



Respiratory Mortality: A Review

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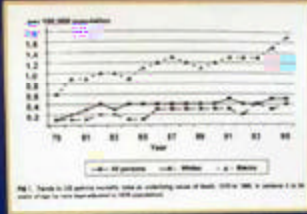
Background

It is estimated that 17 million people in the United States have asthma. The prevalence of asthma (all age groups) is 6.62 per 100 persons, but is higher in those under 18 (8.12/100 persons) and those with an income less than \$16,000 (6.6/100 persons).

Asthma is a complex, heterogeneous disease in which response to treatment varies widely. Numerous factors including viral infections, allergen and irritant exposure, exercise are among the factors that can complicate the short- and long-term management of asthma.

Quality intensive research and adherence to evidence-based practice are all vital to asthma research, relatively high. There is little information available that links risk factors to high-risk populations and mortality data.

- This review of published literature focuses on three key areas:
- 1) Examination of current trends in rates of asthma-related deaths
 - 2) Identification of mortality predictors or risk factors
 - 3) Review of potential effective prevention measures



In Memory of Matthew Wayne Banocki Who died on August 25, 2000 following an acute asthma attack



April 7, 1981 - August 25, 2000

Conclusion

- In conclusion -
- Asthma mortality rates have increased worldwide.
 - Although rates differ markedly by region and ethnicity, diverse characteristics that place patients at risk are not well understood.
 - Predictors and potential actions are key to the prevention of asthma-related death.
 - Further research is needed to assess what is known.
 - Specific disease characteristics that place asthma patients at risk for asthma-related death.
 - Primary care physician adherence to asthma management guidelines.
 - Emergency situation asthma protocol.

Review

Adults
In the United States, mortality rates from asthma have increased in the past few years from 1.3 to 1.9 per 100,000 persons.

Recent asthma mortality trends indicate a widening of the racial gap. Rates of death from asthma have been much higher for white females than white males with an increasing disparity.

While the US regional variations also exist in asthma prevalence, mortality and morbidity rates.

Risk
The "high risk" groups for asthma-related deaths are patients with a history of previous asthma and/or asthma-related deaths, patients with a high concentration of poorly controlled asthma characteristics that may affect patients at risk are not clearly defined.

Most deaths do occur either (1) in patients with severe, poorly controlled asthma or (2) in patients who have a history of previously asthma and are currently receiving no treatment, upon which a major attack is unprovoked.

The literature notes that the events were often associated with lead or near-lead episodes of asthma.

Four assessment of the outcomes is considered the most significant. Several studies have shown a pattern of failures on the part of either the patient or health care provider to use the severity of the lead symptoms of asthma. One British study concerning asthma-related deaths found that some extent of care or supervision was deficient in 90% of the deaths reviewed. The problems ranged from failure to diagnose asthma (10%) to poor understanding (7%). Patients had not used appropriate (7%) of the time. Other management failures were asthma-related deaths found very similar asthma.

Many believe that most asthma deaths occur suddenly or hours or at risk, suggesting that some of the outcomes were unexpected. The deaths would not have been preventable. In fact, the first episode of asthma (80%) of the deaths lasted at least 12 hours, allowing enough time for treatment. Slightly less than half of all deaths occur in the hospital.

Some asthma episodes can be completely managed, asthma-related deaths in hospital may be due to the care. Many studies have shown outcomes in intensive care units of patients with asthma in both treatment and support settings, especially in patients who died. Using clinical judgment, practitioners often underestimate the needed pharmacologic treatment.

Prevention
The use of appropriate medication is largely dependent on the ability of caregivers and patients to recognize warning signs. And, unfortunately, signs are reported in any patient with acute asthma.

The patient must be educated about the illness and have a written plan for emergency treatment. The communication between the patient and physician during periods of deteriorating asthma should be established in emergency situations. There is need for a protocol to be established and implemented that encompasses effective drug and acute management of the patient's program.

Clinical practitioners would be advised to follow four algorithm monitoring of the severity of asthma and associated deterioration in gas exchange.

Early recognition of asthma that has reached a level that is not controlled by inhaled corticosteroids and oral corticosteroids is essential. Every effort should be made to prevent any asthma. Long-term management of asthma with appropriate changes in medication.

Practitioners responding to primary care physicians outcomes should be aware of the need for collaboration for further management.