

CURRENT SITUATION OF CHILD HEALTH IN VIETNAM AND INTERVENTIONS TO IMPROVE HEALTH AND REDUCE MORTALITY OF CHILDREN UNDER 5 YEARS OLD, MOVING FORWARD ACHIEVING THE SUSTAINABLE DEVELOPMENT GOALS BY 2030

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INTRODUCTION

Review for Millennium Development Goals, Viet Nam was recognised by global community as a bright spot in achieving the goals of maternal and child health indicators. During 15 year of MDGs implementation, the mortality rate of children under five years old (U5MR) in Viet Nam declined by more than 60%, dropping from 58 to 22.1 deaths per 1,000 live births between 1990 and 2015 (1).

Despite the Goal 4 to reduce 2/3 of U5MR was still not attained (at 19.3‰), the reduction of U5MR in Viet Nam was quicker than many other countries. That resulted to the U5MR in Viet Nam in 2015 was much lower than the global figure (2). That leads to goal to reduce U5MR towards achieving the 2030 Agenda for Sustainable Development Goals (SDGs) in Viet Nam is confirmed as lower than the global target (22.1‰). The Resolution No. 20 of the Sixth Central Committee Meeting, Session XII specifies that by 2030, the U5MR must be reduced to less than 15‰ (3).

In order to achieve the goal of reducing U5MR as planned by the Government, Vietnam needs to make more efforts in terms of both resource investment and professional improvement. Analyzing the current situation, identifying advantages and disadvantages as well as looking for opportunities to improve health and reduce U5MR is the right approach to effectively implement interventions.

This review is carried out with 3 objectives: 1) Situation analysis of U5MR in the beginning stage of SDGs implementation; 2) Identify challenges and risks to health and child mortality and 3) Describe a number of successful interventions to reduce U5MR and propose for application and expansion in Viet Nam.

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1. SITUATION OF U5MR IN THE BEGINNING STAGE OF SDGS IMPLEMENTATION

Starting the process of implementing SDGs with U5MR was at 22.1‰, lower than the global average is an advantage for Viet Nam. However, there is still the huge difference in socio-economic conditions between regions, so estimation of U5MR by region is essential for appropriate interventions.

Data from the latest Viet Nam population Census in 2019 showed that U5MR is 21‰, reducing only 1.1‰ to compare with 4 years before (4). The common cause of deaths of under 5 children has not changed much compared to the previous period. The majority of deaths occurs in neonatal period. From the end of the neonatal period and through the first 5 years of life, the main causes of death are respiratory, circulatory diseases, infections and birth defects (5).

The distribution of child mortality is clearly different by age. Although the neonatal mortality (NMR) has decreased significantly compared to the previous decade, the proportion of NMR still contributes to a major part of U5MR. According to the Maternal and Child Health Department's annual report, NMR currently accounts for more than 70% of infant deaths and more than 50% of under-5 deaths (6). Compared with other countries in the world, the number of neonatal deaths in Viet Nam is in the group with a high proportion of total under five deaths.

Similar to other developing countries, the main causes of neonatal deaths are birth asphyxia, preterm birth/low birthweight, infections and birth defects (7,8). These causes, have been confirmed by many studies, can be prevented or treated if the interventions to save newborns' lives are applied effectively in both the community and health facilities (9).

2. CHALLENGES AND RISKS TO CHILD HEALTH AND MORTALITY

Like other low and middle income countries, in the process towards achieving the SDGs on health, Viet Nam has to face a number of challenges. That are the big difference in child health status and child mortality between regions; slow reduction of NMR; The risk of some emerging new diseases and the reoccurrence of disease pandemic; Increased deaths due to accidents, injuries, and impacts of natural disasters and catastrophes.

2.1. Disparities in child mortality across regions

There is also a big difference (nearly 3 times) in U5MR between mountainous, remote, and ethnic minority areas compared to urban and delta areas of Viet Nam. Also according to the latest 2019 census data (4), the U5MR in rural areas was 25.1‰ that was almost 2 times higher than in urban areas (12.3‰). At the regional level, the U5MR in the Northern mountainous provinces (31.5‰) and the Central Highlands (35.5‰) were nearly three times higher than in the Southeast (12.7‰) and twice as much as that in the Red River Delta region (16.5‰). Therefore, priority interventions should focus on disadvantaged, mountainous and ethnic minority areas. Reduce the gaps in child health care between regions, wealth quintiles and ethnic groups can lower U5MR nationwide.

2.2. The burden of neonatal deaths is a major challenge in child mortality reduction interventions

Neonatal mortality rate is not yet available in Vietnam's annual statistics published by the Ministry of Health. According to Multiple Indicator Cluster Survey (MICSs) 2014 by General Statistics office and UNICEF, the NMR is about 12‰ during 2010 - 2014 (10). Compared to the previous decade, NMR declined significantly. However, the progress of neonatal mortality reduction is slower than the decline of U5MR. According to data from the Ministry of Health as well as many international studies and reports showed that NMR still accounts for more than 70% of infant

deaths and more than 50% of under-5 deaths (8). Therefore, reducing neonatal mortality should be placed at the top priority of interventions to reduce child mortality in Viet Nam.

2.3. Accidents, injuries and reoccurrence of some infectious diseases can be prevented with vaccination

Measles epidemic in 2013 - 2014 circulates in most provinces in the country with more than 4000 children infected and more than 100 children under 5 years old died. Although there have also been the great efforts to prevent the spread of the disease, the measles epidemic has not shown signs of stopping. Data in 2019 showed that there were more than 43,000 cases of suspected measles fever including more than 14,000 confirmed by testing in the whole country. Measles occurred in all 63 provinces/cities with high prevalence in Hanoi, Ho Chi Minh City, and Dak Lak (11)

Diphtheria epidemic, after years of being under controlled, has reappeared recently. Although it is not as spread out as measles, the disease is often severe and has a high risk of death. Data in 2019 showed that there were 53 cases of diphtheria in 7 provinces and cities including 5 deaths (12).

The impact of the COVID -19 pandemic on child health care: COVID19 has had a huge impact on the providing services and quality of care because of the need to share resources to fight epidemics (13). For child health care, social isolation and distances as well as fear of infection will limit the access to the health care services by many families and communities in terms of both prevention and treatment.

2.4. Accidents and injuries

A worrying risk that causes children 5 years of age is prevalence of accidents and injuries becomes more common. Annual statistics show that child mortality due to accidents and injuries often account for 20-25% of the total

deaths of children under 5 years old. The main causes are Drowning; Traffic accidents and accidents occurred at home (food chopping, falls, poisoning, electric shock, burns). Statistics in 2013 of the Ministry of Health showed that among 1,634 children under 5 years old who died from accidents and injuries, the number of deaths caused by the above main causes are 1,178; 140; 122, respectively (14).

2.5. Natural disasters and catastrophes

Viet Nam is located in a susceptible geographical to natural disasters and catastrophes. Droughts, forest fires, epidemics, floods, etc. occur every year and the consequences are unpredictable. In addition, the harmful effects of climate change in recent years have caused a lot of damage to socio-economic development and most serious influence on health, of which children are the target group at the highest risk.

Severe impacts of storms and floods in many provinces and cities in the country are high risks of complications, maternal and newborn deaths related to childbirth. Many health facilities are destroyed, isolated and inaccessible, so mothers and children do not receive the basic medical care. Poverty after natural disasters is the risk of disease, malnutrition and developmental retardation for millions of children, and are also factors related to the increase the mortality rate in these regions.

3. INTERVENTIONS TO IMPROVE CHILD HEALTH AND REDUCE MORTALITY

The results of many studies confirm that countries can reduce child mortality by more than half with simple, inexpensive and feasible interventions even in the limited resourced settings.

The interventions to reduce child mortality should prioritize for the most vulnerable groups, in areas with a high rate of child mortality in order to accelerate the rate of mortality reduction,

narrowing the gap in health care, ensuring equity in child healthcare. If this can be done, it is certain that U5MR will be reduced, thus helping Viet Nam in sustaining the achievements in the MDGs, and striving for SDGs by 2030.

3.1. Interventions to reduce neonatal mortality: The intervention packages that has been confirmed to be the most effective in NMR include care of mothers before, during and after birth; Early essential maternal and newborn care; Kangaroo mother care for preterm/low birthweight babies; emergency care and timely care of sick newborns. In addition, it is also necessary to pay more attention on improving knowledge, practice for health staff on neonatal care at delivery, proper resuscitation, special care for premature/low birthweight babies as well as to ask for support of health facility leaders and prioritizing funding for neonatal care (15).

Focusing on prevention of the main causes of neonatal deaths is considered to be very effective. Improvements in levels of coverage and quality of care provided before, during and after birth will reduce neonatal mortality by 71%. These interventions are all basic care, do not require high technology and can be implemented in difficult areas at a cost of about 1.15 USD per woman. Facility-based interventions at health facilities is more expensive, accounting for 64% of total funding, but more effectiveness in reduction of neonatal. The maximum effect on neonatal deaths is through interventions delivered during labour and birth, including for obstetric complications is 41%, followed by care of small and ill newborn babies with 30% reduction (16).

Viet Nam has also been and continues to adopt a continuum of care approach in interventions reducing NMR. Close coordination of interventions at home and community together with safe referral care and efforts to improve the quality of neonatal care at health facilities is considered a best solution to reduce

NMR. These measures are considered as a crucial strategy to achieving the goal of reducing neonatal mortality.

Coordination of preventive and therapeutic interventions in neonatal care has been implemented in almost all regions of the country, including improving quality of antenatal care, ensuring every delivery is safe, and compliance with the guidelines on Essential maternal and neonatal care (17). Priority for disadvantaged and mountainous areas is always emphasized in national policies and action plans (18).

3.2. Interventions to reduce under five mortality

Combination of prevention and effective treatment of infectious diseases; Injury prevention; Control of emerging epidemics and reoccurrence of infectious diseases that can be prevented by vaccination.

- Prevention: Make sure all children receiving fully immunized and on schedule; Support appropriate infant and young child feeding; Keep children in a safe environment and early detect abnormal signs and bring them to health facilities promptly.

- Treatment: Early identify the signs of illness; classify the levels of the severity and determine if urgent treatment/referral so that child's illness can be managed in time. Improve the quality of emergency care and illness treatment at all levels of health facilities.

- Connecting communities and health facilities: Building a network to child health care from families, communities to health facilities; Support safe referral; set up the communication system from lower to higher levels for consultation and guidance on disease management; Always coordinate the prevention and with treatment system in child health care; Building the link and support each other between public health and private health facilities.

One more point should be noted that Viet

Nam is one of 5 coastal developing countries in the world that are most affected by climate change and the dangers of it are unpredictable. Therefore, it is necessary to have proactive disaster preparedness and timely responses to reduce risks to the health of the people in general and children in particular. National strategies on health care need specific plans to provide the most basic needs when the disaster occurs.

4. SUPPORTING ENVIRONMENT

4.1. Government policies: Child health care is always a top priority in the people's health care strategies and policies. To support the long-term plan for child health care until 2030, the Government has designed its own Viet Nam Development Goals (VDGs), localizing the targets and indicators. Throughout the implementation period, the Government has issued a number of new policies as follows.

- Resolution No. 20-NQ / TW dated October 25, 2017 of the 6th Conference of the 12th Party Central Committee on strengthening the protection, care and improvement of the people's health in the new situation;

- Law on Children 2016 (Law No. 102/2016 / QH13 dated April 5, 2016);

- Decision No. 1624/QĐ-BYT dated March 6, 2018 of the Minister of Health promulgating the Action Plan of the Ministry of Health to implement the Resolution No.20 and 21 of the 6th Conference of the Central Executive Committee Party XII on strengthening of protection, care and improvement of the people's health in the new situation.

- Decision No. 1896/QĐ-TTg dated December 25, 2019 of the Prime Minister promulgating the Program on Nutrition Care for the first 1,000 days of life to prevent maternal and child malnutrition, improving the stature of Vietnamese people.

An important priority for neonatal care is that the Ministry of Health has updated a National

Guide for Reproductive Health Care Services including the care and treatment of newborn babies and issued the guidelines for establishing neonatal department/unit at provincial/district hospitals.

In order to move forward the health goals in the VSDGs, the Ministry of Health is submitting to the Government for approval the project "Intervention to reduce U5MR by the year 2030" and "National action plan on Reproductive health care, focusing on maternal, neonatal and young infant health in the period 2021 - 2025" with improving newborn health is placed in an important position.

These policies, guidelines, strategies are very important foundations and support for successful intervention in improving child health and reducing child mortality.

4.2. Cooperation and support of organizations and donors

The companionship and technical support as well as funding from international organizations such as WHO, UNICEF, UNFPA, NGOs and other domestic and international agencies have contributed significantly, creating a favorable environment for interventions to improve child health. Partners' contributions in development of policies, strategies and professional guidelines are really important for improving the quality of child health care. Training, monitoring, building and expansion the moderns on child health care are also really effective cooperation between the government and supporting partners in the reducing child mortality intervention programs.

CONCLUSION

In order to achieve the child health target up to 2030, and confirm its commitment to the international community, Vietnam has begun the process with a number of advantages as well as difficulties and challenges. Following the success of MDGs implementation, the Government has

enabled the health system to make clear action plans with a specific roadmap to ensure feasible activities.

With experiences from other countries in the World, simple inexpensive interventions have been implemented effectively in all cities/provinces in Viet Nam with special priority given to poor and disadvantaged areas. These are continuous approach interventions from pregnant women, giving birth, after giving birth and until the child is 6 years old in the community; Ensuring safety during referrals and improving the quality of care at health facilities.

Effort to ensure health equity through universal health coverage so that all children are able to access essential health services and high quality of care will improve child health and reduce child mortality in Viet Nam.

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