

Safe, Nourishing, Accessible Community Kitchen (S.N.A.C.K.): A Community Kitchen Manual for Public Health Emergencies



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ABSTRACT

Objective: The project aims to develop a community kitchen manual for public health emergencies.

Participants: The officers and members of the Samahan ng Nagkakaisang Kababaihan ng BASECO served as community respondents for this project. These eight women were in charge of the community kitchen operations, particularly the feeding program during the COVID-19 pandemic.

Implementation: The whole project comes in three phases. The design stage was executed in phase one of this project. The phase one also focused on the development of manual content based on available literatures and considered the interviews conducted with respondents.

Discussion: The manual contains guidelines on food safety and meal preparations. Based on the interview, the proponents identified specific contents that must be included in the guidelines, as compared with the need to improve current operations of the group's community kitchen. Looking at the activities of the community, the proponents indicated the food

flow guidelines to ensure a safe, nourishing and accessible community kitchen (S.N.A.C.K.).

Conclusion: The designed community kitchen manual may be of use to lay groups putting up community kitchens, since there is no existing manual in the Philippines. However, phases two and three must be conducted to validate its usefulness and accuracy in the field.

Keywords: Community Kitchen, Public Health Emergency, Food Security, Food Safety, Nutritious Meals, BASECO

INTRODUCTION

The Philippines is ranked third among 171 countries, as per the World Risk Report 2018, with the highest risks to multiple hazards and susceptibility in terms of the impact[1]. Climate risk and hunger are correlated, especially in areas with pre-existing issues on food security[2]. Philippines is ranked 70 out of 117 qualifying countries with the Global Hunger Index score of 20.1, translated to a serious hunger situation[3]. With the country's pre-existing hunger problem, the hazards are at stake, and the higher odds of experiencing food insecurity.

In 2017, during the World Food Program's strategic review of Food Security and Nutrition in the Philippines, one of the recommendations in the micro

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level (community and households) was to address the nutritional issue through feeding programs, community gardens, emergency reliefs and fortification. Citing those all lead to the functioning of a community kitchen.

A community kitchen is an organized community-based cooking program used to address hunger and food insecurity through regular activities for families within the local community[4]; which does not only promote nutrition through soup kitchen, but also as a training site for locals and community farmers to create local businesses that will strengthen the economy and lessen the produce cost[5].

Apart from the positive impact on nutritional status and socio-economic aspect, community kitchens are also used in several relief operations, such as in the networks of food banks as it increases the food distribution rate, hence, a faster measure in addressing food insecurity during disaster or emergencies[6]. Thus, it is very timely to discuss community kitchens, as Corona Virus Disease 2019 (COVID-19) created an impact on the trade of goods, resulting in the disruption of food availability and accessibility, and negatively affecting the global food security[7].

During the COVID-19 pandemic, several local government units used community kitchens, like that of Pasig City to ensure that its frontline workers were provided with food packets for lunch and dinner; and municipalities in Region 10 Northern Mindanao, ie, Manolo Fortich, Maramag and Sumilao, Bukidnon and Cities of Ozamiz and Valencia, supervised by the National Nutrition Council officers following the principles of *Pinggang Pinoy* in their food preparation to ensure variety, moderation and balance in terms of the nutritional content in food selection[8].

Moreover, since a community kitchen may address food insecurity and improve the nutritional status, it also addresses the Sustainable Development Goals number 2 and 3, which are zero hunger, and good health and well-being.

Hence, this project was designed to develop a community kitchen manual for public health emergencies. The project output was particularly intended for community organizers, to provide guidelines on how to ensure producing safe, nutritious and accessible foods for nutrition projects, most especially during public health emergencies.

Furthermore, for future researchers and policymakers, the manual may serve as a standard

community kitchen manual for various nutrition program settings and as a reference for community kitchen policies.

IMPLEMENTATION (METHODOLOGY)

Project Design

The project focused on the creation of a community kitchen manual for use during public health emergencies, including the pandemic. It comprised of guidelines on the menu planning, food safety practices, accessibility concerns, as well as the different forms and intended use for nutrition programs.

The development of the manual involves three phases. In the first phase, the design stage, was covered in this community project.

The UST Faculty of Medicine and Surgery formalized the approval of the project proposal and protocol. Coordination through written endorsements was made to the UST Simbahayan, Faculty of Arts and Letters Simbahayan, and the Samahan ng Nagkakaisang Kababaihan ng BASECO.

For phase one, which is called as the "design stage", the procedure involved drafting of the community kitchen manual based on literatures. The initial content focused on the guidelines on costing, food safety and menu planning with nutritional content and accessibility considerations. Afterwards, the community respondents were interviewed through Google Meet. The initial draft was presented to the community after the interview. For the interview, the proponents asked the respondents regarding practices incurred during the group's considerations in operating the community kitchen. And then, the proponents finalized and completed the manual contents, considering the practices that need guidelines as per the interview results. Generally, as per the final manual design, it contained discussions on how to prepare safe and nutritious community kitchen menus, the easy-to-follow food safety practices from purchasing up to dishing out of meals, how to design an accessible and readily available community kitchen; plus the forms that can be used in community kitchen operations.

Regarding the phases two and three, specifically the "implement stage" and the "validation/evaluation stage", these were not yet conducted in this project.

Respondents and Study Site

Since the project output was to create a manual for community kitchen operations, which aims to provide guidelines to ensure proper implementation of nutrition programs, even during emergencies; it was ideal to choose a community or group with an existing community kitchen operating in this COVID-19 pandemic. The respondents were chosen based on their involvement with the community kitchen operations, particularly on food and menu preparation, and nutritional assessment among the participants in the feeding program. Also, the study site was selected with poor socio-economic status to fully maximize the benefits of a well-guided community kitchen.

The project investigators initially considered an area in Metro Manila, since 40% of the 13.3M of its population are living in the slum community[9]. Out of the different Metro Manila communities, the Bataan Shipping and Engineering Company (BASECO), in Manila City, which is considered an informal coastal reclamation area was selected. BASECO was identified with socio-economic needs, and at the same time a disaster risk area due to its location.[10]

Since the consideration was an existing community kitchen, the proponent identified The BASECO Women's Organization (Samahan ng Nagkakaisang Kababaihan ng BASECO), as a local registered group in Zone 68, Barangay BASECO, Manila City, organizing a community kitchen, particularly a feeding program. The organization is also a partner community of the University of Santo Tomas.

The community kitchen started their initial and independent feeding program in July 2020. The members/officers who directly planned the menu, prepared and served the food, assessed the children's nutritional status, were chosen as the respondents of this project. There were eight direct members involved in the preparation and operation of the community kitchen who participated in the focus group discussion via Google Meet. As per the respondents, the community kitchen was located in the organization president's lot area. The community also has an existing Barangay Health Center, possible for future health project collaborations. Additionally, in 2018, there was Klinika Tomas, a free medicine dispensary built in collaboration between the organization and University of Santo Tomas.

Also, as per the Medical Report Philippines 2017, the BASECO Compound, which was the study site, belongs to an urban poor area having less access to medical services, and even with issues on daily food.[9] Additionally, as per the same source, one of the recommended follow-up plans for the 15.7% checked BASECO children was to undergo a feeding program. Thus, the functional community kitchen, as the focus of this project, could help in addressing nutrition issues, as one of the health concerns of BASECO.

DISCUSSION

The manual as the output of this project aims at providing guidelines in planning community kitchen operations that functions during public health emergencies. When the manual was drafted there were two main considerations such as the guidelines from credible literatures and the experiences of actual community kitchen organizers in this pandemic. Hence, the manual was designed in such a way that lay community kitchen organizers would be guided starting from the community kitchen plan up to implementation of the nutrition program.

During the focus group discussion, the proponent and select community kitchen organizers were able to tackle practices of the group in terms of its operations. The discussion focused on menu and nutrition considerations, food flow practices, costing and forms used. All these practices were taken into consideration to determine what will be the final contents of the manual that a lay person could implement in his/her own community kitchen. Therefore, activity forms were also provided to step-by-step guide the organizers in providing safe, nutritious and accessible meals during public health emergencies, like in the time of COVID-19 pandemic.

As per the respondents, the feeding program that the group organized during this pandemic was its first initiated and planned community kitchen program. The community kitchen was situated in the house of the organization's president. Materials and equipment such as cooking utensils were provided by the members of the BASECO Women's Organization. The program was supposed to last only for 30 days, but with the funding sponsors, the whole program lasted for 162 days. The program operated daily,

Table 1: Menu and Nutrition Considerations

| Area | Practices of BASECO Women’s Organization | Guidelines in the Proponent’s Community Kitchen Manual |
|---|---|---|
| Menu and Nutrition Consideration | <ul style="list-style-type: none"> The community kitchen had a weekly menu, based on the organizer’s select menu, and children’s preferences served once every week, ie, hotdog, embutido, and egg, as they noticed less plate waste. In terms of serving sizes, each child participant in the program was served a daily lunch consisting of one cup of rice, half slice of fish or a slice of chicken (estimated amount is equivalent to one exchange of protein), a cup of vegetables and a slice of fruit for dessert, ie, banana/watermelon/papaya (estimated amount is equivalent to one exchange). The portion size was provided to 6 years old and below. For those whose ages were between 7-10, there was an addition of one cup rice, making two cups per plate per child. However, the serving portion was only based on the group’s personal understanding of the ideal portion size, without consideration of any nutritional guidelines. | <ul style="list-style-type: none"> The proponent included the discussion of Pinggang Pinoy for children 3-12 years old. Pinggang Pinoy is an illustrative food guide that resembles the typical plate which showcases the right proportion of type of food per meal basis.[11] Food aid rations and feeding program during emergencies are discussed. It identified the value of 2100 kcal, regardless of population group during emergency food rations and the estimated amount per day, per person, ie, 10-12% from protein and 17% from fat.[12] Furthermore, the manual also highlighted the importance of dry or take home ration and how to properly distribute those. |

Table 2: Food Flow Practices

| Area | Practices of BASECO Women’s Organization | Guidelines in the Proponent’s Community Kitchen Manual |
|----------------------------|---|--|
| Food Flow Practices | <ul style="list-style-type: none"> Purchasing of the ingredients was done daily due to lack of a refrigerator as a storage equipment. Staff washed the vegetables and fruits, including the meat and fish products. The whole preparation took 3-4 hours. The group started at 6:30 AM and the dishing out was at 10 AM. This was the chosen time for distribution since the students needed to attend online classes. Each beneficiary provided their own plates and utensils, and brought the food home as there was not enough space for the children to eat the meal provided. Due to the COVID-19 pandemic, there should be physical distancing to avoid the possible transmission of the disease. The group had a NO leftover policy, as no storage equipment was provided. The group also worked based on the available borrowed equipment from the members. The group decided to allot 1000-1500 pesos for a lunch meal for 51 children. According to the group, the amount was enough to cover the rice, slice of meat/fish and a slice of fruit per meal for all the beneficiaries | <ul style="list-style-type: none"> The manual contains topic on Food Preparation and Safety Guidelines of Community Kitchen for and during public health emergencies. In this particular discussion, the focus would be general operations, food preparation and cooking, and food distribution in the time of public health emergencies. For a safer kitchen routine, the proponent provided a food safety plan which identifies food safety hazards and preventive measures in all aspects of food flow of the community kitchen. Thus, the equipment can already be identified prior to the project implementation. The unavailable equipment may likewise be considered in food preparation, like for instance, no electricity in the area, and no refrigeration equipment. The manual, instead of providing actual recipes with costing, had a discussion on how to prepare nutritious, safe and accessible dishes using the relief goods and other available ingredients within the community. |

providing lunch, and served 51 children aged 3-10 years old. However, the group mentioned that the project was launched without an actual nutritionist-dietitian guiding them in the program. There were also no Barangay nutrition scholars involved in the

program. Still, the weight of children was monitored weekly through the use of a bathroom scale.

Further, the following practices were noted and served as additional discussions, as elaborated in the proponent’s community kitchen manual:

Table 3: Forms Used

| Area | Practices of BASECO Women’s Organization | Guidelines in the Proponent’s Community Kitchen Manual |
|--------------|--|---|
| Forms | <ul style="list-style-type: none"> • The group used written notes containing: <ul style="list-style-type: none"> A. Market list with prices B. Weight monitoring sheet | <ul style="list-style-type: none"> • The manual provides different templates that are aligned to all the activities provided. Forms were created to ensure that community kitchen organizers are well guided as to what to plan, prepare and monitor. Since these are bound, this can be kept properly to avoid being damaged. |

CONCLUSION

Community kitchens providing well-balanced nutritious meals served regularly may create a longer impact in combatting hunger, especially in vulnerable communities, like in Barangay BASECO. Further, as elaborated by the Global Giving Organization, the community kitchens with collaborations among different stakeholders may implement focused health, education and livelihood programs.

In several areas of the Philippines, local government units and private individuals revived community kitchens during the COVID-19 pandemic, a public health emergency. In Iloilo, for instance, there were 241 daycares and barangay halls, converted to community kitchens, providing 1,903,036 meals to more than 16,000 families. Another urban poor community, San Roque in Agham Road, organized a community kitchen,

feeding 3,000-4,000 families during the Enhanced Community Quarantine[13].

In terms of the select respondents for this project, the Samahan ng Nagkakaisang Kababaihan ng BASECO – BASECO Women’s Organization, the group initiated the feeding program during this pandemic to address hunger among children, a vulnerable population; as the pandemic resulted in economic difficulties – unemployment[14], wherein the parents of children-participants were also affected. Thus, lower income may also result in few food supplies.

With several informal groups facilitating community kitchens and the non-existence of a community kitchen manual, it will be helpful that the guidelines provided by this manual will be able to aid community kitchen organizers. This manual will help the organizer of the community kitchens in terms of operations, resulting in safe, nutritious



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Figure 1: The front page of the developed community kitchen manual

and accessible meals, regardless of the population, in the most challenging time, the public health emergencies.

Finally, it is highly recommended that the remaining phases of the project be executed to validate the manual contents. Also, the manual should have the Filipino version since the proponents aim to implement the use of it in the community. It would be ideal to have the final manual translated by the UST Sentro ng Salin.

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