



Women’s Mental Model on Health: Understanding Elements That Influence Health-Care Decisions by Examining Personal Narratives

Reshma Ramesh¹, Anagha S²

^{1,2}Center for Women Empowerment and Gender Equality Amrita Vishwa Vidyapeetham Kollam, India 690525

***Corresponding Author:**

Reshma Ramesh

Center for Women Empowerment and Gender Equality Amrita Vishwa Vidyapeetham Kollam, India 690525

Type of Publication: Original Research Paper

Conflicts of Interest: Nil

Abstract

Women's health objectives have been a topic of attention in literature for decades, and it's still a conundrum why women are torn between their health goals and the expectations of others. While tremendous efforts have been put forward to understand their health care attitudes, Perceptions studies are important way to obtain relevant indicators. Through an in-depth interview technique, thirty working class-women and housewives were interviewed to understand their mental representations relating to key contributing factors towards their health and health-decision making. The study was also carried out during the pandemic situation to understand if the scenario brings forward any difference from the pre-Covid era. The methodology was aimed to reveal their mental models related to beliefs and attitudes related to their own health and their families. Results from the studies suggested that health behavior decisions are based on both women’s self-expectation and societal expectations. Even with the access to a stable financial source woman tend to depend on factors pertaining to socio-cultural and self-perception when catering to decision related to their health. Maternal influences, their locus of control and socio-cultural factors drives most of their health decisions. The concept of mental models is studied in the paper with respect to women’s health. To effectively bring in health promotions among women it is necessary to consider women’s inputs in formulating policy’s and involve women in implementing it understand their self-perceptions with encouraging family oriented decision-making capacity.

Keywords: women’s health, health seeking behaviour, mental representations, mental models

INTRODUCTION

In General, Women and girl’s health needs are specific at every phase of their life. While life expectancy of women is longer than men at all ages, the additional years are not accountable to be healthy [1]. As the Covid-19 Pandemic surges the world with unpredictability’s, discussions on women health attracts even more attention from the stakeholders. South Asian context on women’s health shows that women and girls doesn’t have same life advantages of their counter parts [2]. Among women in this region, non-Communicable diseases; mainly cardio vascular diseases, chronic respiratory diseases, diabetes and cancer are major diseases reported, claiming lives of

8.5 million lives each year [1]. The Indian perspective is also not different. Being culturally, ethnically and religiously diverse nation, it is also home to a range of health ailments in women were causes attributes itself towards access, awareness and socio-cultural and economic indicators [3, 11]. Health care facilities in Indian families are generally used alongside the line of sex, age, status and of which women comes at the end of the line [4,6].

The geographic location for the current study, the state of Kerala is unique in its own way when compared to the Country’s health statistics [5]. The state of Kerala is known for its progressive development in terms of

literacy and social development. The state's performance in terms of maternal mortality, adolescent births, proportion of female adults in education has been impressive, but gender disparity is existing in terms of labour participation, politics participation and household decision making [5]. Being a state with highest sex ratio and female literacy compared to the national figures, statistics shares that women tend to live in poor health compared to men [5].

Biological construct is not only just a factor which affects women's health, socio-economic factors, poverty and family responsibilities are also among them [7, 11]. The disparities related to gender in socio-economic context related to health have been diminished compared to historic trends but still women are comparably disadvantaged to men [8]. While these disadvantages can be attributed to Social, political, cultural, political factors and availability of resources; influences such as women's psychological factors should also be considered. Gender restrictions and norms have been found to place difficulties on girl's mobility and access to information which indirectly effects their health seeking behaviour [6]. Literature shows that health of young women and girls are impacted due to their lack of decision-making capacity [6, 9].

Providing proper health-care facilities wouldn't end up being utilized by women. Different variables affect health seeking behaviour in women; ability to pay for the services, behavioural issues related to motivation, perception of illness, individual values, educational status, religion and demography [10]. Even though not gender specific, studies suggest that beliefs about causality, controllability, susceptibility and seriousness impact health seeking behaviour in individual [10]. Overall decisions pertaining to health care are most often decided jointly by both men and women in a household [5]. The decision making regarding utilizing a health care facility depends on three phases for a woman, first she should choose that she has a health ailment, next she should sense that she can seek a healthcare and third she decides that she needs to take a health care need. Each of these phases have different barriers for different women from different socio-economic, cultural and geographical backgrounds. The equation with health seeking behaviour when it comes to family is different [12].

Since the role of "Care-giver" is attributed mostly to the feminine gender in a societal context, women generally have known to undertake the responsibility of "taking care of others" in a familial or community setup. Even women who neither have a domestic partner nor children tend to assume the role of care takers for family and friends. The joint family system in India, particularly places women position to consider caretaking as a women's role [13]. While family's responsibilities related to every realm is being prioritized, women tend to struggle to consider their own health needs a priority [13]. To effectively understand this difference in perception related to own health and family health, the current study attempted to study women's mental representation (mental models) through their narratives on their perceived health and health seeking behaviour.

The concept of mental model explains inner representations that enables people to organize their experiences about themselves, their relationships and environment with which they intermingle [14]. While traditionally mental model research theorized people's psychological entity which is created related to an external artifact [14], there have been increased focus in literature to focus also on mental models about people's internal entity [15]. Literature suggests that there are many dynamic interactions between person (in the study women's internal mental model), and an "artifact" (society relations, attitudes and beliefs) that together constructing their inner representations [16]. Thus, understanding mental models gives the relationship between inner beliefs, mental representation acquired through social interactions and its predictability towards a behaviour [14,15]. Building on this principle the current study, focused on analyzing different mental representation women expressed in relation to their health and health seeking behaviour within the setting they live. The study also presented the cognitive entities related to health that women associate to their lives, to their environment and how they think these cognitive entities help them change their mental models over time.

METHOD AND MATERIALS

The study used a qualitative approach to interview a convenient sample of thirty employed and housewives from southern districts of Kerala, India. The questionnaire gathered narrative data about demography, illness and physician consolation

pattern, their perception of major and minor illness, perception regarding self-medication and physician consultation, attitude towards getting medical care, spending money on their health, and their understanding on their health seeking behaviour and responsibilities towards self-care and family care. Inclusion criteria included women between the age group between 20 to 60 who are currently employed with a monthly income and housewives. In depth interviews were conducted with participants who volunteered for the study. Participants verbal consent was obtained. Information on the study was provided to them and interview were conducted at their convenient time and location. Interviews were audio recorded with the interviewee's consent. It lasted for 30-45 minutes. Interview were conducted in English with women who reported higher fluency in English and rest was carried out in their mother tongue. Those transcripts were translated to English for analysis. A conventional content analysis was carried out to derive themes related to attitudes, experience, knowledge related to women's health behaviour how their environment facilitates their action. Interview transcripts were initially analyzed and identified for small meaningful segments. The units are then represented in rows of a sheet format. From the identified units, units with similar meanings are highlighted and colour coded and grouped to categories and sub categories.

RESULTS AND DISCUSSIONS

Population varied in socio-economic and geographical context. Demographic details of the participants are presented in Table 1. 34 to 35 were the average age of the respondents under the study. All of the participants were educated and majority were post graduate in their educational qualifications. Eighty percent of the sample respondents were married.

Behaviors and attitudes expressed by the participants are detailed in Table 2. Participants conveyed that routine hospital visits do not happen within the family and their responses indicated that their last hospital visits happened a month ago when the survey was administered. Women believed that money should be spent in their health only if they are encountered with major illness that need physician and hospital consultations. Even though few of the women expressed that money should not be spend on their health, majority of the women expressed the need for

proper treatment. On an average around ninety two percent of the women reported that they would opt for self-medications rather than physician consultation when they are ill while the attitude changed for fifty eight percent of the women when it comes to their family's illness. Women mentioned that their family encourages them to visit hospitals and take doctors consultation when they are sick but they attribute it towards their self-decision to not to take it up.

Major themes that emerged from the conventional content analysis of women's narratives about their health behaviour were related to the locus of control, Maternal influence, society and personal expectations, Sense of responsibility, Social roles, Attitudes towards illness and health seeking behaviour and inertia towards change.

Locus of Control: Degree to which women believe that a certain illness is under their control prevents them from worrying about the disease. When they feel that a particular illness is beyond their control then they responded that they would take up external help to deal with their illness. Few of the women also responded that they would treat their family's illness also in a similar manner. But when they feel that if its beyond their control, they pressurize the family to take up additional help. Few of the narrative from women were as follows.

"To an extend where the illness is not controllable then I will put some effort to visit a doctor"

"When illness comes to us we are able to identify if it's something that we can control, but when it comes to someone in our family we do not understand how serious an illness is. So, I pressurize them to consult a doctor"

Women and their belief of their locus of control has a major impact on their health seeking behaviour. Women attribute this attitude towards their self-decision. Women feel that family needs to be given more priority when it comes to health. Their belief that outcomes related to health can be controlled gives them the added benefit of prioritization of family's health over their own. From the narratives it was clear that control plays a prominent role in the mental representation towards health behaviour and it mirrors the external reality often.

Maternal Influence: Mothers is of great influence in a girls' attitudes and behaviour towards health. Almost

all women mentioned that they learn responsibilities from their mothers and grandmothers. They mention that *“The way they have taken care of their families, we would also like to give it to our families.”* Few of the narratives were as follows,

“Responsibilities are somethings that we are taught of. Our mothers, grandmothers set examples for us.”

“Whatever I have seen while growing up whatever my mother does for the family I am also trying to give it to my family”

“Maybe I have seen my mom doing it grandmother doing it. got ingrained in a subtle level of self-consciousness.”

The mental representation formed here in the women is based on the interactions she had with her mother. The influence caused a development of a learned model which guides all her future outcomes related to women’s health behaviours. For an active community health promotion, a mother-daughter relationship is a potential source [17]. We shall grow to resemble what we love. The axiom is literal when it comes to women learning from their mothers. Even though common to all attitude’s health behaviour is majorly impacted from learning they receive from their mothers. Their sense of responsibility is taught and learned from their mothers.

Society and Personal Expectations: Women mentioned that *“Even if a member of the family gets sick even gets paralyzed, relatives or people around asks, who is there, is there daughter, daughter in law etc. If there is a woman in the family and then if the family is not being looked upon then it becomes a great issue”*. A newly wedded women is taught to be careful for social and family expectation and how to behave in her newly wedded house. Women mentioned that *“There is a lot of expectations from the in laws about taking care of his health”*. Even she is sick, she is bound to take care of the family. *“One day if I take rest out of sickness they will ask the second day if the illness is over or not so that I can come and help in household work.”* Few of the narratives are as follows;

“The elderly and the kids can't take care of their own health that puts pressure on us to keep an eye on them. For the elderly the reason might be that they don't understand that they are ageing and their body can't tolerate what they used to in the past and for kids and teens due to not being aware.”

“Women is always expected to take care. If anyone falls sick in a family, the first question that is raised is that is there no women in the family.”

Expectation are being set on women entire lives and how they behave and react to any situation. The case is not different when it comes to health as well. The mental representation formed in women is attributed towards learning they acquire through their interconnections and the self-interpretations they form out of each of their relations. Family’ health is a women’s responsibility [18]. Even among different societal expectations women set self-expectations as well when it comes to their families. *“Women have a responsibility towards womanhood; Over and above its her personal challenge to prove herself worthy for the role she has been entrusted with”*. Women tend to own up this responsibility on themselves because they feel that if they don’t nobody will own up to it. Even when talking about health-oriented experiences, women tend to look for self-evaluations. They tend to own up or grow up to the role they are being entrusted with.

Attitudes towards illness and health seeking behaviour: Women’s attitude towards illness and seeking help for the illness vary according to the availability of time, effort they have to put in, severity of the illness as they perceive, women’s view of herself making the decision, and their awareness and ability to control about a particular interest. Most of them responded that these decisions are made by themselves most of the time despite being encouraged by family, because they priorities other work which they feel are important at that point of time. *“Try and give my maximum time to focus on family.”* Most of the time their judgement about their illness have been proven right which in turn give them confidence to practice it in future. Important aspect is that they seek health care only when they feel that illness is out of theirs hands to control.

Expenses and time constraints also stop them from seeking health care. *“I need to save money and time, every time if I go to a doctor when I am ill, who will take care of my family, and every time I have to pay consultation fees.”* As working women, they feel that balancing between life and work take a toll on their health seeking behaviour as well *“Both of us are working and we need to balance between work and life, so necessary to take enough precautions and we*

have to try and prevent such illness.” Women feels that family health and happiness in their responsibility and she feels she has to spend her maximum attention and time towards the family. One of the narratives where “I feel that when I am sick and resting it effects the daily routine of everyone, so I shouldn’t make a situation happen like that. If I am mentally down, I will be physically down also and it will affect the family”. The Attitudes in women clearly defines that they give central importance to family. Understanding from the narratives, women generally seemed happy in their choices they make for their family as well as their own life.

Cultural influences, Family dynamics and internal inertia towards change:

“We have a duty towards womanhood, it is part of my responsibility and it is my Dharma to protect my family”. The narratives from women revealed that right from their very young age women are brought up conditioning that family health-care is their responsibility. Most of the women mentioned that term “Dharma” in their interviews stating that it’s their responsibility to protect family’s health and wellbeing. Women generally do not portray their mental and physical weaknesses to others in the family, fearing that it will affect the overall wellbeing of the family. They often turn into decisions of purging their disease condition through self-medications, home remedies or even avoiding proper care. They believe that if they do not take care of the family no one else would take up their role. They mentioned sacrificing their comfort to support for their loved ones.

Family dynamics is an important determinant in women’s health priorities. *“I might feel cooking Rice Porridge, but it will not be sufficient for the others in the family. They will ask including the children, if there is nothing more to eat. But if the case of sickness is for elders/husband or children the whole family ends up eating the rice porridge.”* The support from their husbands also affect in a women health seeking behaviour; *“father preferred self-medicines so he doesn’t take mother to hospital as well.”* Sometimes other women in the family also puts a lot of pressure on women’s choices. *“One day if I take rest out of sickness they will ask the second day if the illness is over or not so that I can come and help in household work.”* Women’s belief, values and behaviour’s effect

the interactions they have with their family and even health care providers [19].

Even with a moderately high educational status and awareness level there seems to an internal inertia of change which women expressed in their health behaviours. *“It’s not a consistent behaviour but sometimes I also do not take my illnesses seriously. There are a few things you can do for certain illness so will wait for few days and see if the illness will be cured.”* Most of the women say that their behaviour is part of their habit which they have seen growing up, it is difficult for them to change their habit even when they are aware of its repercussions. They believe that, the routine wouldn’t do them harm because nothing much happened to their mom’s or grandmothers. Interestingly most of the women replied with a shy smile mentioned they didn’t feel for the change when asked about why do they not prefer to change their routine behaviour.

CONCLUSION: Understanding women’s health mental models from their narratives opens up various discussion factors including those discovered by existing literature. There is no one major component to solving the riddle. It is a factor of multiple agents and concepts women has to their environment as well as self-perception. Their belief that an illness can be self-controlled by them stands out in the current study. Their health priority depends their own understanding on their availability of time, effort they have to put in, severity of the illness as they perceive, women’s view of herself making the decision, and their awareness and ability to control about a particular interest. While few factors are being imposed on them, a large number of choices they make are based on their convicence, habit and their belief and value system. Even though the current study was based on twenty qualitative interview and cannot be generalized it has implications which can be considered for health awareness and services within the State. Women under the study are educated but still find it difficult priorities their health in times of need.

Women’s perception of their illness and the extend to which it can be controlled defines their health-seeking behaviour. Family influences, societal expectations and its culture also impacts women’s decisions and choices when it comes to health. Where family’s take a collective decision, women’s voice is considered, but certain narratives showed often their health seeking

behaviours are taken up by the family. Health expenditure is also a concern raised in the study were women tend to avoid their issues focusing more on the family despite their economic situation.

Self-expectations and women's understanding of their responsibilities towards womanhood are major factors that impact women's health priorities. Even though most of the respondent felt the need for focusing on themselves applying it to their daily routine was difficult for them. Health promotions should include personal and self-awareness content were women should be made aware that it's okay to take some time for your own. Promotion of social groups were women can volunteer and participate will be a major platform for women to exchange relevant information that support their health behaviour. Substantial behavioural change initiatives should be designed and encouraged to strengthen the women's decision-making capacity and altering self-perceptions on different role they play.

ACKNOWLEDGEMENT:

I extend my gratitude to Center for Women's Empowerment and Gender Equality (CWEGE), which hosts the UNESCO chair for Gender Equality and Women's Empowerment and Ammachi labs staff for providing all support.

REFERENCES

1. Organization W. World health statistics 2016: monitoring health for the SDGs, sustainable development goals [Internet]. Apps.who.int. 2021 [cited 21 July 2021]. Available from: <https://apps.who.int/iris/handle/10665/206498> .
2. Thresia C. Health Inequalities in South Asia at the Launch of Sustainable Development Goals: Exclusions in Health in Kerala, India Need Political Interventions. *International Journal of Health Services*. 2017; 48:57-80. .
3. Aravindan A. Health of Women in Kerala: Current Status and Emerging Issues Centre for Socio-economic & Environmental Studies Khadi Federation Building Health of Women in Kerala: Current Status and Emerging Issues [Internet]. *Academia.edu*. 2021 [cited 21 July 2021]. Available from: https://www.academia.edu/7917897/Health_o
4. Reshma Ramesh, Swati Dinesh. PSYCHOSOCIAL EFFECTS OF PCOS ON REPRODUCTIVE-AGE WOMEN; A PRELIMINARY EXPLORATORY STUDY BASED IN KERALA. *Malaysian Journal of Public Health Medicine*. 2020;20:305-310. .
5. National family health survey (NFHS-2) [Internet]. *Dhsprogram.com*. 2021 [cited 21 July 2021]. Available from: <https://dhsprogram.com/pubs/pdf/frind2/frind2.pdf>.
6. Deconfining Women! Mental Models Pertaining to Empowerment. *Proceedings of the 4th International Conference on Gender Research*. 2021.
7. Bird C, Rieker P. Gender matters: an integrated model for understanding men's and women's health. *Social Science & Medicine*. 1999; 48:745-755. .
8. Gronowski A, Schindler E. Women's Health. *Scandinavian Journal of Clinical and Laboratory Investigation*. 2014; 74:2-7.
9. Ganle J, Obeng B, Segbefia A, Mwinyuri V, Yeboah J, Baatiema L. How intra-familial decision-making affects women's access to, and use of maternal healthcare services in Ghana: a qualitative study. *BMC Pregnancy and Childbirth*. 2015;15.
10. Puentes-Markides C. Women and access to health care. *Social Science & Medicine*. 1992; 35:619-626. .
11. A tribal community-based discussion on economic repercussions of a twin-pit for pour-flush model toilet construction [Internet]. *Ieeexplore.ieee.org*. 2021 [cited 21 July 2021]. Available from: <https://ieeexplore.ieee.org/abstract/document/8289093>.
12. Artazcoz L, Borrell C, Benach J, Cortès I, Rohlfs I. Women, family demands and health: the importance of employment status and

f_Women_in_Kerala_Current_Status_and_Emerging_Issues_Centre_for_Socio_economic_and_Environmental_Studies_Khadi_Federati_on_Building_Health_of_Women_in_Kerala_Current_Status_and_Emerging_Issues.

- socio-economic position. *Social Science & Medicine*. 2004; 59:263-274.
13. Choudhury SB. Empowerment of women in Indian context. *International Research Journal of Multidisciplinary Studies*. 2018 Mar 4;4(3).
 14. Gentner D, Stevens A. Mental models.
 15. Mevorach M, Strauss S. Teacher educators' in-action mental models in different teaching situations. *Teachers and Teaching*. 2012; 18:25-41.
 16. Kempton W, Lave J. General/Theoretical: Mental Models. Dedre Gentner and Albert L. Stevens, eds. *American Anthropologist*. 1983; 85:1002-1004.
 17. Mosavel M, Simon C, Van Stade D. The Mother–Daughter Relationship: What Is Its Potential as a Locus for Health Promotion? *Health Care for Women International*. 2006; 27:646-664.
 18. Mohindra K, Haddad S, Narayana D. Women's health in a rural community in Kerala, India: do caste and socioeconomic position matter?. *Journal of Epidemiology & Community Health*. 2006; 60:1020-1026.
 19. Women Empowerment through Productivity, Rural Development and Technology: Assessment of Cross Linkages within a Village of Maharashtra, India [Internet]. *Ieeexplore.ieee.org*. 2021 [cited 21 July 2021]. Available from: <https://ieeexplore.ieee.org/abstract/document/9356965>.
 - 20.

Tables:

“Table 1: Demographic information”

Table 1	
Demographic information	
Age	
Average	34.5
SD	10.57
Range	22-60
Educational Qualification	
10th-12th	3
Undergraduate	17
Post Graduate	10
Marital Status	

Married	26
Single	4
Divorced	0

“Table 2: Behaviours and Attitudes expressed”

Behaviours and Attitudes expressed	Percentage reported from the sample
Last time visited a hospital when they are ill	
Last Two weeks	7%
Last month	47%
Last Year	27%
Last time visited a hospital when family is ill	
Last Two weeks	7%
Last month	47%
Last Year	7%
Should money and resources be spend on your health?	
Yes	33%
Yes, only for major illness	42%
No	17%

Attitude towards self-medications vs Physician Consultation for minor personal illness	
Prefer Self Medication	92%
Prefer Physician Consultation	8%
Do your family encourage you to seek health care	75%
Attitude towards self-medications vs Physician Consultation for family's minor illness	
Prefer Self Medication	33%
Prefer Physician Consultation	58%