

Practices of Elementary Schools on the Implementation of School-Based Feeding Program from Pre-Pandemic to Post-Pandemic

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Abstract— School-Based Feeding Programs (SBFPs) play a crucial role in addressing food security and promoting child nutrition, particularly in vulnerable communities. However, the COVID-19 pandemic has presented unprecedented challenges to the implementation and sustainability of SBFPs, necessitating careful examination and strategic interventions. This study aimed to assess the current practices, challenges, and priorities within SBFPs post-pandemic, and propose strategies to enhance their effectiveness and sustainability. Through a comprehensive analysis of data gathered from school heads and SBFP coordinators, several key findings emerged. The study revealed critical challenges in transitioning SBFPs from emergency to regular operations post-pandemic, with insufficient funding emerging as a primary obstacle. Addressing this requires advocacy, diversified funding sources, and community involvement. Furthermore, prioritizing training and skills development for personnel was identified as essential for program success, emphasizing the need for ongoing capacity building.

Keywords— funding, pandemic, personnel, process, resources

I. INTRODUCTION

The implementation of School-Based Feeding Programs (SBFP) has been a crucial aspect of education and public health policies in many countries. Before delving into the changes brought about by the COVID-19 pandemic, it is essential to understand the background of SBFP and its significance in promoting child well-being and academic performance.

Numerous studies have highlighted the positive impact of school-based feeding programs on children's nutritional status, cognitive development, and educational outcomes. For instance, a comprehensive review by Bundy et al. (2009) emphasized that well-nourished children are more likely to attend school regularly, participate actively in classroom activities, and perform better academically. The World Food Programme (WFP) has also advocated for school feeding programs, asserting that they contribute not only to children's health but also to achieving broader educational and developmental goals (WFP, 2020).

Before the COVID-19 pandemic, the implementation of SBFP varied across countries and regions, influenced by economic factors, government policies, and local contexts. In some cases, SBFPs were well-established and integrated into the education system, while in others, they faced challenges related to funding, infrastructure, and coordination between relevant stakeholders (Adelman et al., 2008).

The emergence of the COVID-19 pandemic in 2019-2020 significantly disrupted education systems worldwide. School closures, a key measure to curb the spread of the virus, raised concerns about the continuity of SBFPs and their impact on children's nutrition and well-being. Studies such as those by Pérez-Escamilla et al. (2020) highlighted the potential negative consequences of interrupted SBFPs, emphasizing the need for innovative solutions to ensure continued access to nutritious meals for vulnerable children during school closures.

Post-pandemic, the landscape of SBFP implementation may have undergone substantial changes. Governments and educational institutions, having experienced the challenges posed by the pandemic, may have reevaluated and adapted their strategies for delivering school-based feeding programs. Research by Ruel and Alderman (2013) on the resilience of nutrition programs in the face of crises suggests that the post-pandemic era might witness efforts to strengthen and make SBFPs more resilient to unforeseen disruptions.

Finally, the implementation of School-Based Feeding Programs (SBFP) spans the pre-pandemic period, marked by varying degrees of program integration and success, to the pandemic era, which posed unprecedented challenges to the continuity of these programs. As we transition to the post-pandemic phase, there is a need to examine how schools and

policymakers have adapted SBFPs, drawing insights from existing literature on the critical role of nutrition in child development and education.

To justify why Bulan III was involved in the study of the implementation of the School-Based Feeding Program (SBFP) from pre-pandemic to post-pandemic, we need to consider several critical factors that highlight the significance and relevance of this specific location. Bulan III, located in the Sorsogon province of the Philippines, represents a mix of rural and semi-urban settings. This diversity is crucial for understanding the implementation of SBFP in varying contexts. The socio-economic conditions in such areas often present unique challenges and opportunities that can influence the effectiveness and adaptation of feeding programs. By including Bulan III, the study can capture a broader spectrum of data reflective of these mixed environments. Bulan III, like many regions in the Philippines, has faced significant nutritional challenges, with notable rates of malnutrition among school-aged children. Pre-pandemic data likely showed higher instances of undernutrition, which makes it an ideal case to observe the impact of SBFP on improving child health and educational outcomes. Post-pandemic, the area might have experienced changes in these rates, providing a comparative view of the program's effectiveness over time.

The COVID-19 pandemic significantly disrupted educational systems and food security worldwide. In regions like Bulan III, these disruptions could have been more pronounced due to limited access to resources and healthcare. Studying Bulan III offers insights into how the SBFP adapted to these challenges, the innovative strategies employed to continue feeding programs during lockdowns, and the overall resilience of the community in maintaining child nutrition. Bulan III has shown strong community involvement and stakeholder engagement in education and health initiatives. This involvement is crucial for the successful implementation of SBFP. Analyzing how these stakeholders adapted to the shifting demands brought about by the pandemic can provide valuable lessons on the role of community support in program sustainability and effectiveness.

The effectiveness of SBFP can vary significantly based on local policies and implementation strategies. Bulan III's approach to integrating SBFP with local resources, governance structures, and health policies can offer unique insights. Understanding these local adaptations

can help identify best practices and areas for improvement that can be scaled or adapted to similar contexts elsewhere. Bulan III has maintained comprehensive records of SBFP implementation both pre- and post-pandemic. The availability of continuous and reliable data is essential for a thorough analysis of the program's impact over time. This data continuity enables researchers to track progress, identify trends, and assess the long-term outcomes of the SBFP.

Involving Bulan III in the study provides a comprehensive understanding of the SBFP's dynamics in diverse settings, especially in response to significant disruptions like the COVID-19 pandemic. The area's representative nature, nutritional challenges, community engagement, policy context, and robust data availability make it an exemplary case for examining the effectiveness and evolution of school-based feeding programs over time.

The researcher opted to conduct the study because the study on the implementation of SBFPs from pre-pandemic to post-pandemic is justified by its potential to enhance our understanding of the interplay between child nutrition, education, and public health during times of crisis. The findings can inform policies and practices that contribute to the holistic development of children and the resilience of educational and nutritional programs in the face of future challenges. The study can offer insights into the effectiveness of existing policies related to SBFPs and provide recommendations for improving their resilience and adaptability in the face of unforeseen challenges. Policymakers can benefit from evidence-based research to refine and strengthen the implementation of school-based feeding programs in both normal and crisis situations. School-based feeding programs contribute not only to the individual health of students but also have broader implications for public health and social welfare. Researching the changes in SBFP implementation can inform public health policies, helping to design and implement interventions that address the nutritional needs of vulnerable populations and contribute to overall community well-being (Ruel & Alderman, 2013).

The COVID-19 pandemic has caused unprecedented disruptions to education systems globally, including the abrupt interruption of SBFPs due to school closures. Investigating how schools and policymakers responded during this crisis, and the subsequent adaptations made post-pandemic, can provide valuable lessons for future

emergency preparedness and resilience planning in education and nutrition programs. School-based feeding programs play a crucial role in addressing the nutritional needs of children, especially those from socioeconomically disadvantaged backgrounds. A well-nourished child is more likely to exhibit improved cognitive function, better learning outcomes, and overall healthier development (Bundy et al., 2009). Investigating the continuity and adaptations of SBFPs provides insights into how effective these programs are in promoting child well-being.

Generally, this study aimed to determine the practices of elementary schools on the implementation of the School-Based Feeding Program (SBFP) from the pre-pandemic to post-pandemic in Bulan III District Division of Sorsogon Province from School Year 2019-2023. Specifically, it aimed to (1) describe the practices of the elementary schools on the implementation of School-Based Feeding Program (SBFP) during pre-pandemic along process, resources, funding, and personnel; (2) know the practices of the elementary schools on the implementation of School-Based Feeding Program (SBFP) during pandemic along the identified variables; and (3) identify the practices of the elementary schools on the implementation of School-Based Feeding Program (SBFP) during post-pandemic.

II. METHODOLOGY

Research Design

This study aimed to determine the elementary schools' practices on the implementation of School-Based Feeding Program from pre-pandemic to post-pandemic in Bulan III District, Division of Sorsogon, Division Province, S.Y 2019 -2023.

This study utilized the descriptive method of research incorporating quantitative approaches using the survey questionnaire as the instrument for gathering the data needed. The researcher conducted unstructured interview to gather information about the practices and challenges encountered by the school heads and SBFP coordinators.

Moreover, the respondents would be School Heads and SBFP Coordinators of the elementary schools in Bulan III District. It will be both a purposive sampling and a simple random sampling technique of the prospective respondents. The statistical tools to be employed are the frequency, percentage, ranking, and t-test for independent samples.

The Sample

The primary sources of the data were 15 School Heads and 15 SBFP Coordinators of the elementary schools in Bulan III District. It would be both a purposive sampling and a simple random sampling technique of the prospective respondents. The table below contains the distribution of the respondents.

The Instrument

This study employed and used a researcher-made instrument. The researcher utilized the survey questionnaire as the main source of the gathered data. It utilized a questionnaire in the form of checklist. First and foremost, the researcher crafted the instrument with the assistance of the adviser. The questionnaire of this study included how the respondents can rate the attainment of the goals in the implementation of SBFP in terms of process, resources, funding, and personnel from pre-pandemic to post-pandemic implementation of the program. Similarly, the last part included enumerating and identifying the challenges or problems met by the respondents in the implementation of SBFP in their respective schools from pre-pandemic to post-pandemic.

The survey questionnaire subjected to the evaluation of the panel members for comments and suggestions. Then, the instrument revised based on the comments incorporated and the final form would be prepared.

A dry run was conducted last March 25, 2024 in District 1 that consist of 10 school heads and 10 SBFP coordinators. After the conduct of dry run, some of the comments were inserted and the researcher revised the instrument instituted for the head teacher/s and SBFP coordinators.

The final form of the instrument prepared and be presented to the adviser and panel members for approval and administration to the target respondents.

Data Collection Procedures

With the instrument ready for administration, the researcher sought the approval of Schools Division Superintendent by submitting a letter of request which would be personally delivered to the office last January 11, 2024.

Then, the same activity be done with the school heads of the schools in the covered district for the implementation of the said study.

Likewise, the researcher personally hand in the survey questionnaire to the prospective respondents in their schools on April 1, 2024 and be given a week to complete the survey form and retrieved the survey questionnaire last April 11, 2024. Afterward, the accomplished instrument be retrieved by the researcher with the hope of attaining a 100 percent retrieval rate.

Data Analysis Procedures

The collected data from the respondents be subjected to various statistical analyses depending on their nature and level of measurement. In SOP 1, frequency count and rank were utilized to present in a descriptive way.

The study about elementary schools practice on the implementation of the School Based Feeding Program from pre-pandemic to post-pandemic utilized frequency count and rank of the ranks.

Meanwhile, the frequency and ranking may also used to identify the challenges or problems met by the respondents in the implementation of SBFP from pre-pandemic to post-pandemic in their respective schools.

III. RESULTS AND DISCUSSION

1. Practices of the elementary schools on the implementation of School-Based Feeding Program (SBFP) during pre-pandemic along the process, resources, funding, and personnel

This section presents the practices of school heads and SBFP coordinators in district 3 of Bulan. Using rank and frequency count were also presented for the clear understanding of the readers.

Process. The table 2A provides an insightful overview of the practices employed during the implementation of School-Based Feeding Programs (SBFP) before the onset of the pandemic, highlighting the roles of school heads and SBFP coordinators. Among the practices assessed, conducting a comprehensive needs assessment emerged as the top priority, with both school heads and coordinators ranking it highly. This underscores the importance of understanding the specific nutritional requirements and food security status of students within each school community. Such assessments provide crucial insights for tailoring the feeding program to meet the unique needs of the student population, as well as identifying potential areas for intervention to address food insecurity and malnutrition, FAO. (2010).

Table 1A. Practices on the Implementation of School-Based Feeding Program (SBFP) during Pre-pandemic along the Process

Practices	School Heads	Rank	SBFP Coord.	Rank
Needs Assessment. Conducting a comprehensive needs assessment to identify the nutritional requirements and food security status of the students in the school.	15	1	14	2.5
Community Involvement. Involving the local community, parents, and stakeholders in the planning and execution of the feeding program to ensure cultural relevance and community support.	13	3.5	13	4
Food Safety and Hygiene. Implementing strict hygiene and food safety protocols in the preparation, storage, and distribution of meals to ensure the health and well-being of the students.	13	3.5	15	1
Nutrition Education. Incorporating educational components into the program that teach students about nutrition, healthy eating habits and the importance of a balanced diet.	13	3.5	14	2.5
Monitoring and Evaluation. Setting up a robust system for monitoring and evaluating the program's effectiveness, including regular assessments of students' nutritional status and program impact.	13	3.5	12	5
Communication and Reporting. Maintaining open and transparent communication with parents and guardians to keep them informed about the program's goals, menu, and benefits for their children.	10	6	11	6

The responses of school heads were ranked 1 for the "Needs Assessment" practice because they demonstrated a higher level of effectiveness and proficiency in conducting a comprehensive needs assessment compared to the SBFP coordinators. School heads are typically responsible for overseeing the overall functioning of the school and have a direct understanding of the students' needs, resources, and challenges within their educational setting. Therefore, they are well-equipped to conduct thorough needs assessments to identify the nutritional requirements and food security status of the students accurately.

On the other hand, while SBFP coordinators also play a crucial role in program implementation, their primary focus may be more specific to the operational aspects of the feeding program rather than conducting comprehensive needs assessments. While they may contribute valuable insights, their expertise may not be as extensive or directly aligned with the assessment process as that of school heads. Furthermore, the ranking for SBFP coordinators was 2, indicating that they still demonstrated proficiency in conducting needs assessments but were slightly less effective than school heads. This ranking suggests that while SBFP coordinators may be involved in the assessment process, their involvement may not be as extensive or thorough as that of school heads, thus resulting in a slightly lower rank.

Community involvement also emerged as a significant practice, with both school heads and coordinators recognizing the importance of engaging local communities, parents, and stakeholders in the planning and execution of SBFPs. This aligns with research emphasizing the role of community participation in enhancing the sustainability and effectiveness of nutrition interventions, Pelto, Levitt, & Thairu, (2013). By fostering partnerships and leveraging local knowledge and resources, SBFPs can better address cultural preferences, promote community ownership, and garner support for long-term success.

The emphasis on food safety and hygiene underscores the paramount importance of ensuring the health and well-being of students participating in SBFPs. Strict adherence to hygiene and food safety protocols is essential to mitigate the risk of foodborne illnesses and ensure the nutritional quality of meals served. This aligns with global recommendations emphasizing the need for robust food safety measures in school feeding

programs to protect the health of children, WHO. (2021).

Nutrition education emerged as another key practice, highlighting the importance of incorporating educational components into SBFPs to promote healthy eating habits and nutritional literacy among students. By integrating nutrition education into the program, SBFPs can empower students to make informed food choices, thereby promoting long-term health and well-being, Contento, (2011).

Monitoring and evaluation also emerged as critical practices, emphasizing the need for ongoing assessment and feedback to gauge the effectiveness of SBFPs and identify areas for improvement. Regular monitoring of students' nutritional status and program impact is essential for tracking progress towards program goals and ensuring accountability, Bundy, Burbano, & Grosh, (2009).

Lastly, communication and reporting were identified as important practices, emphasizing the need for transparent communication with parents and guardians to keep them informed about the program's goals, menu, and benefits for their children. Open communication can help build trust and support among parents, fostering greater engagement and participation in SBFPs, Ruel, Alderman, & Maternal and Child Nutrition Study Group. (2013).

Overall, the findings underscore the multifaceted nature of SBFP implementation, highlighting the importance of a holistic approach that addresses nutritional needs, engages communities, ensures food safety, promotes nutrition education, and emphasizes monitoring and communication. By integrating these practices, SBFPs can effectively contribute to improving the nutritional status and overall well-being of students.

The practitioners responsible for implementing SBFPs can draw several practical implications from the study findings. Firstly, practitioners should prioritize implementing strict food safety and hygiene protocols to safeguard the health and well-being of participating students. This may involve training staff on proper food handling procedures, conducting regular inspections of kitchen facilities, and ensuring compliance with hygiene standards. Secondly, practitioners should integrate nutrition education components into SBFP activities to promote healthy eating habits and empower students to

make informed food choices. This could involve incorporating nutrition lessons into the curriculum, organizing cooking demonstrations, or engaging students in garden-based learning activities. Lastly, practitioners should establish robust monitoring and evaluation systems to assess the effectiveness of SBFPs and identify areas for improvement. This may involve collecting data on student nutritional status, monitoring program attendance and participation rates, and soliciting feedback from stakeholders.

Resources. Table 2B presents the practices related to resource management in the implementation of School-

Based Feeding Programs (SBFPs) before the pandemic, with rankings provided by school heads and SBFP coordinators. The practices assessed cover various aspects of resource planning, budgeting, equipment management, human resource utilization, transparency, and optimization. Resource planning emerged as a crucial practice, with both school heads and coordinators recognizing the importance of developing comprehensive plans outlining the specific resources required for SBFPs. Effective resource planning ensures that adequate provisions are made to support the smooth functioning of the feeding program and mitigate potential resource constraints.

Table 2B. Practices on the Implementation of School-Based Feeding Program (SBFP) during Pre-pandemic along the Resources

Practices	School Heads	Rank	SBFP Coor.	Rank
Resource Planning. Develop a comprehensive resource plan that outlines the specific resources required for the program, such as funding, food supplies, equipment and human resources.	14	2	13	3
Budgeting and Financial Management. Adequate allocation of financial resources by the school or relevant authorities to support the procurement of food, kitchen equipment, and other necessary resources for the program.	15	1	15	1
Equipment and Supply Management. Assessing and ensuring that schools have appropriate kitchen facilities, storage space, and dining areas to accommodate the preparation and distribution of meals.	13	3	14	2
Volunteer and Human Resource Management. Encouraging and leveraging community contributions, such as volunteer time, donations, or in-kind support, to supplement the resources allocated by the school or government.	12	4	12	4
Transparency and Accountability. Conducting regular audits and reviews of the School-Based Feeding Program to assess resource utilization effectiveness, identify areas for improvement, and ensure accountability in the use of allocated funds.	11	5	11	5
Resource Optimization. Collaborating with non-governmental organizations (NGOs), local businesses, or corporate sponsors to secure additional resources, including food supplies, financial support, or expertise.	9	6	10	6

The responses of school heads were ranked 2 for "Resource Planning" because they demonstrated a higher level of proficiency in developing a comprehensive resource plan compared to SBFP coordinators. School heads are typically responsible for overseeing the overall management and administration of the school, including resource planning and allocation. They have a broader perspective on the school's needs and priorities, allowing them to develop detailed resource plans that consider various factors such as funding, food supplies, equipment, and human resources. On the other hand, while SBFP coordinators

also play a crucial role in program implementation, their primary focus may be more specific to the operational aspects of the feeding program rather than comprehensive resource planning. While they may contribute valuable insights and assistance in resource planning, their expertise may not be as extensive or directly aligned with developing detailed resource plans as that of school heads. These narratives were testified by the school heads.

Furthermore, the ranking for SBFP coordinators was 3, indicating that they still demonstrated proficiency in

resource planning but were slightly less effective than school heads. This ranking suggests that while SBFP coordinators may be involved in resource planning activities, their involvement may not be as extensive or comprehensive as that of school heads, thus resulting in a slightly lower rank. Overall, the ranking reflects the varying levels of responsibility and expertise between school heads and SBFP coordinators in resource planning for the feeding program.

Budgeting and financial management were identified as top priorities, highlighting the need for adequate allocation of financial resources to procure food, kitchen equipment, and other necessary supplies for SBFPs. This aligns with research emphasizing the critical role of financial resources in sustaining school feeding programs and ensuring their long-term viability, Gelli, Meir, & Espejo(2017). Adequate budget allocation enables schools to meet the nutritional needs of students effectively and maintain program quality.

Equipment and supply management also emerged as significant practices, emphasizing the importance of assessing and ensuring that schools have appropriate facilities and resources to support meal preparation and distribution. Schools must have adequate kitchen facilities, storage space, and dining areas to accommodate the feeding program efficiently, Evidence from schools in sub-Saharan Africa. Food and Nutrition Bulletin. Effective management of equipment and supplies is essential for optimizing resource utilization and ensuring the program's smooth operation.

Volunteer and human resource management were recognized as important practices, highlighting the potential benefits of leveraging community contributions to supplement resources allocated by schools or governments. Engaging volunteers, soliciting donations, or securing in-kind support from the community can help stretch limited resources further and enhance program reach and impact, USDA Food and Nutrition Service (2009).

Transparency and accountability were also emphasized, emphasizing the need for regular audits and reviews to assess resource utilization effectiveness, identify areas for improvement, and ensure accountability in fund utilization. Transparent management practices foster trust among stakeholders and demonstrate responsible stewardship of allocated resources, Transparency International (2017).

Resource optimization emerged as a practice involving collaboration with non-governmental organizations (NGOs), local businesses, or corporate sponsors to secure additional resources, including food supplies, financial support, or expertise. Such partnerships can help schools access additional resources and expertise to enhance program effectiveness and sustainability, Loevinsohn, Meij, & Ceesay, (2011).

It implies that policymakers can draw from the study to inform policy decisions aimed at supporting SBFPs. Recognizing the importance of comprehensive resource planning and budgeting, policymakers should prioritize providing sufficient financial resources to schools and relevant authorities to ensure the effective implementation of feeding programs. This may involve allocating dedicated funding streams for SBFPs and establishing guidelines for transparent financial management and accountability. Additionally, policymakers should explore strategies to facilitate community engagement and resource mobilization, such as incentivizing volunteerism and fostering partnerships with NGOs and local businesses to supplement government resources. Practitioners responsible for implementing SBFPs can leverage the study findings to enhance program design and management. Practices such as equipment and supply management underscore the importance of assessing and ensuring that schools have the necessary infrastructure and resources to support meal preparation and distribution. Practitioners should prioritize addressing gaps in infrastructure and equipment to optimize program efficiency. Moreover, transparency and accountability practices highlight the importance of establishing mechanisms for regular monitoring, evaluation, and stakeholder engagement to ensure responsible resource utilization and program effectiveness.

Funding. The table outlines key practices related to the implementation of a School-Based Feeding Program (SBFP), with a focus on how these practices intersect with funding considerations. The first practice highlighted is Grant Writing and Proposal Development, which involves clearly defining and transparently communicating the budget for the SBFP, including details on funds allocation for food procurement, kitchen equipment, staff salaries, and other associated costs. Despite its importance, this practice seems to be less prioritized, as both School Heads and SBFP Coordinators ranked it relatively low at 13 and 12 respectively. Sustainability Planning emerges as another

critical aspect, aiming to incorporate contingency plans within the budget to address unforeseen circumstances or emergencies without compromising meal provision. While both groups recognize its significance, they also

place it in a moderately prioritized position, with School Heads ranking it at 12 and SBFP Coordinators at 11, indicating room for improvement in ensuring program resilience.

Table 2C. Practices on the Implementation of School-Based Feeding Program (SBFP) during Pre-pandemic along the Funding

Practices	School Heads	Rank	SBFP Coor.	Rank
Grant Writing and Proposal Development. Clearly defining and transparently communicating the budget for the School-Based Feeding Program, including details on the allocation of funds for food procurement, kitchen equipment, staff salaries, and other associated costs.	13	3	12	3
Sustainability Planning. Incorporating contingency plans within the budget to address unforeseen circumstances or emergencies, allowing the program to adapt to changing conditions without compromising the provision of meals.	12	4	11	4
Engage with Local government. Securing consistent and adequate financial support from government authorities to ensure the sustainable implementation of the program. This may involve collaboration with education or health departments.	15	1.5	15	1.5
Donor Cultivation and Stewardship. Schools actively explore and engage with various funding sources, including local businesses, philanthropic organizations and community fundraising initiatives, to diversity funding streams.	15	1.5	15	1.5
Transparency and Accountability. Regularly measure and report on the program's impact to demonstrate the effectiveness and value of the funding.	10	5	10	5

Engaging with Local Government emerges as the top priority according to both groups, with both School Heads and SBFP Coordinators ranking it at the highest position of 15. Additionally, SBFP Coordinators rated this practice at 1.5, highlighting its utmost importance. This practice involves securing consistent and adequate financial support from government authorities to sustain the program, often through collaboration with education or health departments.

Donor Cultivation and Stewardship, another crucial practice, also received high rankings from both groups. It involves actively seeking funding from various sources such as local businesses, philanthropic organizations, and community fundraising initiatives to diversify funding streams. Both School Heads and SBFP Coordinators ranked this practice at 15, indicating its significance, and SBFP Coordinators rated it at 1.5, underlining its high priority.

Finally, Transparency and Accountability are essential practices to ensure the effective and efficient use of

funding. Both groups ranked this practice similarly, with School Heads and SBFP Coordinators rating it at 10. However, SBFP Coordinators also rated it at 5, indicating a moderate prioritization. Transparency and accountability involve regularly measuring and reporting on the program's impact to demonstrate its effectiveness and value, ensuring trust and confidence among stakeholders.

One notable implication is the apparent lack of emphasis on Grant Writing and Proposal Development, as evidenced by its relatively low ranking by both School Heads and SBFP Coordinators. This finding underscores the need for capacity-building initiatives aimed at enhancing the skills of school administrators and program coordinators in grant writing and proposal development. By equipping them with the necessary tools and knowledge to effectively communicate the budgetary needs and objectives of SBFPs, educational institutions can enhance their ability to secure funding from various sources. This aligns with existing literature emphasizing the importance of grant-writing skills in

securing financial support for educational programs (Bauer, 2017).

Furthermore, the high priority assigned to Engaging with Local Government and Donor Cultivation and Stewardship underscores the significance of external partnerships and collaborations in ensuring the sustainability and viability of SBFPs. This finding resonates with previous research highlighting the role of government support and community engagement in the success of school feeding programs (Gelli et al., 2015).

Moreover, the moderate prioritization of Sustainability Planning and Transparency and Accountability highlights areas for improvement in program design and implementation. Sustainable planning, including the integration of contingency measures, is crucial for ensuring the resilience of SBFPs in the face of unforeseen challenges, such as natural disasters or economic crises (Devereux et al., 2020). Similarly, robust mechanisms for transparency and accountability are essential for building trust among stakeholders and

demonstrating the impact and value of SBFPs (Galloway et al., 2019).

Personnel. Table 2D offers detailed insights into the practices concerning personnel involved in the implementation of School-Based Feeding Programs (SBFPs) during the pre-pandemic period. The rankings provided by School Heads and SBFP Coordinators shed light on the perceived importance and prioritization of these practices, which carry significant implications for the effective management and success of SBFPs. One notable finding is the emphasis on Professional Development, with both groups ranking this practice at the highest level of 15. This underscores the recognition of the crucial role that ongoing training and skill enhancement play in ensuring the competency of personnel involved in SBFPs. Regular training programs aimed at improving knowledge in nutrition, food safety, and program management are evidently regarded as essential for the program's success, aligning with existing literature advocating for continuous professional development in similar contexts (Gupta & Narang, 2018).

Table 2D. Practices on the Implementation of School-Based Feeding Program (SBFP) during Pre-pandemic along the Personnel

Practices	School Heads	Rank	SBFP Coor.	Rank
Training and Capacity Building. Ensuring that the school has qualified and trained kitchen staff responsible for meal preparation, following food safety guidelines, and managing the overall operation of the kitchen.	13	3	10	4
Professional Development. Implementing regular training programs for kitchen staff, teachers, and other personnel involved in the program to enhance their skills in nutrition, food safety, and program management.	15	1	15	1
Collaboration and Teamwork. Encouraging the participation of volunteers, including parents or community members, to assist in the implementation of the program, helping with tasks such as meal distribution, monitoring, or educational activities.	14	2	10	4
Work-Life Balance. Managing a school feeding program can be a significant additional workload for school staff who already have numerous other responsibilities inside the classroom.	10	4	13	2
Recognition and appreciation. Recognizing the mental health challenges faced by personnel and providing support services to address stress, and anxiety related to their roles in the School-Based Feeding Program.	9	5	10	4
Continuous Improvement. Encourage them to share their insights, suggestions and ideas for enhancing the program's effectiveness and efficiency.	8	6	9	6

The responses of school heads were ranked 3 for "Training and Capacity Building" because they demonstrated a moderate level of proficiency in ensuring that the school has qualified and trained kitchen staff responsible for meal preparation, following food safety guidelines, and managing the overall operation of the kitchen. School heads typically oversee various aspects of school operations, including staffing and training, but may not always have direct involvement in the day-to-day training and supervision of kitchen staff. On the other hand, SBFP coordinators were ranked 4 in this practice, indicating that they demonstrated a slightly lower level of effectiveness compared to school heads. While SBFP coordinators play a key role in program implementation and may be responsible for aspects of training and capacity building, their primary focus may be more oriented towards program administration and logistics rather than direct involvement in kitchen staff training.

Additionally, the ranking for SBFP coordinators was 4, suggesting that while they may contribute to training and capacity building efforts, their involvement may not be as extensive or effective as that of school heads. This ranking reflects the varying levels of responsibility and expertise between school heads and SBFP coordinators in ensuring the competency and readiness of kitchen staff for meal preparation and program implementation. Overall, while both groups play important roles in training and capacity building, school heads may have a slightly higher level of involvement and effectiveness in this practice compared to SBFP coordinators.

Collaboration and Teamwork also emerge as critical aspects, albeit with slightly varying prioritization between School Heads and SBFP Coordinators. While School Heads rated this practice moderately at 14, SBFP Coordinators ranked it slightly lower at 10. Nonetheless, there is clear recognition of the importance of involving volunteers, such as parents or community members, in supporting various tasks related to SBFP implementation. This underscores the value placed on collaborative efforts in enhancing program effectiveness and efficiency, echoing previous research highlighting the benefits of community involvement in school feeding initiatives (Zybert et al., 2019).

Moreover, the relatively lower prioritization of practices such as Training and Capacity Building and Recognition

and Appreciation suggests areas where attention and resources may need to be directed to better support personnel involved in SBFPs. While both groups recognize the importance of these practices, their rankings indicate that they may not receive the same level of focus as Professional Development or Collaboration and Teamwork. Addressing these areas could involve providing additional training opportunities for kitchen staff and implementing support services to address mental health challenges faced by personnel, ultimately contributing to a more conducive work environment and program sustainability.

The findings from Table 2D underscore several critical implications for the effective implementation and management of School-Based Feeding Programs (SBFPs). Firstly, the high prioritization of Professional Development highlights the imperative of investing in continuous training and skill enhancement opportunities for personnel involved in SBFPs to ensure competency in nutrition, food safety, and program management. Secondly, while Collaboration and Teamwork are recognized as essential, there's room for improvement in fostering community involvement and volunteer participation to enhance program effectiveness. Moreover, the relatively lower prioritization of practices like Training and Capacity Building and Recognition and Appreciation suggests the need for targeted efforts to provide additional support and resources to personnel, addressing potential gaps in training and mental health support. By addressing these implications, stakeholders can foster a more supportive and well-equipped workforce, ultimately enhancing the impact and sustainability of SBFPs in promoting child nutrition and well-being.

2) Practices of the schools on the implementation of School-Based Feeding Program (SBFP) during pandemic along the identified variables

Practices along process during pandemic. Table 3A provides valuable insights into the practices concerning the implementation of School-Based Feeding Programs (SBFPs) during the pandemic, despite the challenges posed by the circumstances. The rankings provided by School Heads and SBFP Coordinators shed light on the perceived importance and prioritization of these practices, offering valuable implications for program implementation and management.

Table 3A. Practices on the Implementation of School-Based Feeding Program (SBFP) during Pandemic along the Process

Practices	School Heads	Rank	SBFP Coor.	Rank
Needs Assessment. Conducting a comprehensive needs assessment to identify the nutritional requirements and food security status of the students in the school.	6	3	6	2.5
Community Involvement. Involving the local community, parents, and stakeholders in the planning and execution of the feeding program to ensure cultural relevance and community support.	6	3	6	2.5
Food Safety and Hygiene. Implementing strict hygiene and food safety protocols in the preparation, storage, and distribution of meals to ensure the health and well-being of the students.	8	1	7	1
Nutrition Education. Incorporating educational components into the program that teach students about nutrition, healthy eating habits and the importance of a balanced diet.	6	3	5	4
Monitoring and Evaluation. Setting up a robust system for monitoring and evaluating the program's effectiveness, including regular assessments of students' nutritional status and program impact.	0	6	0	6
Communication and Reporting. Maintaining open and transparent communication with parents and guardians to keep them informed about the program's goals, menu, and benefits for their children.	2	5	1	5

The ranking of school heads at 3 and SBFP coordinators at 5 in the practice of "Nutrition Education" may be attributed to the different roles and responsibilities each group holds within the implementation of the School-Based Feeding Program (SBFP). School heads are typically responsible for overseeing the overall management and administration of the school, including curriculum planning and implementation. While they may recognize the importance of incorporating nutrition education into the program, their primary focus may be on broader administrative tasks rather than directly facilitating or developing educational components on nutrition. As a result, their involvement in nutrition education initiatives may be more indirect or supportive rather than hands-on.

SBFP coordinators are more directly involved in the day-to-day operations of the feeding program, including meal preparation and distribution. While they may recognize the importance of nutrition education, their primary focus may be on logistical aspects of the program, such as ensuring meals are delivered efficiently and complying with food safety regulations. As a result, they may have less time or resources available to dedicate to implementing formal nutrition education components within the program.

One notable observation is the consistent emphasis placed on Food Safety and Hygiene, with both School Heads and SBFP Coordinators ranking it among the top priorities. This underscores the critical importance of implementing strict protocols to ensure the safety and well-being of students during meal preparation, storage, and distribution, particularly in the context of a global health crisis. The high ranking of this practice aligns with recommendations from health authorities emphasizing the need for stringent hygiene measures in school feeding programs to prevent the spread of infectious diseases (WHO, 2020).

The lack of responses from both school heads and SBFP coordinators for the "Monitoring and Evaluation" practice during the pandemic could be attributed to several factors, 1) During the pandemic, schools and SBFP coordinators may have faced resource constraints, including limited staff availability, disrupted routines, and redirected priorities. As a result, allocating resources and personnel to monitoring and evaluation activities may have been deprioritized in favor of more immediate needs, such as ensuring the safety of students and staff or adjusting to remote learning environments. 2) The sudden shift to remote or hybrid learning models may have posed challenges for implementing traditional monitoring and evaluation methods. Traditional

methods of assessing students' nutritional status and program impact, such as in-person assessments or surveys, may have been difficult to conduct remotely or may have required significant modifications to be feasible. 3) The pandemic likely caused significant disruptions to the normal operations of schools and SBFPs, including changes to meal distribution processes, school closures, or shifts in program logistics. These disruptions may have hindered the establishment of robust monitoring and evaluation systems or made it challenging to maintain continuity in data collection and analysis. 4) The immediate response to the pandemic may have focused primarily on emergency response measures, such as ensuring food security for students, rather than on implementing comprehensive monitoring and evaluation systems. In such crisis situations, the emphasis may have been on meeting immediate needs rather than on longer-term program assessment and improvement efforts.

Furthermore, the emphasis on Needs Assessment and Community Involvement reflects a recognition of the importance of understanding the unique nutritional requirements and food security status of students, as well as the need to engage local communities and stakeholders in program planning and execution.

Despite the challenges posed by the pandemic, respondents still prioritize these practices, highlighting their fundamental role in ensuring the relevance, effectiveness, and sustainability of SBFPs. This resonates with existing literature emphasizing the importance of community engagement and participatory approaches in designing and implementing nutrition interventions (Ruel et al., 2018).

However, it's noteworthy that Monitoring and Evaluation received the lowest rankings from both groups, with School Heads ranking it at 0 and SBFP Coordinators at 6. This may indicate a potential gap in the implementation of robust systems for monitoring and evaluating program effectiveness during the pandemic.

While understandable given the extraordinary circumstances, this highlights the importance of prioritizing mechanisms for ongoing assessment and feedback to ensure the program's adaptability and accountability, even in challenging times.

In conclusion, while some respondents may not have completed the questionnaire due to the pandemic, the data from Table 3A still provide valuable insights into the prioritization of practices in SBFP implementation during these unprecedented times. By addressing the identified priorities and potential gaps, stakeholders can work towards enhancing the effectiveness, resilience, and sustainability of SBFPs, ultimately contributing to improved nutrition outcomes and well-being among school children, even amidst challenging circumstances.

The data from Table 3A offer important implications for the implementation of School-Based Feeding Programs (SBFPs) during the pandemic, despite potential limitations in questionnaire completion. The consistent prioritization of Food Safety and Hygiene underscores the critical need for stringent protocols to safeguard the health and well-being of students amidst the ongoing health crisis.

Additionally, the emphasis on Needs Assessment and Community Involvement highlights the recognition of the importance of understanding students' nutritional needs and engaging local communities in program planning and execution, even in challenging circumstances.

However, the low ranking of Monitoring and Evaluation suggests a potential gap in the implementation of robust systems for assessing program effectiveness during the pandemic, indicating the need for strengthened mechanisms for ongoing assessment and feedback to ensure program adaptability and accountability. Addressing these implications can enhance the resilience and effectiveness of SBFPs, ultimately contributing to improved nutrition outcomes and well-being among school children in times of crisis.

Practices during pandemic along the resources. Table 3B delineates the prioritization of practices pertinent to the implementation of School-Based Feeding Programs (SBFPs) during the pandemic, categorized by the availability of resources.

The rankings provided by both School Heads and SBFP Coordinators offer valuable insights into the perceived importance and prioritization of these practices, revealing areas of consensus and potential focal points for enhancement.

Table 3B. Practices on the Implementation of School-Based Feeding Program (SBFP) during Pandemic along the Resources

Practices	School Heads	Rank	SBFP Coord.	Rank
Needs Assessment. Conducting a comprehensive needs assessment to identify the nutritional requirements and food security status of the students in the school.	2	4.5	2	4.5
Community Involvement. Involving the local community, parents, and stakeholders in the planning and execution of the feeding program to ensure cultural relevance and community support.	4	3	5	3
Food Safety and Hygiene. Implementing strict hygiene and food safety protocols in the preparation, storage, and distribution of meals to ensure the health and well-being of the students.	6	2	6	2
Nutrition Education. Incorporating educational components into the program that teach students about nutrition, healthy eating habits and the importance of a balanced diet.	7	1	8	1
Monitoring and Evaluation. Setting up a robust system for monitoring and evaluating the program's effectiveness, including regular assessments of students' nutritional status and program impact.	0	6	0	6
Communication and Reporting. Maintaining open and transparent communication with parents and guardians to keep them informed about the program's goals, menu, and benefits for their children.	2	4.5	2	4.5

Notably, both groups rank Needs Assessment similarly, highlighting its paramount importance in identifying the nutritional requirements and food security status of students, thereby facilitating targeted and effective program implementation. Likewise, Community Involvement garners recognition, albeit with slightly differing rankings, emphasizing the significance of engaging local communities, parents, and stakeholders in ensuring the cultural relevance and community support necessary for program success.

Food Safety and Hygiene emerge as top priorities for both School Heads and SBFP Coordinators, underlining the critical importance of implementing stringent protocols to safeguard student health amidst the pandemic. Additionally, Nutrition Education receives high rankings from both groups, indicating a shared acknowledgment of the need to incorporate educational components into SBFPs to promote healthy eating habits and long-term well-being. However, the lowest ranking for Monitoring and Evaluation suggests a potential gap in the implementation of robust assessment systems during the pandemic, signaling a need for strengthened mechanisms to ensure program adaptability and accountability. Nonetheless, the recognition of Communication and Reporting as important practices underscores the value placed on transparent communication with parents and guardians to keep them

informed about program goals and benefits. In addition, the insights gleaned from Table 3B provide valuable guidance for enhancing the effectiveness and resilience of SBFPs during the pandemic, emphasizing the importance of strategic resource allocation and collaborative efforts to address evolving challenges and ensure positive outcomes for student nutrition and well-being.

The rankings provided in Table 3B offer significant implications for the implementation of School-Based Feeding Programs (SBFPs) during the pandemic. The consistent prioritization of practices such as Needs Assessment, Food Safety and Hygiene, and Nutrition Education underscores the critical importance of addressing students' nutritional needs and ensuring their health and well-being amidst the pandemic. These findings align with existing literature emphasizing the essential role of comprehensive needs assessments, stringent food safety protocols, and educational components in promoting healthy eating habits and mitigating health risks among school children (WHO, 2020; Langford et al., 2014). However, the low ranking of Monitoring and Evaluation highlights a potential gap in assessing program effectiveness during the pandemic, emphasizing the need for strengthened mechanisms to ensure program adaptability and accountability, as echoed in previous research emphasizing the importance

of robust monitoring and evaluation systems in evaluating the impact of school feeding programs (Gelli et al., 2015). By addressing these implications and leveraging evidence-based strategies, policymakers and program implementers can enhance the resilience and effectiveness of SBFPs, ultimately contributing to improved nutrition outcomes and well-being among school children during challenging times.

Practices during pandemic along the Funding. The data presented in the table offer insights into the prioritization of practices related to the funding aspect of implementing School-Based Feeding Programs (SBFPs) during the pandemic, as perceived by both School Heads and SBFP Coordinators. Grant Writing and Proposal Development emerge as important

practices, with both groups ranking it second, indicating the recognition of the need to clearly define and communicate the budget for SBFPs to ensure efficient allocation of funds. Sustainability Planning is prioritized highest by both groups, highlighting the acknowledgment of the importance of incorporating contingency plans within the budget to address unforeseen circumstances and maintain meal provision despite changing conditions, a crucial aspect for program resilience during the pandemic. Engaging with Local Government is also deemed significant, emphasizing the need to secure consistent financial support from government authorities to sustain SBFPs, potentially through collaboration with relevant departments, showcasing the reliance on external funding sources for program continuity.

Table 3C. Practices on the Implementation of School-Based Feeding Program (SBFP) during Pandemic along the Funding

Practices	School Heads	Rank	SBFP Coord.	Rank
Grant Writing and Proposal Development. Clearly defining and transparently communicating the budget for the School-Based Feeding Program, including details on the allocation of funds for food procurement, kitchen equipment, staff salaries, and other associated costs.	5	2	6	2
Sustainability Planning. Incorporating contingency plans within the budget to address unforeseen circumstances or emergencies, allowing the program to adapt to changing conditions without compromising the provision of meals.	7	1	7	1
Engage with Local government. Securing consistent and adequate financial support from government authorities to ensure the sustainable implementation of the program. This may involve collaboration with education or health departments.	4	3.5	5	3
Donor Cultivation and Stewardship. Schools actively explore and engage with various funding sources, including local businesses, philanthropic organizations and community fundraising initiatives, to diversity funding streams.	4	3.5	4	4
Transparency and Accountability. Regularly measure and report on the program's impact to demonstrate the effectiveness and value of the funding.	3	5	2	5

Moreover, Donor Cultivation and Stewardship are recognized as important practices, reflecting the proactive approach of schools in exploring diverse funding sources, including local businesses, philanthropic organizations, and community initiatives, to support SBFPs and ensure financial sustainability. Lastly, Transparency and Accountability, while ranked lower, are still valued, with both groups emphasizing the importance of regularly measuring and reporting on the program's impact to demonstrate the effectiveness and value of the funding, fostering trust and accountability

among stakeholders. Overall, these interpretations highlight the multifaceted nature of funding-related practices in SBFP implementation during the pandemic, underscoring the importance of strategic financial planning and collaboration to ensure the sustainability and effectiveness of these vital programs.

Table 3B offer significant implications for the implementation of School-Based Feeding Programs (SBFPs) during the pandemic, particularly concerning funding strategies. The prioritization of Sustainability

Planning by both School Heads and SBFP Coordinators underscores the critical importance of incorporating contingency plans within program budgets to ensure adaptability in the face of unforeseen circumstances, aligning with existing literature emphasizing the need for resilience in nutrition programs amidst crises (Frongillo et al., 2020). Engaging with Local Government also emerges as a key practice, highlighting the reliance on government support for sustainable program implementation, a finding consistent with research advocating for strong partnerships between schools and local authorities in addressing nutrition needs (García-Casal et al., 2019). Additionally, the emphasis on Donor Cultivation and Stewardship underscores the proactive approach of schools in diversifying funding sources, aligning with literature emphasizing the importance of leveraging community partnerships and fundraising initiatives to support nutrition interventions (Ruel et al., 2013).

Furthermore, the recognition of Transparency and Accountability highlights the importance of measuring and reporting on program impact to demonstrate value and foster trust among stakeholders, a practice supported by research emphasizing the role of accountability mechanisms in ensuring program effectiveness and sustainability (FAO & WFP, 2019). However, the lower ranking of Grant Writing and

Proposal Development suggests potential challenges in effectively communicating budgetary needs, reflecting the need for capacity-building efforts to enhance schools' ability to secure funding through grant proposals, a sentiment echoed in literature advocating for enhanced grant-writing skills in resource mobilization efforts (Bauer, 2017). Addressing these implications through targeted interventions and strategic partnerships can enhance the resilience and effectiveness of SBFPs, ultimately contributing to improved nutrition outcomes and well-being among school children during times of crisis.

Practice during pandemic along Personnel. Table 3D offers insights into the prioritization of practices related to personnel management in the implementation of School-Based Feeding Programs (SBFPs) during the pandemic, as perceived by both School Heads and SBFP Coordinators. Notably, Professional Development emerges as a top priority for both groups, highlighting the recognition of the importance of regular training programs to enhance the skills of kitchen staff, teachers, and other program personnel in nutrition, food safety, and program management. This emphasis on ongoing skill development aligns with research emphasizing the critical role of training in ensuring the effectiveness and sustainability of nutrition interventions in school settings (Gurnani et al., 2018).

Table 3D. Practices on the Implementation of School-Based Feeding Program (SBFP) during Pandemic along the Personnel

Practices	School Heads	Rank	SBFP	Rank
			Coor.	
Training and Capacity Building. Ensuring that the school has qualified and trained kitchen staff responsible for meal preparation, following food safety guidelines, and managing the overall operation of the kitchen.	6	2	5	2.5
Professional Development. Implementing regular training programs for kitchen staff, teachers, and other personnel involved in the program to enhance their skills in nutrition, food safety, and program management.	8	1	8	1
Collaboration and Teamwork. Encouraging the participation of volunteers, including parents or community members, to assist in the implementation of the program, helping with tasks such as meal distribution, monitoring, or educational activities.	3	5	4	5
Work-Life Balance. Managing a school feeding program can be a significant additional workload for school staff who already have numerous other responsibilities inside the classroom.	4	3	5	2.5
Recognition and appreciation. Recognizing the mental health challenges faced by personnel and providing support services to address stress, and anxiety related to their roles in the School-Based Feeding Program.	3	5	4	5

Continuous Improvement. Encourage them to share their insights, suggestions and ideas for enhancing the program’s effectiveness and efficiency.	3	5	4	5
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Furthermore, Collaboration and Teamwork are deemed significant, albeit with slightly differing rankings, underscoring the value placed on engaging volunteers, including parents or community members, to support various tasks such as meal distribution, monitoring, and educational activities. This recognition of the importance of community involvement aligns with literature highlighting the benefits of collaborative approaches in promoting ownership and sustainability of school feeding programs (Zybert et al., 2019). Additionally, the acknowledgment of Work-Life Balance as a concern reflects the challenges faced by school staff in managing additional workloads amidst existing responsibilities, indicating the need for supportive policies and practices to mitigate stress and ensure staff well-being during challenging times.

Moreover, Recognition and Appreciation and Continuous Improvement are prioritized by both groups, highlighting the importance of acknowledging the mental health challenges faced by personnel and providing support services to address stress and anxiety related to their roles in SBFPs. Additionally, the emphasis on continuous improvement underscores the value placed on fostering a culture of learning and innovation to enhance program effectiveness and efficiency. These findings underscore the multifaceted nature of personnel-related practices in SBFP implementation during the pandemic and emphasize the importance of supportive policies, ongoing training, and collaborative approaches in ensuring the well-being of staff and the success of SBFPs.

It implies that the prioritization of Professional Development underscores the importance of investing in

regular training programs to enhance the skills of kitchen staff, teachers, and program personnel, ensuring competence in nutrition, food safety, and program management. Additionally, the emphasis on Collaboration and Teamwork highlights the value of engaging volunteers and community members to support various program tasks, promoting ownership and sustainability. However, the concerns raised regarding Work-Life Balance and the recognition of mental health challenges underscore the need for supportive policies and practices to mitigate stress and ensure staff well-being. Overall, addressing these implications through targeted interventions and supportive measures can enhance staff capacity and well-being, ultimately contributing to the effectiveness and sustainability of SBFPs during challenging times.

3) Practices of the schools on the implementation of School-Based Feeding Program (SBFP) during Post-pandemic along the identified variables

Practices during post-pandemic along process. Table 4A provides insights into the prioritization of practices related to the implementation of School-Based Feeding Programs (SBFPs) during the post-pandemic period, as perceived by School Heads and SBFP Coordinators. Notably, Food Safety and Hygiene emerge as the highest priority for both groups, indicating a strong emphasis on implementing strict protocols to ensure the health and well-being of students during meal preparation, storage, and distribution. This prioritization aligns with the heightened awareness of hygiene and safety measures following the pandemic, underscoring the importance of maintaining a safe environment for meal provision.

Table 4A. Practices on the Implementation of School-Based Feeding Program (SBFP) during Post-pandemic along the Process

Practices	School Heads	Rank	SBFP Coord.	Rank
Needs Assessment. Conducting a comprehensive needs assessment to identify the nutritional requirements and food security status of the students in the school.	9	5	7	5
Community Involvement. Involving the local community, parents, and stakeholders in the planning and execution of the feeding program to ensure cultural relevance and community support.	13	3	11	3

Food Safety and Hygiene. Implementing strict hygiene and food safety protocols in the preparation, storage, and distribution of meals to ensure the health and well-being of the students.	15	1	15	1
Nutrition Education. Incorporating educational components into the program that teach students about nutrition, healthy eating habits and the importance of a balanced diet.	14	2	13	2
Monitoring and Evaluation. Setting up a robust system for monitoring and evaluating the program's effectiveness, including regular assessments of students' nutritional status and program impact.	11	4	9	4
Communication and Reporting. Maintaining open and transparent communication with parents and guardians to keep them informed about the program's goals, menu, and benefits for their children.	8	6	5	6

Additionally, Needs Assessment and Nutrition Education are recognized as essential practices, reflecting the ongoing focus on addressing students' nutritional needs and promoting healthy eating habits.

The emphasis on Community Involvement underscores the value placed on engaging local communities, parents, and stakeholders in program planning and execution to ensure cultural relevance and community support, fostering ownership and sustainability.

However, the relatively lower ranking of Monitoring and Evaluation and Communication and Reporting suggests potential areas for improvement in assessing program effectiveness and maintaining transparent communication with stakeholders, highlighting the importance of robust assessment and communication mechanisms in enhancing program accountability and impact.

Overall, these interpretations underscore the multifaceted nature of process-related practices in SBFP implementation during the post-pandemic period, emphasizing the importance of prioritizing safety, nutrition education, community engagement, and effective communication to ensure the success and sustainability of SBFPs in the evolving landscape.

Table 4A offer significant implications for the post-pandemic implementation of School-Based Feeding Programs (SBFPs).

The high prioritization of Food Safety and Hygiene underscores the imperative of stringent protocols to ensure student health and well-being during meal provision, aligning with recommendations from health authorities emphasizing the importance of hygiene

measures in school settings (WHO, 2020). Additionally, the recognition of Needs Assessment and Nutrition Education highlights the ongoing focus on addressing students' nutritional needs and promoting healthy eating habits, resonating with literature emphasizing the importance of comprehensive needs assessments and educational components in improving nutrition outcomes among school children (Ruel et al., 2013).

However, the relatively lower emphasis on Monitoring and Evaluation and Communication and Reporting suggests a need for strengthened mechanisms for assessing program effectiveness and maintaining transparent communication with stakeholders, reflecting the importance of robust assessment and communication mechanisms in enhancing program accountability and impact.

By addressing these implications through targeted interventions and strategic planning, stakeholders can enhance the effectiveness and sustainability of SBFPs in the post-pandemic era.

Post-pandemic along the Resources. Table 4B provides insights into the prioritization of resource-related practices in the implementation of School-Based Feeding Programs (SBFPs) during the post-pandemic period, as perceived by both School Heads and SBFP Coordinators.

Notably, Resource Planning, Budgeting and Financial Management, and Equipment and Supply Management are all ranked highest by both groups, indicating a strong emphasis on comprehensive planning and adequate allocation of resources to support program implementation.

Table 4B. Practices on the Implementation of School-Based Feeding Program (SBFP) during Post-pandemic along the Resources

Practices	School Heads	Rank	SBFP Coord.	Rank
Resource Planning. Develop a comprehensive resource plan that outlines the specific resources required for the program, such as funding, food supplies, equipment and human resources.	15	2	15	2
Budgeting and Financial Management. Adequate allocation of financial resources by the school or relevant authorities to support the procurement of food, kitchen equipment, and other necessary resources for the program.	15	2	15	2
Equipment and Supply Management. Assessing and ensuring that schools have appropriate kitchen facilities, storage space, and dining areas to accommodate the preparation and distribution of meals.	15	2	15	2
Volunteer and Human Resource Management. Encouraging and leveraging community contributions, such as volunteer time, donations, or in-kind support, to supplement the resources allocated by the school or government.	12	4	13	4
Transparency and Accountability. Conducting regular audits and reviews of the School-Based Feeding Program to assess resource utilization effectiveness, identify areas for improvement, and ensure accountability in the use of allocated funds.	10	5	12	5
Resource Optimization. Collaborating with non-governmental organizations (NGOs), local businesses, or corporate sponsors to secure additional resources, including food supplies, financial support, or expertise.	10	6	10	6
Transparency and accountability. Maintain transparency in resource management by documenting, reporting and communicating with the stakeholders about resource-related decisions, challenges and successes.	9	7	9	7

Practices during post-pandemic along process. Table 4C provides insights into the prioritization of funding-related practices in the implementation of School-Based Feeding Programs (SBFPs) during the post-pandemic period, as perceived by both School Heads and SBFP Coordinators. Notably, Grant Writing and Proposal Development, Sustainability Planning, Engaging with Local Government, and Donor Cultivation and Stewardship are all ranked highest by both groups, indicating a strong emphasis on various aspects of securing and managing financial support for SBFPs. This emphasis aligns with the importance of sustainable funding mechanisms in ensuring the continuity and effectiveness of SBFPs, particularly in the context of

post-pandemic recovery efforts. Additionally, the recognition of Transparency and Accountability underscores the importance of measuring and reporting on program impact to demonstrate the effectiveness and value of funding, reflecting the need for robust accountability mechanisms to ensure transparency and accountability in resource utilization. Overall, these interpretations highlight the multifaceted nature of funding-related practices in SBFP implementation during the post-pandemic period and emphasize the importance of comprehensive funding strategies, collaboration with stakeholders, and transparent reporting mechanisms to ensure the success and sustainability of SBFPs in the evolving landscape.

Table 4C. Practices on the Implementation of School-Based Feeding Program (SBFP) during Post-pandemic along the Funding

Practices	School Heads	Rank	SBFP Coord.	Rank
Grant Writing and Proposal Development. Clearly defining and transparently communicating the budget for the School-Based Feeding Program, including details on the allocation of funds for food procurement, kitchen equipment, staff salaries, and other associated costs.	15	2	15	2

Sustainability Planning. Incorporating contingency plans within the budget to address unforeseen circumstances or emergencies, allowing the program to adapt to changing conditions without compromising the provision of meals.	12	4	13	4
Engage with Local government. Securing consistent and adequate financial support from government authorities to ensure the sustainable implementation of the program. This may involve collaboration with education or health departments.	15	2	15	2
Donor Cultivation and Stewardship. Schools actively explore and engage with various funding sources, including local businesses, philanthropic organizations and community fundraising initiatives, to diversity funding streams.	15	2	15	2
Transparency and Accountability. Regularly measure and report on the program’s impact to demonstrate the effectiveness and value of the funding.	10	5	10	5

It implies that the high prioritization of Grant Writing and Proposal Development, Sustainability Planning, Engaging with Local Government, and Donor Cultivation and Stewardship highlights the critical importance of securing and managing financial support for SBFPs, aligning with literature emphasizing the necessity of sustainable funding mechanisms for program continuity and effectiveness (FAO & WFP, 2019). Additionally, the recognition of Transparency and Accountability highlights the importance of robust accountability mechanisms to ensure transparency and accountability in resource utilization, resonating with research advocating for transparent reporting mechanisms to demonstrate the impact and value of funding (Biesma et al., 2009). However, the high ranking of these practices also suggests potential

challenges in accessing and managing financial resources, reflecting the need for strategic planning and collaboration with stakeholders to address funding gaps and ensure the sustainability of SBFPs in the post-pandemic era. By addressing these implications through targeted interventions and collaborative efforts, stakeholders can enhance the resilience and effectiveness of SBFPs, ultimately contributing to improved nutrition outcomes among school children.

Post-pandemic along the Personnel. Table 4D sheds light on the prioritization of personnel-related practices in the implementation of School-Based Feeding Programs (SBFPs) during the post-pandemic period, as perceived by both School Heads and SBFP Coordinators.

Table 4D. Practices on the Implementation of School-Based Feeding Program (SBFP) during Post-pandemic along the Personnel

Practices	School Heads	Rank	SBFP Coord.	Rank
Training and Capacity Building. Ensuring that the school has qualified and trained kitchen staff responsible for meal preparation, following food safety guidelines, and managing the overall operation of the kitchen.	7	6	8	6
Professional Development. Implementing regular training programs for kitchen staff, teachers, and other personnel involved in the program to enhance their skills in nutrition, food safety, and program management.	15	1.5	15	1.5
Collaboration and Teamwork. Encouraging the participation of volunteers, including parents or community members, to assist in the implementation of the program, helping with tasks such as meal distribution, monitoring, or educational activities.	13	3	12	3
Work-Life Balance. Managing a school feeding program can be a significant additional workload for school staff who already have numerous other responsibilities inside the classroom.	15	1.5	15	1.5

Recognition and appreciation. Recognizing the mental health challenges faced by personnel and providing support services to address stress, and anxiety related to their roles in the School-Based Feeding Program.	10	5	10	5
Continuous Improvement. Encourage them to share their insights, suggestions and ideas for enhancing the program’s effectiveness and efficiency.	12	4	11	4

Professional Development emerges as the highest priority for both groups, highlighting the recognition of the importance of regular training programs to enhance the skills of kitchen staff, teachers, and other personnel involved in SBFPs, aligning with literature emphasizing the significance of ongoing capacity building in ensuring program effectiveness (Gurnani et al., 2018). Additionally, Collaboration and Teamwork are recognized as significant, underscoring the value placed on engaging volunteers and community members to support various program tasks, reflecting the importance of community involvement in promoting program ownership and sustainability (Zybert et al., 2019). The recognition of Work-Life Balance and the emphasis on Recognition and Appreciation suggest awareness of the challenges faced by school staff in managing additional workloads and the importance of supporting staff well-being, resonating with literature advocating for supportive policies to mitigate stress and ensure staff satisfaction (Tartakovsky et al., 2019). Furthermore, the acknowledgment of Continuous Improvement underscores the value placed on fostering a culture of learning and innovation to enhance program effectiveness and efficiency, reflecting the importance of adaptive management approaches in addressing evolving program needs. Overall, these interpretations highlight the multifaceted nature of personnel-related practices in SBFP implementation during the post-pandemic period and underscore the importance of prioritizing staff training, community engagement, well-being support, and continuous learning to ensure the success and sustainability of SBFPs in the evolving landscape.

IV. CONCLUSION AND RECOMMENDATIONS

This study concluded that the results highlight the critical importance of conducting a comprehensive needs assessment and prioritizing budgeting and financial management for the successful implementation and sustainability of School-Based Feeding Programs (SBFPs). Transparent communication of budget allocation through grant writing and ongoing professional development for personnel are also paramount. These findings underscore the necessity of

understanding local nutritional needs, ensuring adequate financial resources, and continuously enhancing the skills of SBFP personnel to effectively address food insecurity and promote child nutrition within school communities. The study underscores the critical significance of prioritizing food safety and hygiene protocols within School-Based Feeding Programs (SBFPs), particularly in light of global health concerns. The alignment between School Heads and SBFP Coordinators on key priorities, such as grant writing and professional development, emphasizes the shared commitment to program success and efficiency. These findings highlight the importance of collaborative efforts in addressing challenges and enhancing the effectiveness of SBFPs. Moving forward, ensuring strict adherence to food safety measures, clear communication of budgetary allocations, and ongoing professional development will be instrumental in promoting the safety, health, and success of students within SBFPs. The study underscores the paramount importance of prioritizing food safety and hygiene within School-Based Feeding Programs (SBFPs) to ensure student well-being, particularly in the wake of the pandemic. Additionally, the shared emphasis on resource planning, financial management, and professional development reflects a collective commitment to program success and sustainability. Moreover, the recognition of various aspects of securing financial support underscores the multifaceted approach required for program funding. Moving forward, maintaining rigorous hygiene standards, effective resource management, and continuous professional development will be pivotal in advancing the effectiveness and longevity of SBFPs, ultimately benefiting student health and educational outcomes.

It was recommended that the practices during pre-pandemic may recommend to conduct comprehensive needs assessments, prioritize budgeting, ensure transparent communication, and invest in ongoing professional development for SBFP personnel. The practices during pandemic may recommend prioritize food safety, enhance collaboration, ensure clear communication, and invest in ongoing professional

development for SBFP effectiveness. The practices during post pandemic may recommend to maintain hygiene standards, enhance resource management, prioritize professional development, and secure diversified funding for sustainable SBFP success.

This prioritization aligns with the importance of strategic resource management in ensuring the efficiency and effectiveness of SBFPs, particularly in the context of post-pandemic recovery efforts. Additionally, Volunteer and Human Resource Management are recognized as significant, highlighting the value placed on community contributions to supplement allocated resources, underscoring the importance of leveraging community engagement for program sustainability. However, the relatively lower rankings of Transparency and Accountability and Resource Optimization suggest potential areas for improvement in ensuring transparency in resource management practices and optimizing partnerships with external stakeholders to secure additional resources, reflecting the importance of robust accountability mechanisms and strategic collaborations in enhancing program impact and sustainability. Overall, these interpretations underscore the multifaceted nature of resource-related practices in SBFP implementation during the post-pandemic period and emphasize the importance of prioritizing comprehensive planning, community engagement, and accountability to ensure the success and sustainability of SBFPs in the evolving landscape.

The rankings provided in Table 4B offer significant implications for the post-pandemic implementation of School-Based Feeding Programs (SBFPs) with respect to resource management. The high prioritization of Resource Planning, Budgeting and Financial Management, and Equipment and Supply Management underscores the critical importance of comprehensive planning and allocation of resources to support program implementation, aligning with literature emphasizing the significance of strategic resource management in ensuring program efficiency and effectiveness (UNESCO, 2020). Additionally, the recognition of Volunteer and Human Resource Management highlights the potential for community contributions to supplement allocated resources, resonating with research advocating for community engagement as a means of enhancing program sustainability (Afridi et al., 2019). However, the lower emphasis on Transparency and Accountability and Resource Optimization suggests potential areas for

improvement in ensuring transparency in resource management practices and optimizing partnerships with external stakeholders, reflecting the importance of robust accountability mechanisms and strategic collaborations in enhancing program impact and sustainability (FAO & WFP, 2019). By addressing these implications through targeted interventions and strategic partnerships, stakeholders can enhance the efficiency and effectiveness of SBFPs, ultimately contributing to improved nutrition outcomes among school children in the post-pandemic era.

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