descriptive approach through residency activities conducted at the Provincial Health Office and selected primary healthcare centres. Data were collected through observations, document reviews, and in-depth interviews with health officials and programme managers involved in non-communicable disease control. The findings revealed that CKD prevention has not yet been implemented as a specific programme. Screening services for kidney function are limited due to insufficient laboratory equipment and reagents. Public awareness regarding CKD prevention remains low, while healthcare workers have limited training related to early detection and management. Several local initiatives have integrated CKD education into non-communicable disease programmes; however, policy and funding support remain inadequate. The implementation of CKD prevention programmes in Lampung Province has not been optimal. Strengthening primary healthcare services, improving health workforce capacity, increasing public awareness, and integrating CKD prevention into non-communicable disease programmes are necessary to improve prevention efforts.

Keywords: chronic kidney disease; health promotion; prevention; primary healthcare; screening; policy

INTRODUCTION

Chronic Kidney Disease (CKD) is a progressive and irreversible decline in kidney function that constitutes a significant global health burden. According to international reports, CKD is among the leading causes of mortality worldwide and affects millions of individuals annually. In Indonesia, the prevalence of CKD continues to increase, contributing substantially to healthcare expenditure and reduced quality of life among affected populations.

In Lampung Province, the burden of CKD has increased considerably. The number of patients requiring haemodialysis continues to rise, while access to kidney-related healthcare services remains unevenly distributed. The limited availability of dialysis facilities and inadequate preventive programmes contribute to delayed diagnosis and poor disease management. The Ministry of Health has introduced several initiatives to strengthen non-communicable disease prevention, including the Healthy Living Community Movement (GERMAS) and Integrated Non-Communicable Disease Posts (Posbindu PTM). However, implementation of CKD-specific

prevention strategies remains limited. Therefore, an assessment of current prevention practices is necessary to support evidence-based policy development and programme improvement.

METHODS

This study used a qualitative descriptive design. The residency activity was conducted at the Provincial Health Office of Lampung between May and June 2025.

Data collection was performed through: Observation of programme implementation. Review of policy and programme documents. In-depth interviews with key informants, including health office officials, programme managers, and healthcare personnel involved in CKD prevention and non-communicable disease control. The collected data were analysed using thematic content analysis. Emerging themes related to programme implementation, barriers, and strategic recommendations were identified and interpreted.

RESULT AND DISCUSSION

The study identified several challenges in the implementation of CKD prevention programmes. First, CKD has not been established as an independent programme within the non-communicable disease framework. Most preventive activities focus on hypertension and diabetes mellitus management. Second, kidney function screening remains limited. Laboratory examinations such as serum creatinine and estimated glomerular filtration rate (eGFR) are not routinely available in many primary healthcare centres due to limited resources.

Third, public awareness regarding CKD prevention is relatively low. Most individuals seek healthcare only after symptoms become severe, reducing opportunities for early intervention. Fourth, healthcare personnel reported limited opportunities for specialised training on CKD prevention, screening, and patient education.

Table 1.
Respondent Characteristics (n = 3)

Respondent Characteristics	Frequency (f)	Percentage (%)
Provincial Health Office Officials	1	33.3
Programme Managers	1	33.3
Healthcare Staff	1	33.3
Total	3	100

The interviews also revealed several local innovations, including integrating CKD education into Posbindu PTM activities and community outreach programmes. However, implementation remains constrained by limited funding, infrastructure, and policy support.

The findings demonstrate that CKD prevention efforts remain inadequately integrated within primary healthcare services. Similar studies have reported that limited healthcare resources and low public awareness are major barriers to effective CKD prevention.

The absence of dedicated CKD policies contributes to insufficient programme prioritisation and budget allocation. Consequently, healthcare facilities face challenges in conducting routine kidney function screening and providing comprehensive health education.

Strengthening primary healthcare services is essential for improving early detection and prevention. Integrating CKD screening into existing non-communicable disease programmes may provide a cost-effective strategy for identifying high-risk individuals. In addition, continuous training programmes for healthcare workers can improve their ability to deliver preventive interventions and patient education. Community participation also plays a crucial role. Educational campaigns focusing on healthy lifestyles, rational medication use, and risk factor management should be expanded through collaboration between healthcare institutions, community leaders, and local government agencies.

CONCLUSIONS

The implementation of CKD prevention programmes in Lampung Province remains suboptimal due to limited screening facilities, inadequate workforce capacity, low public awareness, and insufficient policy support. Integrating CKD prevention into existing non-communicable disease programmes, strengthening primary healthcare infrastructure, increasing workforce competency, and promoting community engagement are necessary to improve prevention outcomes and reduce the burden of CKD.

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