

2-1-2020

Evidence to inform an integrated social and behavior change strategy in the Sahel

Leanne Dougherty
Population Council

Jessie Pinchoff
Population Council

Follow this and additional works at: https://knowledgecommons.popcouncil.org/focus_sexual-health-repro-choice

Part of the Public Health Education and Promotion Commons

How does access to this work benefit you? Let us know!

Recommended Citation

Dougherty, Leanne and Jessie Pinchoff. 2020. "Evidence to inform an integrated social and behavior change strategy in the Sahel," Breakthrough RESEARCH Literature Review. Washington, DC: Population Council.

This Report is brought to you for free and open access by the Population Council.

LITERATURE REVIEW

Evidence to Inform an Integrated Social and Behavior Change Strategy in the Sahel



FEBRUARY 2020







Acknowledgments

Robert Pursley and Sherry Hutchinson both with the Population Council contributed to the editing and layout of the literature review.



Breakthrough RESEARCH is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of cooperative agreement no. AID-OAA-A-17-00018. The contents of this document are the sole responsibility of the Breakthrough RESEARCH and Population Council and do not necessarily reflect the views of USAID or the United States Government.



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 about 50 countries, the Council works with our partners to deliver solutions that lead to more effective policies, programs, and technologies to improve lives worldwide. Established in 1952 and headquartered in New York, the Council is a nongovernmental, nonprofit organization with an international board of trustees.



Breakthrough RESEARCH catalyzes social and behavior change (SBC) by conducting state-of-the-art research and evaluation and promoting evidence-based solutions to improve health and development programs around the world. Breakthrough RESEARCH is a consortium led by the Population Council in partnership with Avenir Health, ideas42, Institute for Reproductive Health at Georgetown University, Population Reference Bureau, and Tulane University.

©2020 The Population Council. All rights reserved.

Cover photo by ©Marjoleine Moreaux

Suggested Citation

Dougherty, Leanne and Jessie Pinchoff. 2020. "Evidence to Inform an integrated social and behavior change strategy in the Sahel," *Breakthrough RESEARCH Literature Review*. Washington, DC. Population Council.

Contact

4301 Connecticut Avenue NW, Suite 280 | Washington, DC 20008 +1 202 237 9400 | BreakthroughResearch@popcouncil.org breakthroughactionandresearch.org

Evidence to Inform an Integrated Social and Behavior Change Strategy in the Sahel

Leanne Dougherty Jessie Pinchoff

Population Council

List of Acronyms

ANC Antenatal care

BF Burkina Faso

DFAP **Development Food Assistance Programs**

Development Food Security Activities DFSA

DHS Demographic and Health Survey

DMI Development Media International

FP Family planning

HKI Helen Keller International

IPC Interpersonal communication

Infant and young child nutrition **IYCN**

MNCH Maternal, newborn, and child health

Resilience in the Sahel Enhanced RISE

SBC Social and behavior change

TΑ Technical assistance

U.S Agency for International Development **USAID**

Water, sanitation, and hygiene WASH

Table of Contents

Background	1
Objective	1
The Sahel Region	1
Resilience in the Sahel Enhanced (RISE)	1
Determinants of priority behaviors targeted to improve health outcomes in the Sahel	2
Evidence from SBC Programs in the Sahel	5
Interpersonal communication with supporting print materials	5
Mass media approaches	5
Evidence from Integrated SBC Programs	7
Limitations of current evidence on integrated SBC in the Sahel	8
Lessons	10
Knowledge, myths, and misperceptions	10
Evidence from SBC programs in the Sahel	10
Evidence from integrated SBC approaches	10
References	11
Annex	
Background on The RISE Initiative	14
Phase 1 (2012–2017)	14
Phase 2 (2018–2023)	14

Background

Objective

Over the next three years, Breakthrough RESEARCH mixed methods research will assess the successes and challenges of integrated social and behavior change (SBC) programming, including its effectiveness in promoting priority behaviors as well as its cost effectiveness. This review of the literature on SBC programming summarizes the evidence, and lack thereof, in the Sahel, to establish a rationale for the planned Breakthrough RESEARCH RISE II SBC evaluation. An overview of the health and development challenges in the region, along with priority health behaviors and their determinants, is followed by a description of SBC programmatic approaches that have addressed behavioral determinants and health outcomes in the region.

The Sahel Region

The Sahel region, covering the lower Sahara to the north African savannah, experiences persistent poverty, recurrent climate shocks, high population growth, and food insecurity. According to the World Bank, about half of the population lives in poverty, defined as living on less than \$2 per day. Violent extremism is reportedly increasing as resources become more constrained amid weak or corrupt governance.² Chronic poverty results in need for external humanitarian assistance during droughts and an inability to recover after a drought or other type of climate shock.

While the Sahel region contributes little to greenhouse gas emissions, its temperatures are rising 150% faster than the global average.³ Consequences of climate change are extreme temperatures, fluctuating rainfall, and droughts, affecting water supply for the human and animal populations in addition to agriculture, leading to food insecurity.³ These worsening conditions are often associated with humanitarian emergencies including famine, displacement, and conflict.

In the Sahel, 33 million people are classified as food insecure, with 4.9 million displaced in 2018 alone, and 24 million require humanitarian assistance, including 4.7 million children under the age of five who are suffering

from acute malnutrition.³ A high proportion of children are stunted (35% in Burkina Faso, 444% in Niger⁵) and under-five mortality rates are high (76 per 1,000 births in Burkina Faso; 84 per 1,000 in Niger).6 Large numbers of children within families is seen as a risk management strategy in response to the cycle of shocks and stressors households face in such a harsh climate,7 and the total fertility rate in Burkina Faso is 5.2 births per woman,8 and 7.6 in Niger, 5 which is the highest in the world; Niger has the fastest growing population in the world (3.8% each vear).1

Resilience in the Sahel Enhanced (RISE)

USAID's RISE I initiative was developed in 2012 to strategically layer and sequence humanitarian assistance while reducing vulnerability in regions of Burkina Faso and Niger over five years. RISE focused its efforts on strengthening state institutions and local governance; increasing sustainable economic well-being through agriculture and livelihood programs; and improving health and nutrition among the population. RISE II, the successor project to RISE I, targets chronically vulnerable populations through programming to improve priority behaviors and health outcomes in maternal, newborn, and child health (MNCH); family planning (FP); nutrition; and water, sanitation, and hygiene (WASH). The program is implemented at the community and health facility levels through the Development Food Security Assistance (DFSA) partners^a and health service delivery mechanism in select zones in Burkina Faso and Niger (a summary of RISE I and II is provided in Annex 1). Based on lessons from RISE I, RISE II will introduce several adjustments, including emphasis on local ownership and culturally sensitive behavior change programming, targeted areas for joint action across health and development sectors, and the agency of women and youth.9 To support RISE II implementation partners, Breakthrough ACTION will provide capacity strengthening and technical assistance to the partners to strengthen coordination and enhance

^aThe DFSA in Niger include Hamzari (led by Care), Girma (led by Catholic Relief Services), and Wadata (led by Save the Children).

quality and alignment of the SBCb components of the program.

Determinants of priority behaviors targeted to improve health outcomes in the Sahel

Governments and donors in the Sahel recognize the need for strengthening state and local institutions and governance, increasing sustained economic well-being, and improving health and nutrition among their populations. There is increased interest in building upon existing humanitarian and development assistance to cohesively address, within multi-faceted or integrated programs, more than just one health or development issue. Assessments^c of RISE I suggest that closer integration of nutrition SBC activities implemented by DFSA partners with broader health and nutrition behavior change investments is an area of critical need.9

To address this need, the Breakthrough ACTION project recently provided DFSA partners with technical assistance (TA) to integrate SBC strategies within health, nutrition and WASH programs. During the strategy development process, DFSAs identified key audiences, health behaviors including their barriers and facilitating factors, along with communication channels. 10 Behaviors identified include MNCH, nutrition, WASH, and FP. This process identified behavioral indicators and frequencies for Burkina Faso, Niger, and RISE II regional implementation zones in Maradi and Zinder, Niger.

Maternal, newborn, and child health

In both Burkina Faso and Niger, approximately one third of women have attended four or more antenatal visits prior to their last birth, and only 60% of children 12 to 23 months of age receive their third dose of pentavalent vaccine in Niger (Table 1). A qualitative study in Niger

TABLE 1 MATERNAL, NEWBORN, AND CHILD HEALTH **BEHAVIORAL INDICATORS**

BEHAVIORAL INDICATORS	BF %	NIGER %	MARADI %	ZINDER %
Proportion of women age 15–49 who had a live birth in the 5 years preceding the survey who had attended a minimum of 4 ANC visits	33.7	32.8	na	na
Percentage of children 12–23 months who have received all 3 doses of pentavalent vaccine by 12 months	85.0	59.6	na	na
Proportion of women age 15–49 who had a live birth in the 5 years preceding the survey who gave birth in a facility	66.7	29.8	26.7	19.9

Source: Burkina Faso, 2010 DHS; Niger, 2012 DHS

among mothers with children under five identified a number of individual factors that influence demand for child health care, including financial barriers, knowledge and information barriers, distances to health facilities, perceptions of health care quality, and adverse socio-cultural norms and gender dynamics. 11 Distances to health centers are documented as a perceived obstacle for mothers seeking care for themselves and their children.11,12

While mothers evince general awareness of specific health conditions, they sometimes do not understand the relationships between conditions and their causes (e.g., the relationship between diarrhea and poor sanitation). A number of women in the Bedford et al. 2014 study suggested that their knowledge came from Allah, or instinctively as a mother, while others referenced community health volunteers. Social and gender norms also influence care-seeking patterns. In Niger, male household heads usually allow mothers and children to attend health posts, and women's movements are not generally restricted.¹¹ Woman are typically dependent upon men for money to travel to a health care facility, and this can be a barrier. Mothers and health workers also note that fathers take little responsibility for their child's health, as socially and culturally the mother is perceived as the primary caregiver. When husbands advise their wives to attend antenatal care (ANC) or provide them with support for the care of their sick children, women are more likely to seek care for children. 13,14 Higher levels

bSBC is an evidence-based, theory-driven process that uses communication to identify and address such factors, and positively influence individual and collective behaviors to improve health outcomes.

^cUSAID and its implementing partners conducted project evaluations, baseline surveys, a mid-term assessment, sectoral assessments, learning events, and regular monitoring with the participation of the Government of Burkina Faso and the Government of Niger over the course of RISE. Lessons learned are derived from these documents and summarized in the RISE II technical approach document.

of maternal and child mortality manifest among poor women and mothers with less education. 15,16 When a woman has access to her own money (i.e., generated through small business) and is not financially dependent upon her husband, she is more likely to seek care.¹¹

Nutrition and WASH

As documented in the literature, the immediate causes of malnutrition are poor nutrient intake and illness. These factors are related to food insecurity, feeding and caregiving practices, and access to WASH and health services. In both Burkina Faso and Niger, breastfeeding in the first hour after birth is uncommon, and exclusive breastfeeding ends prior to six months for half of all children in Burkina Faso and three quarters in Niger. Access to improved water is better in Burkina Faso than in Niger, but in both areas lack of improved sanitation facilities,

TABLE 2 NUTRITION AND WASH BEHAVIORAL **INDICATORS**

BEHAVIORAL AND HEALTH OUTCOME INDICATORS	BF %	NIGER %	MARADI %	ZINDER %
Percentage of children breast- fed within the first hour after birth	42.1	52.9	40.7	63.4
Proportion of children 0–5 months who were exclusively breastfed in the 24 hours preceding the survey	48.0	23.3	na	na
Proportion of children 6–9 months who received com- plementary feeding in the 24 hours preceding the survey	75.0	62.0	na	na
Percent of households with at least 1 place designated to wash hands by location	75.0	na	na	na
Percentage of households us- ing improved drinking water sources	80.7*	67.0	72.8	67.2
Percentage of households using improved sanitation facilities	23.9*	9.3	8.8	9.4
Percentage of children 0–59 months whose height-for- age z-score is below minus 2 (-2.0) standard deviations (SD) below the mean on the WHO Child Growth Standard	34.6	43.9	53.5	52.0

Source: Burkina Faso, 2010 DHS unless otherwise noted; Niger, 2012 DHS; *2017-2018 Malaria Indicator Survey

but particularly in Niger, are of special concern, where a lack of knowledge about the importance of sanitation and the perceived simplicity of open defecation are barriers to latrine use.17

Access to resources, social and cultural norms, and policy environments also influence nutrition outcomes.¹⁸ A secondary analysis of Demographic and Health Surveys (DHS) data on sub-optimal feeding practices among children ages 6 to 23 months in West Africa found that younger children, in rural areas and from poor households, with mothers of limited access to mass media or health facility contact, were less likely to benefit from optimal feeding practices.¹⁹ Only 12% of women report participation in three decisions of significance: traveling to see family, health care, and major household purchases. While increasing women's control over assets has been shown to improve food security, child nutrition,

> and women's own well-being, women often face more constraints than men in acquiring ownership rights to certain assets due to social and gender norms that dictate property rights according to marriage and traditional inheritance practices.20

Family planning

Several factors directly influence FP in the Sahel. In addition to supply challenges relating to access and availability of contraceptive products,²¹ demand side challenges include relatively low unmet FP need among married women 24.5% in Burkina Faso⁴ and 16% in Niger.⁵ Pro-natalist cultural norms coupled with a lack of decision-making power by women for health and fertility matters further challenge efforts to promote FP in the region.⁷ Beliefs that contraception is not supported by Islam and that contraception causes infertility are also common.²⁹ A recent study from Niger used tools informed from marketing research to identify five sub-groups^d of women with distinct FP needs, attitudes, and patterns of use indicates that demand creation may be more effective in increasing FP demand if interventions address the needs, values, and underlying beliefs of each sub-group.²²

^dThe five groups include 1) women who accept limiting 2) women who trust FP and the health system 3) women with a customary view of reproduction 4) women who fear social condemnation 5) women who think FP is not their concern.

TABLE 3 FAMILYL PLANNING BEHAVIORAL INDICATORS

BEHAVIORAL AND DEMOGRAPHIC INDICATORS	BF %	NIGER %	MARADI %	ZINDER %
Percentage of married wom- en using any modern method of contraception	15.0	12.2	6.9	16.0
Percentage of girls giving birth by age 18	29.2	43.9	na	Na
Total fertility rate	5.2*	7.6	8.4	8.5
Median age at first marriage, women 25–49	17.8	15.7	15.3	15.4

Source: Burkina Faso, 2010 DHS unless otherwise noted; Niger, 2012 DHS; *2017–2018 Malaria Indicator Survey

Rates of child marriage in both countries are persistently high, with more than half of women married by the age of 18 (53% in Burkina Faso,⁴ 77% in Niger⁵). Adolescents in Burkina Faso are less likely to be equipped with adequate sexual and reproductive health knowledge, and sexually active adolescents are less likely to use contraception.^{23,24} Adolescents who report communication with their parents about sexual and reproductive health, however, are more likely to use contraception.²⁵ Married adolescents are less likely to use FP due to social norms that encourage childbearing,^{26,27} and are influenced by an adolescent's husband's education and beliefs that a husband should make FP decisions.²⁸

Cross cutting gender and social norms

Gender and social norms of female agency and resource access are associated with a number of health outcomes that often limit positive health behaviors such as maternal and child health care, decisions for healthy feeding practices, and contraceptive use. The strength of these norms is evinced by the fact that many traditional customary practices such as early child marriage occur despite prohibitive national policies.³⁰ Previous programs in the region have focused on a female empowerment approach for gender equality but have not adequately addressed the need for including men nor addressing social and gender norms, which may differ by ethnic group.³⁰ Understanding the varying levels of autonomy and access among different ethnic groups is necessary for ensuring gender- and social norms-based approaches are developed for the needs of distinct communities.

Evidence from SBC Programs in the Sahel

Because the challenges in the Sahel include a cycle of recurrent drought, food insecurity, chronic poverty, and poor health outcomes, the USAID response has focused on building resilience through multi-sectoral programs to increase economic productivity, strengthen governance, and improve health and well-being. While these programs have incorporated activities to improve knowledge of specific issues for target audiences, they have not developed an SBC strategy to unite development sectors and maximize contact with key audiences to promote a set of behaviors more efficiently. SBC messages should not target primary audiences exclusively, but influential figures as well who can help drive and support behavior change. This literature review assessed peer-reviewed and grev literature to assess the effectiveness of programs with health-focused SBC components in the Sahel to better understand what single sector approaches have been introduced and how they could be leveraged within a multi-sectoral, integrated SBC strategy. Most programs identified rely on either interpersonal communication (IPC) or mass media strategies.

Interpersonal communication with supporting print materials

In 2018, the USAID-funded Fanta project^e published a report describing how Food for Peace DFSAs under the RISE program designed their SBC activities.³¹ The report finds that DFSA programs use a variety of SBC approaches, but most are based upon IPC, such as counseling with printed materials, peer group activities, or community meetings. Community mobilization and media approaches are less frequent, and when used are often coupled with an IPC approach. The agriculture component of DFSA programs enabled some projects to create farmer field schools and cooking demonstrations, which often included health SBC components.

The dominant SBC approach used by DFSAs is the care group model. Traditionally care groups focus on promoting nutrition for pregnant and lactating women, infant young child nutrition (IYCN) practices, and WASH behaviors through information dissemination. Care groups are expanding to cover other influential audiences and are becoming a "hub" for inter-related community activities including male engagement and couples work, savings and loan groups, youth theatre, and grandparent clubs.31 Virtually all partners use the basic structure of care groups, which relies on training cascading from paid promoters to volunteer leaders to neighbor mothers. This model enables broad geographic coverage, but implementation strength deteriorates during the cascade process, with weak IPC skills leading to ineffective participant learning engagement, despite program guidance. DFSAs are also adopting community mobilization for broader social change, but which is still untested.

Mass media approaches

Radio is the primary medium for SBC communications within Food for Peace projects, but effectiveness is unknown, as there have been no evaluations of Food for Peace radio activities addressing resilience programming in the region. Radio broadcasts announce the availability of seed or sack coupons, as well as opportunities to join other program activities. The USAID funded WA-WASH project used radio in Niger and Burkina Faso to promote water and sanitation technology adoption along with water and hygiene-related behaviors. UNICEF also introduced a radio serial drama in Niger that addressed girls' education, nutrition, and delaying first pregnancy. Animas Sutura, a social marketing organization, also uses radio to promote FP products and water purification tablets.32

eThe USAID funded FANTA project works at both the country and global levels, supporting the design and implementation of programs in focus $% \left(1\right) =\left(1\right) \left(1$ countries, and building on field experience to strengthen the evidence base, methods, and global standards for food security and nutrition

fUSAID's Office of Food for Peace funds the DFSAs which implement the RISE program.

Development Media International (DMI) implemented a comprehensive radio campaign in Burkina Faso to address key family behaviors, focused on child mortality (2012–2015). Short programs of one minute were broadcast approximately 10 times per day and two-hour interactive programs were broadcast five days per week. All materials were produced in the predominant local language in each intervention area. Dramas were based on message briefs DMI developed for each targeted behavior. The longer format program was followed by a segment allowing listener comments by telephone. A randomized control trial assessed the effects of the radio campaign. At endline, 82% of women surveyed recognized the campaign's radio programming. Post-neonatal under-five mortality decreased in both the intervention and control groups (no evidence of an intervention effect). Under-five consultations increased significantly, new antenatal care attendance increased, and deliveries in facilities increased in the intervention group.^{33,34} This mass radio campaign was able to change health-seeking behaviors. Radio is a common mechanism for SBC in Burkina Faso, so these findings demonstrate that this type of programming may transmit behavior change messages effectively. A follow up paper modeled the effects of the media campaign on health-seeking behaviors and estimated that it could reduce under-five deaths by an average of 7.1% per year.35

Evidence from Integrated SBC Programs

In recent years, global SBC programming has increasingly embraced integrated approaches for multiple health or development issues or outcomes within the same program.³⁶ An integrated SBC program usually unites related health areas or development sectors in a sensible way for the audience, utilizing a specific event or presenting set of behaviors.³⁷ This programming has the potential to reduce duplication, lower costs, eliminate missed opportunities, provide the right services and information to the right clients at the right time, and achieve greater success.³⁷ A review of integrated SBC programs in the region showed that a combination of SBC approaches is a key design factor for increasing program effectiveness.³⁸ In Ghana, the GoodLife Campaign is an integrated SBC approach that promotes a range of positive health behaviors (such as maternal and child health and malaria prevention and treatment) through multimedia. The campaign reached a broad base and achieved substantial impacts in multiple health areas.³⁹

Due to the complexity and interactions between the underlying determinants and norms of the RISE priority health outcomes (WASH, FP, MNCH, and nutrition), integrated SBC programming can be an effective tool for achieving program goals. Integrated approaches allow individuals to receive health promotion information on many related health issues (from WASH to FP) at the limited health system interactions individuals might have (in the community or at a facility). Integrated approaches are particularly useful in rural, resource-constrained settings with limited health system accessibility and among migratory populations (e.g., pastoralists). Many behaviors have health benefits with multiple health outcomes. Improved hygiene and access to potable water can lead to improved nutritional outcomes and reduce risk of diarrheal diseases; related reductions in malaria incidence can improve nutrition outcomes.⁴⁰ A recent literature review of integrated interventions between global health and other key development sectors found strong evidence of integration among select health areas such as FP and HIV, but limited evidence of integration of other health and development sector approaches such as agriculture and nutrition, or democracy and governance and health.41

Burkina Faso and Niger are implementing cross-sectoral programming for transformational resilience including improved key health outcomes. Integrated SBC programming will strengthen the overall approach. Of six peer reviewed publications (from three cluster randomized control trials, and a case study) in the literature, three are from the same cluster randomized control trial in Burkina Faso. Two evaluations (a pre-post cross-sectional study and a quasi-experimental evaluation) are based on integrated SBC programs in the grey literature.

The rigorously evaluated (cluster-randomized design) Helen Keller International (HKI) project in Burkina Faso's rural Gourma province combined advanced homestead food production with agriculture, nutrition, and health behavior change and communication activities. The intervention included agriculture production activities (distribution of seeds and tools with agricultural training) and a behavior change component (based on the nutrition actions framework^g) taught by either older women leaders or a health committee member in twice monthly home visits. Intervention villages saw improved hemoglobin measures, decreased anemia, and decreased prevalence of diarrhea. 42 An analysis of the HKI project found that it increased household, including mothers', dietary intake of nutrient-rich foods, further empowered women, and decreased underweight among program participants. 43 The program discovered that intervention targeting, timing, as well as its components are critical to success, with most effective interventions delivered early in pregnancy and sustained longer than two years. Messaging from the health committee and older women leaders was equally effective, for improved knowledge, but only messages from the health committee were

gThe essential nutrition actions framework that focuses on seven practices as follows: 1) women's nutrition, 2) anemia prevention and control (e.g., intake of iron-rich foods and use of bed nets to prevent malaria), 3) iodine intake, 4) prevention of vitamin A deficiency, 5) breastfeeding practices, 6) complementary feeding practices, and 7) nutritional care for sick and severely malnourished children.

associated with improved child nutrition. Targeting women with agricultural empowerment improved their access and control over productive assets.⁴² Increased overall availability of nutrient-rich foods could help families be more resilient. Positive impacts on women's nutrition paired with their increased empowerment can lead to longer term benefits for women and their children, but a longer term evaluation should assess the impact of this approach. 43 Further research reveals that women's empowerment was an important factor in the success of the program.44

Evaluation of the CHANGE program (in Senegal, Burkina Faso, and Cote d'Ivoire), which was developed from the HKI program, found that phasing different program components was important due to logistical complexities. The intervention started by distributing supplies for poultry and horticulture, then once food production began, nutrition and WASH SBCC components (including community-led total sanitation) were introduced. Components that required more trust among participants, such as the gender-transformative curriculum, were incorporated later, so those components were implemented over a shorter period of time with limited time for internalization of their messages. A lesson from CHANGE is that those who plan multi-sectoral, integrated programs should plan for a longer implementation and simpler programs. Implementers of multi-sectoral nutrition-sensitive agriculture programs must plan for things to appropriate amounts of time, given the complexities of integration, coordination, establishing trust, along with modifications as lessons are learned during implementation. Another important finding from the study is that integration was most effective when led by community workers—likely a result of their intensive training in the relevant subject areas and follow up training to reinforce their skills.⁴⁵ The results did not differentiate between program components, so it is not possible to isolate the effects of specific SBC messages on specific behaviors.

In Burkina Faso, Sanou et al. (2010) found that using an IPC intervention in a co-occurring model, combining dietary enhancement and adequate sanitation (handwashing promotion and discouraging common plate meals) with de-worming, improved nutritional status and anemia in the short term among pre-school vulnerable children living in foster homes.⁴⁶ The Vegetables Go to School program, a school-based intervention with a school garden (providing seeds, gardening tools and

teacher training) combined with WASH (building latrines, safe water stations and handwashing units, and providing soap-making tools) and nutrition and WASH education in classrooms,⁴⁷ showed little effect. While there were improvements in handwashing (self-reported) and intestinal parasites (anti-parasitic drugs were administered), there were no improvements in water quality and measured thinness, and stunting and anemia actually increased in both the intervention and control sites, which indicates that schools may not be the most effective venue for such interventions. No concurrent efforts were made in the community or in students' homes, and children may well not be empowered to effect changes in their homes.

The SPRING project in Niger and Burkina Faso introduced a community video program to mothers' and fathers' groups in 2015–2016. The program created a platform enabling rural communities to create and share videos promoting wider adoption of high impact maternal, IYCN and hygiene behaviors during monthly group meetings. Results from the baseline, midline, and endline surveys in Niger indicate that use of the video program increased handwashing stations at homes from 14% at baseline, to 48% after the video was shown, and to 59% at endline.⁴⁸ Results for responsive feeding of children ages 6 to 24 months of age, and of feeding from a separate dish, also indicate promising results. After watching the video, the percentage of women who fed their children from a separate plate increased from 69.8% to 96.6% at endline. ⁴⁸ Findings from qualitative interviews in Niger found that using community videos enabled spousal communication about nutrition behaviors and that the visual presentation of messages enhanced information transmission, which then facilitated communication among partners.⁴⁹ Results from the household survey in Burkina Faso found some indications that women were more likely to adopt recommended child feeding practices if they reported speaking with a family member about practices such as exclusive breastfeeding.50

Limitations of current evidence on integrated SBC in the Sahel

Despite the interest in supporting cross-sectoral programs, there is limited evidence of the effects on health statuses of strategies for integrating interventions in low- and middle income countries, and even less in the

Sahel.⁵¹ Some evidence was found in programs that integrate either nutrition and WASH or nutrition and MNCH. The emphasis on nutrition and WASH integrated programming is likely a result of persistent high levels of food insecurity and malnutrition in the region. WASH is an underlying determinant of malnutrition, creating a more natural link for integration than with other health programs.

While there is some evidence that integrated SBC in the Sahel is effective in changing behaviors, there is generally a lack of rigorous evidence, with few randomized evaluations or large surveys. Integrated program evaluations do not always differentiate each program components, making it challenging to understand what influences outcomes. Isolating the effectiveness of specific behavior change messages, or their combinations, is critical for building successful programs. More research is necessary to understand what works, when, and how successful programs can be replicated and scaled. Costs, and cost effectiveness, are also important to quantify.³⁷

Lessons

The literature on existing SBC approaches and integrated SBC programs in the Sahel region provides lessons and future research directions to inform integrated SBC strategy and its evaluation.

Knowledge, myths, and misperceptions

- Persistent knowledge gaps, myths, and misperceptions continue to influence health behaviors in the Sahel. Lack of knowledge about the benefits of exclusive breastfeeding, infant feeding practices, and misconceptions about FP and fertility are critical. Research should focus on understanding levels of knowledge and misperceptions of priority behaviors and how these differ among target populations and key influential figures to better inform which audiences to target.
- For certain behaviors such as open-air defecation, local knowledge, attitudes, and social norms continue to enable behaviors despite increased access to latrines. Similarly, social norms and beliefs about early marriage and the importance of adolescent childbearing immediately after marriage continue despite strong political will for increasing age of marriage from 15 to 18. Research should identify which interventions are most effective in shifting social norms for adoption of priority behaviors.
- Many priority behaviors are practiced by women, but they are influenced by their parents, husbands, friends, and community leaders. Research should seek to determine how information is shared within communities, including which sources of information are most frequently accessed and trusted, and how these figures of influence can be engaged to support adoption of priority behaviors.

Evidence from SBC programs in the Sahel

Previous SBC approaches implemented in the Sahel have focused on community-based approaches, IPC, and messaging through mass media. While

community-based group models have been the dominant approach for health messaging, there is limited evidence or rigorous evaluations of their effectiveness for improving health outcomes. Mixed methods research should further determine the value of group models.

Evidence from integrated SBC approaches

A few important lessons can be learned from the few available studies evaluating integrated SBC programs.

Gender-based strategies

- First, several integrated SBC programs incorporated a gender-based strategy and included female empowerment as an initial factor, which contributed to program effectiveness. The HKI project in Burkina Faso, for example, targeted women with agricultural empowerment activities that helped improve women's access and control over productive assets. Research should consider how increasing women's autonomy can influence health behaviors.
- The SPRING project also noted that promoting spousal communication through community videos helped promote nutrition behaviors. More evidence is needed to understand how gender-based strategies should be designed to support health behaviors in integrated programs.

Introducing innovative technology-based approaches to address multiple behaviors

The SPRING project introduced an innovative community video program in which videos on health topics were developed by and for a community and disseminated via solar-powered handheld projectors that enabled message dissemination and facilitated discussions on a range of subjects in rural areas. Utilizing technology, including video messages on mobile devices, may aid more rapid diffusion of a range of behavioral messages, but more research is needed to understand the long-term sustainability of these approaches.

References

- 1. World Bank. "World Development Indicators" [Internet]. [cited 2019 Nov 29]. Available at: https://databank.worldbank. org/home
- 2. Cooke, J.G. et al. 2016. "Militancy and the arc of instability: violent extremism in the Sahel." Washington, DC: Center for Strategic and International Studies.
- 3. UN News Service. 2018. "Building climate resilience and peace, go hand in hand for Africa's Sahel—UN Forum" [Internet]. Available at: https://news.un.org/en/story/2018/11/1025671
- 4. Institut National de la Statistique et de la Démographie (INSD) et ICF International. 2012. "Enquête démographique et de santé et à indicateurs multiples du Burkina Faso 2010." INSD et ICF International.
- 5. Institut National de la Statistique (INS) et ICF International. 2013. "Enquete demographique de la sante et a indicateurs multiples du Niger 2012." INS et ICF International.
- 6. UN Inter-agency Group for, Child Mortality Estimation. 2019. "Levels & trends in child mortality 2019 report."
- 7. USAID. 2016. "Family planning assessment for the Resilience in the Sahel Enhanced (RISE) initiative." Available at: https:// www.usaid.gov/sites/default/files/documents/1864/RISE FP Assessment Report PUBLIC1.pdf
- 8. Institut National de la Statistique et de la Démographie, ICF International, Programme National de Lutte contre le Paludisme. 2014. "Enquête sur les Indicateurs du Paludisme au Burkina Faso (EIPBF)." Ouagadougou, Burkina Faso.
- 9. USAID. 2018. "Resilience in the Sahel Enhanced (RISE) II Technical Approach Working Paper" [Internet]. USAID. Available from: https://www.usaid.gov/sites/default/files/ documents/1860/RISE_II_Technical_Approach_Working_Paper_May_2018_0.pdf
- 10. Becker-Bention, A. et al. 2019. "Breakthrough ACTION & Breakthrough RESEARCH trip report and Behavioral Pathways Workshop report (Niger and Burkina Faso)." Washington, DC: Breakthrough ACTION & Breakthrough RESEARCH.
- 11. Bedford, K.J.A. and A.B. Sharkey. 2014. "Local barriers and solutions to improve care-seeking for childhood pneumonia, diarrhoea and malaria in Kenya, Nigeria and Niger: a qualitative study," *PLoS ONE*. 9(6): e100038. doi: 10.1371/journal. pone.0100038
- 12. Blanford, J.I., S. Kumar, W. Luo, and A.M. MacEachren. 2012. "It's a long, long walk: accessibility to hospitals, maternity and integrated health centers in Niger," Int J Health Geogr. 11(1): 24. doi: 10.1186/1476-072X-11-24
- 13. Begum, K. et al. 2018. "Prevalence of and factors associated with antenatal care seeking and adherence to recommended iron-folic acid supplementation among pregnant women in Zinder, Niger," Matern Child Nutr. 14: e12466. doi: 10.1111/ mcn.12466

- 14. Yaya, S., G. Bishwajit, F. Okonofua, and O.A. Uthman. 2018. "Under five mortality patterns and associated maternal risk factors in sub-Saharan Africa: A multi-country analysis," PLoS ONE. 13(10): e0205977. doi: 10.1371/journal.pone.0205977
- 15. Kalter, H.D. et al. 2016. "Verbal/social autopsy study helps explain the lack of decrease in neonatal mortality in Niger, 2007-2010," J Glob Health. 6(1): 010604. doi: 10.7189/ jogh.06.010604
- 16. Koffi, A.K. et al. 2016. "Social determinants of child mortality in Niger: Results from the 2012 National Verbal and Social Autopsy Study," J Glob Health. 6(1): 010603. doi: 10.7189/ jogh.06.010603
- 17. UNICEF. "In the Niger, a community-led sanitation programme transforms lives" [Internet]. Available at: https://www.unicef. org/wash/niger 66754.html
- 18. SPRING. 2014. "Drivers of malnutrition in Niger: analysis of secondary data sources" [Internet]. SPRING Project. Available at: https://www.spring-nutrition.org/sites/default/files/pub $lications/briefs/spring_drivers_of_malnutrition_in_niger_0.$
- 19. Issaka, A. et al. 2015. "Determinants of suboptimal complementary feeding practices among children aged 6-23 months in seven francophone West African countries: Complementary feeding in francophone West Africa," Matern Child Nutr. 11 (Suppl 1): 31-52. doi: 10.1111/mcn.12193
- 20. van den Bold, M. 2015. "Can integrated agriculture-nutrition programmes change gender norms on land and asset ownership? Evidence from Burkina Faso," J Dev Stud. 51(9): 1155-74. doi: 10.1080/00220388.2015.1036036
- 21. Ali, M., M. Farron, T. Ramachandran Dilip, and R. Folz. 2018. "Assessment of family planning service availability and readiness in 10 African countries," Glob Health Sci Pract. 6(3): 473-83. doi: 10.9745/GHSP-D-18-00041
- 22. Dalglish, S.L. et al. 2018. "Using marketing science to understand contraceptive demand in high-fertility Niger," Stud Fam Plann. 49(4): 367-83. doi: 10.1111/sifp.12078
- 23. Bankole, A. et al. 2007. "Sexual behavior, knowledge and information sources of very young adolescents in four sub-Saharan African countries," Afr J Reprod Health. 11(3): 28-43.
- 24. Bankole, A. et al. 2007. "Knowledge of correct condom use and consistency of use among adolescents in four countries in sub-Saharan Africa," Afr J Reprod Health. 11(3): 197-220.
- 25. Biddlecom, A., K. Awusabo-Asare, and A. Bankole. 2009. "Role of parents in adolescent sexual activity and contraceptive use in four African countries," IPSRH. 35(02): 072-81. doi: 10.1363/ipsrh.35.072.09
- 26. de Vargas Nunes Coll, C., F. Ewerling, F. Hellwig, and A.J.D. de Barros. 2019. "Contraception in adolescence: the influence of parity and marital status on contraceptive use in 73 lowand middle-income countries," Reprod Health. 16(1): 21. doi: 10.1186/s12978-019-0686-9

- 27. Samandari, G., C. Grant, L. Brent, and S. Gullo. 2019. "It is a thing that depends on God': barriers to delaying first birth and pursuing alternative futures among newly married adolescent girls in Niger," Reprod Health. 16(1): 109. doi: 10.1186/s12978-019-0757-y
- 28. Fleming, P.J. et al. 2019. "Knowledge, attitudes, and practices related to family planning and gender equity among husbands of adolescent girls in Niger," Global Public Health. 1-12 (Online ahead of print). doi: 10.1080/17441692.2019.1692890
- 29. Nouhou, A.M. 2016. "Liberte reproductive et recours a la contraception: les influences religieuse et social au Niger," African Population Studies. 30(2).
- 30. Some, B. 2018. "Resilience in the Sahel Enhanced (RISE) II Gender Analysis." USAID.
- 31. Packard, M. 2018. "Report on a review of social and behavior change methods and approaches within food for peace development food security activities." Food and Nutrition Technical Assistance III Project (FANTA)/FHI 360.
- 32. Waverly, R., P. Koniz Booher, B. Rogers, and M. Moreaux. 2014. "SBCC in the Sahel: a landscape assessment of nutrition and hygiene social and behavior change communication in Niger and Burkina Faso." SPRING Project.
- 33. Murray, J. et al. 2015. "The Saturation+ approach to behavior change: case study of a child survival radio campaign in Burkina Faso," Glob Health Sci Pract. 3(4): 544-56. doi: 10.9745/ GHSP-D-15-00049
- 34. Sarrassat, S. et al. 2015. "Behavior change after 20 months of a radio campaign addressing key lifesaving family behaviors for child survival: midline results from a cluster randomized trial in rural Burkina Faso," Glob Health Sci Pract. 3(4): 557–76. doi: 10.9745/GHSP-D-15-00153
- 35. Murray, J. et al. 2018. "Modelling the effect of a mass radio campaign on child mortality using facility utilisation data and the Lives Saved Tool (LiST): findings from a cluster randomised trial in Burkina Faso," BMJ Glob Health. 3(4): e000808. doi: 10.1136/bmjgh-2018-000808
- 36. USAID. 2017. USAID Mission Brief: Integrated Social and Behavior Change Communication [Internet]. Available at: https://sbccimplementationkits.org/integrated-sbcc-programs/wp-content/uploads/sites/11/2015/12/Integrated-SB-CC-Brief-FINAL-101617.pdf
- 37. Breakthrough RESEARCH. 2019. "Advancing integrated social and behavior change programming," Research and Learning Agenda. Washington, DC: Population Council.
- 38. Skinner, J., S. Velu, C. Whang, and H. Chotvacs. 2016. "Social and behavior change communication in integrated health programs: a scoping and rapid review—Health Communication Capacity Collaborative - Social and Behavior Change Communication [Internet]. Available at: https://healthcommcapacity. org/hc3resources/social-behavior-change-communication-integrated-health-programs-scoping-rapid-review/
- 39. Health Communication Collaborative. 2016. "Case study: using an umbrella approach to link SBCC campaigns in Ghana [Internet]. CCP. Available at: https://sbccimplementationkits. org/integrated-sbcc-programs/wp-content/uploads/ sites/11/2016/01/GL-Ghana-Integrated-SBCC-Prog-Case-Study-ae.pdf

- 40. Oldenburg, C.E. et al. 2018. "Malaria and nutritional status among children with severe acute malnutrition in Niger: a prospective cohort study," Clinical Infectious Diseases 67(7): 1027-34. doi: 10.1093/cid/ciy207
- 41. FHI. 2014. "Integration of global health and other development sectors: A review of the evidence." Durham, NC: FHI 360. Available at: https://www.fhi360.org/sites/default/files/ media/documents/sap-integration-ofglobal-health-full.pdf
- 42. Olney, D.K., A. Pedehombga, M.T. Ruel, and A. Dillon. 2015. "A 2-year integrated agriculture and nutrition and health behavior change communication program targeted to women in Burkina Faso reduces anemia, wasting, and diarrhea in children 3-12.9 months of age at baseline: a cluster-randomized controlled trial," The Journal of Nutrition 145(6): 1317-24. doi: 10.3945/jn.114.203539
- 43. Olney, D.K. et al. 2016. "A 2-year integrated agriculture and nutrition program targeted to mothers of young children in Burkina Faso reduces underweight among mothers and increases their empowerment: a cluster-randomized controlled trial," The Journal of Nutrition 146(5): 1109–17. doi: 10.3945/ jn.115.224261
- 44. Heckert, J., D.K. Olney, and M.T. Ruel. 2019. "Is women's empowerment a pathway to improving child nutrition outcomes in a nutrition-sensitive agriculture program?: Evidence from a randomized controlled trial in Burkina Faso," Social Science & Medicine 233: 93-102. doi: 10.1016/j.socscimed.2019.05.016
- 45. Nordhagen, S. et al. 2019. "Fostering CHANGE: Lessons from implementing a multi-country, multi-sector nutrition-sensitive agriculture project," Evaluation and Program Planning 77: 101695. doi: 10.1016/j.evalprogplan.2019.101695
- 46. Sanou, D., H. Turgeon-O'Brien, and T. Desrosiers. 2010. "Nutrition intervention and adequate hygiene practices to improve iron status of vulnerable preschool Burkinabe children," Nutrition 26(1): 68-74. doi: 10.1016/j.nut.2009.05.017
- 47. Knoblauch, A.M. et al. 2017. "School children's intestinal parasite and nutritional status one year after complementary school garden, nutrition, water, sanitation, and hygiene interventions in Burkina Faso," The American Journal of Tropical Medicine and Hygiene 97(3): 904–13. doi: 10.4269/ ajtmh.16-0964
- 48. Dougherty L, Moreaux M, Dadi C, Minault S. 2016. "Seeing is believing: evidence from a community video approach for nutrition and hygiene behaviors." Arlington, VA: Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project.
- 49. Dougherty, L. et al. 2017. "The father factor: how community video can encourage male involvement for better nutrition and hygiene behaviors in Niger." Arlington, VA: Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project.
- 50. Bougma, M. et al. 2017. The SPRING Community Video Program in East Region, Burkina Faso: Effects on Women and Children's Nutrition and Hygiene Behaviors. Analysis Report. Arlington, VA: John Snow Inc.; p. 42.

- 51. Dudley, L. and P. Garner. 2011. "Strategies for integrating primary health services in low- and middle-income countries at the point of delivery," Cochrane Database of Systematic Reviews 2011(7), CD003318. doi: 10.1002/14651858.CD003318. pub3
- 52. Smith, L., T. Frankenberger, S. Nelson, and C. Presnall. 2018. Resilience in the Sahel-Enhanced (RISE) Program Impact Evaluation Midline Survey Resilience Analysis: Draft, September 2018. TANOG and Save the Children as part of the Resilience Evaluation, Analysis and Learning (REAL) Associate Award.

Annex Background on The RISE Initiative

Phase 1 (2012-2017)

USAID's Resilience in the Sahel Enhanced (RISE) initiative was developed in 2012 to strategically layer and sequence humanitarian assistance while reducing vulnerability in regions of Burkina Faso and Niger over five years.9 The RISE initiative was comprised of five existing Food for Peace activities labeled Development Food Aid Programs (DFAPs) run by Catholic Relief Services (PASAM-TAI), Mercy Corps (Sawki), Save the Children (LAHIA), and ACDI/VOCA (ViM and FASO), as well as two regional programs REGIS-AG, REGIS-ER. The learning partner for RISE was called SAREL and implemented by the Mitchell Group. The overarching goal of the RISE initiative was to increase the resilience of chronically vulnerable populations in the agro-pastoral and marginal agriculture livelihood zones of the Sahel, in specific target communities in Burkina Faso and Niger.⁵² RISE focused its efforts on strengthening State institutions and local governance; increasing sustainable economic well-being; and improving health and nutrition among the population. These activities were integrated into existing humanitarian and development assistance to support the most vulnerable and reduce the need for future humanitarian assistance. RISE did not adequately address family planning due to an initial lack of family planning funds and restrictions on the use of other funds to increase family planning.7

At the conclusion of the first phase of RISE, USAID-funded partners, with participation from the Governments of Burkina Faso and Niger, conducted project evaluations, baseline surveys, a mid-term assessment, learning events, and regular monitoring that resulted in cross-cutting lessons learned. This learning was integrated into the plans for Phase 2 of the RISE initiative. Some critical recommendations and updates based on the findings for the next phase of RISE are:

- 1. Expansion of the family planning investment.
- 2. Address social and gender norms for behavior change.

Emphasize local ownership of development while building capacity and supporting culturally sensitive behavior change.

Phase 2 (2018-2023)

RISE II contributes to underlying resilience using a package of investments that align USG Global Food Security Strategy funding in the agriculture sector with complementary funding in health and governance. RISE II also builds the foundation for agricultural growth by strengthening market systems in targeted value chains, including enhancing access to finance and the policy enabling environment. RISE II was awarded, developed and planned to build off of the gains made under RISE, incorporating best practices and lessons learned to address several key areas as described above. A critical component of this work will be the implementation of an integrated SBC approach by the DFSAs in the community and by the Health Service Delivery program in the health facilities in the RISE zones of influence, with capacity building and an umbrella SBC program designed by Breakthrough Action.

Population Council

Washington, DC 20008 +1 202 237 9400 breakthroughactionandresearch.org