Summer Training Report

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ACRONYMS/ABBREVIATION

PART I

RESEARCH PAPER

TITLE:

A descriptive qualitative review study on social determinants of maternal malnutrition.

ABSTRACT

Background: Nutrition is fiercely ignored aspect of maternal and newborn even though it is the fact that under nutrition is the potential risk factor for disease. World Bank report suggests that under nutrition is more common in developing countries. Several studies have been done by WHO suggesting that maternal under nutrition is one of the reason leading to higher risk of pregnancy complications. Maternal and child under nutrition is the underlying cause of 3.5 million deaths worldwide. Maternal nutrition influences maternal, neonatal and child health outcomes at a large proportion. Major social determinants of maternal under nutrition are education, socio-economic status, nutrition education or counseling during pregnancy, support natal and marital family and peers, household food security. The golden period to make any intervention is from onset of pregnancy to 24 months of age of the child.

Method: A systematic literature review was carried out based on published reports, articles, books, website, e-journals, and research papers.

Objectives: This paper focuses on identification of the social determinants that lead to maternal malnutrition. It also discusses these social determinants, and its emphasis on maternal malnutrition. Further, this paper contains few suggestions, suggesting some ways to improve maternal malnutrition focusing on the social determinants.

Conclusion: The paper concludes that a malnourished woman fails to bring maximum wellbeing to family, because when she is weak, she fails to take care of other people in the home. Hence, proper nourishment should be provided to a women at all stage of her life to prevent under nutrition of both mother and child as a well nourished woman can bring prosperity in lives in an inclusive way.

INTRODUCTION

Social determinants are those social factors, which influence the day- to-day needs depending upon the accessibility of the resources. In women the phase of pregnancy requires serious and certain attention regarding health and nutrition of mother as well as for proper growth and development of the fetus. For a pregnant woman to give birth to a healthy baby requires proper nutrition and sound sleep, hygienic environment and a good antenatal care, correct medication and healthcare services [1]. These are few of the essential factors that can avert low-birth weight among newborn thus keeping them alive and healthy. The first 1000 days from the onset of a women's pregnancy to her child's 2^{nd} birthday are the most important period for the development of the baby. Nutrition is one of the major factors that help in the process of pregnancy by reducing the complications. The right nutrition during these 1000 days yields lifetime prosperity such as strong immune system, healthy growth and brain development, higher IQ, better performance at school. [1]

Lack of adequate macro and micro nutrients in adolescent girls will lead to malnourished mother and deprivation of major nutrients in pregnant mothers will lead to undernourished child. This is a vicious cycle where implications of poor nutrition in women lead to poor pregnancy and undernourished child that again because of improper nutrition gives birth to undernourished child. Malnutrition is in fact caused due to inappropriate nutrition which can be due to lack of proper nutrients or utilization of nutrients in required way which can either lead to under nutrition or over nutrition. Maternal and child under nutrition is the underlying cause of 3.5 million deaths [1].

In tropical countries, under nutrition is the type of malnutrition that is most prevalent [1]. At most risks are particularly the poor, women of reproductive age, pregnant women and children. Maternal and child nutrition and health depend upon the weight of the newborn after his or her birth. For low birth weight newborns, their first 28 days of life is very critical because they have a higher risk of death as soon as they are born. In such cases if the newborn survives after the crucial period they mostly suffer from stunted growth and lower IQ [1]. As a result of low birth weight continues into adulthood, escalating the danger of inception of adult chronic conditions such as diabetes, hypertension and obesity [1]. The Global Nutrition Targets has recognized reducing low birth weight as a public health priority [1]. The UNICEF-WHO report states that globally, 20.5 million babies suffered from low-birth weight that is one in seven live births, among which almost half of them suffered from southern Asia. [1]. Despite the fact that there is enough production of food in this planet 25000 people die every day due to hunger related issues, among which death of one child in every five seconds takes place [2].

WHO reports suggests that maternal under nutrition is one of the reason leading to higher risk of pregnancy complications. 10 percent of the total global burden of disease is constituted together by maternal and child under nutrition in regions like Southeastern Asia, Sub-Saharan Africa and South-Central [3, 4]. Poor nutrition in pregnant women remains high. Shortfall of fundamental nutrition in the course of reproductive age, unhealthy dietary pattern are few of the reasons leading to Anemia. Maternal and child deaths can be prevented by reducing these. Globally, Anemia affects 40 percent of pregnant women. Maternal nutrition influences maternal, neonatal and child health outcomes at a large proportion [5]. Latest study suggests the importance of first 24 months of child's life for inhibition of stunting, obesity and certain Non-communicable diseases such as coronary heart diseases, diabetes (type 2), stroke, hypertension[5,6] . In the same way, insufficient maternal nutrition before and during pregnancy is highly associated with rising risk of mortality, maternal anemia and cumbersome birth outcomes like preterm birth (PTB) and low birth weight (LBW) although the exposition for this link has not been simple [7,8]. Apart from this malnutrition among women specifically mothers where the effects are transferred to generations with recurring cycles of improvishment and malnutrition over a long period of time [9].

In few of the studies being done earlier it is found that LBW infants are mainly born from undernourished pregnant women [10, 11]. There are past findings that have suggested association of ill health and poor nutritional outcomes with LBW. Further reports from many studies have linked the LBW with under nutrition, greater risk of mortality and morbidity, poor development and growth in children [12, 13]. Besides, negative outcomes during pregnancy have been associated with poor as well as under nutrition during pregnancy, particularly certain deficiencies of micronutrients especially Vitamin A, B complex, C, D and minerals such as Iron, Calcium, Zinc Magnesium as well as enormous mental stress to pregnant mothers can also lead to certain negative outcomes such as LBW and prematurity. Extreme deficiency in Iron, Anemia has been amalgamated to birth asphyxia [14], preterm labor [14] and poor anthropometric measures [15, 16]. Rarely there are studies suggesting any influence on lactation due to maternal malnutrition. Although several studies has given a possible link in production of lower level of Vitamin A and B complex, fatty acids specifically the essential, and decreased quantities in breast milk [12,17,20]. There are several evidences suggesting that during pregnancy the deficiency of Vitamin D may produce complicated outcomes as Preeclampsia [21, 22]. Besides, its underlying mechanism and the implications are yet to be understood totally.

Under nutrition in pregnant women can occur due to compounded interaction of multiple factors all together [18] The main factors being Food, affordability and accessibility to nutritious food; Care, lack of proper care of both mothers and babies and poor infant feeding practices also having many children of less than 2 years [19]; Health, accessibility to healthcare services and unhealthy household environment. Major

social determinants of maternal under nutrition are education or literacy, socio-economic status, nutrition education or counseling during pregnancy, support natal and marital family and peers, household food security.

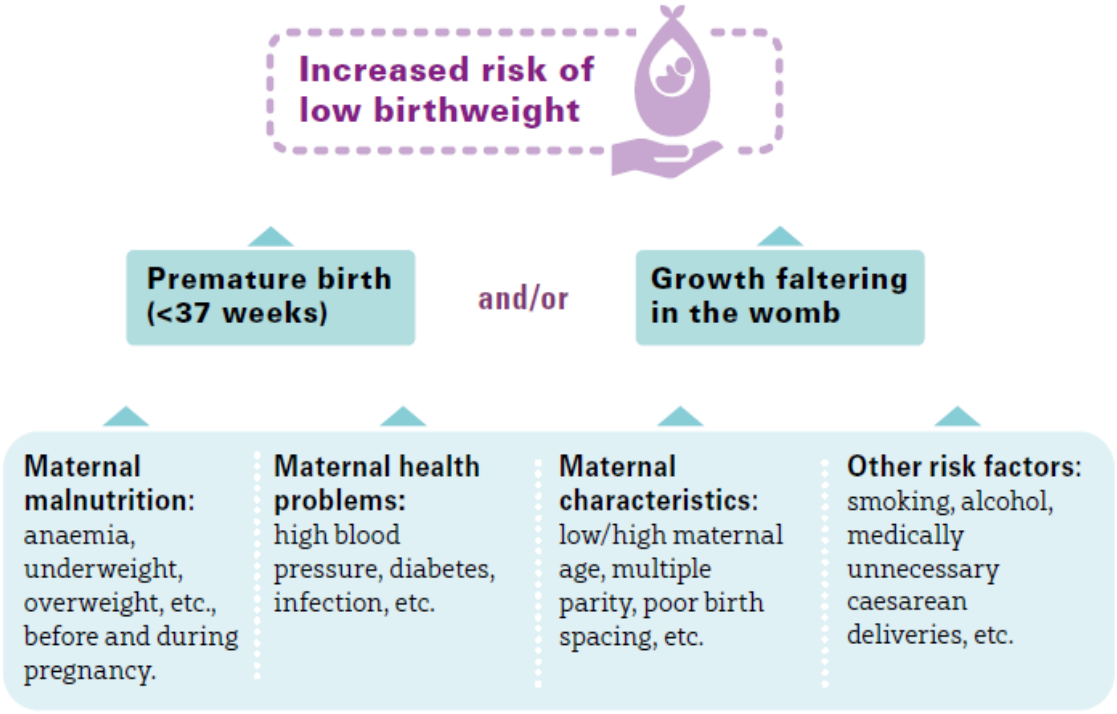
Several approaches have been taken to decrease poverty, increase nutritional facilities to reduce hunger, provide good health and well-being, providing quality of education, equalizing gender, clean water and sanitation so that Sustainable Development Goals can be achieved (SDG 1,2,3,4,5,6)[12-15]. These goals directly influences nutritional status of pregnant women and children by removing extreme poverty (SDG1) and hunger (SDG2), facilitating adequate and proper healthcare services also awareness about dietary patterns by community health workers (SDG3), increasing basic education accessibility (SDG4), empowering women (SDG5) and ensuring that no contamination of water and hygienic environment is provided along with proper sanitation (SDG6).

Therefore, the window period of 1000 days that is beginning from pregnancy (270 days) to 2 years of age (730 days) is an important opportunity to decrease under nutrition and its detrimental effects. There are stockpile of proficient and experienced in different countries as how to establish and observe nutrition programmes, raise engagements, revise or abolish inefficient programmes. Interferences with proven efficacy should be immediately bought into effect [23].

NEED FOR THE STUDY

Nutrition is fiercely ignored aspect of maternal and newborn [24]. Despite the fact that under nutrition is the potential risk factor for disease [25]. The golden period to make any intervention is from onset of pregnancy to 24 months of age of the child. World Bank report suggests that under nutrition is more common in developing countries [26]. Certain groups have higher of under nutrition such as women under nutrition especially during pregnancy and lactation period are common. Most of the developing nations such as Afghanistan, Nepal, Myanmar, Ethiopia, India, Pakistan, Bangladesh and Democratic Republic of Congo have higher maternal mortality rate as well as infant mortality rate, reason being lack of proper nutrition during the crucial window of 1000 days for both mother and child. Studies have linked under nutrition with low level of education, maternal illiteracy and lack of support from home [27]. One of the major causes for low birth weight in babies is maternal malnutrition. The risk for life is more in low-birth weight babies in comparison to normal babies. A slight increase in average birth weight can highly lower the infant mortality, so the supply of adequate nutrition and supplement to malnourished mothers are of utmost importance [27].

Fig.1 Framework for risk factors to low-birth weight babies.



Source: Adapted from UNICEF-WHO Low birth weight estimates levels and trends 2000-2015

OBJECTIVES:

The objectives of this study were to conduct review on identification of the social determinants that leads to maternal malnutrition on qualitative results.

1.) How malnutrition is defined in terms of participants, interventions, comparison and outcome measures.
2.) Suggesting some ways to improve maternal malnutrition.

METHODOLOGY:

Study Design & Setting

A descriptive qualitative review study was conducted wherein a systematic review of observational studies published at MEDLINE (via Ovid), Pub Med databases and Google scholar was done along with references from various articles and books. The secondary data was assessed and evaluated qualitatively using set criteria.

Data Collection Methods

Various literatures published on the topic burden and determinants of malnutrition among pregnant women published till 2019 were searched in the PUBMED, EBSCO host, Google Scholar using Boolean algebra (AND/OR)

Inclusion criteria:

Population/Participants

Systematic reviews on malnourished women and child were included in the searches for systematic review.

Interventions

Few interventions in women education, socio-economic status, interventions in household food security, nutrition education and counseling during pregnancy, prenatal care were considered.

Comparison

Reviews of studies comparing nutritional status of developing nations to developed nations, review of studies comparing girl's participation at level of education with that of boy's participation at level of education, review of a study comparing on spending in household by women to that of men were included.

Outcomes

Only reviews reporting relevant outcomes were included, specified as importance of nutrition for women and child, cause of malnutrition, executive summary of the Lancet Maternal and Child nutrition & series, influence of maternal nutrition on birth weight were included.

Languages

No articles were excluded based on languages.

Year of publication

Papers until 2019 were included.

Exclusion criteria:

Design

Reviews considered not systematic were excluded. If the same author had several publications of same reviews, the updated review was selected. Dissertations were excluded.

Participants/populations

Studies with participants considered not relevant for the review as studies on male under nutrition, under nutrition of women after reproductive years of age.

Interventions

Other exclusions were studies on interventions considered not relevant for review such as male education, food and nutrition habits of men, socio-economic status of men, other counseling except nutrition counseling during pregnancy.

Outcomes

Reviews reporting determinants of stunting and overweight among young and adolescent children, determinants of stunting, overweight and wasting among children, high frequency of vitamin D deficiency in current Japanese pregnant women, nutritional assessment of the children were excluded.

Year of publication

Papers after 2019 were not considered.

RESULTS & DISCUSSION:

After the initial search yielded 90 results, 13 underwent abstract and full text review underwent 43 papers being included in study. A total of 43 articles were included in the review, see figure 2 the articles were published in 38 different journals. The most common field was women status, malnutrition.

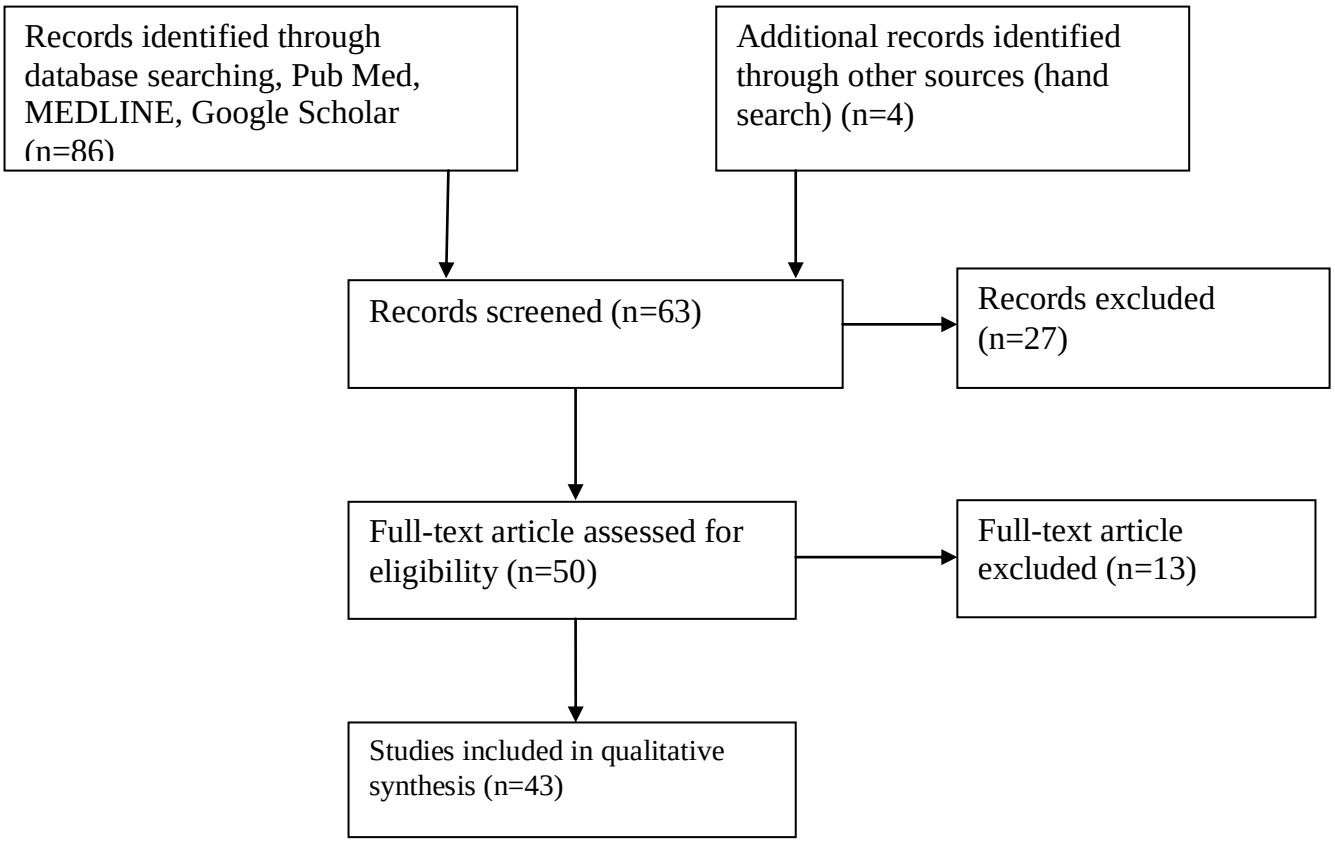


Fig .2 Literature search process with inclusion and exclusion criteria

SOCIAL DETERMINANTS THAT LEADS TO MATERNAL MALNUTRITION

FEMALE EDUCATION

Education is a human right and therefore it is placed in goal 4 of SDG. A quality basic education provides children and adults the knowledge and skills to face difficulties in life, helps in economic development. Education helps in reduction of poverty, stimulating economic growth, social development and attaining gender equality. Women's education has proven to be the among strongest poverty reduction determinants as reported by few of the studies [32] According to UNICEF estimates, worldwide 132 million girls between the age of 6 and 17 are out of school and 15 million girls of primary school age-half of them in sub-Saharan Africa will never enter a classroom the reason being mainly poverty, gender based violence and child marriage in several countries and communities [27].

Women's participation at the primary and secondary level of education is not as expected. It has been seen that retaining girls in school are more challenging than boys because provision of education to boys are preferred more than girls. All of these results into lack of basic nutrition education, which ultimately hampers the health of girls, and women at the end because they do not know the right kind of food for proper nutrition and the consequence of under nutrition, moreover women are dependent upon their family. Girls who complete their primary education tend to find better jobs, marry later and have fewer children [28].

Women have the power of decision-making and are not likely to suffer from under nutrition. Although women have knowledge about which food to eat but somewhere they lack the knowledge of what to avoid, they don't know the importance or the reason behind eating a particular food item, their nutritional benefits [29]. Primarily the source of this nutritional knowledge comes not from any trained professional but from any old lady from the household during their pregnancy [29]. To bring down maternal as well as child mortality food and nutrition habits of girls and most importantly of pregnant women must be taken care of properly [29]. Level of nutrition is considered to be a crucial determinant of complications at the time of child birth and pregnancy. Multiple studies state the comparatively impoverished health and nutritional status of young and adult women and the broad ranging gender-specific disparities in feeding practices [29]. Low maternal health and poor pregnancy outcomes are also contributed by poor nutrition along with other factors. Education apparently makes women aware and knowledgeable of nutritional requirements during pregnancy, its benefits for young girls and as well as infants [29]. Education has that power to change the age-old dreadful food habits of people by educating them. It's the right of a woman to take care of her own

health and nutrition, become educated and make this world a better place. Education plays an important role and is a key determinants for catering good health and well being of both the mother and the infants [29]

SOCIO-ECONOMIC STATUS

Socio economic status is one of the key factors in regulating the quality of life for women actively influencing their children as well as their family life. Low socio-economic status is related to poor education, poor health which ultimately affects our society [30]. If the socio-economic status of an individual improves there are higher chances of better quality of life even for the family. For improving the socio-economic status both the social as well as economical factors have to be considered. Researches have shown that the low socio-economic status in women primarily effects their quality of life, physical health and mental health [30].

Biasness in paying according to gender, differences in employment opportunities in women, not completing primary and secondary education effects socioeconomic status of women in society, socio economics status influences the nutritional status of women during pregnancy lack of economic resources to women can obstruct the process to eliminate maternal as well as child under nutrition. In developing countries there is huge inequality of income, most of the household earn very little to survive. It even affects the standard of living [30]. Studies have suggested that socio economic status affected child malnutrition [30]. As a result, women become a victim of impoverishment. They are less concerned about their own health just focusing on subsistence anyhow [30].

A study suggested that the chronic malnutrition is highly dependent upon the long-term nutritional situation of women [31]. If the socio-economic condition of a woman is not good that is they are poor they will definitely be poorly nourished thereby implicating serious nutritional status to herself as well as for the yet-to born baby [32]. It has also been seen that under nutrition in females holds down the ability of women to generate revenue, which may ultimately hamper the nutritional status of their current child. Whenever a woman controls budget they hold a larger position in allocating the resource, also they are in a good position to ensure better care for her children [32]. The underprivileged status of women has less impact at the time of allocation of resources somehow influencing the ability of decision making power of the household [32]. The UN women report states that in order to achieve SDG1 of ending poverty, SDG2 on zero hunger and SDG3 on ensuring health women empowerment is the key. It increases productivity and equality in income [33].

NUTRITION EDUCATION AND COUNSELING DURING PREGNANCY

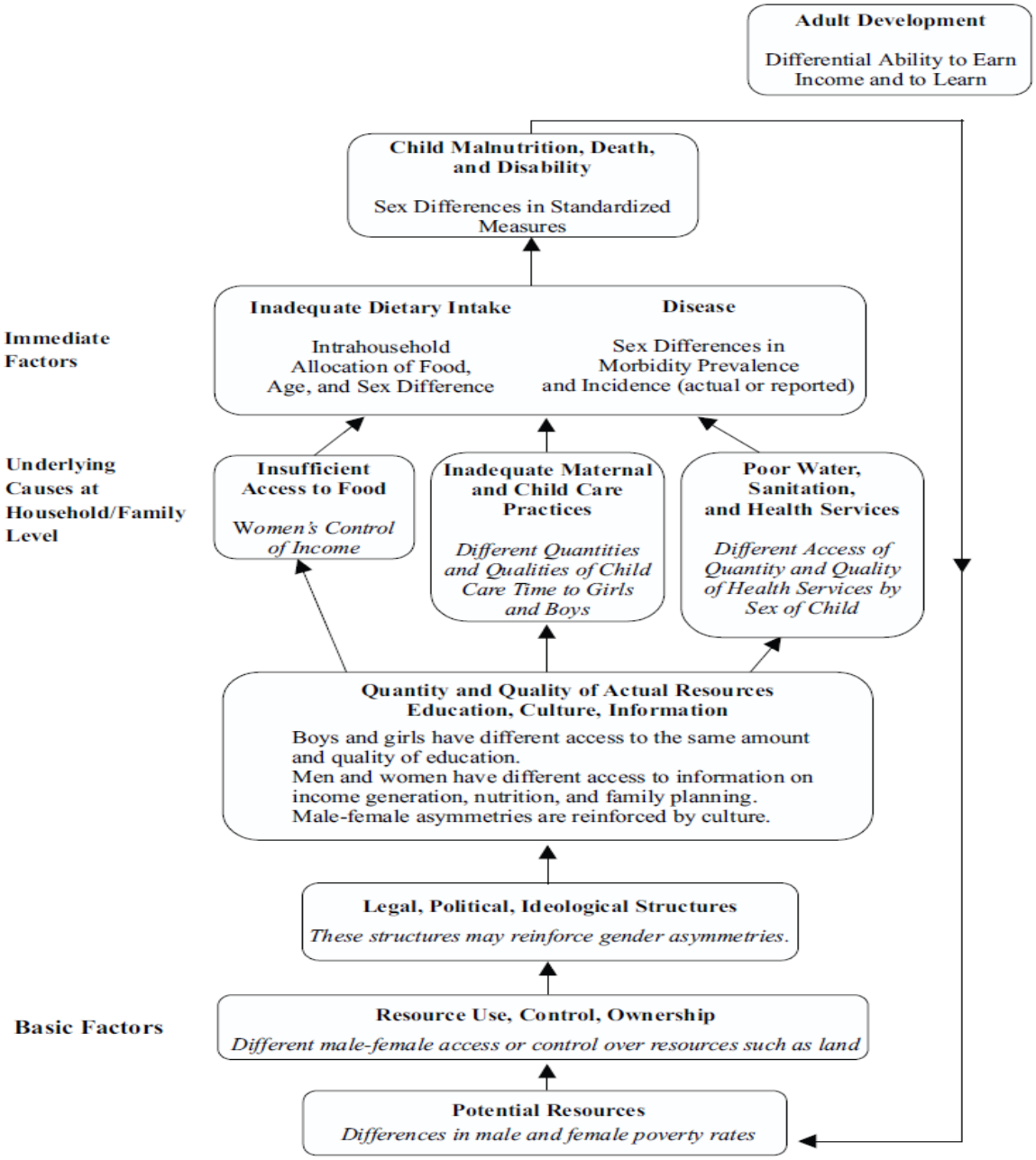
The disheartening thing is that most of the health care facilities are available in the urban setups in the form of hospitals, nursing homes, community health centers etc. There is no or a very few facility available in the rural areas. Even if it is availability in primary health centre it has very little facility and technology to offer to its people. Due to which, the poor women who are undernourished do not get any option to get a proper consultation about nutrition or any healthcare services [34]. Even if they manage to arrange a visit to urban health care centre they face different challenges like if they go for Government healthcare centre issues are different than private health clinics, at first government facilities are too crowded and the later is quite expensive for the poor and vulnerable people [34]. This leads to under nutrition in women. Therefore providing necessary facilities to women during pregnancy at the healthcare centre is most important in order for a healthy delivery of a baby. Nutrition education and counseling is prevalent strategy to better the nutrition of the mother during pregnancy [34].

A study suggested that the nutrition education and counseling elevates gestational weight by 450 grams, reduction in risk of anemia in late pregnancy by 30%. The effect of nutrition education and counseling increases when supported by nutritional safety nets, supplements of food or micronutrients [35]. Nurses considered nutrition counseling an important but challenging task in the clinics. In addition to promotion of health, they had counseled clients in the management of various disorders ranging from constipation to celiac disease. Variability was noted in the extent to which nurses had adopted nutrition guidelines. As means to improve counseling, better collaboration with both families and healthcare professionals and an increase in resources, including time available for counseling, up-to-date educational material and clinical guidelines, as well as increased education in nutrition were suggested [35]. It has been seen that for pregnant women in Primary Healthcare education for nutrition was lacking [36]

HOUSEHOLD FOOD SECURITY

Women are considered to be the key to the lock of the household food security. They are majorly responsible for to make decisions that effects the child survival positively [32]. However, this decision making power is totally dependent upon their status and position that they hold in family. They generally engage in resource use such as spending in household income, provision of quality life to their children especially education and nutrition, allocation of food in household. Women tend to spend more on food items than men keeping in mind the nutrition factors [32]. Care provided by women usually contains activities such as care during pregnancy, breastfeeding of babies and feeding of children, supporting at the time of their baby's development, preparation of food and it's storage practices, care for children during illness [32].

Fig.3 A gender conceptual framework of the determinants of nutrition outcome.



Source: Adapted from UNICEF (1998)

PRENATAL CARE

Prenatal care have show to prevent low birth weight among infant, there are three targets which are mostly aimed to prevent low birth weights, (1) nutritional highlighting weight gain and low pregnancy weight, (2) psychological, (3) medical [37].One of the important causes of childhood mortality and morbidity is malnutrition. Nigeria is one of the worst countries in this aspect. Few studies have shown a link between childbirth and childhood malnutrition and maternal care at the time of pregnancy. Hen studies tell us for care of women in pregnancy and childbirth can pose risk to mother as well as the child [38]. A study was conducted stating that there was an increase in incidence of miscarriage, premature and still births in women having poor diet [39].

SOME WAYS TO IMPROVE MATERNAL MALNUTRITION FOCUSING ON THE SOCIAL DETERMINANTS

FEMALE EDUCATION

1.) **Creating accountability:**

Initiatives for girl child education need to have form accountability from the administration which handles civic affairs. Concerned authorities must be accountable and assessed for their ability and responsibility in changing girl child enrollment. Factors that push girls out of the school, including sanitation (scarcity of dedicated toilets for female students it is a well known factor for girl dropout), harassment it must be inspected regularly by concerned authorities [40]

2.) **Creating dialogue with communities:**

Support is required from local authorities like police, political persons and renowned people [40, 41].

3.) **Focus on basic education**

Focus on basic education should be given properly for the girls as it has been that lack of good quality basic education leads to lack of knowledge and self esteem among women [40, 41].

All of these in abilities mentioned above lead to lack of information which ultimately results into lack of self care. The above mentioned reasons finally turns a woman into a malnourished being as they have no information or Idea available with them to help them become strong and self sufficient [41].

SOCIO-ECONOMIC STATUS

1.) The measures needed to be initiated, to bring about changes in the status of women are crucial, particularly the ones, belonging to rural areas and tribal communities and women who belong to underprivileged urban areas and economically backward section of the society [42].

2.) Measures need to be taken to bring about improvements for them who are primarily engaged in minority works. These women are required to be empowered in their status as well [42].

3.) Some of the most common initiatives for improvement in the status of women are employment opportunities, acquisition of education, equal opportunities and rights, participation in the activities like social, religious, economic, cultural and political. Good terms and relationships with family members and communities along with maintenance of good health, socialization and well being, availability of facilities and amenities and elimination of abuse and mistreatment is a must for the physical and mental well-being of women [42].

4.) . Women around the world especially in developing countries face abuse of some or the other forms. Due to prevalence of violent and criminal activities not only it has effect upon their physical and psychological health conditions but also their status gets undermined [42].

5.) We should take developmental approaches and strategies, which would ultimately e result into the elimination of discrimination of any form among men and women. This would give women equal status as men and they can have proper food for their good health and there health is not compromised because of any social economic conditions [42].

NUTRITION COUNSELLING AND EDUCATION

1.) According to a study conducted pregnant women prefers the written mode, visual mode as well as 1-1 session for communication more such as written pamphlet from healthcare professionals, listening to healthcare professionals about nutrition. So important information can be given via pamphlet writing [36].

2.) Provide them detailed educational materials that helps them understandings the importance of nutrition and its key functioning in pregnancy [36].

3.) Recommendations from midwives on how to prevent from gaining weight during pregnancy [36]

4.) Pregnant women to meet their individual needs they prefer nutrition counseling individually rather than in a group setting. So ideal 1-1 sessions can be conducted with the nutrition expert or healthcare professionals [36].

HOUSEHOLD FOOD SECURITY

Girl child must be educated in order to have a control over household and to be able to generate resources as well as direct them such as food, care, preventive and curative healthcare to young children [32].

PRENATAL CARE

1.) Increasing prenatal care access [43].

2.) Referring to guidelines provided by government deliver nutritional care [43].

3.) Put more emphasis on behavioral risk factors (such as screening & intervention) [43].

CONCLUSION

There is no doubt that nutrition is fiercely ignored aspect of maternal and newborn even though it is the fact that under nutrition is the potential risk factor for disease. Several studies have been done by WHO suggesting that maternal under nutrition is one of the reason leading to higher risk of pregnancy complications. Hence to understand the problem better and to reach the solution we have delved into the social determinants of maternal malnutrition. Social determinants are those social factors, which influence the day- to-day needs depending upon the accessibility of the resources. The objective was to identify the social determinants that lead to maternal malnutrition, and suggest the ways to improve maternal malnutrition. Some of most important social determinants which lead to maternal malnutrition are Female Education, Socio-economic status, Nutrition education and counseling during pregnancy, Household food security and Prenatal Care. Maternal health is such an issue which does not affect the concerned woman only but also the society at large as it shows the impact upon all the sectors in some or the other way. A weak woman gives birth to a weak child which is harmful for a precious life. Affecting a woman's dignity by discrimination and by not giving them proper care and nutrition weakens the society from within. In a society where the woman is given equal position and respect, that society is bound to flourish. Also malnutrition affects the economy of region as the women (who are around half the population of a particular place) cannot work there to their optimum capacity, hence resulting into the loss of economy. A malnourished woman fails to bring maximum wellbeing to family as well because when she is weak, she fails to take care of other people in the home. Hence, proper nourishment should be provided to a women at all stage of her life to prevent under nutrition of both mother and child as a well nourished woman can bring prosperity in lives in an inclusive way.

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PART II

ONLINE COURSE OFFERED BY JOHN HOPKINS UNIVERSITY, COURSERA

TITLE

TRAINING AND LEARNING PROGRAM FOR VOLUNTEER COMMUNITY HEALTH WORKERS

COURSE DESCRIPTION

Community health workers (CHWs) are a major strategy for increasing access to and coverage of basic health interventions. This village health worker-training course reviews the process of training and continuing education of CHWs as an important component of involving communities in their own health service delivery. Participants will be guided through the steps of planning training and continuing education activities for village volunteers. The course draws on real-life examples from community case management efforts, peer educators programs and patent medicine vendor training programs, to name a few.

OBJECTIVE OF THE COURSE

- Apply key principles of learning to the training program.
- Identify and recruit trainees for any program.
- Identify the existing needs that the program must address.
- Formulate SMART objective for the program.
- Designing content for the training program.
- Generate a first draft of the course project.
- Select appropriate methods for the training program.
- Develop educational materials match with which methods.
- Plan a monitoring program.
- Apply example case study in owns training program.
- Evaluate the training program.
- Assess trainee performance on an ongoing basis.
- Plan an ongoing continuing education program for trainees.

LEARNING METHODOLOGY USED

- Lectures, PPT, videos

COURSE CONTENTS

Week 1

- Introduction video
- Lecture 1: approaches to training and learning.
- Lecture 2 : identification and recruitment of trainees

Week 2

- Lecture 3: diagnosing traning needs
- Lecture 4: content and objectives

Week 3

- Lecture 5: selecting appropriate training methods
- Lecture 6: material, time and resources.

Week 4

- Lecture 7: monitoring implementation
- Lecture 8: sample community volunteer session on malaria case management
- Course project –revised draft submission and peer evaluation.

Week 5

- Lecture 9: evaluating training programs.
- Lecture 10: follow-up, supervision and continuing education.

Lecture 1: Approaches to training and learning

A) Principles of learning(part 1):-

- Teaching is a facilitating process.
- Learning & discovery
- Learning & exploration
- Learning & experience
- Trainees feel important
- Independence
- Cooperation

B) Principles of learning (part 2):-

- giving up old ways
- evolutionary process
- self as a resource
- emotional concept
- problem solving

C) Adult education approaches

- Adult learning assumptions- concept of the learner, role of learner's experiences, readiness to learn,

orientation to learning, motivation.

Adult learning elements- climate, planning, diagnosis of needs, setting of goals, designing of learning plan, learning activities, evaluation.

Lecture 2: Identification and Recruitment of Trainees

A) Overview

- start-up components
  - approach the health services
  - approach the community
  - training volunteers selected by community
- partnerships
  - organizational partners ⟺ community partners

- build on existing programs

B) Roles for health services

- Train trainers
- Partnership concept for training volunteers
  - Mapping catchment areas
  - Reaching out to the community
  - Ensure participation

C) Approaching the community: gaining support for community volunteers efforts

- Train health workers for their roles
- Train health workers reach the community
- Train frontline health workers plan and monitor
- After training, more health department roles

D) Meetings and roles of community

- First meeting with community leaders
- Second meeting with community members
- Discuss & gain commitment from the community
- Roles for the community

Lecture 3: Diagnosing Training Needs

A) What information is needed?

- diagnostic questions
- understanding tasks
- realistic tasks
- analyzing tasks on the basis of training
- a remainder

B) Documents and interviews

- Information needs: who and how

- Example of document
- Job description
- Plans and progress reports
- Reviewing plans and reports
- Minutes of meeting
- Professional literature
- Change in policy
- Feedback from stakeholders
- Interviews in context
  - Personal interviewing
  - Group interviewing
  - Community interviewing

C) Observation of performance

- Observation
- Observers and the observed
- Triangulate multiple methods
- Maps are documents
- Health worker views
- Implications for training

D) Training needs to deliver a basic package of services

- Alma ata declaration
- What does community wants and needs?

  Ideally, PHC should be based on the perceived needs of community.
- Selective primary health care
- Community directed intervention

Lecture 4: content and objectives

A) contents and objectives

- training contents
- formulating objectives
- training objectives are behavioral objectives
- training objectives are observable

B) SMART Objectives

- Good objectives are smart
- Specific
- Measurable
- Attainable
- Realistic
- Time-bound
- Choose an objective
- Plan simple trainings

Lecture 5: selecting appropriate training methods

A) A variety of methods

- a variety of training methods are available
- appropriate methods
- Precede a guide to method selection
- Level of participation as a guide

- CDT
  - Components
  - Characteristics
  - Training objectives

B) Sample methods for learning about educating villagers

- Educating villagers: sub-objectives
- Signs and symptoms

- methods for sub-objectives
- build on local knowledge
- local communication
- brainstorming
- local beliefs
- health belief systems

C) Sample methods for learning about a census

- Estimating tables
- Aspects of village census
- Estimating needs
- Possible methods
- Problems in the field
- Local perceptions
- Guided discussion
- Brief lecture on eligibility
- Demonstration and role play
- Practical field work

Lecture 6: Material, time &resources

A) Training logistics

- Overall logistics
- When, where and how much
- Village health workers logistics
- Village health workers training arrangements
- Training costs and funds
- Budget checklists

- Sources of funding for training

B) Matching materials with methods

- Each training methods implies resources
- What is needed for a demonstration?
- Filter demonstration
- Needs for a role play
- Costs for each methods
- Estimating time
- Role play on prompt treatment
- Checklists
    - supplies for each trainee at the start

C) Developing and using educational material/aids

- Methods or materials
- Staring with indigenous media
- Stories
- Trainees can be involved in designing materials
- Materials should be pre-tested

D) A Simple training guide

- Developing a training guide
- Basic content
  - Title page
  - Description of trainees, setting and recruitment
  - Steps in diagnosis for training needs
- Preparation section
- Preparing logistics
- Introduction
- Sample session narrative
- Wrap-up narrative
- Evaluation plan

Lecture 7: monitoring implementation

A) What is monitoring?

- Why monitor?
- Monitoring involves responsiveness
- Monitoring is process evaluation
- Using process evaluation
- Trainee's meeting

Timely feedback

- Immediate results
- Achieving immediacy
- Observer's checklists
- Using information

B) Monitoring content & process

- Monitoring ‘R’ Us
- Structure reviews times
- Reviewing
- Use content review
- Reviewing the process
- Getting feedback
- Use the information
- The suggestion box

Lecture 8: Sample community volunteer session

A) Sample community volunteer session

- Session objectives
- Simulated modules for volunteers
- Resources needed
- Overview of session
- Objectives for training session

B) How do we check for the disease?

- Rapid diagnostic tests
- Treating diseases

C) Treatment scenario

- Counseling for treatment
- Record the treatment provided
- Monitoring, follow-up after treatment
- Evaluation Q & A for volunteers

Lecture 9: evaluating training programs

A) Overview and definitions of evaluation

- Evaluation defined
- Accountability
- Types of training evaluation
- Types of evaluation
- Impact evaluation
- Outcome evaluation
    - tools for outcome evaluation

B) Pre & Post Test

- Pre and post tests
- Types of questions
    - Balance in questions
    - Open ended questions
    - Multiple-choice questions

C) Observation, feedback & analysis

- Observation checklists
- Patient counseling checklists

- Test instructions and results
- Feedback forms
- Focus group discussions
- Use tests results and feedback

Lecture 10: follow-up, supervision and continuing education

A) Monitoring and measuring performance

- Training for transferability
- Transferability
- Levels of transferability
- Follow-up evaluation

- Changes to be monitored and measured
- Recall training need diagnosis

B) Realities back on the job

- Application of new skills is not easy
- Change is difficult

C) Supervision functions and effectiveness

- Functions of supervision
- Supervision functions
- Effective supervision
- General supervision
- Close, detailed supervision
- Employee
    - Centered
    - Centered situations

THANK
YOU