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## Health problems in children: A review article

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**Abstract**---Children in India face health issues and are afflicted by illnesses and disorders. There are a variety of factors that contribute to these issues. It is the parents' primary obligation to ensure that their children receive good nourishment and education and that the home environment is created in such a way that it promotes the health and well-being of the children in an acceptable manner. The causes of health problems, the prevalence of childhood health problems, child health interventions, and strategies to avoid health problems among children are the key topics covered in this study paper. It is critical that individuals from deprived, marginalized, and socioeconomically backward areas of society raise awareness about these initiatives. Individuals of all classifications, backgrounds, and occupations must be aware of health issues affecting children and how to address them.

**Keywords**---accident poisoning, behavioral problems, children, health problems, infections parasitosis, low birth weight, malnutrition.

**Introduction**

Children in the country are valuable human resources. It is widely recognized that children are the country's future citizens and that opportunities for their operational growth and development should be provided [1]. Health-related

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conditions and behaviors affect 10 to 30% of children in India. There are a variety of factors that contribute to health problems in people. Nutritional disorders, including malnutrition and overnutrition, tobacco and alcohol use, other substance use, high-risk sexual behaviors, stress, depression, and common mental disorders, as well as injuries from traffic, accidents, suicides, and various forms of violence, all affect this population and have long-term consequences. Multiple behaviors and conditions frequently coexist in the same person, posing a cumulative risk for their health to deteriorate. The negative consequences include increased morbidity, mortality, disability, and socioeconomic loss [1].

Many health policies and programs have prioritized individual health problems and included coordinated approaches, but both vertical and horizontal approaches are found to be lacking. According to population-based studies, healthy lifestyles and health promotion policies and programs are seen as critical factors in the health of young people. These studies are required in India, where the increase in NCDs and injuries will also be reported. Inadequate diet and nutrition, exposure to weather conditions such as cold, heat, and rain without taking precautions or wearing appropriate clothing, and exposure to various types of criminal and violent acts such as verbal abuse, physical abuse, torture, stress, pressure, anxiety, poverty, homelessness, inaccessibility to health care and medical treatment are all factors that contribute to the high prevalence of health problems, illnesses, and diseases among children [2].

### **Health problems in children [3]**

1. Low birth weight
2. Malnutrition
3. Infections and parasitosis
4. Accidents and poisoning
5. Behavioral problems
6. Other factors affecting the health of children.[4]
  - Maternal health
  - Family
  - Socio-economic circumstances
  - Environment
  - Social support and health care

### **Low Birth Weight**

One of the most serious challenges in MCH.LBW is the single most factor determining the survival chances of the child. Many of them die during their first year. LBW is an important guide to the level of care needed by individual babies. A high percentage of LBW points to the deficient health status of pregnant women, inadequate prenatal care, and the need for improved care of the newborn [5].

### **Malnutrition**

Malnutrition makes a child more prone to infection, slows healing, and increases the risk of death. Children who are malnourished do not reach their full physical

and mental potential. Stunted growth occurs as a result of malnutrition in infancy and childhood. Infection and malnutrition can create a vicious cycle, so preventing and treating diarrhea, measles, and other diseases in infancy and early childhood is critical to lowering malnutrition rates [4].

### **Infectious and parasitic diseases**

Diarrhea, respiratory infections such as measles, pertussis, polio, neonatal tetanus, TB, and diphtheria are among the most common childhood illnesses. A quarter of the 4 million people who die each year in the poor world from acute respiratory infections are due to starvation, while the other quarter is due to complications from measles, pertussis, malaria, and HIV/AIDS. Children's disease prevention and treatment may help to prevent infection spread in the community [5].

### **Accidents and poisoning**

In the developed world, accidents and poisoning have become a relatively more important child health problem. Children and young adolescents are particularly vulnerable to domestic accidents-including falls, burns, poisoning, and drowning [6].

### **Behavioral problems**

Disturbances in behavior are a common problem in children's health. Children who have been abandoned by their relatives face serious social and health issues. In India, almost 60,000 children are abandoned every year [6].

### **Other factors**

#### **Maternal health**

#### **A major determinant of a child's health is the health of his/her mother**

If the mother is malnourished, if she is under 18 years old (too young) or over 35 years old (too old), if her last child was born less than 2 years ago (too near), or if she has already had a child, the child's health is jeopardized (the risk begins even before birth). A healthy mother has a healthier baby who has a better chance of surviving [6].

#### **Family**

The child is very much an organic part of the immediate family during the pre-school years. Everything that happens to him or her has an impact on the rest of the family, and vice versa. As a result, "kid health" must also include "family health." The period of infancy and early childhood is when a child is exposed to common communicable illnesses through interaction with others. The number of episodes of infectious diarrhea increases with the size of the family, according to data. In other words, having fewer children would result in better nutrition, health care, decreased morbidity, and lower infant mortality [6].

**Socio-economic circumstances**

The education, profession, and income of parents, their housing, and the population's urban or rural, industrialized or non-industrialized character all play a role in child health. Poverty, illiteracy (particularly among mothers), and illness form a vicious spiral that passes down from generation to generation and is difficult to break free from [6].

**Environment**

As determinants of neonatal and childhood illness and mortality, environmental variables have a significant impact. The effects of a tetanus infection on a newborn can be severe in the first few weeks of life. In youngsters exposed to an unsanitary and hostile environment, diarrhea, pneumonia, and other bacterial, viral, and parasitic illnesses are particularly frequent. A lack of safe drinking water, improper disposal of human excreta and other waste, and an abundance of insects and other disease carriers are just a few of the environmental problems that are constantly threatening family health [6].

**social support and health care**

Community and social support measures, ranging from creches and day-care facilities to organized healthcare systems, also have an impact on children's health [6].

**Causes of death in children****Pneumonia**

Pneumonia kills more children than any other disease, accounting for 19% of all deaths, surpassing AIDS, malaria, and measles combined. In every location, it is a leading cause of child death [6].

**Diarrhea**

Diarrhea is most frequent in children aged 6 months to 2 years, with the maximum prevalence occurring between the ages of 6 and 11 months when weaning begins. Children under the age of five in underdeveloped countries die at a rate of 4.9 per 1000 per year due to diarrhea [6].

**Measles**

Measles is a leading cause of illness and mortality among children in India. It affects children from six months to three years old. In malnourished youngsters, it is more severe [6].

## HIV/AIDS

This is a new cause of death among children, primarily in Sub-Saharan Africa. This accounts for 3% of all deaths among children under the age of five [6].

## Malaria

This is a leading cause of death in Sub-Saharan Africa, accounting for 25% of all childhood deaths [6].

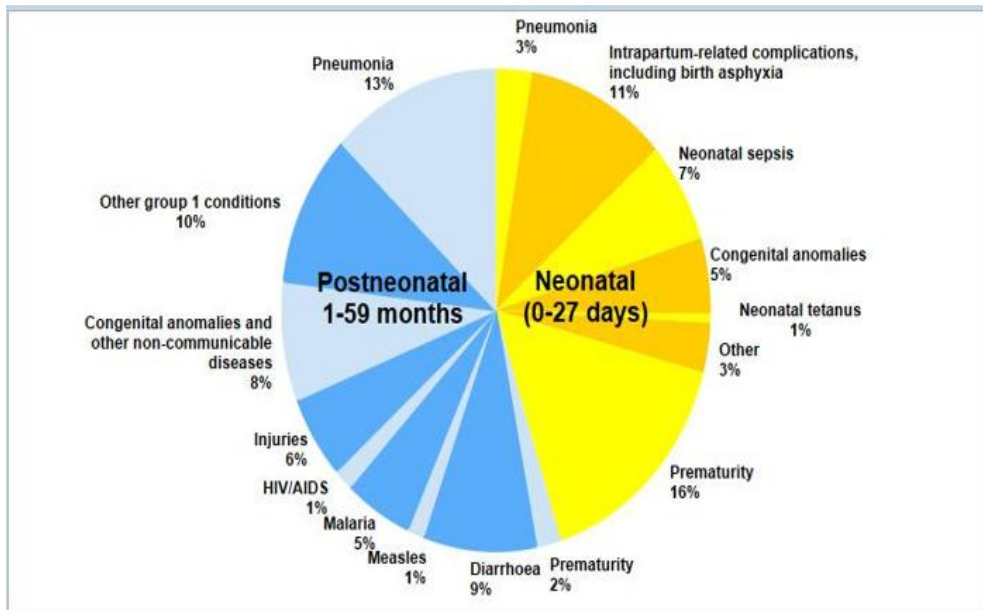


Figure:1 Causes of deaths among children under 5 years,2015

Source: WHO-MCEE methods and data sources for child causes of death 2000-2015

(Global Health Estimates technical paper WHO/HIS/IER/GHE/2016.1)

## Goal

The Under-Fives Clinic's overall purpose is to provide comprehensive health care to young children in a separate, specialized setting [7].

## Objectives

1. Care in illness
2. Growth monitoring
3. Preventive care
4. Family Planning
5. Health education

## **Methodology**

Methodology Dr. Dobbin's Rapid Review Guidebook Steps for Conducting a Rapid Review guided the rapid review through five steps of the evidence-informed decision making (EIDM) process. The health Evidence™ tool was used to 1) find and obtain relevant research evidence; 2) assess research evidence's methodological quality, and 3) synthesize the evidence.

## **Search Strategies**

The key search phrases "Health Problems" and "Under-five children" were defined based on the quick review research questions and a combination of multiple study topics. Low birth weight, malnutrition, infections and parasitosis, accidents and poisoning, and behavioral disorders have all been included in the search criteria. Wildcards were employed to increase the quality and unbiasedness of the search [8].

## **The final search string is as below**

("Health Problems "OR "Under-five children". Four databases namely PubMed, Cochrane, Google Scholar, and Scopus library have been adopted for systematic search of publication. PubMed and Cochrane library offered a good coverage of peer-reviewed articles, while Google Scholar & Scopus has been included to have a broader coverage of the grey literature given the scarcity of publication on health problems under-five children. The literature search was also supplemented with snowball searching to pursue references reference involving the review papers.[8]

## **Eligibility criteria**

The literature search was limited to English-language publications and included all articles, theses, and review papers about the care of under-five children published before February 2022; studies conducted in developing countries based on the World Bank checklist; and studies conducted in developing countries based on the World Bank check-list. Data were extracted from publications that detail the evolution of the conceptual framework for health concerns, policy development, and determinants of utilization, issues, and challenges [8].

## **Data Extraction**

The articles were reviewed by two impartial reviewers from the university fraternity to guarantee that the selection was not biased. On the finished list of publications for additional data extraction, both reviewers have established an eighty-percent agreement. Because the investigations were conducted by a variety of field experts, there was a lack of consistency in the methodology. The level of evidence was used to grade the quality [9].

## Results of the literature search

Non-related articles were filtered based on their non-English language, title, abstract, and chapter of a book, and a total of 151 articles were reduced to potentially relevant articles of 21 articles after the preliminary screening procedure. According to the inclusion criteria, 21 studies from 8 developing and developed countries were included in the final data extraction (Figure 1: Health Evidence™ tools: Literature search results).

## Inclusion criteria

Original articles focused on health problems in children under the age of five were considered for inclusion.

## Exclusion criteria

Nontribal studies; effectiveness studies; studies combining various interventions (multiple intervention trials). Abstracts, conference posters, short communications, and letters to the editor, as well as studies with insufficient data on community efficacy and surveillance data or reviews.

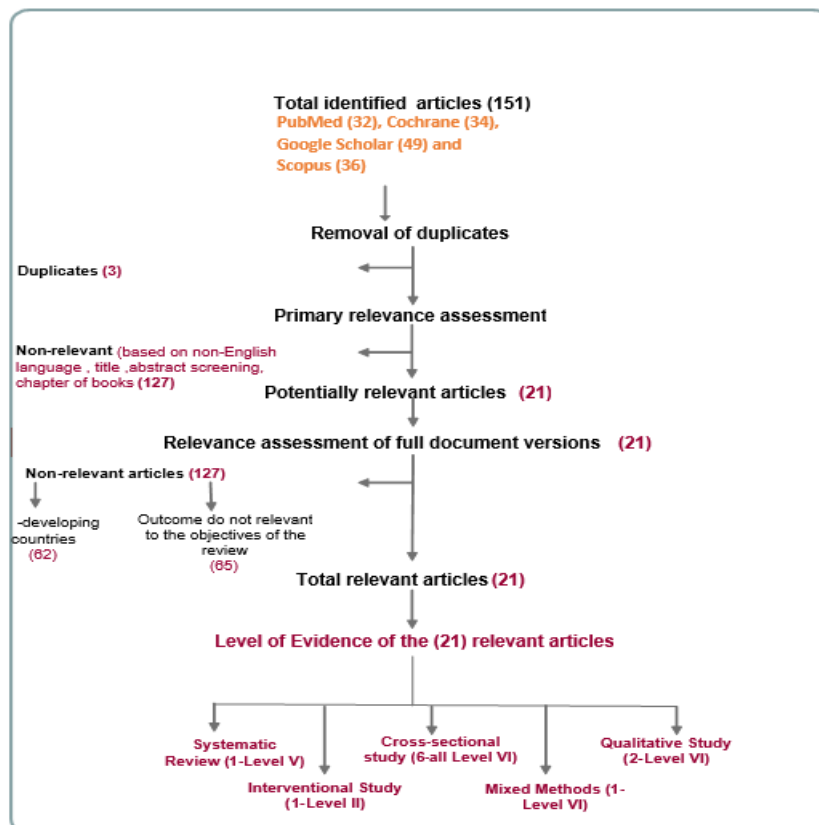


Figure 2: Health Evidence™ tools: Literature search results [9]

## Result & Discussion

### Under Five Clinic

Under-five clinics are centers where under-five children can receive preventive, promotional, curative, referral, and educational services all in one place. The services are provided by professional nurses, allowing them to reach a higher proportion of the community's children [10].

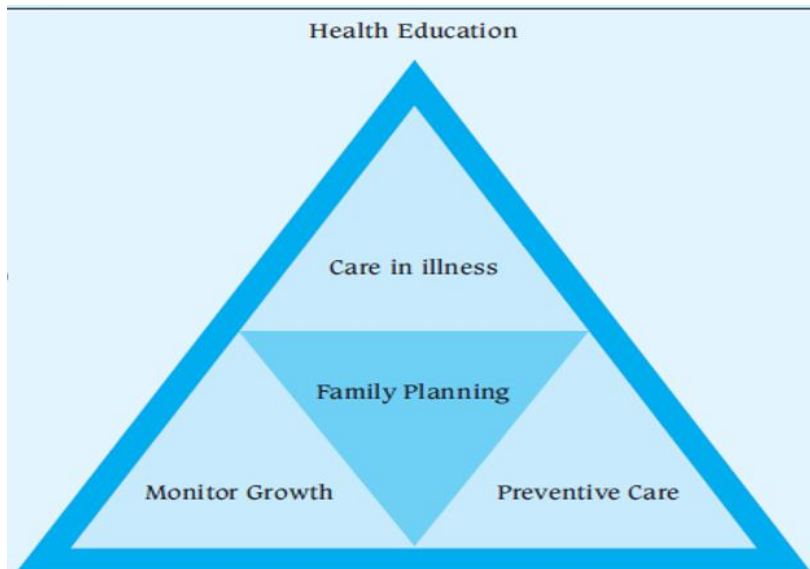


Figure:3 Under Five Clinic

(<https://www.nursingpath.in/2018/05/under-five-clinic-program.html>)

### Features of under-five clinics

Children under the age of five In impoverished countries, clinics are specifically built to assist children under the age of five. Clinics must be located as close to residential areas as feasible, and that home visits be included in the services given. The majority of the staff should be locally trained health care workers, nurses, and auxiliary personnel, who will be responsible for the majority of the care. The doctors on staff should be in charge of more difficult disease training, diagnosis, and treatment. This technique will increase moms' trust in the abilities of the locally trained worker. Mothers require instruction and assistance to establish habits that will reduce disease and improve health [10].

### Care in Illness

This is the mother and child's perceived need, and it is for this reason that any child is brought to the clinic. Fever, diarrhea, ARI, skin infections, and helminthiasis are common ailments in children under the age of five. Essential laboratory investigations and X-ray facilities should be available at the facility. A strong referral system should be in place to support the clinic [10].



### Growth Monitoring

This is one of the clinic's most significant functions. The kid is weighed every month throughout the first year, every two months from one to three years of age, and every three months in the fourth and fifth years. Depending on the availability of qualified people and equipment, other tests such as weighing, measuring height, and measuring mid-arm circumference can be performed. Growth is shown on a growth chart, and any stalls in growth are identified and appropriate action is taken. The milestones are also tracked, and any delays in meeting them are assessed [10,16].

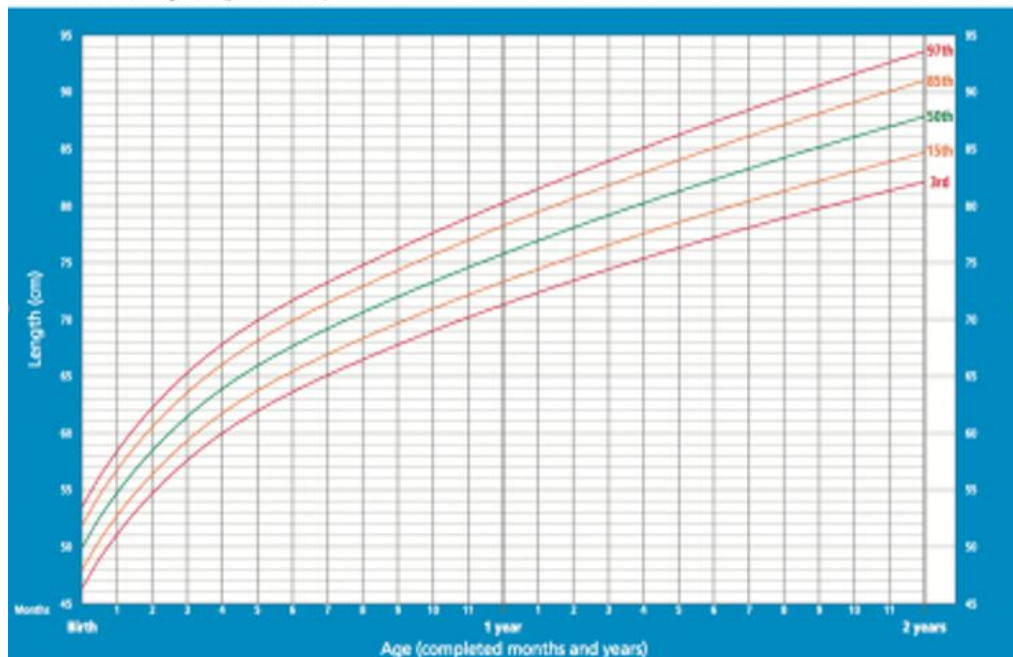


Figure:4 Length for -Age boys (Birth to 2 years)  
Source: WHO Child Growth Standard

### Preventive Care

This includes immunization services for the first five years of life, vitamin A supplementation (1 lac IU at 18 months, 2 lac IU at 6-month intervals thereafter until 3 years of age), and iron supplementation and anthelmintic treatment to avoid anemia. Regular health checkups, dietary surveillance, and the use of ORS during diarrhea to prevent dehydration are all part of preventative care [10, 15].

### Family Planning

Any program aimed at women and children must include family planning. During early puerperium and nursing, moms are more amenable to family planning. Mother is advised on the numerous options available, as well as their benefits and drawbacks, so she may make an informed decision [10,12].

## Health Education

The opportunity should be taken to teach the mother about infant care, breastfeeding, nutrition, growth monitoring, immunization, and clean water and food preparation hygiene [10,13].

## Why Immunization?

Immunization is one of the safest and most efficient ways to keep children healthy. Significant progress has been made in the prevention and control of vaccine-preventable diseases under the Universal Immunization Program (UIP) (VPDs). To further lower the prevalence of all VPDs, control measles, eliminate tetanus, and eradicate poliomyelitis, vaccination must be prioritized [11, 14].

### National Immunization Schedule

Age	Vaccines given
<b>Birth</b>	Bacillus Calmette Guerin (BCG), Oral Polio Vaccine (OPV)-0 dose, Hepatitis B birth dose
<b>6 Weeks</b>	OPV-1, Pentavalent-1, Rotavirus Vaccine (RVV)-1, Fractional dose of Inactivated Polio Vaccine (fIPV)-1, <b>Pneumococcal Conjugate Vaccine (PCV) -1*</b>
<b>10 weeks</b>	OPV-2, Pentavalent-2, RVV-2
<b>14 weeks</b>	OPV-3, Pentavalent-3, fIPV-2, RVV-3, <b>PCV-2*</b>
<b>9-12 months</b>	Measles & Rubella (MR)-1, <b>JE-1**</b> , <b>PCV-Booster*</b>
<b>16-24 months</b>	MR-2, <b>JE-2**</b> , Diphtheria, Pertussis & Tetanus (DPT)-Booster-1, OPV – Booster
<b>5-6 years</b>	DPT-Booster-2
<b>10 years</b>	Tetanus & adult Diphtheria (Td)
<b>16 years</b>	Td
<b>Pregnant Mother</b>	Td-1, Td-2 or Td-Booster***

\* PCV in selected states/districts: Bihar, Himachal Pradesh, Madhya Pradesh, Uttar Pradesh (selected districts) and Rajasthan; in Haryana as state initiative

\*\* JE in endemic districts only

\*\*\* One dose if previously vaccinated within 3 years

Figure 5 National immunization schedule  
Source: National Health Mission ([shorturl.at/fgmBO](http://shorturl.at/fgmBO))

## Conclusion

When a person has health problems, he or she has a variety of problems and adversities in their lives as well as in the execution of responsibilities and functions. There are many different kinds of health issues and illnesses. Some are long-term, others are short-term, some are temporary, and so on. Malnutrition, poverty, injuries and accidents, a lack of education and employment, a lack of health care facilities and medical centers, a lack of facilities and infrastructure,

criminal and violent acts, homelessness, toxins and drugs, and hazardous occupations are all factors that contribute to health problems. In some circumstances, adequate treatment for one's health concerns can be found. On the other hand, there have been incidents of people who have been unable to obtain therapy due to a lack of resources. Poverty, illiteracy, ignorance, and other factors are among the causes [1].

When children's health problems become severe, their parents often discourage them from attending school or engaging in other activities. Children's health issues hinder them from attending school, participating in play and creative activities, leisure and recreation, or performing any responsibilities or functions. Adequate diet and nutrition, medical treatment, clean environmental conditions, hygiene and lifestyle, carefulness when going outdoors, pollution control, maintenance of good relationships and conditions, mistreatment of children, symptoms, signs, and ill-defined conditions, and limiting the use of alcohol and tobacco are all measures that can be taken to prevent health problems in children. Individuals who have a good awareness of these elements are better equipped to prevent health problems and contribute to the prevention of illnesses and diseases at a far higher level [1].

In comparison to children from wealthy and educated households, health problems are more likely among children from deprived, marginalized, and socioeconomically backward areas of society. Individuals must make certain that their jobs do not cause any health issues. All people value their jobs since they provide them with a source of money. Some people may not be satisfied, yet they must work to make a living. When children work in dangerous industries, they must receive suitable training and have the necessary skills. Individuals must also create a pleasant environment and provide the required facilities and civic amenities within their houses to aid in the preservation of good health and the prevention of illnesses and diseases [1].

**Funding:** There was no outside support for this study.

**Conflicts of Interest:** The authors declare no conflicts of interest.

### **Ethics approval and consent to participate**

This evaluation does not require ethical approval because no patient data will be collected. Plagiarism, confidentiality, malfeasance, data falsification and/or falsification, double publishing and/or submission, and duplication are among the ethical problems examined in this study.

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