

Syndromic Management of Sexually Transmitted Infections- Is It the Need of the Day in Indian Perspective

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ABSTRACT

Syndromic management is the protocol followed in India at the present moment. This approach has been adapted by National Aids Control Organization (NACO) in reference to WHO guidelines present for STI management. Though this method of controlling STI is still appropriate for resource poor settings and limited laboratory diagnosis overtreatment and under-treatment are the adverse effects. Evaluation of this approach is needed from time to time on population based studies and concerted efforts from different sectors are the need of the day.

Keywords

Syndromic management, STI, Indian perspective.

Introduction

Syndromic management refers to an approach for treating Sexually Transmitted Infections (STI) based on signs and symptoms of the disease caused by the organism. Laboratory validation of this syndromic approach is a necessity when and where possible. As early as in the 1970s, public health physicians, particularly those working in Africa, became interested in testing simple clinical tools for controlling and treating STIs [1]. This resulted in the design and promotion of “syndromic management” guidelines for STIs by the World Health Organization in 1991 [2].

It rapidly became clear that the syndromic approach offered enormous advantages compared to the traditional approach, although more evidence was needed to rationalize and convince policy makers [3].

Different Approaches for Management of STI

There are three different approaches for management of STI.

Clinical Approach

Laboratory Investigations

Syndromic approach

Clinical Approach

Clinical approach is case management which includes history taking, clinical examination, laboratory tests, diagnosis, treatment, advice and counseling and follow-up. Though this process is time consuming it is the best approach to be followed. But the disadvantages are plenty. Advantages include simple, inexpensive and can be used in any settings. This also avoids the expense incurred for setting up laboratory facilities and provides immediate diagnosis and treatment. Limitations of this method includes incorrect diagnosis in case of asymptomatic infections and mixed infections. Even experienced clinicians can miss the cases and surveillance of STIs is not done properly.

Laboratory Approach

Laboratory diagnosis is required to confirm the diagnosis and to initiate the specific treatment. It avoids over treatment, wrong treatment and minimizes antimicrobial resistance. Problems of this approach are many. It is time consuming and expensive. The patient has to wait for the treatment against pending reports. It requires experienced personnel, supplies and adequate infrastructure. Moreover Quality Management systems are still not in place in most laboratories.

Syndromic approach

A syndrome is a set of symptoms and signs that characterize a

clinical condition. Extending this syndromic management implies an approach in which clinical algorithms such as decision trees for commonly presenting signs and symptoms are used in case management. The symptoms selected are reasonably consistent and easy to recognize. The algorithm provides treatment for the commonest biological causes of the syndrome [4]. Syndromic management usually provides single dose treatment as far as possible. It is comprehensive and includes patient education and counseling. Syndromic approach gives immediate treatment hereby decreases transmission and complications with the risk of over treatment.

Failure to diagnose and treat STIs at an early stage may result in serious complications and sequelae and an increase in medical cost [5]. In order to respond to the need of STI prevention and treatment, especially in countries with limited resources, the syndromic diagnostic approach based on treatment of symptoms without laboratory confirmation was recommended by WHO [6]. This syndromic approach remains the key component of the most recent WHO guidelines [7]. Rather than relying on aetiological laboratory diagnosis, which requires relatively sophisticated laboratories, the syndromic approach is based on the identification of consistent groups of symptoms and easily recognized signs, which is more practical and feasible for resource-limited settings. A study by Bosu (1999) has identified several advantages of the syndromic approach, including the simplicity of its implementation, rapid diagnosis and treatment, savings on the cost of laboratory tests, broader coverage and lower requirements for existing health systems [8]. Several studies have also demonstrated the efficacy of the syndromic approach [9-11].

On the other hand, the syndromic approach has been criticized because it relies on symptoms, physical signs and the physician's subjective judgement, all of which are sometimes nonspecific, inaccurate or even misleading. Furthermore, the approach does not address asymptomatic STIs. However, some studies suggest a poor sensitivity for detecting chlamydial and gonococcal infections among women [12,13]. Therefore, the sensitivity of syndromic management may vary depending upon gender, risk groups and organism [8,11].

The Indian Scenario

Studies in Indian settings are few. A study by K. Ray et al. at Regional STD teaching Training and Research centre, New Delhi, suggested that while a high proportion of women were diagnosed by syndromic approach, their total infection load as determined by etiological diagnosis was quite low. This could mean that the RTI/STIs are being over diagnosed by investigating physician and even that physiological discharge was misinterpreted as pathological. Therefore the sensitivity of the syndromic approach for Vaginal Discharges (VDs) in this study was high but specificity of this method in diagnosing VD was low [14]. This study was conducted on women attending clinics in a tertiary centre. In a community based study from the Urban slum area of Mumbai results showed that self reported symptoms correlated poorly with laboratory evidence of RTIs with sensitivity of 55.06% and specificity of

57.33%. An improvement in sensitivity from 55.06% to 82.91% was observed when RTIs were diagnosed with clinical examination however specificity decreased to 53.33% from 57.33% [15]. Though this study was a population based study the sample size was only 469 which were quite low in order to come to a justifiable conclusion.

The Need of the Day

STIs are preventable and many are treatable. Early access to care helps prevent further transmission to partners and from mother-to-child, acquisition of additional STIs, and decreases the risk of STI related complications. Therefore, STI screening and prevention should become routine and integrated into the current health care system. The government agencies should be committed in prevention of STIs.

As per 2002-2003 ICMR study the National AIDS Control Organization (NACO) program in India estimated occurrence of 30 million episodes of STI/RTI every year in the country [16]. Though many studies in piecemeal are present for prevalence of STIs all are concentrated on small communities and clinic attendees. Thereby till today syndromic diagnosis of STIs are being used in India where resource is inadequate and laboratory diagnosis is limited. It is simple, cost effective and capable of yielding rapid diagnosis for immediate treatment. However it should be validated from time to time using population based studies. Concerted efforts are needed from clinicians, policy makers, and health care personnel for periodically evaluating this management strategy. Time has come to decentralize STI management program from Government sector and utilize the resources of private funded agencies for more effective management of sexually transmitted infections.

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