A Review of the Literature on Health Policy for Tuberculosis

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Background and Objective

• The objective of this study is to systematically review the published literature on tuberculosis and health care policies surrounding tuberculosis.

• In 2000, health care workers began seeing breakdowns in the efforts to control tuberculosis and the appearance of new populations at risk, such as persons infected with the human immunodeficiency virus (HIV), the homeless, and immigrants from high-prevalence nations, have contributed to dramatic increases in identified cases.[4]

• Outbreaks of tuberculosis in health care settings and the emergence of multiple drug-resistant strains of mycobacterium tuberculosis, which are associated with significantly higher mortality rates, are a major concern to health care institutions.

• In a nation-wide response to increasing numbers for nosocomial transmissions and outbreaks among health care workers, several organizations, such as the Center for Disease Control and Prevention and the World Health Organization, came together to create specific guidelines to increase the prevention of tuberculosis transmission in health care settings.[1,6]

• The guidelines emphasize early detection of patients with active tuberculosis, environmental controls, respiratory protection for persons entering infected patients' rooms, surveillance for tuberculosis transmissions and prophylactic treatment of persons identified with latent infection.[2,6]

• Familiarity with the guidelines and their implications for worker surveillance and treatment are critical to reduce the risk of occupationally-acquired tuberculosis.[2,5] This renewed danger raises some important issues for research and policy among health care institutions.
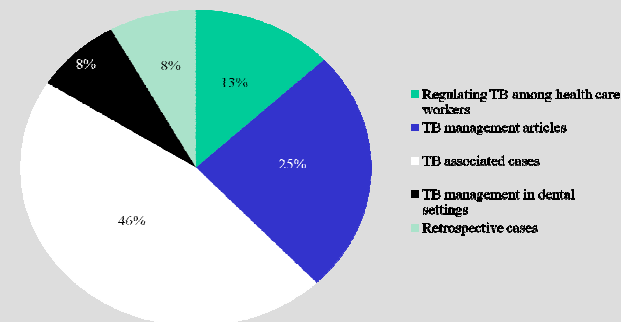
Methods

Data Sources

Medline (1990-2010), the Cumulative Index to Nursing and Allied Health Literature (CINAHL, 1990-2010), and the Association of American Medical Colleges, were searched for eligible articles using combinations of the following search terms:

(1) pulmonary tuberculosis, tuberculosis, pulmonary (MeSH), or mycobacterium infections, atypical (MeSH);

(2) medical schools (MeSH), medical education (MeSH), graduate medical education (MeSH), undergraduate medical education (MeSH), medical students (MeSH), medical staff, medical faculty, residents (MeSH);

(3) infection control, communicable diseases (MeSH), cross infection/prevention & control (MeSH), infection/prevention & control (MeSH), staff health policies, faculty health policies. The reference lists of included studies were also searched.

Study Selection and Data Extraction

The author screened the titles, abstracts, introductions, methods, discussions, and results of the identified eligible articles based on the following criteria: measures of literacy specific to tuberculosis, studies of associations between health policies and tuberculosis control, or faculty and staff health policies and infection control policies within health care organizations. The author also screened for articles in English language only and years searched were from 1990-2010.

Results

Regulating tuberculosis among health care workers

• Three articles which identify the risks of healthcare-associated tuberculosis as a concern for patients and healthcare staff. Each article expressed an outcry for a uniform health policy to better control tuberculosis within their respective health care institutions.

Tuberculosis Management

• The six articles in this category offer treatment suggestions against drug-resistant strains of tuberculosis. It shows that policies and standard treatment guidelines vary among institutions and must be consistent in order to control tuberculosis.

Tuberculosis associated cases

• Eleven tuberculosis associated cases were in this group. These studies showed gaps in what is expected of management and maintenance programs for tuberculosis. Each institution has its own expectations in regards to tuberculosis policies.

Tuberculosis management in relation to dental settings

• Two articles touched on tuberculosis management in dental settings. Both articles agreed that regardless of the risk category, every dental setting should develop a written TB infection control plan as part of their overall infection control programs. Overall, the guidelines for detecting and controlling tuberculosis in a dental setting is no different than that of a hospital.

Retrospective cases on tuberculosis

• This category contains two retrospective studies. Both of these case reviews showed that by implementing the most current guidelines for the prevention of transmission of tuberculosis including administrative and engineering controls and a change in personal protective equipment a significant decrease in new conversions is seen.

Figure 1. Systematic Literature Review Results

Legend:
- Regulating TB among health care workers
- TB management articles
- TB associated cases
- TB management in dental settings
- Retrospective cases

(13%, 25%, 46%, 8%, 8%)

Discussion

The alarming emergence of drug resistant tuberculosis tells us that changes in current control practices are a must.[3] The reasons for increasing drug resistant tuberculosis are: inadequate treatment because of poor adherence, the lack of regimens or timely susceptibility results, and transmission of drug-resistant strains.[2] If measures are not strengthened to prevent the development of resistance in drug-sensitive tuberculosis and if administrative control measures are not put in place then the number of cases will continue to grow.[1,2]

Implications

• There isn't a standard set of policies and regulations that are parallel across the board. Because a set standard is lacking this makes it extremely difficult for a health care organization to know exactly which set of policies and regulations to use. Instead, they must utilize a set of policies and regulations that seem most beneficial to their institution and see if they have an impact through a decrease in the numbers of new skin conversions. After reviewing all of the articles the biggest issue that presented itself to me was that there is no set standard or protocol for TB.

Limitations

• English language
• After the year 1990.

References

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