Health Economics: Making communications on maternal nutrition work

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Key messages

- For millennia, the best approach to maternal nutrition and breastfeeding has been the subject of debate – usually without involving directly affected mothers.
- The economic growth potential of maternal nutrition should be given greater emphasis in communications on the topic.
- Learning from the health communication activities of the past shows that nutrition communication can only be successful if it is dialogue-oriented and if the relevant target groups are involved.

The ancient debate on maternal nutrition

As long ago as the days of Ancient Greece and Rome, maternal nutrition and breastfeeding were the subject of controversial public debate. However, these topics were mainly discussed by wealthy and well-educated men such as Pseudo-Plutarch or Tacitus, without involving directly affected mothers at all.

Even 2,000 years ago, social and regional contexts played a crucial role in differentiating approaches to early childhood nutrition and care.[1] Historic sources state, for instance, that malnutrition due to overly short or otherwise inadequate breastfeeding results in bladder stones and anemia.[2]

Historic sources that discuss breast-milk substitutes – for instance, honey potions or diluted wine – indicate that the use of animal milk and milk substitutes was not common compared with breastfeeding and wet nursing. To avoid putting very young babies at risk, wet nurses were the subject of stringent behavioral and dietary rules. The arguments in favor of breastfeeding, however, were based not on scientific, medical or nutritional findings but rather on popular psychological rationales or the supposed laws of nature.

In our own 21st century, the debate on maternal nutrition and breastfeeding is still very much alive, but, sadly, "despite impressive scientific advances and massive economic growth … the hope of achieving significantly improved health for a greater proportion of the world's people … has become an even more distant prospect."[3]

Maternal nutritional status during and after pregnancy has a crucial influence on fetal growth and early child development and later exposure to the risk of contracting a wide variety of communicable and non-communicable diseases. Pregnant and breastfeeding women are in a particular phase of life and have very special dietary needs.

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Achieving goals in the fields of adherence and prevention is very often dependent on behavior change on the part of the target groups. Experience to date indicates that recommendations for healthy nutrition or dietary supplementation are often poorly implemented during and after pregnancy, either because pregnant or breastfeeding mothers have their own ideas about appropriate nutrition and dietary supplementation or else because they lack the prerequisite knowledge. The sources of advice most trusted today in matters of diet are general medical practitioners and the Internet. It is well known that effective health communication and education are very powerful tools for behavior change in matters of nutrition.[4] However, this is

A baby at the breast. The best approach to maternal nutrition and breastfeeding has been the subject of debate for millennia.

only the case if the traditional communication is replaced by a more dialogue-based approach that is tailored to the specific target group.[5]

Maternal nutrition as a global communication challenge

From a health economics point of view, improving maternal nutrition can succeed only if "countries have considerable self-interest in improving the health of their own … population."[6] However, the motivation behind these efforts is not purely philanthropic. Political and economic leaders have learned in recent years that many countries will not be able to climb out of poverty as long as a major part of their population is unable to achieve the nutritional status necessary for a healthy and productive life. For this reason, the effective communication of general nutrition concepts is of extreme relevance to the economics of healthcare. Undernutrition reduces economic growth by at least 8%. The quality of nutrition a child receives while in the womb and during its infancy has irreversible effects on its future health and development.[7]

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Despite the importance of the link between early nutritional input and subsequent growth and development, the history of the Western world shows that this issue has not been at the top of the agenda of the world's political leaders – or, indeed, of the majority of pregnant and (breastfeeding) mothers, either.

Public health has always been influenced by medical and scientific arguments as well as by ethical and political considerations.[8] In the Great Britain of the 19th century, for example, the majority of today's elemental rules of infant care simply did not exist. Many poor people did not make use of midwives for the delivery of babies, and if the mother died in childbirth, the baby was allowed to die as well.[9] "Thousands of babies were born annually to mothers who were underweight and undernourished, who had contracted pelvises, who worked too hard … during the pregnancy, and who received no sound advice, either from health societies, or from any supporting network of women, about pre- and antenatal care."[10] The question is therefore whether health communication about maternal nutrition seen from an economic perspective should simply focus on the prevention of deficiencies or should rather highlight the positive biological effects of maternal nutrition on (lifetime) health. The answer is obvious: both.

Just over a decade ago, Szwajcer analyzed the nutrition-related information-seeking behaviors and motives of young Dutch women before and during pregnancy. The main information sources of the test group were the Internet and their own social environment. Pregnancy-specific nutrition information was important to the test group because such information helps protect the health of the fetus.[11] In Asia (e.g. Bangladesh), lack of (health) education, client orientation and direct communication on the part of health personnel[12] leads to a lack of knowledge about ante- and postnatal care and maternal nutrition, and the services offered are therefore not well accepted.[13] For efficient and effective nutrition programming, communication is key.

Good health communication offers economic and personal benefits

Since the 1980s, most health communication activities have focused primarily on behavior change methodologies as promoted in expert circles and leading media. The protagonists have overestimated the effectiveness of these activities, because they have focused too heavily on telling people what to do in a very sophisticated manner rather than listening to and involving the target groups themselves. Apart from a frequent disregard for the sociocultural attributes and educational background of the target groups, one chief error has been the lack of interest shown in the information tools normally used by, for example, malnourished women. Furthermore, health communication has mainly been seen as a one-way street. In the USA and Japan, for example, education, household income and other social determinants are the main drivers of different approaches to accessing health information, as well as of disparities in health status.[14] However, compared with health information supplied by healthcare providers and the Internet, levels of trust in health information provided by the mass media are not linked to socioeconomic status.[15] Empowering the poorest by informing them about health benefits should therefore involve two-way communication.

Today, a variety of much more target-group-oriented communication approaches have been developed and put into practice. According to Servaesa and Malikhaob, successful health communication should consist of behavior change communication, mass communication, advocacy communication, participatory communication, and structural and sustainable social change communication.[16] To be successful, behavior change communication has to be interpersonal. Mass communication should focus on special community media and platforms and mass media. Advocacy communication has to consist of both interpersonal communication and mass communication, while participatory communication should be based on interpersonal communication and communities. Structural and sustainable social change communication should be an amalgam of interpersonal, partici-

patory and mass communication. However, what mothers generally want from health care professionals is advice.[17]

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Every patient-centered communication initiative has to be adapted to the specific situation and needs of the individual target group. Key to the success of all public health communication activities is a strategy-based approach – and this is the reason why so many health communication initiatives fail.

Conclusion

Today, the role of media- and dialogue-oriented communication in influencing health is well acknowledged. The main issue to be addressed is the communication focus in the context of maternal nutrition. Maternal nutrition communication should not be one-dimensional. To achieve a change of mindset, it has to address both the affected individual and the more general economic potential of good maternal nutrition.

To achieve a broader social acceptance of maternal nutrition campaigns and activities, health workers should therefore reconsider their approach and try to base their communication activities on two different aspects: **a)** the individual and economic outcome of efficient maternal nutrition; and **b)** a less dogmatic approach to their style of communication. The critical success factor is, however, target group orientation.

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