

Factors affecting successful scale-up of health-related pilot projects

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Abstract

Objective: To identify the key factors that contribute to the successful scale-up of pilot projects, with emphasis on factors that are proven helpful in the successful scaling up of health interventions.

Methods: Grey literature was searched at the library of the University of Kebangsaan, Malaysia, on database engines Google Scholar and Science Direct with specific key words to screen papers published from January 2001 to June 2016. They were reviewed to identify the key factors affecting scaling up of health-related pilot projects. Full-text articles were selected, and their reference lists were checked to look for relevant papers. They were short-listed and analysed using thematic approach.

Results: Of the 47 articles initially screened, 14(29.78%) were shortlisted. Thematic analysis of the selected articles suggested several key factors contributed to the successful scale-up of pilot projects. These factors included evidence-based and effective intervention, community readiness, government support, stakeholders' engagement, and monitoring and supervision.

Conclusions: To maximise health coverage in developing and low middle-income countries, scaling up of health interventions on a large scale is essential to improve the health and wellbeing of people. The identified key factors should be considered while planning the scale-up of any health project.

Keywords: Scale-up, Scalability, Pilot project, Success factors. (JPMA 71: :518; 2021)

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Introduction

Pakistan is the sixth most populous country in the world with a population of 208 million people.¹ Estimated maternal mortality ratio (MMR) is 178/100,000 live-births.² In 2015, approximately 55,00,000 babies were born in Pakistan, or around 14,900 every day.³ Around 671 babies were expected to die each day before reaching their first month, and 665 stillbirths were expected every day.⁴ Pakistan is among five countries where half of <5 deaths occur and 70% of these deaths occur in the first year of life.⁵ The vicious cycle of uncontrolled population growth and poor maternal and child outcomes and nutrition in Pakistan needs urgent attention.⁶ Evidence suggests that early-life health and nutritional interventions, including those that act to improve the health and nutritional status of potential mothers and pregnant women, have significant impacts on schooling, earning, and productivity over the lifecycle in low and middle-income countries (LMICs). Benefit-cost ratios for such interventions suggests gains exceeds the costs, and, as such, scale-up policies and programmes should be in place to allow such countries to reach their full potential.⁷

United Nations (UN) member states agreed to provide quality and affordable health coverage to all the people and set the target to achieve universal health coverage by

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2030. Although attempts have been made to achieve this goal, LMICs are still not on track.^{8,9} To take effective steps towards achieving this goal, developing countries, like Pakistan, need to take realistic measures which can help them improve and maintain their health systems. Literature also suggests that large-scale implementation of health-related interventions would "accelerate the progress towards achieving the goal".¹⁰

Scaling-up involves processes to introduce innovations with demonstrated effectiveness through a programme delivery structure. The aim of scale-up public health interventions is to improve coverage and equitable access to the intended benefits. Most of the recent emphasis on scaling up has focussed on achieving high coverage rates of health services and reducing mortality rather than the processes for how to scale up.¹¹

The World Bank (WB) defines scaling up as a process "to efficiently increase the socio-economic impact from a small to a large scale of coverage".¹² In the health sector, Expand/Net defines scale-up as "deliberate efforts to increase the impact of successfully tested health innovations so as to benefit more people and to foster policy and programme development on a lasting basis".¹³ Studies have also suggested that the implementation of evidence-based health interventions could be useful in preventing "70% of deaths of children under 5 years".¹⁴⁻¹⁶ Scaling up of family planning interventions can "prevent one-third of maternal deaths by allowing women to delay motherhood, avoid unintended pregnancies and

subsequent abortions".¹⁷

However, studies that have addressed how scaling-up occurs have concluded that the processes are complex, with changes in political context and programme management factors being the major sources of variation in how scaling-up occurs. There have also been warnings against the over-reliance on "gold standard" evidence on intervention cost-effectiveness as the basis for policy and implementation choices, as there are limitations on how relevant they are to what could happen in a particular country. Literature review also suggested that scaling up in international health involves a number of factors which may affect or contribute to the scalability of a project. The common constraining factors include the lack of absorptive capacity, weak health systems, human resource limitations, and high costs, whereas strong leadership and management, realistic financing, and technical innovations are believed to be common characteristics of successful large-scale health programmes.¹¹

The current thematic review of literature was planned to identify different framework approaches for scaling-up and factors that contribute to the scalability of projects and interventions. It is intended to provide policymakers and programme managers with new insights into the factors that help the scaling up of health-related interventions. The new insights can be used to support planning, implementation, and scale-up of pilot projects in other countries.

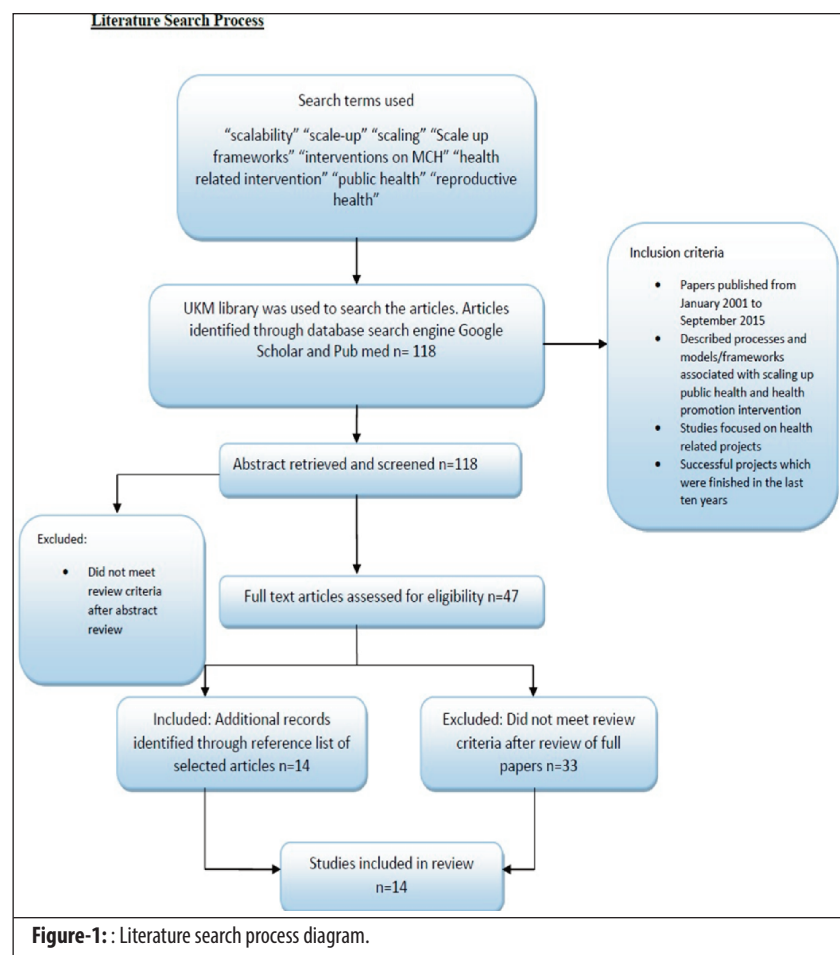
Methodology

A systematic review is the most used method to produce evidence-based knowledge, but requires enormous effort, time and resources. For example, it has been estimated that it takes around half-a-year to 2 years to carry out a rigorous systematic review.¹⁸ Due to time constraints, another simple but effective approach, rapid review approach, was used to perform this review. The rapid review is "a type of knowledge synthesis in which components of the systematic review process are simplified or omitted to produce information in a short period of time".¹⁸

Using the rapid review approach, a total of 118 articles were identified using database search engines. For the identification of articles, various key terms were used, such as "scalability", "scale-up", "scaling", "Scale-up, frameworks" "interventions on family planning/maternal health", "health-related

intervention", "public health", "reproductive health" to identify articles most relevant to the current review. Library of the University of Kebangsaan, Malaysia, was used to search the articles; and 220 articles were screened using electronic database search engines Google Scholar and Science Direct. The articles screened during the initial phase were the ones that were published from January 2001 to June 2016. Studies focussed on the scalability of projects or interventions were included, and successful projects completed in the preceding 10 years were prioritised. In the next phase, abstracts of the selected articles were retrieved and those which met the inclusion criteria were selected. A total of 47 full-text articles were selected and their reference lists were checked for relevant papers. During this process, 14 articles were included in the study for further analysis (Figure 1).

Inclusion criteria: The sample included case studies, descriptive studies, frameworks and systematic reviews describing processes, methods and conceptual frameworks/models for scaling up. Those included were studies addressing public health, maternal and child health or health services disciplines; studies explicitly addressing



scale-up as the main focus or aim.

For the purpose of this review, scale-up was defined as “the ability of health intervention shown to be efficacious on a small scale or under controlled conditions to be expanded under real-world conditions to reach a greater proportion of the eligible population while retaining effectiveness”.¹⁹ Full-text papers were analysed using thematic analysis approach. Thematic analysis is one of the most common approaches used in research.²⁰ Researchers all over the world used this method of analysis because it is a relatively simple method which “minimally organises the data and describes it in rich detail”.²¹ This method was proposed by Braun and Clarke, who defined it as a method used for “identifying, analysing and reporting patterns (themes) within data”. The thematic analysis method was chosen in this study because evidence suggests that it “can produce an insightful analysis that answers particular research questions”.²² After developing the potential themes within the data, all relevant information was organised under these themes. In the next two steps, through the iterative process, the themes were refined, organised and categorised meaningfully to develop a thematic framework. Themes emerged as a result of a detailed thematic analysis of the full-text papers (Table).

Table: Themes identified through review of full-text papers.

Themes	Sources citing factor	Sources citing factor n
a. Evidence based and effective intervention	14, 24, 25, 26, 27, 28, 29, 30, 31, 32	10
b. Community readiness	28,29, 30 31, 32	5
c. Government support	15, 28, 34, 35, 36, 37, 38, 39	8
d. Stakeholders’ engagement	13, 27, 35, 39, 40, 41	6
e. Monitoring and supervision	32, 42, 43, 44	4

Results

While there is a lot of theoretical information on different approaches and framework of scaling up projects, it is necessary to take into consideration evidence-based practices and their impact before implementing the process of scaling up. Unfortunately, the implementation of this process is relatively recent and there are few evidence-based models which have been implemented and explored. Many frameworks and approaches have been developed in the past few years to improve the process of scaling up around the world but no single approach to scaling-up can be standardised to be implemented in all settings. The scaling-up approach needs to be altered according to the needs of the population and



Figure-2: Words cloud.

available resources. There are some frameworks that are more popular than the rest. The current study generated a ‘words cloud’ on the basis of its analysis (Figure 2).

Thematic analysis of the articles suggested some of the key factors which play an important role in scaling up interventions successfully. These factors include evidence-based and effective intervention, community readiness, government support, stakeholders’ engagement and monitoring and supervision.

a. Effective and Evidence-based Intervention

For any health intervention to be scaled up, it is necessary to know whether the intervention has proven to be effective or not, as for scaling up an intervention it is “prerequisite” to know its effectiveness and design.²³ A well-designed intervention that can easily be adopted by health systems has greater chances to be implemented successfully than a complex one. Literature also suggests that interventions “should be evidence-based, simple, credible, relevant, easy to carry out, compatible with potential user organisations’ values and norms”^{13,23,24} because intervention which is “facilitated by simplicity and standardisation” is more likely to succeed.²⁵ Moreover, before designing a scaling-up approach, it is also important to understand the cultural and social factors of the community as a successful intervention in one country will not necessarily be successful in another country.²⁶ One of

the success factors common in all successful health projects is that they are tailor-made to meet the needs of the local population. Identifying an evidence-based intervention which can meet the need of the community is one of the significant factors to consider before scaling up.²⁷⁻³⁰

b. Community Readiness

Another most important factor emerged during the study was the community readiness and its acceptance towards the intervention to be implemented. Before scaling up it is important to know that the community for which the intervention is being implemented is prepared for that or not, as community readiness is the key in the process of scaling up.^{27,28} Literature review also affirms that “the community should see a need for change” therefore, understanding the community and their needs before designing a scaling-up approach is a crucial step.^{27,31}

c. Government Support

Furthermore, it is important to have government’s full support in implementing a health programme successfully into an existing system as evidence suggests that scale-ups are generally successful when “there is a clear political will or established guidelines”.^{14,27,32-34} Moreover, examples of successful scale-ups around the world also show that the highest level of commitment from the government and strong leadership played an important role in facilitating the scaling-up process. While many international organisations are dedicated to improving the overall health around the globe, the basic running cost must be shared by the local government, especially since scaling up is a long process with wide coverage. Without the support of the local government, scaling up in any country cannot be sustained for a long period of time because of its inability to expand to other areas.³⁵ Macfarlane et al. also mentioned that interventions carried out or facilitated by governments have a greater chance of success, therefore clear political will is needed for the successful implementation and sustainability of a programme. Other than that, the government should also provide a conducive environment as it is a necessary condition for the implementation of the programme and ease of the scaling-up process.³⁶ Kempers et al.³⁷ mentioned that the successful scale-up in Estonia was possible and got successful only because “there was a favourable social and political climate for implementation”. Hence, before generalising an intervention, political circumstances and political stability must be considered.³⁸

d. Stakeholders’ Engagement

A strong partnership between institutions and the government’s involvement with stakeholders are critical to

the success of scaling-up interventions. Evidence suggests that support for scaling up is not only needed from the local government of the host country, but also institutions in which the intervention or innovation is being implemented.^{27,35,39,40} Similarly, collaboration with high-profile individuals is also proved to be useful as it increases the credibility of the project in the field as well as the public. It is also important to coordinate with local leaders and gain their support for the project to ensure that people at both community and national levels are fully involved in the project for smooth expansion and sustainability. Thus, for the sustainability of intervention, it is evident that “country ownership, including the engagement of both programme-level champions, is key”.⁴¹ It also requires great commitment from people who are involved in the process as the literature shows that among the key factors of successful scale-ups “were strong individuals and leaders, who were involved over the long term and at many levels within countries, and guided the adaptation of processes and bringing them to scale”.¹¹²

e. Monitoring and supervision

Monitoring and supervision is another key factor found during the analysis. According to a World Health Organisation (WHO) report, monitoring and evaluation are very crucial for the process of scaling up as it is an effective way of assessing the progress of a programme.⁴² Moreover, it helps to identify challenging issues during the process and that the achievement provides the opportunity for the project leaders to make improvements and arrangements accordingly.⁴³ Hence, to ensure smooth implementation of an intervention it is necessary to have a strong and efficient monitoring system as it contributes greatly to the success of scaling up the process.^{31,42,44}

Conclusion

The review identified key factors facilitating the process of scaling up which contribute greatly to the successful implementation of health programmes. The findings suggest that the appropriateness and effectiveness of a health intervention must be assessed before scaling up. Interventions which are proven to be effective and are culturally appropriate for the target population are more likely to succeed than others. It is also worth noting that simple and user-friendly interventions are more easily adopted than complexed ones. Furthermore, in order to implement a health intervention successfully, studies recommend that community’s readiness and willingness for the intervention implementation is an important factor to be considered. Government support along with good governance was the most important and recurring factor that emerged during the analysis. It was observed that government involvement during the scaling-up process

and the provision of a favourable climate to the implementers smoothen the progress of scaling up. Moreover, the involvement of all stakeholders and the establishment of an effective partnership between them facilitate the uptake of the intervention. Lastly, a transparent and credible monitoring system is critical to this process as it is essential to track the progress of intervention. In order to maintain quality, an efficient monitoring system is needed to identify gaps and ensure progress according to the project objectives. The identification of weaknesses in the scaling-up process will allow people concerned to take appropriate measures and inform key stakeholders about future strategies. Countries following universal health coverage (UHC) are looking for evidence-based solutions to improve their health systems. Examples of successful research interventions in developed countries show that implementation of health interventions at large scale can help improve people's access to quality healthcare. However, prior experience indicates that interventions that are found to be effective at a small scale under controlled conditions cannot naturally be expected to be broadly adopted and scaled up to cover large segments of the population, despite scale being important for population-level impact. Therefore, a number of factors identified in the current review should be considered prior to scaling up any health intervention.

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