Now study of health care is one of the important aspect of geographical research. This newly emerged branch is known as Geography of Health in which various aspect of health care has been also studied systematically. Traditional health care is now getting importance among all walks of life because it is actually a part of Ayurveda system, which has no side effects.

Health care covers a broad spectrum of health care services, which actively tries to avoid illness through curative, preventive and promotive way by which an individual achieves physical and mental well being. The study of health care delivery includes various components of health care services by which people get various types of health facilities through different health care system. Health care services are essential inputs for the health of the people, which in turn helps the developments of human resources and further aids in social and economical developments of the particular area.

Spatial perspective of health care services should be increasingly recognized as they are important in better understanding these problems and to some attempt to solve them. However, interestingly, the medical professionals and health planner, as such is not yet quite familiar with the geographical aspect of health care delivery, with the result that more complications in this field emerge before the eradication of older one. Systematic study of spatial distribution of various health care components with special reference to tribal areas is important. Study of various systems or medicine, particularly indigenous non-professional system of folk medicine together with Allopathic, Ayurvedic and Homeopathic system, are the main concern of the study.

Present study is directly related to tribal health and health care systems including folk medicine, procedure of treatment, folk practitioners and as the concept of health and disease prevailing in the region. Diet and Nutritional aspect and life style of the tribal people are also included in the
present study. This study is based on extensive field work, conducted by the scholar personally.

The main part of the present study is to find out the traditional method of diagnosis as well as procedure of treatment of various health disorder among the tribal population of the area. For this purpose 16 villages has been selected from the stratified random sampling method. For intensive field work scholar has been prepared the detail scheduled for the study of various purpose. They are

1 Village Report, Tribal Health Study
2 Family Survey- Socio Cultural aspect
3 Tribal Health Care Study
4 Diet/ Nutritional Survey

In this way to know the treatment procedure harbal use and other folk practices, which are used by tribal people, various type of interview has been conducted in the field. The total numbers of families interviewed are 182. Collected Informations are health care services, procedure of treatment and other related aspects. For this purpose, 40 folk practitioners are also interviewed from the selected villages.

The study unit i.e. Upper Narmada Basin is one of the important part of tribal zone of Madhya Pradesh. The region spread over 23429 Square Kilometer in four districts i.e. Jabalpur, Mandla, Katni and Dindori. The adverse geographical conditions are responsible for the slow running of developmental process.

The area under study comprises complex geological structure where rocks are range from Archean to Recent. Geologically, the two districts of the area namely Jabalpur and Katni have economically important mineral deposit and some palacontological remain while in Mandla and Dindori regions the major parts are occupied by Deccan Trap and Archean rocks.

The study unit is a part of diversified physiographic features. It is the real core of country in the real sense of that the Satpura, Mahadeo, Maikal line (which runs from Western Ghat to Mandla district) form a great divide as a critical divide between the deep soil plain and hard rock
plateau, and as a natural divide the Narmada-Son and Tapti-Mahanadi river valley areas. The Narmada and its tributaries are the main rivers of the region i.e. the Wainganga, the Banjar, the Burhner, the Gour, the Hiran, the Katni and the Johila.

The major rocks of the regions produced clayey to silty, loam and sandy soil in texture, deep black, red in colour, main soil of the region are Black soil, Kabar, Mund, Sehara Domat and Barra soil. Teak and Sal constitute major part of the forest in the study region. The study region lies in the tropical belt. The area is accessible to the moisture bring winds of the southwest monsoon that ascend up the Narmada Basin.

It is confirmed fact that the health status of a community is influenced by its cultural trends like customs, habits, values, belief, superstitions etc. Similarly there are numerous factors, for instance family and which are also deeply linked with individual and community health status. The major category of factors, which along with biological and environmental factor, determine the size and distribution of health problems. Thus, the investigation of relationship between cultural factors and health has been undertaken in the present work.

According to the census of 2001, study unit comprises a total population of 4704378 persons. Education aware the man and open the door of new thought, that a person can use the surrounding environmental elements with regard of social life. But as seen during the field work that tribal people do not take seriously to education.

Tribal people want to live intrinsically in their own. They avoid to being exploited from the so-called developed society. They believe in limited society circle. They give importance to agriculture but as and when required they also work as labourer. They are guided by their belief in god, worship of nature and traditional cultural values. Due to above reasons they restrict themselves into a limited cultural, social and geographical region. They have more faith in traditional health care system in comparison to modern system of treatment. Evidently, social, economic and cultural peculiarities determine the health status of the tribes in the region under study.
Life style is a mirror of the society. It implies to a certain mode of behaviour in the daily activities. Gond, Baiga Kol and Pardhan are the major tribes of the region, residing since long back. These communities mostly reside in isolated areas, where environmental conditions are responsible for their custom, culture, beliefs, rituals as well as health and health care. Their close association with nature inspires them to lead a carefree life; they fell pleasure in roaming about hill, forest and field. Where they find different herb and shrubs to cure diseases. The religions attitude put them into an atmosphere of an unknown world of spirits and for any happenings the spirits are made responsible and hence are propitiated. Disease caused by the supernatural things, are treated by folk practitioner i.e. Baiga, Gunia, Ojha etc.

The different sanskars, mainly on the occasion of the birth, marriage and death, are also part of tribal life. The parents, elders and friends help him in acquiring a mate. The marriage songs and dances inspire them to the new conjugal life.

Their economic structure depends on agricultural activities, gathering of forest product and also as a labourer. Weekly market and fairs are also plays an important part in their life from where they get their daily needs and enjoy the gathering.

There is clear evidence of changing trends in tribal socio cultural aspects and values. From some have retained the purity of originality mainly because of their isolated existence, but the influence of urban culture is evident in the dress, dance and social comments of many others.

The human body is constantly doing work even though one might be asleep whether the work is internal or external, it consumes energy, which the body gets from the food one eats. A balanced diet contains a variety of foods in quantities and proportions that is essential for body needs. Dietary habits of the people directly depend upon the nature and the quality of the food stuff, which is responsible for the nutritional intake of the person. Nutrition is mainly concerned with fulfilling the nutritional requirements for the protection and maintenance of health in all groups of population. Nutritional intake is directly controlled by the local available foods. It
varies with community to community according to their socio-cultural set up.

Tribal people mostly depends upon locally available cereals, pulses, vegetables and forest food occasionally or cheaply available food adds variety of foods i.e. flesh food, mahua wine, fruits. But the 'Pej' is a common and popular food.

To determine the consumption of various nutrients by different communities in the study area, nutrient wise rank have been calculated, which varies from community to community. The community having the lowest accumulated ranks, indicated that the concerned community is in better position of taking nutrients. Among the tribal communities of the region Gond community scored 11 rank and stands in the first position. It is because, consumption of calcium, iron, thiamin and riboflavin is more than other communities and comes in first position while Baiga community is very poor and comes in last position ranking 21 place and accumulated fourth rank.

On the basis of intake of different nutrients, the intake rank of the sixteen villages of the study unit has been calculated. It helps in dividing the village into nutritional intake and thus one can infer the circumstances. Ghutas village of Mandla occupies the first position, while Lalpur, Keolari and Anjania come in second, third and fourth and Sijhora obtained last place respectively. The formula reveals that higher the ranks lower the rank of intake and conversely lower the rank higher the rank of intake.

The diet survey reveals that the total food stuffs available for the consumption of the people of the study area is to be taken into account to assess the nutritional level. As cereals are almost the only item of diet of the people of the basin, but if flesh and fishes are cheaply available, they used them. The calorie and proteins are obtained from cereals only. However the diet survey carried out by the author in the selected villages of the region shows that the diet of a considerable proportion of the population is inadequate. So the average diet of the region is under nourished as well as malnourished.
Allopathy, Ayurveda and Homeopathy are system of medicine, which provide health care facilities in the study unit. But allopathy system is more prevalent than others. The allopathic health care facilities in the study area are provide through public health center, community health center and sub center. District Hospital is an important administrative unit in the study area. A medical collage situated in Jabalpur, also provides advanced health care facilities to people of the region.

There are 913 Allopathic health care center in the study area. It is found during the study area that, at block level, most of the allopathic centers are situated in Jabalpur block and very few is allopathic centers are in Samnapur and Mohgaon block. The average DPR 12236.21 persons per doctor found in the region. Jabalpur block is comparatively better than other block. BPR represents the number of bed, available per ten thousand people. In this context, average of study region is 5.7 bed available for per ten thousand population. Jabalpur block again placed first while Sihora is a poorest block regarding this facility.

It is evident from the collective study of all the health parameters that Jabalpur block placed first, if arrange these blocks in the rank order. This is significant in these parameters i.e. Bed population ratio (93.33/0,000 per sons), Area served by each medical institution (12.94 Sq.km) and Doctor patient ratio (1408.44 persons/doctor).

From the above discussion, it is clear that the allopathic health services are not sufficient and their distribution is also inadequate and uneven in the study unit. It is also found that the limited medical facilities in rural/tribal areas hardly fulfill the requirements of the people.

Ayurveda and Homeopathy systems of health care are also discussed along with different health care systems. Facilities of Indian system of medicine are also not up to the mark in the study unit. There are only 75 medical institutions available in the region. Jabalpur district is served by 38 hospitals followed by Mandla where 29 medicinal institutions are available. Twenty doctors serves all over the study region. Only thirty beds are available in the study unit under this medicinal system.
From the study of indigenous professional health care facilities it is evident that the availability of these facilities in the area is very less and at some places almost negligible. In such indigenous professional system, only Ayurvedic and Homeopathic systems of medicine are prevalent. While Unani, Siddha and other systems are totally lacking. It is also evident that this area is backward as far as medical facilities are concern. The rural population is not getting any notable advantage of these facilities.

According to the analysis of collected information and data, it is clear that the concepts about the disease are more or less same as in tribes of the region. They believe that most of the diseases are caused by evil spirits, wrath of god/goddesses, witchcraft and breach of taboos together with other ideas. Epidemic diseases are caused due to the anger or wrath of god/goddesses and personal diseases are caused by breach of taboos, where as general diseases are caused by breach of sex taboos. Besides this some physical causes are also responsible for the health disorder i.e. effect of weather, effect of wrong food etc.

Tribal people have some specialties from ancient time. They live in small groups in dense and inaccessible forest localities. So their methods of treatment of health disorders depend upon physical as well as socio-cultural environment.

Health care providers of the study unit are local health healers or folk practitioners. Generally the procedure or method depends on the causes of disease and differ from place to place. Mostly they use two types of procedure- (i) herbal cure and (ii) jhar-phook, for various health problems. It is found that treatment of most of the diseases is done through medicinal plants, which are easily available in the study area. Jhar phook method is used for the treatment of diseases, which are caused due to supernatural things like-god, goddesses, bhut (ghost) churel, sodhan, evil eye etc. Baiga, Gunia, Ojha are the persons who performed these type of treatment procedure. During the field observation, it has been found that in the process of treatment they traits to know about the causes responsible for disease, after that, opted modes of treatment. Among these processes of treatment, supa tuma, chirra grass, lota pirha etc. are the
significant and used frequently. Generally these types of method are not completed without sacrifice of proper living thing for this purpose cock, hen, pig, goat etc. are sacrificed. The place for sacrifice may be temple, worship place, residence of the patient or any other place, suggested by the Gunia or Ojha. It is also notable that the sacrifice is done only after the cure of diseased person. During the field work it is observed that the tribal people corelates some of the disorder to goddess i.e. epidemic, Haija, Chechak, small pox etc. The related god/goddesses are worshiped. Some of the times worship is done by the Panda or Baiga of the village. Thus it is evident now, for the health care of tribal people in the study region medicinal plants, herbal medicine jhar-phook hold a special importance.

Tribal people live in isolated areas. Where they use folk medicine for the treatment of different health disorders. Diseases are cured, appeasing and offering the disease causative factors i.e. goddesses, ancestors, evil eye and various evil spirits. Process of diagnosis and treatment is done by local folk practitioner i.e. Gunia, Baiga Ojha, Panda etc. It is observed that these medicine man hold prestigious status in the tribal society.

The main aim of the present study is to collect the information about prevalent health care services among the tribal community of the region. Apart from other sources, local folk practitioners were the most reliable source for such study. Folk practitioner provides health facilities, to their people, based on his own experiences and beliefs. Generally they treats diseases by three methods based on jari-buti, Jhar-phook and combined method of jari buti and jhar-phook.

The traditional faith healers are of great importance since they have a vital role to determine the disease method for some particular disease and health care condition in the tribal community. The mutual confidence between patient and folk practitioner is a significant scientific bridge to cure the disease.

In the study region various information were collected from 40 selected folk practitioners engaged in health care delivery profession. It is found during the study that 90.0 per cent folk practitioners are male while only 10 per cent are female. Community wise study of practitioners shows
that Gond are 27.5, Baiga 42.5, Kol 10.0 per cent Kol and Pardhan are 20.0 per cent.

According to educational data 52.5 per cent are uneducated and 47.5 are the literate practitioner. Among the active folk practitioners of the study unit 52.5 per cent belong to 25-50 years age group, while above 50 years are 32.5 per cent. It is also observed among selected folk practitioner that 32.5 per cent are traditional faith healer while herbalist and priest are 20.0 per cent respectively.

Youth stage always attracts for new achievement, 67.5 per cent medicine men have been started their work from the youth stage. While 10.0 per cent started from childhood and 7.5 per cent started it in their old stage. It has been found that 52.5 per cent practitioners are continuing this profession as inherited from their ancestors, while remaining 20.0 per cent has started this work on their own and 27.5 per cent obtained knowledge from other sources.

It is observed during the field work and as reported by the practitioners that tribal peoples are not aware about their health 40.0 per cent patient contacted to practitioner in seven stage while only 35.0 per cent came in early stage.

About the acceptance of fee 65.0 per cent selected practitioner answered that they accepts fee in cash or in other forms, 35.0 per cent are, not take any type of fee or gift.

After collecting the information of folk practitioners regarding their method of treatment it is found that 65.0 per cent prefer combined method of treatment through Jhar- Phook and Jari-butli, while 12.5 equal percentage of each prefer jari buti and Jhar phook respectively. Only 10.0 per cent folk practitioners prefer other methods of treatments.

While considering the health disorder of tribal communities it is important to recognise certain characteristics of tribal people and tribal region.
Most of the part of the study unit is economically backward. Geographical condition and situation of development have made the study area situation more complicated.

Gond, Baiga, Kol and Pardhon are the predominant tribes of the study unit. They live in inaccessible dense forest, which are isolated due to lack of communication-facilities.

They have distinctive health problems due to their placement in difficult areas.

The unfavourable environmental conditions, lack of awareness about sanitation and personal hygiene are the main causes of health disorder.

Poor educational facilities and unawareness about education are also responsible for their ill health conditions and development.

Dietary habits, selection of foodstuffs, cooking method etc. of the tribal people are influenced by their deep-rooted tradition and caused the various nutritional problem.

Smoking, chewing tobacco and drinking local wine are common. These habits are also responsible for their ill healthy conditions.

Lack of resources, illiteracy, unawareness about health care also responsible for their ill health conditions.

Distribution of health care services in the study region is inadequate. The urban areas of the study area are better served than the tribal area.

There are 913 allopathic medical institutions in the region where 263 well-qualified doctors are serving the study unit. Total 1840 beds are available for the patient.

Christian missionaries also providing good health facilities in the basin.

Ayurveda and Homeopathy are the important health care system under indigenous professional health care system. There are only 75 medical institutions and 20 doctors are serving under this category in the study unit.
◊ It is found that concept of health and disease of tribal people are characterised by belief in non-physical factors, supernatural beings and mystical powers.

◊ Tribal people believe that supernatural and physical causes are responsible for the health disorder. Supernatural causes include god and goddesses, evil spirit, evil eye etc. while physical causes are weather, effect of wrong food etc.

◊ The health disorder and health care practises in tribal community are influenced by interplay of social cultural and economic factors. Magico-religious practices are resorted for the treatment of diseases.

◊ Among the tribal people of the region the procedure of treatment can be broadly divided into preventive and curative methods. The preventive procedures include use of charms, amulets and animal sacrifice, propitiation of diseases and worship of god etc. While curative practices include worship of dities, ancestors and spirits.

◊ God/Goddesses are worshiped to avoid incidence of epidemic.

◊ They have more faith in folk medicine. Traditional treatment methods have great extent in the region. These methods have psychological effect on the people.

◊ Folk practitioners i.e. Baiga, Gunia, Ojha etc. used jari-buti and Jhar Phook for the ailment. Sometimes combined method also used by them.

◊ It is observed that Gunia, Baiga etc. applied various interesting methods to diagnose the possible causes of ill health condition of a person, among these-sup a tuma, chirra grass and lota pira methods are important.

◊ It is general belief of the folk practitioners that they can cure every ill health conditions through Jhar- phook and Jari- buti.

◊ On the basis of the analysis of various schedules and interview, some procedure of treatments are find out. On the basis of collected information about treatment six terms are used generally-
1. Health Disorder - Asthma
2. Probable cause - Due to cold or past sin
3. Mode of Treatment - The powder of bark of Jamun is given with water twice a day, upto three successive days.
4. Place of Observation - Keolari (Mandla)
5. Local Name - Jamun.

◊ H.D. - Jaundice
P.C. - Contaminated drinking water and dietary habits.

M.O.T. - Seeds of Jangli Kacharia fried in ghee and gives first day one seed, second, day two and so on upto twenty one days.
P.O. - Baklehta (Katani)
L.N. - Kacharia.
B.N. - Cucumus sativus.

◊ H.D. - Malaria
P.C. - Mosquito bite (Anopheles.)
M.O.T. - Kara of Chirayta, Damjari and Gurbel gives to cure malaria.
P.O. - Lakho (Mandla)
L.N. - Chirayata, Damjari, Gurbel.
B.N. - Swertia aungustifolia, Anicostимa latorial, Cusuta chinensis.

◊ H.D. - Problem of breast-feeding (lack of breast milk).
P.C. - Evil eye, improper care of mother.
M.O.T. - Kheer (a sweet prepared with milk) of unripe pappya made with cows milk is given to promote lactation.
SUGGESTIONS

Tribal people of the study region have specific problems, some of them are in built problems of these communities and some are imposed upon them, which work as barrier for their overall development and progress inclusive of their health. Therefore, the health care delivery system should be designed for specific community that is serves to their specific needs and problems by bringing their personal involvement.

♦ Development plans based on specific tribal area should be formulated.

♦ Valuable indigenous Jari buties (medicinal plants) could be identified, collected and developed in local nurseries. Jari buties could be good source of income (tribal economy) for the tribal people of the region, if properly collected and cultivated.

♦ Changing pattern of dependence of traditional food and dietary habits should be evaluated.

♦ To improve educational level, strategies should be developed.

♦ The local people should implement education on health with local guidelines provided by health functionaries.

♦ Effort should be made to identify the experienced folk practitioners and document their indigenous knowledge about treatment of various health problems.

♦ Finding such a poor conditions of the Govt. doctors/Practitioners of various medical systems, the effect should be made to encourage the doctors and practitioners through various incentives to go to in remote tribal areas.

♦ Traditional health practitioners (Gunia, Baiga, Ojha, etc.) should be identified and trained in public health also. Local tribal women (Dais) should be trained as midwives to generate better response in the field of mother and child health care.
Mobile health services (Govt.) should be provided in each tribal weekly market and fair so that more people will be benefited.

**SCOPE FOR FURTHER RESEARCH**

Indigenous health care delivery system is one of the major parts of Health Care Geography. There is wide scope for further research in this faculty. It is evident from the enquiries concluded by author during the course of this work and from the discussions made in the above mentioned pages, the further research is possible along the following lines -

1. Separate study on any one system of folk medicine as health care provider.
2. Separate study on folk practitioners of the region.
3. Detail study on medicinal plants of the study area.
4. Separate studies on preventive and promotive services or any one of them.
5. Detail study on mother and child health care, with the special reference of local woman health workers i.e. Dai's.
7. Role of voluntary organisations.