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## Public Health 2018- Pneumonia in Astringently Malnourished Children: Etiologic, diagnosis, management and Future Direction

**M**alnutrition is a condition that results from victualing a diet in which one or more nutrients are either not enough or are an exorbitant amount of such that the diet causes health quandaries. It may involve calories, protein, carbohydrates, fat, vitamins or minerals. Not enough nutrients is called undernutrition or undernourishment while an extravagant amount of is called overnutrition. Malnutrition is often used to concretely refer to undernutrition where an individual is not getting enough calories, protein, or micronutrients. If undernutrition occurs during gravidity, or afore two years of age, it may result in sempiternal quandaries with physical and phrenic development. Extreme undernourishment, kenneed as starvation, may have symptoms that include: a short height, thin body, very impecunious energy levels, and swollen legs and abdomen. People withal often get infections and are frequently cold. The symptoms of micronutrient deficiencies depend on the micronutrient that is destitute.

Undernourishment is most often due to not enough high-quality aliment being available to victual. This is often cognate to high victuals prices and perviousness. A lack of breast-feeding may contribute, as may a number of infectious diseases such as: gastroenteritis, pneumonia, malaria, and measles, which increase nutrient requisites. There are two main types of undernutrition: protein-energy malnutrition and dietary deficiencies. Protein-energy malnutrition has two astringent forms: marasmus (a lack of protein and calories) and kwashiorkor (a lack of just protein). Prevalent micronutrient deficiencies include: a lack of iron, iodine, and vitamin A. During gravidity, due to the body's incremented need, deficiencies may become more prevalent. In some developing countries, over nutrition in the form of inordinate corpulence is commencing to present within the same communities as undernutrition. Other causes of malnutrition include anorexia nervosa and bariatric surgery.

The cause of a disease or anomalous condition and a branch of erudition concerned with causes concretely a branch of medical science concerned with the causes and inchoation's of diseases. Etiology is defined as the science of finding causes and inchoations. An example of etiology is kenning that some of the causes of high blood pressure are smoking,

lack of exercise, stress and a diet high in salt and fat. Etiology and epidemiology cover homogeneous approaches to the study of diseases, but they're distinct medical terms that shouldn't be used interchangeably. While both fields offer valuable insight into diseases and the maintenance of health, each has an area of focus. Aetiology: The study of the causes. For example, of a disorder. Aetiology is the preferred spelling in some countries, including the UK, whereas "etiology" without an "a" has surmounted in the US. The word "aetiology" emanates from the Greek "aitia", cause + "logos", discourse. According to the gregarious etiology thesis of phrenic illness, disorders may be caused or precipitated by rigorous stressors or major life difficulties. The model has been fortified for onset of despondence and apprehensiveness disorders.

The effort to bring modern agricultural techniques found in the West, such as nitrogen fertilizers and pesticides, to Asia, called the Green Revolution, resulted in incremented victuals engenderment and corresponding decreases in prices and malnutrition akin to those visually perceived earlier in Western nations. This was possible because of subsisting infrastructure and institutions that are in short supply in Africa, such as a system of roads or public seed companies that made seeds available. Investments in agriculture, such as subsidized fertilizers and seeds, increases pabulum harvest and truncates victuals prices. For example, in the case of Malawi, virtually five million of its 13 million people used to require emergency aliment avail. However, after the regime transmuted policy and subsidies for fertilizer and seed were introduced against World Bank strictures, farmers engendered record-breaking corn harvests as engenderment leaped to 3.4 million in 2007 from 1.2 million in 2005, making Malawi a major pabulum exporter.

#### Statement of the Problem:

Management of pneumonia in rigorously malnourished children is critically paramount in abbreviating deaths in such children. Understand the etiology of pneumonia in rigorously malnourished children is one of the essential components of congruous management. Diagnosis of pneumonia in children with astringent malnutrition is additionally intriguing. Etiology and diagnosis of pneumonia in SAM is not well described in medical literature. Data on management of pneumonia in such children are withal lack. Management of pneumonia in rigorously malnourished children is critically consequential in abbreviating deaths in such children. Understand the etiology of pneumonia in astringently malnourished children is one of the essential components of congruous management. Diagnosis of pneumonia in children with rigorous malnutrition is additionally intriguing. Etiology and diagnosis of pneumonia in Astringent Acute Malnutrition (SAM) is not well described in medical literature. Data on management of pneumonia in such children are withal destitute.

We have done a systematic review utilizing categorical search criteria in PubMed to evaluate the overall role of astringent malnutrition in children with pneumonia in SAM children.

#### Result:

Among a total of 215 isolates 26% were Klebsiella and 25% S. aureus species, 18% Pneumococcus, 8% each E. coli and Salmonella species. A recent study conducted in Bangladesh found 87/385 (23%) MTB as the bacterial etiology of pneumonia in SAM children. In SAM children, the sensitivity of expeditious breathing as a prognosticator of radiographical-

ly proven pneumonia ranged from 14% to 76% and specificity from 66% to 100%. Surprisingly, metabolic acidosis found to have no impact on the diagnostic clinical features of pneumonia in SAM children having diarrhoea. Studies revealed that as a first line therapy ampicillin and gentamicin are more efficacious against enteric Gram-negative bacilli than chloramphenicol in SAM children with pneumonia. Both the groups received in integration to diet, micronutrients, vitamins and minerals.

#### Conclusions & Consequentiality:

Currently, available data suggests that the spectrum and frequency of causative agents of pneumonia in astringently malnourished children differ from that optically canvassed in well-victualled children. Clinical signs are relatively poor presages of pneumonia in rigorously malnourished children. However, injectable antibiotics in integration to diet, micronutrients, vitamins and minerals are the sine qua non. High prevalence of pulmonary tuberculosis in rigorously malnourished children having acute pneumonia underscores the consequentiality of further research that may avail to evaluate determinates of TB in such children.