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CREATE AND IMPROVE THE AWARENESS OF NUTRITION THROUGH TECHNOLOGY

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ABSTRACT

This paper explores how technology can be leveraged to create and improve awareness of nutrition in developing contexts. It highlights the coexistence of undernutrition, micronutrient deficiencies, and diet-related chronic diseases, stressing the need for effective communication and education to promote healthy diets. Case studies such as local production of Plumpy'nut in Tanzania, D-Tree International's mobile diagnostic tools, and Living Goods' nutrition-based social business model demonstrate how technological innovations and mobile platforms can enhance access to therapeutic foods, improve clinical care, and disseminate nutrition messages at the community level. The discussion emphasizes three critical responsibilities for nutrition programs: mobilizing resources, implementing communication strategies, and strengthening human resource capacity for effective nutrition education. Challenges such as limited funding, inadequate training in communication, and resource allocation are addressed, with recommendations for systematic planning and prioritization of communication in health programs. In conclusion, technology-driven approaches ranging from mobile apps to social enterprises offer scalable solutions to improve nutrition awareness and outcomes. By integrating communication strategies with resource mobilization and evaluation, nutrition programs can achieve greater impact in promoting public health and wellbeing.

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INTRODUCTION

Under nutrition, vitamin and mineral deficiencies, obesity and diet-related chronic diseases exist side by side in many countries. Whether food supplies are scarce or abundant, it is essential that people know how best to make use of their resources to ensure nutritional wellbeing. To be adequately nourished, individuals need to have access to sufficient and good quality food and they need an understanding of what constitutes a good diet for health, as well as the skills and motivation to make good food choices. The Nutrition Education and Consumer Awareness Group gives technical assistance to FAO member countries to develop policies and programme that foster public understanding of diets that promote health and raise levels of nutrition.

Developing Local Production Capacity: Many of you are likely familiar with Plumpy'nut, peanut-based a ready-to-use

therapeutic food created over 15 years ago that is used to treat cases of acute malnutrition in children. Until recently, much like traditional food aid, Plumpy'nut was produced exclusively outside of the developing world. The first organization to produce Plumpy'nut in the United States, believed that they could have more impact by producing the foods closer to the areas where they were being used. Since starting the plant in

Rhode Island, Edesia Global has helped a manufacturing plant in Tanzania to produce Plumpy'nut and aims to start other production facilities in other developing countries as well. Local production of Plumpy'nut not only would increase the available supply of RUTFs, but also help develop the market and provide employment opportunities for the local population. Because Plumpy'nut and its related products are peanut-based and do not need refrigeration, they are not only appropriate for East African diets, but also easy to produce locally as well. Edesia Global worked with the manufacturing plant in

Tanzania to transfer the technological skills necessary to produce Plumpy'nut and other therapeutic foods.

D-Tree International: Improving Diagnostics and Treatment of Malnutrition: A major hurdle for tackling the issue of malnutrition is ensuring that people have access to appropriate clinical treatments. In developing countries, particularly rural areas, this can be an extreme challenge given the low number of trained medical professionals and distances between communities and the nearest medical facility. Through the use of available technology, such as mobile phones, D-Tree International has collaborated with local governments and partners to introduce systems to improve access to medical care and ensure that patients are receiving the care that they need. In Tanzania, D-Tree international built electronic decision trees to assist front-line, in-community healthcare workers determine the appropriate course of action for their patients and to help them identify when a patient needed to seek additional, more specialized care. D-Tree also works with medical facilities to standardize health protocols and patient care according to existing international clinical standards through the use of mobile phone apps. The apps guide healthcare workers through the screening, enrollment, physical examination, treatment, counseling and tracking of patients so that medical centers can ensure they are providing the level of care that is needed to treat each patient.

Living Goods: Creating a Nutrition-based Social Business: Many organizations have helped to create social businesses in developing nations that both meet a critical need of the population (eyeglasses, water filters, etc.) while also providing a source of income for the sales force. Living Goods is one such organization that has created a microenterprise model around the sale of health and nutrition products, such as malaria medications, water filters, deforming medications and cook stoves. In addition to product sales, Living Goods sales agents also serve as community health workers and disseminate messages on health and nutrition. Living Goods has integrated the use mobile technology in a creative and highly effective way. All sales agents have cell phones and are on call to answer questions from their clients and other members of the community. The phones help the agents keep in touch with their clients so they know where to go and when, saving on transportation costs. National level marketing campaigns are also conducted through mobile phones. In Uganda, Living Goods conducted a flash sale through an SMS promotion that helped to quadruple the number of clean stoves sold in only four days. There are two "facilitating" strategies that need to be included with the overall communicating strategy. These include (1) a plan for mobilizing resources and (2) a plan for doing formative evaluation (research). First, as regards resources, if radio broadcasts (or other media) are to be used, these questions need to be asked: Who will do it? How will it be done? The attempt to answer these questions may suggest some resource needs: a script-writer, performers, recording facilities, money to purchase time, listening group leaders, or persuasive efforts applied to broadcast station officials, etc. These should be carefully calculated and provision made for obtaining the resources before going into the implementation activities that require them. Anticipation of needed resources - from spare parts to training staff will increase the chances of effective communication.

The Remaining Steps: We have moved through the first two steps of the process suggested earlier. The third step,

implementation, is the most visible part of the communication sector's activities. This is where messages are designed, posters printed, cassettes distributed, etc. These details are vitally important, but of less concern to high-level programme officials than the more macrolevel planning and strategy process discussed earlier. Obviously, the programme official will have an interest in both the implementation and summative evaluation phases, especially that they be carried out in a manner faithful to the strategy. The results of the summative evaluation - if they are to be useful at all - need to be followed by an explicit statement as to future action to be taken. How, for example, do the results influence the initiation or completion of another strategy, or a decision to restate the communication problem?. Dealing with audiences and channels and messages may seem quite distant from issues such as nutrient deficiencies, diarrhea, and the weight-for-height charts that nutritionists may be more comfortable with, but it bears repeating that effective communication methods may be as vital to improving the nutritional status of a population as a sanitary water supply or special formula supplements. That is why leaders of community or national nutrition programmers must demand the kind of detailed planning for the communication sector that is outlined above. This leads us to the third responsibility that nutrition officials have.

Mobilizing Resources: It is a rare agency that has all the resources it needs or wants to carry out its mission. The communication sector in a nutrition programmed is quite likely to suffer in resource allocations because microphones or cassette tapes or projectors seem less vital than vaccines, vitamins, and medicines. In addition, the health and medical items are more visible symbols of health-care services offered by the health establishment.

If, however, nutrition programmed leaders have accepted and committed themselves to the first two responsibilities outlined above, it is imperative that they give higher priority to providing reasonable resources for communication activities. Examination of budget allocations for nutrition and health education communication suggests that these kinds of activities tend to get token amounts of money, or what is left over after other needs have been met. One reason is that, in planning and budgeting activities, there are seldom advocates speaking as forcefully for the communication sector as those speaking for the medical, health, and nutrition sectors and the conventional resources they require.

If there is to be effective communication for nutrition in primary health programmers the medical doctors and nutrition experts who are most influential in allocation of resources will need to lobby for additional resources for communication, or increase the priority of communication resources in the competition for what overall support is available. In addition, more attention needs to be paid to the development of human communication resources within the nutrition establishment. It is a sad state of affairs when persons whose principal activity is based largely on communication have little professional training to do that kind of work. What is the balance between technical training and communication training for those persons who work directly with the public? Too frequently we assume that communication is "natural," and that to have effective extension agents and nutrition aides it is only necessary to provide them with technical information.

What can be done? Nutrition and health officials need to initiate or support efforts to examine the job responsibilities of the people working on their programmes to discover if and where communication plays a significant role in their activities. Does their successful performance depend on effective communication? This was done in Thailand, where the Ministry of Health now uses the phrase "village health communicator" to describe one of the two kinds of health volunteers working at the community level. The re-examination of job tasks should lead to a systematic effort, through in-service training, to upgrade health-care workers' skills for communicating about nutrition and related topics. This should be a priority issue.

CONCLUSION

In reviewing these three responsibilities for bringing about more effective communication for nutrition in primary health care, it should be clear that senior-level health and nutrition professionals need not change the nature of their careers and become communication experts.

But they do need to understand enough about what can be done with communication so that, in their influential positions, they can demand systematic, quality planning and performance from the communication sector, and, given the expectation that it is forthcoming, support resource allocations for both vitamins and video cassettes.

REFERENCES

- Cole, R.D. 1981. "Tasks Required for Technical Management and Supervision in Rural Health and Development Programs," in *The Training and Support of Primary Health Care Workers* (National Council for International Health, Washington, D.C. Semen, M.J. R.D. Cole, N.T. Uphoff, *et al.* 1980. *Paraprofessionals in Rural Development, A State-of-the-Art* (Center for International Studies, Cornell University, Ithaca, N.Y.
- Winichagoon P. *et al.* 1983 "A Cassette-tape Recorder Technique as an Approach to Nutrition Education of Rural Mothers in Northeast Thailand," mimeo (Institute of Nutrition, Mahidol University, Bangkok).
