Training manual on basic monitoring and evaluation of social and behavior change communication health programs

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<th>Description</th>
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<tbody>
<tr>
<td>ASHA</td>
<td>Accredited Social Health Activist</td>
</tr>
<tr>
<td>BCC</td>
<td>Behavior Change Communication</td>
</tr>
<tr>
<td>FHI 360</td>
<td>Family Health International</td>
</tr>
<tr>
<td>FP</td>
<td>Family Planning</td>
</tr>
<tr>
<td>IEC</td>
<td>Information, Education, and Communication</td>
</tr>
<tr>
<td>IHBP</td>
<td>Improving Healthy Behaviors Program</td>
</tr>
<tr>
<td>IPC</td>
<td>Interpersonal Communication</td>
</tr>
<tr>
<td>IUCD</td>
<td>Intra-uterine Contraceptive Device</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental organization</td>
</tr>
<tr>
<td>NIHFW</td>
<td>National Institute of Health and Family Welfare</td>
</tr>
<tr>
<td>NRHM</td>
<td>National Rural Health Mission</td>
</tr>
<tr>
<td>SBCC</td>
<td>Social and Behavior Change Communication</td>
</tr>
<tr>
<td>SHRC</td>
<td>State Health Resource Center</td>
</tr>
<tr>
<td>SIHFW</td>
<td>State Institute of Health and Family Welfare</td>
</tr>
<tr>
<td>TOR</td>
<td>Terms of reference</td>
</tr>
<tr>
<td>TV</td>
<td>Television</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
</tbody>
</table>
Introduction

Social and behavior change communication (SBCC) interventions are increasingly seen as the key interventions for addressing social and cultural barriers and achieving goals laid out for health programs. States have the responsibility to plan and implement SBCC activities. Focus on mass media, community mobilization and interpersonal communication is increasingly gaining importance as SBCC interventions in the State Project Implementation Plans (PIPs) with increasing resource allocation to achieve the objectives. Often these interventions are not evidence based and especially for mass media it is mistakenly assumed that the interventions will benefit all equally. Though monitoring and evaluation (M&E) of overall National Rural Health Mission (NRHM) is considered important, M&E of SBCC interventions is limited. Lack of trained and skilled human resources for M&E has been a limitation in general. This demands a serious effort to build capacity of M&E personnel to monitor and evaluate performance of SBCC interventions in terms of reach and effectiveness among intended audiences.

Improving Healthy Behaviors Program (IHBP) of FHI360, funded by USAID, aims to provide technical assistance to strengthen capacities to monitor and evaluate SBCC intervention for maternal health, family planning, tuberculosis and HIV/AIDS at of public program managers at national, state and district level. The project is coordinating with National Institute of Health and Family Welfare (NIHFW), and the State Institute of Health and Family Welfare (SIHFW) to build the trainers capabilities within the state in this area. The Population Council will train a cadre of master trainers on M&E of SBCC activities at the national and state level who would further build capacity of human resources responsible for M&E of SBCC activities within the state at the district level.

To address the capacity building initiative in M&E of SBCC intervention, a ‘Training Manual on Basic Monitoring and Evaluation of Social and Behavior Change Communication Health Programs’ is prepared. The key personnel trained in this initiative will include master trainers, state program M&E officers and managers, district level officials and supervisors whose main job is to monitor SBCC interventions in their geographical area of work. The extent of involvement of these personnel in planning and executing the M&E activities vary. Therefore, the depth of training content covered will vary depending on the level of function of the officials and supervisors that are trained.

The training manual is comprehensive to include various aspects of M&E. It includes the following seven modules:

**Module 1:** Basics of SBCC: The learning objective of module-1 is to differentiate between IEC and SBCC; orient participants on how theories of behavior change have evolved and the process used in designing a SBCC intervention.

**Module 2:** Introduction to monitoring and evaluation: The module-2 will enable participants to learn what is monitoring and evaluation and distinguishes between process, output and outcome indicators specific to social and behavior change.

**Module 3:** Developing logical framework analysis for a SBCC program: From module-3, the participants will learn to develop a logical framework matrix that will guide M&E of SBCC interventions. They will also learn to develop indicators with respective to the goal, objectives and activities of the SBCC program.

**Module 4:** Monitoring of SBCC program at district and block level: Using module-4, the participant will understand how to monitoring quality of SBCC activities implemented and design district and block...
specific feedback mechanisms.

**Module 5**: Research designs for evaluating SBCC program: The objective of module-5 is to orient the participants to various evaluation approaches and frameworks, increase capacity to design appropriate evaluation methodology and orient to overcoming barriers in effective evaluation.

**Module 6**: Role of qualitative methods in evaluating SBCC program: The objective of module-6 is to orient participants on importance of qualitative approaches for monitoring and evaluation of SBCC interventions. They will learn about various qualitative methods.

**Module 7**: Developing terms of reference for evaluating SBCC program: The module-7 is mainly meant for the state officials who will learn how to develop Terms of Reference for contracting agencies for evaluation of SBCC programs.

Overall, the training manual is organized around concepts of M&E for SBCC interventions with strengths and weakness of approaches and recommendations wherever applicable and necessary. The manual aims to strengthen efforts of SBCC interventions by building capacity to effectively monitor and evaluate intervention against desired outcomes and provide learning for SBCC strategies. The guiding principles in development of this manual are the various roles played by officials at various levels within the state; the block supervisors are responsible for supervising implementation of day to day activities and providing feedback during weekly and monthly meetings; district M&E officers are responsible for data collation to assess the progress of interventions using output indicators and provide feedback and the state level officials in addition to monitoring are also responsible for evaluation of the programs. The training methodology and the possible exercises that could be used to facilitate learning are mentioned in the “Facilitator’s Guide” that accompanies this manual.
Module 1

BASICS OF SOCIAL AND BEHAVIOR CHANGE COMMUNICATION

Learning Objectives
- To know the difference between Information Education and Communication and Social and Behavior Change Communication
- To have an overview of various theories of behavior change
- To understand the Socio-Ecological model for change

What is the difference between IEC and SBCC?
Information, Education and Communication (IEC) is a process of providing information and education to individuals and communities to promote healthy behaviors that are appropriate to their context. It is believed that having correct knowledge will lead to adoption of healthy behaviors but the experience of IEC programs shows that knowledge is not a necessary and sufficient condition for behavior change. There are lot of examples which show that giving correct knowledge has not always led to adoption of healthy behaviors. This is because adoption of a behavior is also influenced by the external environment; the local context, family and community at large, in which the individual is placed.

Social and Behavior Change Communication (SBCC) has evolved from earlier models of IEC and is an evidence-based, consultative process of addressing knowledge, attitudes, and practices through identifying, analyzing, and segmenting audiences and participants in programs and by providing them with relevant information and motivation through well-defined strategies, using an appropriate mix of interpersonal, group and mass media channels, including participatory methods (Neill McKee, 2002). SBCC aims to affect changes in knowledge, attitudes, and practices and is a more comprehensive approach than IEC. SBCC involves analyzing personal, societal, and environmental factors for sustainable change and uses strategies that influence the physical, socio-economic, and cultural environment to facilitate healthy norms and choices and remove barriers to them.
Theories of behavior change

Health Belief Model

The Health Belief Model is a psychological model of behavior change. It is based on the individuals’ perception of acquiring the disease and its severity; analysis of benefits in taking action to reduce the barriers in adopting healthy behavior and relative cost benefit of adopting a healthy behavior (Figure 1).

**FIGURE 1.1: THE HEALTH BELIEF MODEL**

<table>
<thead>
<tr>
<th>Modifying factor</th>
<th>Individual's perceived:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>susceptibility</td>
</tr>
<tr>
<td>Gender</td>
<td>severity</td>
</tr>
<tr>
<td>Knowledge</td>
<td>threat</td>
</tr>
<tr>
<td>Socio-economic status</td>
<td>benefit of changing behavior</td>
</tr>
<tr>
<td>Previous experience</td>
<td></td>
</tr>
</tbody>
</table>

The Theory of Reasoned Action/Planned Behavior

The Theory of Reasoned Action, modified as Theory of Planned Behavior, is a socio-cultural model for behavior change. In this, the primary determinant of behavior is the individual's intention to perform it which depends on their attitude towards performing the behavior and the individual's perception of the social (or normative) pressure exerted upon them to adopt or not to adopt the behavior (Figure 2).

**FIGURE 1.2: THE THEORY OF PLANNED BEHAVIOR**


Socio-Ecological Model for Change

Socio-Ecological Model for Change SBCC applies a socio-ecological model that examines several levels of influence to provide insight on the causes of problems and find tipping points for change. A tipping point refers to the dynamics of social change, where trends rapidly evolve into permanent changes. It can be driven by a naturally occurring event or a strong determinant for change—such as political will that provides the final push to “tip over” barriers to change. Tipping points describe how momentum builds up to a point where change gains strength. It has two parts (Figure 3):

1. Behaviors are influenced by personal and environmental factors and multiple levels of influence, which include:
   - Individual (the person or 'self' in relation to the program)
The immediate people of influence are husband and other family members and peers (second ring in figure 3). Their interactions with the individuals influence the behavior of the individuals. Both the interpersonal and community rings shape community and gender norms, access to and demand for community resources, and existing services. The people represented in the outer two rings are community influencers including health care providers, community leaders and influencers, and others outside of the community like government officials, NGOs, and private providers. They exert influence through policies and legislation, political forces, private sector market environment, economic conditions, religion, technology, and the natural environment.

**FIGURE 1.3: THE SOCIO-ECOLOGICAL MODEL FOR CHANGE**

2. Behaviors are also influenced by a number of cross-cutting factors such as:
   - Information (knowledge, education)
   - Motivation and attitudes
   - Ability to act (access, efficacy)
   - Norms

Cross-cutting factors (in the triangle) influence each of the actors and structures in the rings. The cross-cutting factors are information, motivation, ability to act and norms. It is on these cross-cutting factors that SBCC interventions may be able to generate change. People need information that is timely,
accessible and relevant. For example, if information about modern contraceptives and their side effects is given some individuals or couples will be empowered to act. Motivation is determined by attitudes, beliefs or perceptions about benefit and risks. For example, some women may believe that intra-uterine contraceptive device (IUCD) will move up to the heart. Such individuals could be motivated by effective counseling with demonstration models, peer education, and even radio and TV programs. However, for some women motivation may not be enough to accept IUCD and they need self-efficacy to decide skills to negotiate, and avail IUCD services (access ability to act). Further, individuals may be governed by perceived norms which are followed by others individuals and socio-cultural norms that the community follows. So the same is expected from him or her. There are gender norms which shape the behaviors of men and women.

**What SBCC can and cannot do?**

<table>
<thead>
<tr>
<th>SBCC Can</th>
<th>SBCC Cannot</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Information</strong></td>
<td>Remove compensations for inadequate infrastructure or logistics of services, lacking access to them or policies regulating them</td>
</tr>
<tr>
<td>• Increase knowledge and awareness of an issue, problem, or solution</td>
<td></td>
</tr>
<tr>
<td>• Counter myths and misconceptions</td>
<td></td>
</tr>
<tr>
<td><strong>Motivation</strong></td>
<td>• Produce sustainable change without the support of other program components or whole programs providing services, technology, and enforcing regulations and policies</td>
</tr>
<tr>
<td>• Influence perceptions, beliefs, and attitudes that may change social norms</td>
<td></td>
</tr>
<tr>
<td>• Show the benefit of behavior change</td>
<td></td>
</tr>
<tr>
<td>• Prompt action</td>
<td></td>
</tr>
<tr>
<td>• Trigger an individual to adopt and maintain a new health behavior</td>
<td></td>
</tr>
<tr>
<td><strong>Ability to Act</strong></td>
<td>• Be equally effective in addressing issues in different countries with cookie-cutter strategies</td>
</tr>
<tr>
<td>• Demonstrate and provide an opportunity to practice skills</td>
<td></td>
</tr>
<tr>
<td>• Reinforce self- and collective-efficacy</td>
<td></td>
</tr>
<tr>
<td>• Strengthen organizational and network relationships</td>
<td></td>
</tr>
<tr>
<td>• Address barriers/systemic problems, such as insufficient access to care through advocacy and mobilization</td>
<td></td>
</tr>
<tr>
<td><strong>Norms Change</strong></td>
<td>• It can, however, link with these programs and make their work visible.</td>
</tr>
<tr>
<td>• Support or initiate norm change</td>
<td></td>
</tr>
<tr>
<td>• Mobilize community members or whole social movements</td>
<td></td>
</tr>
<tr>
<td>• Advocate for a health or development issue or policy</td>
<td></td>
</tr>
<tr>
<td>• Initiate adoption of a new policy direction</td>
<td></td>
</tr>
</tbody>
</table>

**How does SBCC work?**

SBCC is a process that involves:

- Understanding the situation
- Focusing and designing the strategy
- Creating interventions and materials
- Implementing and monitoring
- Evaluating and re-planning
SBCC operates through three key strategies (Figure 4). These include:

1. **Advocacy** – to raise resources as well as political and social leadership commitment to develop actions and goals
2. **Social mobilization** – for wider participation, coalition building, and ownership, including community mobilization
3. **Behavior change communication (BCC)** using mass and social media, community-level activities and interpersonal communication (IPC) for changes in knowledge, attitudes, and practices among specific audiences.

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**FIGURE 1.4: STRATEGIES OF SOCIO-ECOLOGICAL MODEL FOR CHANGE**

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**What is a Social and Behavior Change Communication Strategy?**

The SBCC strategy is a framework indicating direction and scope of communication activities. The development of SBCC strategies should be based on SBCC theory, research and available evidences that will identify the barriers and the facilitating factors for each of circles mentioned in Figure 4. The SBCC strategy forms the road map for “WHAT do you want to get WHERE?” and should focus on following elements:

**Analysis Summary**
- Problem statement
- Research needs
- Changes the problem involved

**Communication Strategy**
- Target audiences
Desired changes, barriers, facilitators, communication objectives by audience

Strategic approach

Positioning

Key content

Communication channels (e.g. mass media, mid-media, IPC), activities, and materials

**Ten Principles of SBCC**

- **Principle 1**: Follow a systematic approach (e.g., C-Planning).
- **Principle 2**: Use research, not assumptions to drive your program.
- **Principle 3**: Consider the social context.
- **Principle 4**: Keep the focus on your audience(s).
- **Principle 5**: Use theories and models to guide decisions (e.g., the socio-ecological model).
- **Principle 6**: Involve partners and communities throughout.
- **Principle 7**: Set realistic communication objectives and consider cost-effectiveness.
- **Principle 8**: Use mutually reinforcing materials and activities at many levels.
- **Principle 9**: Choose strategies that are motivational and action-oriented.
- **Principle 10**: Ensure quality at every step.

Thus, SBCC is the systematic application of interactive, theory and research-driven communication processes and strategies that address change at individual, community, and societal levels.

**In summary, SBCC**

- Has evolved from IEC and BCC and employs a more comprehensive approach.
- Refers to both social change and behavior change.
- Is the systematic application of interactive, theory and research-driven communication processes and strategies that address change at individual, community, and societal levels.
- Is a process, uses a socio-ecological model, and operates through three key strategies - Advocacy, Social mobilization and BCC.
REFERENCES


Module 2

INTRODUCTION TO MONITORING AND EVALUATION

Learning Objectives
- What is monitoring and evaluation and they differ?
- What is indicator? What are different types of indicators?
- Characteristics of a good indicator

2.1 WHAT IS MONITORING AND EVALUATION?

Monitoring

Monitoring is systematic and purposeful observation and timely data collection to check if program activities are being implemented as planned in terms of frequency, timing, and sequence, if applicable. More precisely, monitoring tracks and measures program activities to answer what activities are done, where, with whom, when and how many.

Monitoring is used to track changes in program performance over time against measurable indicators defined well in advance. Its purpose is to permit stakeholders to make informed decisions regarding the implementation and performance of programs and the efficient use of resources. Monitoring is done internally often by program managers themselves or concerned program monitoring staff. Monitoring helps in establishing controls to make sure that implementation is on track and moving towards achieving the objectives of the program. Therefore, it is a continuous day-to-day management process of checking, analyzing and giving feedback into program activity and resource allocation plans.

Monitoring of SBCC programs involve routine data collection, both quantitative and qualitative measurements, and analysis to check process and outputs to provide timely answers like:

- are the communication activities being implemented as planned?
- is the quality of implementation good?
- are the materials, channel and equipment used to communicate messages culturally acceptable and effective

In summary, monitoring for SBCC program:

- is a continuous process of data collection and analysis at multiple points throughout the program cycle, including a baseline at the beginning
- is used to determine if activities are implemented as planned
- helps in taking decision on midterm correction based on evidences, if required;
- alerts and guides utilization of planned resources and timely execution
- requires data collection tools and quality assessment checklists
Evaluation

The evaluation is a systematic process that attempts to determine objectively relevance, effectiveness, and impact of activities in relation to the objectives intended to achieve. It measures how well the program activities have met expected objectives and/or the extent to which changes in outcomes can be attributed to the program or intervention. The evaluation also provides insights into the future of the programs, for both implementers and donors, in terms of sustainability, scalability and policy implication. Therefore, evaluation differs from monitoring in terms of timing and focus and level of details of outcome of the program.

Evaluations can be conducted during the project period or at the end of the project period depending on the purpose of the evaluation. Evaluation, unlike monitoring, involves data collection at discrete points in time e.g. baseline, midline and endline surveys. Evaluation requires a comparison of measureable changes in the level/prevalence of the outcome variables before and after the SBCC interventions. In evaluation of SBCC interventions, it measures to answer:

- whether the SBCC intervention has achieved its objective of adoption of desired behaviors and/or outcome indicators identified in the program?
- extent equity and gender has been address in the campaign and with what effects?
- extent the changes could be sustained, economically viable and could be scaled up
- beside these key measures of SBCC effect, evaluation also could throw light on those issues which have/ could have direct bearing of the outcomes or impact
- Whether barriers to social and behavior change is reduced by SBCC interventions?
- the reach of SBCC program specially among intended audience
- in the long term, the extent of diffusion effects that helped adoption of the behavior in larger community
- the role played by the predictors of facilitating factors to behaviour change

In summary, evaluations of SBCC programs:

- requires a well-planned evaluation study design and data collection tool
- require data collection at the start of a program (to provide a baseline) and again at the end to assess the extent the proposed program outcomes or impact of the SBCC interventions have been achieved
- it gives insight into causal factors and implication to change in future
- determine the quality of the program

2.2 WHAT IS INDICATOR?

Indicators are measurements used in monitoring and evaluating program performance. Indicators are program specific and are defined by the objectives of the program. Indicators can use both on quantitative and qualitative measurements, Indicators should be measurable and helps to assess the extent the SBCC intervention has changed the outcomes.

The process of selecting indicators can be fairly easy if objectives are presented clearly in terms of
defined quantity, quality, and timeframe of a particular program activity. Ideally, during the planning process of the program, the indicators must be defined and linked to the activities and objectives.

It is important to understand and differentiate program indicators and communication indicators. Program indicators refer to the outcome of a program to achieve the goal such as change in contraceptive use, reduction in unmet need. However, communication indicators measures the communications provided through different channels such as IPC, mid-media or mass media to reduce myths or misconceptions and increase correct knowledge. It also includes process indicators like reach of the given messages, comprehension of the messages etc.

Types of Indicators

Monitoring Indicator: There are two types of monitoring indicators- process and output.

Process indicators: Process indicators helps in assessing how the planned activities have been implemented both with respect to time schedule and quality of the implementation. Example could be: percentage of ASHAs passing competency based training for improved counseling and services, TV advertisement tested and adjusted to cultural context, messages given are clear and understood by the target audience, characters present in the entertainment education are perceived from their own community, etc.

Output indicators: Output indicators provide measures the extent the planned activities have been actually implemented. It is must that these monitoring indicators are fixed prior to the implementation. In SBCC, outputs are the direct products of the campaign and measured in terms of campaign activities performed. Examples could be: number of street show organized, number of wall painting done, number of TV spots with messages aired, number of group meetings organized, and number of ASHA trained in counseling skills and provided with counseling aids, etc. It is important to note that outputs do not measure any outcome indicators like behavior change or increase in knowledge of the audience.

Evaluation indicators: There are also two types of evaluation indicator- outcome and impact.

Outcome indicators: Outcome indicators measure the outcomes that the SBCC program hopes to achieve, and identified in the communication objectives. Outcomes indicators are intermediate results of the impact which is the ultimate objective of the program. Examples could be: percentage of contraceptive uses, percentage initiated early breastfeeding, percentage availed postpartum care for newborn and mother, percentage adoption of skin to skin care, percentage delayed first bath of newborn etc.

Impacts indicators: Impacts indicators measure the long-term effects, or end results, of a SBCC program. It takes longer span of time to achieve. This may not necessarily captured in evaluation of a short duration campaign. The example of the impact indicators are; change in birth rate, change in HIV incidence rate, and change in neonatal and infant mortality.

A systematic framework provides link between inputs, process, outputs, outcomes and impact indicators of a project goal. A visual presentation of these indicators in case of family planning program can be seen in figure 1.
Source: adopted from Williams, K. and Ramarao, S. 2009

Appropriate M&E questions on the objectives of SBCC intervention and work plan can be helpful in developing appropriate indicators, as shown in the examples below.

<table>
<thead>
<tr>
<th>Communication objective and work plan activity</th>
<th>M&amp;E Questions</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective:</strong> By end of project, there will be an X percent increase in the number of women who are aware of the benefits of family planning</td>
<td>Monitoring Question</td>
<td>Monitoring (Process/Output) Indicator</td>
</tr>
<tr>
<td>Activity: Air a radio spot in three communities</td>
<td>• Was the radio spot aired?</td>
<td>• Process indicator: Radio spot aired, messages were recalled by the target audiences, messages were clear and understood by the intended audiences</td>
</tr>
<tr>
<td></td>
<td>• Frequency of radio spot aired?</td>
<td>• Output indicator: Number of community members/ target audiences heard the radio spot</td>
</tr>
<tr>
<td></td>
<td>• At what time?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• In how many communities?</td>
<td></td>
</tr>
<tr>
<td><strong>Evaluation Question</strong></td>
<td>• Did women become more aware of the benefits of family planning?</td>
<td>• Increase in the percentage of women aware of benefits of family planning as compared to baseline or the difference in awareness between those who heard and those who did not hear the radio spots.</td>
</tr>
</tbody>
</table>
2.3 CHARACTERISTICS OF GOOD INDICATORS

A good indicator

- should be defined in clear and unambiguous terms
- must be measurable
- should produce the same results when used repeatedly to measure the same condition or event (It is called reliable)
- measures only the event that is intended to measure (It is called validity)
- Collection of data should not be too costly

Indicators should independent measurement. For example, an indicator should measure the number of clients receiving counseling rather than increase or decrease in the number of clients receiving counseling. Similarly, indicator should measure the contraceptive prevalence rate, rather than the increase or decrease in contraceptive prevalence rate. Commonly the evaluation experts recommend indicators that are SMART, indicating the trait of good indicators listed below:

<table>
<thead>
<tr>
<th>A good indicator must follow the SMART criteria:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific: clearly written to avoid differing interpretations</td>
</tr>
<tr>
<td>Measurable: to allow for monitoring and evaluating progress toward achieving the result</td>
</tr>
<tr>
<td>Appropriate: to the scope of your program or work activities, so that you can influence or make changes</td>
</tr>
<tr>
<td>Realistic: achievable within the time allowed</td>
</tr>
<tr>
<td>Time bound: with a specific time period</td>
</tr>
</tbody>
</table>
REFERENCES:


Module 3

MONITORING AND EVALUATION OF SBCC PROGRAM THROUGH LOGICAL FRAMEWORK MATRIX

Learning Objectives

✓ To orient participants on Logical Framework Matrix for monitoring and evaluating SBCC program
✓ To enable participants to develop a Logical Framework Matrix

What is Logical Framework Matrix?
The Logical framework Matrix (logframe) is one of the key steps that represent the hierarchical logic between planned work and intended results. More specifically, logframe give a structured logical approach for setting priorities and determining the intended purpose and results of a project. It allows information to be analyzed and organized in a structured way. The logframe encourages clear and specific thinking about what the project aims to do and how, and highlights aspects upon which success of the program depends.

How does Logical Framework Matrix help?
The logframe helps both program managers and M&E officers by presenting a summary of the project in a standard format:

● To establish and lay down in a logical manner the means by which objectives will be reached
● To identify the potential risks to achieving the objectives, and to sustainable outcomes
● To establish how outputs and outcomes might best be monitored and evaluated
● To monitor and review projects during implementation

Thus, the logframe is a tool that links the planned activities for objectives with the expected results in terms of outputs, outcome and impact and the associated risks. It indicates how they would be monitored and evaluated. The M&E officers should develop the logframe in coordination with IEC division so that the proposed indicators for the communication objectives and activities are synchronized and the means of verification is clear to both. (Meg Gawler, 2005).

The Logical Framework Matrix

The Logframe is represented as a matrix (Table 3.1). It has a vertical logic and a horizontal logic:

The vertical logic is the project intervention logic. This indicates sequential causal relationships of activities to the goal. It has – goals, objectives, and activities .

● Goal is a high level objective which the project is expected to contribute. The goal is a bottom line condition of well-being of individuals, families and communities.
● Objectives answer the question,"how will this goal be achieved". The effects of achieving the
objective will result at achieving the goal.

- Activities are the actions which when implemented within the given time period will result in achieving the objectives. Activities are the main elements of the project implementation. Inputs are preparations made to implement an activity like preparation of posters and films for a communication program. Input also include other investments like human resources, equipments and supplies and financial resources. Inputs are very timebound tasks which are very critical to conduct the activities on time.

The horizontal logic links each of the intervention logic to their measurement indicators. It has four columns - intervention logic, objectively verifiable indicators of achievement, sources and means of verification (source of the data to measure the indicator) and the assumptions (external factors) on which the results are based.

- Objectively verifiable indicators of achievement: They are measurements used to assess the progress of an intervention logic. Indicators set for assessing goal measure, directly or indirectly, the overall impact of the project. Indicators for objectives measure the direct outcome of the project which are often measured at a fixed time during the project period, for example, at the beginning, mid-course, and end of the project or on an annual basis. Measurement of objectives constitute evaluation of the project. Indicators for activities give the outputs of implementation which are measured at regular short intervals like weekly, monthly or quarterly. Indicators for activities are used to monitor the progress and quality of the project.

- Timeline: This column includes the date by when the set activities will be completed and the objectives will be measured.

- Person/s responsible: This column denotes the person who is responsible for doing the given activities. Often, the designation rather than names of the persons is given.

- Sources and means of verification: Sources and means to verify the indicators would be different for goal, objectives and activities. Mentioning sources and means of verification in the logframe along with the indicators help in designing methodology and tools for M&E.

- Assumptions are the external factors beyond the scope of the proposed project that are necessary to effectively implement the activities and achieve the objectives. If assumptions are materialised risks are reduced that increases the chances for project success. Assumptions are likely factors that may or may not happen. If they are definitely going to happen then there is no risk and should not be included in the logframe. On the other hand, if the assumptions are definitely not going happen then the project is not likely to reach its objectives and therefore, would require to redesign the project.
## TABLE 3.1: EXAMPLE OF A LOGFRAME FOR SBCC

<table>
<thead>
<tr>
<th>Intervention logic</th>
<th>Objectively verifiable indicators of achievement</th>
<th>Timeline</th>
<th>Person Responsible</th>
<th>Means of verification</th>
<th>Assumptions/Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal:</strong> Increase contraceptive use in 100 Gram Panchayats (GPs) of one district</td>
<td>Impact: Reduce unmet need, increase CPR</td>
<td>By the end of project</td>
<td></td>
<td>Large scale surveys (DLHS)</td>
<td></td>
</tr>
<tr>
<td><strong>Objective:</strong> Increase access to modern FP methods through a systematic SBCC</td>
<td>Outcome:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• % women reporting discussion with husband/family for FP</td>
<td>Start and end of project</td>
<td></td>
<td>Baseline and end line surveys</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• % women using modern FP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Activities:</strong></td>
<td>Output:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Sensitization of all Government Department on the SBCC strategy</td>
<td>• A training on the SBCC strategy for all concerned Govt. Dept.</td>
<td>July 2014</td>
<td>Designation</td>
<td>Project progress report</td>
<td></td>
</tr>
<tr>
<td>2. SBCC activities:</td>
<td>• 10 film shows organized in each GP per month</td>
<td>from Oct 2014 to Oct 2015</td>
<td>Designation</td>
<td>MIS</td>
<td>Fund release by Government is timely</td>
</tr>
<tr>
<td>2.1 SBCC materials showed/displayed</td>
<td>• 50 posters distributed/ displayed in each GP</td>
<td>Designation</td>
<td>MIS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2: Training of ASHA in FP counselling</td>
<td>• All ASHAs are trained</td>
<td>Designation</td>
<td>MIS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Systematic M&amp;E plan</td>
<td>• M&amp;E framework developed</td>
<td>July 2014</td>
<td>Designation</td>
<td>Project progress report</td>
<td></td>
</tr>
<tr>
<td>3.1 Prepare a M&amp;E framework</td>
<td>• MIS developed and operational</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2 Design MIS and key indicators</td>
<td>• Baseline report presented</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3 Baseline survey</td>
<td>• Endline report presented</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.4 Endline survey</td>
<td><strong>Inputs:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Staff for the project</td>
<td>• Staff for the project are hired/identified</td>
<td>March 2014</td>
<td>Designation</td>
<td>Project progress report</td>
<td>Resources required are budgeted</td>
</tr>
<tr>
<td>2. Development of SBCC Strategy</td>
<td>• SBCC Strategy developed</td>
<td>June 2014</td>
<td>Designation</td>
<td>Project inventory report</td>
<td>Fund release by Government is timely</td>
</tr>
<tr>
<td>3. Films and SBCC materials developed/adopted</td>
<td>• 2 films, 3 types of posters and counselling tool developed/adopted</td>
<td>Sept 2014</td>
<td>Designation</td>
<td>Project progress report</td>
<td></td>
</tr>
<tr>
<td>4. Procurement of Projectors</td>
<td>• 100 copies of films made, 5000 poster printed and 500 counselling tools prepared</td>
<td>Sept 2014</td>
<td>Designation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Strengths and Weaknesses of Logframe:**

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensures that decision-makers ask fundamental questions and analyze assumptions and risks.</td>
<td>If followed rigidly, creativity and innovation would be limited.</td>
</tr>
<tr>
<td>Engages stakeholders in the planning and monitoring process.</td>
<td>If not updated during implementation, it would not reflect changing conditions.</td>
</tr>
<tr>
<td>It is an effective management tool to guide implementation, monitoring and evaluation.</td>
<td>To develop and use the Logframe, often project personnel would need to be trained</td>
</tr>
</tbody>
</table>

**In summary:**

- Logframe is a tool for representing the project activities and expected results in a logical manner.
- Logframe forms the basis for designing methodology and tools for monitoring and evaluation.
- Goal is a high level objective which the project is expected to contribute.
- Objectives are the effects as a result of which the goal is achieved.
- Activities are the actions when implemented within the given time period will reach the objectives.
- Inputs are preparations made to implement an activity.
- Objectively verifiable indicators of achievement are measurements used to assess the progress of an intervention logic.
- Sources and means of verifying the indicators are key elements that will determine how M&E will be done.
- Assumption are the external factors that may or may not happen but are important for success the project.
REFERENCES:


Module 4

MONITORING SBCC PROGRAMS AT DISTRICT AND BLOCK LEVEL

Learning Objectives

- To develop a checklist for monitoring quantity and quality of SBCC activities
- To understand feedback system in SBCC programs

Effective monitoring at the lowest administrative levels helps in enhancing implementation of overall program. Following are the salient points to remember for effectively monitoring at the block and district level:

- Form a monitoring core team including members from IEC team at the state and district levels and review the overall program logframe to provide guidance into expected activities at the lower level e.g., block, PHC and sub-center.
- Review the activity indicators. If felt necessary consider including any additional indicators to be monitored at the district level and lower level.
- Develop appropriate data collection tools and checklists such as mother and child tracking system that will help to measure the key activity indicators. This process should also define the involvement of program stakeholders and beneficiaries.
- Decide on the personnel and frequency of data collection and the levels at which the data will be collated.
- Verify quality of data collected and indicate its analysis, interpretation and program action.
- Develop the feedback mechanism and its process
- Keep track of any change in the implementation plan and revise the logframe with the indicators accordingly.

Monitoring of a SBCC activity

For monitoring of a SBCC activity, collect location and contact details of key personnel related to the SBCC activity. The following form (Table 4.1) may be used to get the required information.
### TABLE 4.1: LOCATION HUNT FORM

<table>
<thead>
<tr>
<th>District</th>
<th>Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village name</td>
<td></td>
</tr>
<tr>
<td>Name of ASHA</td>
<td>Mobile number</td>
</tr>
<tr>
<td>Name of ANM</td>
<td>Mobile number</td>
</tr>
<tr>
<td>Name of Sarpanch</td>
<td>Mobile number</td>
</tr>
<tr>
<td>VHSC Representative</td>
<td>Mobile number</td>
</tr>
<tr>
<td>Approximate Population of Village</td>
<td></td>
</tr>
<tr>
<td>Suitable location for play/screening the film</td>
<td>Time</td>
</tr>
</tbody>
</table>

**Checklist for quality assessment**

Checklists are useful tools to systematically observe and assess the quality of a service provided or a behavior change communication activity performed in the field. A checklist for quality assessment is a list of essential characteristics needed to be adopted in the process of implementing the activities, example Form 2. Thus, the checklists provide a systematic structure to observe, assess and take corrective measures. The key elements of developing and using checklists for communication activities are:

- The checklists should be prepared based on the expected task that the providers have to perform.
- The checklists should be standardized for all who will use them. All the observers (or supervisors) should be oriented and made familiar with the checklists to have a common understanding of the listed observations, their purpose and measurement. It will reduce observational bias/subjectivity in noting and reporting observations. The observation checklists should be short, simple and listed in the same logical order as it is expected to occur. This facilitates use of checklist by the observer/supervisors.
- The recording of response in the checklist should be simple like ‘yes/no’ or ‘never/rarely/sometime/most of the time/all the time’. However, if required space could be provided to record numerical as well as explanatory observations.

An example of checklist to observe a group meeting held by CHWs for family planning is given below (Table 4.2):
### TABLE 4.2: CHECKLIST FOR QUALITY ASSESSMENT OF GROUP MEETING CONDUCTED BY CHW

<table>
<thead>
<tr>
<th>S No</th>
<th>Observations</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CHW reaches the place of group meeting before the schedules time and makes required arrangements (eg. setting up posters, counselling aids)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Greets all participants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Welcomes those who join late</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Makes sure all women are seated in a manner that their visibility to the visuals or demonstrations is not blocked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Showed the given flip chart while communicating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Demonstrated the given family planning models</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>The audio-visual shown could be well heard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Informed about all types of FP methods available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>The information given by CHW was technically correct</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Engages audiences by asking open ended questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Allows and encourages participants to ask questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Clarifies questions raised by audiences in non-judgmental manner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>CHW was honest while clarifying questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>CHW summarized / reinforced key messages before ending the session</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Thanks all participants</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Checklist for exit interview

Regular field visits provide insights into implementation process and challenges faced and people’s perceptions. An exit interview would provide insight into people perception and their actual knowledge gain after SBCC activities such as film show/street plays/group meetings. The following exit interview form (Table 4.3) can be adapted for this purpose.
<table>
<thead>
<tr>
<th>Questions</th>
<th>Answers</th>
</tr>
</thead>
</table>
| 8. Have you ever heard of the theme/s before this show?                  | Yes.................................................................................................1 where:_______________________  
No.................................................................................................2 |
2.                                                                                                                                         
3.                                                                                                                                         
4.                                                                                                                                         
5.                                                                                                                                         |
| 10. Would you like to avail any services shown in the play/film? If yes, what services would you like to avail? | 1. Antenatal care .........................................................................................A  
2. Delivery.................................................................................................B  
3. Postnatal care .........................................................................................C  
4. Neonatal care.........................................................................................D  
5. Family planning.........................................................................................E  
6. Others .....................................................................................................X |
| 11. Would you like to share today’s learning with others (peer group or family)? | 1. Yes.................................................................................................1  
2. No.................................................................................................2 |
| 12. Mention 3 things you liked about the play/film                        | 1.                                                                                                                                         
2.                                                                                                                                         
3.                                                                                                                                         |
| 13. Mention 3 things to improve the play/film                             | 1.                                                                                                                                         
2.                                                                                                                                         
3.                                                                                                                                         |
Feedback system

Feedback is essential to learning, building capacity and improving performance. Constructive feedback is very critical in SBCC programs. Feedback mechanism should be built into the program for effective management. All the supervisors should be informed that lack of feedback mechanism is a missed opportunity for learning. Lack of feedback mechanism implies that performance monitoring is not considered important. M&E and IEC officers, as core team for monitoring, should workout the feedback system.

One of the key roles of program managers is to provide constrictive feedback. The provision of feedback should be taken as an indicator of better monitoring system. The review meetings held within the block is an opportunity to provide feedback and reorientation to address the gaps. The key elements of feedback are:

- It should be based on sound and structured assessment, for example, based on an analysis of data obtained from the checklists.
- It can be verbal or written with key action points.
- It should be given with a positive attitude to motivate and reduce future barriers. Negative attitude can make the worker defensive and damage the working relationship.
- It should include a dialogue starting with the SBCC worker sharing their own strengths, weaknesses and challenges
- It should be a regular and timely to improve performance.

Feedback to the worker responsible for SBCC activity is easier if they maintain a standardized SBCC activity report as given in Table 4.4.
<table>
<thead>
<tr>
<th>Specify SBCC activity</th>
<th>Village</th>
<th>Time</th>
<th>Theme</th>
<th>BCC Activity conducted Yes/No</th>
<th>Reasons for not conducting activity*</th>
<th>No of Adults 19-49</th>
<th>Children &lt;14</th>
<th>Adolescent 14-18</th>
<th>Total No of people present</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Film show</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Street show</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Group meeting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. IEC materials distribution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>NA</td>
</tr>
</tbody>
</table>
A consolidated report of the same could be assessed by the supervisors to provide feedback in monthly review meeting in line with “5Ws and 1H” which denotes where, when, what, who, why and how. For example feedback could be provides on the following issues:

- number of activities achieved against planned; and if not the possible means to achieve
- the intended audience reached or not
- appropriateness of the timing of activities
- possible means to reach the intended audience

Example: Feedback on counselling by CHWs

**Intervention:** As part of the large campaign on promoting family planning, 25 ASHAs of the PHC area were trained on how to counsel women using a flip chart. They were trained on various modern contraceptive methods available and how to use the flip chart while counselling women. ASHAs were asked to make note of all eligible women in the reproductive age group 15-49 years and their contraceptive status. ASHAs were asked to visit women not using any modern contraception once every month and counsel them on contraceptive methods. ASHAs were instructed to visit women using a spacing method once every three months to confirm if they were still using any method or not. ASHAs were expected to counsel women discounting a method with no desire to get pregnant but are not using any method. ASHAs were asked to maintain a register of eligible women, date of home visit made and whether counselling done or not. The monitoring officers during their field visit observe counselling sessions done 10 ASHAs and recorded their observations using a checklist.

**Feedback:** The check list is analysed and key observations noted. A monthly review meeting of all ASHAs was held by the M&E officer along with the IEC officer. 20 ASHAs attended the meeting. Individual registers were checked to assess its completeness and clarifications sought in a positive tone if they were not complete or if women were not being counselled. Individual feedback on how to plan and complete the activity is mentioned. All 20 ASHAs were brought together and based on the analysis of checklist reorientation is given on counselling. For example, it was observed a woman said she wanted to have tubectomy once her child became one year old. The ASHA talked about where to get tubectomy from and the care she should take after the surgery. ASHA did not talk about any other contraceptives. In such case the feedback should be given to find out if the woman knows about other contraceptive methods as well and in case she does not know she should be oriented to all methods even if she finally chooses only tubectomy.

**In summary:**

- Develop checklists for monitoring quantity and quality of SBCC activities
- Orient all supervisors on the checklist
- Provide feedback that is supportive and constructive
- It should be based on sound and structured assessment, for example, based on an analysis of data obtained from the checklists.
- Feedback should be timely, wherever possible it should in given in written with suggested action points
Module 5

RESEARCH DESIGNS FOR EVALUATING SBCC PROGRAM

Learning Objectives

- Why and what to evaluate in SBCC health interventions?
- Research design to evaluate SBCC health interventions
- How to select a research design?

Why evaluate SBCC in health?

- The SBCC programs are implemented to enable individuals, families and communities to learn about new innovations, approaches and behaviors which have direct bearing on family health, help change in their attitude and stimulate them to adopt healthy behavior leading to better quality of life.

- SBCC provides information, gives reasons for adopting any particular behavior and reinforce the messages with other channel such as mass media, IPC and mid-media.

- It is therefore, imperative that SBCC programs are closely monitored and subjected to evaluation which are robust and provide scientific evidence to assess how far SBCC program is achieving its goals and what interim correction is required, if any.

What should be evaluated in SBCC health interventions?

SBCC strategy and its implementation plan should be based on theories of change and findings of the formative study which could provide adequate understanding of the local context, facilitating factors and possible barriers to the desired behavioral change.

A scientific and robust evaluation should also be based on the SBCC strategy, its implementation plan and designed right in the beginning of the SBCC campaign so that necessary data or information required for the evaluation is decided, measured/collected and analyzed. Evaluation may be conducted to:

- determine if project goals, objectives and intended outcomes are met; the processes of implementation and challenges met
- assess the quality of campaign in term of appropriateness of the message given in the local context, scheduling, reach and recall
- identify constraints and areas for improvements and suggest what to do and how to do;
- do cost analysis of the intervention implemented and assess cost of scaling up
- communicate and advocate the learning and results of the program and
- if successful in achieving it goals, explore possibility of scaling up in larger areas and or other areas
• In evaluation, terminologies like outputs, outcomes, and impacts are often used to measure the short-term, intermediate and the long-term results of an intervention.

Outputs

Outputs are the most basic level of information, and they can be easily compared across time and geographical area. They are the direct products of the campaign and measured in terms of campaign activities performed. It is important to note that outputs do not measure any attention, action, or response on the part of the audience. In evaluation these information helps in assessing the extent of implementation of the planned activities. Examples:

- number of spots aired or shown on TV
- number of advertisement made in newspapers or magazines
- number of different events organized (e.g. nuke natal, group meetings etc.)
- number of people who were engaged or reached through IPC

Outcomes

Outcomes are the interim goals of a SBCC campaign. In a SBCC campaign, outcomes would be:

- change in knowledge and attitudes
- intentions to adopt targeted behavior
- adoption of the targeted behavior depending on duration of the campaign

Recall of advertisement and its accuracy are common outcome variable to assess the reach and understanding of the media campaign. Example:

- 35 percent of recently delivered women recall the advertisement for exclusive breastfeeding aired on TV and 10 percent of them were able to accurately recall the delivered messages.
- Forty percent of recently delivered women remember that they were advised about skin to skin care by ASHA during their last trimester of pregnancy and 15 percent could accurately respond how to practice it and only 3 present actually practiced it.

Often actual behavior change may not be achieved with short term campaign alone. The interim outcomes in such cases could be only knowledge of intervention components

- Examples of attitudinal change could be more favorable to use family planning, delaying first child or rejecting gender based violence
- Example of behavior change intention could be an indication that they will like to adopt a contraceptive method after the present delivery or after asking their husbands or the respondents are going to take their children to the nearest facility soon to get immunized.
- Example of behavior change could be increase in family planning use, increase in complete immunization of children, increase in institutional delivers, and increase in early breast feeding

Impact

Impact measures the ultimate achievement of the goal of a program and it takes longer span of time to achieve. This may not necessarily captured in evaluation of a short duration campaign. Examples:

- drop in neonatal death rate
- reduction in unmet need of FP
5.2 METHODS TO EVALUATE SBCC HEALTH INTERVENTION

Evaluating a SBCC health intervention requires time, resources, and methodological rigor both in design and analysis. Both qualitative, quantitative or a combination of the two methods can be used to collect the required data. Quantitative approach is used to measure the quantifiable outcome / impact variables while quantitative approach helps in understanding process of behavior change and answers some of the how and why questions both for the implementation process and behavior change process (refer module 6 for qualitative approaches).

The common research designs which often used in experimenting impact of an SBCC intervention include range from true experimental designs to quasi-experimental design and non-experimental design. Understanding of the designs by the program managers as well as program evaluators will be useful in planning and evaluating a SBCC campaign with scientific rigor.

Typically, an experimental design planned is to protect the findings from various threats to validity. It includes history, selection, maturation, mortality, testing and instrumentation. A brief definition of each of these terms is given below. For more detail please refer to Population Council publication entitled “Handbook for Family Planning Operations Research Design”.

1. **History**: History refers to those unplanned events which occur during the project that could influence the intended outcomes of the project. For example, talk by a highly respected religious leader in favor of family plan. This may motivate some of the couple who were avoiding contraception because of religious reasons.

2. **Selection**: A very common threat to validity occurs whenever the people selected for the control group differ greatly from the people selected for the experimental group. For example, in a two arm study the villages selected in experimental group largely belong to higher caste Hindus while the villages in the other arm are dominated by SC population.

3. **Maturation**: Over time, people change and become mature. The maturation process can produce changes that are independent of the changes the intervention is designed to produce. For example, in a longitudinal study first and second year students were given sex education to encourage them to avoid risky sexual behavior. After two years sex behavior of these students were compared with the students of 3rd and 4th year students who were not part of the experimental group. No difference was observed between the two groups. Pre-post comparison of the experimental group showed increase in sexual activity. Study concluded that sex education increase sexual behavior. It was misleading as increase in sexual activity was more because the students of first and second year matured and become adult leading to increased sexual desire. This is natural. This change was not due to intervention.

4. **Mortality**: In cohort studies (also called panel studies) where the same group of people are followed over time, there is almost always some lose to follow up. Mortality refers to those losses. If the people who are loss to follow up are very different from those who are followed up, then the results
could change. This change is not due to experiment but due to losing some specific group of people e.g. the mobile labor class forms the village or young population who migrate to urban area for higher education or job.

5. **Testing:** If the same questions are administrated to a panel of respondents, it is possible some of the questions they remember particularly those questions which they were not able to answer or answered incorrectly. This could make them interested in knowing the answer of those questions and try to get information from other sources. If the same respondents are interviewed again after some time, they are likely to do somewhat better during the second interview. The difference or better performance in the second interview might have nothing to do with intervention but instead be due to the effect of first interview.

6. **Instrumentation:** Whenever a study instrument (such as a questionnaire) is changed between the pretest and the posttest, this change is likely to result in an effect that is independent of any effect due to experimentation.

No design can protect the study from all threats to validity but some of them could control up to three of the first four threats to validity.

Refer the example of a health intervention which can be evaluated through different research design discussed below.

---

**Example of a health intervention:** A health intervention planned for husbands to provide voice messages approximately 15-20 seconds long on their mobile phone once in a week over 12 months. The health information will end with a message encouraging husbands to discuss with their wives and family members about the information they heard. The following messages will be given to husbands whose wives are in third trimester of pregnancy:

- Three postnatal checkup for mother and newborn within 7 days of delivery
- Early initiation and exclusive breastfeeding
- Proper nutrition after 6 months

Evaluation of this program need to measure knowledge and behavior change indicators related to the intervention such as aware about the importance of receiving three postnatal care (PNC) check-ups for mother and newborn, the importance of early and exclusive breastfeeding messages given on mobile phone triggered discussion in the family initiated by husband, received three PNC check-ups (mother and child) within 7 days of delivery, initiated breastfeeding within an hour of delivery, practiced exclusive breastfeeding and improved nutritional status of children.

---

1. **NON EXPERIMENTAL DESIGN**

There are several non-experimental designs commonly used by researchers. These designs are appropriate for collecting descriptive information or for doing small case studies of a particular situation. They are not recommended for evaluating the effect of a program intervention unless there are major contains in evaluating better design. The three types of non-experimental designs are described below:
a. Post-test only design

In this design, impact of an intervention X is evaluated after it has been implemented for a specified period of time. In this design, neither a baseline is done nor is there a control group. The figure given below typically represents the design.

\[
\text{Time (T)} \quad \text{Experimental Group} \quad X \quad O1
\]

Where
- X is intervention
- \( T \) = Time period since when intervention X is implemented
- O1 is the measure of the impact or outcome after time T

Example: From this design, the reach of phone message can only be measured for the intervention given in example. Other example could be - impact of TV campaign on condom use could be assessed taking condom use as dependent variable and along with other independent variables; a dummy variable (0 or 1) on the exposure of the condom advertisement or number of times the subject was exposed to condom advertisement could be used.

Strength and/or limitation: This is a weak design and does not control the threats to validity due to history, maturation, selection, and mortality. In absence of baseline data and a control group, multivariate analysis could be used for analysis.

b. Pre-test post-test design

This is a commonly used design in measuring impact of SBCC campaign as well as in other SBC intervention programs. In this design pre-intervention measurement of the outcome variable is compared with post intervention measures. In this design also no control group is included. In figure, this design is typically presented as below.

\[
\text{Time (T)} \quad \text{Experimental Group} \quad O1 \quad X \quad O2
\]

Where
- O1 is measure of the outcome before the intervention implemented
- O2 is measure of the outcomes after the intervention completed
- X represent intervention
- \( T \) = Intervention period

Example: From this design, we can measure knowledge and behavior change in maternal and child health of the above intervention, but we will not be sure that the change has happened due to the intervention or any other factors as we don’t have any control group.
Strength and/or limitation: Pretest-posttest design is subject to several threats to validity like history, testing, maturation, and instrumentation.

c. Post experimental and control design

In this case, post experimental measures of the outcome are compared with the measures of the control group. No baseline data is collected from either of the two arms. Here it is assumed that the level of outcomes in both the arms before the intervention is equal. Thus any gain after the implementation of intervention in the experimental arm is contributed towards the intervention. No random allocation is involved in allocating subject in the experimental and control group. The following figure depicts the post experimental–control design.

Example: From this design, we can only compare the knowledge and behavior indicators of the example intervention but we cannot measure the change as there is no baseline data.

This design could be applied well in this intervention - within the same block of a district, X numbers of villages are exposed to community radio or mid media activities while an equal number of villages are not exposed to any such intervention. Care is to be taken that the two groups of the villages are quite apart to avoid contamination. Experimental and control villages could be from two different blocks but within the same districts. The purpose of keeping the same block or the same district is to avoid any big variation in the two groups at the time of the study.

Strength and/or limitation: The primary source of error with this design is the threats to validity due to selection and mortality.

2. EXPERIMENTAL DESIGNS

a. Pre-post experimental control design

This is also called Randomized Control Trial (RCT), a true experimental design. RCT is the gold standard of evaluation and provides the highest quality of evidence of success. In this case the difference of the measures obtained from pre and post intervention data of the experimental group is compared with the corresponding difference of the outcome measures of the control group. The subjects (the sampling unit) are allocated randomly in the experimental and control groups. Before random allocation of the subjects, they are matched and made pairs then from each pair, one is randomly allocated to the control group and another in experimental group. Random assignment helps to assure that the experimental
and control groups are balanced and the difference at the end of the study will be largely due to intervention. RCT thus helps in establishing causal relation between intervention (independent variable) and the outcome measures (the dependents variable) Presentation of a typical RCT in figure is given bellow.

![RCT Diagram](attachment:RCT_Diagram.png)

Where
- R= indicates random allocation of subjects
- O1 and O2 are the pre and post measures of outcomes in the experimental group
- O3 and O4 are the pre and post measures of outcomes in control group
- X represent intervention
- T = Intervention period

**Example:** From this design, we can compare the knowledge and behavior related indicators of the above intervention.

**Strength and/or limitation:** This is one of the strongest designs in terms of controlling threats to validity but random allocation remains a challenge and this is quite costly and time consuming.

**b. Post-test only control group design**

This is also a true experimental design and similar to the one discussed above except there is no baseline (pre-test) measurement of the outcome in both groups.

- The post intervention data is collected from the both groups and compared. As allocations of the subjects in the two arms are done randomly, it is assumed that both the groups are balance in the beginning of the study and the difference which is observed is largely due to intervention.

- The design demonstrates causal relationship between the intervention and outcome measures. However, this design does not allow measure of changes that takes place within the group during the period.
In this design there could be more than one experimental arm testing different SBCC interventions or combination of the interventions as indicated in figure below.

**Example:** From this design, we can compare the knowledge and behavior indicators of the example intervention.

**Strength and/or limitation:** Random allocation will remain a challenge and this is quite costly and time consuming. It is economical as baseline data is not collected yet the causal relation between intervention and outcomes could be demonstrated.
3. QUASI - EXPERIMENTAL DESIGNS

In many field research situations, it is not possible to conduct RCT and it could be very costly and or difficult to meet the random assignment criteria of a true experimental design. At the same time, researchers want to avoid the problems of threats to validity associated with non-experimental designs. A reasonable compromise often can be made by selecting a quasi-experimental design. These designs do not have the restrictions of random assignment and hence do not demonstrate causal relationship between intervention and the outcome measures. However, they may help in measuring impact of the intervention and tend to control many threats to validity.

a. Quasi-experimental control group design

It is quite similar to the RCT design except the random allocation of subjects in experimental and control groups. Such designs are good to evaluate program when a program intervention is introduced into one area (say, one district) and we want to compare the program effects in that district against a similar, but not necessarily equivalent, neighboring district. The figure given below typically represents such design:

```
Time (T)

Experimental Group: O1 X O2
Control Group: O3 O4
```

Where
- O1 and O2 are the pre and post measures of outcomes in the experimental group
- O3 and O4 are the pre and post measures of outcomes in control group
- X represent intervention
- T = Intervention period

Example: From this design, we can compare the knowledge and behavior indicators of the example intervention.

Strength and/or limitation: In such design one need to be careful while analyzing the data and drawing conclusion. A difference of the difference between the two groups \((O2-01)-(04-03)\) will provide the net impact of intervention. Selection procedure and its effect on the validly of the results are serious threat to validity. Hence in this design, care should be taken as much as possible, to match the experimental and control groups. There is no need of random allocation of subjects as that was in the RCT. This is less costly and time consuming than a RCT.

b. Time series design

Time series design measures the outcomes at several points both before intervention and after intervention. Such design does not only measure impact of the intervention immediately after the intervention period but at several points of time after the campaign (intervention) is over. This helps in understanding not only temporarily gain but also the long term impact on the outcome. Such design is
particularly useful when the sampling unit is few and dividing them in experimental and control groups is not practical.

**Example:** From this design, we can compare the knowledge and behavior indicators as well as nutritional status of child of the example intervention at several points of time like every quarter and see the progress. For cost-effectiveness, service statistics maintained by program could be used for measuring the impact of intervention (nutritional status) by analyzing the height and weight in the last four quarters before introducing the intervention and the next four quarters after the intervention. This is not possible in any other design. A comparison of data before and after intervention provides a better and more precise understanding of how the program has contributed change in nutritional status of children. The following figure gives a typical presentation of such design:

![Time series graph](image)

**Experimental Group**  O1  O2  O3  Program (X)  O4  O5  O6

Time series graph could be revealing and give chance to understand the process better way. The figures given below show levels of impact of the different interventions to understand how much difference is the intervention making.

**CASE 1 (Sudden increase):** If there is no difference between O1, O2, and O3, but then a sudden increase occurs between O3 and O4, which is subsequently maintained in O5 and O6. In this case, we can conclude with some degree of confidence that the sudden increase was probably due to the effect of the program (X).

![Figure 5.1: Trend in family planning knowledge before and after an intervention (Sudden increase)](image)

**CASE 2 (Steady increase):** If there is a steady and constant increase over time before the intervention and it continue to grow with the same pace, then the figure will look like the one given Figure 5.2. After the intervention though outcome is increased, trajectory of the line is the same indicating no gain due to intervention.
CASE 3 (Regular increases and decrease): If there are regular and consistent increases and decreases over time, the program intervention did not seem to make a difference in this trend. But, once again, if the evaluator had used a pretest-posttest design and compared only O3 against O4, he or she might mistakenly have concluded that the program has had an impact where in reality the trend shows no difference in the pattern or the impact.

CASE 4 (Temporary impact of a program intervention): If there is increase at one point and then decrease, this show program intervention has not made a difference for longtime. Once again, had the evaluator used a pretest-posttest design and compared only O3 against O4, he or she would mistakenly have concluded that the campaign had an enormous impact. But the evaluator would have missed the important point that the impact was only temporary.

To conclude although the time series design does not include a control group and does not control for history and possibly instrumentation threats to validity, it does allow for a more detailed analysis of data and program impact than the pretest-posttest design. The time series design provides information on trends before and after a program intervention. It is a particularly appropriate design to use when it is possible for a researcher to make multiple measurement observations before and after a program intervention.
3. HOW TO SELECT A STUDY DESIGN

Selecting an appropriate research design depends on the research question, availability of fund, human resources, time constrain and ethical considerations. It is always advised to start with the best and more rigorous design but the local context and the constrains may lead to a less rigor design and force to compromise power and precision of the results. Researcher and his/her team are in best position to choose the design most appropriate in the given context. However to decide a design one could follow the thumb rule suggested by Anderew et al. (1998) is given in the following steps:

a) Whenever possible, create experimental and control groups by assigning cases randomly from study group.

b) When random assignment is not possible, find a comparison group that is as nearly equivalent to the experimental group as possible.

c) When neither a randomly assigned control group nor a similar comparison group is available, use a time series design that can provide information on trends before and after a program intervention.

d) If a time series design cannot be used, as a minimum- before a program starts, obtain baseline (pretest) information that can be compared against post intervention outcomes.

e) If baseline (pretest) information is unavailable, there may be limitations in the possible types of analysis. Multivariate analytic techniques may be considered.

f) The issue of validity must be remembered. Are the measurements true? Do they measure what they are supposed to measure? Are there possible threats to validity (history, selecting, testing, maturation, mortality, or instrumentation) that might explain the results?
REFERENCES


Stephen S Lim, Lalit Dandona, Joseph A Hoisington, Spencer L James, Margaret C Hogan, Emmanuela Gakidou 2010 Use of mass media campaigns to change health behaviour Lancet 2010; 375: 2009–23
Module 6

USE OF QUALITATIVE METHODS IN MONITORING AND EVALUATING SOCIAL AND BEHAVIOR CHANGE COMMUNICATION

Learning Objectives

✓ To understand what is qualitative research and how does it differ from quantitative research

✓ To know the various qualitative data collection methods and its application in monitoring and evaluation of SBCC program

What is Qualitative Research?

Qualitative research is a scientific research method which provides descriptions and explanations of the research question. Qualitative research aims to gather an in-depth understanding of human behavior and the social dynamics which influence and help to behave one way or the other. It helps to understand the ‘how’ and ‘why’ of the human behavior and provides complementary data to the quantitative findings to draw precise conclusions. Qualitative research is also done independently as formative research prior to designing programs or quantitative data collection tools. It can be done simultaneously along with the quantitative data or after analyzing the quantitative data. During monitoring, qualitative methods help to know the perception of audiences and stakeholders about the activities implemented.

Characteristics of qualitative research:

- It explores answers to what, why and how of decisions and actions taken
- It explores and discovers the social phenomena in decision making process to action taken
- Provides insight into the meaning of decisions and actions
- Leaves the respondent to describe their answers
- Is interactive rather than fixed
- Involves respondents as active participants rather than subjects

Difference between Quantitative and Qualitative Research

Quantitative research is measurement of phenomena in terms of quantity or amount. Qualitative research is to understand the process leading to the outcome. It focuses on participants' perceptions and experiences leading to the way they make decisions and act.

Quantitative and qualitative research methods differ primarily in:

- Analytical Objectives
- Question and data format
- Flexibility in study design
### Characteristics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Quantitative</th>
<th>Qualitative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytical Objective</td>
<td>• To quantify variation.</td>
<td>• To describe variation.</td>
</tr>
<tr>
<td></td>
<td>• To describe characteristics of a population.</td>
<td>• To describe individual experiences and group norms.</td>
</tr>
<tr>
<td>Question Format</td>
<td>• Closed ended (Select answers from options given) or semi structured</td>
<td>• Open ended (Answer is descriptive)</td>
</tr>
<tr>
<td>Data Format</td>
<td>• Gives results in numbers</td>
<td>• Gives results in words</td>
</tr>
<tr>
<td>Tool Design</td>
<td>• Design of data collection tool is stable from beginning to end.</td>
<td>• There is flexibility in the way questions are asked.</td>
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<tr>
<td></td>
<td>• Participants’ response do not influence or determine how and which questions researcher ask next. Interviewer has to ask and follow the same order of question as given in the questionnaire.</td>
<td>• Participants’ response affects how and which questions researcher ask next. Order of question is not important.</td>
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</table>

### 6.2 Need for Qualitative Research Methods

- To improve quality of the program: The qualitative monitoring methods collect data on how well things are being implemented. They are necessary for learning, re-planning, and addressing the quality of a program.

- To understand participants’ perspective: The qualitative methods provide insight into why participants do what they do. It provides information about the “human” side of an issue – that is, the often contradictory behaviors, beliefs, opinions, emotions, and relationships of individuals.

- To explain quantitative results: The qualitative methods are more explorative, which complement quantitative methods by exploring the reasons, patterns underlying the responses of quantitative methods of enquiry. When used along with quantitative methods, qualitative methods can help us to interpret and better understand the complex reality of a given situation and the implications of quantitative data.

- To develop options for answers and codes for quantitative study when the researcher is exploring a new area and do not know type of responses one could expect from the respondents. Quick formative study before undertaking large sample survey helps in making the questionnaire better and appropriate with respect to the context and answers that could come from the field.
Example:

It is estimated that institutional delivery in rural areas of Bihar is less than 20 percent and it causes adverse effect on health of the women and infants. The Department of Health and Family Welfare initiated a SBCC program in two villages through mass media campaign and interpersonal communication to improve the rate of institutional delivery. The mass media campaign was through spots in the TV channels during the prime time and interpersonal communication (IPC) was through ASHA among the eligible women and their family members.

While evaluating the program, the quantitative survey showed that the percentage of institutional delivery increased from 18 percent to 40 percent in one village, while the in the second village it improved from 18 percent to 23 percent.

In this situation qualitative research can help to understand why the change was not achieved as expected in the second village. The focus group discussion (FGD) conducted with eligible women in the villages shows that:

There was a community festival in the village during the intervention period and majority of the women were not able to see the spots in TV regularly.

ASHA was mostly interacting only with the pregnant women and not with their mothers-in-law or husbands who were the major decision makers for place of delivery.

The ASHAs was living in the main village and not visiting regularly to the large hamlet which was situated about a kilometer away.

6.3 Overview of Different Qualitative Methods

The most common qualitative methods used are:

- Observation
- In-depth interviews
- Key informant interviews
- Focus group discussions.

Each method is particularly suited for obtaining a specific type of data or opinion about a process.

6.3.1 Observation

It is useful approach for collecting data on naturally occurring behaviors in their usual contexts. Observation can also be used to monitor and assess the quality of an activity implemented. Observation checklists as discussed in module 3 can be used to monitor activities as they are implemented, for example, counseling by ASHAs using flip charts or film shows and discussions with men’s groups. Observation methods provide researchers to check expressions of feelings, find out who interacts with whom and how they communicate with each other, and how much time is spent on various activities. Observation techniques can be used to understand a practice in the community. For example, newborn care practices like cord care, bathing, feeding etc. of births taking place at home.
Strengths and weaknesses

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Allows to understand the contexts, relationships, and behavior</td>
<td>● It is time consuming and costly</td>
</tr>
<tr>
<td>● Can guide quality improvement of program implementation</td>
<td>● Reporting of observations depends on researcher’s attention, memory and personal discipline to note down the observation</td>
</tr>
<tr>
<td>● Can provide new information that is crucial for project design, data collection, and interpretation of other data.</td>
<td>● Dependent on the quality of checklist used for observation</td>
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</table>

Example:
The use of modern spacing family planning method among postpartum women is less than two percent in Uttar Pradesh. It was also estimated that the average birth interval between two births is less than 24 months. To increase awareness about the healthy timing and spacing of pregnancy and to improve the use of modern reversible contraceptive methods, Department of Health and Family Welfare initiated a SBCC program through counseling of young postpartum women attending the immunization sessions.

The department would like to know how effectively the counselor is providing counseling. In order to evaluate the counseling, observation technique can be used. An observation checklist would further facilitate systematic documentation of the observations.

In this observation it was found that:

● Counselor was able to communicate the importance of proper spacing between pregnancies and the health problems of mother and children if pregnancies were not spaced
● Counselor was providing information about all spacing contraceptive methods and its use but not providing information regarding the possible side effects and how to handle them
● Counselor was talking in the language which the women could understand and avoided technical words
● Women were attentive and clarified their concerns regarding the health of their child if they used pills during post-partum period

Based on the observations certain recommendations were given to improve the counseling approach.

6.3.2 In-depth Interviews are best for collecting data on individuals’ personal histories, perspectives, and experiences, particularly when sensitive topics are being explored or when personal opinions are sought about the way activities were implemented. It could also help in monitoring and evaluation of the understanding of the providers, their difficulties in the given context in counseling and covering distance area etc. Similar data could be collected from user’s perspective. In-depth interviews are conducted face-to-face and involves a well-trained interviewer. The researcher’s interviewing techniques are motivated by the desire to learn everything the participant can share about the research topic or his or her life if that is the objective of the in-depth interview. For example in-depth interview
could be done on the reproductive behavior of the women and in the given context how did she manage her reproductive goal, difficulty faced, information seeking behavior about contraception and decision making process in accepting or rejecting a contraceptive method. Researchers pose questions in a neutral manner, listen attentively to participants’ responses, and ask follow-up questions and probe based on those responses. They do not lead participants according to any preconceived notions, nor do they encourage participants to provide particular answers by expressing approval or disapproval of what they say. Depending on subject of inquiry, in-depth interview could take more than one session also.

The key characteristics of in-depth interviews are the following:

- **Open-ended questions/guidelines:** Questions need to be worded such that the informant does not just answer “yes” or “no” but explain their answer. Many open-ended questions begin with “why” or “how” which gives informants freedom to answer the questions using their own words.

- **Semi-structured format:** Although it is important to pre-plan the key questions as guideline for interview, the interviewer should converse with participants by asking questions or ‘prompting’ based on the previous responses when possible.

- **Seek understanding and interpretation:** It is important to carefully listen to what the participant is saying and ask for clarification what is said. The interviewer should understand what is said and should seek clarity and understanding throughout the interview.

- **Recording responses:** The responses are typically audio-recorded with the permission of the informant, and complemented with written notes (i.e., field notes) by the interviewer. Written notes include observations of both verbal and non-verbal behaviors as they occur, and immediate personal reflections about the interview, presence of other person, their relationship with the informant and their interference if any. This process is crucial to judge the authenticity of information provided by the informant.

In sum, in-depth interviews involve not only asking questions, but systematically recording and documenting the responses to probe for deeper meaning and understanding.

**Strengths and Weaknesses**

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provides more detailed information than what is available through quantitative surveys</td>
<td>Interview takes more time, and may require more than one sitting with the informant</td>
</tr>
<tr>
<td>Respondents most likely to feel free to talk when interviewed on one-on-one basis in a relax environment</td>
<td>Specially trained investigators are required</td>
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Example:

It was estimated that the number of female sex workers (FSWs) attending the STI clinic and ICTC in Rajasthan is very low. The state AIDS control society in association with NGOs working with FSWs initiated a SBCC program for improving the STI/HIV screening and promoting safe sex through group discussion with peer educator and showing short documentary films.

To assess the impact of SBCC activities on access to STI/HIV services and safe sex practices by FSWs, in-depth interview with FSWs were conducted. As given in the quotes below, the in-depth interviews revealed that illiteracy, loss of wages and fear were the reasons for not accessing services and more money for the reason for not using condoms.

“I cannot read but I could understand the documentary. It was very useful. Earlier I never went for STI/HIV testing because I thought it will take time and I may lose my income. But now I understand the benefit of getting tested.”

“I was scared about checking for HIV because I thought if I am found to have HIV clients will not come to me, but now I understand how important is to do health checkups.”

“Earlier if the customer offered me more money I used to agree for not using condom, the documentary helped me to understand the risk of getting diseases if I do not regularly use condoms. Now I do not agree if the client is not willing to use condoms.”

6.3.3 **Key Informant Interviews** are freely structured conversations with people who have good knowledge and who can give detailed information about the topic the researcher wish to understand. The Key Informant Interviews provide detailed, qualitative information about impressions, experiences and opinions. This is typically a one-to-one talk between the informant and the researcher. It is mostly used in formative study when the researchers are not well aware about the situation and could be used before planning the BCC interventions and messages. In evaluation this could be used to get explanation of some of the puzzles, which emerge from the quantitative evaluation.

**Strengths and Weaknesses**

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Opportunity to get an insider’s view</td>
<td>• Your relationship with the informant may influence the information you get</td>
</tr>
<tr>
<td>• Can provide in-depth information about the topic in short in-depth interview</td>
<td>• Informants may give their own impressions and biases</td>
</tr>
<tr>
<td>• Quick and cheap method of gathering information</td>
<td>• Takes time to select good informants and build rapport and trust</td>
</tr>
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</table>
Example:
To promote male participation in family planning, the health department puts up large posters and hoardings at strategic locations along the highways and road crossings regarding the condom use. In order to assess the effectiveness of the displayed messages, key informant interviews were conducted with the dhaba owners, betel shop owners and chemists regarding the appropriateness of choice of the location of the posters and hoardings and the messages and pictures used to illustrate and convey the messages.

The key informant interview with dhaba owner and betel shop owner showed:
“This is a halting point for trucks. I have heard many truckers discussing among themselves while eating about the hoarding.”

“People come to buy cigarettes from me. I have seen them looking at the poster put up in my shop as they are smoking. Sometimes they ask if I also sell condoms. Apart from this they do not ask me anything. May be they understand the risk.”

The chemist said:
“I think the truckers read and understand the message written in the hoarding because now-a-days demand for condom has increased.

6.3.4 Focus Group Discussions are effective in eliciting data on the cultural norms of a group and in generating broad overviews and perception of issues of concern to the cultural groups or subgroups represented. They can also be used in monitoring to understand about an activity implemented. Focus group discussion (FGD) is a qualitative data collection method in which two researchers (moderator and note taker) meet a group of participants to discuss a given research topic. These sessions are usually audio-recorded, and sometimes videotaped. One researcher (the moderator) leads the discussion by asking open-ended questions to participants that require an in-depth response rather than just simple answers as “yes” or “no”. A second researcher (the note-taker) writes detailed notes on the discussion and observes and notes their expression to questions. A principal advantage of FGDs is that a large amount of information can be collected over a short period of time. The FGDs are effective in collecting different views on a specific topic from various participants. Unlike in-depth interviews, FGDs are not the best method for acquiring information on personal or socially sensitive topics.

To keep the discussion focused, a guideline is prepared listing the key issues on the topic. The thumb rule is that one should continue to do FGD till the information start getting repeated. However, as resource constrains may not allow to conduct many FGDs, at least two FGDs must be conducted for each type of sub population. For example if reaction of young men and women on an advertisement on sex education or an educational entertainment serial aired on radio, is to be assessed then for at least two FGDs for men and two FGDs for women is to be conducted.

The key characteristics of FGDs are:
- Held with a group of six to ten people
- Participants are homogenous with respect to selected back ground characteristics and in most cases gender, but not well known to each other. Often in villages it becomes difficult as most know each other.
- Usually two researchers lead for each FGD. One FGD takes one and half to two hours.
- Gives qualitative data on the topic. The goal is not to come to a conclusion or solve a problem or make a decision
- Seek to obtain insights into attitudes, perceptions, beliefs and feelings of participants
- Questioning route uses predetermined, sequenced, open-ended questions

**Steps of conducting FGDs**

Before the focus group discussion begins, the facilitator should obtain background information of the participants.

The following steps are carried out:

1. After a brief introduction, the purpose and scope of the discussion are explained.
2. The discussion is structured around the key themes using the probe questions prepared in advance (guideline).
3. During the discussion, all participants are given the opportunity to participate. A successful FGD stimulates good discussion and participation of all participants and dominance of one or two participants is discouraged.
4. Use a variety of moderating tactics to facilitate the group.
5. Stimulate the participants to talk to each other, not necessarily to the moderator.
6. Encourage shy participants to speak.
7. Discourage dominant participants through verbal and nonverbal cues.
8. Pay close attention to what is said in order to encourage that behavior in other participants
9. Use in-depth probing without leading the participant

**Strengths and Weaknesses**

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants can freely give information on the topic that are important to them but that the evaluator may not have anticipated</td>
<td>The small number of respondents and the lack of random selection significantly limits the ability to generalize the findings to a larger population</td>
</tr>
<tr>
<td>Focus group discussions provide in-depth insights into how the participants feel about specific topics or an activity that was implemented. Group dynamics during the FGD reduces inhibition on sharing their feelings and helps to stimulate discussion</td>
<td>The interaction of participants with the researchers and with each other may affect respondents’ willingness to give their different opinions, particularly if the group is not homogeneous with respect to caste, class and age profile</td>
</tr>
<tr>
<td>Focus group discussions take less time and cost compared to interviewing them individually.</td>
<td>Respondents may hesitate to express their concerns in a group setting with peers or colleagues, but be more likely to express themselves in one-on-one interviews</td>
</tr>
<tr>
<td>Findings are presented in narrative form, often with actual participant quotations that can help program leaders grasp participant’s concerns and beliefs.</td>
<td></td>
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</table>
Example:

The use of spacing methods among young women was low in Bihar due to myths and misconception regarding the side effects of IUD. It was also noted that the involvement of women in SHG meetings are high in the state. The Department of Health and Family Welfare in association with various SHGs initiated a SBCC program on awareness about the spacing method. In each SHG meeting half an hour was devoted for discussing the health issues and family planning use and ANM/ASHA provided information about various spacing methods by using video clips and leaflets. They also tried to dispel various myths associated with condom.

The department wanted assess the effectiveness of using SHG forum and the SBCC program, whether the video clipping was appropriate to convey the message and how effective were the sessions conducted by ASHA/ANM. For this Focus Group Discussion with eligible women were conducted and it showed that there was a common belief that the IUDs may go up to the chest and it can harm the women using it, or it can cause cancer but the video clippings and sessions by ASHA/ANM helped to overcome this and many of them had adopted IUD.
Development of Guidelines for in-depth Interview/Focus Group Discussion

While developing an interview guideline ensure that the following steps are followed:

- Questions should be open-ended rather than closed-ended, for example, instead of asking “Do you know about the services provided at the clinic?” ask “Please describe the services provided at the clinic.” List what are the main sources from you seek information about health care?
- Ask general questions first and then more specific questions and also positive questions before negative questions
- Ask factual question before opinion questions. For example, ask, “What activities were conducted?” before asking, “What did you think of the activities?”
- Ask for explanations on the views given by the participants like:
  - Would you please give me an example?
  - Can you please describe that idea?
  - Would you please explain that further?
  - Is there anything more than this?

Steps to develop a Focus Group Discussion Guideline:
1. Specify the objectives and information needs of the discussion to the group.
2. Break down the major topics into discussion points or themes
3. Prepare probe or exploratory questions.

Review the guide and eliminate any irrelevant questions.

Sample Size Determination in Qualitative methods

The study’s research objectives and the characteristics of the study population (such as size and diversity) determine which and how many people to select. An appropriate sample size for a qualitative study is one that adequately answers the research question. The sample size determination of qualitative study depend on various factors, however there are some informal rules used.

In a focused group discussion it is advised to conduct a minimum of two FGDs per segment because if we will select only one group it will be peculiar. Another guideline is to continue doing FGDs or IDIs until we seem to have reached saturation or near saturation point and no longer new information is emerging. However, constrains of resources and time may not permit to do many FGDs and in-depth interviews and hence depending on diversity of the population and topics to be covered and available resources (fund and human resources) researchers could decide how many IDIs/FGDs needs to be done. The following table gives some thumb rules to decide about the number of such qualitative interviews:
The minimum sample size requirement for each qualitative method is:

<table>
<thead>
<tr>
<th>Data Collection Method</th>
<th>Rule of Thumb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observation method</td>
<td>Observe at least two episodes for each category of the research question. For example, counseling of women and men, plan to observe at least four sessions (two for women and two for men).</td>
</tr>
<tr>
<td>Key Informant Interviews</td>
<td>Select the persons highly recommended by the community and who is knowledgeable about the topic under investigation. Depending on the topic and purpose, interview approximately 3-5 persons.</td>
</tr>
<tr>
<td>In-depth interviews</td>
<td>Interview approximately 3-5 persons for each category in the research question. For example, mothers with less than six month and 6-12 month old child, plan to interview five mothers in each group, so total of 10 mothers. To get variation in answers select informants from diverse segments such as age group, cast or income group.</td>
</tr>
<tr>
<td>Focus groups</td>
<td>Interview approximately two groups for each category in the research question. For example, when studying males and females of three different age groups, plan for twelve focus groups discussions.</td>
</tr>
</tbody>
</table>

Source: Adapted from a presentation by Dr. Bonnie Nastasi, https://my.laureate.net/Faculty/docs/.../qualit_res__smpl_size_consid.doc

**In summary, qualitative research:**

- is a scientific research that aims to gather an in-depth understanding of ‘how’ and ‘why’ of human behavior
- complements and explains quantitative findings
- can be done independently as a formative study or for assessing quality of an activity

Implemented
REFERENCES

2. Focus Group Facilitation Guidelines. Adapted from Centre for Higher Education Quality, Quality Advisor at Monash University
4. C-Change Module 5 (Facilitator), USAID
5. www.nucats.northwestern.edu/...research/.../Family_Health_International...
The Terms of Reference (ToR) is a document that describes the purpose and structure of conducting an evaluation by consultants or organizations. Ensuring a meaningful and useful evaluation is very much linked to a well specified ToR. The ToR is the basis of a contractual agreement with the evaluators. The ToR states the objectives, specifies the scope of an evaluation and the questions to be answered, leaving scope for suggestions from the evaluators.

The ToR describes the distribution of tasks and responsibilities among the people participating in the evaluation process. It specifies the qualifications required of the evaluation team as well as the criteria to be used to select an evaluation team. ToR fixes the deliverables, time frame and the budget. It should be brief (typically 5-10 pages), and if necessary supplemented by related annexure.

The purpose of this chapter is to acquaint the program managers who are often involved in deciding and commissioning evaluation to consultancy services or other research institutions. In such cases they must know the key components which must go in the ToR which ensures that the study follows correct procedure and provides desired deliverables.

The following key elements should be included in developing ToR for contracting process:

1. **Background and rationale for the evaluation**
   
   This section should include:
   
   - Program goal and objectives and the context under which this program was initiated
   - Relevant information of the program implementation especially program audience’s geographical area, roles and responsibilities of implementing partners and the program period
   - Any specific area of the program that need attention in evaluation
   - Rationale for evaluation

2. **Objective of the evaluation**

   In this section, the ToR should explain the purpose/objective of the evaluation. This is an important part of the ToR against which the evaluation activities will be planned and conclusion of finding will be consolidated.
3. **Scope of the evaluation**

- Include key evaluation questions that need to be answered with respect to relevance, effectiveness, and efficiency of the program or any of these. Ensure that the key questions and the objectives stated are well linked. The evaluation questions provide guidance to the evaluators. This will limit gathering large quantities of data to generate sophisticated indicators which make little contribution to practice or policy.
- Formulate key questions that the stakeholders will find useful, for which there is a real need for answers. If a question is only of interest in terms of new knowledge, without any immediate input into decision-making in the program or into the public debate, it is more a matter of scientific research and should not be included in an evaluation. Questions should be directly linked to the main objective of the evaluation.

**Check if the formulated questions can actually be answered in the evaluation:**

1. Is the data required to answer the question available?
2. Are there already any results that can be evaluated?
3. Is the question clear? If the question can be interpreted in different ways the program might get a proposal that does not match its expectations.
4. Is it necessary to have an evaluation to answer the question, or could the monitoring system or a discussion be sufficient to answer the question? This check may lead to a decision not to undertake the question in the evaluation, or to revise the question.

4. **Methodology for evaluation**

- The choice of methods to be used is generally made to maintain sufficient flexibility to allow the agency responding to the ToR. It will allow the program manager to differentiate in terms of the relevance and clarity of their proposed methodology (refer module 5 for research design) and sample size (refer appendix 1 for sample size determination).
- This is especially important in the selection phase because assessing the methodological qualities of the proposals is a crucial step in selecting the right evaluator.
- Program manager who will be selecting the evaluation agency will then need to be capable of judging the methodological quality and proposed sample size in the proposals. So including design, he or she should also have a fair idea about sample size for judging the proposal. For sample size determination an consult a sampling expert.

5. **Roles and responsibilities**

For timely and effective evaluation, contribution is often made by various organizations or groups or consultants, for example:

- sharing of detailed program background
- various tools and communication materials used in the program
- list of program communities or locations
- may be baseline data/reports,
- appointments with key personnel for interviews

It is useful to mention in the ToR the people/organization responsible for sharing of such documents and record.
6. **Time schedule & reporting**

In this section, include the expected activity timeline of the evaluation:

- Indicating the period of the evaluation.
- Indicating timeline for key activities proposed for the evaluation along with critical dates and deliverables in the ToR is important.
- If an evaluation is linked to certain events for decision-making, it is a good idea to mention those to ensure that the evaluation will be ready in time. This timeline could be proposed by the evaluator and agreed up on before the task agreement is signed. A suggestive format for activity timeline in months is given below which could be modified with activities and quarterly or yearly timeline as per the requirements:

<table>
<thead>
<tr>
<th>Activity</th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>M4</th>
<th>M5</th>
<th>M6</th>
<th>M7</th>
<th>M8</th>
<th>M9</th>
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<tbody>
<tr>
<td>Communication of TOR to listed agency or advertise</td>
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<td>Deadline for proposals</td>
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<td>Selection of an agency</td>
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<td>Start evaluation with planning meeting</td>
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<td>Data collection and analysis</td>
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<td>Meetings between program and evaluating agency</td>
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<td>Draft report</td>
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<tr>
<td>Feedback &amp; meeting with Evaluation Steering Group</td>
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<td>Final report</td>
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<td>Presentation and discussion of final report</td>
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</table>

7. **It is also important to indicate the expected types of reports in the ToR:**

- Broad framework for the final report: background and objects; sample size and methodology; analysis and findings; and discussion and conclusions. In addition, mention in the ToR, if there are any key elements to be included in the report like secondary data findings, evaluation tools used, and list key personnel or groups met for evaluation.
- Indicate if any interim reports or executive summary is required
- It is also useful to mention the required number of hard copies and soft copies of the various reports.
- Mention is any oral presentation of the findings is required along with the type of audience expected to be present

8. **Budget**

It is good practice to suggest an indicative maximum budget and then leave those competing for an evaluation by open tender to suggest what they would be able to provide for the budget available. This allows value-for-money assessments to be made. It also provides the contractor of the evaluation with greater control over expenditure.
• Ask for a budget to be submitted in detail use your organizational budget template and mention key expected line items.
• Mention if there are any limits to overhead charges and purchasing hardware
• Indicate is any approvals are required in shifting budget line items.
• Description of each budget line item can be asked for in the ToR to further justify the budget. For example, contribution of key personnel listed and details about travel budget.

9. **Required qualifications of the evaluators**

It is a good idea to reflect in advance the expected criteria among the evaluators. Here are some possible experiences lists that the evaluator could be asked to submit:

- Experience with evaluation and with a specific topic
- Academic research or practical solutions
- Experience with certain methods of evaluation
- Specific evaluation of SBCC programs, if any.
- Experience with certain countries/regions
- Knowledge of certain languages
- Experience or qualifications of the individual experts who will be involved in evaluation with specific reference to SBCC

The types of organizations or consultants eligible or not eligible to apply could also be included in the ToR. For example:

- Those with ongoing evaluation of another program implemented by you may not be eligible
- Only organizations that are registered for at least 2 years under the Societies Registration Act are eligible

10. **Proposal submission rules and assessment criteria**

The ToR could specify the deadline and the modes of submission (post, e-mail), the language in which the proposal must be submitted, and how long the offer should remain valid. It should also indicate the criteria according to which the proposals will be judged and selected. The ToR should state, for example, the relative importance in percentage points that will be given to:

- The quality of the methodological approach proposed by the firm;
- The qualifications and previous experience of the consultant/agency
- The capacity to undertake the current evaluation
- The budget

11. **Proposal Outline**

- Cover Page – Project Title; Name, contact details and contact person, date of Submission.
- Executive Summary
- Context/Background (Understanding and need for the RFP)
- Methodology
- HR/Staffing plan
• Budget (Brief budget allocation under line items –
  • personnel
  • travel
  • Direct Costs and Indirect Costs/Overheads.
  • Appendices: CVs/brief-bios of key team members

It is recommended to make a clear list of assessment criteria for the proposals and to include these (in a summarized form) in the ToR. Many proposals use the assessment model shown below.

• The content and budget are assessed separately and are therefore sent in separate envelopes;
• The assessment of the proposal should be done anonymously with the names of the evaluators concealed.

It is recommended to make a clear list of assessment criteria for the proposals and to include these (in a summarized form) in the ToR. Many proposals use the assessment model shown below.

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• The assessment of the proposal should be done anonymously with the names of the evaluators concealed.

### Format for Evaluation Criteria

<table>
<thead>
<tr>
<th>Topic</th>
<th>Maximum points (e.g.)</th>
<th>Initial assessment</th>
<th>Revised assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>I Organization and methodology</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Rationale (understanding of and reflection on the ToR, risks &amp; assumptions)</td>
<td>20</td>
<td>[score]</td>
<td>[score]</td>
</tr>
<tr>
<td>Strategy (approach, activities, timetable, milestones, logical framework)</td>
<td>40</td>
<td>[score]</td>
<td>[score]</td>
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<tr>
<td>II Evaluation team</td>
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<tr>
<td>Experience (description of company / consortium, division of tasks). E.g. (a) experience in evaluations</td>
<td>20</td>
<td>[score]</td>
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<tr>
<td>Experts (CVs, division of tasks)</td>
<td>20</td>
<td>[score]</td>
<td>[score]</td>
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</tbody>
</table>

### Appendix 1: Sample Size Determination

The size of the sample is determined primarily by two things: the availability of resources, which sets the upper limit of the sample size; and the requirements of the proposed plan of analysis, which sets the lower limit. For instance, the availability of trained interviewers to do a survey in specified period of time
may be insufficient to permit more than a certain number of interviews, in which case the sample size cannot exceed this number. On the other hand, the sample size must be large enough:

(1) To allow for reliable analysis of cross-tabulations;
(2) To provide for desired levels of accuracy in estimates of proportions; and
(3) To test for the significance of differences between proportions.

If the resources available for a study are inadequate to obtain a sample of sufficient size, then the researcher must either find additional resources or revise the plans for data analysis. To calculate the minimum sample size required for accuracy in estimating proportions, you need first to answer the following questions:

1. What are reasonable estimates of key proportions to be measured in the study? For example, if you are studying contraceptive prevalence, you should try to guess what prevalence rate you will obtain. If you cannot guess what it will be, the safest procedure is to assume it is 0.50 (50 percent), which maximizes the expected variance and therefore indicates a sample size that is sure to be large enough.

2. What degree of accuracy do you want to have in your study? How far can you allow the sample estimates of key proportions to deviate from the true proportions in the population as a whole? For instance, if you find that the sample estimate of the prevalence rate is .50, do you want to be confident that this finding is accurate within 1 percent or 5 percent (usually referred to as the .01 and .05 level, respectively)? If you seek a high degree of accuracy (such as .01), your sample will need to be much larger than if you seek a relatively low degree of accuracy (such as .05).

3. What confidence level do you want to use? How confident do you want to be that the sample estimate is as accurate as you wish? Customarily, the 95 percent confidence level is specified.

4. What is the size of the population that the sample is supposed to represent? If it is greater than 10,000, the precise magnitude is not likely to be very important. But if it is less than 10,000, the required sample size may be smaller.

5. If you are seeking to measure the difference between the two subgroups with regard to a proportion, what is the minimum difference you expect to find statistically significant? For instance, if you are comparing the contraceptive prevalence of an experimental group and a control group, and you find a difference of only 5 percentage points, do you expect a difference this small to be statistically significant? The smaller the difference you expect to be significant, the larger your subsample sizes will have to be.

On the basis of your answers to these five questions, you can calculate the sample size needed to measure a given proposition with a given degree of accuracy at a given level of statistical significance by using a simple formula, provided that the total population size is greater than 10,000:
\[ n = \frac{z^2 pq}{d^2} \]

**where:**

- \( n \) = the desired sample size (when population is greater than 10,000).
- \( z \) = the standard normal deviate, usually set at 1.96 (or more simply at 2.0), which corresponds to the 95 percent confidence level.
- \( p \) = the proportion in the target population estimated to have a particular characteristic. If there is no reasonable estimate, then use 50 percent (0.50).
- \( q \) = 1.0 - \( p \).
- \( d \) = degree of accuracy desired, usually set at 0.05 or occasionally at 0.02.

For example, if the proportion of a target population with a certain characteristic is 0.50, the \( z \) statistic is 1.96, and we desire accuracy at the 0.05 level, then the sample size is:

\[
\frac{1.96 \times 1.96 \times (0.50)^*(0.50)}{(0.05 \times 0.05)} = 384
\]

If we use the more convenient 2.0 for the \( z \) statistic, then the sample size is \( 400 \).

Note that the numerator in this case is 1.0. This means that when you assume the proportion is 0.05 and set a 95 percent confidence level by using \( z \) equal to 2.0, then formula for sample size is simply:

\[
\frac{1}{d^2}
\]

**In summary these 3 steps are important for sampling:**

1. Decide first whether you want to draw a sample and, if so, whether it should be a probability sample or a non-probability sample. In making this decision, take into account the objectives of the study, the extent to which you want the findings to be representative of a larger population, and such resource factors as cost, time, and personnel.

2. Calculate the size of the sample required for your study. You may use the formulas given above, but you should also seek the assistance of a statistician if possible. The statistician will need to know your estimates of the proportions to be tested, the degree of accuracy you seek or magnitudes of differences you wish to test, the confidence levels you wish to use, and the approximate size of the population from which the sample will be drawn.

3. Bear in mind the following basic principles:
i. A larger sample will yield more accurate results but will be more costly than a smaller sample.

ii. A probability sample will provide quantitative data more representative of a larger population than will a non-probability sample, but a non-probability sample can be designed in such a way as to maximize insightful qualitative data from relatively small samples.

iii. If your proposed analysis calls for studying particular subgroups of your sample, your sample size will need to be expanded accordingly. For example, to study characteristics of a group of acceptors, you may need a sample of only 400 acceptors, but if you want to extent the analysis to the acceptors of particular methods, the subsample sizes will be too small to yield significant findings unless the total sample size is increased. Even if statistical significance is not considered very important, there should be at least 50 cases in the smallest subgroup to be studied if you want to obtain even moderately reliable percentages.
REFERENCES

**Glossary**

**Accredited Social Health Activist (ASHA):** are local women trained to function as community health workers instituted by the Ministry of Health and Family Welfare, Government of India, as part of the National Rural Health Mission.

**Attitude:** is a cross cutting factor. Personal dispositions towards a particular subject or situation; how we generally feel about a situation. This is a concept from the individual level theories in the Graphic: Concepts of Selected SBCC Theories

**Barrier:** is a difficulty or obstacle that can stop people from performing desired behaviors to the identified problem.

**Behavior change communication (BCC):** is a researched based, consultative process of addressing knowledge, attitudes, and practices through identifying, analyzing, and segmenting audiences and participants in programs and by providing them with relevant information and motivation through well-defined strategies, using an appropriate mix of interpersonal, group, and mass media channels including participatory methods.

**Biomedical interventions:** are interventions in which the administration and use medicines are key features.

**Campaign:** is goal oriented recognizable attempt to inform, persuade or motivate change within the intended audiences; linked series of activities using different media with mutually supportive messages.

**Channel:** is the medium used for communication. The three categories of communication channels are interpersonal, mid-media, and mass media. Interpersonal channels include direct communication with an individual or group of individuals. Mid-media channels reach a group of people within a distinct geographic area or reach a group that shares common interests or characteristics. Mass media channels are those which can reach large audiences quickly.

**Cohort:** is a group of people sharing a common characteristic, e.g. females born in 1985, males who have never had sex, etc.

**Control:** Scientists investigate the effect of various factors one at a time in an experiment and keep control for study. Control group do not receive treatment and represents population before treatment or if no treatment. They are kept for comparison purpose.

**Communication objective:** Communication objectives are ways to address barriers to achieve desired change in policies, social norms, or behaviors. They are audience specific and contribute to program objectives.

**Communication strategy:** is a comprehensive document that guides and links decisions on intended audiences, communication objectives, channels and materials based on analysis and integrated by a strategic approach.

**Community:** is a group united around a shared characteristic or concern or a group of people located in the same area.
Conceptual framework: is a diagram of a set of relationships between factors that are believed to impact or lead to a target condition. It is the foundation of project design, management, and monitoring.

Crosscutting factors: These are represented in the triangle of influence in the socio ecological model. These factors are put into four large categories: information, motivation, ability to act, and norms which SBCC interventions may be able to modify to generate change.

Data sources: The resources used to obtain the data needed for M&E activities. These sources may include, among many others, official government documents, clinic administrative records, staff or provider information, client-visit registers, interview data, sentinel-surveillance systems, and satellite imagery.

Dependent Variable: The measure of behavior that is used to assess the effect of the independent variable. In most research, several dependent variables are measured to assess the effects of the independent variable.

Determinant: Are factor that cause changes in behavior such as media exposure, education etc.

Diffusion of innovation: is a process by which an innovation is spread in a given population over time. Under the right conditions, innovations (new services, products, best practices) can be successfully introduced/communicated and adapted at the individual, community, and organizational level.

Ecological: In this context, ecological means the relationships between individuals and their environments.

Environment: is the physical, emotional, or social contexts that shape community and individual attitudes and behaviors.

Epidemic: denotes significantly high incidence of disease occurrence in a population.

Evaluation: is a process that attempts to determine as systematically and objectively as possible the relevance, effectiveness, and impact of activities in light of their objectives.

Experiment: is an empirical method that arbitrates between competing hypotheses. Experimentation is used to test existing theories or new hypotheses in order to support them or disprove them. Any study in which a treatment is introduced is an experiment. It looks for cause and effect relationships.

Experiments vs non-experiments: An experiment is any study in which a treatment is introduced. However, a non-experimental study does not introduce a treatment but is exploratory in nature.

Focus group discussion: is discussion in which a small group of people, usually 8 to 10, talk about a topic of common interest to all the participants. These group discussions take place under the guidance of a facilitator and are used to collect research data or test materials.

Formative research: is the research conducted during the planning process that allows program planners to obtain insight into the knowledge, attitudes, and practices of the situation. This research helps to form, plan and develop communication programs and determine audiences and strategies.

Framework: is an open set of tools for project planning, design, management, and performance assessment. Frameworks help to identify project elements (goals, objectives, outputs, and outcomes), their causal relationships, and the external factors that may influence success or failure of the project.
Goal: is a broad statement of a desired, long-term outcome of a program. Goals express general program intentions and help guide a program’s development. Each goal has a set of related, more specific objectives that, if met, will collectively permit program staff to reach the stated goal.

Incidence: is the number of new cases of infection within a specified period of time.

Independent variable: are factors that researchers control or manipulate in order to determine the effect on behavior.

Indicators: are quantitative or qualitative measures of program performance that are used to demonstrate change and that detail the extent to which program results are being or have been achieved. Indicators can be measured at each level: input, process, output, outcome, and impact.

Information: is a crosscutting factor. People need information that is timely, accessible, and relevant. When looking at information consider the level of knowledge held by that person or group, e.g., about modern contraceptives and their side effects.

Informal communication: is a communication networks that fall outside of established systems for conveying information, e.g. information communicated over drinks at the bar or by the communal pipe stand.

Information Education and Communication (IEC): a process of providing information and education to individuals and communities to promote healthy behaviors that are appropriate to their context.

Impact: is the anticipated end results or long-term effects of a program. For example, changes in health status such as reduced disease incidence or improved nutritional status.

Impact evaluation: is a set of procedures and methodological approaches that show how much of the observed change in intermediate or final outcomes, or “impact,” can be attributed to the program. It requires the application of evaluation designs to estimate the difference in the outcome of interest between having or not having the program.

Input: are the resources going into conducting and carrying out the project or program. These could include staff, finance, materials, and time.

Interpersonal communication: is a face to face exchange of e.g.; information, education, motivation, or counseling.

Intervention: is a set of complementary program activities designed to achieve program goals.

Learning: is a process of mastering or internalizing values, knowledge, skills through socialization, formal instruction, or experience.

Logic model: is a visual representation that charts (or maps) a path for the problem to be addressed, to the inputs (available resources), then outputs (activities and participation) to finally arrive at outcomes (short, medium and long term results), which will ideally lead to impact (long lasting change).

Logical framework: is a dynamic planning and management tool that logically relates the main elements in program and project design and helps ensure that an intervention is likely to achieve measurable results. It helps to identify strategic elements (inputs, outputs, purposes, and goal) of a program, their causal relationships, and the external factors that may influence success or failure.

Message: is a brief, value based statement aimed at an audience that captures a concept. Messages must be personally appealing and discuss only one/two key points. The information in the message
should be new, clear, accurate, and complete, culturally appropriate, and include specific suggestions of what people can do.

**Metric:** is the precise calculation or formula that provides the value of an indicator.

**Model:** it draws upon multiple theories to try to explain a given phenomenon.

**Modeling:** is a process where people learn not only from their own experiences but also by observing others actions and the benefits that they gain through those actions.

**Monitoring:** is the routine process of data collection and measurement of progress toward program objectives. It involves tracking what is being done and routinely looking at the types and levels of resources used; the activities conducted; the products and services generated by these activities, including the quality of services; and the outcomes of these services and products.

**Monitoring and evaluation (M&E) plan:** is a comprehensive planning document for all monitoring and evaluation activities within a program. This plan documents the key M&E questions to be addressed: what indicators will be collected, how, how often, from where, and why; baseline values, targets, and assumptions; how data are going to be analyzed and interpreted; and how/how often reports will be developed and distributed.

**Multivariate analysis (MVA):** refers to any statistical technique used to analyze data that arises from more than one variable. This essentially models reality where each situation, product, or decision involves more than a single variable. In design and analysis, the technique is used to perform trade studies across multiple dimensions while taking into account the effects of all variables on the responses of interest.

**National Institute of Health and Family Welfare:** is an autonomous organization, under the Ministry of Health and Family Welfare, Government of India, acts as an ‘apex technical institute’ as well as a ‘think tank’ for the promotion of health and family welfare programs in the country.

**National Rural Health Mission:** is the Indian health program, run by the Ministry of Health since 2005, for improving health care delivery across rural India.

**Objectives:** are significant development results that contribute to the achievement of goals and provide a general framework for more detailed planning for specific programs. Several objectives can contribute to each goal. Examples: “to reduce the total fertility rate to 4.0 births by Year X” or “to increase contraceptive prevalence over the life of the program.”

**Outcomes:** are the changes measured at the population level in the program’s target population, some or all of which may be the result of a given program or intervention. Outcomes refer to specific knowledge, behaviors, or practices on the part of the intended audience that are clearly related to the program, can reasonably be expected to change over the short-to-intermediate term, and that contribute to a program’s desired long-term goals.

**Output:** are the immediate result obtained by the program through the execution of activities (e.g., number of commodities distributed, number of staff trained, number of people reached, or number of people served). Good process monitoring of outputs from activities (if mutually supportive) can lead to program outcomes and hopefully have impact!

**Population:** is set of all cases of interest. For example: All currently married women aged 15-49 in a district.
**Pretesting:** is a type of formative evaluation that involves systematically gathering intended audience reactions to messages and materials before the messages and materials are produced in final form.

**Prevalence:** is the proportion of persons in a population who have a particular disease or condition.

**Process:** is set of activities in which program resources are used to achieve the results expected from the program (e.g., number of workshops or number of training sessions).

**Process evaluation:** is a type of evaluation that focuses on program implementation. Process evaluations usually focus on a single program and use largely qualitative methods to describe program activities and perceptions, especially during the developmental stages and early implementation of the program.

**Qualitative method:** it helps build an in-depth picture among a relatively small sample of people on a specific issue. Questions are asked in an open-ended way and the findings are usually analyzed as data is collected. Information gathered should not be described in numerical terms, and generalization about the intended audience cannot be made.

**Quantitative method:** are things that are either measured or counted, or questions are asked according to a defined questionnaire so that the answers can be coded and analyzed numerically by asking a large number of people identical (and predominantly close ended) questions.

**Randomization:** is true experiment that involves assignment to treatment groups based on random selection. All participants have equal chance of being chosen for experimental group or control group

**Reliable:** Results those are accurate and consistent through repeated measurement.

**Risk:** is an increased probability of being affected.

**Risk factors:** are conditions associated with increased likelihood of a particular disease or condition, e.g. individual behaviors, lifestyle, environmental exposure or hereditary characteristics.

**Routine data sources:** are resources that provide data collected on a continuous basis, such as information that clinics collect on the patients utilizing their services.

**Sample:** subset of the population used to represent the population.

**Sampling:** refers to the procedures used to obtain a sample.

**Sampling frame:** is the list of members of a population. For example: All currently married women aged 15-49 delivered a baby in last one year in 50 gram panchayat

**Situation analysis:** is a systematic review of social, cultural, political, and behavioral data aimed to identify internal and external determinants of a situation, such as immediate and underlying cause and effects.

**SMART (objectives):** specific, measureable, attainable, realistic, time bound

**Social and behavior change communication (SBCC):** is an evidence-based, consultative process of addressing knowledge, attitudes, and practices through identifying, analyzing, and segmenting audiences and participants in programs and by providing them with relevant information and motivation through well-defined strategies, using an appropriate mix of interpersonal, group and mass media channels, including participatory methods.
**Social change intervention:** are activities directed at changing conditions within the social environment.

**State Institute of Health and Family Welfare:** is a state level institution for improving the total effectiveness of health care delivery system by imparting knowledge and technical skills at different levels within the state.

**State Project Implementation Plans:** are the annual health plans developed by the state that includes strategies to be deployed and budgetary requirements against the expected health outcomes.

**Strategy:** is a coordinated and comprehensive set of activities aimed at achieving an objective.

**Theory:** is a systematic and organized explanation of events or situations. Theories are developed from a set of concepts (or “constructs”) that explain and predict events/situations, and provide explanations about the relationship between different variables.

**Theory of Change (TOC):** is a “concrete statements of plausible, testable pathways of change that can both guide actions and explain their impact”

**Tipping point:** is the dynamics of social change where trends eventually become permanent change. They can be driven by a naturally occurring event or a strong determinant for change, such as political will that can provide the final energy to “tip over” a situation to change – they are events that prompt change.

**Tools:** are instruments (e.g. worksheet, checklist, or graphic) that assist or guide practitioners in the understanding and application of concepts in their programmatic work.

**Trend:** is a pattern in frequencies of disease incidents or prevalence over time, within or across various subgroups.

**Triangulation:** is the use of multiple data sources or methods to validate findings, discover errors or inconsistencies, and reduce bias.

**Valid:** a term used to describe an objective, methodology or instrument that measures what it is supposed to measure.

**Variables:** a trait or characteristic with two or more categories. Categories should be mutually exclusive (Each participant belongs to one and only one category) and exhaustive (Variable has a category for each participant).
The Family Health International (FHI 360)-managed Behavior Change Communication – Improving Healthy Behaviors Program (IHBP) in India project is a United States Agency for International Development (USAID)/India-funded program. IHBP aims to improve adoption of positive healthy behaviors through institutional and human resource capacity building of national and state institutions and through development of strong, evidence-based social and behavior change communication programs for government counterparts.

The Population Council confronts critical health and development issues—from stopping the spread of HIV to improving reproductive health and ensuring that young people lead full and productive lives. Through biomedical, social science, and public health research in 50 countries, we work with our partners to deliver solutions that lead to more effective policies, programs, and technologies that improve lives around the world. Established in 1952 and headquartered in New York, the Council is a nongovernmental, nonprofit organization governed by an international board of trustees.