

Thrice-weekly dose of anti-tuberculosis drugs: efficacy under India's program conditions

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Title: Thrice-weekly dose of anti-tuberculosis drugs: efficacy under India's program conditions

Content: **Background:**

When discovered, anti tuberculosis drugs were always administered in Daily-doses. That worked wonders!

Later, some studies claimed that drugs were equally effective even if given as thrice-weekly doses (intermittently). Not everyone believed that. Three Reviews (Cochrane, Thorax, Azhar) appear unconvinced! Most nations worldwide (including 20 High TB Burden Countries) remain skeptic and continue to practice time-tested Daily dosing!

However, India is exception. In 2000, India adopted a unique thrice-weekly regimen. During 14 years, under national program, Thrice-weekly doses have been administered to 14.2 million TB patients, self-claiming 85% success.

Objective: To revisit long-term fate of all registered patients; identify the ones, who clearly didn't achieve lasting cure with a single course of thrice-weekly treatment, were later re-registered for a second innings; thus, their names figure twice in national registry (nicknamed herein as Repeaters).

Setting: Author heads District Tuberculosis Center, Faridabad, India; his job has been to monitor thousands of current / ex-patients on Thrice-weekly regimen, by providence, offering him unique access to patients, data and entire network of TB workers of district.

Design/Methods:

Two Methods of data collection:

Retrospective Record Review: Author motivated district work-force; jointly conducted systematic review of hand-written registers of past 14 years, one at a time – thus identified 1575 Repeaters. Clinical Audit: Author conducted exhaustive clinical audit in his busy TB OPD, cherry-picked (on an average) one repeater per day; thus tracked 1600 Repeaters in 42 months (Of these, 800 were referred in for Re-treatment, duly diagnosed at Delhi's premier TB institutes and needed local registration). **Results:**

Long-term fate of 27,120 registered TB patients was analyzed.

3175 patients noticed to have returned – sick, meriting Re-treatment; thus over 11.7 % identified as Repeaters - registered twice/thrice (names, unique govt. ID's, irrefutable evidence enclosed) – revealing an unfavorable outcome, unreported anywhere thus far - a bubble within.

Besides, study found 1282 (5.4%) Deaths; 2271 (9.6%) Defaulters – recorded similarly with clinching details.

Conclusion:

Under India's routine program conditions, Thrice- weekly regimen is ineffective. Too many (11.7%) patients come back sick, which may promote drug-resistance on industrial scale!

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