

Success and Challenges in Achieving The Health-related Millennium Development Goals (MDG 4, 5 & 6) in Developing Countries—A Lesson for Sustainable Development Goals: A Systematic Review

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ABSTRACT

Objective: To assess challenges and success in attaining the health related Millennium Development Goals (MDG 4, 5 & 6) in developing countries.

Study Design: A systematic review

Place and Duration of Study: This study was conducted at the Agha Khan University from April to September 2018.

Materials and Methods: Systematic search for published literature using search term Challenges, Successes, Achieving, Health related MDGs and Developing countries. Data bases like Pub-Med, Science direct and Google Scholars were used to search the studies. Eligibility criteria were set to select the article for review. Filters for article type, free full text, years of publication were applied for more focused review.

Results: Systematic review finding revealed that weak governance, lack of strategic leadership, financial constraints and low budget allocation and lack of human resource for health capacity were identified as the most documented challenges. Among successes it includes multi-sectoral approach, increased health service package, increased health service coverage, and poverty reduction strategies.

Conclusion: Systematic review findings present a complex picture of progress towards health related MDGs. Results clearly indicate that reducing maternal and child health related indicators are merely not a technical process but interplay of several non-health determinants including poverty, socioeconomic disparities, health inequities along with leadership and governance.

Key Words: Millennium Development Goals, Sustainable Development Goals, Health outcomes

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INTRODUCTION

In 2000, 189 heads of state adopted the UN Millennium Declaration and endorsed a framework for development.

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The declaration established eight Millennium Development Goals (MDGs) and twenty-one set quantifiable targets for 2015. MDGs identified a number of indicators for monitoring progress, several of which relate directly to health^{1,2}.

Most aid agencies and civil society organizations reoriented their work towards the achievement of the Millennium Development Goals (MDGs)³. The MDGs were associated with increased access to resources from development partners. Low-income countries, tied their development plans to the MDGs which provided good incentives for translating and operationalizing them⁴.

There is evidence stating remarkable progress towards achieving the MDGs⁵. According to the UN MDGs Report 2012, child mortality has been steadily decreasing globally and immunization rates are over 90% in almost two-thirds of all countries⁶. Professional assistance during childbirth has improved from 55% in 1990 to 65% in 2010⁷.

However, progress across all MDGs has been limited and uneven across countries, particularly in African and Asian continent. Three of eight MDGs were health

goals: Goal 4 (reduce child mortality), Goal 5 (improve maternal health) and Goal 6 (combat HIV/AIDS, malaria and other diseases)⁸. According to the World Health Organization (WHO) report 2015, some countries have made impressive gains in achieving health-related targets⁹.

The MDGs were expired in 2015 and a new set of Sustainable Development Goals (SDGs) were developed and fit into a global development framework beyond 2015 which were signed on 25th September, 2015 which included a set of 17 SDGs.^{10,11}

To achieve sustainable development, the Agenda 2030 underlines the fundamental importance of reliable, timely and disaggregated data and statistics. These are indispensable to analyze development challenges; measure progress and make evidence decisions¹².

MATERIALS AND METHODS

This study included published Primary and Secondary literature from Jan, 2014 to December, 2021 on success and challenges in attaining health related MGDS. The international electronic databases like Pub Med, Science direct as well as Google Scholar were used using detailed search strategy in consultation with second reviewer. Cross referencing of systematic reviews was also undertaken to identify relevant articles using manual search. The search terms were grouped into major concepts of Success, Challenges, achieving, Millennium Development Goals, and Developing Countries. In order to make uniform search terms, the Medical Subject Headings (MeSH) were also utilized wherever applicable. Besides, bullion operators “AND” and “OR” were also used.

The inclusion criteria was 1) Articles clearly states successes and challenges in achieving Health related MDGs; 2) Studies conducted in LMICs; 3) Literature reviews, Commentaries, Policy paper, Special Issues and Opinion paper. Economic evaluation and any experimental studies such as RCTs or clinical trials or study discussed the policies and reforms carried out by government in attaining the MDGs were excluded. Language limitations were imposed, due to resource constraints and studies were only considered if an abstract and full article existed.

There were two reviewers involved in selection of studies for systematic review. The resulting studies were first screened by titles, followed by abstract and full text to eliminate studies not meeting criteria. After screening, total twenty-four (n=24) articles were available for review. Finally, the information extracted from 24 available studies was documented in self-design extraction form.

RESULTS

Conceptual framework detail is shown in Figure 1 and Figure 2 depicts the consort diagram for study selection process.

Out of twenty-four studies, five were based on Commentary (n=05) and eleven (n=11) have used secondary review as a methodology that includes, Literature review, secondary analysis, and simple non-systematic reviews. Where others include Cross-sectional study (n=1), Policy Paper (n=1), Special Issue (n=1), Case study (n=1), Narrative Review (n=1) and Survey (n=1). However, two (n=2) studies have not mentioned any study design.

1. Leadership and Governance: Around 62.5% have identified challenges specific to leadership and Governance and 58.8% studies have evident leadership and governance related matter as one of the major success factors. It was noted that strong political will and commitment, multi-sectoral approach, effective and integrated strategic planning, health reforms initiatives, policy alignment with global targets^{21,31,36}, harmonization of legal and policy framework²², decentralized governance structure^{22,33}, strengthening of leadership capacities³⁷, improved accountability³³ and improved coordination & collaboration^{23,38} with national & regional partners as booster in attaining MDGs.

2. Healthcare financing: Around 41.6% studies have identified challenges under area of healthcare financing, whereas five 20.8% studies have documented success linked with Health care financing. The key financing challenge include low budgetary allocation to health along with reliance on external funding assistance, inappropriate allocation of funds-- more money spend on tertiary care than primary care³⁹, lack of financial resource for data collection³⁵, high cost of health care²¹. To counter this healthcare financing issue, few countries have increased allocation of funds by focusing on basic essential service package as identified in countdown countries study³⁹. Other financing mechanism that would result in attaining health related goal includes performance-based financing and health insurance mechanism³⁴.

3. Health work force: In 37.5% studies challenges related to health work force were highlighted. The most common challenge was shortage of workforce and lack of human resource capacity. Other challenges include Lack of employment opportunities, lack of coordination among different health cadres, lack of involvement of public health professional in planning and decision making³⁰, lack of adherence to standards.

Only 20.8% have identified success linked with health workforce^{33,33,36}. Other success studies evident involvement of public health professional in decision making³⁰, adequate provision of skilled workforce³⁸ and introduction of emergency human resource plan²⁵.

4. Health Information System: Health information system related challenges were identified in 29.1% studies which include inadequate and unreliable data system and, inconsistency and lack of data report. Only three 12.5% studies have identified measures that would contributed in attaining MDGs linked with

healthy information system include good data Surveillance system, infrastructure of health network system²³, strengthening of health information management system³⁶ and institutionalization of deaths audits³³.

5. Access to essential medicines, commodities and infrastructure: Around 54.1% studies have identified challenges in this area. The most frequently reported challenges include lack of access to primary health care and basic health package, Lack of material resources and commodities, poor health infrastructure.

As far as measures that had contributed in attaining goals have been identified by eight (33.3%) studies, most observed findings include increase in health service coverage^{29-31,33,34}, provision of integrated basic health service package for mothers and children^{18,31,34,35}, strengthening the pharmaceuticals companies to ensure availability of medicines and medical supplies¹⁸ and improving the health infrastructure³¹.

6. Health Service Delivery: Total ten (41.6%) studies had identified challenges pertaining to this domain. The most distinct challenge includes poor quality of health service followed by inadequate utilization of health services and lack of service ranges/ integrated care. The 12.5% studies had documented actions that turned into success in achieving few of the health related MDG targets include resource extension for health-

related programs^{25,33}, improved quality of care provision^{26,36} and strengthening referral and coordination mechanism³⁶.

1. Contextual Factors, including non-health systems determinants: Contextual factors including non-health systems determinant turned out as a major challenge for developing countries. Around 79.1% studies has emphasized challenges linked with non-health related determinants. The most pronounced challenge was poverty followed by health inequities (n=8), cultural barriers (n=7), environmental factors and socio-economic inequities (n=3). Other non-health determinants include lack of community engagement and participation, lack of female education, poor household knowledge, violation of human rights, violence against women, insecurity, poor water and sanitation facilities, inadequate transportation and uncontrolled population.

Whereas 37.5% studies found that non-health determinants have also greatly contributed in overall attainment of MDGs including health. The studies have identified that poverty reduction approach, improving health equity can improve health related MDGs. Remaining success factors included women empowerment, community engagement, environment management measures and Political stability.

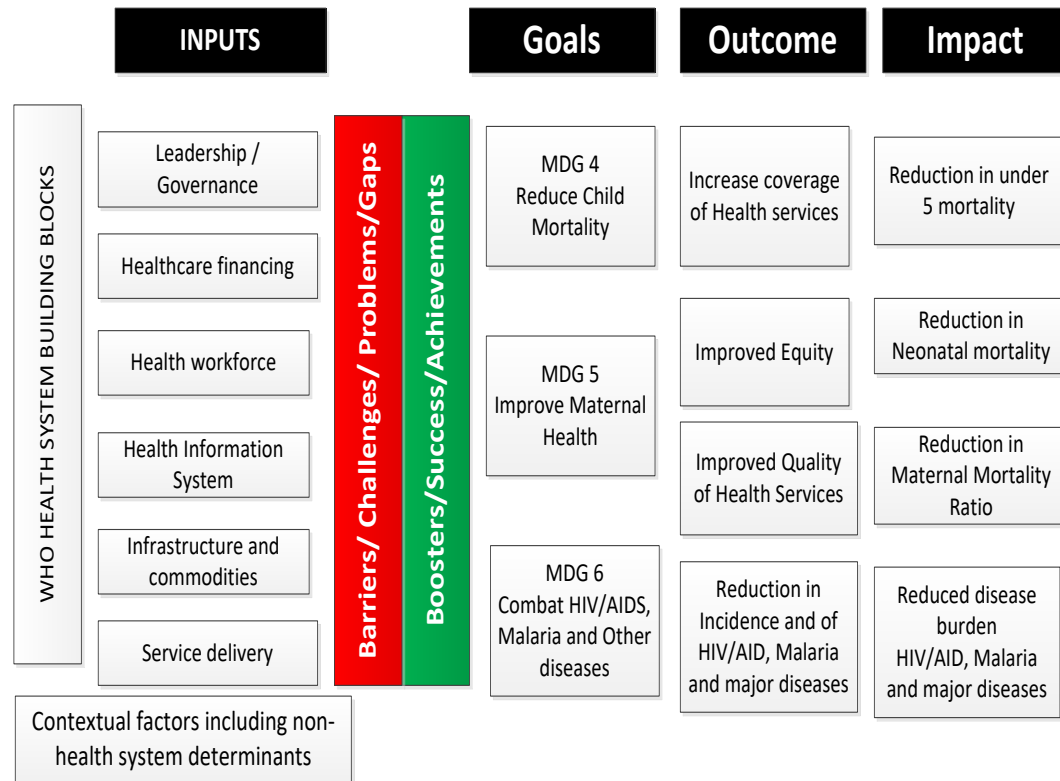


Figure No.1: Conceptual Framework

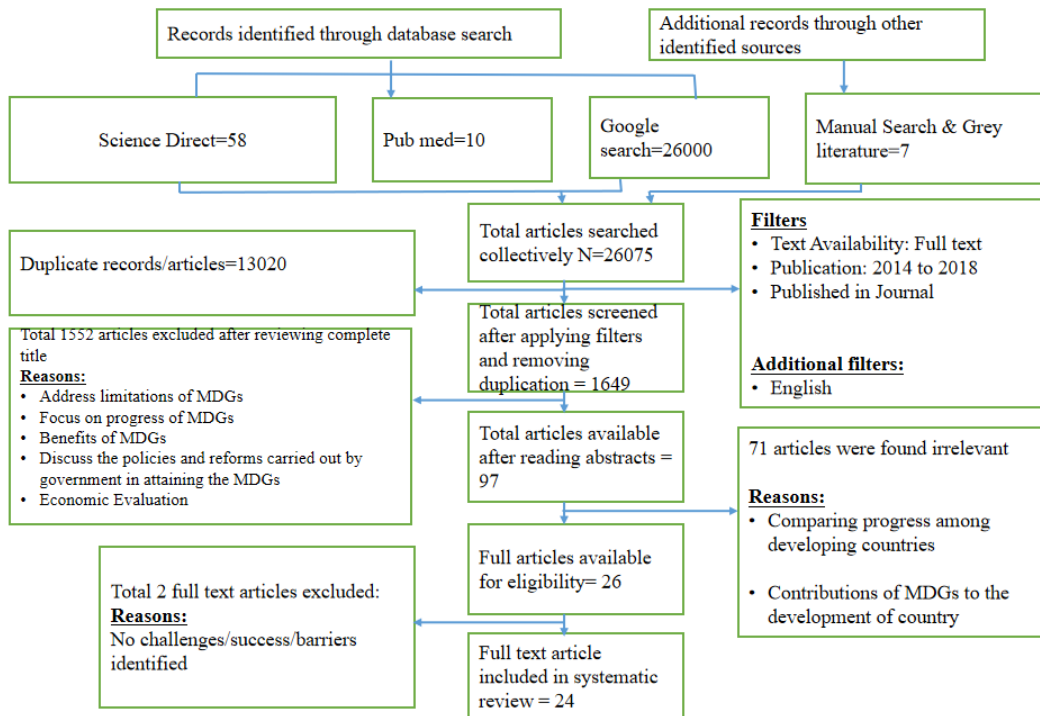


Figure No.2: Consort Diagram for Study Selection

DISCUSSION

This systematic review has focused on challenges and successes that will allow us to understand the reasons behind achieving health linked MDGs in developing countries.

Systematic review findings revealed that weak governance, lack of strategic leadership, financial constraints, shortage of skilled workforce, poor access to primary health care, health inequities and poverty were the major challenges developing countries have faced in not attaining health goals.

Vietnam has achieved MDG 4 & 5, partially due to strong political will and ownership of government in support of MDGs by aligning policies into global target. Other possible reasons of weak governance highlighted by other studies are lack of political commitment and accountability and poor accountability and responsiveness^{14,16,23}.

One of the success factors in achieving health related goals by fast contract countries was catalytic strategies for leadership, partnership and better accountability that has improved the governance capacity and structure³⁵. Leadership, commitment and responsiveness has allowed Cambodia and Bangladesh to achieve MDG 6³⁰.

Another major challenge identified was financial constraints due to lack of funding for health expenditure and low budgetary allocation specifically for MDGs activities^{14,18,23,27,29,30,38,39}. Developing countries have other obligations to meet with very scarce resources, sinking funds in meeting MDGs would be challenging

for Nigeria to allocate for health-related task¹⁴. Inappropriate financing is another challenge. In Pakistan; major chunk of health budget was allocated to tertiary care rather than primary care³⁹.

To better address the financial challenges, countries have adopted several strategies; among such strategy performance-based financing has been introduced in Rwanda³⁴. Other countries have adopted multi-sectoral strategy to pool all the resources and developed a unified and integrated plan of action to avoid duplication and financial losses³⁴. Similar approach has been adopted by Peru¹⁸. Moreover systematic review findings also highlighted that provision of basic service package improved significantly by shifting the financing gear from curative to preventive care^{18,31,34,35}. Systematic review findings also explored accessibility issue for primary health care services, multiple studies have identified poor infrastructure^{17,26,31,39}, lack of material resources and commodities^{18,26,27,31,33} as its cause. Such issues lead to poor quality of service delivery, lack of utilization of health services as identified by study on infant and child mortality status of Bangladesh³¹. To fix this issue Ethiopia and Nicaraguan under health sector development plan increased access to medicines and supplies by strengthening of Pharmaceuticals and medical supplies in priority areas and also resource extension for health programs¹⁸. Afghanistan dealt with this issue differently and shifted from vertical interventions (EPI) to more integrated approaches to RMNCH services to ensure accessibility to basic health package¹⁸.

Under contextual factor, poverty and health inequities were the major barrier as they have undermined the

overall progress and remained major reason of failure for not achieving health MDGs. The studies conducted in Vietnam and Pakistan concluded that health inequities and inequalities resulting from differential impacts of socioeconomic determinants on geographic regions and between socioeconomic groups pose major challenge¹⁵.

Countries that have achieved health related MDGs have focused on poverty reduction approach with special focus to marginalized group of population. Policy efforts made by Vietnam aimed at closing gaps in health between different socioeconomic groups and have achieved MDG 4 & 5¹⁵. Peru and Rwanda has successfully implemented pro-poor and targeted health strategy in childhood immunization thus have increased equity in health outcome¹⁸ and would helped in achieving all three-health related MDGs.

CONCLUSION

The findings present a complex picture of progress towards health related MDGs. Results clearly indicate that reducing maternal and child health related indicators are merely not a technical process but interplay of several non-health determinants including poverty, socioeconomic disparities, health inequities along with leadership and governance.

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Conflict of Interest: The study has no conflict of interest to declare by any author.

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