

## **COMMUNICATION STRATEGIES AND MEDIA ROLE TO PROMOTE SUCCESSFUL BREASTFEEDING**

Emma Mirza Wati Mohamad  
Universiti Kebangsaan Malaysia

### **Abstract**

In the area of health communication, little focus is given to the study on breastfeeding promotion as opposed to other deadly health issues such as AIDS and cancer. This is rather sad given that the benefit of breastfeeding has been proven able to help prevent mothers and babies from developing some diseases in the future such as cancer, asthma and obesity. Hence, the purpose of this article is to look at the communication strategies, policies and media role in promoting health, specifically on breastfeeding initiatives. Based on findings from a study using three focus groups, it was found that information on breastfeeding is still very limited. The media especially television tend to promote information on formula milk which comes in the form of advertisements. However, most information on breastfeeding is obtained from the Internet. The study suggests that the media and the government should be more constant and proactive in disseminating more breastfeeding information to promote breastfeeding-friendly environment.

### **Strategi Komunikasi dan Peranan Media dalam Mempromosikan Penyusuan Susu Ibu**

### **Abstrak**

Dalam bidang komunikasi kesihatan, terlalu sedikit fokus diberikan kepada kajian mengenai promosi penggunaan susu ibu berbanding dengan tumpuan kepada isu-isu lain seperti AIDS dan kanser. Keadaan ini amat menyedihkan memandangkan kelebihan penggunaan susu ibu yang telah dibuktikan dapat mengelak dari berbagai jenis penyakit di masa akan datang seperti kanser, lelah dan obesiti. Tujuan makalah ini adalah untuk mengkaji strategi komunikasi, polisi dan peranan media dalam mempromosi kesihatan terutamanya inisiatif terhadap penggunaan susu ibu. Berdasarkan kajian daripada tiga kumpulan fokus, didapati bahawa maklumat tentang penggunaan susu ibu masih terbatas. Pihak media terutamanya television berkecenderungan mempromosi maklumat tentang susu formula yang seringkali datang dalam bentuk iklan. Walau bagaimana pun, kebanyakan maklumat tentang susu ibu hanya diperolehi daripada Internet. Kajian mencadangkan agar pihak media dan kerajaan perlu lebih kerab dan proaktif dalam menyampaikan maklumat mengenai penggunaan susu ibu untuk mewujudkan suatu persekitaran yang positif terhadap penggunaan susu ibu.

**Keywords:** *Health communication, breastfeeding, information dissemination, communication strategies, health promotion.*

## **Introduction**

This research project is interested to look at the communication strategies, policies and media role to promote health, specifically on breastfeeding initiatives. In the area of health communication, little limelight is given to the study on breastfeeding promotion as opposed to other deadly health issues such as AIDS and cancer. This is rather sad given that the benefit of breastfeeding has been proven able to help prevent mothers and babies from developing some of these so-called 'popular' diseases in the future such as cancer, asthma and obesity.

Women who breastfeed are less likely to develop osteoporosis and breast cancer ( Labbockm, 1999; Enger et. al., 1997; Michels, 1996); they may also have less stress and better social interactions (Uvans-Moberg, 1998). In addition, further breastfeeding empowers low income women (Locklin & Nabor, 1993) and can help with pregnancy spacing (Labbock, 1999).

Infants who are breastfed exclusively for at least 4 months have fewer incidences of Sudden Infant Death Syndrome (SIDS) (Ford et. al., 1993), ear infections, diarrhea (Sciarti et. al., 1997), and allergies (Saarinen & Kajosaari, 1995). Breastfed infants, when compared to formula fed infants, have increased immunoglobulins, antibody production, resistance to pathogens, bonding with their mothers, potentially increased intellectual development (Lucas, 1992 ; Lucas, 1994; Horwood & Fergusson, 1998), and improved health outcomes later in life (Cunningham, 1991; Newman, 1995). The health benefits of breastfeeding are also dose-dependent, meaning that breastfeeding longer and exclusively confers greater health benefits to the infant (Lawrence, 1997) .

World Health Organization (WHO) recommends that women especially in the developing world should exclusively breastfeed their babies for the first 6 months of life. They should then carry on to breastfeed until the child reaches two years old. WHO defines exclusive breastfeeding as feeding a child only with breast milk, which means no additional supplementation such as water, juices, or solids introduced to the baby before 6 months. However, medications such as vitamin/mineral supplements are allowed when exclusively breastfeeding.

Breastfeeding may seem to look as if it is the easiest instinctive thing to do. However, this is not entirely true. A lot of people are not aware that most mothers do need assistance and the most important thing is for them to learn the correct breastfeeding techniques (WHO, 1998). This is supported by Hofmeyr et. al. (1991) who found out in his research that there was a significant difference in breastfeeding rate between mothers who received continuous moral support and those who didn't.

Mothers who recently gave birth are physically weak and emotionally fatigue, therefore it is the healthcare providers that should provide sufficient support to assist mothers to breastfeed. Incorrect assistance from health staff has also been recognized as a major obstacle to successful breastfeeding (Winikoff et. al., 1986; Garforth & Garcia, 1989; Rajan, 1993).

Immediate breastfeeding support right after delivery such as holding the baby to the breast, teaching the right techniques and making sure the baby latch on properly are among the assistance that should be provided. This is the critical stage that may determine whether the mother will be able to breastfeed successfully or not. Skin-to-skin touch within the first half-hour after birth is proven crucial to initiate milk lactation and successful breastfeeding (Sosa, 1976; Rosenblatt, 1994; Widstrom et. al. 1990).

Recognizing the importance of establishing good breastfeeding support, this research hopes to see how much assistance are available to mothers and how successful our present policies and strategies to encourage exclusive breastfeeding. This research is also interested to look at media role in promoting breastfeeding friendly environment.

### **Policies and Strategies Implemented**

The Malaysian Government was among the earliest to respond to the need of breastfeeding-friendly environment by extending its promotion on breastfeeding programs into hospitals. This is as an outcome of United Nations Children's Fund (UNICEF) and WHO introducing the Baby-Friendly Initiative (BFHI). This policy is to ensure that the health care providers are actively advocating breastfeeding and discontinued the routine practice of giving bottle feeds to newborns.

The first Baby-Friendly Hospital was declared in 1993 and within just 4 years, all Ministry of Health hospitals were declared Baby-Friendly Hospitals. Malaysia was even recognized by WHO as the third country in the world, after Sweden and Oman, to have successfully accredited all its Government hospitals as Baby-Friendly.

Aside from BFHI, the government also pledged their commitment by adopting the International Code of Marketing of Breast-milk Substitutes with the aim to protect, promote and support appropriate infant and young child feeding practices. The Code is a set of recommendations to regulate the marketing of breast-milk substitutes like formula milk, feeding bottles and teats. It is part of the response to the awareness that poor infant feeding practices can negatively affect the growth, health and development of children (WHO, 2006).

It seems that with all the aid and support given by the government and healthcare providers it is to no surprise that more Malaysian women are becoming aware of the importance of breast milk to their children. However, surprisingly the number of exclusive breastfeeding mothers in this country does not seem to reflect the government's gregarious effort implementing BFHI and adopting the International Code of Marketing of Breast-milk Substitutes. Shockingly, only 29 percent mothers exclusive breastfeed their babies in the first 6 months, and only 12 percent of them carry on to breastfeed until the baby reaches two years old (UNICEF, 2005). This is rather sad especially considering that the 'core business' of the International Code of Marketing of Breast-milk Substitutes and BFHI is to help prepare the mothers to breastfeed.

Could it be that they do not have enough education materials to go around? Or did the problem occur during the execution stage? Not enough trained health professionals perhaps? Whatever reasons behind this failure need to be identified and addressed comprehensively so that more

women will be able to exclusively breastfeed successfully, which can later help the realization of The International Code of Marketing of Breast-milk substitutes and BHFI objectives.

### **Problem Statement**

The environment for communicating about health has changed extensively. Dramatic increases in the number of diseases and health issues are becoming significantly distressing. People are becoming more concerned about their wellbeing and willing to spend thousands of dollars just to stay healthy.

A study done in 2006 by Organization for Economic Co-operation and Development (OECD) to look at the growing pressure on public health spending over and above effects of ageing society revealed that public spending on health and long-term care in OECD countries will double by 2050. Even if governments manage to contain rising costs, spending would still amount to the equivalent of around 10% of GDP by the middle of the century.

The study also indicated that advances in medical technology and rapid increases on health services are the main causes for increasing trend of health spending. Even where new technology brings down the cost of a treatment, public spending may rise as demand for the treatment increases. It is these factors, which will put the most pressure on health spending over the long term.

Judging by this trends, there are two initiatives that can be drawn from this revelation; first, we should invest money on health insurance now for the use of future health treatments, and second, we must try as much as possible to maintain our health today and take care of our children's health. And one of the smartest ways to maintain health is to watch our food and nutrition intake.

Media can play a role to encourage healthy living. At present, there are numerous communication channels emerging and the assumption is that these mediums are able to assist us in disseminating and educating the public on health issues. Making full use of these channels, government and international health agencies have utilized both traditional as well as the online media to disseminate civic health messages in hopes to achieve maximum public health awareness.

It may seem comforting to know that we have various channels to broadcast information on health and diseases, and that information is reached at multi levels. However, one of the main challenges in designing health communication programs is to make sure the message reach the public effectively. This means that we need to identify the optimal context, channels, content and reasons that will motivate people to pay attention and use health information. This is supported by Hornick (2006) who pointed out that people less give attention to the problem of message exposure. The concern is to make sure that the target audience is exposed.

To make sure everyone is exposed is even harder when we have to deal with multicultural setting. Different communities have different beliefs and level of reception towards health meanings. Studies have shown that only exclusively designed health communication programs / messages will effectively reach culturally unique population. This is concurred by Kreps &

Kunimoto (1994) who pointed out that health care providers must be receptive and responsive to the information and communication needs of consumers in multicultural settings.

### **Research Objectives**

- 1 To look at how culture and beliefs influence breastfeeding behavior.
- 2 To look at media role as one of the support system in motivating mothers to breastfeed exclusively.
- 3 To suggest some improvements on the local health communication strategies, practices and policies to promote breastfeeding friendly environment.

### **Research Questions**

- 1 How effective are the present communication policies and strategies in promoting exclusive breastfeeding?
- 2 How local culture and beliefs influence breastfeeding behavior?
- 3 How media can help to educate, motivate and support mothers to breastfeed exclusively and to promote a more breastfeeding friendly environment?

### **Literature Review**

Geist-Martin, Ray and Sharf (2003) define health communication as a study and use of communication strategies to inform and influence individual and community decisions that enhance health. This involves a wide range of messages and media in the context of health maintenance, health promotion, diseases preventing, treatment and advocacy touching on aspects like situations, structures, roles, relationships, identities, goals and strategies of social influence.

Kreps and Kunimoto (1994) pointed out that when handling multicultural settings, health care providers must be receptive and responsive to the information and communication needs of consumers, inviting consumers to participate fully in health care decision making. They also stated that consumer participation in health care teams can help promote increased cooperation and collaboration between providers and consumers.

Gwyn (2002) highlighted that the media has overwhelmingly played on health issues in television which has help generate a pervasive public obsession with health. Using strategies like 'health scares' in movies and television dramas to communicate on diseases like HIV/AIDS and epidemic, the media could help public to realistically grasp the message within a fictional setting. However health scare technique may not be suitable to promote exclusive breastfeeding.

Morton and Duck (2001) in his study found out that there is some evidence that media primarily affect perceptions of risk to other people and beliefs about others may have little direct effect on individual health behavior. However Morton and Duck trust that such beliefs may contribute to how public understand their own health and assist them in health decision making in the broader context.

Kennedy et al. (2004) found out that public can be motivated to seek health information by a dramatic, televised storyline that addresses health issues. Under the right circumstances, this approach can be manipulated to educate and stimulate the public to seek more information on breastfeeding.

Calderon & Beltran (2004) pointed out that the readability of health information does not match the literacy skills of general populations. The language of health is English and this could be a problem for non English speaking community. Besides that, medical terms and jargons are sometimes too complicated and hard to understand especially for people like us.

### **Methodology and Sampling**

Method of choice for this project is focus group. This research used 3 focus group discussion with working mothers to look at their experience and perceptions on breastfeeding. This method was chosen because of its advantage being able to set the discussion mood into the most natural setting. This is important as the researcher need her informants to be comfortable while sharing and discussing their breastfeeding experience. Talking to each other has made the informants felt less tense and they are more open up to discuss on intimate details.

Guided by the social constructionist perspective, the researcher was interested to see how these working mothers react towards the issue of breastfeeding and their interpretation of the policies related to breastfeeding. A discussion using circular interview technique was used so that informants felt free to speak up anytime they felt like voicing out. Everyone had an equal chance to speak.

### **Findings and Discussion**

#### **1. Limited and segmented information on breastfeeding**

All the mothers agreed that information on breastfeeding is still limited. Most of them seek

information on breastfeeding from the Internet. Many of the sources are from websites from the U.S and U.K which sometimes are not suitable to be applied locally. The only books available are mostly written in English and most of the time the content is irrelevant to be applied into the local setting. They do acquire some information from the local magazines but only in certain magazines such as PaMa, which is targeted for mothers and pregnant women. All of them agreed that they have not heard about breastfeeding in the media other than the source aforementioned. However they hope to see that breastfeeding information will soon be available in media targeting wider audience such as in popular TV programs and newspapers. So far, Internet forums have provided some help that they need. Among those quoted saying information was not enough was as below:

*“I didn’t know much about Expressed Breast Milk. I just got to know about it from susuibu.com. But it was too late. I only managed to breastfeed during confinement only.” “Me too. When I read susuibu.com only then I got the idea on how to make breast milk stock.*

The mothers also strongly believed that mental preparation to exclusive breastfeed is important and should start as early as during pregnancy. This is to give ample time to learn the techniques, talk to families on their intention, gain enough support groups etc. This is because the mothers agreed that exclusive breastfeeding is not an easy experience, especially with working mothers. However they all agree that with more experience expressing breast milk and sustaining lactation will improve in time.

## 2. Healthcare support proves crucial

The environment from the hospital or clinic where they deliver their baby or undergo for pregnancy check ups influenced their confidence level to breastfeed. Some of them who delivered at certain hospitals which are not baby-friendly enough doubted themselves and were unconfident that they can breastfeed exclusively. Those who had higher confidence to exclusively breastfeed had great support from the health care providers. Self confidence is seen to be one of the major factors which can determines whether a mother successfully breastfeed or not. Among those quoted on healthcare provider’s support influenced their breastfeeding was as below:

*“Government hospitals do provide information on breastfeeding. But most of them do not really show the right techniques to breastfeed and do not provide help to the mothers. They let the mothers breastfeed on their own” “Government hospitals only teach us the conventional way to expressed milk. Using hands.” “I never got any information about breastfeeding during maternal check ups” “When I went to register, the nurses ask me to join their antenatal and breastfeeding classes.”*

The mothers also revealed that some healthcare providers do not provide enough moral support like they should have and there are some who do not respect the mother’s wish to exclusively breastfeed their baby. This tendency is found especially in private hospitals, where some doctors and nurses disregard the mother’s intention to exclusively breastfeed the baby and feed them

with formula milk without the mother's permission. Among those quoted was as below:

*“When my babies was brought out from the Operation Theater they were fed with formula milk. They didn't even ask for my permission first”*

*“I think the nurse have fed my baby with formula milk before, although I have stated to my gynae that I intend to exclusively breastfeed.”*

### 3. Moral and Physical Support Needed

Moral and physical support was found to be very crucial in sustaining the motivation to breastfeed. All of these mothers received full support from their husbands and other mothers who also advocate on breastfeeding, like those in susuibu forum. Some who received discouragements from family members, especially the grandmothers feel down and unconfident to breast feed. However some who have stronger determination prevailed despite having to argue and bicker with unsupportive family members. Among those described the support and discouragements received are as below:

*“My husband gave the biggest support. He was the one to check which breast pump was the best in the market”*

*“My husband found susuibu.com for me.”*

*“I had fights with my mom because of this [exclusive breastfeeding] I was so depressed that I told my mother that I know what's best for my baby”*

*“My maids refuse to feed my twins expressed breast milk. They said it would cause stomach pain”*

*“Lonely grandparents are afraid that breastfeeding will make the baby becomes too attached to the mother. They worry they wont be able to bond with the baby, that's why they will discourage breastfeeding.”*

### 4. Policies and Facilities should be breastfeeding friendly

Work policies and environment was found to be able to affect breastfeeding. Some of the mothers had to express breast milk in public spaces like in prayer room during working hours. One of them described how she had to express milk in the ladies room while one of them did not even attempt to express milk at her work place because there are no private rooms to do so as she is working in a science laboratory, mostly with men. Others were lucky enough to have their own office to express milk. However, all of them still prefer to keep their Expressed Breast Milk (EBM) in their cooler bags than to keep it in the public refrigerator.



Although no one mentioned any problems with their superiors or colleagues regarding their expressing milk routine, but some of them did indicate that there might be some people who may feel uneasy about them doing it in the office. All of their companies do not have a written policy on breastfeeding working mothers in the organization. Among those quoted their experience are as below:

*“I expressed milk in the prayer room... But sometimes, there are people who knock on the door and that makes me stress. I feel like I am not respecting public property”*

*“My boss and officemates are ok [with me breastfeeding]. But I wouldn't know if they say anything behind my back”*

*“I keep my expressed breast milk in my cooler bag. More privacy.”*

The informants also pointed out that the public facilities in Malaysia are not breastfeeding-friendly enough. For instance, there are more changing rooms than breastfeeding rooms available in shopping complexes and public buildings. Even major buildings such as Kuala Lumpur International Airport was missing a breastfeeding room. All but one informant agreed that they still feel uncomfortable breastfeeding in public. Among those quoted are as below:

*“Not comfortable breastfeeding in public”*

*“Stressing.. I feel ashamed if people look at me [breastfeeding]”*

*“Sometimes baby room is located too far away at the other end of a building”*

*“I've been to KLIA baby changing room. I was so surprised to found a man sleeping inside the room. Men shouldn't enter.”*

*“There are more baby changing rooms than nursing rooms in Malaysia.”*

#### 4. Social Responsibility Conflict in the Media

Another interesting issue pointed out in this focus group was that the television advertisements and programs are mostly funded by formula milk companies such as Dutchlady123. This will influenced mothers to trust formula milk and discourage them to breastfeed. This is one of the biggest challenges in promoting breastfeeding. How to get the media to advocate on breastfeeding when their revenue comes from formula milk advertisements? Among those quoted saying media support was not enough are as below:

*“Formula milk ads and campaigns in the media successfully convinced working mothers that it is the most convenient way for them, although it is not better”.*

*“We have to refer back to the campaign messages. Have to show that breastfeeding is simple and everyone can do it.”*

#### 5. Too Strong Advocators can Hamper Mothers to Breastfeed

Another interesting finding was that while some of the informants are strong advocators on breastfeeding, they might not necessarily provide the best support for mothers to breastfeed. This is because subconsciously these strong advocator mothers seemed to pass judgment on the non-breastfeeding mothers and mothers are not able to breastfeed exclusively. Whether it is intentional or unintentional, support should be given to encourage mothers to breastfeed not to

hamper them.

### **Conclusion**

Breastfeeding promotion should be focused in various aspects. Firstly, the media should start being more responsible towards the society by producing more breastfeeding information to promote breastfeeding-friendly environment. Exposure of this information should not be selective to mothers or women only. Everyone should be made known about the benefits of breastfeeding. However, media messages must be tailored according to groups of audiences and not just communicating through a general message.

Healthcare providers should provide more support physically and mentally to mothers. To be able to do this, doctors and nurses must be well trained to handle mothers and are able to show the right techniques to breast feed babies. Hospitals especially private hospitals should start adapting BFHI policies to the fullest. Healthcare providers should start thinking on how to include other family members such as the grandparents to participate in breastfeeding classes so that they continue to support the mothers to breastfeed at home.

Other support centers to encourage breastfeeding should be accessible to women who may need breastfeeding support. Forums such as susuibu.com is a good start, however we need to also take into consideration those who do not have Internet access. Information on breastfeeding must be published in books and other reading material and translated into local language and using simple laymen explanation so that it can reach to a bigger audience.

The government should make it mandatory for all office buildings and major public complexes to be breastfeeding friendly. Buildings should have private and well-maintained breastfeeding room and all employers must be sensitive and understand women employees who wish to express milk during work hours. Public facilities should also be upgraded to be more breastfeeding friendly. Government should be aware that the future major workforce in the country will be women. More than 60 percent of students in higher learning institutes today are women. Policies need to be reassessed and working mothers' needs to breastfeed should be well-supported in order to create a healthier environment and generate more productivity for the country.

### **About the Author**

*Emma Mirza Wati Mohamad is a lecturer at the School of Media and Communication Studies, Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia.*

*For further enquiries, please contact her at email: mirza@ukm.my*

### **References**

- Bennet, P. (2000). *Introduction to clinical health psychology*. Philadelphia: Open University Press.
- Botan, C. H. and Taylor, M. (2004). Public relations: State of the field. *Journal of Communication*, 54(4):645-661.

- Covello, V. T. (2003). Best practices in public health risk and crisis communication. *Journal of Health Communication*, 8(4):4-5.
- Cunningham, A.S., Jelliffe D.B. and Jelliffe, E.F.P. (1991). Breastfeeding and health in the 1980's: a global epidemiologic review. *J Pediatrics* 118:659–666.
- Enger, S., Ross, R., Henderson, B. and Bernstein, L. (1997). Breastfeeding history, pregnancy experience and risk of breast cancer. *Br J Cancer* 76: 118–123.
- Ettema, J. S., Brown, J. W. and Luepker, R. V. (1983). Knowledge Gap Effects in Health Information Campaign. *Public Opinion Quarterly*, 47:516-527.
- Ford, R.P.K., Taylor, B.J., Mitchell, E.A., Enright, S.A., Stewart, A.W. and Becroft D.M.O. (1993). Breastfeeding and the risk of sudden infant death syndrome. *Int J Epidemiol* 22: 885–890.
- Garforth, S. & Garcia, J. (1989). Breast feeding policies in practice – “No wonder why they get confused”. *Midwifery*. 5:75-83.
- Geist-Martin, P., Ray, E. B. and Sharf, B. F. (2003). *Communicating Health: Personal, cultural and political complexities*. Belmont: Thomson Wadsworth.
- Gwyn, R. (2002). *Communicating Health and Illness*. London: SAGE Publications Ltd.
- Heath, R. L., Bradshaw, J. and Lee, J. (2002). Community relationship building: Local leadership in the risk communication infrastructure. *Journal of Public Relations Research*, 14(4):317-353.
- Hofmeyr, G. J. et. al. (1991). Companionship to modify the clinical birth environment: effects on progress and perceptions of labour, and breastfeeding. *British journal of obstetric and gynaecology*, 98(8):756-764.
- Horwood L.J. and Fergusson, D.M. (1998). Breastfeeding and later cognitive and academic outcomes. *Pediatrics* 101:e9.
- Kennedy, M. G., O’Leary, A., Beck, V., Pollard, K. and Simpson, P. (2004). Increases in calls to the CDC National STD and AIDS hotline following AIDS-related episodes in a soap opera. *Journal of Communication*, 54(2):287-301.
- Kitzinger, J. (2003). The Media and Health. In: Alder B, et al. (eds). *Psychology and Health Applied to Medicine*: Elsevier Science.
- Kitzinger, J. (2003). Radical Blueprint for Social Change? Media Representations of New Labour's Policies on Public Health. *Sociology of Health and Illness*, 25(6):532-552.
- Kitzinger, J. (1999). Researching Risk and the Media. *Health, Risk and Society* 1(1):55-69.
- Kitzinger, J. (1998). *The Circuit of Mass Communication: media strategies, representation and audience reception in the AIDS crisis*. London: Sage .
- Koplan, J. P. (2003). Communication during public health emergencies. *Journal of Health Communication*, 8(4):144-145.
- Kreps, G. L. and Kunimoto, E. N. (1994). *Effective communication in multicultural health care settings*. Thousand Oaks: SAGE Publications, Inc.
- Labbock, M. H. (1999). Health sequelae of breast-feeding for the mother. *Clin Perinatol* 26: 491–503.
- Locklin M. P. and Nabor, S. J. (1993). Does breastfeeding empower women? Insights from a subgroup of educated low income minority women. *Birth* 20:30– 35 .
- Lucas, A., Morley, R., Cloe, T.J., and Gore, S.M. (1994). A randomized multicentre study of human milk versus formula and later development in preterm infants. *Arch Dis Child*

- 70:F141–F146 .
- Lucas, A., Morley, R., Cloe, T.J., Lister G. and Leeson-Payne, C. (1992). Breast milk and subsequent intelligence quotient in children born preterm. *Lancet* 339:261–264.
- McKee, N., Manoncourt, E., Chin, S. Y. and Carnegie, R. (eds.). (2000). *Involving People Evolving Behaviour*. Southbound: United Nations (UN) Children's Fund (UNICEF) .
- Michels, K. B., Willett, W.C., Rosner, B. A., Manson, J. E., Junter, D. J. and Colditz G.A. (1996). Prospective assessment of breastfeeding and breast cancer incidence among 89,887 women. *Lancet* 347:431–436 .
- Morton, T. A. and Duck, J. M. (2001). Communication and health beliefs: Mass and interpersonal influences on perceptions of risk to self and others. *Communication Research*, 28(5):602-626.
- Newman, J. (1995). How breast milk protects newborns. *Sci Am* 273:76–79.
- Nicholas, D., Huntington, P., Williams, P., and Gunter, B. (2003). First steps towards providing the UK with health care information and advice via their television sets: An evaluation of four Department of Health sponsored pilot services. *Aslib Proceedings*, 55(3):138-154.
- Nicholas, D., Huntington, P., Williams, P., and Gunter, B. (2001). Delivering consumer health information digitally: Platform comparisons. *Proceedings of International Online Conference*, :145-153.
- Organisation for Economic Co-operation and Development. (2006). Study projects growing pressure on public health spending over and above effects of ageing society. Report of the research is available online at:  
[http://www.oecd.org/document/12/0,2340,en\\_2649\\_37407\\_36079116\\_1\\_1\\_1\\_37407,00.html](http://www.oecd.org/document/12/0,2340,en_2649_37407_36079116_1_1_1_37407,00.html) .
- Parrott, R. (2004). Emphasizing “Communication” in health communication. *Journal of Communication*, 54(4):751-787.
- Rajan, L. (1993). The contribution of professional support, information and consistent correct advice to successful breast feeding. *Midwifery*, 9:197-209.
- Rao, N. and Svenkerud, P. J. (1997). Effective HIV/AIDS prevention communication strategies to reach culturally unique populations: Lessons learned in San Fransisco, U.S.A and Bangkok, Thailand. *International Journal Intercultural Relations*, 22(1):85-105 .
- Rogers, E. M. (1995). *Diffusion of Innovations*. New York: Free Press.
- Rogers, E. M. (1987). The diffusion of innovation in perspective. In Weinstein, N. (ed.). *Taking care: why people take precautions*. New York: Cambridge University Press.
- Rogers, E. M. and Storey, J. D. (1987). Communication campaigns. In Berger, C. R. and Chafee, S. H (eds.). *Handbook of Communication Science*. Beverly Hills: CA: SAGE Publications .
- Rosenblatt, J. S. (1994). Psychology of maternal behaviour: contribution to clinical understanding of maternal behavior among humans. *Acta paediatrica supplement*, 397:3-8.
- Saarinen U.M. and Kajosaari, M. (1995). Breastfeeding as prophylaxis against atopic disease: prospective follow-up study until 17 years old. *Lancet*, 346:1065.
- Sciarti, P.D., Grummer-Strawn L.M. and Fein, S.B. (1997). A longitudinal analysis of infant morbidity and the extent of breastfeeding in the United States. *Pediatrics* 99:e5 .
- Seale, C.F. (2003). *Media and health*. London: Sage Publications.
- Sosa, R. et al. (1976). The effect of early mother-infant contact on breast feeding, infection and

- growth. In Ciba Foundation Symposium No 45. *Breastfeeding and the mother*. Amsterdam, the Netherlands: Elsevier Publishing Co .
- Tyler, T. and Cook, F. (1984). The mass media and judgments of risk: Distinguishing impact on personal and societal level judgments. *Journal of Personality and Social Psychology*, 47:693-708
- Uvans-Moberg, K. 1998. Oxytocin may mediate the benefits of positive social interaction and emotions. *Psychoneuroendocrinology*. 23:819–835.
- Valente, T. H., Paredes, P. and Poppe, P. (1998). Matching the message to the process: The relative ordering of knowledge, attitudes, and practices in behavior change research. *Human Communication Research*, 24(3):367-383.
- Widstrom, A.M. et al. (1990). Short-term effects of early suckling and touch of the nipple on maternal behavior. *Early human development*, 21:153-163.
- Winikoff, B. et al. (1986). Dynamics of infant feeding: Mothers, professionals, and the institutional context in a large urban hospital. *Pediatrics*. 80(3):423-433.
- World Health Organization. (2006). The international code of marketing of breast-milk substitutes. Geneva.
- World Health Organization. (1998). Evidence for the ten steps to successful breastfeeding. Geneva.