

Pneumonia and diarrhea- The two major killers of children under five years of age.

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Accepted on December 13, 2017

Editorial

Pneumonia and diarrhea, the two preventable and treatable conditions, are the two major killers of children under five years of age in the world. As per the World Health Organization (WHO), Global Health Observatory and Black et al. these two conditions together contribute to 29% of the total deaths of children worldwide [1,2].

In the year 2009, World Health Organization and UNICEF, issued a joint statement for a Multi-sectorial integrated approach aimed at reducing incidence of severe Pneumonia and diarrhea and to prevent deaths due to these diseases. This joint statement led to the development of a Global Action Plan to end Preventable Deaths from Pneumonia and Diarrhea (GAPPD). This action plan provides goals to reduce deaths due to pneumonia and diarrhea [3]:

Pneumonia

- a. Reduce deaths to less than 3 per 1000 live births.
- b. Reduce incidence of severe pneumonia by 75% (compared to 2010 levels).

Diarrhea

- a. Reduce deaths to less than 1 per 1000 live births.
- b. Reduce incidence of severe diarrhea by 75% (compared to 2010 levels).

The key components of this action plan include the below elements:

1. **Protect:** Establishing good health practices at birth, aimed at infant Young and Childhood feeding (IYCF) practices and prevention of malnutrition.
2. **Prevent:** Preventing children from becoming ill (Rotavirus vaccine, hand washing, safe drinking water and sanitation).
3. **Treat:** Providing appropriate treatment (Case management, ensuring supplies).

Certain health system bottlenecks at both supply and demand side need to be handled in order to implement these strategic elements, especially in low and middle-income countries (LAMI). Some of these are inadequate availability of supplies e.g. medicines such as ORS, Zinc, antibiotics, faulty distribution, lack of awareness among both-service providers and community, delay in care seeking, delay in identification of danger signs by community health workers etc.

It is often seen in LAMI countries that coverage of evidence based interventions are low and as per the UNICEF state of the World's children report 2017, the coverage of exclusive breastfeeding stands at 40%, vitamin A supplementation 70%, DPT3 immunization 86%, measles immunization 85%, care seeking for pneumonia 62%, antibiotics for pneumonia %, diarrhea treatment with ORS 44%, improved sanitation facilities 68%, improved drinking water 89%, rotavirus vaccine 25% and pneumococcal vaccine 42% [4].

With global advocacy led by WHO and UNICEF, and availability of vaccines such as rotavirus and pneumococcal, the task at hand of reducing deaths due to pneumonia and diarrhea seems less daunting, however, global efforts are only possible if the in country health systems are able to implement these interventions effectively, with strong political will, leadership, accountability and governance.

References

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3. http://apps.who.int/iris/bitstream/10665/79200/1/9789241505239_eng.pdf (Accessed Dec 12, 2017)
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