

CHAPTER – 2

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REVIEW OF LITERATURE

An in-depth review of relevant literature on infrastructure of public healthcare facilities and their utilisation has been discussed. Further, an attempt has been made to explore several empirical studies particularly on the utilisation of healthcare services of primary health centres and its related issues to find out the scope for the research work. The review of literature has been presented into four sections- Section 2.1 - availability of and accessibility to the health facilities and utilisation, Section 2.2 - distance, location and utilisation, Section 2.3- socio-economic aspects and utilisation, and Section 2.4- needs, perception and utilisation.

2.1 Availability and Accessibility of Healthcare Facilities and Utilisation

Hassinger (1973) designed a study to assess the relationship between the availability of health services to the pattern of use of health services in a rural area. From the survey of households, the data showed similar patterns of utilisation of health services for the four communities against the proposed hypothesis that the use of services would be directly related to services available within the communities. Moreover, the application of age and income controls did not change the results. Nevertheless, there is a common normative pattern of health behaviour in the four communities, on the basis of which people will exert considerable effort and utilise scarce resources to obtain medical services deemed to be needed in a given situation.

Kekk (1980) analysed the relationship between the availability of resources and the use of health services. This study concluded that a considerable change in the pattern of health services use depended on the number of physicians and physicians working hours in primary care in health centres.

Okafor (1983) opined that availability of health services mainly refers to its physical presence. On the other hand, accessibility reflects the extent to which services can be obtained at the time of requirement. Available services can be inaccessible due to the users' physical condition, age and sex, long-distance, lack of transportation, and social custom. It was found that utilisation in Nigeria is highest among the under 20 and over 50 years of age.

The Indian Council of Medical Research (ICMR) study (1991) on Health facilities found that most PHCs are over-burdened, accessible only to a few, and regional variations in area coverage. Also face problems of inadequate drugs and medicine supply, poorly equipped treatment facilities etc.

Islam (1993) has had observed that opening time is an important factor in the utilisation of the facilities. It is reported in Bangladesh that the reasons for the reluctance of mothers to use Maternal and Child Health (MHC) clinic facilities partly that clinics operating only during busy hours of family work.

Mukherjee (1997) in his work on “Aspects of Distribution, Accessibility and Utilisation of Health Care Facilities in Urban Delhi” found that the pattern of healthcare utilisation depends on area. The areas provided with good government facilities, e.g. Fatehpuri, Safdarjung Enclave and Shahadra, showed higher utilisation of government facilities while areas far away from them come up in large number show higher utilisation of the private facilities.

Prasad (2000) studied on the health problems of the poor rural population of Gujarat. His research shows that the majority of the rural poor population faces problems accessing health services because the government has failed to identify

social spaces or gaps in health policies. It also found from a study on the leptospirosis epidemic in the state of Gujarat. During the epidemic of 1997-99, the rapid supply of drugs, increased allotment equipment, health workers, doctors and the opening of special wards in hospitals were of less significant in saving lives.

Banerjee et al. (2004) carried out a study on health care delivery in rural Rajasthan continuous facility survey. Each of 143 nos. of public facilities was visited weekly during regular hours for an entire year. Around 45 per cent of the doctors were found absent from primary health centres. It was also found that at sub-centre and aid posts, the doors were closed 56 per cent of the time. Moreover, the patterns of absence from duty and the closure of the facility were found to be unpredictable, so people could not even count on facilities being open on certain days or certain times.

Al-Ghanim (2004) had conducted a study based on descriptive statistics and binary logistic regression to determine the significant variables which may influence the utilisation of Public and Private Primary Health Care Services in Riyadh City. The study reveals that several patient-related variables such as income, health status, education, gender, the presence of health insurance and nationality and provider-related variables such as the location of the health facility, waiting time, the availability of ancillary services, opening hours and the availability of specialised doctors) were statistically significant in identifying the variables that influence the utilisation of public PHCs and private out-patient clinics.

O'Donnell (2007) studied on titled "Access to health care in developing countries: breaking down demand side barriers" and revealed on the low-level health care utilisation and income-disparities existence in health care facilities utilisation in developing countries. They highlighted that the poor section people of the developing countries did not get adequate health care facilities. They found two basic reasons behind the low utilisation of health care facilities in developing countries *viz.*, (a) good quality and effective health care may not be offered to

them, and (b) individuals may not utilise services from which they could benefit. They argued that it is urgent to establish mechanisms to increase availability and improve health care quality in developing countries.

Bhandari and Dutta (2007) in their study “Health Infrastructure in Rural India” reported that rural public health facilities across the country are difficult to attract, retain, and ensure the regular presence of highly trained medical professionals. The higher the level of training required for the position, the greater is this need gap. Further, in the case of physical health infrastructure, there is also a shortfall (and perhaps a more serious one) in service providers. In addition to the shortage of service providers, the system is plagued by poor involvement and participation of those who are employed. Many of the healthcare facilities- public or private are not accessible throughout the year to about a third of the villages.

Andersen (2008) examined on “National Health Surveys and the Behavioral Model of Health Services Use” in the United States of America (USA) and the advancement of concepts and methods of health services research. He reviewed the 75 years legacy of the series of national studies on the form and function of health services research. He further analysed the Behavioural Model of Health Services over 40 years of its application and alteration. He highlighted the role of National Health Survey as a very significant and effective function of health care system and its impact on people socio demography, economic and illness levels. Despite National Health Survey somehow improve policy implications and methods of health service research but still have to address some areas such as Government urgent needs of information, public expectations with respect to national health insurance, the distribution and adequacy of health insurance coverage for the population and access to medical care appropriate to the needs of the general population and vulnerable subgroups. He has suggested equity, effectiveness and efficiency of health care services for redoubling the general effort to conceptualise and analyse health services utilisation.

Akresh (2009) conducted a study using Andersen's behavioural model to examine the utilisation patterns of Asian and Hispanic immigrants to the United States. This study confirms that the behavioural framework is well suited to predicting immigrants' physician visits and dentist visits. It exhibits positive relationship with physician and dental visits for both groups (Asian and Hispanic immigrants) even after controlling for several predisposing characteristics, self-assessed and physician-diagnosed needs, pointing to the importance of this as an enabling factor in health care access and use.

Gill (2009) studied on evaluation of the quantity and quality of service delivery in rural public health facilities under NRHM. The study evaluated the static and dynamic state of the physical infrastructure and feasible measure on the number of paramedics, technicians and medical personnel employed. The NRHM has put rural public health care firmly on the agenda and is on the right track with institutional changes in the health system. However, it is revealed in the study that there are problems with the implementation, so the delivery of healthcare services is far from what it should be. In terms of physical infrastructure, medicines and, procession problems could more easily escalate over time however, in some cases it seems that they have already been overcome, whereas on human resources and to the extent these impact actual availability of services.

Ratnawali (2009) highlighted on health status of the rural population from a study carried out in South Gujarat and indicates that there is relatively poor health status among the rural population. The study found significant incidence of morbidity among the households. According to the study, appeared to be inadequate public health facilities to provide reasonable health care and for which reliance are more on private health services. Therefore, it was suggested that there is an urgent need to reorient the public health care system with better manpower and infrastructure with priority.

Nteta et al. (2010) carried out a study on 'Utilisation of the Primary Health Care Services in the Tshwane Region of Gauteng Province, South Africa'. This study was designed to investigate the accessibility and utilisation of primary health care services in three community health care centres in the Tshwane of the Gauteng Province, South Africa. The results revealed that the Community Health Care Centres in the Tshwane Region are accessible to most participants who lived within 5 km of such centres and travelled 30 minutes or less to the clinic.

Zaman et al. (2010), their study revealed that PHCs under their study were rendering the assured services of OPD, 24 hours general emergency service and referral services. However, 24-hour delivery services were being provided by 80% of the PHCs. They have found that functional labour rooms were available only in 80% and 90% in Assam and Karnataka, respectively. Basic laboratory facilities such as routine blood, urine and stool examination were available in only 20% of the PHCs of the Empowered Action Group (EAG) state of Assam against 80% of PHCs under the non-EAG state Karnataka.

Shah et al. (2010) they observed that the post of medical officer was filled in 80% PHCs while in 20% PHCs the post was vacant, the post of compounder and nurse were filled in 70% PHCs while the post of ANM/FHW was filled in 88.7% PHCs. Further, it was observed that only 3 (30%) PHC had 6-7 indoor beds facilities, 3 (30%) health facilities had 3-5 beds, while 2 (20%) health facilities had no indoor beds. It was interesting to note that at 30% PHCs, Medical Officers were utilising the indoor facilities, while at 70 % PHCs, they were not admitting the patients. Haemoglobin estimation and blood group facilities were available in 80% PHCs; urine and Peripheral smear examinations for Malaria Parasite were carried out in all PHCs. At the same time, sputum for AFB was done in only 20% PHCs. ESR facility is available in 2 PHC out of 10, but they were not doing the test. As regards vehicle availability, 8 (80 %) of the PHCs had their own vehicle. Of these, the vehicle was in working order in 7 (87.5%); fuel supply was adequate in 4 (50%); absence of a permanent driver in 100%.

Nanjunda (2011) found in a study in selected tribal districts of Karnataka had found problems with PHC that doctors are not available 45% of the time at PHCs. It has been shown a high vacancy rate for medical personnel, especially for nurses (43%), pharmacists (52%), and lab technicians (23%). Patients have to purchase drugs from outside the PHCs 20% of the time even though they should be supplied with free medicines.

Burnham et al. (2011) tried to explore the existence of primary health care facilities and factors associated with the choice of public health care facilities after many years of sanctions and conflict in Iraq. They argued that Iraqi people are happy with the quality of existing primary health care facilities in both public and private sector. Poor section people mostly used the primary health care facilities than rich whereas the private clinics are the most popular means of primary health care in Iraq. They found that 66.4% of patients visited the nearest PHC for treatment, whereas 7.3% did not visit PHC despite having proper knowledge of available public sector primary health care facilities. They identify the high cost of medicine as a major barrier in assessing primary health care facilities in the country. Indeed primary health care facilities are free in Iraq, a little evidence of corruption has been observed. Enhancing expenditure on PHC may improve the efficiency and effectiveness of Iraqi health system suggested by them.

Sharma (2012) in her paper on “A Review of Urban Poor Health and Health Inequalities” found that inadequate infrastructure and poor health delivery has exacerbated the consequences of poor infrastructure, pinpointing deficiencies in the institutional setup in delivering health services. The lack of awareness in the community, especially vulnerable groups on available services at the health facility level often result in the underutilisation of services. He observed that a significant gap in communication and information between service providers and the community. It is shown that inadequate manpower in the public healthcare system and skewness towards private health services is a prominent feature.

Parveen (2013) studied the health of married Muslim women of Assam particularly in the district of Cachar, Assam. Like many other research findings, this study also identified four determinants of health-seeking behaviour: availability, accessibility, affordability, and acceptability. These include several factors that affect the health seeking behaviour in the study area.

Guttikar (2013) revealed that a case study on primary health centres and health care services of Uttar Kannada district, Karnataka on the–non-utilisation of health care services available at PHCs. LIGs and MIGs avoided PHCs because of inconvenient clinical timings, lack of medicines, non availability of doctors need of immediate treatment, long distance etc., On the contrary, High income group avoid PHCs for the reasons like poor treatment, long waiting, known family doctor, non availability of service, lack of cleanliness, hesitation to consult male doctors (in case of female respondents). Only increase in number of PHCs and the health staff not sufficient to solve the problem rather integrated health care delivery is needed to through the enhancement of managerial skills of health personnel for ensuring the increase in productivity.

A cross-sectional study was carried out in Ghayabari PHC by Ghosh et al. (2013) titled ‘Imbalances in health workforce in a primary health centre (PHC) of Darjeeling district’. They found two doctors, three nurses, ten beds for approximately 16,800 population with 8.4 turnover rates. Indian Public Health Standard criteria are incompletely met regarding adequacy and health workforce distribution. They also found that 27.27% of posts are vacant, 13% left jobs in the last three years.

Patra et al. (2013) carried a study on ‘National Rural Health Mission (NRHM) & Health Status of Odisha: An Economic Analysis’ and they observed that the health status of study area is very poor and however gradually increasing in quality as a result of the implementation of NRHM. In addition, they also found low income, illiteracy, a shortage of doctors, a reluctance of doctors to go to

remote areas, a lack of health facilities, and a lack of production of laboratory technicians and radiographers.

Mannan (2013) discussed extensively the process and factors associated with access to public health care services in Bangladesh. He tried to explore the reason behind the dissatisfactory public health care facilities in Bangladesh despite the substantial amount of expenditure on it. He found that economically weaker section especially women and child are more likely to use public health care services. He highlighted that inadequate supply of medicine, staff absenteeism; informal payments (corruption) are the major barriers to public health care system in Bangladesh. He has suggested that for improvement of public health care system in Bangladesh and rebuild hope among the patient government should ensure the presence of staff regularly at the facilities, provide the minimum amount of drugs to each patient and control the corruption at the lowest level.

Devi (2014) conducted an empirical study on “Access to and Utilisation of Health Care in Rural Assam: A Study with reference to Rural Goalpara”. Her work deeply entrusted with the existing health care facilities in rural Goalpara and its adequacy to check the rural areas' health care needs and examined the effect of economic and non-economic factors on people's choice regarding utilisation of health care. She highlighted that even as one of the high focused states of the NRHM programme, the health status of the rural people of Assam is relatively poor compared to urban Assam. In the state, rural areas have encountered the burden of acute illness and a high rate of child mortality and maternal mortality than the urban. Moreover, poor health infrastructure is identified as one of the root causes of low-level health care utilisation in rural Assam. She argued that rural Goalpara has failed to maintain the national norm regarding the average population of sub-centres and CHCs. Each CHC in the district has to serve more than four times larger population than the maximum capacity limit that shows a shortage of some basic health care infrastructure and manpower in the district. She suggested for qualitative improvement in health infrastructure and overcome the

problem of absenteeism, irregularity on the side of health personnel and ensures 24 hours service in all rural health care institutions.

Ninama et al. (2014) conducted a cross-sectional study on facilities available at primary health care in 14 PHCs. According to IPHS guidelines, 50% PHCs was located within the village area, and 28% was within 1 KM from the village. Doctor, Nurse, lab- technician and Pharmacist is available in 92%, 57%, 100% and 100% PHCs, respectively. Residential facility is available in 21% of PHCs. More than 85% of Doctors, staff nurses and health workers are trained for IMNCI and ANC services. All PHCs were providing all RCH services, but none of the PHC was providing MTP services. 92% PHCs had RO system for drinking water. Locked suggestion and complain box was available in only 21% PHCs.

Saikia et al. (2014) examined the status of healthcare infrastructure in the rural areas of the north-eastern region. They examined the status of rural health infrastructure, healthcare facilities, health workers, accessibility of healthcare services, and safety and acceptability of healthcare services in the rural areas of the north-eastern states since the implementation of the NRHM in 2005. Except for Assam and Meghalaya, other north-eastern states have shown a better position than the national average in terms of CBR, CDR, and IMR in rural and urban areas. They opined that in comparison to the national average, all the north-eastern states were in a better position in case population coverage by a Sub-centre in 2005. In contrast, all the states except Assam and Tripura are in a better position in the case of PHC and CHC facilities. The Indian Govt. National Rural Health Mission (NRHM) has made significant improvements in the healthcare infrastructure of the country. However, the improvement is quite uneven across regions, especially in the NER, with large-scale rural-urban variations and limited access to healthcare services in rural areas. They suggested an urgent need for rigorous efforts to strengthen rural healthcare and a proper roadmap for the key areas.

Devanand (2016) studied on public rural health services through Primary Health Centres in Jaunpur district of Uttar Pradesh. He found that female patients (53%) are more inclined towards the PHCs and its services than male patient (47%). It has been found that level of education having primary school (23.2%) or secondary schools (41.5%) are inclined toward PHCs services. However, it revealed that regularity of doctors in attending patient has been found be very disappointing. Regularity in attending of staff nurse and pharmacist has also been found disappointing in the study. With regard to referral services provided through PHC, 45% of the respondents are dissatisfied and 10.2 % highly dissatisfied. He suggested that the local village health workers as paramedics should be trained on basic medicine, health care, hygiene and nutrition for posting in PHCs to overcome the hardships being faced by the people in the rural areas due to non-availability/absenteeism of doctors. He also emphasised to ensure the availability, adequacy and functionality of health infrastructural facilities including the medical and para-medical staff in PHCs.

Hwang et al. (2017) conducted an extensive study on the impact of neighbourhood environments on unmet health care needs. They tried to examine an association between perceptions of neighbourhood availability of health care services and experience of unmet health care needs by gender in an urban city setting. They found that approximately 17% of female and 14% of male respondents had experienced overall unmet health care needs in the past year. Women and men aged 60 years and older were faced more unmet needs (13.7% and 9.2% respectively) in comparison to younger age categories. Women aged 40–49 (19.8%) and men aged 40 and younger (20.0%) were more likely to report the unmet needs relative to other respective age-sex categories. Persons with income less than \$40000 indicated more unmet healthcare needs than other income level groups (23.0% of both men and women) significantly. Recent immigrants (<10 years) had the highest reported unmet needs (men: 20.0%; women: 16.4%). They observed basically three things in their study; (a) the perceptions of poor health care availability in the neighbourhood were significantly associated with unmet health care needs, (b) simply increasing the number of family practitioners or

promoting a more even distribution of physicians across neighbourhoods may not reduce unmet health care needs and (c) identified gender differences in the relationship between perception of health care availability and subcategories of perceived unmet needs. According to them, Individuals' perception of health care availability played a crucial role in the experience of unmet health care needs. They also suggested for better community-based policy to improve physical conditions and the social aspect of health care services that reflect the needs of the residents within neighbourhoods.

Devi (2017) in her study on "Status of Public Health Care Delivery System-A Case study of Nagaon and Nalbari district of Assam (India)", analysed the status of public health care delivery system and the pattern of utilisation of health care services in the state of Assam. She opined that lack of proper health care infrastructure adversely impacts economically vulnerable sections of society and increase their pocket expenses for low-quality health care facilities. It has been shown that the major factors responsible for the low utilisation level of health care facilities in rural Assam are lack of specialists, shortage of medicine, poor functioning of the health centres, lack of proper infrastructure, shortage of manpower and overall minimal health facilities associated with accessibility. She also highlighted that higher healthcare expenditure for the rural poor implies cutting expenditure on food and non-food items such as education and other households' utilities. She suggested that well-equipped Govt. health care facilities and increased capital expenditure on the health sector would improve rural households' health status.

Bhavani (2017) researched examined about the efficiency of Primary Health Centres, critical and key issues of Primary Health Centres, policy implications on health programs implemented through PHCs and manpower problem associated in PHCs of Mysore districts in particularly and Karnataka in general. She found that lack of permanent staff, less number of maternity hospitals without lady doctors, lack of scientific and proper mechanism of health care services, presence of private clinic in a large extent are the major barriers in the

utilisation of PHCs in Karnataka. She has suggested that proper resource allocation, scientifically up gradation of PHCs and especially the co-ordination between medical staff as well as in between health workers and common people would enhanced the PHCs utilisation in Karnataka.

Kujawski et al. (2018) carried out a study to find out reasons for low utilisation of public facilities among households with hypertension in India, The explored health facility utilisation patterns and reasons for non-utilisation of public facilities in 21 states and union territories in India, with a focus on hypertension based on District Level Household and Facility Survey. They found that 37.6% households (had at least one household member with hypertension, while 15.9% had members with hypertension and diabetes. 20.0% of households sought care at public primary clinics, 29.9% at public hospitals and 48.3% at private facilities. Choice of private facilities increased with the burden of disease. Households with hypertension only and hypertension and diabetes cited quality reasons for non-utilisation of public facilities more than households without hypertension Households, particularly those with hypertension, chose private over public primary facilities for usual care. Quality of care was an important determinant of facility choice in households with hypertension and diabetes.

Gupta et al. (2020) highlighted on the availability of health care facilities and its utilisation level in India. The study shows the inadequacy of primary health care facilities in India where against 1000 population only 0.8 nos. of Physician, 1.5 nos. of Nurses and 0.5 nos. of Hospitals beds are available. They highlighted that only 3.9 of India's GDP had invested in primary health care facilities in 2017 budget. In India, 65% of healthcare expenditure accounted for out of pocket expenditure in 2015-16. It has been mentioned that the launch of the National Health Protection Scheme (Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana,(PMJAY) enables the poor section of people of the country to get cashless secondary and tertiary healthcare services even at private health care facilities, and this has improved a little bit the health care scenario of India. They

had put stress on improved the public health care system in India for the treatment of critical health problems also.

Bagchi et al. (2020) conducted a study on “Non-utilization of public healthcare facilities during sickness: a national study in India” They tried to explore the reasons behind the low utilisation of primary health care facilities in low- and middle-income countries. They found that the majority of the respondent, i.e., 88% revealed that their family members did not use public healthcare facilities. The basic reason they had found behind the non-utilisation of primary health care services are 'no nearby facilities' (42.4%), 'inconvenient facility timing' (29.6%), 'poor quality of care' (52.3%), health personnel often absent' (16.8%) and 'long waiting time' (39.9%). They also highlighted that during the last 10 years, the utilisation of public healthcare facilities had dropped significantly despite achieving the Indian National Health Policy 2017 targeted to reach all, and the Indian Parliament has been placing emphasis on equity. They suggested that redistribution and re-formulation of public healthcare facility are necessary to increase public health care utilisation in India.

Boro et al. (2020) in their paper assessed the barriers to utilising Healthcare services among the tribal population in Assam. They found both demand-side and supply-side barriers to utilising health care services among the tribal population of Assam. From the demand side, direct and indirect financial obstacles, distance to health facilities, poor public transportation, perceived negative behaviour of hospital staff, and lack of infrastructure were the main barriers. In contrast, on the supply side, doctors and nurses in government health facilities were overburdened by demand due to a lack of manpower. They highlighted that health care utilisation barriers do not always link with the patient's socio-economic status but depend on the quality of health services and other contextual factors. They also argued that even after effort by the Govt. to improve the rural healthcare system through national-level programs, rural healthcare facilities in Assam had not been enhanced satisfactorily. To increase the health care utilisation among the rural tribal population of Assam, Govt.

should improve awareness about the value of modern healthcare facilities through various community-level programs, healthcare and transportation infrastructure in rural areas, and socio-economic status of the tribal population. It was suggested to establish contact between the tribal population and health workers with the help of tribal leaders and government functionaries.

Lawal et al. (2021) in their work titled “Healthcare Access and Utilisation among Households in Katsina State, Northern Nigeria”, is an in-depth study on the healthcare sector of Nigeria. They aimed to determine the households spending on health, health seeking behaviour, access to healthcare services among the residents of the state. They found that primary healthcare facilities in Nigeria are not satisfactory as most of the residents, i.e., 99.3%, paid from their pocket for treatment. Only about 0.5% has health security in the form of insurance or retainership. The majority (95.2%) of residents visit the healthcare facilities when ill; only about 63.9% visit government health facilities as their first point of contact for treatment. Again, less than 15.2% of residents are taking treatment from chemists and pharmacists, usually without a doctor. They highlighted that the major determining factor of utilisation of health care facilities in Nigeria is quality of care (51.5%), affordability (23.2%) and nearest availability of health care facilities (83.6%). They suggested that proper implementation of health care policy would reduce the expenses of the patient.

2.2 Distance, Location and Utilisation

Kitacksuh(1982) in his study in Korea, observed a significant relationships between distance and utilisation of maternal health services. It was found that the more convenient the mode of transportation and shorter the travel distance, the greater the utilisation.

Stock (1983) found that distance factor is more significant in some conditions. In countries where the density of the modern health facilities is low, patients mainly prefer to go to the facilities by foot and where traditional medicine is within reach of the population. Further, he opined that distance may not be a deterrent if people perceive that the quality of services to be good. For instance, in Nigeria, people travelled from outside the service area of a Christian mission dispensary due to the perceived quality of its services.

Attah (1986) opined that though physical distance is the primary factor in many studies mentioned earlier but other mediating factors also need to be considered. For example, transport cost and ease of movement have a significant influence. A study in Imo State in Nigeria found that poor road communication and transport contributed more to health services use than distance.

Nwakoby (1992) in his study observed that distance has been considered one of the key determinants for utilising health services, particularly maternal and child health care services. It is an important factor in two respects; it influences both the choice of facility for care and the ability to reach the facility of choice in time, for example, at the onset of labour.

La Fond (1995) argued that location of facilities may also be an important factor for service utilisation. Primary health care is more frequently needed and involves less cost than secondary and tertiary care. The inappropriate location of the health facilities in Pakistan and Nepal also accounted for the low utilisation of health services.

Sarkar (2001) in her thesis, assessed the determinants of the utilisation of healthcare services among the diverse providers by patients affected by curative illnesses. The demand for health services is relatively inelastic. The factor that contributes significantly to the determination of demand is the perception of quality of services in terms of low waiting time and better or longer duration of the consultation. The study mentioned that the travel costs constitute between one-

tenth to a maximum of a quarter (only when in-patient care is also involved) of the total cost expended per episode, which may not determine which health sector is being sought. Perceptions of distance were different for the nature of ailment and therefore may not also be a significant factor in shaping concerns regarding transportation costs while seeking health care providers from within different sectors.

Burnham et al. (2011) analysed how primary health care is perceived and utilised by Iraqis. Participants under study are generally satisfied with the quality of primary care services available in the public and private sectors. However, the Primary Health Care Clinics (PHCCs), mostly located in population centres, but some in rural and peri-urban areas are utilised more by poorer households. In spite of the free services available at PHCs many households expressed difficulty in affording health care, especially in the purchase of medications.

Ray et al. (2014) carried out a study on “An Assessment of Rural Health Care Delivery System in Some Areas of West Bengal-An Overview”. A cross-sectional observational study was carried out in three districts of West Bengal by following observational, quantitative and qualitative methods from July to December 2006 to find out the extent of utilisation, strengths, weaknesses and gap in the health care delivery system for the state of West Bengal, India. They found that a large number of patients did not avail of any service when they fell sick, especially in the tribal district where distance, poor knowledge about the availability of the services and non-availability of the medicine might be some reasons in addition to the cost of treatment and transport. So, there is a need for serious attention from Government.

Prasad et al. (2015) attempted to highlight the rural community's utilisation of facilities at primary health centres on availability and perception. Utilisation of primary health centres in this community is satisfied because of the availability of Medical Officer and free medicines, less waiting time and health education activities. But, the study recommended for periodic assessment to know

the pattern of utilisation of primary health centres by the community on their health problems

2.3 Socio-Economic Aspects and Utilisation

Rahman (1981) revealed on utilisation of MCH services in Bangladesh and found the reason for discontinued contraceptives is disapproval of the husband. This study also found that non-utilisation of maternal and child health services related to lack of knowledge on the availability of services, unconcern/indifference towards self and family members, particularly in relation to the delivery of babies at health centres. Moreover, it has been revealed that women in traditional society, as in Bangladesh, are not willing to visit a male doctor in the hospital even in a critical condition. Furthermore, the family refuses to refer seriously ill women to a hospital where they are believed to be exposed to men and lose their honour.

Grimsmo et al. (1984) conducted a study on factors affecting primary health care utilisation in Norway. They classified the social and demographic variables into five major categories that might influence primary health care utilisation: need of medical care, self-care, and availability of the doctor, socio-demographic factors, and social network factors. Availability of doctors is found a highly significant variable for chronic or non-chronic illness patients. In contrast, education and income level are both found as insignificant variables of the utilisation of primary health care in Norway. They had identified that there is a relationship between self-care and the utilisation of professional health care. Among people who tried self-care, 7.8% had found the doctor, and 11.3% of people who did not try self-treatments had visited the doctor, with an increase of one-third. They argued that both poor and rich sections of the people equally used the primary health care services. Older people, basically those over 85 years, found less use of doctors than expected level.

Haynes (1991) studied to examine the relationship between socio-economic status and health service use. It is found that morbidity was related to housing tenure and care availability rather than to occupational status.

Engelkes (1991), it was found in a cross-sectional study in Colombia that lack of confidence towards health workers is one of the main factors for non-consultation with the Community Health Worker (CHW). The study shows that the consultation rate is only 6-7% with the community health worker for their illness

Anderson (1992) and his colleagues carried out research in developed countries on the factors influencing health service utilisation. The issues under study come with morbidity related issues in utilisation of health care, individual characteristics related issues of utilisation, socio-economic and community-related factors in utilisation, access to health care in terms of geographical/spatial proximity related factors in utilisation, access in terms of costs and affordability related factors in utilisation, and quality of services related factors in utilisation.

Purohit and Siddiqui (1992) highlight the degree of health service utilisation in India across three groups of states in categories, i.e., low, medium and high expenditure groups based on NSS and NCAER data of 1992. The study reveals that the level of govt. expenditure had a direct influence on the availability and utilisation of various health services in the country. The utilisation pattern shows that public institutions are utilised more for inpatient care whereas for outpatient care, most of them prefer private doctors and private clinics.

Karel (1994) conducted on a study on household in Papua New Guinea and suggested that ignorance is one of the main factors for the non-utilisation of immunisation services. This study also found that the location of the clinic and lack of confidence due to the cancellation of the clinics were causes of low utilisation. So discontinuity and availability of services are affecting utilisation in this instance.

Stewart et al. (1994) reported that in Bangladesh parents, who believe evil spirit caused ARI, go to a faith health healer for treatment rather than to modern doctors. The influence of mothers-in-law in seeking maternal care is important in the rural Asian culture. They are often honoured, especially for their experiences in maternal and childcare. A study in India demonstrated that the mothers-in-law took 56% of the decisions in seeking MCH services (Prakash 1994). Thus, in countries where the mothers-in-law are the decision-maker, her Knowledge and attitude on maternal and child health care practices may significantly influence whether or when available health care facilities will be used.

Rajeshwari (1996) in her paper reviewed the gender bias in the utilisation of health care. She has found that gender disparity is higher in non-PHC villages and the availability of HCFs, thus, an important factor that significantly reduces the male-female disparity in its utilisation. However, where a health care facility is available, gender disparity does not correspond with the economic/ occupational categories.

Mendoza et al. (2003) carried out a cross-sectional study was in southern Brazil on demographic, socioeconomic, health needs and regular sources of care data for utilisation of health service. Findings reveal the probability of visiting a doctor increased with health needs, uneducated lower-income, demographic factors, women, age groups were significantly associated with visiting a doctor.

Majumder (2005) conducted an empirical study to investigate health services utilisation in the rural and urban areas of Cooch Behar and Jalpaiguri districts of North Bengal. Among the different characteristics, demographic factors like age and family size have been found important determinants of utilisation of care. Multiple Classification Analyses (MCA) shows that children in the 5-14 age group are by and large neglected. This study observed U-shaped relationship between age and probability utilisation of care.

Baker and Liu (2006) tried to assess the factors that can be used to explain primary health care utilisation and to improve the understanding of patient utilisation behaviour. The findings of this research are consistent with findings from prior research indicating that utilisation of primary health care largely depends on factors relating to economic status and walking time to clinic. However, a home territory variable is used to examine spatial variations of utilisation behaviour and found to be the most significant determinant of health facility utilisation in the study area.

Liu et al. (2007) described physician and hospital utilisation patterns among rural and urban populations in China based on the Third National Health Services Survey in China, 2003. About half of respondents did not see a physician when they were ill. Rural respondents used the physicians more than urban respondents (52.0% vs. 43.0%, $P < 0.001$) and used hospitals less (7.6% vs. 11.1%, $P < 0.001$). Rural minority Chinese visited the physicians significantly less than urban minority Chinese. Hospital utilisation was significantly lower among rural males than hospitalisation among urban counterparts

Chakravarty (2008) explores the various health problems of the tribes. The tribal population constitutes more than 10% of the Indian population as per 2001 census. The tribes do generally not accept any new positive intervention in their lifestyles as well as in medical care in particular due to ignorance, illiteracy and social traditions. Therefore they do not avail themselves of the health care facilities available in sub-centres and PHCs. The tribes are not taking care of delivery related issues, and 90% of deliveries are at home. Extreme magico-religious beliefs are there among tribes. Moreover, educational level is very low among them. There is needed to create awareness about preventive and curative medical care among them.

Thimmaiah and Anitha (2013) estimated the utilisation of primary health centre services in rural and urban areas based on primary data using descriptive statistics, Probit and Negative Binominal Regression models. The study included

the respondents' socio-economic characteristics - age, sex, employment status, monthly income, family type, distance to PHC, the health status of the respondent, health insurance accessed PHC services earlier, utilised PHC services, respondents self-reported number of visits to PHC in last one year, and awareness about PHC. The study found no significant difference between rural and urban areas in the utilisation of PHC services. Their study identified five significant predictors: Age, Sex, Distance, Family Type, and Qualification in urban areas. In contrast, in rural areas, only three predictors such as Awareness about Government programmes, Distance and Family Type were found to be significant.

Alkhaldeh et al. (2014) studied to examine patterns and factors associated with primary health care services utilisation among Older Adults in the Irbid Governorate of Jordan. The use of health care services, history of chronic illnesses, and perceived health status of participants were self-reported. The study mentioned that though many factors were associated with PHC service utilisation, chronic illnesses is the strongest predictor of PHC service utilisation.

Shaikh and Hatcher (2015) evaluated health seeking behaviour and health service utilisation in Pakistan. Like other studies, they tried to find the factors affecting the utilisation of a health care system and choice of public or private and formal or non-formal. They found that choices of healthcare services may depend on socio-demographic factors, social structures, level of education, cultural beliefs and practices, gender discrimination, status of women, economic and political systems, environmental conditions, and the disease pattern and health care system itself.

Dalal and Dawad (2009) described the non-utilization of public healthcare facilities and reasons through a national study of women in India. They observed that respondents' education, economic status and standard of living are significant predictors for non-utilisation of public healthcare facilities. Women who sought the services of care delivery and health check-ups indicated that health personnel were absent. Service seekers for self and child's medical treatments indicated no

nearby health facilities, service times were inconvenient, long waiting times, and poor quality healthcare. This study concludes that improving public healthcare facilities with user-friendly opening times, the regular presence of staff, reduced waiting times, and improved quality of care are necessary steps to reducing maternal mortality and poverty.

Kumar et al. (2009) had conducted an analysis of utilisation of health services under national rural health mission: a case study of a selected district of Uttar Pradesh, India 2009. This study was designed with the overall goal of assessing the utilisation of health care facilities provided under NRHM in the State of Uttar Pradesh. Preliminary analysis suggests an increasing trend in the utilisation of health facilities at each level, reflecting the strengthening of the public health system in recent years. The maximum improvement is found at the PHC (129%) level, followed by the district and CHC level with almost similar increase (86%). The main beneficiaries of indoor services at each level were invariably women. However, their study found that the changes are not uniform, especially where peripheral facilities are showing less improvement in comparison to the district hospital.

Kapur (2011) observed in a study conducted on the analysis of health and healthcare services in Punjab that several factors like increasing incomes, increasing literacy, awareness and use of birth control, general improvement in medical assistance, increase in the number of hospitals, doctors, nurses, the discovery of wonder medicines to control epidemics like cholera, tuberculosis, smallpox etc., and spread of immunisation programmes have helped to bring down crude birth rate, crude death rate, infant mortality rate and rise in life expectancy in India. Moreover, as a result of socio-economic development and family planning intervention, Punjab has undergone a substantial transformation in its fertility profile.

Patel (2011) in his work entitled “Health Care System in Surat District” (With reference to Olpad Taluka) in his work found that there appeared to be a

strong relationship between the utilisation of services vis-à-vis caste, income, Rural-Urban and education levels of the respondents. The utilisation of health services by income category showed that the preference for ANC services was more for respondents with high income than those with lower income below one lakh.

Kalin (2011) in his study on access to and utilisation of health services in rural Bangladesh, it is shown that poverty, literacy and access variables are also important determinants of health care use. Results of the study revealed that utilisation of health care among women are as much as 50% less likely than their male counterparts. He has found that poverty, distance, quality of care, lack of knowledge and education, as well as community and cultural preferences were identified as barriers to accessing care for arsenicosis patients.

Sathyamala et al (2012) in an article on “Public Report on Health” report on village data on health conditions, determinants and health-seeking related perceptions and behaviour from six states with varied experiences of development. The study demonstrates that the conditions in which people grow live, work and age – the social determinants of health – are mostly responsible for the differences in health status observed in the study population. The findings of their study affirm that for the vast majority of people who live in rural India, improvements in health status lies in bringing about fundamental changes in their living conditions. The inequalities that underlie living conditions are systemic, stemming from several factors outside the control of the health system – yet, access to good quality rational health services becomes equally important in preventing illnesses and dealing with ill health once they occur.

Saeed et al. (2013) carried investigation on socio-economic inequality in the use of healthcare services in Ghana using binary logistic model in R. The study found that education, insurance, employment, income, and health state are important gradients to healthcare use in Ghana. Hence, their study realised a

potential correlation between utilisation of healthcare and the predictor variables of Ghanaians.

Egbewale and Odu (2013) conducted a descriptive cross-sectional study to determine the utilisation of PHC services in a suburban community in a developing country in West Africa. It was observed that respondents' age, sex, marital status, educational level and occupation are significantly related to utilisation status. This study recommended enhancing service, changing the perception about PHC among local communities and creating good access routes that link primary health centres to enhance the utilisation of services.

Rajpurohit et al. (2013) in their work “Utilisation of primary health centre services amongst rural population of northern India - some socio-demographic correlates”, analyse the awareness and utilisation of Primary Health Centre (PHC) services by the rural community of northern India. They found that awareness among the rural community about Primary Health Centre services is relatively high (76.2%), whereas its utilisation is found very low, i.e., 36.3% only. They observed that education, distance from PHC, age, availability of doctors, economic accessibility are the major determinant factors of the awareness and utilisation of Primary Health Centre services. They also revealed that poor section people of the rural community utilised more Primary Health Centre services than rich.

Dey and Mishra (2014) examined the determinants that lead an individual to choose between public and private healthcare service providers in India based on national-level health survey data National Family Health Survey –3. The study revealed that people with increasing age, females, lower-income group people, uneducated, weaker sections of society and those having access to primary public health care are more likely to utilise public healthcare services as compared to private ones in India. However, their study did not include variables such as condition of health, service availability, distance, availability of medicines which are also important determinants of healthcare service utilisation.

Begashaw et al. (2016) in their work entitled “Healthcare Utilization among Urban and Rural Households in Esera District: Comparative Cross-sectional Study”, analysed the healthcare-seeking behaviour and associated factors of urban and rural households for perceived morbidity in Southwest Ethiopia. They found that the healthcare-seeking behaviour of households is mostly influenced by individuals’ characteristics, type of diseases, and access to health services. The overall health-seeking behaviours of households for perceived illness were revealed satisfactory level in the study. It is also evident that urban households seek more health care than rural. Altogether, 41.6% of households did not seek health care from anywhere, whereas in an urban area, 19.3% and 51.9% of rural area households did not seek care. The main reasons reported for not seeking health care were lack of money 29.3%, long-distance 26.9% and symptoms were not severe 26.4%. In the urban area, they identified matrimonial status and severity of disease as the most influential factor of health-seeking behaviour. In rural areas, monthly income, severity of disease perception, duration of disease, and distance from health centres are found the most significant factors. They had suggested that as self-medication was a widely practised form of treatment, Govt. should prioritised increasing accessibility of health care services in Southwest Ethiopia.

Guinness et al. (2018) extensively analysed the level of health care utilisation and its determinants in Timor-Leste. They highlighted that health care need is the basic factor behind the utilisation of primary health care services. They had found that rural people used lesser services of PHC than urban people, and the poorest section people of the Timor-Leste less utilise the PHC services than other sections. They also revealed that the health care policy implication in Timor-Leste is at a satisfactory level as the health care is free at the point of use, and it was suggested that reforms in the health care policy of Timor-Leste are necessary to reduce the other costs of health care such as distance barriers, to address the inequities.

Badu et al. (2018) examined how household profile influences the National Health Insurance Scheme (NHIS) status and use of healthcare in Ghana. They highlighted that household profiles such as age, gender, education, marital status, ethnicity, and religion were the key components that are very significant to an NHIS active membership. Again, regarding the utilisation of health care facilities, they have found that education, marital status, place of residence, and NHIS status were the highly influential factor. Population such as elderly, minority ethnic and religious groups vulnerable were less likely to renew their NHIS policy. They suggested that the NHIS policy should reform to wholly cover vulnerable groups of people such as minority ethnic, religious groups, and elderly people at the retiring age of 60 years that may increase the utilisation of PHC facilities in Ghana.

Pokharel et al. (2021) has analysed the utilisation of healthcare services & patterns of healthcare expenditure in the rural households of Nepal. They found that the utilisation of health services by in-patient and out-patient is 89.9 % and 10.1% in Nepal. The majority of the households of the study, i.e., 88%, had less than \$410 annual health care expenditure. The average health care expenditure is found to be \$279 in the study area. Approximately 71.4% of the sample households had more than \$40 expenditure on medicine, mostly on allopathic medicine, which stood at 93.4%. 70% of the respondent mentioned that health care expenditure is a burden for their households. They argued that despite having proper knowledge about health insurance, participation of people on it is found very low. They had identified few determinant factors of utilisation of health care services such as educational status, knowledge about insurance, privileged ethnicity, religion, income source etc. They suggested the necessity of implementation of awareness and promotion program with affordable health care facilities, especially in rural communities.

Mustafa et al. (2021) examined the association between the availability of facilities at PHCs and healthcare-seeking from PHCs in rural India. They found that the availability of a proper health care index is highly associated with health

care seeking from PHCs. They argued that the people of the district having a very good facility index visited four times more to PHC than the very poor facility index district for treatment. They also found that highly educated households visited less than lower-educated households to the PHC. Regarding religion, they had argued that only 1.8% of the Sikh households were seeking healthcare from PHCs, while 15.05% of Christian, 11.9% of Muslims and 12.08% of the Hindu household generally visit PHC for healthcare seeking. Again households those are having health insurance coverage is visit less (i.e., 10.85%) than those are without health insurance coverage (14.66%). They suggested that if Govt. improves the quality and availability of health care facilities, it will attract people to the PHC for general health care.

2.4 Needs, Perception and Utilisation

In a study on 'Research on the demand for healthcare services' by Feldstein (1965), it is observed that utilisation happens to be the main factor that brings interaction between the demand and supply of healthcare services. Access to healthcare mainly represents the supply side of healthcare, and it has to do much with the utilisation of healthcare.

Zeid (1985) revealed through his study in Egypt, those of low socio-economic and educational levels have low utilisation of MCH services was due to a lack of understanding about the importance of antenatal care. Moreover, where there were traditional midwives, women had greater confidence and respect for them, which explained why 80% did not use MCH services for delivery. Dissatisfaction with the quality, an unkindness of the provider, and inadequate provision of services compared to traditional midwifery was mentioned in the study.

Bakoula (1983) opined that availability does not always ensure the utilisation of services. He argued that to some extent, it depends upon the acceptability of the services by the targeted population. For example, in a study in

Greece, it had been found that "rural people may not have confidence in their local doctor and his services are therefore remaining underutilised.

Stock (1983) in his work titled *Distance and the utilisation of health facilities in rural Nigeria* is an important work on utilisation of PHCs in Nigeria. Stock in his work very deeply examined the impact of distance on utilisation of health care facilities. He has identified that distance is a very highly significant variable in utilisation of PHCs in Nigeria as well as the Third World countries where the density of Western-type health facilities is often low and most of the patients are pedestrians and having the viable and usually more accessible alternate sources of medicine. He has found large scale variation in utilisation of PHCs in relation to distance. He also argued that per capita consumption of health care decreases exponentially in increasing rate of distance that shown great disparities in utilisation PHCs among the communities.

Bhandari (1989) conducted a study in India and found that peoples knowledge and ignorance about the scientific cause for illness are the main reasons for the non-utilisation of MCH services in rural Rajasthan and lead to high infant mortality rates However, his study was limited only to looking at the relationship between infant mortality and the utilisation of services.

Ali (1992) observed that patient satisfaction is an important factor for the utilisation of primary health care. The study on utilisation of primary health care services in Riyadh city found that patients are dissatisfied due to wrong working time, distance, cost of using services, non-availability of specialist clinics, language barriers with the physicians deterring the people from attending primary health care facilities though most of the people want to use PHC facilities as first choice.

Niraula (1994) designed a study to assess the use and non-use of health care facilities in the Hill villages in central Nepal based on the behavioural health model (HBM). The findings of the study indicate that all three characteristics of

the HBM model, predisposing, enabling and need, are significantly related to the use and non-use of the modern health care system. Contrary to expectation, caste is unimportant.

Sundar and Sharma (2002) in their paper examined the pattern of morbidity and healthcare utilisation by the urban poor living in slums and resettlement colonies in Delhi and Chennai, based on the household survey conducted by the NCAER April-July 2000. Despite the proximity of health facilities, the sample population living in the slums/colonies do not seek treatment for all the illnesses as 'illness not considered serious'. Moreover, the utilisation of government hospitals for both non-hospitalised treatment and inpatient care decreases with the increase in the income level of the households in the study area

Padmaja (2005) tried to examine the functioning of health care delivery system, its impact on health status of rural population, its efficiency level and to find out its limitations and remedial measures. Non-availability of medicines, doctors, treatment, distance and lack of faith were identified as the major barriers of primary health care utilisation. She suggested that optimum resource allocation may improve the primary health care system in Kerala. Apart from this, she also suggested to strengthen the Sub-centres with well equipped health care facilities, strict monitoring epidemiological system, appointment more minimum qualified doctor's instead of specialist, appointment of health workers from nearby areas, providing nutritional supplement for the needy people and facilitating free health care and insurance facilities would improve the overall primary health care scenario of Kerala.

Titaley et al. (2009) analysed the factors associated with the non-utilisation of postnatal care in Indonesia. They found that more than half the infants born between 1997 and 2002 resided in the Java region of Indonesia, and approximately 56% were born to mothers aged 20-29 years. Almost 60% of the deliveries occurred outside the healthcare facility, although trained birth attendants assisted around 66% of deliveries. Overall, 67% of the infants born

within this period received postnatal care, of which 94% (95% CI 93.2 to 95.4) received it in the first week of life. They identified four significant factors for non-utilisation of postnatal care services in Indonesia *viz.*, region and type of residence, percentage of infants receiving four or more antenatal care checks in the cluster, household wealth index and the use of untrained delivery attendants. They argued that public health interventions for utilisation of postnatal care services should target poor, less educated women from rural areas and who use untrained birth attendants. They also suggested that to increase postnatal care utilisation, proper policy implications are vital to improve the availability and accessibility of antenatal care services and skilled birth attendance, including focused financial support and health promotion programmes, especially in the rural areas.

Blackwell et al. (2009) their paper examined factors associated with the utilisation of physician and hospital services among adults in Canada and the United States, focusing on socioeconomic status. Several measures of socioeconomic status- having a regular medical doctor, education, and, in the US, income and insurance coverage- were associated with doctor contacts or visits in both countries, along with various predisposing and need factors. The individual's predisposing characteristics (e.g., age and sex) and his/her need for health care predicted utilisation of hospital services in Canada and the United States, whereas insurance coverage status in the United States became a significant predictor of hospitalisation. Adults in Canada and the United States exhibited similar patterns of hospital utilisation, and socioeconomic status played no explanatory role.

Rajesh, (2011) Health Care Services by Primary Health Centres in Madurai District in Tamil Nadu revealed that morbidity level is found high among users PHCs for both male and female. Rural people prefer PHC services for free treatment and free medicine. However, it has been revealed that same medicine is supplied by PHCs for various types of illness. Another, problem has been revealed that PHCs are not functioning in the evening and non-availability of sufficient drugs, respondents want doctors to stay in PHC quarters as many of Medical

Officers of PHCs reside in urban area. With regard to diagnosis facilities like scanning, X-ray, etc., to be made available in PHCs. Female adult are utilising out-patient services than their counterpart male in both type of PHCs in the district. It has been revealed that promotive health services are also felt necessary through the appointment of like psychologists and physiotherapists in Main PHCs because mental health is one of the important problems in recent years. He suggested that government should implement regular continuous health check-up and monitoring particularly for elderly population in rural areas to Life Expectation at Birth.

Kumar and Bala (2012) analysed disease patterns, morbidity rate, health-seeking and utilisation behaviour in three districts of Punjab. The study clearly revealed that the morbidity rate of chronic diseases was very high both in rural and urban areas. The study also shows that the public sector institutions are unable to attract patients from rural areas. Further, the role of quacks/local doctor/hakim/faith healers (unqualified) in treating patients was found to be very high in rural areas compared to urban areas.

Van de Poel et al. (2012), in their study, presented a method of allowing for heterogeneity in the use–need relationship while measuring and decomposing inequity in health care utilisation. This analysis reveals explicit inequity that derives from unequal treatment response to variation in need and that due to differential effects of non-need determinants. Based on four middle-income Asian countries, it is observed that socioeconomic inequality is due to utilisation being more responsive to need among the higher wealth and urban-dwelling individuals.

Rushender et al. (2016) , in their Article “A study on effective utilisation of health care services provided by primary health centres and sub-centres in rural Tamil Nadu, India”, assessed the utilisation level of primary health care services in primary health centres and its sub-centres and its determinant factors. They found that 85.5% of respondents were aware of the PHC. 71.2% of the respondents revealed their satisfaction with primary health services. The

utilisation of primary health care facilities among patients with acute and chronic illness is found only 45.40% and 58.80%, respectively. They also found that 81.65% of the ANC mothers had utilised the PHC, 77.98% for TT immunisation, 75.24% for delivery, 75.76% for postnatal care, and 79% for immunising their children. They had suggested that to increase the utilisation of health care facilities among the patient Govt. should ensure the availability of special investigations such as ultrasound, biochemical tests, X-rays, etc., in the PHC and availability of 24 hours health services in the community health centres and Taluk Headquarters.

Natesh (2012) in his research work dealt with the trends in health indicators, determinants of health status, availability of health care facilities and population coverage, socio-economic factors associated with primary health care utilisation, morbidity and awareness about the PHCs services in Tirunelveli District of Tamil Nadu especially. He has found that the proportion of the sample population those are suffered from diseases are found higher in age groups of 6-12 years and 22-60 years than the age group of 0-6 years and 60 and above . The level of male population suffering from common ailments (53.47 percent) and chronic diseases (51.11 percent) is found higher than its female counterpart. The SC and ST population are found more prone to communicable diseases. The Low and Middle Income Group people used more PHCs than High Income Group people. He highlighted the major shortfalls about the utilisation of PHCs in Tamil Nadu are found such as poor infrastructure, shortage of medical and paramedical personnel, non-availability of certain medicines and lack of certain essential health care services in Primary Health Centres. He has suggested that the collective participation of the government, Primary Health Centres and people may improve the health scenario of Tamil Nadu.

Conclusion

The literature on health care utilisation has been extensively reviewed on the studies carried out in different parts of the world. A number of problems have been found regarding the utilisation of primary healthcare services by individual

behaviour, households and community characteristics as well as healthcare delivery system of the country. Most of studies have been conducted to examine the factors of utilisation from the users perspective. Few studies examined the problem of low level of utilisation both users and providers perspectives.

After thorough study of available literature; it has also been found that some studies conducted are relevant to healthcare facilities and utilisation of primary healthcare centres in the state of Assam. However, it has not been found any specific study relevant to primary health centre service utilisation conducted in Baksa district. Hence, there has been a scope for the study to find out the level of utilisation of primary health care services and factors associated with utilisation in relation to the healthcare facilities in the Primary Health Centres in the study area of Baksa district.