

Implementation of tuberculosis preventive treatment among people living with HIV, South Sudan

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Objective To describe an intervention to scale up tuberculosis preventive treatment for people living with human immunodeficiency virus (HIV) in South Sudan, 2017–2020.

Methods Staff of the health ministry and United States President's Emergency Plan for AIDS Relief designed an intervention targeting the estimated 30 400 people living with HIV on antiretroviral therapy across South Sudan. The intervention comprised: (i) developing sensitization and operational guidance for clinicians to put tuberculosis preventive treatment delivery into clinical practice; (ii) disseminating monitoring and evaluation tools to document scale-up; (iii) implementing a programmatic pilot of tuberculosis preventive treatment; and (iv) identifying a mechanism for procurement and delivery of isoniazid to facilities dispensing tuberculosis preventive treatment. Staff aggregated routine programme data from facility registers on the numbers of people living with HIV who started on tuberculosis preventive treatment across all clinical sites providing this treatment during July 2019–March 2020.

Findings Tuberculosis preventive treatment was implemented in 13 HIV treatment sites during July–October 2019, then in 26 sites during November 2019–March 2020. During July 2019–March 2020, 6503 people living with HIV started tuberculosis preventive treatment.

Conclusion Lessons for other low-resource settings may include supplementing national guidelines with health ministry directives, clinician guidance and training, and an implementation pilot. A cadre of field supervisors can rapidly disseminate a standardized approach to implementation and monitoring of tuberculosis preventive treatment, and this approach can be used to strengthen other tuberculosis–HIV services. Procuring a reliable and steady supply of tuberculosis preventive treatment medication is crucial.

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Introduction

South Sudan had an estimated 190 000 people living with human immunodeficiency virus (HIV) in 2018, and an HIV prevalence of 2.5% (95% confidence interval: 1.9–3.1) among an estimated population of 15–49-year-olds of 5.4 million.^{1,2} Of the total number of people living with HIV, an estimated 45 600 people (24%) know their HIV status and 30 400 (16%) are on antiretroviral therapy (ART).¹ Among those on ART, 24 425 (80%) receive care that is supported by funding from the United States President's Emergency Plan for AIDS Relief (PEPFAR) as of 2018.³ In 2018, the World Health Organization (WHO) estimated the incidence of tuberculosis in South Sudan as 146 per 100 000 population (uncertainty interval, UI: 95–209), based on 16 000 incident cases (UI: 10 000–23 000). An estimated 1900 cases of tuberculosis (UI: 1200–2800) and 250 (UI: 150–380) tuberculosis deaths were among people living with HIV.⁴ To address the incidence and mortality of tuberculosis disease among people living with HIV, WHO provides guidelines for clinical and public health interventions, including intensified tuberculosis case-finding, infection control and, importantly, tuberculosis preventive treatment.^{5,6}

A one-time course of tuberculosis preventive treatment for people living with HIV is an essential component of HIV care and treatment. Isoniazid preventive therapy, the most

common tuberculosis preventive treatment, has been shown to reduce tuberculosis-related mortality by 37% at 6 years, independent of the additional protection provided by ART.⁷ Shorter, rifampentine-based regimens have demonstrated improved adherence compared with isoniazid alone for 6 months and have been recommended by WHO for people living with HIV.^{8,9} Despite positive outcomes, implementation of tuberculosis preventive treatment in HIV care programmes has been slow. A 2017 review of barriers to its implementation in 35 countries found that only 21 (60%) reported nationwide programmatic use of preventive treatment. Reported barriers included lack of funding for medication, inadequate staffing, and poor coordination between national HIV and tuberculosis programmes.¹⁰

In South Sudan, delivery of HIV and tuberculosis care involves the coordination of several stakeholders. HIV and tuberculosis programme policies are made by the health ministry. HIV care, including ART, is delivered in HIV treatment facilities by clinical staff supported by the health ministry and implementing partners funded by PEPFAR. Procurement of anti-tuberculosis drugs is done by the United Nations Development Programme (UNDP) through the Global Fund to Fight AIDS, Tuberculosis and Malaria. Tuberculosis services are provided in tuberculosis treatment facilities, which may or may not be co-located with HIV treatment facilities, and are

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supported both by the health ministry and Global Fund partners. Until 2017, tuberculosis treatment facilities provided tuberculosis preventive treatment only for child contacts of breastfeeding mothers with tuberculosis disease, aligned with national tuberculosis treatment guidelines.

Recognizing that tuberculosis preventive treatment is an essential intervention to decrease morbidity and mortality of tuberculosis among people living with HIV, the South Sudan health ministry included it in the 2017 revised national HIV and tuberculosis treatment guidelines. Nevertheless, this addition did not immediately lead to scale-up of tuberculosis preventive treatment in HIV care. In fact, there were no documented instances of tuberculosis preventive treatment among people living with HIV in 2017. In 2018, the national HIV and tuberculosis technical working group identified four major barriers to implementation and scale-up of tuberculosis preventive treatment in South Sudan: (i) lack of coordinated sensitization of clinicians and operational guidance for the intervention in clinical care; (ii) lack of tools to document and monitor scale-up; (iii) lack of a pilot demonstrating feasibility in HIV care; and (iv) lack of a clear mechanism to procure isoniazid for preventive treatment for this population.

Staff at the health ministry and PEPFAR in South Sudan worked to overcome these barriers to implementing tuberculosis preventive treatment in HIV treatment sites and to facilitate its rapid scale-up. Here, we describe the design and implementation of the intervention and identify lessons for other low-resource settings.

Methods

Intervention

To address the barriers identified, staff designed an approach to implementation and scale-up of tuberculosis preventive treatment for people living with HIV in South Sudan. The programme had four components: (i) sensitization, operational guidance and training for clinicians to put tuberculosis preventive treatment into clinical practice; (ii) creation and dissemination of monitoring and evaluation tools to document scale-up; (iii) implementation of a programmatic pilot of tuberculosis preventive treatment; and (iv) identification of a

mechanism for procuring and delivering isoniazid to HIV treatment facilities.

To sensitize clinicians to the importance of tuberculosis preventive treatment in HIV clinical care, it was necessary to increase awareness about the evidence for its use and its inclusion in the national HIV and tuberculosis guidelines, as well as the upcoming dissemination of operational guidance for implementation. In collaboration with partner organization staff, the South Sudan health ministry disseminated a letter to all its health facilities in June 2018 to introduce the intervention and explain the objectives.

The operational guidance on standardized implementation of the programme provided to clinicians and clinical site managers consisted of several steps. In 2018, ICAP South Sudan, a partner of PEPFAR, created tuberculosis preventive treatment implementation guidance and job aids and disseminated the English-language document to clinicians and clinical site managers. The guidance included practical considerations for implementation of tuberculosis preventive treatment, with sections on assessment of eligibility; exclusion of tuberculosis disease before offering preventive treatment; assessment of contraindications to preventive treatment; medication regimens; and the need for counselling on adherence. The guidance also included information on counselling, clinical assessment and management of potential preventive treatment-related adverse events. The guidance outlined recommended content for follow-up clinic visits, including assessment for breakthrough tuberculosis disease, potential preventive treatment-related adverse events and adherence. Finally, the guidance included a suggested schedule for dispensing daily isoniazid, coupled with follow-up clinic visits: first visit (dispense 1 month of pills), second visit (dispense 3 months of pills), third visit (dispense 2 months of pills) and final visit (document course completion). The job aids included decision algorithms for providing tuberculosis preventive treatment (Fig. 1), for tuberculosis diagnosis and for treatment dosing for children.

A separate, but related, initiative was to create and disseminate monitoring and evaluation tools to document the implementation and scale-up of tuberculosis preventive treatment. To supplement the health ministry's stan-

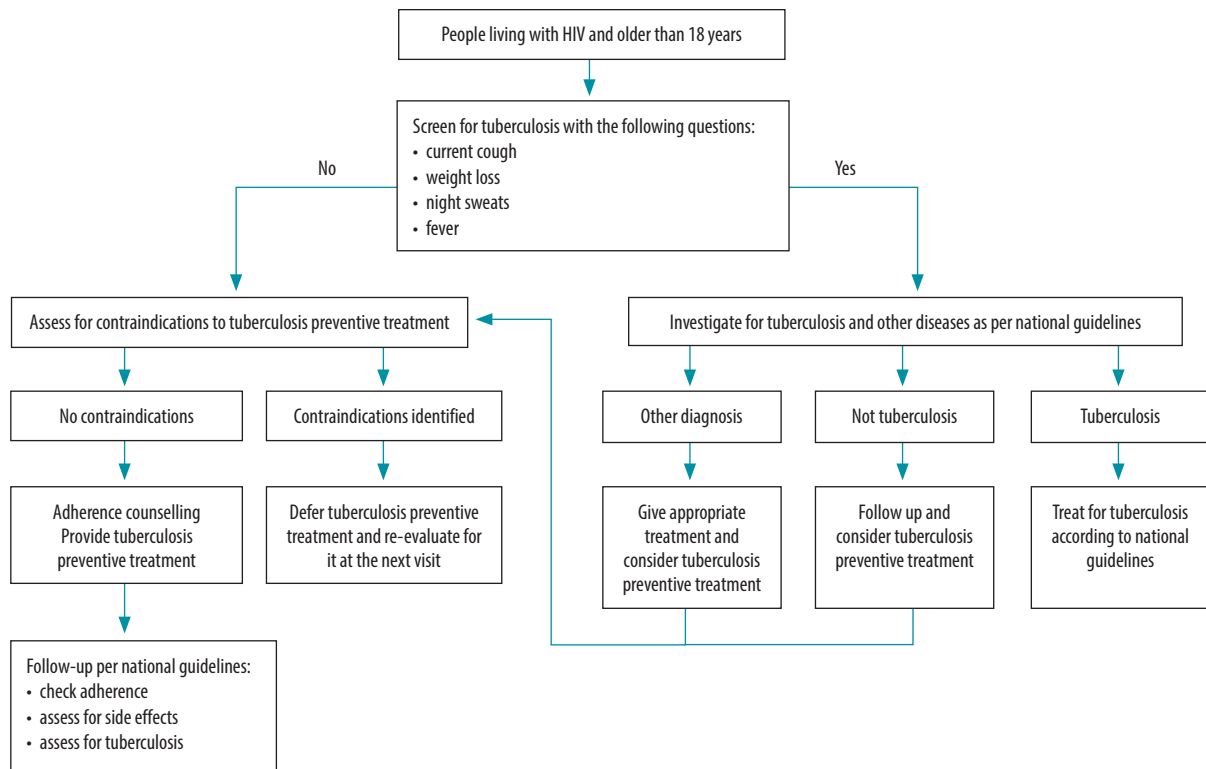
dardized tuberculosis disease screening form, ICAP staff developed a register of people living with HIV with presumptive tuberculosis. The register aimed to track diagnostic results and potential eligibility for future tuberculosis preventive treatment. The national ART register, maintained at each clinical site as a line list of people living with HIV seeking care, did not include a variable field for isoniazid initiation. ICAP staff therefore developed an ad hoc tuberculosis preventive treatment register for clinical sites. This register was used to document the start of preventive treatment, adherence, presence of any adverse events, results of screening for tuberculosis disease at each clinic visit and outcome of the preventive treatment course.

Preparing clinicians and clinical site managers to implement the operational guidance and registers was initially carried out through in-person training conducted by ICAP technical staff in the capital city Juba. The training was given to the clinical staff selected to be clinical site focal points, tuberculosis-HIV field supervisors (supported by the health ministry and PEPFAR) and WHO public health officers. These staff then trained other staff at HIV treatment facilities, thus cascading the training outward. Field supervisors performed repeated on-site mentorship visits and PEPFAR staff provided training sessions via an online platform to facilitate implementation of tuberculosis preventive treatment.

Implementation

Implementing a programmatic pilot intervention was an important step in demonstrating that implementation of tuberculosis preventive treatment among people living with HIV was feasible in South Sudan. In 2018, health ministry and ICAP staff undertook the pilot at Juba Teaching Hospital HIV clinic. ICAP staff laid the groundwork for the pilot through focused trainings and introduction of the tuberculosis-related data recording and reporting tools. One clinician was trained to be the site tuberculosis preventive treatment focal point. Other facility clinicians referred people living with HIV to this clinician for counselling on the benefits of tuberculosis preventive treatment, review of its contraindications, its administration and monitoring of potential preventive treatment-related adverse events. Ad-

Fig. 1. **Clinical decision algorithm for provision of isoniazid as tuberculosis preventive treatment among people living with human immunodeficiency virus, South Sudan**



HIV: human immunodeficiency virus.

Source: Adapted from ICAP South Sudan tuberculosis preventive treatment implementation guidance, 2018.

ditionally, ICAP applied the dedicated tuberculosis preventive treatment register to track initiation, continuation and outcome of the course of preventive treatment for each eligible person. With these components in place, between April and October 2018, a convenience sample of 54 people living with HIV was started on 6 months of daily isoniazid as preventive treatment plus pyridoxine medication.

The inclusion criterion to offer tuberculosis preventive treatment was people living with HIV coming for routine HIV care at the site, both newly diagnosed with HIV and established on ART. The exclusion criteria included children younger than 18 years of age, pregnant women and people living with HIV with presumptive tuberculosis disease using the WHO four-symptom screening tool.⁶ However, those screening positive for presumptive tuberculosis could receive tuberculosis preventive treatment if the tuberculosis diagnostic investigation did not indicate tuberculosis disease. Other contraindications to preventive treatment were history of or current liver disease, active alcohol

abuse, peripheral neuropathy grade 2 or higher, or history of poor adherence to ART.

The number of people living with HIV receiving isoniazid in the pilot was determined by the total amount of isoniazid available at the site to complete a full 6-month course for each recipient. Among the 54 people living with HIV in the pilot, 48 (89%) completed treatment. These results indicated that providing tuberculosis preventive treatment to people living with HIV as part of HIV care was feasible, that people living with HIV and their providers found it acceptable, and that outcomes could be monitored and documented.

Despite the encouraging results of the pilot intervention, immediate further scale-up of tuberculosis preventive treatment at Juba Teaching Hospital and other treatment facilities was hampered by an insufficient supply of isoniazid to ensure a full preventive treatment course for additional adult people living with HIV. Of note, in 2018, UNDP had purchased isoniazid 100 mg tablets for children younger than 5 years who were household contacts of individuals with

pulmonary tuberculosis. There was no support, however, for purchasing preventive treatment medication for people living with HIV. Identifying a mechanism for procurement of isoniazid was therefore critical to ensure a sufficient and continuous supply of preventive treatment for people living with HIV. In this setting, PEPFAR South Sudan, through its United States Agency for International Development global health supply-chain mechanism, authorized an emergency procurement of isoniazid to support a 6-month treatment course for over 10 000 people living with HIV. Procurement was done through redirection of funds for HIV commodities, and in May 2019, a shipment of supplies of 300 mg isoniazid tablets for a 6-month course of treatment for 2750 people arrived in the country. Because of a global supply shortage of isoniazid at the time, this amount was only part of the total purchased, but it was sufficient to initiate focused national scale-up following the single-site pilot intervention. The balance of the procured order arrived in October 2019. Isoniazid and accompanying pyridoxine were delivered to

pharmacies at HIV treatment sites selected by the national HIV–tuberculosis technical working group.

Data collection

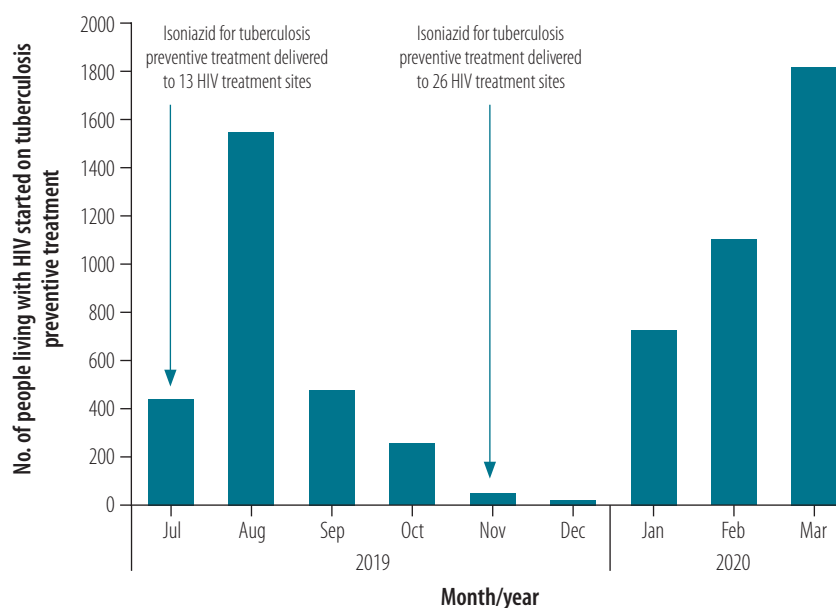
To monitor scale-up of tuberculosis preventive treatment in South Sudan, PEPFAR implementing partner staff aggregated routinely collected programme data from facility registers across all clinical sites providing tuberculosis preventive treatment. The data collected were the monthly number of adults living with HIV receiving HIV care in programme treatment sites and starting on a course of isoniazid for tuberculosis preventive treatment. Data were reported to PEPFAR and the health ministry during July 2019–March 2020. Because this activity consisted of improvement of a public health programme with de-identified data and no perceived ethical risk to patients, we did not require informed consent from participants. This public health programme activity review was covered under a non-research determination from the Center for Global Health of the Centers for Disease Control and Prevention.

Results

After implementation of the four intervention components, provision of tuberculosis preventive treatment among people living with HIV began in 13 HIV treatment sites across South Sudan. During July–October 2019, following further training and distribution of isoniazid and pyridoxine to facilities, the number of adults starting a course of isoniazid for tuberculosis prevention increased from 446 in July to 1559 in August, then fell to 486 in September and 259 in October, for a cumulative 2750 people (Fig. 2). After the second shipment of isoniazid was delivered to an expanded list of 26 HIV treatment sites in November 2019, the monthly numbers of people started on preventive treatment initially remained low, with 51 in November and 22 in December, when clinical interactions were more limited during the holiday season. Numbers then increased to 739 in January 2020, 1110 in February and 1831 in March. During July 2019 to March 2020, a total of 6503 adults started preventive treatment.

Including the 54 people in the pilot intervention, 6557 (22%) of the estimated 30 400 people living with HIV

Fig. 2. Number of people living with human immunodeficiency virus infection initiating tuberculosis preventive treatment, South Sudan, July 2019–March 2020



HIV: human immunodeficiency virus.

on ART were started on tuberculosis preventive treatment from April 2018 to March 2020.

Discussion

Despite inclusion of tuberculosis prevention treatment for people living with HIV in South Sudan's 2017 guidelines, preventive treatment was not implemented across multiple HIV treatment sites before July 2019. After delivery of guidance, documentation tools and commodities to HIV treatment sites, 6503 people living with HIV receiving ART at these sites were started on tuberculosis preventive treatment over a 9-month period.

Descriptions of concurrent scale-up of tuberculosis preventive treatment among people living with HIV in other sub-Saharan African settings have cited similar barriers and applied similar strategies as we describe. In Uganda, a national quality improvement collaborative focused on preventing stockouts of isoniazid and ensuring that all eligible people living with HIV were offered tuberculosis preventive treatment. The intervention was associated with high proportions of people in a prospective cohort of people living with HIV starting (100%) and completing (89%) preventive treatment.¹¹ An implementation pilot intervention in Zimbabwe, which addressed isoniazid supply-chain logis-

tics gaps and limited integration of isoniazid dispensed with ART, led to successful national scale-up of tuberculosis preventive treatment.¹² The numbers of people living with HIV starting tuberculosis preventive treatment were over 5000 and over 20 000 in the 18-month periods before and after the intervention, respectively. Of note, public health managers mentioned the importance of a centralized, standardized module for reporting and monitoring scale-up, as we describe in South Sudan. Finally, scale-up of tuberculosis preventive treatment among people living with HIV in Nigeria from 2015 to 2017 focused on coordinating commodity logistics and ensuring an uninterrupted supply of isoniazid. The study documented a 69% increase in preventive treatment initiations, with over 36 000 people living with HIV starting preventive treatment in 2016 and over 61 000 in 2017.¹³

The importance of having a reliable supply of medication for scale-up of tuberculosis preventive treatment was clear in South Sudan. Increased monthly numbers of people started on isoniazid corresponded with the timing of arrival of shipments of the medication, decreased when stocks of isoniazid decreased and increased again after the arrival of the next shipment. A more consistent, predictable supply of tuberculosis preventive treatment for people living with HIV is crucial in South Su-

dan. This need should be addressed by including isoniazid for preventive treatment as part of essential commodities for HIV and tuberculosis programmes within Global Fund-supported funding mechanisms.

Some limitations of our description of this programmatic implementation include the inability to directly attribute interventions to the observed outcome due to the lack of an experimental design. Delays and inconsistencies in reporting limited the data available on how many courses of tuberculosis preventive treatment were completed. Reporting and analysing these results is the next step for the programme. Finally, despite this scale-up, tuberculosis preventive treatment coverage among people living with HIV in South Sudan remains limited: less than a quarter of the estimated people living with HIV on ART have started tuberculosis preventive treatment.

Despite these limitations, there are several lessons learnt from the implementation and scale-up of the intervention among people living with HIV. Even when existing national guidelines include tuberculosis preventive treatment as a component of HIV care, as it did in South Sudan in 2017, translating guidelines into clinical practice may require additional steps for implementation. In South Sudan, key interventions included engaging the health ministry leadership to promote tuberculosis preventive treatment among people living with HIV; dissemination of implementation guidance and job aids; staff training; and conducting a pilot intervention at one site with accountability and participa-

tion of a specific clinician. It was also important that implementation partner staff and the field supervisor cadre disseminated lessons learnt from the pilot to clinical site staff, including clinical advice and adaptations to data recording and reporting tools. These staff allowed for the continued standardization of tools used for reporting and of procedures for delivering and recording use of preventive treatment. Moreover, the cadre has now adapted this approach of repeated site monitoring and mentoring to provide technical assistance in other aspects of HIV and tuberculosis care. Finally, implementation of tuberculosis preventive treatment in South Sudan provided an opportunity to strengthen overall tuberculosis-HIV services. Specifically, the programme established universal use of standardized tuberculosis symptom screening for every person living with HIV at every clinical encounter and bolstered the use of a presumptive tuberculosis register. The programme also contributed to the development of standard operating procedures and appointment of site tuberculosis focal points to track and improve the quality of tuberculosis services among people living with HIV. These changes served to further integrate tuberculosis preventive treatment within the standard of care for tuberculosis services among people living with HIV in South Sudan.

In conclusion, the lessons learnt and opportunities identified in South Sudan have strengthened the programme's commitment to ensuring all people living with HIV on ART in the country receive and complete a course of tuberculosis preventive treatment.

Procurement of isoniazid for preventive treatment continues to be unpredictable, but South Sudan has now ensured that tuberculosis preventive treatment commodities for people living with HIV are included in Global Fund funding mechanisms. Other next steps include offering tuberculosis preventive treatment at all HIV treatment sites and monitoring and improvement of treatment course completion. The actions would include integration of tuberculosis preventive treatment into models of community ART dispensation, expansion of access to children living with HIV and updating national guidelines to include short-course rifampentine-based regimens. In this way, South Sudan can continue to ensure access to tuberculosis preventive treatment to reduce morbidity and mortality among its people living with HIV. ■

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ملخص

تنفيذ العلاج الوقائي من السل بين المصابين بفيروس نقص المناعة البشرية، جنوب السودان

من السل. قام الموظفون بتجميع بيانات البرنامج الروتينية من سجلات المنشآت حول عدد الأشخاص المصابين بفيروس نقص المناعة البشرية الذين بدءوا العلاج الوقائي من السل في جميع المواقع السريرية التي تقدم هذا العلاج خلال الفترة من يوليو/تموز 2019 إلى مارس/آذار 2020.

النتائج تم تنفيذ العلاج الوقائي من السل في 13 موقعًا لعلاج فيروس نقص المناعة البشرية خلال الفترة من يوليو/تموز إلى أكتوبر/تشرين أول 2019، ثم في 26 موقعًا خلال الفترة من نوفمبر/تشرين ثاني 2019 إلى مارس/آذار 2020. وخلال الفترة من يوليو/تموز 2019 إلى مارس/آذار 2020، وبدأ 6503 شخصًا مصابًا بفيروس نقص المناعة البشرية العلاج الوقائي من السل.

الغرض وصف تدخل لتوسيع نطاق العلاج الوقائي من السل المصابين بفيروس نقص المناعة البشرية (HIV) في جنوب السودان، 2017 إلى 2020.

الطريقة قام فريق العمل في وزارة الصحة، وخطة الطوارئ التابعة لرئيس الولايات المتحدة للإغاثة من الإيدز، بوضع تدخل يستهدف ما يقدر بنحو 30400 شخص مصاب بفيروس نقص المناعة البشرية يتلقون العلاج المضاد للفيروسات الرجعية في أنحاء جنوب السودان. وتألف التدخل من: (1) تطوير التوعية والتوجيه العملي للأطباء لوضع العلاج الوقائي لمرض السل قيد الممارسة السريرية؛ و(2) نشر أدوات الرصد والتقييم لتوثيق التوسع؛ و(3) تنفيذ برنامج تجريبي للعلاج الوقائي من السل؛ و(4) تحديد آلية شراء وتوصيل أيزونيازيد إلى المنشآت التي توزع العلاج الوقائي

ورصد العلاج الوقائي للسُّل، ويمكن استخدام هذا الأسلوب لتقوية خدمات السُّل - فيروس نقص المناعة البشرية الأخرى. إن الحصول على إمدادات موثوقة وثابتة من أدوية العلاج الوقائي للسُّل، يُعد أمراً حيوياً للغاية.

الاستنتاج إن دروس الأماكن الأخرى ذات الموارد المنخفضة قد تشمل إكمال الإرشادات الوطنية بتوجيهات وزارة الصحة، وتوجيه وتدريب الأطباء، وأسلوب تنفيذي قيادي. يمكن لكادر من المشرفين الميدانيين أن يقوموا سريعاً بنشر أسلوب قياسي لتنفيذ

摘要

苏丹南部：对人类免疫缺陷病毒 (HIV) 携带者实施结核病预防治疗计划

目的 描述 2017-2020 年期间采取的干预措施，以在苏丹南部扩大接受结核病预防治疗的人类免疫缺陷病毒 (HIV) 携带者的数量。

方法 卫生部及美国总统艾滋病紧急救援计划的工作人员制定了干预措施，以确保整个苏丹南部预计 30 400 名 HIV 携带者能够接受抗逆转录病毒治疗。干预措施包括：(i) 为临床医生制定宣传和操作指南，以确保结核病预防疗法能够应用于临床实践；(ii) 分发监控和评估工具，以记录接受治疗患者的增加情况；(iii) 按计划开展结核病预防治疗试行方案；以及 (iv) 确定为提供结核病预防治疗的机构采购并交付异烟肼的机制。工作人员汇总了机构登记的常规计划数据，以了解 2019 年 7 月至 2020 年 3 月期间在提供此类治疗方案

的所有临床研究所开始接受结核病预防治疗的 HIV 携带者人数。

结果 2019 年 7 月至 10 月期间，在 13 个 HIV 治疗场所实施了结核病预防治疗计划，并于 2019 年 11 月至 2020 年 3 月期间在 26 个治疗场所实施了结核病预防治疗计划。2019 年 7 月至 2020 年 3 月期间，6503 名 HIV 携带者开始接受结核病预防治疗。

结论 针对其他资源匮乏的地区，可采取的措施包括：通过发布卫生部指令来补充国家指南，提供临床医生指导和培训，以及建立实施试点。现场主管人员可迅速宣传实施和监控结核病预防治疗的标准化方法，并可使用该方法来加强其他结核病-HIV 服务。保证可靠和稳定地提供结核病预防治疗药物至关重要。

Résumé

Mise en œuvre du traitement préventif contre la tuberculose chez les personnes vivant avec le VIH au Soudan du Sud

Objectif Décrire une intervention destinée à intensifier le traitement préventif contre la tuberculose chez les individus vivant avec le virus de l'immunodéficience humaine (VIH) au Soudan du Sud entre 2017 et 2020.

Méthodes Le personnel du ministère de la Santé et du Plan d'urgence du Président des États-Unis pour la lutte contre le sida (PEPFAR) a imaginé une intervention qui cible les quelque 30 400 individus vivant avec le VIH sous traitement antirétroviral au Soudan du Sud. Cette intervention consistait à : (i) développer une sensibilisation et un encadrement opérationnel pour les médecins afin qu'ils incluent la lutte préventive contre la tuberculose dans leur pratique; (ii) diffuser des outils de contrôle et d'évaluation pour documenter l'intensification; (iii) instaurer un programme pilote de traitement préventif contre la tuberculose; et enfin, (iv) identifier un mécanisme d'acquisition et de livraison d'isoniazide aux établissements qui dispensent un traitement préventif contre la tuberculose. Le personnel a prélevé les données relatives au programme de routine dans les registres des établissements afin de déterminer le nombre d'individus vivant avec le VIH et ayant entamé un traitement

préventif contre la tuberculose dans tous les centres cliniques qui proposaient ce traitement entre juillet 2019 et mars 2020.

Résultats Le traitement préventif contre la tuberculose a été mis en œuvre dans 13 établissements de prise en charge du VIH entre juillet et octobre 2019, puis dans 26 centres entre novembre 2019 et mars 2020. Durant la période allant de juillet 2019 à mars 2020, 6503 individus vivant avec le VIH ont entamé un traitement préventif contre la tuberculose.

Conclusion Divers enseignements peuvent être tirés pour d'autres endroits disposant de ressources limitées, notamment l'élaboration de directives du ministère de la Santé pour compléter les recommandations nationales, l'encadrement et la formation des médecins, ainsi que l'organisation d'un projet pilote. Une équipe de superviseurs présents sur le terrain peut rapidement promouvoir une approche standardisée d'application et de suivi du traitement préventif contre la tuberculose, et cette approche peut servir à renforcer d'autres services tuberculose/VIH. Et dernièrement, il est essentiel de mettre en place un approvisionnement constant et fiable de médicaments pour assurer le traitement préventif de la tuberculose.

Резюме

Проведение профилактического лечения от туберкулеза среди населения с ВИЧ, Южный Судан

Цель Описать меры вмешательства по расширению охвата профилактическим лечением от туберкулеза населения, страдающего вирусом иммунодефицита человека (ВИЧ), в Южном Судане, 2017–2020 гг.

Методы Сотрудники Министерства здравоохранения и Чрезвычайного плана Президента Соединенных Штатов по борьбе с ВИЧ/СПИДом разработали меры вмешательства, ориентированные на 30 400 человек, живущих с ВИЧ и получающих антиретровирусную терапию в Южном Судане. Меры вмешательства включали: (i) разработку информационных и руководящих оперативных указаний для лечащих врачей по внедрению профилактического лечения от туберкулеза

в клиническую практику; (ii) распространение инструментов мониторинга и оценки для документирования процесса расширения охвата населения; (iii) реализацию планомерной пилотной программы профилактического лечения от туберкулеза; (iv) определение механизма закупки и поставок изониазида в учреждения, обеспечивающие профилактическое лечение от туберкулеза. Персонал собирал текущие данные по программе из реестров учреждений о количестве людей, живущих с ВИЧ, которые начали проходить курс профилактического лечения от туберкулеза в любых клинических учреждениях, предоставляющих такое лечение, в период с июля 2019 года по март 2020 года.

Resultados Профилактическое лечение от туберкулеза было внедрено в 13 пунктах лечения ВИЧ в период с июля по октябрь 2019 г., а затем в 26 пунктах в период с ноября 2019 г. по март 2020 г. В период с июля 2019 г. по март 2020 г. профилактическое лечение от туберкулеза начали проходить 6503 человека, живущие с ВИЧ.

Вывод На основании полученного опыта можно порекомендовать другим странам с дефицитом ресурсов дополнить национальные руководства директивами Министерства здравоохранения,

клиническими рекомендациями и обучением, а также пилотным проектом по внедрению программы профилактического лечения. Группа кураторов на местах может быстро распространить стандартизированный подход к проведению и мониторингу профилактического лечения от туберкулеза, который можно использовать для укрепления других служб по борьбе с туберкулезом и ВИЧ. Решающее значение имеет обеспечение надежных и стабильных поставок препаратов для профилактического лечения от туберкулеза.

Resumen

Aplicación del tratamiento preventivo de la tuberculosis entre las personas que viven con el VIH, Sudán del Sur

Objetivo Describir una intervención para ampliar el tratamiento preventivo de la tuberculosis de las personas que viven con el virus de la inmunodeficiencia humana (VIH) en Sudán del Sur, 2017-2020.

Métodos El personal del Ministerio de Salud y del Plan de emergencia del presidente de los Estados Unidos para el alivio del sida diseñó una intervención dirigida a las 30 400 personas que se estima viven con el VIH y que reciben tratamiento antirretrovírico en toda la República de Sudán del Sur. La intervención incluía: i) la elaboración de orientaciones de sensibilización y operativas para que los médicos apliquen el tratamiento preventivo de la tuberculosis en la práctica clínica; ii) la divulgación de instrumentos de supervisión y de evaluación para documentar la ampliación; iii) la aplicación de un programa piloto para el tratamiento preventivo de la tuberculosis; y iv) la determinación de un mecanismo para la obtención y la distribución de isoniácida a los establecimientos que ofrecen el tratamiento preventivo de la tuberculosis. El personal agrupó los datos de los programas de rutina de los registros de los establecimientos sobre la cantidad de personas que viven con el VIH que iniciaron el tratamiento preventivo de la tuberculosis en todos los

centros clínicos que ofrecieron este tratamiento entre julio de 2019 y marzo de 2020.

Resultados El tratamiento preventivo de la tuberculosis se aplicó en 13 centros de tratamiento del VIH durante julio y octubre de 2019, y luego en 26 centros durante noviembre de 2019 a marzo de 2020. Durante julio de 2019 a marzo de 2020, 6503 personas que vivían con el VIH iniciaron el tratamiento preventivo de la tuberculosis.

Conclusión Las lecciones para otros entornos de bajos recursos pueden incluir la complementación de las directrices nacionales con directivas del Ministerio de Salud, la orientación y la capacitación de los médicos y un programa piloto de aplicación. Un equipo de supervisores de campo puede difundir con rapidez un enfoque normalizado de la aplicación y del seguimiento del tratamiento preventivo de la tuberculosis, que se puede aplicar para fortalecer otros servicios relacionados con la tuberculosis y el VIH. Es fundamental obtener un suministro fiable y constante de medicamentos para el tratamiento preventivo de la tuberculosis.

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