Leadership Trainings of Health Managers And Administrators To Improve Health Outcomes In Low And Middle Income Countries: A Review

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Abstract- *Low and Middle Income Countries (LMICs) are striving to provide equitable, quality and affordable universal health care services to their populations. Considerable leadership capacity gaps with shortages of qualified and skilled health-care workers present the most significant barriers in achieving improved health outcomes. Several LMICs have made efforts to enhance leadership capacities of health managers to meet the Sustainable Development Goals [1]. This review aims to document various leadership training programs organized for health managers and administrators from LMICs to improve health outcomes. We used PICOCS framework to retrieve relevant articles from major e-databases. An extensive search guided our qualitative literature review of 10 case studies. We present and compare different leadership frameworks, training approaches and evaluation methods used by training providers.* ***Results****: There was a consensus among all the articles reviewed that trainings improved competencies and skills of health managers thereby, improving delivery of health care services. Invariably, all the articles recommended that a leadership development program should be one of the key strategies to strengthen health systems in LMICs. Some studies indicated that in resource-limited settings, it is important to integrate leadership and management training programs to sustain the enhanced skills. Essentially, the design of a leadership training program should be contextual and flexible, based on outcomes of training needs assessment, such that the skills acquired are transferable in real world settings. Further, country context, training period, and seniority level of participants are important factors which should be considered in the development of leadership programs.*

Keywords- Low-Middle Income Countries, Leadership Training, Health Systems, Review

I. INTRODUCTION

Over seventy-five percent of the world's population lives in developing countries in Asia and Africa [2].Rural and underserved areas in LMICs continue to account for an overwhelming majority of preventable maternal and child deaths. Further, a time trend analysis shows that there are only marginal improvements in health outcomes in rural areas compared to urban areas in LMICs since 1991[2]. The determinants of health promotion and barriers to scale up health care services vary with geography, culture and socioeconomic status within and across each country [3]. With the growing burden of non-communicable diseases, emerging and re-emerging infectious diseases, LMICs are constantly faced with leadership challenges aggravated by limited infrastructure and local data [4]. As a result, there is a significant lag in implementing evidence-based practices to strengthen the existing health systems. Most LMICs have been unable to meet the Millennium Development Goals despite concerted local, national and global efforts, and generation of innovative partnerships [3]. Over the last decade, rate of progress in meeting health outcomes continue to languish in countries such as India, Afghanistan, Pakistan and SAHEL regions of Africa. In addition to limited infrastructure, lack of economic resources is the most important challenge in implementing interventions and health services delivery in LMICs. WHO Commission on Macroeconomics and Health recommends that a substantial scaling up of expenditures on health care must be undertaken [5]. However, misappropriation of funds and inappropriate allocation of available resources to the most effective interventions lead to underutilization of health services especially by the poor [6]. Thus, it has become crucial to train health leaders in cognitive intelligence i.e. business skills in management of finances, resources and in budget planning. However, equal attention must be paid to emotional and social intelligence aspects so that the technical skills can become integrated into the individual's daily life.

Majority of health leaders and managers in LMICs are qualified health professionals who barely have any training or experience in management [7]. Extreme shortage of qualified health-care workers and leadership qualities among qualified health care professionals present significant barriers to health-care services delivery. WHO estimates that an

increase in health professionals by 1% is associated with an almost 5% increase in maternal survival and over 2% increase in both infant and child survival [8]. Hence, formal training programs and on-the job training programs could prepare clinicians in taking up managerial roles. Investing in overall capacity development of health managers is a critical endeavor to improve health systems performance. A literature review conducted in UK by the Faculty of Medical Leadership and Management (FMLM), The King's Fund and the Centre for Creative Leadership (CCL), concluded that there is a positive association between leadership traits and a range of important outcomes such as: patient satisfaction, patient mortality, organizational financial performance, staff well-being, engagement, turnover and absenteeism, and overall quality of care.[9] Significant efforts and resources have been invested by Governments and development partners across the globe to improve leadership capacity of health professionals. However, limited scientific research has been conducted to understand the process and methodology of leadership trainings and its effectiveness.

The main objective of this review was to document various leadership trainings organized by institutions around the world for health managers and administrators from LMICs to improve health outcomes. We explored two specific objectives: 1) To document various aspects of leadership trainings, methods, target audience, length of the training and 2) To document improvement in leadership and managerial skills and competencies among the participants of such trainings.

II. METHODS

This section highlights methods of operationalizing search strategy and search database. This review followed guidelines developed by the Cochrane Collaboration published in 2008.

2.1. Eligibility Criteria

The review includes any global study or research published since 1990 on leadership and management trainings for a minimum of three days with target groups in public health and or governance and or leadership. We included articles, where full texts of studies were available from reputed databases at no cost. We eliminated articles published in a language other than English. Additionally, training of health professionals such as nurses and community health workers, and trainings conducted in under three days were also eliminated. We didn't attempt to look at the grey literature.

2.2. Search Strategy

We used the 'PICOCS' framework and defined search terms under each category to develop a syntax for searching articles across different databases. Relevant articles pertaining to management training programs were reviewed over a period of five months up to May 2017. While reviewing relevant documents new search terms were added to maximize search outcomes related to the study. We were interested in types of trainings provided to participants solely from LMICs and the methodologies adapted for successful execution of the programs. Broadly, we included studies focused on participants such as Health Managers, Provincial Health Directors, Provincial Health Managers, Provincial Health Administrators, Districts Health Administrators, Health Administrators and District Health Managers serving at different levels of health systems. The following keywords were used: Executive development, leadership development, leadership training, public health training, in-service training, capacity building, class-room training, intensive training, short-term intensive training, decentralized training, hands on training, leadership education, management development, management training, managerial training, supervisory training, supervisory development, mentoring, coaching. Other search terminologies used were 'evaluation, leadership assessment, feedback, 360-degree feedback, multisource feedback, multi-ratter feedback, health system strengthening, health systems and human resource strengthening'.

2.3. Information Sources

We used the following databases to search for relevant articles: CENTRAL, CINAHL, Cochrane databases of Systematic Reviews (CDSR), Database of Abstracts of Review of Effects (DARE), Database of Public Health Effectiveness Reviews (DOPHER), EMBASE, ERIC, Health Promis (Database of the Health), Health Services Technology, JSTORE, MEDLINE, Trials Register of Public Health Interventions (TROPHIPUBMED/MEDLINE), Keele, Web of Science Journal of policies, Google Scholar, Journal on Human resource and management, Social science and medicine, Lancet, "Related search" in Mendeley, SAGE Journals and Open source.

2.4. Search Syntax

According to the database used, there were minor variations in search protocols. Four different search syntaxes were used. An example of a Search Syntax used is as follows:
("Training" OR "In-service training" OR "class-room training" OR "on-the job training"OR "distance learning courses" OR "Provincial decentralization training" OR "Capacitybuilding")

AND "Health Managers" AND "Low and Middle Income Countries".

III. RESULTS

We mainly selected articles from LMICs, Africa, Asia along with a few studies from developed countries. A total of about 1,033 articles were found. After browsing the titles, and abstracts in some instances, 36 articles, for which full texts were available, were downloaded for inclusion in the final assessment. Based on the eligibility criteria mentioned above, we selected 10 case studies for discussion (**Table 1, 2**; **Figure 1)**

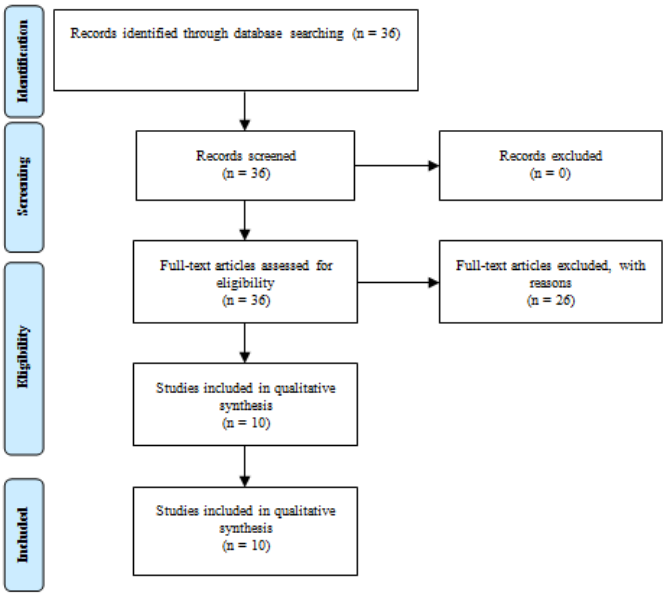

Figure 1. Adopted from 'The Prisma Statement' [10].

During the course of literature review, we came across many leadership approaches such as life story or superhero approach, functional approach for team building, emotional and social intelligence for individual and group leadership, transformational leadership, transactional leadership, servant leadership, and situational leadership. The studies reviewed used some of the above leadership approaches to design course modules. All the articles included described programs designed to enhance skills and competencies of the participants. It is important to understand skills and competencies required in a health manager before designing training modules or courses. Most of the articles included in our review used diverse competencies frameworks to design and implement leadership trainings. Few programs focused on competencies such as communication skills, negotiation and conflict resolution skills, and interpersonal skills: motivating people, team building, coordination, listening.[11–15] Most studies used technical competencies framework such as accountability, transparency, financial management, human resources management, results driven evidence based decision-making, program management (Plan – Do – Review), time management and utilization, regulatory affairs management, professional ethics and legal issues.[11,14,16–19**]**

Case studies discussed in this review indicate that country context (developed, developing, LMICs with inadequate resources, and countries in active or post conflict situation) plays an important role in designing leadership capacity development strategies and programs. Further, training duration is an important factor to consider. A variation in duration of training programs was observed: yearlong training programs, short-term intensive training programs coupled with mentorship spread out in phases and on-site mentorship support to name a few. Mid to senior level of participants, country context, leadership framework, and type of competency frameworks influence the design of training approaches [11, 20]. Additionally, different training approaches such as in-service training (hands on training), distance learning and mentorship, and yearlong training in technical competencies (Master's in public health) were utilized by training providers[13,14,21]. Most of the evaluation results (qualitative) showed some level of improvements in skills and competencies of health managers and administrators.

IV. DISCUSSION

Leadership is defined as 'the position or function of a leader, a person who guides or directs a group', with synonyms like 'administration', 'management', and 'control' [22, 23]. This definition continues to evolve as new leadership frameworks develop with different styles of leadership, each with their own definitions and frameworks. According to Rogers R, leaders require two general types of behaviors: 'task' behaviors and 'relationship' behaviors [24]. Task behaviors allow individuals to accomplish their goals and enable them to guide others in achieving their objectives. Relationship behaviors involve the ability to interact with peers and subordinates in a way that all feel comfortable with themselves, with each other, and their respective settings [24]. A leader may be more task oriented in certain situations and more relationship oriented in others. Therefore, individuals are becoming more aware of their own leadership styles and the way they communicate, usually through feedback from others. Leadership scholars have long debated whether leaders are born or made. However, a vast body of literature supports the notion that leadership can be learned. Donnithorne and Snook argue that in technical fields such as health services delivery, leaders are not just 'born' but can be 'made', through formal leadership training programs which systematically inculcate

skills and competencies [25, 26]. Such training programs could also include internal and external governance frameworks, management and coordination capabilities, personal competencies like interpersonal skills and teamwork, and administrative and policy processes.

Leadership and management are two sides of the same coin and therefore, are essential for organizations to develop capacities of their key strategic human resources to fulfil envisioned organizational mission. Classical teaching states that 'Management is about coping with complexity', whereas 'Leadership is about coping with change' [27]. Leadership encompasses the art of motivating and leading a group of people to act towards achieving a common goal [27]. Hence, learning to work effectively with team members and other professionals, and creating an enabling environment under a broad institutional framework are essential values of interdisciplinary leadership. The current scenario in the global health sector calls for public health professionals to take up multiple interdisciplinary responsibilities. Blumenthal et al suggested that the common elements of effective leadership development trainings include reinforcement or building of a supportive culture, ensuring high-level involvement and mentorship, using a variety of learning methods, offering extended learning periods with sustained support, encouraging ownership of self-development, and committing to continuous improvement [28]. WHO Framework Brochure: 'Building Leadership and Management Capacity in Health' suggests a similar approach for leadership development [29]. There are many institutions involved in designing, delivering and sustaining leadership development programs, each using a distinct leadership framework, approach and methods in the health care industry. In one of the articles, leaders are mainly classified as a) Transactional leaders, who work within the boundaries and the existing standards of the organization. They are usually not risk takers, but focus on efficiency, control, stability, and predictability; b) Transformational leaders, who raise one another to higher levels of motivation, making changes and shaping the future and c) Servant leaders, who focus on the service aspect first as they have a natural tendency to help others [21].

The primary purpose of this review was to describe different management and leadership trainings organized by various institutions across the world for health managers and administrators from LMICs. The first objective of this review was to document various aspects of leadership trainings, methods used, participants, and length of trainings **(Table 2).**

The second objective was to document improvements in leadership, and managerial skills and competencies among the participants of such trainings. Even though, all articles have adopted different approaches, diverse competency frameworks, and training methods for leadership development, all the articles included in this research have concurred pointers of success. This research may not have been a comprehensive review, however, it highlights the fact that based on country context and other key parameters, different approaches for leadership development are required. The leadership development program should be contextual and flexible. Most LMICs have weak public sector capacity, particularly in the areas of policy analysis, strategic planning, human resources planning, standard setting, health legislation/regulation and health financing: including issues in procurement and budget execution of development budget, monitoring and evaluation and financial reporting, leadership and conflict management [30]. This lack of technical and managerial capacity adversely affects health services delivery and creates delays in achieving universal healthcare coverage. Hence, Blumenthal et al argued to combine leadership and management training programs that can be transferred and sustained in resource-limited settings and LMICs [28]. He suggested five elements for leadership programs in LMICs: 1) use of a short course format focusing on key skill areas with practical tools 2) inclusion of didactic training, on-site projects, and on-site mentoring 3) collaboration with academic institutions 4) provision of training for the in-country academic faculty and 5) securing Ministry-level support to ensure participation. WHO conceptual framework, 'Leadership and Management Strengthening Framework' to build leadership and management capacity of health managers describes a similar approach for training as part of overall health system strengthening to meet the SDGs [31].

Many of the articles included in this review have touched upon some of the elements of leadership and management competencies suggested by Blumenthal et al. Academic institutes can be involved to provide training and to increase sustainability of a training program. This is proved in a case study from Uganda, where Mekerele University was engaged in providing leadership training (**Table 2)**[20]. As inadequate skilled man power is one of the constraints to improving health outcomes in LMICs, leadership development training programs which engage health managers and administrators for a longer duration may interrupt and disrupt health care services delivery [20]. Hence, it may be appropriate to design leadership training programs in phases or of shorter duration. Any leadership training program should first conduct training needs assessments (TNA) of potential participants to identify capacity (skills and competencies) gaps. Training modules should be designed based on the outcome of training needs assessment and consultation with partners working in health sector. The outcome of TNA exercise will facilitate the participants to start thinking about

skills and competencies gap that they intend to enhance through trainings. Two articles followed a mentor-mentee approach to create a personalized learning environment for participants [14, 20]. One case study used a short intensive course followed by on site mentorship support [12]. This is an important approach as on-site mentoring will consolidate learning, transfer of skills learned and enhance lifelong learning. To improve effectiveness of leadership training where situation allows, the training program may be designed in several short phases. Initial phase focuses on bridging key capacity gaps. At the end of the initial phase, participants return to their place of work with a proposed project and engage local teams to implement the project using the skills and competencies acquired from phase I of intensive training. Mentors continue to guide the participants throughout this period either through distance or through on-site support. During the subsequent phases, participants resume their advanced management and technical training. After each phase of intensive training, participants again return to their place of work with a mandate to strengthen health systems to improve health outcomes. Development of a strategic plan should be one of the key deliverables for health managers. Mentor's support, on-site or distance, should continue at least for another six months to ensure implementation of strategic plan. During the entire training period, engage central ministry to provide needed support to the participants in all spheres of their work. While trained health managers and leaders can help realize the SDGs in the developing world, it must be noted that building effective capacity alone cannot substitute for other challenges such as the lack of resources required for providing health services.

4.1 Limitations

Literature on health care leadership training programs is scarce and evaluations of leadership trainings are even scarcer. Evaluations of leadership programs were initiated and conducted by universities or training institutes for their participants. So there may be an element of publication bias. Most of the evaluations were qualitative in nature which make it impossible to compare effectiveness of leadership frameworks and different training approaches. Most of the evaluations used self-assessment/self-reported methods and tools to collect data. Free evaluation reports conducted by independent research firms were not found in any of the e-databases. In addition, none of the articles evaluated the long-term impact of different leadership training approaches. Moreover, enabling work conditions and context does influence application of knowledge gained through leadership trainings. However, only one case study took 'enabling environment' into consideration in its evaluation methodology.

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