ABSTRAK

Latar belakang: Tuberkulosis dan Diabetes Mellitus (TB-DM) merupakan *new-emerging multimorbidity* yang mengalami lonjakan ko-epidemik. Pasien komorbid memiliki risiko lebih tinggi tidak terpenuhinya kualitas dan keselamatan dalam layanan kesehatan sehingga membutuhkan pengelolaan kolaboratif. Meskipun telah terdapat panduan nasional pengelolaan TB-DM, namun implementasinya di fasilitas kesehatan belum rutin dan sistematis. Tujuan umum penelitian ini adalah mengembangkan model kolaborasi TB-DM yang mengedepankan kualitas dan keselamatan pasien, serta dapat diimplementasikan di fasilitas kesehatan primer (Puskesmas).

Metode: Penelitian implementasi ini menggunakan *multi-phase design mixed method* dengan pendekatan *action research* (1 siklus). Adaptasi dilakukan dengan ADAPT-ITT (*Assessment-Decision-Administration-Production-Topical Expert Integration-Training*-Testing) yang dimodifikasi terhadap *Expanded Chronic Care Model* dan panduan nasional yang berlaku. Subyek penelitian meliputi pasien TB, DM, TB-DM, petugas Puskesmas, klinik pratama, dokter praktik mandiri, petugas DOTS RS tipe D, pejabat struktural Dinas Kesehatan Kota Yogyakarta, dan kader TB yang direkrut secara *purposive sampling*. Uji coba implementasi dibatasi pada tingkat Puskesmas.

Hasil: Tahap *assessment* mengidentifikasi hambatan dan peluang implementasi dari perspektif pasien, petugas kesehatan, dan pembuat kebijakan. Pada tahap *decision* disepakati 3 prioritas pemecahan masalah, di mana 2 prioritas dikerjakan dalam penelitian meliputi: (1) penyusunan panduan adaptasi yang memuat SOP-SOP dan dokumen/formulir penunjang kolaborasi TB-DM Puskesmas, dan (2) pemberdayaan masyarakat/pasien. Model yang meliputi skrining dua arah, penatalaksanaan TB-DM terintegrasi, edukasi, serta pendokumentasian dan pelaporan kasus potensial memenuhi indikator-indikator *acceptability, appropriateness, adoption,* dan *feasibility*. Meskipun demikian, masih terdapat hambatan dari aspek penyelenggaraan layanan kesehatan termasuk dampak pandemi COVID-19, faktor pasien, faktor petugas kesehatan, serta regulasi BPJS. Oleh karena itu, capaian pelaksanaan skrining 2 arah masih rendah (rata-rata 16,5%) meskipun terus mengalami peningkatan. Capaian indikator proporsi temuan kasus TB-DM baru juga masih rendah (5,8% dari seluruh pasien TB pada periode *testing*, n=2). Sedangkan capaian proporsi pengobatan TB 100 % dan capaian pasien DM tekendali gula darahnya 85,7%.

Simpulan: Model adaptasi kolaborasi pengendalian dan pelayanan TB-DM potensial dapat diterima dan diterapkan pada *setting* layanan primer dengan konteks yang serupa dengan Puskesmas yang diuji coba. Dibutuhkan peningkatan layanan yang berpusat pada pasien, institusionalisasi kolaborasi, peningkatan kapasitas petugas, advokasi kepada para pemangku kepentingan terkait, serta monitoring dan evaluasi yang intensif. FKTP swasta, RS, dan peran lintas sektor penting untuk dilibatkan.

Kata kunci: TB-DM, multimorbiditas, penapisan, pelayanan kolaboratif, penyakit kronis

ABSTRACT

Background: *TB-DM is a new emerging multimorbidity with a looming co-epidemic problem. Patients with these comorbid diseases have a higher risk of low quality and safety during health services. Hence, their management must be carried out collaboratively. Although there are national guidelines for TB-DM management, collaborative implementation in health facilities is not conducted routinely and systematically. This study's general objective was to develop a TB-DM collaboration model that could be implemented in primary health facilities (community health services/CHCs) and prioritized quality of care and safety.*

Methods: *This implementation study used a multi-phase mixed-method design with an action research approach conducted in one cycle. The model adaptation is carried out with the modified ADAPT-ITT (Assessment-Decision-Administration-Production-Topical Expert Integration-Training-Testing) and Expanded Chronic Care Model. The research subjects included TB-DM patients, health workers of public and primary care facilities, type D hospitals, Yogyakarta District Health Office officers, and TB cadres, recruited purposively. The study was limited to testing at the CHC level.*

Results: *In the assessment phase, constraints and opportunities for implementation were identified from the perspectives of patients, health workers, and policymakers. At the decision stage, three problem-solving priorities were agreed upon. Two priorities were carried out in the research: (1) the preparation of adaptations containing SOPs and supporting documents/forms needed at the CHCs, and (2) community/patient empowerment. The model includes bidirectional screening, integrated TB-DM management, education, documentation, and case reporting. In general, the models being tested potentially meet with the acceptability, appropriateness, adoption, and feasibility indicators. However, there were still obstacles from aspects of the delivery of health services including the impact of the COVID-19 pandemic, patient factors, health worker factors, and BPJS regulations. Hence, the accomplishment of bi-directional screening was also low (mean 16,5%) but had increased. The achievement of the proportion of TB-DM case findings was still low (5,8% from all TB patients in the testing period, n=2). While the achievement of the proportion of TB treatment was 100% and DM patients whose blood sugar was controlled were 85.7%.*

Conclusion: *The TB-DM collaborative control and service adaptation model had the potential could be accepted and applied to the primary care setting with a suitable context to tested CHC. It is necessary to increase patient-centered care, improve health workers' capacity, the institutionalization of collaboration, advocacy to the related stakeholders, and intensive monitoring and evaluation. Private primary care, hospitals, and multisector roles were essential to be involved.*

Keywords: *TB-DM, multimorbidity, screening, collaborative care, chronic disease*