CHAPTER-2: Review of the related literature

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2.0 Introduction

Women health information system needs to be looked at in a broader perspective to mobilize the information resource, to make it reachable to the needed community and to develop the feedback system. Further, to achieve the integrated system, existing practice of health education and information dissemination has to be studied in detail. In the existing system, as per the studies, information service has been proposed on a par with social marketing, marketing mix, and various means and media like popular entertainment, Forum Theater etc. to reach community. In case of rural health care services, many studies have recommended to facilitate clients' transition from facility-based to community-based services, coordinated care between in-patient units and rural communities across barriers.

The major issues of women health are relevant to the study are status of women with regard to existing facility and policies, health seeking behavior, health education and information service. The study also has covered various aspects like communication/team effort, awareness/availability of community resources, access to health care services, attitudinal barriers towards information service, and referral/interagency communication.

Majority of the studies for the review are Indian considered as compared with international scenario.

2.1 Status of women

Status of the women highlights the history, social status, psychosocial factors, education factors, socio-economic factors, family dynamics and women participation. Fikree et al (1995) recommended for field-based rapid nutritional and morbidity evaluation to ascertain the health status of pregnant women. Sermsri (1995) found that
household decision-making is dependent on the social status within the family. Butt (1996) suggested, in context of traditionally and biologically imposed duties and burdens of motherhood, that in-laws must be better respected, attention must be given to the family unit and individuals within the family. Women must have both the rights and responsibilities accorded to and expected of men and a suitable judicial and administration framework. Pande (1996) suggested that the women development must be integrated with the economic, social and cultural factors, and also pointed out that the family structure represents women's subordination as natural, and the mechanisms through which that ideology and subordination are sustained. Sarma (1996) further stated that women play a key role in family formation, childbearing, child rearing, socialization, and the development of the family both as biological and viable socioeconomic units.

Kamath (1998) described, historically, that women held high status and had many rights held by men. During the Rig Vedic period- women's status declined, wherein women were viewed as ornamental objects and devoted, unpaid family managers and teachers. During the Sutra period, women were prevented from studying the Vedas and became men's property. Hinduism, Jainism, and Buddhism were widespread. When Verasaiva became popular in the 12th century women promoted equality. Jain women were more enlightened in arts and religion than other women. Verasaiva women held important and honorable vocations in life. Women faced many social evils without freedom. Although education of girls was not widely accepted particularly for the middle and lower classes, actual development still gives the picture that women from royal or rich families received a good education specifically in literature and fine arts. Sati, or women burning themselves at the funeral pyre of their husband, began around the 4th century and was evidenced in Karnataka after the 6th century. The dancing girls
of temples were held in high esteem, after the practice was begun in 778 A.D. Women in Karnataka enjoyed more freedom than women elsewhere in India. Women's position declined during the British rule. Higher status was regained during the freedom struggles of the 1920s and later. The first female literary figure was recognized in 1150. Women writers did not succeed again until the late 1800s. The status of women or other are linked to the promotion programme. In health care service, health is promoted keeping in view of promotion, cure and rehabilitation.

Women health as discipline has undergone a remarkable change in the last one decade.

2.1.1 Women Health

Women health is recognized as a distinct discipline, with approach to care during total life cycle of women. Recently, a good awareness has been created both at health care providers level and the community level to consider women health as a specialization and distinctive problem. Illo (1989) found, in context of primary agents influencing health decisions for family member and the community, that women are socialized to be willing, reliable and efficient managers of other people's health. Sundari (1993) stated that women's health status was dependent on their ability to take care of themselves and their power status in the household. Jato et al (1995) found that husbands are reportedly more concerned about family size limitation; women are empowered to make family planning decisions.

Campero-Cuena (1996) found that the literacy and access to education in general are more important to women health than is health education per se. He also showed that the social situation of women is clearly correlated with their morbidity and mortality, while other studies demonstrate that statistical reports on women health are
influenced by gender. Without analysis of the circumstances in which women live their welfare and general quality of life, many health programs and policies are destined to fail. Women health is understood primarily in terms of their reproductive functions, a limitation with direct repercussions on the types of health services made available to them. A problem such as workplace safety, inadequate sanitary conditions, violence or excessive work for women has been given less attention.

Bajaj (1999) found that the primary reasons for the non-utilization of MCH services is due to the lack of knowledge of the services offered by the government, which attributed to high illiteracy and low accessibility of institutions providing the services. It was further stated that a number of deliveries, in fact, are still conducted at home and continue to be attended by traditional dais under the most unhygienic conditions. It was also found that vaccination rate in slum areas failed to attain the goal of universal immunization against the major vaccine preventable disease due to lack of awareness among women, residing in the slums, on services that are provided by the government. While working out the information support, it is essential to understand various factors affecting health of women.

2.2 Factors affecting Women Health

Major factors that are responsible for women health problems are like social, educational, participatory, economic, behavioral and cultural factors. In developing and under developing countries social education and economical are major factors which can be solved by awareness
2.2.1 Social factors

Social factors are most important, particularly in India, due to prevalence of various caste, creed and religion. Old adage that “Human being is product of environment, particularly social environment” still holds good. Rayappa (1998) found, that females are disadvantaged compared to male due to poverty, lack of food adequacy, single status, landlessness, and social stratification.

2.2.1.1 Legal factors

National policy for the empowerment for women 2001 considered bringing about advancement and empowerment. Kishore (2002) it has considered many aspects in its social empowerment of women such as education, health, nutrition, violence against women, rights of the girl child and mass media. Notably strict enforcement of laws against prenatal sex selection and the practices of female feticide, female infanticide, child marriage, child abuse and child prostitution, etc., removal of discrimination in the treatment of the girl child within the family and outside and projection of a positive image of the girl child will be actively fostered. Also, it will be used to portray images consistent with human dignity of girls and women.

2.2.2 Educational factors

Education is considered, as a prerequisite for everyone in all walks of life, may be for male or for female. In the context of information service, education plays an important role. Ratnaike and Chinner (1992) stressed on teaching methods, use of teaching aids to female community health workers. United Nations: Department for Economic and Social Information and Policy Analysis. Population Division, (1995) in
its survey highlighted that gender equality in education should be promoted solely on the grounds of human rights, and it warrants policy attention.

Jejeebhoy (1993) found that education affects fertility, contraceptive usage and family size. Felix de Sousa (1995) found suitable the feminist-oriented training, based largely on small group discussions, to create positive changes in their relationships with self and others. It was suggested that training should be a collective action, to overcome negative attitudes toward health. The importance, of nutrition, of treating skin diseases and diabetes, and managing stress, blood pressure control, treating circulation problems, eating better, exercising and preparing home medicines was highlighted.

Prahlad (1995) highlighted that women’s literacy rates increased during the 1970's with and a further step increase during the early to mid 1980s. It was suggested that distance education is suitable for women. Sermsri (1995) stressed the need for research on the role of non-formal education, such as in-house training, occupational training, community education, home handicraft training, and exposure to educational media.

Thiagarajan (1995) suggested for democratizing the educational process regardless of time, space, sex, creed, community or religion with the improvements of print-based materials, and self-learning strategies. Rao (1998) found obstacles to girls’ education such as facilities time for school and curricula, as well as home factors.

2.2.3 Cultural factor

Anonymous (1999) identified cultural beliefs and practices have been identified as problems, which hold back the improvement of women health, especially their reproductive health. Problems include preference for son, pregnancy and childbirth taboos, traditional contraceptive and abortion methods, sati, dowry killings and patriarchy.
Acsadi and Johnson-Acsadi (1993) found that a number of factors viz- gender differences, gender preference, attitudes towards girls, behavioral manifestations of negative attitudes, access to health care, education, the work burden and marriage age, long-term implications of gender discrimination and maltreatment in childhood upon physical and mental health are detrimental to women health.

Education factors need to be supported by multi-media materials and distance education taking into consideration convenient time, preferably home-based learning, irrespective of caste, creed and socio-economic background.

2.2.4 Participation factor

Participation is lacking due to discrimination and inhibition of heterogeneous and like poor v/s rich, literate v/s illiterate, urban v/s rural, and isolation of slum dwellers. Ratnaike and Chinner (1992) found community participation is major determinant and lack of participation being due to a lack of community awareness and resentment of “top down” messages, authoritarian behavior and cultural insensitivity. The women’s group is the most important for programme success. Chandra (1996) found that the female participation rate in the country is 51% wherein the number of women who work part-time or do domestic chores included. Sarma (1996) opined that women’s participation in national socio-economic development issues relating to education, literacy, safe motherhood and child survival needs are integral components of overall development of women.

Naidu and Chandralekha (1998) stated that community participation is the process of change, liberated from crippling traditions and from want and deprivation. There are participatory strategies that can act as agents of change and overcome barriers to women’s involvement in the development process. They also stressed upon the need to
identify influential leaders, existing resources, to facilitate access to resources, and to encourage cooperative action. Though participation is important however barriers such as economic, access, employability, social, traditional and cultural, health and nutritional, educational, and technological equally are dominating.

2.2.5 Behavioral factors

Behavior is predominantly depending on exposure to socio-economic condition, education, socialization of women and facilities available. Weisman (1987) found that male and female respondents were more willing to disclose symptoms to a physician of the same sex than to a physician of the opposite sex. Patients prefer to be treated by a physician of the same sex, when a sex-specific condition of a highly personal or sensitive nature, or a long-term relationship between physician and patient is required. It was noticed that in context of provider-patient communication, female patients ask more questions than male patients at the medical encounter. Numerous studies report that physicians generally underestimate their patient’s desire for information.

Hasting and Haywood (1991) opined that health-seeking behavior depends on the age, sex, social class, family influence educational background and religious beliefs. Seguin and Rancourt (1996) found that if assured of anonymity, women express their fears and are ready to break their silence. Bane (1997) opined that barriers, stigma experienced in seeking help, and lack of privacy are major factors of inhibition. In health seeking behavior of women in villages or small rural communities, varies as everyone tends to know and recognize everyone else, because of less population.

The attainment of health is predominately depends on health seeking behavior.
2.3 Women health seeking behavior

In India health-seeking behavior varies from region to region, due to many social factors. Kavitha (2002) identified female autonomy and education shows significant association on the treatment-seeking behavior. Das et al (2001) found that the main factors affecting utilization appear to be demand factors, such as women’s education, exposure to mass media and son preference. Gupta et al. (2001) found better interspousal communication in upper castes and joint families. Literacy status of both husband and wife and per capita income of the family have positive relationship with interspousal communication. Adoption and practice of FP methods as well as full immunization coverage of the child in the family were observed to be higher among high and medium communication families as compared to low degree of communication families.

Griffiths et al (2001) found that women perceived private services to be superior to those provided by the government, but due to the cost they were unable to approach them. He also opined that the poor quality of services offered at government institutions was the main factor for deliveries being performed at home. Prakasam (2001) found that women in a better socioeconomic position are more likely to utilize health care services. Further women who have some education are more likely to utilize health services than illiterate women. Exposure to media encourages women to avail the health care services, while religion has mixed effect. Andrade et al (1999) opined that employment might benefit women but stress their husbands.

Morre (1999) found that knowledge of the fertile period and symptoms of pregnancy complications were highest among women from high socioeconomic status. Chandrasekaran et al (1965) conducted a survey of 10 clinics in the Greater Bombay area regarding contraception, found that there is no relationship to income, education or
mother tongue in its use. The health seeking behavior of women depends on the accessibility, autonomy, cost of care and more importantly availability of female doctors to attend to them.

The promotion of any service should be directed in consonance with the health seeking behavior and the affordability of the individual. In case of women health promotion needs a distinct feature due to various limitations of women in accessing health.

2.4 Health promotion

It is well known that health has to be attained it cannot be imposed. Hence, health promotion has been undertaken through many activities, in addition to prophylaxis and health education. Sundaram (1988) suggested non-formal education about supplementary food, immunization, nutrition and health referral services. Northrup et al (1990) suggested to increase community participation in decision making and adopt local needs by political groups, improved communication with institutions, dialogue with traditional healers, dialogue with mothers, and meeting with community representatives, and for effective communication within the community and improved training methods for mothers and health care providers. Mabulay and Subingsubing (1992) recommended for multi sectoral community coalition with community groups, satellite centers, health centers within communities and to engage the community actively in securing proper child health and awareness through mother’s groups. Cardaci (1994) found that the level of schooling and age were not significantly related to variables such as knowledge on use of contraceptive methods, family size number of offsprings and/or abortions, length of breast feeding period and self-medication. Swanson (1999) found that there is lack of needed medical care for women under use
of preventive services, depression and low self-esteem, abuse and poor physician communication. He also pointed out that health promotion and disease prevention among women must focus on wellness and self-care, must be encouraged as a multi-dimensional phenomenon and be taught and integrated throughout the life span. Further, it was recommended that the goal of trans-cultural endeavor should be to implement health protection and health promotion as a way of life for all individuals and families as they pursue their life’s goals with vigour and pleasure.

Bender De and McCann (2000) suggested that the grandmother’s education does exert an effect on health behaviors above and beyond the effect of maternal education. It was observed that influence of the grandmothers in the, development of culturally sensitive quality health programs is more. Zoubi et al (1990) pointed out that many factors affect health, viz. age, sex household composition, educational level, housing characteristics, household durable goods, marital status, access to mass media, birth intervals, age at first birth, teenage fertility, knowledge of contraceptive methods and sources, timing of sterilization, acceptability of mass media for messages, ever-married women, marital exposure, postpartum amenorrhea and insusceptibility, termination of and exposure of risk to pregnancy, fertility preferences by age, and by number of living children, desire to stop having children, child mortality by background vaccination, place and assistance in delivery, vaccination by source of information prevalence and treatment of diarrhea, knowledge and use of oral dehydration packets, breast-feeding and nutritional status.

Pyke (1996) recommended that proper accessibility, availability, and appropriateness of services for individuals and their families are a priority for healthy communities. Sheldon-Keller et al (1996) found that the need for services in rural settings is no less diverse than in urban settings, but access to and provision of an
adequate range of health care services typically is much more difficult. Bane (1997) found abundant evidence concerning urban-rural differences in access, availability, staffing and quality of health care services.

Most successful in self-help groups are promotion of health and creation of awareness in the community. A self-help group is a group of people suffering from similar health problems and undergoing successful treatment. They have discussions among themselves through which they understand their disease and treatment much better and can thus be helpful to those people who have not visited the physician/hospitalized so far. Naidu and Chandralekha (1998) pointed out that people must have a deep understanding of their needs and problems and that education and development are an internal process that occurs only in equal partnership. Development should aim to unify all women, support men who address women's needs and concerns, raise critical awareness among women and develop a positive self-view of women. Women working, for women needs to be recognized at all levels.

Rajagopal (1999) suggested for an informal self-help groups (SHGs), for working women in sectors like garment making, embroidery, food processing, bee-keeping, basketry, gem cutting, weaving, and knitting Self-governed as they are, for developing new culture in rural development, and to empower rural women to manage rural industries and make decisions collectively for their common economic interests. Desai et al (1976) found that the clinic is the best place to motivate young mothers to temporarily accept family planning methods.

Health promotion calls for meaningful participation and interaction between providers and targeted community. The meaningful participation from the receiving end is possible by their knowledge, which can be acquired by the health education.
However suitable strategy considering various barriers and limitation of women is essential.

2.5 Health Education

Health education has been part and parcel of health care delivery system. However, information resources at the grass root level do not support a good health education strategy. Lenart (1987) suggested for education of 10 basic programme teaching national philosophy or mutual self-help, nutrition, clothing, housing and home economics, education and crafts, health promoting cooperatives, conservation of the environment; and domestic planning. Ali (1989) recommended using influence of effective communication methods particularly ethnic and cultural diversities, different types of ecological settings, low literacy level, geographic isolation, lack of development infrastructure, language barriers and lack of access to modern media, through culture-specific entertainment programme.

Ewing (1989) suggested educating people in taking responsibility for their own health, and a new holistic concept of health involving prevention rather than cure of symptoms. Grant (1991) suggested to lead the movement advocating healthy changes. Hossain (1992) suggested education to non-literate through village carnivals, traditional drama and festivals, exhibits, open-air films, cartoons, and, messages on the back of rickshaws are most effective.

Elo (1992) found that lack of access to care in the outlying rural areas supersedes maternal education, it was also indicated that maternal education has a profound effect on seeking medical care. Kussel (1994) recommended influencing health practices of large populations, including maternal health care providers (traditional birth attendants (TBA), nurse-midwives) other indigenous practitioners and physicians. It was further
suggested that health education messages be integrated into popular songs and dramas to reach large illiterate audiences and to provide technical assistance to take advantage of the mass media as a means to communicate health messages such as video on wheels. It was also found that nurses proved to be the most successful health educators in changing the woman’s behavior and girls often communicated health messages to their mothers while helping with household chores. Adeyemo and Brieger (1995) described Family Life Education (FLE) as a process of imparting both factual knowledge about human development, sexual relationship, preparation for parenthood, pregnancy, contraception and sexually transmitted diseases and also values, attitudes and perceptions that will enhance self-concepts and relationships. Sokhi and Abdullah (1998) suggested enabling women to initiate self-help at home, to be well-informed users of health services and to feel entitled to quality health care, be it from the government public health system or private practitioners.

The literature suggests more of non-formal and informal health education considering socio-economic, cultural and education background for consideration.

2.5.1 Health education strategy

The strategies should penetrate the barriers and create a better understanding among women. Oikeh (1981) stressed the need to include instructions on drugs in the health education of the people at the primary level of health care so that they become aware of the dangers involved in indiscriminate use of drug during prenatal periods. It was observed that women go to the chemists and traditional doctors for prescription and in some instances for self-medication. Expectant mothers should be encouraged to visit and seek the assistance of primary health care personnel who have been formally trained for this purpose. It was further recommended to study the health problems of
the local community in their true cultural setting and to evaluate the success of any health education programme that might be established at the peripheral level thereby realize effectiveness in communicating ideas to the target population.

Bhandari and Bhandari (1983) suggested for sharing information, expressing opinions, and debating issues and also pointed out that shopkeepers were found to be an important factor in initiating such discussions. Hastings and Haywood (1991) introduced the concept of social marketing for health education like consumer orientation, voluntary and mutually beneficial exchange, internal and external environment, threats and opportunities, objective settings and market segmentation. It was also recommended that the marketing mix, which involve the medium, comprehensive language, images (visual elements of media materials), and link with other initiatives are more successful for a media campaign.

Tasiguano (1993) suggested for recruiting staff from local community. Cardaci (1994) proposed for knowledge of the characteristics and needs of the people at implementation level. El-Katsha and Hatts (1994) suggested disseminating simple hygiene messages in health units, schools, and homes by health promoters (nurses, school teachers, and women leaders). The links between behavior, disease transmission and environmental sanitation was stressed along with water and food storage, infant feeding, hand washing, cleanliness of latrines and kitchen hygiene.

Bamdas (1995) suggested to follow a 6-step process: (i) Identify the problems and its perceived importance to the community (ii) Examine how it affects the community (iii) Considers treatment and prevention approaches (iv) Devise a problem-solving strategy (v) Draw parallels between the target problem and comparable occurrences in the past and (vi) Assess the strengths and weakness of the health education process. Earth (1996) suggested for effective participatory teaching methods for health
campaigns. According to him peer counseling was not a successful participatory teaching method. Krishnan (1996) suggested the use of television to the group with higher reading skills, and clinic and pamphlets/brochures to the group with lower reading skills.

The literature suggests various aspects of education and integration of health education into various activities at community contact point. At the same time institutional approach and support strengthen the health education in preparing materials and policy.

2.5.2 Health education - Institution

The sustainability of health education can be achieved by institutionalization of the activities integrated into health care delivery system.

Institute of Nutrition of Central America and Panama (INCAP) (1992) is working on the distance learning method to update health providers. UNICEF (1993) has supported decentralization of government policy, local control of resources and decision-making, multisectoral collaboration at the intermediate level, health competition between villages, and to provide strong support at the policy level to ensure coordination of programme. Mindanao Training Resource Center (1994) presents games, exercises and skits that promote consciousness rising about patriarchal values and the cultural construction of sex roles, which cover reproduction and sexuality. The impact of socio-economic and political factors on women’s health, and a women’s right to control her own body includes stress reduction techniques and guidelines for formulating a gender advocacy action plan.

Johns Hopkins School of Public Health, Center for Communication Programs. Population Communication Services/Population Information Program (PCS/PIP)
(1995) recommended (i) to build broad, high-level support from the inception (ii) to start small and expand gradually (iii) to relay on research and evaluation for effective program design (iv) to involve youth from the start (v) to recognize that youth actively want accurate information (vi) to use information to link young people with services (vii) to work with adults, families, schools and the community (ix) to use a variety of communication channels and (x) to provide engaging and positive role models.


Ravindran (1998) in context of the services from Rural Women Social Education Center suggested for:

- Publication and distribution of population education material on health
- Community-based action
- Education and empowerment programs for adolescents
- Work with men for gender sensitization and on reproductive health issues
- Health education and training for the non-governmental organizations and hosting annual health festivals
• Creation of an information base on the health of rural low-income women.
• Action research projects on specific health problems and interventions.
• Operation of a reproductive health clinic.
• Local women being coordinators and supervisory staff of the center are all local women.

It is clear from the literature that there are many local, national, and regional institutions that provide information resources and strategy for community education. The technology has made it possible to extend information access language and widespread community.

Information sources and services need to be channelized through appropriate formal and informal channels of information service and communication.

2.5.3 Health education channels

Desai and Mehta (1976) found that the clinic is the best place to motivate young mothers. Mohapatra et al. (1991) suggested child-to-child care for diarrhea, fever and injuries. Grant (1992) was for incorporating messages into various street theaters, radios, comics, soap operas, billboards, t-shirts and bumper stickers. Honik et al. (1992) suggested for choosing appropriate channels and specific messages, and recommended to institutionalize the capacity. Haider, et al. (1993) found interpersonal education as a potential channel.

It has been established that mass media is an effective channel of communication to sensitize the people on any aspect. Leslie (1981) opined that mass media provides a relatively rapid, inexpensive, and effective means of dissemination. Colie (1988) suggested the use of satellite, videos, TV programs and audiocassettes. Information, Education and Motivation unit of Bangladesh Ministry of Health and Family Welfare

McDivitt et al (1993) recommended that media campaign must also be supported with appropriate hospital policies and routines. Saibaba et al (1993) found that poor production quality, limited creativity and poor visual appeal accounted for the low preference for educational programs. It was suggested to provide guidelines for developing acceptable formats and style for need-based and creative health and nutrition programs. Elkamel (1995) points to TV as one of the most cost effective and easy method for dissemination of health education. Kotehabhkdi (1995) found video as an effective tool for successful change in behavior of mothers to engage and continue to breast feed infants. Michau (1997) suggested development of appropriate interventions in a multi-media approach.

Kuncar (1995) opined that radio was suitable for providing health awareness by creating simple and accessible health messages and also using drama as an educational resource. Valente et al (1996) found that the mass media is effective in information dissemination, which increases knowledge about innovations and interpersonal communication facilities, behavior change for allowing adoption of the innovation. As individuals progress in the adoption-of-behavior process (knowledge, approval, intention, practice, and advocacy), their media message recall would improve. Roman-Perez (1990) suggested for use of the video as an effective media.

Many studies, suggested overseeing production of a training video on interpersonal communication for health workers who use video to illustrate the importance of empowerment of women through equal educational opportunity, access to reproductive
health information and services and economic independence. Most of the studies have stressed the use of mass media effectively.

Folk media is another essential mode for communication with rural mass using local terminology to create better understanding about the health problems. White (1990) recommended the use of drama to communicate effectively. YU (1974) recommended training local people to deal with local problems. Feliciano (1977) suggested having a specific structure availing different talents its production staff. UNESCO (1997) suggests making the folk media an integral part of any motivational program for rural development. The prerequisite to the use of the folk media is an understanding of the rural audiences and use of these media to provide the rural population with recreation, to attract their attention, and to ensure sufficient motivation for their participation in developmental activities. The Folk media production should be consistent with the needs of the social environment and related to the customs and beliefs of the local communities. Kanani (1994) suggested for a puppet show using local terms and events. Pratt et al (1997) found that a community-based framework should emphasize from the beginning, as well as throughout the programme implementation and evaluation, the importance of folk media as both formative and summative norms in communication programme.

Whatever the strategy for health education, it is essential that the health education materials be developed in the local language, using the terminology commonly used by the local community. It would be more appropriate to develop materials keeping in view the local community.

2.5.4 Health education materials

Commonly known health education materials are poster, pamphlets, booklets and magazine articles. They are to be developed based on the feedback of the local care and
promotion. Srivastava (1988) opined that radio, posters, films, lectures, meetings, booklets, would be more effective.

Park and Peterson (1991) recommended for developing a bilingual pamphlet of medical terms. Goodwillie (1992) introduced culturally sensitive and attractive nutrition teaching aids consisting set of 13 nutrition education books dealing with food and diseases, food preservation, fitness, gardening, budgeting, developing training materials and individual food needs of family members.

Varyheld (1992) suggested that scriptwriters should consult villagers, broadcasting professionals, research workers and health officials to tailor messages; to use short grammatically simple and colloquial sentences so as to simplify translation. He also suggested recruiting literature experts, adult, native speakers of the target languages with some experience in health education in their own languages for accuracy of the messages and ensure the appropriateness of the words used. It was pointed out to be cautious about altering the meaning of technical terms tended to be simple mistakes, words with multiple meanings, exaggeration of problems and/or solutions and sometimes failed to adapt cultural ideas to those of their tribes. Also suggested that field officers should watch how villagers react after using the educational materials.

Alcalcay et al (1993) recommended use of posters, calendars, brochures and radio songs addressing informational, attitudinal or behavioral needs of all the target population. De-Fossard (1993) focused on the planning, creation and monitoring of the radio programmes with specific attention to the design of messages targeted to children, as well as the dual-purpose workbook. Saibaba et al (1993) pointed out that many educational sources are not effective and informative, and misguide viewers. Hence, he recommended developing acceptable forms and styles for need-based information. Singh et al (1993) conducted an assessment for the effectiveness of distribution of
health education pamphlets among mothers with infants admitted to the pediatric ward of Christian Medical College, Ludhiana, India. Emotionally disturbed and critically ill infants were excluded; literate mothers who could read and write were included. Effectiveness of using pamphlets to convey health education information reveals that retention was constant for two weeks. He suggested that hospitalization was the appropriate period for when mothers to be are receptive to health education messages, thus derive advantage for distribution of health information materials to visiting population such as friends and relatives of patient, to make materials reach easily.


Ngwenya and Chikara, (1994) found links between health information systems and the development/design of IEC interventions. Barndas (1995) found posters as a convenient media in local language for more effective communication. Chatterjee (1995) suggested to pay attention to utilization, field test and impact analysis. It was also recommended that the concept of Information Education and Communication (IEC) should encompass voluntary activity of health education in a tradition of innovation. Ngoma (1995) found it difficult to find the language to satisfy the areas of health education and the girl child. Parrott (1996) suggested for identifying the important gaps in research about women’s health and gaps in the messages for women
health. Further information reveals that the retention of message was constant for two weeks.

Thassri et al. (2000) recommended in designing a health education program by using input from the hospital health care professionals including obstetricians, nurses, nutritionists, health educators and health promoters.

The literature highlights that it is essential to identify needs to develop capabilities to solve health problems. It is also noticed that education and development are internal processes that occur in equal partnership. Development should aim to unify all women, with the support of men who address women’s needs and concerns, raise critical awareness among women, and develop a positive self-view of women. A woman needs to be recognized at all levels. Women themselves need appropriate technology and orientation to develop faith and respect for people in general for women in particular.

The Campaign basically addressed the need to create awareness and reading materials for learning and understanding among the community. Shanmugam (1981) found in context of physical reception of messages and interpretation or understanding of messages on the part of the audience in accordance with the intention of the communicator, and effectiveness of communication on the cognitive, affective and behavioral dimensions of the audience, observed in terms of audience reached, information disseminated, education undertaken, and motivation provided. In addition it has been suggested that information on health needs to include both the concept of health and pertinent ideas and facts about various health measures and services available.

Verson (1993) found that 8-10 year old children understood messages and retained information well, sometimes even better than adults. Comparative study of mother’s
knowledge of children immunization before and after mass media that was conducted by El-shazly (1991) found, that mothers with satisfactory knowledge among those completing the schedule were significantly better. Krishnan (1996) found that the group with higher reading skills used television whereas the group with lower reading skills used clinic and pamphlets/brochures.

Information sources, channels of communication and strategy are important component to make the needed information reach the community. However the information dissemination needs more human resources and support at community contact point.

2.6 Human resource support

Manpower is the crucial component in distributing, disseminating, sharing and interpreting experiences to the mass. Mattson and Lew (1992) stressed the concept of culture broker and the role of nurses as culture brokers. Ratnaike and Chinner (1992) recommended using key persons (advisory team, community health education unit, community health workers (CHW’s) and women groups) in the system. Mayer (1994) suggested involving social structures such as homes, schools and social clubs which influence the attitudes, values and behavior of young people and involve parents, teachers and religious leaders. Ravaozanany (1995) found that women leaders may serve as model for emulation by other women in their localities. Their new knowledge, their educator role and their membership in the association were a source of pride and self-esteem, to become counselors and persons of reference within their local communities. Thassri et al (2000) suggested to include obstetricians, nurses, nutritionists, health educators and health promoters.
In health care delivery system, particularly at community contact point and rural level, health workers play a major role in guiding and educating people in use of health services. Lenart (1987) suggested involving voluntary organization, grass-roots organization, village health centers and women volunteers trained to promote health and community development. Gussow (1988) pointed out that simply providing knowledge and skills to the public to make their own decisions is enough to change the eating patterns of people and to achieve desirable eating habits. Sundaram (1988) suggested the use of paramedical workers and female health assistant/health workers supervised by district health officers. Park and Peterson (1991) recommended use of health care workers who would visit patients more often and give them more opportunities to ask for assistance, when needed, using family members as interpreters.

Rajan (1992) suggested to utilize manpower available at the local level, for designing appropriate training for field workers, in counseling and services to women. It was also suggested to use the service of village leaders (traditional midwives, healers and teachers) to assist health workers in educating village members and to form a village health committee. Laporte et al (1994) suggested for networking of public health workers in local health department, academia, governments, industry, and private agencies, to bring greater benefits. Tabbutt (1995) demonstrated that health workers could overcome barriers to communication through their skills on how to assess women's needs and knowledge, how to use visual aids effectively and the importance of using non-medical terminology and supplying reasons for things.

In India, majority of the women like to share their problems with women. It is experienced at rural level, particularly for maternal and child health, that the women health workers are preferred. Kaithathara (1982) opined that women are the best health workers and educators in rural areas, since cultural beliefs are more deeply rooted
among them, they look after the sick in the family, they can enter every house where men cannot and the risk of malpractice and misuse of training is less in women. Women health workers communicate well with their own people, understanding the difficulty of changing local beliefs and they do not need formal educational environments in order to communicate. The training course can provide them with a chance to share their experiences and gain a deeper understanding of society, teaching about the causes, effects and treatment of common diseases. Shiva (1993) found that village women can improve the health status of their community, particularly that of women and children, if they receive encouragement to learn health care skills. In India, community health care lies mainly with women (e.g., nursing personnel) and in rural areas.

The Government finds it very difficult to reach all the places, particularly the rural and remote villages. Hence, the NGOs play a major role at the community level. Longwe (1988) stressed the need to strengthen the contribution and role of NGOs, which focus on the development of women and create a place where NGOs can get in touch with each other and share their knowledge and experiences. Setting up a forum and infrastructure, better use of NGOs, more NGO involvement where governments feel that the matter may be sensitive, gathering resources for women’s development, review and classification of NGOs according to their type of contribution to women’s development and documentation and information dissemination service and the other points stressed upon.

Women in NGOs (non-governmental organizations) promote women’s interest at the governmental level, but often do not have the economic or political power, as do other interest groups such as trade unions. Women often participate in public life via their membership in women’s organizations, community action groups, voluntary
organizations and other close to home groups. It was also found that women prefer to participate in activities such as problem solving rather than institution building. They prefer to operate outside political institutions. Women show a tendency to have different leadership styles than men (e.g., ability to relate to people affected by their decisions), which are most needed for the modern day world. They often do not campaign just for women’s issues, but once in office, they do tend to become more involved in women’s issues.

Before introducing IEC it is essential to go through the existing work in health care delivery system, wherein information component is not considered to strengthen in consumer education.

2.7 Information, Education and Communication

Communication is an important component to reach widespread community with suitable information resource. Smith (1980) stated that broadcasting media, print materials and face-to-face community outreach activities reinforce information service.

Mukhopadhyay (1988) recommended that traditional channels of communication would help the goal of “Health for All”. Rogers (1992) suggested for campaign approach for achieving health related life styles. Nakato (1994) suggested use of satisfied users to disseminate information and motivation in their communities. In addition to clear misconceptions, nutritional and sexual taboos affect maternal and child health. Gottert (1995) recommended integrating the IEC (Information, Education and Communication) materials into the interpersonal training activities of the community health workers by setting up flexible guidelines for the use of the sticker book. Jato et al (1995) opined that the appropriateness of choosing the right communication strategies suitable to a particular segment of the population can minimize barriers to
services, improve services and facilitate client actions to obtain their desired health care goals. Communication strategies suggested were mass media, community participation, advocacy, PRO approach, (promoting professional providers) and client-provider interaction. In case of communication process, messages and materials that are effective for reaching a segment of the population may be completely ineffective in reaching another sub segment of the same population. Three effective approaches to promote communication are spousal communication, access to services, and acknowledgement. Effective communication integrated with each of the service elements (i.e. access to services, quality of services and respect of clients) will strengthen the effectiveness of services to satisfy clients. Robinson et al (1996) stressed the need for good communication strategies and building consensus.

To improve the services without duplicating the establishment, it is essential to build an integrated service system. In health care system, health education and information resource and service support should be integrated at the grass root level service system and to the staff on work. Sundaram (1988) pointed out that proper planning of information dissemination through well-trained personnel, proper supervision and reliable documentation is crucial in India where different languages, cultural practices, and social values are prevalent. Bansal (1995) suggested information dissemination to mothers, during the waiting time, when they bring their children to an immunization center on acute respiratory infections, family planning modes of disease transmission, role or nutrition, environmental health, first aid, lifestyle-related diseases, value of yoga as a health-promoting activity.

Parrott and Condit (1996) suggested that gaps in messages about women’s health be identified such as pregnancy, childbirth, abortion, AIDS, cancer, reproductive technologies and chemical substance use, before actual information service. Bryant
(1999) made an effort to bring out a bibliography on women health information, which incorporates journals, associations, web sites on alternative therapies, videos and a separate subject listing section for recent and forthcoming titles lists with publishers, distributors and wholesalers.

Laporte et al (1994) recommended a systematic integration of telecommunications and public health systems across countries. On-line vital statistics, forecasting of population growth, health needs of mothers and children and linking global disease tele-monitoring (morbidity data for non-communicable diseases) with environmental data systems to make them understand the environmental determinants of disease. Computer based distance education, through email searches, videos, pictures and sounds could be transmitted across long distance at low costs. Networkings of schools together with availability of online electronic journals and books have the potential for instantaneous dissemination of free information. Global public health needs to plan for a public health communication system that can reach all the public health workers in the world.

Sancher and Juarez (1995) recommended for information to be made as an integral part of the community’s knowledge, which can and influence the local health policy.

The WHIS combines information and communication integrated to health services for the improvement of women’s lives by working through information service involving Government and non-governmental organizations. It also strengthens the communication and advocacy skills of women health awareness, a strategy aimed at the broader goals of women’s empowerment and helps them to build healthy society. Ultimately it assists women’s organization to use all forms of media to access, disseminate, communicate and advocate information as the causes are important in their
local communities and reduction of all forms of violence, thus activating research and reproductive health clinics.

It is observed in this study that communication lag among India’s development framework, social structure, and health-promoting agencies, and cost effective programme had affected the implementation of many a programmes. It was felt that to exploiting pressure groups is more helpful in bridging the communication gap. In the context of Information-Education-Communication, information component is viewed more as a data related to health care activity rather than augmenting the support of information in community education. Eustarhe (1992) suggested for suitable staff training.

Kreun et al (1995) recommended for strengthening of primary health care delivery system by broadening the scope of traditional IEC, leadership to a growing number of health education officers and developing a partnership with the private sector. The first step towards this goal was to conduct a needs assessment of the current status in terms of strengths, weaknesses and opportunities in IEC activities, and staffing patterns and then to improve its leadership position in the coordination of health-related IEC policy, structure and relationships with public and private sector agencies activities, and current training levels.

The success of any programme institution or management depends on the administrative and service skills. In health care services, it is very essential as health care is being addressed to each individual. Hunt (1975) in context to data collection recommends 1) registration of information on birth certificates; 2) high priority to analysis of previously-collected data between occupational history of the mother and pregnancy outcome; 3) information exchange with countries which have reviewed
experiences of promotion of health education. Devi and Swain (1993) suggested the use of the data to develop a mass education policy.

Lippeyeld (1995) recommended (i) assessing the existing health information system in order to plan its improvement (ii) to propose a detailed work plan for the design and implementation of a health information management system (iii) the design of a computerized data processing system (iv) to determine the necessary level of technical expertise in health information system, data processing be computerized and v) at the national and zonal levels.

Kemprecos et al. (1996) suggested 1) to create a village profile and plan for health education, disease prevention and improved water and sanitation 2) to provide information on beliefs and practices relating to hygiene and disease. Etiology to form the basis of individual health education interventions 3) to profile data related to information about health knowledge, attitudes and practices 4) to compile information on household demographics, environmental health issues such as drinking water, gray water disposal, sanitation and animals in the home. Campero-Cuena (1996) pointed out that injuries of domestic violence are likely to be classified as accidents rather than as results of deliberate aggression. Similarly, problems related to personality disorders and depressions are generally interpreted as purely individual, without consideration of the position of women in society.

Therefore resource and users are to be linked on Internet and service providers. In case of knowledge acquisition the library has many services to offer, as it is an information bank.

2.8 Library Services

Library is a knowledge bank for the use of all people irrespective of caste, creed, dwelling, socioeconomic condition and physical/visual handicapped. Today the library
can serve across the barriers and can maintain anonymity about their learning. Dipko and White (1992) suggested that by providing access to key technical articles and reports, distributing acquisitions lists on diarrhea, nutrition, and vitamin A, distributing technical literature update on diarrhea, producing bibliographic lists, responding to information requests, translating and distributing key technical articles, distributing mini libraries on health topics to health training institutions and found that the impact of information center is evident in the growing demand for services. In a study on reaching the unreachable, Alvarez and Spain (1992) recommended using multiple methods and the participation of people in the learning process.

Materia et al (1994) pointed out that dissemination of information at the district level in developing countries is hampered by an acute shortage of teaching materials and health information resources and also the lack of accessible libraries to potential users. The lack of libraries is a serious issue because of their usefulness in continuing education, job training and supportive supervision. Libraries, in rural areas, to spread information on primary care and provide literature resources for planners and evaluators of health services and to facilitate the transmission of information, can help health workers. It was further suggested that basic training be reinforced with updated health information with sophisticated systems of communication if affordable in remote or rural areas. The libraries need to provide materials relevant to the user and local work activities, working environments, learning styles, language and semantics. Selection of materials is in consultation with local personnel, such as WHO. A standard package should contain material on clinical medicine, preventive health measures, primary care management and other germane topics and should be delivered to the target places. Simultaneously coordinated workshops need to be held to introduce the packages to district medical officers, discuss the role of libraries in the continuing
education of health workers, and to develop guidelines for use and design monitoring instruments at libraries.

Barkeri and Polson (1998) indicate that most people use the library service to become better informed about a specific personal health problem. Kirton (1998) experienced that, a lending library residing under the umbrella of education service within the locality aims to promote health through the providers of health information. Lyon (1998) recommends the inclusion of material gathered from a wide range of sources, including commercial publishing houses, patient organizations, voluntary groups, individual health authorities, health education organizations local support groups and self-help organizations.

It is visualized that in future IT will become a common vehicle for information dissemination and people will become parasites on this media.

Information Technology has established itself as a powerful communicating facility. However, in rural areas ICT facility and use is very less. Nevertheless, one has to think ahead while planning the service instead of underestimating people. It is even suitable to community, across the institution level, which can be enlarged to use for selecting, acquiring and dissemination of information. Mandil (1995) recommends telemetric relay for cost-effectiveness of the resources. Laporte et al (1994) suggested for networking to health care data transmission so as to reduce the cost of health care, among academic institutions of government institutions and industry. Baker et al (1997) found that (in western countries) access to health and medical information has increased dramatically over the past decade with the advent of CD-ROM databases, Public, academic and hospital libraries, as well as consumer health information centers. They have subscribed to InfoTrac, many other consumer oriented databases.
Burg and Kautzmann (1998) reviewed three CD-ROM based on the printed version of encyclopedia of medical information that reflect issues of concern to contemporary women. A woman 'R' is a full text database of feminist periodicals, academic journals, newsletters, magazines, regional publications, and government reports for the relevance of information. Collins and Sasser (1998) found that popular media on the Internet, has highest consumer health in information, accessible free of charge via the Internet. Dracos and Seta (1998) draw the attention to a wide variety of medical and health care information available on the World Wide Web in the style easily understood by the public. They recommended bringing out rules and regulations to validate the reliability, completeness and consistency of the information sources. Gillaspy and Huber (1998) stressed a need for female specific Internet information, which acts as an index, organized link and encyclopedic information source. Marshall (1998) suggests setting up a strategy for the realization of the initiative.

Marton (1998) appreciated and provided an overview of Internet-based consumer health initiatives for women that have their origins in Canada and the USA. Murry (1998) suggested for annotated bibliography of articles and books on consumer health information on the Internet. He also examines the reasons why consumers turn to the Internet for health information and looks at some of the problems associated with using the Internet for this purpose and lists some of the standards or benchmarks being developed to help consumers locate better quality information and evaluate health information on the Internet developed by the US Health Information Technology Institute for the credibility, content, disclosure, links, design, interactivity and caveats. Normann and Rochon (1998) recommends of using the Internet to create a physical and virtual network of community-based organizations bound together by a common goal.
Shimazaki (1998) suggested an extensive list of Internet addresses for resources of medical and treatment information for patients, giving the internal sources. Gathering of information from mailing lists, Medline and specific journals was also suggested. Meta directories and government sites are listed in many web sites followed by sites relating to specific topics arranged according to the National Library of Medicine Classification order.

Vogue (1998) suggested for bilingual information on World Wide Web site, which will provide accurate, timely, relevant and unbiased full text health information. He further suggested for the involvement of the library partners in terms of the management and funding of the site, including information gathering and organization. Williamson (1998) appreciated the service offered by the Patients Education and Consumer Health Information Center of Julius Jacob Health Science Library in Nashville, Tennessee. Hattery (1999) gives high priority, in context of electronic information service to consumer health information service, for the evaluation of IHC resources including templates for site evaluations, purchaser decisions and a disclosure statement.

Kaufman and Krevsky (1999) opined that the Web is suitable for patient information sites enforcement. Stevens (1999) found that increasing number of people access the world wide web for health and medical information and is growing in popularity as consumer healthcare web sites are replacing general search engines. Wood (1999) mentions that consumer health information service tends to be one of the health care 'have nots' in province.

Every society, both the developed and developing, is having people with different approach. In case of library and information service, there are users who prefer print, audio, video and multi-media to acquire knowledge. Each media has its features and
shortcomings. Printed media is good for study and ICT media is good for remote access with faster communication and search for information. Multi-media is useful across all barriers however, considering the "digital divide", "social divide" and "gender divide". EBSCO (1998) consumer health information database Health sources Plus Web offers full text cover of more than 500 health care publications plus 17 books and full text for nearly 1,000 pamphlets. Kikuchi (1998) found that the American hospital libraries are increasingly providing patients with medical information, in addition to educational and leisure reading. He suggested that librarians in public and hospital libraries must interact more, using common technology such as the Internet.

Johnson (1998) presents a guide to collection development in the area of depressive illness, which includes an annotated list of books, videos and online resources intended as a starting point for public and consumer health libraries. The list is arranged under the following headings: general works, medications, alternative healing, special populations, women special populations, men special population, Youth, memoirs, videos, Web Sites and newsgroups, indicating options for a core collection.

Gross (1999) stated that many health care consumers have become their own advocates in seeking information and consumers choices vary due to the Internet, news media, national and local associations, and the public health sciences libraries and growing number of consumer health libraries. To meet consumer needs for reliable and current health information the former Geisinger Health system developed the Women's Resources Center (WRC) at the Geisinger Medical Center, a teaching hospital in central Pennsylvania. The key aims of the WRC are prevention care education, disease management and assessment of treatment options. Interestingly an early decision as to appoint a health educator or a librarian first, was made in favour of the librarian.
The role of the librarian in field-based service has not been understood properly. Neither the librarians are taking initiative nor the community or field workers are expecting librarians to extend the services outside the four walls except the mobile library, which again working like traditional mobile library within the walls of mobile vehicle. However, the ICT is taking information to the field oriented users. Iida et al (1998) evaluated a group of articles on medical information from the viewpoint of librarians as patients, found that it as uncommon for them to have access to medical or hospital libraries in Japan. Being a patient, gives the librarian a clear view of the type of information required which is easy-to-use and delivered in conjunction with the medical team and supported by a health reading room. When a medical librarian’s friends or relatives become ill, the librarian is often pressurised to provide information. Kawamura (1998) stated that librarians have an important role to play in conveying medical information to the public and recommended that libraries providing information to patients be staffed by specialist librarians trained in these difficult areas.

Tosaka (1998) stated that Medical librarians should consider their role as potential providers of information to patients, as a second opinion for those who need information on technical terms and processes and nursing care. He also stated that delays in making medical information available to public could cause problems. Cawthra (1999) suggested to address the health information needs of older people in many respects including different formats of information for carers and elders from ethnic groups and stressing the need for direct user involvement in the development of information. He emphasizes the need for primary care workers to know how related services, such as social care, operate; reviews the information professional’s role in providing resources and training and suggests a broader commit for the professionals as a whole, to help to ensure social inclusion for older people.
2.9 Summary and viewpoints of literature

There are many worthy points to note from the literature review. Literature review highlights that there are many unmet needs in health care and cost considerations in deciding the choice of service. Many studies have identified association of socio-economic variables with cognitive and behavioral factors, personal hygiene, household environment and sanitation. A general inadequacy in health infrastructure and supplies were also found.

In addition it was found that social indicators are closely related and the first priority is to educate people. It was further observed that the use of any service directly depends on the facility available to the targeted community, which should be as close as possible to the people and should be integrated and amalgamated with information services along with the local concepts and practices. It would be more helpful and effective to build a multi-type health information service, with female medical practitioners and female health guides at the village level. Information component should be developed in an integrated, holistic and people centered approach, both at conceptualization and during propagation of policy. It was pointed out that just involving the NGOs did not necessarily amounts to people's participation. It is essential to integrate local bodies like 'panchayats'. Equally it was also highlighted that existing quality of services offered by hospital in terms of personnel, record keeping and interpersonal relationship were not satisfactory. The information based on the incomplete record keeping on various important factors such as occupation, income, fertility history, periods of breast feeding, age of menopause, previous drugs used, dietary history may create a problem in pin-pointing the information service. Further, effective communication of information through accessible and available services, helps quality service delivery and improved consumer outcomes and creation of
appropriate resource position, development of self-help groups, is an effective way to deliver information to rural consumers and their families.

Considering the findings from this review, the effective continuum of WHIS (Women Health Information System) for women as a model is worked out involving community workers help to decrease misconception regarding resource availability and to understand consumers needs. It was very essential to have a system approach for quicker response. Teaching community development principles to team members of the health care delivery system became the main stay to facilitate identification of issues related to women health and development of proactive strategies to meet specific and prioritized needs. WHIS can create an environment for sharing, dispel misconception and optimize the benefit. WHIS can create community partnership to alleviate some of the frustration felt by service providers and women in society.

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