

SOCIAL AND BEHAVIOUR CHANGE (SBC) SUPPORTING IMMUNIZATION IN INDONESIA: A BACKEND STORY

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How to cite this paper:

Gupta, Deepak and Prakash, Ravi (2025) Social and Behaviour Change (SBC) Supporting Immunization In Indonesia: A Backend Story, Journal of Global Resources, Vol. 11 (01)

DOI:

10.46587/JGR.2025.v11i01.002

Received: 18 October 2024

Reviewed: 25 November 2024

Final Accepted: 09 Dec. 2024


Freely available Online
www.isdesr.org

Abstract: Significance of social and behaviour change (SBC) in development and health is well recognized. SBC engages, empowers, informs, educates, and facilitates positive change in individuals, families and communities and influences policies and progressive legislative frameworks. In addressing varied development and health issues, especially the 'child-centric' developmental planning, more targeted SBC strategies are designed in making optimum use of available resources to achieve the planned results in a given context. Based upon research, i.e. the community-based study of risk-factors (studying behavioural insights) and the operational research, SBC theories and methodologies evolved and so did the strategies and practices for results-driven and human-centered design under the SBC. The SBC arm is highly strategic to the Expanded Programme on Immunization (EPI), wherein mitigating the risks of the vaccine preventable diseases (VPDs) is a crucial life-saving intervention. SBC for EPI is also termed as a 'Demand Generation' strategy, which is suitably employed in Indonesia; yet there exist many vast areas with the Zero-Dose children. Vaccination resistance and hesitancy continues to loom large, such as in the Banda Aceh; despite the best efforts being made by the health and development stakeholders in Indonesia. This qualitative review attempts to study the SBC component and its critical role and status in Indonesia in demand generation strategies for routine immunization. It demonstrates, among key conclusions, that the SBC micro-planning is an essential element together with the critical need for empowering communities, especially the providers and the health officers, in empowering them with the much-required results-tracking tools.

Key words: Child Survival, Vaccine Preventable Diseases (VPDs), Social & Behaviour Change (SBC)

Background

As of 2024, Indonesia's population is over 278 million (283,859,710), which is equivalent to 3.47 percent of the total world population. 49.7 percent of Indonesia's population is female, while 50.3 percent of the population is male. 59.0 percent of the population is urban while 41.1 percent reside in the rural belts. Its largest city is Jakarta, its capital with a population of 8,540,121. It has a median age of 30.1 years. The country experiences a maternal mortality rate of 177 deaths per 100,000 live births and an under-five mortality rate of 19.9 deaths per 1,000 live births (*Ananta, A. et.al*)ⁱ. Indonesia has a total fertility rate of 2.3 children per woman, infant mortality rate of 16.6 infant deaths per 1000 live births and the life expectancy at birth for both sexes combined is 71.3 years with 73.4 and 69.2 years respectively for females and males (*World Population Prospects/UNFPA*)ⁱⁱ. In 2023, the literacy rate among Indonesians between the ages 15 and 19 years old was 99.87 percent. The literacy rate in urban areas is higher across all age groups compared to the literacy rate in rural areas (*Socio-Demography, Gol*)ⁱⁱⁱ. The male literacy rate is 97.45 percent, whereas for females it is 94.55 percent as on 2020 (*Siahaan, M.*)^{iv}. Indonesia's poverty rates declined to under 10 percent in 2019, prior to the pandemic times.

Socio-economic Context

As a large and diverse country with numerous challenges including in connectivity, which restricts the access to quality healthcare especially for children, Indonesia has taken some major steps to address them. Decentralized governance sees a large share of public resource be directly allocated to districts, each with autonomous decision-making structures, but often with weak fiscal and human capacity for planning and delivery of quality services (*Nobles, J. et.al*)^v. Indonesia, as a progressive nation, has taken major strides in growth and diversified the economy so that it is not dominated by agriculture, but also enhanced industrialization and service sectors. The last ten years have seen a boom in the Indonesian economy with a gross domestic product growth rate of 5.5 percent per year on average. This is despite the fact that absolute poverty has come down to below 10 percent and 13 percent for children respectively. These achievements hide levels of inequality in different dimensions of child poverty. However, the variations in levels of poverty reduction, especially among children, exist in different regions based on their geographical position, level of connectivity, gender and disability status. The urbanization process is more rapid and as 55 percent of the population is urbanized, living in cities, causing disparities in education, healthcare, and WASH (Water, Sanitation, and Hygiene) services are more pronounced. The demographic dividend is expected to decline due to an aging population (*Abadi, M. et.al*)^{vi}.

Indonesia is presently in the last phase (the final and strongest pillar) of the 20-year development program from 2005 to 2025. The plan is divided into 5-year medium-term development plans called RPJMN (*Rencana Pembangunan Jangka Menengah Nasional*), each with different priorities concerning developing activities. Indonesia wants to achieve a robust economy by strengthening its human capital and competitiveness in the global market (*World Bank/Indonesia*)^{vii}. Government of Indonesia, along with the development and public health partners, has integrated SBC in all its public health, development and humanitarian programs. The most national programmes in Indonesia are thus, formulated to respond to the challenges, like high rates of stunting, relatively low levels of immunization coverage, as well as poor access to quality education and health service delivery, through an integrated approach with SBC strategies expected to be at the heart of the initiatives. Government is partnering with the development actors in advancing the humanitarian and health care outcomes for better service delivery, including

increasing immunization coverage, providing improved maternal care to reduce infant mortality, tackling adolescent health issues etc.

Expanded Programme on Immunization (EPI) in Indonesia

Routine Immunization (RI) plays a significant part in prevention of infectious diseases and reduction of child mortality. WHO Global Action Plan - outlined in the strategic objective number 2 - also highlights the need for demand generation for immunization. Indonesia presents diverse and myriad public health challenges, primary among them being Routine Immunization (RI). The Indonesian government has demonstrated a firm willingness to place immunization services at the top of the public health interventions. Considerable developments have been made especially in ensuring equitable access to the services. However, more remains to be done especially after the setbacks and reversals faced due to the Covid-19 pandemic. The Indonesian government launched and implemented the EPI program in 1977 where several childhood vaccinations were introduced in the national immunization program (NIP). Despite these measures, the number of unvaccinated or partially vaccinated children still remains high. The government introduced strategies for improving immunization coverage by bringing immunization services closer to the community. Utilizing SBC strategies, stationary primary health centre services were transformed to mobile health centers and then to community-based health services involving the NGOs and CSOs at community levels. Vaccine hesitancy is intricately linked to low coverage of immunization services; this can be addressed through demand generation strategies. Therefore, demand generation is crucial in advancing the RI rates. It is still a central component of ensuring high and stable immunization coverage over time. Demand generation means the introduction of activities which create awareness, build confidence and motivate individuals to demand and use vaccines services. This clearly denotes that in Indonesia the challenges associated with routine immunization coverage and more importantly ensuring that even the hardest to reach children are fully vaccinated against vaccine preventable diseases, calls for constant demand generation strategies to be adopted. Indonesia' Expanded Programme on Immunization has witnessed both progress and reversals in recent years. The immunization programme is classified as a priority health programme in the Indonesian RPJMN (Rancangan Pembangunan Jangka Menengah Nasional) or National Medium-Term Development Plan for 2020-2024, as a result of which the routine immunization coverage had reached 90 percent prior to the pandemic.

Immunization activities have been ongoing since 1956, yet the service providers and the recipients of the services are still struggling with quite a number of challenges, such as refusal to get vaccinated on certain grounds like it may cause disability, constraints on inter sectoral cooperation, financial limitations, the hard-to-reach geographical area susceptible to increase in the incidence of cases and outbreaks of VPDs, etc. The country has been to an extent successful in reversing the damages caused by the disruption of health services during the pandemic, which left millions of children unvaccinated. Even then the coverage remains highly disparate and unequal with huge differences between urban and rural, and also in between the different provinces; moreover, there are rising trends of vaccine-preventable diseases, for instance, measles and diphtheria due to reduced immunization rates. These scenarios highlight the imperative need for increased and effective demand generation approaches

Demand Generation for EPI

Indonesia has been encountering opposition, within the community, regarding RI services necessitating the implementation of demand generation interventions to overcome access barriers and enhance awareness about immunization benefits. The focus was to boost

demand for immunization services by addressing the challenges to access the services, enhance community awareness and promote positive attitudes towards vaccines (*Jusril, Hafizah & Rachmi, Cut et.al*)^{viii}. These efforts were (are) especially crucial for the success of EPI programs in areas, with low immunization rates. In Indonesian context, following are some of the ways in which demand generation interventions have been supporting the EPI programme:

Community Engagement

Community engagement plays a vital role in the global immunization programs. Ensuring sustainable demand for immunization is only possible when caregivers and communities trust the safety and efficacy of vaccines, as well as the quality and reliability of immunization services. It is within communities that the reality of development is experienced, thus community participation in the design and implementation of health & development programs remains an essential element to the positive change process (*Gupta, D. et.al/JHM-SAGE*)^x. Engaging with the local communities forms the basis of the success of the demand generation strategies, aiding in minimizing vaccine hesitancy and increase confidence in the immunization process. The local health workers in many countries are trained to engage and educate the communities about the importance of immunization, and help dispel myths and misconceptions. SBC programs often utilize culturally sensitive approaches to resonate with community values. For example, in Indonesia, UNICEF's SBC interventions emphasized the involvement of local leaders and community health workers to build trust and encourage immunization uptake (*UNICEF, 2020*).

Communication & Public Outreach Strategies

Conventionally under the public health space, all the social mobilization, community engagement, outreach communication, use of multiple media platforms, including counselling/IPC have been dubbed as “Vaccine Communication for demand generation;” whereas with the evolving approaches, are now also being referred to as ‘SBC.’ Immunization coverage is influenced by several key factors. How well the objectives of vaccination communication strategies are met depends on the timing and targeting of the content, channels and messengers, and what kind of information is conveyed. In order to cultivate enduring trust towards vaccination programs, it is necessary to develop messages in such a way that it addresses the particular issue of the audiences, just as it is necessary to periodically assess the surrounding environment and trends within immunization communications (*Yale Institute of Global Health & UNICEF*)^x.

The kinds of communication-related tasks will be influenced by the existing needs along the continuum of care. For instance: when addressing the needs of the “**before** stage,” activities geared towards demand generation and outreach, normative change, or towards creating provider trust are needed. Focusing on the needs in the “**during** stage,” developing counselling and providers’ behaviour change activities, clinic environment activities, or client empowerment activities are needed. Lastly, in the “**after** stage,” one may consider peer support, outreach, and/or follow-up activities. These are poised to eventually fit as part of the broader service delivery initiatives and that they are directed towards achieving similar behavioural and health outcomes. The use of mass media, social media, and community campaigns helps disseminate information about the benefits of vaccines. UNICEF has leveraged its extensive communication channels to promote vaccination campaigns globally. In 2019, UNICEF launched the “No Shots, No School” campaign in Indonesia to raise awareness about the importance of vaccination for school-aged children, resulting in a 15 percent increase in immunization rates in targeted areas (*COVID-19/UNICEF 2020*)^{xi}.

Utilizing Data for Targeting Interventions

To ensure that the most vulnerable populations are served first in accordance with the stated goal, health programs ought to be backed by data systems that enable the identification and access of the most hidden and extreme poor children in a structured manner. In addition, these insights need to further the program's understanding of the individual behaviour and action taking process. For example, the presence of certain actions as facilitators (for instance, timely reminders to put plans into action) and the absence of others as deterrents (as in, social norm or attitude towards the service) can all affect caregivers' choices concerning immunization-what to do, when, how, or if. For example, conventional sociological research instruments such as surveys and focus group discussions and newer methods using psycho-education technologies have been available to assess immunization attitudes. It can also help in devising approaches on how to improve the vaccination coverage of populations by understanding why individuals are opposed to vaccination and their other beliefs. An increasing number of governments claim that low demand is the primary challenge to reaching high and equitable coverage of vaccines. Even in instances, where supply chains are strong, and thorough, the existence of low demand may prove detrimental to immunization programs. Strategies to increase demand for vaccines mitigate underutilization of vaccination services and ensure higher proportion of children receiving the full dose regimen of vaccines. In many cases, data-driven approaches are essential for demand generation interventions. The use of immunization coverage data allows health authorities to identify under-immunized populations and tailor strategies accordingly. In 2021, Indonesia's Ministry of Health collaborated with UNICEF to implement a data-driven approach to identify areas with low coverage and targeted interventions to improve outreach (*UNICEF Annual Report (2021)*)^{xii}.

SBC/Demand Generation - Highly Strategic to EPI

The EPI program has transformed gradually over the years based on the population's needs and changes in the health care system. For example, demand generation interventions have been effective in increasing vaccination rates, encouraging people's participation, and overcoming barriers to vaccinations. One of the most important issues regarding routine immunization in Indonesia is high socio-cultural diversity, where regions and communities differ in levels of awareness and vaccine acceptance. Some remote or tribal populations may have strong anti-vaccination traditions, while fake news on vaccine safety and effectiveness travels very fast among inner cities courtesy of social networks. To overcome these issues, demand generation strategies have to address population or geographic specificities. This could include SBC strategies that address the local context of the population and vaccine promotion along with mobilizing community leaders who are revered and respected. For example, during the COVID-19 pandemic where vaccine acceptance was very low, the Indonesian government worked with Muslim leaders in encouraging immunization. This demonstrates that culturally appropriate demand creation is central to the programme and is effective in countering misinformation and disinformation as well as vaccine hesitancy. These efforts underscore the importance of culturally sensitive approaches to demand generation. The current SBC review too found the pivotal role being played by the faith leaders in fostering vaccination, albeit with some limitations identified as well, which are analyzed and appropriate recommendations suggested therein, in the following sub-sections. In Indonesia, The EPI program has seen both positive developments and some challenges. For instance, Indonesia has the world's 4th highest population of unvaccinated infants, of which the combined diphtheria-tetanus-pertussis (DPT) vaccine coverage rate as of 2017 is estimated at 77 percent. Routine immunization coverage has improved over the years (reaching 94.6 percent in 2022, but still remains a challenge in the rural areas.

Routine Immunization and Zero-Dose Children

GAVI defines zero-dose children as those who lack the first dose of diphtheria-tetanus-pertussis (DTP1) containing vaccine (*Reaching Zero-Dose Children/GAVI*)^{xiii}. Indonesia earned a poor reputation of being the world's seventh-highest number of "zero-dose" children in 2023 with 571,000 children who had not received a single dose of DTP1 vaccines (*Rising to the challenge/WHO Report*)^{xiv}. This was further aggravated by the COVID-19 pandemic, which posed significant challenges to Indonesia's routine immunization activities. As a result of the pandemic, a significant number of children either missed or only partially received their vaccinations, making the vulnerable to vaccine-preventable diseases. In 2021, twenty-five million children missed one or more doses of the vaccine against diphtheria, tetanus, and pertussis (DTP3) through routine immunization services. This number represents a two-million increase from 2020 and six million more than in 2019. Several factors contributed to this decline, including the growing number of children in conflict and fragile settings where immunization access is challenging, increased misinformation, and COVID-19-related issues such as service and supply chain disruptions, resource diversion to response efforts, and containment measures that limited access to immunization services. Coverage of complete basic immunization decreased from 84.2 percent in 2020 to 79.6 percent in 2021, putting children at a higher risk of vaccine-preventable diseases like diphtheria, tetanus, measles, rubella, and polio (*UNICEF-Indonesia, 15 July 2022*)^{xv}.

Leading Institutions Supporting EPI in Indonesia

The Expanded Programme on Immunization (EPI) is a vital public health initiative in Indonesia, aimed at reducing morbidity and mortality associated with vaccine-preventable diseases (VPDs). Successful implementation of the EPI relies on the collaboration of various partners, including government agencies, international organizations, non-governmental organizations (NGOs), and community stakeholders.

1. Government of Indonesia

The Government of Indonesia takes the lead on the EPI and is responsible for policy development, execution, and evaluation. The Ministry of Health (MoH) plays an important role in immunization coordination at national, provincial and district levels. It primarily spearheads - Policy Development and Implementation; Funding and Resource Allocation and; Monitoring and Surveillance.

2. UNICEF

UNICEF has been a longstanding partner in supporting EPI efforts in Indonesia, providing technical assistance, advocacy, and funding to enhance immunization coverage. With UNICEF's support, the Government of Indonesia addressed various challenges facing children, ranging from longstanding obstacles to emerging threats. This collaborative effort resulted in the strengthening of national systems, improvement of child-focused laws and policies and the expansion of quality essential services, among other areas of progress. UNICEF continued with its strategy of policy support and generation of key data and evidence, accompanying the government to test tailored innovative approaches and support pathways to scale (*BAPPENAS & UNICEF*)^{xvi}.

3. World Health Organization (WHO)

The World Health Organization (WHO) plays a critical role in supporting the EPI in Indonesia through technical guidance, policy development, and capacity building. WHO's contribution includes, though not restricted to: International Standards and Frameworks; Public Education and Skills Development and; Supporting in times of crises.

4. GAVI, the Vaccine Alliance

GAVI, the Vaccine Alliance, is a public-private partnership that supports immunization initiatives in low- and middle-income countries, including Indonesia. It plays a significant role in: Funding and Vaccine Procurement; Technical Support and Capacity Building and; Supporting New Vaccine Introduction.

5. Non-Governmental Organizations (NGOs)

Various NGOs in Indonesia contribute to the EPI by implementing community-based interventions, raising awareness, and supporting healthcare services. NGOs largely spearhead - Building Relationships with Community; Health System Strengthening and; Monitoring and Advocacy.

6. Academic Institutions and Research Organizations

Academic institutions and research organizations play a vital role in providing evidence-based research, evaluation, and data analysis to support EPI efforts, such as: Stakeholder Research and Assessment and; Human Resource Development.

7. Community-Based Organizations & Civil Society Organizations (CSOs)

Local community-based organizations (CBOs) are an important partner in reaching underserved populations and enhancing immunization uptake. CSOs/CBOs have a critical connect with the field and thus, play a pivotal role in: Trust Building and Local Engagement and; Improved Access.

The accomplishments of the Expanded Programme on Immunization (EPI) in Indonesia can be attributed to the partnership of various stakeholders comprising the national government, UNICEF, WHO, GAVI, NGOs, academia and the local populace. The strengths and resources of each partner add value to immunization measures thereby improving health indicators among children. With the current issues affecting Indonesia in reaching out to all children with immunization, the existing collaborations and commitment of all parties will remain vital in ensuring that every child is protected through vaccination.

Select Success Stories Under SBC Space: EPI In Indonesia

SBC is a multi-sectoral approach, wherein the strategies are important for the promotion of public health interventions worldwide, especially immunization services. In Indonesia, the Expanded Program on Immunization has been well integrated within the public health system. Its main objective has been the increase of vaccine uptake and the decrease of VPDs. However, these objectives are not met through provision of vaccines alone. They require active community participation, education and behaviour change efforts. This is where SBC programs come into play.

Development partners have been instrumental in the implementation of the EPI in Indonesia and in matters pertaining to increasing the country's demand for vaccinations. Understanding the local context, designing targeted and specific communication activities and engaging the community to promote vaccination are key elements of EPI's outreach and strategic communication approach within the framework of SBC. A multi-tiered SBC strategy from the community level to the individual level was part of this approach (*Pronyk, Paul & Sugihantono et.al*)^{xvii}. Interpersonal communication (IPC) encompasses face-to-face interaction, mass media use, community participation, and social network use. Alongside these strategies, data is gathered and analysed with the aim of tracking how the program is being carried out, particularly in terms of reacting to any new risks.

These strategies are also supported by data collection and analysis, which helps to modify the programme in order to address any emerging threats and challenges during its operationalization such as anti-vaccination propaganda or cultural barriers towards vaccination. For example, partner organizations, including UNICEF, have been involved with the Indonesian Ministry of Health (MoH) and others in creating and delivering messages promoting immunization that are culturally fit for the target community. The messages go out through different channels, thus reaching the intended audience across the country. In addition, the community health workers (CHWs) are also trained as they are vital in reaching and encouraging the families in the communities to get vaccinated and also addressing issues at the community level.

Polio Campaigns in Java and Bali

A good example of SBC driven EPI campaign in Indonesia is the polio outbreak response effort. MoH, with partners, facilitated the government's rapid mobilization and response against a polio outbreak helping vaccinate more than 12 million children by acquiring 16 million doses of the new oral polio vaccine, assisting in the coordination of vaccine distribution, and implementing social and behavioural change communication programs to persuade parents and caretakers to bring their children for immunization. Despite the logistical challenges posed by Indonesia's geography, SBC strategies enabled the government to maintain high levels of immunization coverage in critical areas such as Java and Bali.

Measles-Rubella (MR) Campaign

Another instance of outlining the importance of SBC strategies in improving vaccination rates is the 2017 Measles-Rubella (MR) vaccination campaign. In Indonesia, a nationwide campaign was organized with UNICEF's support. It called for vaccination of millions of children, especially in under-immunized areas. The campaign was marred considerably by misinformation as well as vaccine refusal. To counter the barriers the MoH organized several community engagement activities. Such an approach consisted of public-service advertisements, school-based education, and extensive outreach by health care workers and so on.

COVID-19 Vaccination Efforts

During the Covid-19 pandemic the global health scenario was faced with a daunting challenge of saving lives through vaccines. SBC efforts played a vital role in ensuring that communities, especially vulnerable ones, were engaged in the issue of COVID-19 vaccines. Together with the MoH - NGOs, civil society and UNICEF were able to create various demand generation activities for immunization campaigns which included addressing vaccine-related concerns and restoring confidence in vaccines. For this purpose, the media campaign employed modern channels of communication, like WhatsApp and Facebook, in conjunction with other media to provide reassurance and reliable information regarding vaccinations and dangers posed by them. Data from UNICEF Indonesia demonstrate that as of mid-2022, Indonesia had covered over 150 million of its people with vaccines, which makes it one of the countries with the fastest vaccination campaigns in history. Despite the challenges that however persist in some rural and hard to reach locations, SBC initiatives have played a major role in the remarkable acceptance of COVID-19 vaccines.

How Demand Generation Activities Are Poised to Delivering Results

The success of demand generation activities in Indonesia's EPI can be attributed to several key factors:

Cultural Sensitivity and Tailored Messaging

Indonesia is a highly diverse country, and there can be no one-size-fits-all approach to immunization. By tailoring messages to specific cultural contexts, partners have ensured that communities receive information in a way that resonates with their values and beliefs. For example, engaging religious leaders in the MR campaign helped mitigate vaccine hesitancy among Muslim populations.

Connecting, Building-Bridges via Multi-Channel Communication

SBC programs in Indonesia have utilized a combination of traditional and digital media, interpersonal communication, and community engagement to maximize the reach of immunization messages. Radio and television remain critical for reaching rural populations, while social media has been a valuable aid in the urban areas. This multi-channel approach ensures that no demographic population is left behind in demand generation efforts.

Community Involvement

Engaging communities is the basis of success for any successful SBC efforts. Involving local leaders, healthcare workers, and volunteers ensures that there is ownership for the programs/campaigns and immunization campaigns are not just seen as top-down initiatives but as community-driven movements. This approach fosters trust and encourages greater participation in immunization programs.

Rapid Response to Misinformation

Misinformation is a bane to the success of the immunization campaigns and it influences vaccine hesitancy. This is a significant barrier to achieving high coverage. Scientifically designed SBC activities ideally include real-time monitoring of misinformation and the quick response to disseminate correct information through trusted sources. This approach has been particularly crucial during the COVID-19 pandemic, where misinformation spread quickly across social media.

Challenges and Areas for Improvement

While there are notable success stories in Indonesia's EPI, challenges remain. In rural and remote areas (including in some urban cities), logistical issues and cultural barriers continue to hinder immunization efforts. Additionally, the growing prevalence of misinformation, particularly on social media, requires sustained efforts to build public trust in vaccines. Finally, continued investments in local health systems strengthening and engaging the community can ensure that the demand generation strategies adopted by the programs are sustainable.

The Challenges and Solutions: SBC for EPI

The Expanded Programme on Immunization (EPI) in Indonesia is essential for protecting children against vaccine-preventable diseases (VPDs). While significant progress has been made in increasing immunization coverage, challenges still persist that hinder the effectiveness of demand generation strategies.

1. Vaccine Hesitancy and Misinformation

Challenge: In Indonesia, the persistent barrier to high immunization coverage is still the vaccine hesitancy aspect. This is compounded by misinformation regarding vaccine safety and efficacy, fuelled through social media and word of mouth. Additionally, reports of adverse effects following immunization, regardless of their actual cause, further fuel concerns.

Response Strategies: Development partners have collaborated with local health authorities and trusted community leaders to combat vaccine hesitancy. Misinformation is addressed through the use of comprehensive communication strategies. Utilizing social media platforms, community meetings, and educational materials to provide accurate information about vaccines, in this case, UNICEF in particular shared positive vaccination stories to build public confidence.

2. Access and Equity Issues

Challenge: Unequal access to immunization services is another barrier to high immunization coverage, particularly in remote and underserved areas of Indonesia. Geographic barriers, limited healthcare infrastructure, and socio-economic disparities contribute to inequitable vaccine distribution. Many families in rural regions face challenges in reaching health facilities, resulting in lower immunization rates.

Response Strategies: Mobile vaccination units have been deployed to reach hard to reach areas and underserved communities, improving access. Trained community health workers conduct door-to-door immunization campaigns. Partnerships with local NGOs have facilitated outreach programs that not only provide vaccines but also educate families about the importance of immunization. The Indonesian government has also prioritized improving healthcare infrastructure, aiming to establish health facilities in remote areas.

3. Cultural Beliefs and Practices

Challenge: Many places in Indonesia witness major conflicts between traditional health beliefs and modern medical practices, which influence and thereby create significant hindrance to vaccine uptake. This can often be compounded by a lack of understanding about the benefits of immunization, leading to vaccine hesitancy and refusal to get vaccinated.

Response Strategies: Educating the communities about the importance and benefits of immunization through culturally sensitive approaches are important in addressing these challenges. Community engagement initiatives are designed to respect local traditions while promoting the importance of vaccination. Collaborating with local leaders and influencers helps tailor messages that resonate with community values. Educational programs, delivered through workshops and local events, aim to bridge the gap between traditional beliefs and modern health practices.

4. Limited Awareness and Knowledge

Challenge: Lack of knowledge about the timings of the immunization schedule and importance of timely vaccination often leads to missed opportunities to get vaccinated. Many parents, particularly in rural and low-income communities, may lack this awareness leading to low immunization coverage.

Response Strategies: Demand generation strategies can be implemented by focusing on education and awareness, through public health campaigns, disseminating information through multiple channels, such as radio, television, and social media. Schools and community health workers can be an important ally, helping disseminate information and engage with children, their parents and the communities respectively.

5. Economic Factors

Challenge: Economic challenges can hinder families from accessing immunization services. In low-income communities, parents may prioritize immediate needs, such as food and shelter, over healthcare, leading to low vaccine uptake.

Response Strategies: To address economic barriers, health programs are being integrated with social support initiatives. For instance, conditional cash transfer programs have been implemented, providing financial incentives for families to ensure their children are vaccinated. Additionally, health authorities are working to provide free vaccines at health facilities, reducing the financial burden on families.

6. Impact of the COVID-19 Pandemic

Challenge: The COVID-19 pandemic has had a profound impact on immunization efforts globally, and Indonesia is no exception. Lockdowns, fear of virus transmission, and reallocation of healthcare resources have led to disruptions in routine immunization services, resulting in increased susceptibility to VPDs.

Response Strategies: In response to the challenges posed by the pandemic, Indonesia has adopted innovative approaches to ensure continuity of immunization services. Strategies include incorporating immunization into COVID-19 response plans, utilizing mobile clinics, and conducting outreach campaigns that emphasize the safety of vaccination against both COVID-19 and routine vaccines. Additionally, the government is prioritizing catch-up campaigns to reach children who missed vaccinations during the pandemic.

These multifaceted challenges for demand generation strategies in Indonesia that encompasses vaccine hesitancy, access issues, cultural beliefs, economic barriers, and the impact of the COVID-19 pandemic have played a major part in missed immunization opportunities and low coverage. Addressing these challenges requires a collaborative and multipronged approach, integrating communication, and community engagement, education, and support services. As Indonesia continues to navigate these obstacles, ongoing efforts by the government, international organizations, NGOs, and community stakeholders will be crucial in ensuring that every child has access to life-saving vaccines, ultimately improving public health outcomes across the country.

Methodology of Exploration

In order to deeply study the ongoing SBC space and the deployed demand-generation strategies, particularly in the area of EPI, routine immunization in Indonesia, an exhaustive desk assessment and literature review was undertaken. It not only included the relevant (publically accessible) documents of the Ministry of Health (MoH), leading development partner organizations, such as GAVI, WHO, UNICEF and others, also included were the body of published research (SBC & EPI) specifically focusing on Indonesia. Thereafter, over one hundred and thirty-five ($n^o = 135$) practicing individual experts (health providers, programme managers, policy experts, health educators, SBC technical specialists and field-based faith leaders) were interacted with a structured questionnaire. The analytical discussion above showcases the outcomes of the desk-analysis, literature review and the engaging conversations held on the subject of SBC in the field of EPI/Routine Immunization in Indonesia.

Recommended and Time-Tested Strategies

SBC is critical in the implementation of the EPI as it aids in the demand generation interventions which in turn increase the immunization coverage. It is a known fact that human behaviour and cultural practices are very complex and hence effective SBC strategies have to be holistic, take into account the culture of the people and be backed up by evidence (Gupta, D., 2021)^{xviii}. Here are some of the best approaches and strategic frameworks, which can be used with the aim of improving the SBC activities, which are results-oriented, for the EPI.

1. Evidence-Based Interventions

Evidence-based interventions are a vital component of designing effective SBC strategies. These interventions should be based on scientific evidence and researched and customized to the local setups.

Behavioural Insights: Behavioural insights can help develop strategies to encourage people towards taking vaccines. Simple modifications, for instance, sending an SMS reminder for immunization appointments or making vaccinations a default option at health care visits, can increase uptake dramatically. Studies confirm that these kinds of nudges improve vaccination schedule adherence.

Community Engagement: Involving communities on all levels especially in the planning and the implementation of immunization programs helps ensure that the interventions are suitable and fitting within the local culture. The use of community dialogues, focus group discussions or participatory approaches helps in understanding the local myths and practices that affect attitudes towards vaccination. When the community members are involved in the planning of communication materials, there is a sense of ownership created which raises the chances of achieving the desired behavioural turn around.

2. Multi-Channel Communication Strategies

SBC Strategies place a lot of emphasis on communication since this is crucial in order to get the required results. Reaching a wide range of population segments by employing several communication channels is referred to as a multi-channel communication strategy.

- **Mass Media Campaigns:** Using multiple channels like television, radio, and print media to reach out to the people and educate them on the importance of immunization can go a long way in mass mobilization. The campaigns should include, rather than exclude, examples of success, concentrate on the experiences of vaccine adopters who are zealous and ready to speak up, and invite the endorsement of community authority figures in order to bolster and gain the trust of the community.

- **Digital Communication:** Digital media can also be integrated into the SBC campaigns processes employing digital means like social networks, applications and websites to reach to parents and caregivers. In addition, social media campaigns can be undertaken to address the target communities and urge them to get vaccinated. For instance, short visuals and audio narratives with lengthy text captions can be helpful to expound and simplify complex ideas.

- **Interpersonal Communication:** Training the health workers in interpersonal communications so that they are able to address the fears and apprehensions of the community towards immunization, is another important aspect. This entails active listening, being able to understand their feelings and also addressing their fears about the vaccines. Culturally appropriate training is administered to help health care givers deal with the issues and fears with the aim of increasing vaccination coverage among the population.

3. Monitoring and Evaluation

To deliver positive results, implementation of SBC strategies must have monitoring and evaluation (M&E) mechanisms in place. In these cases, the focus is on measuring outcomes of actions taken and informing future programming.

• **Developing SMART Objective:** With respect to each SBC activity, specific, measurable, achievable, relevant, time-bound objectives need to be formulated. A SMART objective, for instance, can be to increase the vaccination coverage of under-five children targeted in the community by 20 percent within one year.

• **Data Collection and Interpretation:** It is vital to collect both qualitative and quantitative data at predetermined intervals for the evaluation of SBC initiatives. Surveys or focus groups, or participation and record of community acceptance of immunization day activities, provide an insight into community attitudes and behavior change concerning immunization.

4. Strategic Partnerships

SBC strategies can be more successful by tapping into available resources, expertise, and reach through cooperation among the different actors involved as well as forming alliances (*Siswati, T. et.al*)^{xix}.

Government Collaboration: Involving the relevant health authorities will help in making certain that the SBC activities are consistent with the national policies and programs on immunization. The efficiency of particular strategies can be improved by a better utilization and sharing of the existing resources and implementing joint program activities.

Collaborating with NGOs: Participation among grassroots non-profit organizations can strengthen the outreach and educational programmes. These organizations usually have access to the intended clients and contribute significantly to the implementation of community-based programs. These types of entities tend to be well-regarded by their target constituencies, which facilitates their participation in community-based projects.

Academic Partnerships: Collaboration with academic partners allows access to tap into research skills, evaluation processes, and resources for skills enhancement. Involving researchers in the formulation of SBC plans strengthens the expectations that ensuing strategies will be grounded in data and culturally appropriate.

Conclusion

In order to improve demand generation strategies for Indonesia's Expanded Programme on Immunization, it is necessary to take a stepwise approach, which involves frameworks, strategies, communication, evaluation and partnership coordination. The extent to which improvements can be made in the long run is inherently correlated with the active participation of intergovernmental organizations and international agencies, local non-governmental stakeholders, and community members in the immunization campaigns in every region of Indonesia, which will facilitate fair program coverage throughout the region. Despite improvements, in immunization coverage through the EPI in Indonesia, challenges such as accessibility issues arising from vaccine hesitancy and supply chain management concerns remain that need addressing. The two key outcomes that emerged as substantive recommendations were: (a) Promoting micro-planning for SBC in support of EPI at the field level and; (b) Empowering the providers and local health managers with the technical skills in tracking SBC results through scientific and locally developed M&E tools. By carrying out appropriate measures and encouraging the community involvement, there is still hope for Indonesia's immunization program leading to a healthier population in the country.

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