

# CHAPTER I

## INTRODUCTION

### 1.1 Background

Individuals can obtain modern medicines for treatment of common health ailments directly from the community and retailer pharmacy without doctor's prescription and the term over-the-counter (OTC) originates and is used to describe such medicine. Drugs which are sold directly to the consumer without a prescription from a health care profession are called Over-the-counter (OTC) medicines or non-prescribed medicines. The sale of over-the-counter medicines from the pharmacies and community can help individuals to self manage symptoms. However, some OTC medicines may be abused with addiction and may harm. Such OTC medicines can be used for different causes like to reduce symptoms like pain, headache, allergies, skin rashes, itches, nausea, sore throat, cough and cold, acidity, dysmenorrhea etc. Also they help to manage and prevent recurring problems like migraines. Easily availability of such medicines has been argued to be beneficial in terms of convenient access to, and choice of, medicines as well as involving individuals as active participants in their own health and the treatment of illness.

It has been recognized that OTC medicines have the potential both to harm as well as benefit. This may result in what has been variously referred to as the misuse or abuse of OTC medicines and their potential to cause addiction and dependency. Medicines such as stimulants, laxatives, sedatives substances such as dextromethorphan are liable to abuse. OTC medicines like ibuprofen or paracetamol which are used as analgesics and antipyretics may lead to gastritis, acidity and hepatic damage.

People after having some health problems, they seek the health care settings on the type of practice they usually do. Some of them visit physicians and take

the prescribed medicines. Some go through the home care techniques. Some of them attend to the traditional healers. Some wait and see to subside the existing symptoms. Some of them go to the nearest pharmacy and take the same medicines that they had taken for the same condition previously. The rate of incidence of OTC medicines' use is increasing globally day by day. While consuming such OTC medicines, they may or may not be aware about the indication, contraindication, correct dosage, adverse effects, interaction with the food and other medicines.

It is necessary to ensure that the OTC drugs used must be safe and effective to use even without the doctors' prescription. Though the consumption of such medicines has chance of health risk in interacting with other medicines and adverse effect and may worsen the health condition.

Furthermore, the daily lives of the people are becoming busier these days. They have little time or no time to care their health. And at the same time, the treatments are becoming expensive these days. Therefore, the health facilities are beyond the accessibility of general population. The government health facilities are not sufficient enough to the care of the people. The private pharmacies are being established to ease such problems. Also people knowingly or unknowingly be informed about the indication, adverse effects, and interactions with other medicines, correct dosing, use the types of medicines through such pharmacies and administer accordingly. This in turn save their time, save the consultancy fee, minimize the cost as they do not have to go through different testing, investigating procedures. They develop the attitude that the physician will repeat the same medicines. This enforces them to shorten the way to the physicians? The trend that the non medics personnel's, friends, neighbor's recommendation, the previously taken and benefitted medications after purchasing from the pharmacies are repeated. Such practices may lead to the abuse of such over-the-counter medication.

A recent study in Mexico on the study of deaths due to unintentional drug poisoning, 0.9 percent of deaths was from OTC medication. Likewise a study in California showed that 8.5 percent admitted abusing prescribed medicines and 16.2 percent admitted abusing OTC medicines.

Globally, OTC medicines consumption trend is in practice. In the United States, the manufacture and sale of OTC substances is regulated by the Food and Drug Administration (FDA). Examples of OTC substances approved in the United States are sunscreens, anti-microbial and anti-fungal products, external and internal analgesics such as lidocaine and aspirin, psoriasis and topical treatments, anti-dandruff shampoos containing coal tar, and other topical products with a therapeutic effect.

OTC drugs, as the general rules, have to be primarily used to treat a condition that does not require the direct supervision of a doctor, and must be proven to be reasonably safe and well tolerated.

The non-prescriptive drugs or over-the-counter medicines are purchased without prescription. The poor economic status and busy life styles of an individual makes him rely on OTC medication in India.

## **1.2 Statement of the Problem**

Nobody likes being ill. Ill situation is really a hard to go. So, people after getting sick immediately seek different therapeutics. They try to get rid of such illness situation as soon as possible going through different options. They at that time select the nearby option for the speedy recovery. Also they have been practicing different therapeutic methods previously and have experienced the well being. The community people also suggest their opinions, the procedure they had adopted for the similar illness and had experienced betterment. In and around all this circumstances, the individual with ill situation too, adopt the way people suggest. Also the pharmacies where different types of medicines are dispensed and medicines can be easily accessed, provides medicines

without the prescription of any physicians/general practitioners. The physician's service at the same time is more expensive which general people cannot afford them for their consultation fees, advised different investigations and prescribed multiple medicines. In addition, such health facilities may be at a far distance and if nearer may be time consuming with different investigations and lengthy process. Also, people are having a very busy life style. Such a lengthy process may be irritating to the patients in an ill situation. Therefore the medications from the nearby pharmacy will be the best and appropriate option for them at that situation. Such a medication without the prescription of a physician is termed as over-the-counter (OTC) medication. Also it is known as the non-prescription medication.

Though the government health care centers are available which is somehow believed to be cheaper, are found crowded, less managed and with less doctor-patient ratio. The health professionals are not timely available and their presence are low.

For all these reasons, the practice of over-the-counter medication is in increasing order day by day. The consumer purchasing the OTC medications may or may not aware about its indication, contraindication, adverse effects, its interaction with other medicines and the correct dose with the frequency. If they are aware, the effect may be beneficial to the well being of health condition otherwise if unaware then it may instead of benefit, harms and leads to deterioration. So, OTC medication may be harmful if not used properly. For instance, paracetamol, ibuprofen, nimesulide which is used as an analgesics, antipyretics, anti-inflammatory and to relief headache also used as OTC medicine, may adverse effect gastritis, peptic ulceration if not administered after food. Also, these medicines, metabolizes in the liver causing adverse effect as hepatic toxic. These drugs administration along with alcohol intake among alcoholics have synergetic effect for the more hepatotoxic effect. Also OTC medication taken for cough and allergy may have addiction and dependency abuse among them.

So, the exploration of the types of OTC medicines commonly used, the site of distribution of such medicines, the reasons for the increasing use of OTC medications, the level at which the consumers are aware about indications, contraindications, adverse effects, interactions with the other medicines and the correct dosage administration are of great importance. Also, influential factors for the OTC medication need to be explored. The ways to mitigate the OTC medication use or if used, use with proper care and with full aware and the factors to increase the use of prescribed medication needs to be analyzed. The hindrances factors that interrupt patients from going to physician consultation needs to be analyzed. Further if OTC medication if more beneficial, really benefiting the consumers then rules regarding proper monitoring and regulating body with proper rules and regulations needs to be explores. The roles of such regulating body may help to minimize the OTC abuse and the morbidity and mortality due to the use of OTC medications are explored. In relation to the above research gaps, following are the main research questions of the study:

- ) What is the perception of users about OTC?
- ) Are they aware about risks of OTC?
- ) What is the situation of use of OTC medicine in Pokhara?
- ) Why people are preferring and using OTC over prescribed medicine?

### **1.3 The Objectives of the Study**

The aim of the research is to analyze opinion and experience of users about use of OTC medicine in Pokhara. The specific objectives of the study are:

- ) To examine the knowledge and perception of users about OTC medication
- ) To analyze the pattern of use of OTC medicines in relation to influencing factors.

### **1.4 Significance of the Study**

Different studies regarding the over-the-counter have been done in Nepal. Some of the studies were focused on practices under five years' children attending OPD, some of the surveys were focused on use of OTV drugs among

medical students, nursing and clerical staff of a tertiary care attending tertiary care of rural hospital. Most of the studies were done by the medical or health background from national and international authority. But there are very few studies were made by the students belonging to the anthropological backgrounds. Also, the studies at different medical halls have not been done focusing on the attendants those are visiting the medical halls in different sites of Pokhara aiming the knowledge and practices on the use of OTC medications. Therefore, focusing on knowledge and practices of the people attending the medical halls/ pharmacies in different sites of Pokhara, this study is carried out. I hope that my research findings would be useful for my fellow researchers, experts who are pondering into the knowledge and practices on over-the-counter medication of Nepalese society. Also I suppose that this might be helpful for the personnel with health backgrounds, different agencies working in health sector, NGOs and INGOs working in the sector of health, policy and planners regarding the regulation and monitoring of the OTC drugs. I suppose this might be helpful for the health personnel to understand about the practices, abuse from the anthropological point of view. Also, the findings of this research in the level of knowledge about the over-the-counter may be helpful in the planning phase for the awareness campaigns.

## **1.5 Limitation of the Study**

In our country Nepal, there are lots of people beyond the reach of the of the trained, qualified health workers due to different factors. Geographical issue is one of them. People have to walk several hours to reach the health facilities avoiding their regular works. Sometimes, reaching the health facilities, patients may be bared to the health care services due to the absence of health care providers. So, almost many people have to take medicines from the nearest pharmacies. Majority of the people living in the rural areas practice the trend of taking medicines from the medical halls that is nearby their residents without the consultation and prescription of the health personals. Though there are numerous people taking such medicines, it is difficult to reach to every

individual of all the parts of the study area. Therefore, I have to limit my study to selected areas of Pokhara. Among numerous medical halls, I have purposively selected medical halls of different places based on their distance from the health care facilities that is nearer to the hospital and at a distant from the health care facilities i.e. hospitals. For the research I have selected 108 informants from 3 different medical halls at various sites. So, the findings will have limited generalization. And due to certain methodological and practical problems, it may not be able to cover wide range of all OTC medications issues.

## **1.6 Organization of the Study**

The entire study will be carried out by dividing them into three chapters. The introductory part as the first chapter explains about the basic aspects of the study. In this chapter, the background for the research, statements of the problem, the objectives of the study are mentioned, the research questions are stated, and the significance of the study and its limitations are mentioned.

## **1.7 Definition of the Key Terms Used**

**Over-the-counter (OTC) medicines:** Over-the-counter (OTC) medicines are the drugs which can be purchased by patients for the treatment of common health ailments without a prescription form a physician.

**Factors influencing:** Factors influencing are the capacity or power factors those produce effects on the action, behavior, opinion etc (i.e. the use of OTC medicines) of others.

**Medicines:** Medicines are the drugs or other preparation for the treatment or prevention of disease.

## **CHAPTER II**

### **LITERATURE REVIEW**

This chapter deals with the relevant literature consulted and evaluated to identify research gaps and development and link theoretical framework relevant to the study.

#### **2.1 Theoretical Review**

Different types of determinants affect the health of an individual. The factors affecting health are social, cultural, psychological, economic, educational, ecological, biological, political etc. Different concepts on health, disease and illness can be found.

The discipline which studies the human health and disease, health care systems and bio-cultural adaptation is termed as Medical anthropology. The roots of medical anthropology reaches back to an intellectual, academic interest in describing and understanding the ways in which different non-western people have explained illness and given treatment to sick. Healing and shamanism captured the interest of anthropologists. From earlier days of anthropological development, W.H. Rivers (1924) was the first anthropologist to study on non-westerner medical practices. However, the term medical anthropology or a more systematic investigation started only from 1950s. Since 1940s anthropologists started to engage in public health by helping health services, provides agencies to understand cultural differences in health behavior. In 1972, society for medical anthropology was established which was first chaired by Leighton. The field has progressed beyond its root and encompasses a wide range of concerns. The sub-field is increasingly becoming interdisciplinary in terms of theories and methods. Because researches in health sector demanded interdisciplinary approach.



### **2.1.1 Biomedical/Conventional Perspective of Health**

Biomedical perspective of health focuses on normality which is disrupted by any biochemical, physiological or psychological deviances. It perceives health as an absence of disease. But it fails to understand social and cultural bases or factors that affect human health. Also, it lacks subjective dimensions of health.

### **2.1.2 Anthropological Perspective of Health**

What it means to be healthy can vary from culture to culture and is often connected with complexity of societies. For instance individual with a larger body size are seen as a sign of healthiness in Nepal, which in other developed countries are associated with unhealthy life styles. So, anthropologists /sociologists claim that it is important to understand patterns of everyday life experiences, local knowledge and social networks while defining health. Health is seemed, not simply originating in individuals themselves or driving strictly from social forces, but as being produce in complex interaction between the individuals of their social contexts.

World Health Organization (WHO) has defined "Health as a state of complete physical, mental and social well being and not merely the absence of disease or infirmity."(WHO 1948).

### **Disease**

Disease refers to abnormality in the structure and or function of organs, pathological state whether or not they are culturally recognized. Biomedical perception of disease views that disease has specific etiology, it is deviation from normal and understanding of disease is scientific/neutral.

Webster defines disease as "a condition in which body health is impaired, a departure from a state of health and alternation of the human body interrupting the performance of ritual functions."

From ecological point of view, disease is considered as a social phenomenon occurring in all societies and defines in terms of particular cultural forces prevalent in the society.

Likewise illness refers not only the presence of a specific disease but also to the individual perception and behavior in response to the disease. Illness further refers to the impacts of particular disease on psycho-social environment. Illness is a subjective state of the person who feels aware of not being well.

### **Illness**

Illness refers to person's perception and experience of certain socially devalued state including but not limited to disease. It is possible to have illness without disease. Illness is therefore culturally defined and socially engrained. How illness is explained often varies from culture to culture. Therefore, the methods considered acceptable for curing illness in one culture may be rejected by other culture. Understanding a cultural perception of illness is very important for health professionals who treat ill people. It is also useful for scientists or academicians because it helps them to discover major aspects of people's world views to study illness.

### **Medicine / Biomedicine**

Medicines are the drugs or other preparation for the treatment or prevention of disease. Biomedicine was a cultural invention in 19<sup>th</sup> century. Initially, Western medical care was disseminated worldwide by missionaries who established clinics and offered different medicine to the people they wished to convert (Janzen, 1978; Rubenstein & Lane, 1990, Vaughan 1991; Ranger, 1992; Gallagher, 1993) and the colonizers who wished to save the indigenous labour force from infectious diseases, as well as to protect themselves from such diseases (Rubenstein & Lane, 1990; Vaughan, 1991; Curtin 1992; Arnold 1993; Iliffe, 1998). Hospitals clearly have a longer history than biomedicine in Western society (Starr, 1982; Stevens, 2001). Previous to the 18<sup>th</sup> century, they

were institutions for charity and welfare, and warehouses for the poor. The modern hospital had its origin in the 18<sup>th</sup> century at which time it became a place for training physicians, using the poor as "objects of instruction", Foucault, 1973, p-84) and arguably hospitals were spaces for surveillance of the people in them ( Foucault, 1973).

With the introduction of antiseptics and anaesthesia, the modern hospital gradually changed from an institution of charity and welfare to a place of high technology, especially focused on surgery (Starr 1982). Hospitals in the last two centuries evolved into the venues where the marvels of modern technology could be displayed. The hospital evolved from care taking to treatment; from being presumably an institution of kindness to an institution of professionalism that gave great power to physicians (Starr, 1982, p-148; Rothman, 1991).

### **2.1.3 Medical Anthropological Theories**

#### **Structural functional theory of medicine**

Durkheim's work on suicide had direct application to medical sociology. His theory shows how society creates situation (eg. stress) where people are forced to respond to conditions not of their own choice. The main application of Durkheim's theory of suicide is that it helps us to understand how micro social events (eg. recession) can affect human health in variety of ways. Likewise, the publication of Parson's, ' the social systems' is an special event in the history of medical sociology while analyzing different roles of professionals in capitalistic society. He included the relationship between physicians and clients. Parson's concept of sick role is the first theoretical concept in sociology that was directly applicable to medical sociology as well as fit within the parameters of classical sociological theory (Kevin, 2007).

Talcott Parson's classical work, ' The social system(1951)' provides a structural functional model of society and also includes of analysis of the functions of medicine in society. Parson's concept of sick role and medical profession

doctor patient relationship are the first theoretical concepts that are implicitly concern medical sociology. Parson's theory is taken as an alternative to Marxist analysis of health and illness. Parson explains that medicine act as an institution of social structure determining individuals' health and illness. Medical practice and health should be understood in context of broader social structure (Kevin, 2007).

### **Conflict theory**

The most important asset of conflict theory for medical sociology is its capacity to explain the politics associated with health policy and reforms. Marxist explains health in relation to class system in capitalistic medical system where the emphasis is in profit. Conflict theory in general deals with the social inequalities and its link with health such as illness in work environment, competing interest in health care delivery and policy etc. ( Cockerham, 2005).

### **Symbolic Interactions**

Symbolic interactionism focuses on micro level human interaction. This perspectives was used in study of human interaction that are relevant to health and medicine. The strength of interactionism in explaining social behavior of small group of people (doctor-patient) are quite relevant to medical sociology. By the mid of 1960s, interactionism became very popular in medical sociology. Labeling theory particularly mere mostly used by medical sociologist. Erving Goffman study 'Asylum', is one of the classical examples of medical sociological study in symbolic interactionist perspective (Cockerham, 2005).

Interactionism emphasizes the use of qualitative method in the study of human behavior. This method specially participates observation, still remains as an important form of qualitative research methods in medical sociology.

## **Bourdieu on Health Practice**

Pierre Bourdieu provides a framework for medical sociology to conceptualize health life style eg. durability of various forms of health related behaviours within particular social classes. Bourdieu shows how the routine practice of individuals are influenced by the external structure of their social world and in turn reproduce the social structure (agency structure relationship). Bourdieu's work distinction analysis the food habit and sports that how social class orientation habits (habitus) affects particular aspects of health life style.

In 21<sup>st</sup> century, different theories were developed. There were several social and economic changes at the end of twentieth century. These social changes parallel with the theoretical shift in theoretical orientation in sociology as well as in medical sociology. There are few scholars and theoretical orientations which were relevant to medical sociology. Foucault is one among them. His main contribution to medical sociology is his analysis of the social functions of medical professions including the use of medical knowledge as a means of social control and regulations (eg study of madness) . He published a book 'Birth of clinic'. He has explored how social knowledge is used to serve the interest of powerful. His work also emphasize illness asocial construct.

## **Foucauldian**

Michael Foucault's idea/knowledge/power had great influence in social construction. Foucault explain medical knowledge as discourse, 'the powerful creates the knowledge to control powerless. Medical knowledge is also creation of some groups of people in specific social context. Medicine therefore is a system created by society and often used for social control. Many medical sociologist adapted Foucault's idea to explain social and cultural construction of medicines and medical knowledge.

## **Critical Realism**

Critical realism focuses on development of critical consciousness which synthesizes the insights of scientific inquiry with an awareness of the different ways in which scientific knowledge can be interpreted and applied to the solution of problems. It criticizes the extreme social constructionism and connect agency and structure in a way that the distinctive properties of both can be realistically accounted. Critical realism neither completely rejects scientific disclosure eg medicine nor completely accepts that it is a complete reality examination of the body from the strength of chronic illness and disability which focuses on the interrelationship between biological and social factors is shaping outcomes. Is one of the examples of application of critical realism in medical sociology. He explains the sick role concept, rights of sick people and his/her duties (Cockerham, 2005).

Parson explains that contemporary society should be understood as modern not as capitalist. It has capitalistic economy but it also has non-capitalistic structure/ institutions eg. medicine or medical profession is a non capitalistic institution based on altruism and service ethic of care. He also explained that medical profession is guided by norms and ethic and does not reflect the economic interest and egotism. Medical profession contribute to social system by controlling sickness and preventing individuals from trying to avoid their social responsibilities (social control). He explained the characteristics of medical professions/ doctor-patient relationship (Kevin, 2002).

## **Political economy**

Despite some variants, contemporary political economists have shared the conviction that disease is caused by structural factors. All of the political economists argue that improved global health requires dramatic social change and commitment by states to protect their citizens and environment along with the protection from the exploitative effects of corporate greed and state sponsored global capitalism. They call for 'a vision of social justice'. Political

economists especially Marxists have more focused on capitalism and its relationship with medicine (Singer, 1986 ).

People make sense of their worldview on the basis of sources of knowledge which they receive from their community where they live.

## **2.2 Review of Previous Study**

Wachter et.al. (1999) have assessed the over-the-counter antimicrobial dispensing by drug retailers in Kathmandu. They randomly selected 100 pharmacies. Their findings were that all medicine retailers engaged in diagnostic and therapeutic behavior beyond their scope of training or legal mandate. Patient history obtained by retailers was inadequate to determine the nature or severity of disease or appropriateness of antimicrobial therapy. Of the total, virtually all (97%) of retailers dispensed unnecessary antimicrobials in diarrhoea, while only less than half (44%) recommended oral rehydration therapy and only few (3%) suggested evaluation by a physician. Only few (7%) referred for a medical history and physical examination necessary to guide therapy.

Their conclusion is that drug retailers in Nepal did not demonstrate adequate understanding of the disease processes. It is a big concern because it can harm individual patients as well as lead to spread of antimicrobial resistance.

Alam Ket.al. (2006) conducted a cross-sectional, descriptive study was conducted at the Manipal Teaching Hospital, Pokhara, Nepal in 2004. Their objective was to analyze the prescriptions of out-patients for rational prescribing and dispensing and to evaluate the patient's knowledge regarding use of drugs. They randomly selected 247 prescriptions for analysis. They found that out of the total 720 drugs prescribed, only few (15%) of drugs were prescribed by generic name. Diagnosis was mentioned only in few (3.23%) of the prescriptions and the average cost per prescription was found to be NPR 241.11. Very few (0.4%) pharmacists labelled of the medication envelopes with the name of the patient. However, 82.6% of the medication envelopes

were labeled with name of the drug. Only half (53.8%) of the patient knew both the duration of the therapy and administration time of drugs. Based on the findings they concluded that there is a need for educational intervention for prescribers and both managerial and educational intervention for the hospital pharmacists to improve prescribing and dispensing.

Both of the studies above are quite informative and have important policy implications with regard to OTC drug use in Nepal. But their research is limited to drug retailers' knowledge and competencies. For the complete understanding of the OTC use of medicine it is very important to understand patient perspective which. Based on this, this study tries to address this gap.

Dave Beine ( ) has conducted an anthropologically informed study about OTC drug use in Palpa district situated in western Nepal. This is a qualitative study based on fieldwork. Beine argues that role of shaman is being replaced by medical shop in Nepal (over-the-counter use of medicine). He found that 80% patients coming to Palpa Mission hospital had first sought treatment in medical hall. People consider shaman as tradition (an inferior) and medical hall more powerful *bikashe* system. Attraction to allopathy medicine as powerful and modern medicine has encouraged people to choose medical hall. People are not going to hospital or other trained health workers because of various reasons. These included easy access (found everywhere), relationships (often familiar person), cost (initially cheap-no doctor fee, but can be costly later). Beine observed several cases of misuse of drugs (wrong diagnosis and medicines, giving unnecessary medicines for money). This has significantly affected the treatment process and health of people in Nepal.

He concluded that, to an extent, medical hall is filling the service gap (no access to qualified health workers) and some patient may have been benefited. But, it is a dangerous practice significantly increasing in Nepal. Proper regulation of such practice is urgent. Otherwise, the new shamanism will have significant impact on health of Nepali people particularly living in the rural areas.



Beine's provides very good insights about OTC use of drugs in rural areas of Nepal. Complementing this study, this study tries to uncover the situation of OTC drug use in urban area of Nepal from patient's perspective. It is important to understand the pattern of the uses of OTC drugs and factors influencing it which is still less understood.

Devang Parikh, B.M. Sattigeri, Ashok Kumar and Shruti Brahmhatt has conducted a study on use of the over the counter (OTC) drugs among the medical students, nursing and clerical staff of a tertiary care teaching rural hospital to determine the awareness and disadvantages on use of OTC. Responses to feedback questionnaire covering various aspects on usage of OTC drugs were obtained from 100 medical students, 100 nursing students and 100 clerical staffs. They found that among 300 respondents, 84% used OTC medicine commonly purchased by self. Majority of them started self medication within 2 days of illness. The frequently reported illness that prompted self medication including headache, cough and cold, fever, generalized weakness, acidity, dysmenorrhoea, and sleep disturbances. Majority of them obtained OTC by mentioning the name of the drug(81%), 35% by telling symptoms and 15% by showing old prescription. They found that 87% people share OTC among relatives and friends. They concluded that the usage of OTC was highest amongst medical students and nursing staffs. Time consumption for consultation, the consultation fees and frequent visits were commonly mentioned reasons for self medication. It was analyzed that none of the clerical staff were aware of the drug dose, frequency of administration and adverse reactions. While very little awareness of medication was found even among the nursing staffs and medical staffs. Therefore they suggested that the public has to be educated on the types of illnesses to be self diagnosed and medicated, dangers of OTC on misuse which would possibly lead to delay in detection of more serious underlying ailment and timely medication.

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

This section is composed of various elements that are related with research methodology. This section explains about the reason for the selection of the study area, the ways of research design, sampling and data collection techniques. This section describes how the research process was designed and types of tools used in the collection of data essential for the research. The names of the pharmacy and the response of the research mentioned are coded with numerical values, as the data collected are comparatively sensitive and personal in many cases.

#### **3.1 Rationale of the Site Selection**

Most of the data those I require can be collected from the informants who usually visit the pharmacy. So, the pharmacies for the research were selected according to the area with reference to the distance from the health service centers and their residents. The selected sites have high prevalence of OTC medicine users. The reason being nearer pharmacies and distant hospitals have made them increased use of the OTC medicine. The different three pharmacies at different places of Pokhara metropolitan were selected for the research (far from health facilities to near health facility). Informants from different castes, with different religions and with different social background were available in these areas.

#### **3.2 Research Design**

Descriptive type of research was done to describe the characteristics of informants in the selected sites. Different social characteristics like their age composition, caste wise distribution, religion wise distribution, distribution

according to the family income, education, source of income, types of family and the types of their residency were taken. This descriptive type of research design was used to study the different types of practices regarding the use of OTC.

### **3.3 Sampling**

Non probability sampling was chosen to collect the data. The customers those were visiting the pharmacies were asked for the data and after the verbal consent only the information were collected. The data to be collected were purposive and depends on the availability of the informants. Within the period of 12 days, data (altogether 108 informants from 3 different pharmacies located in different sites within Pokhara metropolitan) were collected.

### **3.4 Nature and Source of Data**

Most of the data and information collected were from primary source. The semi-structured interview schedule was developed in accordance to fulfillment of the research objective. Then, the data were collected through interviewing directly with the informants at the pharmacies. So, most of the data collected were first hand, based on answers filled in the pre-established structured interview schedules. So the data collected was mostly quantitative in nature. The earlier researches done by various researchers as the secondary source of data also were used which helped me to attain the goal I had approached.

#### **3.4.1 Interview**

Data collection technique is the most important part of research. The whole research is based on the process of data collection and can be regarded as the backbone of the research process. I have tried my best to use the appropriate data collection techniques and skills to collect various data essential for my research

Interview was the technique employed to collect the required data. Data needed to be collected from different types of informants (literate as well as illiterate), so I have used interview tool mostly which I found most appropriate for my research. Verbal consent was taken from the informants before interviewing.

Semi-structured schedule was developed. The schedules filled were coded so as to maintain the secrecy. Their privacy were maintained, the personal information were not encouraged during the interviewing session. As the objective of the research was to find the users' perception and practice on use of OTC medication, the data were collected through structured interview. Along with total 46 questions among which 11 were related to general background and social characteristics of the informants, 17 questions were related to the users' perception on OTC medication and 18 questions were related to the users' practices and influencing factors on OTC medication.

### **3.5 Data Analysis and Interpretation of Data**

Data were processed and managed using Statistical Package for Social Sciences software (SPSS 20). Analysis of data collected from structured interview schedule was done in tabular form. Percentage was used for the demonstration of data. Techniques like transcription, coding were used for the analysis and organizing purpose of the research. Statistical methods were used for the analysis of the quantitative data. Tables and charts were created using Microsoft excel and word processor. Some of the data handled manually while the larger shares of data were managed by using the above mentioned software.

## CHAPTER IV

### BACKGROUND AND SOCIAL CHARACTERISTICS OF INFORMANTS

This section consists of background and characteristics of informants used in this research. The characteristics of the informants can be dependent and independent variables which affect the research data. Major variables used in this research include the gender, caste/ethnic groups, religion, educational status, the main source of income, the number of family members. Health perceptions of individuals depend on the differences on castes, ethnic group and educational status. This part reflects the composition of such informants.

The informants for this research are the people visiting the different medical halls for OTC medications. The locations of the medical halls are selected according to the variation in distance from the health facilities/hospitals.

#### 4.1. Age of Informants

This table provides age background of the informants. Age is an important factor in using OTC medication.

**Table 4.1: Age Group of Informants**

<b>Age group</b>	<b>Numbers</b>	<b>Percent</b>
Up to 24years	20	18.5
25-29 years	13	12.0
30-34 years	13	12.0
35-39 years	12	11.1
40-44 years	14	13.0
45-49years	6	5.6
50-54 years	18	16.7
Above 55 years	12	11.1
<b>Total</b>	<b>108</b>	<b>100</b>

Source: Fieldwork, 2019.

The table 4.1 shows that OTC medication is prevalent among all age groups of informants ranging from below 24 years to above 55 years of age with the majority of below 24 years with 18.5%. For the OTC medicine purchase almost adults visit the pharmacy but no children came to purchase medicines. This does not mean that no children come to the pharmacy requesting the OTC medicine. This can be interpreted that at time of study, no informants from the children were met. But in real practice children are mobilized to bring medicines like paracetamol, Decold, Sinex etc when the adult of a member become sick.

## 4.2 Sex Composition of Informants

Health issues and problems are different according to the sex/gender. Also, gender makes the difference in the construction of their perception. Therefore, the individuals of both genders are included to find the variation in perception related to the OTC knowledge and practices. Nearly equal numbers of male and female informants were taken for the study. The table 4.2 shows the number of male and female from different three locations attending for OTC medications in Pokhara.

**Table 4.2: Distribution of Informants by Gender**

<b>Sex of the Informants</b>	<b>Numbers</b>	<b>Percent</b>
Male	58	53.7
Female	50	46.3
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork 2019.

In this study, it was found that the majority of male (53.7%) whereas 46.3% of female visited the medical hall for OTC medication. Comparatively more males about 7% were visited in the medical hall than the female informants.

### 4.3 Composition of Informants by Castes and Ethnic group

According to the dictionary of sociology, "a closed social stratum based on heredity that determines its members' prestige, occupation, place of residence and social relationship is caste and ethnicity. In caste system, status of a caste is determined not by the economic and the political privileges but by the ritualistic legitimation of authority. In the caste system, inequalities are expressed primarily in personal relationship of duty or obligation-between lower and higher caste individuals. This variation can cause the differences in making up the perception so differs in knowledge and accordingly the practice. Some of the diseases are inherited.

**Table 4.3: Distribution of Informants by Castes and Ethnic Group**

<b>Caste/Ethnicity of the Informants</b>	<b>Numbers</b>	<b>Percent</b>
Brahman	24	22.2
Chhetri	20	18.5
Janajati	50	46.3
Dalit	10	9.3
Giri	2	1.9
Others	2	1.9
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork 2019.

Table no 4.4 shows that people from different castes and ethnic groups are residing at the site of this study. All the caste and ethnic groups are also visiting the pharmacy halls for OTC medication. However the majority of the people taking OTC medication belongs to the janajatis ethnic groups (46.3) especially Gurungs and magars which shows that their residency is majority in the study area However it does not mean that the janajatis only use OTC medicine. It is due to reason that most of people residing in the area are janajatis.

#### 4.4 Composition of Informants by Religion

The religion is a form of culture which involves beliefs and takes the form of ritualized practice. Therefore the knowledge, practices on health depends upon the religions.

**Table 4.4: Composition of informants by religion**

<b>Religion</b>	<b>Frequency</b>	<b>Percent</b>
Hindu	84	77.8
Bouddha	14	13.0
Bon	4	3.7
Christianity	6	5.6
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork 2019.

Table 4.4 shows that people with different religions practice OTC medication. Among them majority of Hindu religion (77.8%) were visited in the pharmacy.

#### 4.5 Composition of Informants by Marital Status

Illnesses of certain type sometimes depend upon the type of marital status. Also, the type of health problems among the married, unmarried, separated, divorced and widowed may vary. Likewise the way people treat may differ as per the marital status. Also, the chances of being stigmatization and discrimination may be high among the widow in some society like ours. The degree of certain illness like depression, anxiety may be increased among the separated and divorced status.



**Table 4.5: Composition of Informants by Marital Status**

<b>Marital Status</b>	<b>Frequency</b>	<b>Percent</b>
Married	86	79.6
Unmarried	16	14.8
Separated/Divorced	2	1.9
Widowed	4	3.7
<b>Total</b>	<b>108</b>	<b>100</b>

Source: Fieldwork 2019.

Table 4.5 shows that the majority with married status (79.6%) were found visiting the pharmacy for OTC medication.

#### **4.6 Composition of Informants by Educational Status**

The educational status also defines the degree of understanding towards health and diseases. The understanding also affects the knowledge, attitudes and behavior (practices). Also, study of such a data may help in the planning of different programs depending upon the level of understanding. Educated people have access on internet and gain various knowledge and practice. Going through it they visit the pharmacy with the gained knowledge from internet. Also illiterate ones also mentioning the medicine previously used or showing the cover of the medicine come to purchase OTC medicine.

**Table 4.6: Composition of Informants by Educational Status**

<b>Educational Qualification</b>	<b>Numbers</b>	<b>Percent</b>
Illiterate	16	14.8
Primary level	20	18.5
Secondary level	36	33.3
Higher secondary level	17	15.7
Above higher secondary	19	17.6
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork 2019.

Irrespective to education level, people with different educational status visit the pharmacy for OTC medication. In this study, people with majority of Secondary level education were found visiting pharmacy for OTC medications. Also, illiterate people also found visiting pharmacy with the names of the medicines previously taken and presented with the cover of the medicines.

#### **4.7 Composition of Informants by main Source of Family Income**

The source of income also defines the way people live. Health facilities in developing countries are expensive. It is unaffordable for the people with lower income source to the health facilities. The morbidity rate among the poor people are higher. They also have to manage money for their complicated health treated which will pull them underdebt. Though health for all is mentioned, there lacks the health facilities and if health facilities are available then there lacks health personals. So, the more strong source of income, the better the treatment can be obtained from facilitated health facilities in developing countries like ours'. Also, the more comfort and luxurious life people like to spend if they have a strong source of income; they are vulnerable to different diseases. They lack physical activities and are susceptible to different diseases. So, the source of income has relation with the health of people.

**Table 4.7: Composition of Informants by Main source of Family Income**

<b>Main Source of Family Income</b>	<b>Numbers</b>	<b>Percent</b>
Farming	18	16.7
Service	37	34.3
Trade/business	27	25.0
Wage laboring	2	1.9
Pension	4	3.7
House rent	10	9.3
Others	10	9.3
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork 2019.

Previously, Most of the Nepalese people were depended on agriculture .But now the people and percent of people under the agriculture or farming profession has declined. Majority of the people as shown in the table no 4.7 showed that the majority of the people who came to purchase medicine at different pharmacies were found service holder. Afterwards, the people were found under trade and business as their main source of income. Wage laboring people were found at least number.

#### **4.8 Composition of Informants by Family Size**

The number of the family members also affects the health status of an individual. The more the numbers of family members, the less the time to be cared and supported. Also, Expenses on health recovery may hinder the treatment due to the more expenses for more individuals. The members of the family if fallen ill at the same time may be financially burdened.

**Table 4.8: Composition of informants by family size**

<b>Family Size</b>	<b>Frequency</b>	<b>Percent</b>
up to 4	37	34.3
5-7	52	48.1
8 and above	19	17.6
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork 2019.

Table 4.8 shows that the family members of the informants of the study vary ranging from below 4 to above 8. The highest 48.1% with 5-7 members in the family.

#### **4.9 Composition of Informants by Monthly Income of Family**

The income of the family has effect on the health status. That is due to the income of the family which decides the affordability of the health services during illness. Also in developing countries like ours', an individual has to

invest a lot for the health services for well being. The treatment cost is very high.

**Table 4.9: Composition of informants by monthly income of family**

Monthly income of family	Number	Percentage
Up to 10000	4	
Rs. 10000- 25000	38	
Rs. 25000-40000	28	
Rs. 40000-60000	16	
Rs. 60000-80000	6	
More than 80000	16	
<b>Total</b>	<b>108</b>	

Source: Fieldwork, 2019.

Table 4.9 shows that the monthly family income of the informants varies from less than 10000 to more than 80000. Informants owing their own business, trade, service, family member's foreign employers' are the sources of their income. Though the monthly income of the informants were seen, this does not mean that they purchase medicine from pharmacy but do not go to hospitals were not due to lack of money but due to the different lengthy process in the hospitals.

#### **4.10 Composition of Respondent by Types of Residency**

**Table 4.10: Composition of informants by types of residency**

Types of residency	Numbers	Percent
Permanent	65	60.2
Temporary	43	39.8
Total	108	100.0

Source: Fieldwork, 2019.

Table 4.10 showed that the informants visiting the medical halls for OTC medication was found that the majority of the informants 60.2% are residing permanently and 39.8% with temporary residency.

## CHAPTER V

### KNOWLEDGE AND PERCEPTION ABOUT OVER-THE-COUNTER MEDICATION

This chapter analyses the knowledge and perception of the informants about over the counter use of medicine. This mainly includes topics like perceptions of the pharmacist as a good source of information about the minor health problems, preference to visit pharmacy rather than doctor, source of knowledge about OTC medicine, information about the adverse effects OTC medications, effectiveness of the treatment by OTC medicine, perception on OTC medicines as always safe to use, attitude towards health problems/sickness successfully treated with OTC medicine, conditions for using OTC medicines, composition by main reasons for using OTC medicines and aware about the correct dose and frequency of the OTC medicines.

#### 5.1 Pharmacist a Good Source of Information about Minor Health Problems

All the information like the type of medicine they take, the frequency to take medicine, the route for the medication, the time duration to take medicines can be explained by the pharmacist while purchasing medicine. Also, the pharmacy being nearby their residency, make the bond more closer. That's why; they feel easy in taking the detailed information on different health topics.

**Table 5.1: Pharmacist, a Good Source of Information**

Response	Numbers	Percent
Yes	94	87.0
No	4	3.7
Don't know	10	9.3
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork 2019.

The place, the informants primarily visit after falling sick is the pharmacy. They got more information from there. Being their neighbor, nearer to the

house they have sharing in different issues mainly regarding health. This helps in building the trusty relationship between the OTC purchaser and the pharmacist. They clarified the doubts with repeated query. So, 87% of the informants had developed positive attitudes towards the pharmacists and found a good source of information about minor health problems.

## 5.2 Preference to Visit Pharmacy Rather than Doctor

The medicines can be easily purchased from the pharmacy telling the name of the medicine or showing the cover of the medicine. Also, telling the symptoms, the pharmacist also provides medicine with ease. But in hospital patient have to take token at first by being in queue, then for the appointment with the doctor at OPD, they have to wait for a long time, then have to go for different tests, then again have to wait for result for a long time and then with the result again have to wait to meet the doctor with the report and again have to be in queue again for the prescribed medicines. All these difficulties must be faced during the doctor visit in the hospital.

**Table 5.2: Preference to Visit Pharmacy Rather than Doctor**

Visiting Pharmacy	Numbers	Percent
Yes	84	77.8
No	18	16.7
Unanswered	6	5.6
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork, 2019.

Table no 5.2 showed that 77.8% of the informants preferred visiting pharmacy rather than visiting doctor. They explained that the consultation to the doctor is a lengthy process, have to face different difficulties, should be in queue at every step, have to face with crowd in every steps for examination, lab test, show report, buy medicines, sometimes cannot meet the doctor the same day due to delay in laboratory reports etc. Due to all these reasons they explained that the preference was pharmacy rather than visiting doctor in hospital for

minor illness. Though there are availability of advanced types of services in the hospital, informants preferred visiting pharmacy.

### 5.3 Source of knowledge about OTC Medicine

Some of the medicines are commonly known because someone for a particular problem has been using particular medicine. One's experience of treating with certain medicines for certain kind of sickness may help the others to take same type of medicine for same type of illness.

**Table 5.3: Informants by Source of Knowledge about OTC Medicines**

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
Previously prescribed by physicians	18	16.7
Pharmacy	88	81.5
Others	2	1.9
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork 2019.

The table 5.3 showed that 81.5% of the informants reported that the source of knowledge about OTC medicine was pharmacy. The pharmacies being nearby their residency made them the accessibility easy. Therefore, they purchase medicines from the pharmacies. Also, the process at the hospital as reported was found lengthy, different tests for minor illness which they feel more uncomfortable for them. Also 16.7% of the informants had known about OTC from the previous prescription by the physicians.

## 5.4 Perception Towards the cost of OTC Medicines

This table describes whether the OTC medicines are cheaper or expensive. The cost of the medicines also determines the place to purchase medicines.

**Table 5.4: Informants by the cost of OTC medicines**

<b>Attitude towards the Cost of OTC medicines</b>	<b>Numbers</b>	<b>Percent</b>
Cheap	14	13.0
Expensive	4	3.7
Neither cheap nor expensive	90	83.3
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork 2019.

Most of the informants felt that the OTC medicines are neither cheap nor expensive. They explained that the rate of the medicines depends on the types of medicines. They reported that rate of the paracetamol for a strip of 10 tablets can be purchased at Rs.10 whereas some of the antibiotics cost expensive. 13% informants felt that the OTC medicines cost was cheap and just only 3.7% informants felt expensive. They did not have to pay for the doctors and other laboratory tests. This minimized the cost of their medication. Also, they added that the rates of the medicines are calculated as per the printed rate.

## 5.5 Aware About the Correct Dose and Frequency of the OTC

The right medicine, right dose, at right time interval for the right patient is necessary for the effective treatment. The person who is taking medicine should be aware of the correct dose and about frequency to take OTC medicines.



**Table 5.5: Awareness about the Correct Dose, Frequency of the OTC**

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
Yes	69	63.9
No	37	34.3
Unanswered	2	1.9
Total	108	100.0

Source: Fieldwork 2019.

Most of the informants (63.9%) were aware about the correct dose at right time for medication. If an individual becomes aware about the dose and right time medication, then the treatment is hoped to be effective. It was found that informants perceive the medicine of 500 mg as higher dose and halved the dose which affects treatment. Likewise, it was found that in case of severe pain, without caring the dose, they took two tablets at a time. This would lead to ineffective treatment. Informants also reported that though they knew the frequency of taking medicine but unaware of the dose.

## **5.6 OTC Drugs are Primarily Used for Minor Illness**

Different illnesses are prevalent in a community. Some of them are thought to be major and some minor. As the perception that the minor illness needs no consultation by physicians exists. As per the understanding of the informants, minor illness can be treated by purchasing medicine from pharmacies.

**Table 5.6: OTC Drugs are Primarily Used for Minor Illnesses & Injuries**

<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	85	78.7
No	11	10.2
Don't know	10	9.3
Unanswered	2	1.9

Source: Fieldwork 2019.

Table no 5.7 showed that 78.7% of the informants responded that the OTC drugs are primarily used for minor illness and injuries. They believed that they

do not need to consult or need to medicate under the supervision of physicians. They added that the process for the medication by physicians is length, time consuming and costly as well. For minor illness like headache, a single dose of paracetamol of Rupee one works and for cold they just take decold or sinex which would make them better.

## 5.7 Information about the Adverse Effects OTC Medications

OTC medications are meant to treat minor illness. It may be believed that treating minor illness with medicines from the pharmacy may not have any adverse effects.

**Table 5.7: Information about the adverse effects of OTC medications**

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
Yes	<b>62</b>	<b>57.4</b>
No	<b>22</b>	<b>20.4</b>
Don't know	<b>24</b>	<b>22.2</b>
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork 2019.

Majority of the informants (57.4%) reported that the OTC medicines can have adverse effects. Though OTC medicines are those medicines which can be taken without consulting physicians, they did not think that it would not cause any adverse effect. They added that whatever the substance is, they are chemical substance and must have some effect inside our body. Also, they said that some of the adverse can be seem immediately and some effects can be seen after periods of time. However, there were informants (20.4%) who believed that OTC medicines were very normal that should not needed to be consulted with the physician, could be purchased from the medical hall, so they do not have adverse effect. Illustrating the example of Cetamol, they told that it can be kept at home, can be purchased from the medical, even from the kirana stores at some places, and can be taken whenever we had headache and fever.

Likewise 22.2% informants did not have knowledge whether OTC medicines can cause adverse effects or not.

## 5.8 Effectiveness of the treatment by OTC medicine

The effectiveness of the OTC medicines after administration has been explained under this topic.

**Table 5.8 Effectiveness of the Treatment by OTC Medicines**

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
Very effective	33	30.6
Slightly effective	71	65.7
Ineffective	2	1.9
Unanswered	2	1.9
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork 2019.

The majority of the informants (65.7%) found that the treatment by OTC were slightly effective. They reported that the OTC medication can lower the symptoms during the time of administration only but cannot treat fully. OTC medicines helped in relieving onset symptoms. They further needed further consultation for full recovery. Forwarding the example of cetamol for headache and fever, they told that it worked for only 4 to 6 hours. Again, the fever reoccurred. Repeated dose did the same i.e. subsided symptoms for the same time duration i.e. 4-6 hours. The condition became the same afterwards. So, needed further conclusion. Due to this, they categorized the OTC medicine as the slightly effective ones. However, the OTC medication were very effective for 30.6% of the informants. They did not need further consultation. Their minor illness were managed with the OTC medicine.

## 5.9 Attitude on OTC Medicines is Always Safe to Use

Different individuals have different attitudes towards something. The informants too have different attitudes towards the use of OTC medication described below.

**Table 5.9: Attitude on OTC Medicines Always Safe to Use**

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
Yes, always	33	30.6
Not always	57	52.8
Don't know	12	11.1
Unanswered	6	5.6
<b>Total</b>	<b>108</b>	<b>100</b>

Source: Fieldwork 2019.

The majority of the informants (52.8%) believed that OTC medicines are not always safe to use. They reported that medicines are composed of chemical. The chemical in some part cause effect to the body. To administer medicine is to administer chemical, which affect the normal mechanism. However, some of the informants believed that OTC medicines can be taken without consultation with the physicians so that they do not have negative effect. So, they felt that they must be safe for them.

## 5.10 Sickness Successfully Treated with OTC Medicine

Composition of informants by the health problems/sickness successfully treated with OTC medicine

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
Yes	84	77.8
No	20	18.5
Unanswered	4	3.7
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork 2019.

Informants used OTC for minor illness without consultation with the physicians. This table showed that majority of the informants 77.8% were found treated successfully for the health problems by OTC medicines. Such a data showed that the use of OTC medicines are higher and will increase. People are being busy and do not have more time to go for the consultation, though the consultation is the best choice, prefers OTC medication from the nearby pharmacy. Also, without knowing the adverse effect, its interaction with the other medicines, its effect on long term use, people use OTC medicines because their present health problems will be managed. Though in the long run, such medication may have chances to create other health problems. However 18.5% were not treated successfully and needed further treatment. This indicated that not all the minor health problems can be treated by OTC medications.

### 5.11 Conditions for using OTC medicines

Informants used OTC medicines for different types of health problems which are shown in the table below.

**Table 5.11. Informants by Conditions for Using OTC Medicines**

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
Aches/pains/headaches	19	17.6
Fever	27	25.0
Cold/sore throat/Decongestant & Cough	20	18.5
Diarrhea	2	1.9
Nausea & vomiting	4	3.7
Acidity, gastritis	6	5.6
Others	4	3.7
Unanswered	26	24.1
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork 2019.

It was found that most of informants (27%) commonly used OTC medication for fever, 18.5% for cold, sore throat, decongestant and cough and then 17.6%

used medication for aches/pain/headaches. Fever, aches, pain, headaches, acidity (for which they call gastritic), nausea, vomiting, skin rashes were commonly prevalent among the informants and. They believed that such a health problem as minor illness and they tried to manage them with medicines from the nearby pharmacies first. Then after only, they go to the further centers if symptoms do not subside.

## 5.12 Composition by Main Reasons for Using OTC Medicines

Under this title, the different reasons for using OTC medicines are analyzed. This was a multiple choice question-answer. So, the percentage may exceed 100%.

**Table 5.12: Composition by Main Reasons for Using OTC Medicines**

Reasons	Number	Percentage (%)
Easy access	106	98.1
Time saving	84	77.8
Avoiding consultation fee	44	40.7
Less costing	37	34.3
Purchasing site nearby home	41	38.0
Following others' suggestions	32	29.6
Same medication after consultation too	21	19.4
Preventing occurrence of the known illness based on their previous illness	15	13.9
Others	2	1.9

Source: Fieldwork 2019.

Virtually all (98.1%) informants reported that easy access is the reason for using OTC medicine.

## **CHAPTER VI**

### **PRACTICES ABOUT OVER-THE-COUNTER MEDICATION**

This chapter analyses the practices of the informants about over the counter use of medicine. This mainly includes topics like measures informants take first when fall sick, measure taken if the first effort doesn't work, waiting time before starting the second treatment plan, thinks OTC drugs are primarily used for minor illness, influencer to take OTC medicine, conditions for using OTC medicines, reading and following instructions given before taking non-prescribed medicines, check expiry date of OTC medicine, place for storing OTC drugs, ask the pharmacist about use of medicine, understand all the information provided by the pharmacists, follow all the instruction accordingly as pharmacist's advice, practice related to dose of the medicine, time to start OTC medication after symptoms of sickness, way of purchasing OTC medicines, , distance of the nearest hospital or health facility from the residing area, distance of the nearest pharmacy from the resident, last time OTC medication taken experience of any adverse effect due to OTC medicines previously, measures to be taken against side effects

#### **6.1 First Step Informants take After Health Problems**

People after falling sick, take some measure to treat because the condition of being sick is difficult situation to spend. Also after morbidity, there will be the chance of being disability and mortality as well. While doing so, they do as per the practice they have learnt from their society and the perceived, the beliefs they have gained from their society.

**Table 6.1: Informants by Measure taken first when fall sick**

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
Start home remedy	30	27.8
Visit Dhami/Jhakri/Shamans	4	3.7
Visit nearby pharmacy/medical hall	70	64.8
Visit health facility/health care centres	4	3.7
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork, 2019.

Table 6.1 showed that the majority of the informants (64.8%) of the research responded that they visit the nearby pharmacy/ medical hall after fallen sick. This showed that the nearby medical halls or pharmacies are the primary site they visit after fallen sick. Also, the informants, they started the home treatment are 27.8%. But least informants 3.7% of the visit the Dhami/Jhankri/ Shamans and the health care centers. This shows that the informants have least beliefs on the traditional healing practices. And they prefer going to nearby pharmacies rather than hospitals in case of sickness.

## **6.2 Second Step Taken if the First Step Doesn't Work**

The moments of sick periods are really hard. After falling sick people try to get rid of it as soon as possible. They opt different steps those exist within their society and sometimes the periphery as well. The first try the nearby and trusted option. First option in some cases may work and in some cases may not work. In such case, they go for the secondary option. Also, in some cases they may not try the secondary option due to different causes like economic factor, time factor because they may not have money and time for the treatment. So, in such case they keep on continuing with the existing option.



**Table 6.2: Second Step Taken if the First Effort Doesn't Work**

<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
Revisit the firstly visited sites	10	9.3
Plan to visit the secondary site	86	79.6
Others	12	11.1

Source: Fieldwork, 2019.

The collected information on measures taken if the first effort for treatment does not work, what would you do, the responses in the table 6.2 showed that 76.6 % of the informants plan to visit the secondary site like hospitals with more facilities and consult health experts.

### **6.3 Waiting Time before Starting the Second Step Treatment Plan**

It takes time to be fully cured. Sometimes the single dose of a medication works. Sometimes, certain duration of medication is needed to fully recovery. Also, the patience and tolerance capacity of the patient, the type of sickness, depends upon individual. So, some individuals can wait and bear the sick situation for certain time period. This topic deals on that matters.

**Table 6.3 Waiting Time before Starting the Second Step Treatment**

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
Just try with the first single dose	2	1.9
Wait and continue treatment for 1-2 days	48	44.4
Wait and continue treatment for 3-4 days	46	42.6
Wait and continue treatment for 5-6 days	10	9.3
Others	2	1.9
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork 2019.

The table 6.3 showed that 44.4% of the informants waits and continue treatment for 1-2 days and 42.6% wait and continue treatment for 3-4 days. The informants as explained that it takes time to recover for any types of disease condition. Also, they are aware that the medication takes time to work. In addition, if the condition worsen after taking medicine (bis ko unnias navaye in nepali version), they do not wait for other more days.

## 6.4 Influencer to take OTC medicine

An individual gains knowledge from different means. An individual being close to his friends, family and other surrounding orients him/her. He/she himself/herself gets orientated to the environment. In the same way, the member of the community also gets orientated to the disease, the common medicines those they have previously used for common problems. For some of the problems, family members, friends recommended the medicines by which they had experienced the betterment. Some of the medicines are advertised in the media through which people get influenced and try those purchasing from the medical halls.

**Table 6.4: Influencer to take OTC Medicine**

Response	Numbers	Percentage
Self	83	76.9
Friends	11	10.2
Family	10	9.3
Media advertisement	2	1.9
Others	2	1.9
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork, 2019.

Table no 6.4 showed that the majority of the informants (76.9%) initiated self OTC medications. The trend of purchasing known medicines from the pharmacy which are on ease access for the minor illness Also there is somehow trend of medicine recommendation from the friends and family members and

with least influence by media advertisement. The informants as per their experience of having betterment by the previously taken medicine for the same problem had influenced them to continue the same treatment for the same illness.

### **6.5 Distance of the nearest hospital from the residing area**

The distance between the patient's residing area and the nearest hospital or health facility determines the patient for taking the service. The nearer health services are more utilized. This research was conducted on three different sites with the reference of time taken to reach the nearest hospital. This was done to see how the distance affects the service.

**Table 6.5: Distance of the Nearest Hospital from the residing area**

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
15 minutes walking distance	58	53.7
30 minutes walking distance	40	37.0
one hour and more walking distance	8	7.4
Unanswered	2	1.9
Total	108	100.0

Source: Fieldwork 2019.

Most of the informants (53.7%) were found residing at a distance of 15 minutes walking distance from the resident, whereas 37% were found residing at a distance of 30 minutes walking distance. Also some of the informants those were met were at a distance of one and more than one hour walking distance. Irrespective of the distance, they visit the pharmacy for minor illness and go to hospital for major ( as they said for 'thulo rog') health problems only.

### **6.6 Distance of the Nearest Pharmacy from the Resident**

The use of the service depends on the distance of the service centre from the resident. The nearest ones are more used compared to the farthest one.

**Table 6.6: Distance of the Nearest Pharmacy from the Resident**

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
less than 10 minutes	41	38.0
11-20 minutes	41	38.0
21-30 minutes	18	16.7
30 minutes and more	6	5.6
Unanswered	2	1.9
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork 2019.

Pharmacies at different distances were found. The research site being the city area, more pharmacies can be found compared to the remote area. This had made the customers easier from getting medicinal services from the nearest pharmacy for minor illness. This increased the trend of taking OTC medicine. They reported that for minor illness, it is not necessary to go to the hospital. They did not feel comfort at the hospital due to overcrowding, lengthy process for diagnosis.

## **6.7 Conditions for Using OTC Medicines**

After getting sick, people seek for treatment. Some of them go to the pharmacy to purchase medicines for themselves, some of them consult physicians. Different factors influence the treatment options. Some sickness is thought to be minor whereas some are major. For minor sickness it can be self managed. Also financial aspects, time constrain also affect the treatment option.

**Table 6.7 Conditions for using OTC Medicines**

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
Felt that the sickness is minor and self-manageable	57	52.8
Whenever I feel sick	34	31.5
When I cannot visit doctor	9	8.3
When I have no money to consult the doctor	2	1.9
When I don't have time to go to the hospital	6	5.6
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork, 2019

The informants who felt that the sickness is minor and self-manageable is one of the condition for using OTC medicine. Table no 6.7 showed that such informants were 52.8%. And 31.5% of informants used OTC medicines whenever they feel sick. 1.9% of the informants responded that due to lack of money, and 5.6% of the informants do not have time to go to the hospital and therefore use OTC medicines as the option. This showed that the some of the informants cannot afford the consultation with the doctors and some of the informants had busy time so could not go to the hospital.

## **6.8 Time to Start OTC After Symptoms of Sickness**

The tolerance differs according to the individuals. Some individuals can bear pain for long time, but some needs to subside pain immediately after symptoms start. Also some of the individual do not prefer taking medicine whereas some have to take medicine as soon as the symptoms start.

**Table 6.8 Informants by time to start OTC after symptoms of sickness**

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
Immediate after onset of symptoms	38	35.2
After 2nd day of illness	60	55.6
After 3rd day of illness	8	7.4
After 4 or more days of illness	2	1.9
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork 2019.

It was found that majority of the informants started OTC medicine on the second day after the onset of symptoms of sickness. They waited for a single day to see whether the symptoms subside without using medicines. Such informants do not prefer taking medicines because they believe that the medicines cause side effect and cause habitual to take medicine. Whereas, there were informants who believed that they should start medicine as soon as possible after the onset of symptoms of sickness. If not started soon, they would create major problems in the future.

## 6.9 Way of Purchasing OTC Medicines

Over the counter medicines are sold without the prescription. So, the consumer come purchase them from the pharmacy mentioning the name, telling the symptoms to the pharmacist and showing the old prescription, showing the cover of previous medicines.

**Table 6.9 Ways of Purchasing OTC Medicines**

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
Mentioning the name of the medication	18	16.7
Telling symptoms to the pharmacists	76	70.4
Showing the old prescriptions	6	5.6
Showing the cover of old medicines	8	7.4
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork 2019.

Majority of the customers (70.4%) purchase OTC medicines telling the symptoms to the pharmacist. They reported that they feel easy to tell the symptoms to the pharmacist and buy medicine as per the advice of the pharmacist. But they do not prefer visiting physicians or hospital. They feel for the minor illness, it can be managed at the pharmacy level. Following the pharmacists' instruction and medicine, the problem can be addressed over there. Though the costumers do not belong to health background or are not from the medical field, 16.7% of the informants purchase medicines mentioning the

name of the medicines. This was due to the reason that they were previously exposed to the same illness previously and had taken the same type of medicine for the same illness. Names of medicine are known due to the exposure and intake of the medicines previously.

### **6.10 Reading and Following Instructions before Taking Non-prescribed Medicines**

The instructions for administrating medicines, the ways to store medicines are mentioned in the medicine leaflet. The practice of reading such instructions is very useful. But the reading habit among is low and sometimes due to illiteracy and the medical term also hinder it.

**Table 6.10 Reading and Following Instructions Before Taking in Non-Prescribed Medicines**

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
Yes, always	50	46.3
Yes, occasionally	47	43.5
No, never	11	10.2
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork, 2019.

Though the instructions mentioned in the medicine are important and useful, the practice of reading was found less. Among the informants, 46.3% only responded that they always read and follow instructions and 43.5% read and follow instruction occasionally though the medicines were purchased without prescription. Also 10.5% of the informants were found that they never read the instructions. The reason was found that illiterate informants could not do though wished; some have less reading habit, some informants could not understand the terms and some asked the detailed information with the pharmacist during the time of purchase which they think would be sufficient for understanding about the medicine though they are not prescribed.

## 6.11 Check expiry date of OTC medicine

Medicines are to improve the deteriorated health problems. Medicine, those are properly stored at particular dose through appropriate modes should be administrated. But expired medicines can cause harm instead of benefitting and it does not work for the specific illness. Sometimes, pharmacists may not be careful and may not have checked the expiry date.

**Table 6.11: Check Expiry Date of OTC Medicine**

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
Yes, always	76	70.4
Yes, occasionally	20	18.5
No, never	10	9.3
Unanswered	2	1.9
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Field work, 2019.

Table 6.11 showed that 70.4% of the informants always check the expiry date of the OTC medicine. This shows that it is necessary to raise the awareness for checking the expiry date. Administrating expired drugs have negative effects on health. 18.5% informants were found who check the expiry date occasionally. Also 9.3% of the informants were also found who never check the expiry date of the OTC medicine. They trusted on the pharmacists that they always check the dispensed medicine and they would not give them the expired drugs. Some of the informants told that they do not know how to check the expiry date.

## 6.12 Place for storing OTC drugs

Medicine should be stored appropriately. Like medicines should not be exposed directly to the sunlight. This decreases the effectiveness of the medicine. The temperature needs to be maintained. Some medicines need to be kept out of reach of the children. Some medicines need to be kept locked inside



the cabinet. If not properly stored, in a specific place, it is hard to find when needed. This may lead to fewer adherences, chance of missing dose.

**Table 6.12 : Informants by Place for storing OTC Drugs**

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
Medicine box	40	37.0
Open in the table	46	42.6
Bed room	16	14.8
Locker where children cannot reach	2	1.9
Others	2	1.9
Unanswered	2	1.9
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork 2019.

Majority of informants reported that they store medicine in the table. While some of the informants have medicine box to store the medicines. Some of them reported that they store medicines in bedroom and some are that much conscious that they store the medicine in the locked cabinet so they could not be reached by their children. The informants storing medicine in the medicine box reported that this helped them to find the medicine in need, and take them on time, help them to carry whenever they go out of the home.

### **6.13 Ask the Pharmacist about Use of Medicine**

It is necessary to know the dose, times to take medicines, with empty stomach or after food, duration of medication, adverse effect, and interaction with other medicines. Detailed information about the medicine plays important role in the well being process.

**Table 6.13: Ask the Pharmacist about Use of the Medicine**

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
Yes, always	78	72.2
Yes, sometimes	26	24.1
No, never	4	3.7
Total	108	100.0

Source: Fieldwork 2019.

Most of the informants were found conscious about using the OTC medications. Therefore 72.2% of the informants reported that they asked the detailed information about the medicine regarding the dose, the frequency for taking medicine, the time to take medicine like in empty stomach or after food, at bed time, early morning etc. This helped them in proper treatment, proper dosing at proper time interval. How it was found that the in some cases, the informants were advised to take medicine thrice a day at morning, evening and night. That made them to take medicine at anytime of the morning, evening and night irrespective of time intervals. That might affect the treatment which should be administrated at certain time intervals.

#### **6.14 Understand all the Information Provided**

The information provided by the pharmacist regarding the OTC medication should be well understood by the customer. Wrong information leads to wrong procedure with negative effects on health.

**Table 6.14: Informants by Understand all the Information Provided**

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
Yes, very clearly	56	51.9
Somehow clear	50	46.3
Not clear at all	2	1.9
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork 2019.

Nearly half of the informants clearly understood whereas nearly other half informants just understood some information provided by the pharmacists. The language, the medical terminology, the time to grab the given information of the informants, the clarity in the delivery of information, the hurriedly situation of the customers, were the aspects for not fully clearly understanding the provided information. Also, the informants who were not clear should repeat the information twice, thrice or more. Because they anyhow need to understand the information, otherwise it would have negative effect.

### **6.15 Follow all the Instruction Accordingly**

Though the consumer have back experience of using OTC, that time he/she may not have taken the medication in an appropriate way which needs to be corrected as per the instruction and advice of the pharmacist for best results.

**Table 6.15: Follows all the Instruction Accordingly**

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
Yes, fully	47	43.5
Yes, partially	59	54.6
Not at all	2	1.9
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork 2019.

The informants who partially follow the instruction are greater in percentage than the informants who fully follow the instruction. They reported that it was

hard to take medicine on time. They missed dose. Sometime they would not take full course medicine. Some informants who partially understood had chance to take medicine as per his/her wish. It was explained that once medicine for scabies which have to be apply locally throughout the whole body was found administrated orally.

## 6.16 Practice Related to Dose of the Medicine

Some believe that at the severe pain situation, taking medicine more than the recommended dose, might relieve the pain soon and recover sooner. Others, on the other hand believe that the higher dose might harm the health.

**Table 6.16: Practice Related to dose of the Medicine**

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
Yes	4	3.7
No	104	96.3
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork, 2019.

It was found out that almost all except 3.7% of the informants took the medicine of appropriate dose. However some of the informants used medicines more than or less than the recommended dose because of severity. For severe case, they thought that more than the recommended dose works faster and would help in sooner recovery. Also, some of the informants believed that the higher dose of medicine harms so; they themselves lower the dose than the recommended dose. It was found that people taking two tablets of flexon ( paracetamol 500mg and ibuprofen 400 mg) for unbearable toothache. Also Amoxicillin which is an antibiotic with adult dose of 500 mg, was thought of higher dose by the respondent and had reduced the dose by taking half the tablet. This does not work and ultimately due to low dose, has no effective treatment and ultimately develop resistant of the medicine.

## 6.17 Last time OTC Medication Taken

Under this title, the OTC medication, the informants have taken recently is discussed.

**Table 6.17: Time When OTC Medication Taken Recently**

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
1 week back	27	25.0
15 days back	39	36.1
1 month back	24	22.2
6 months back	6	5.6
more than 1 year back	4	3.7
Unanswered	8	7.4
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork 2019.

The informants those who had taken OTC medicines just 15 days back were found 36.1%, those who had taken 1 week back were 25% and those who had taken 1 month back were 22.2%. This showed that almost informants 83.3% had taken OTC medicine since 1 month. This can be interpreted this way, majority of the informants incidence with certain minor illness and keeps purchasing OTC medications. The prevalence of minor illness and practice of purchasing and taking OTC were found high. Informants keep on suffering with any kinds of illness. Informants who took OTC medicines 6 months back and 1years back was found at least percent i.e. 3.7% and 7.4%. This indicated that the prevalence of minor illness among the informants was least and the informants taking OTC medicines were also least.

## 6.18 Experience of any Adverse Effect Due to OTC Previously

Sometimes even food can cause side effects. Some foods may be allergic to some person. Likewise the medicines can also cause side effects. Any individual can have side effects due to any medicines. Whether they had experienced any sort of adverse effects or not are explored in this title.

**Table 6.18: Informants by experienced any adverse effect due to OTC**

<b>Response</b>	<b>Numbers</b>	<b>Percent</b>
Yes	16	14.8
No	92	85.2
<b>Total</b>	<b>108</b>	<b>100.0</b>

Source: Fieldwork 2019.

Majority of the informants (85.2%) had not experienced any type of adverse effects due to OTC medicines. An individual can be allergic to certain medicine. If allergic condition happens to majority of the people, then there would be less people using OTC medicines. The side effect would be explained to the family and friends messaging that OTC medicines cause side effects. However 14.8% of the informants experienced adverse effect due to OTC medicine. They had itching, nausea, gastric with pain in the abdominal area, sometimes in the chest area, sometime sleepy after taking Decold, Sinex and other cough syrup, weakness, no taste in the tongue, loss of appetite. But they find that the adverse effect were not severe.

## **CHAPTER VII**

### **SUMMARY AND CONCLUSION**

This chapter summarizes the main finding of the study and provides conclusion based on the findings. On that base, some relevant suggestions are also made. Almost all of the summary related to the use, perception, influencing factors and practice of OTC medicines were drawn from tabulated data and then narrated.

#### **7.1 Summary**

This study was carried out in three pharmacies of three different areas (Rambazar, Bhede farm and Chhorepatan of Pokhara). Total one hundred and eight respondents were interviewed in the respective pharmacies those who came for the OTC medications. Non-probability sampling was used for the study. Structured interview schedule techniques were used for the data collection. In this way, this study used quantitative data. Over-the-counter (OTC) medications are the medicines which are purchased by individuals directly from the pharmacies without the consultation to the physicians, and without their prescriptions. The numbers of OTC users are increasing day by day due to various reasons. The busy life of the people, so having no time to consult with the physicians, the crowds in the hospitals, unavailability of the physicians at the need in the health setting, the distance of the health settings from the residing area, the lengthy diagnostic process, doctor-patient relationship, the accessibility, the cost of treatment are the factors those influence the use of OTC medicines. So, the users' perception about the use of OTC medicines is felt to study. The perceptions like the use of OTC medication, the conditions for OTC medication, the influencing factor for OTC medication, the reasons to use them, preference to the pharmacy rather than going to hospital and consulting physician etc are to be studied. Also, the

practice related to OTC medication like the site of purchasing medicines, the place to store, check the expiry date, follow the proper way of medicine administration etc were researched.

The aim of the research is to analyze opinion and experience of users about use of OTC medicine in Pokhara. The research was designed achieve the specific objectives like to examine the knowledge and perception of users about OTC medication and to analyze the pattern of use of OTC medicines in relation to influencing factors.

The different three pharmacies at different places of Pokhara metropolitan were selected for the research with reference to the distance from the health service centers and their residents. This descriptive type of research design was used to study the different types of practices regarding the use of OTC. Non probability sampling was chosen to collect the data. Mostly the quantitative data was collected on different issues regarding the perceptions and practice on the use of OTC medicine. Structured interview with set of questionnaires were used as tool to gather the information required for the research. Verbal consent was taken from the informants before interviewing. The questionnaires filled were coded so as to maintain the secrecy. Most of the data and information collected were from primary source. The data were collected through interviewing directly with the informants at the pharmacies. So, most of the data collected were first hand, based on answers filled in the pre-established structured interview schedules. So the data collected was quantitative in nature. Then analysis of data was done in tabular form. Raw data were processed manually using tally bar and converted into frequency table. Tabulated data were interpreted. Uses of Percentage were used for the demonstration of data. Statistical methods were used for the analysis of the quantitative data.



## 7.2 Key findings of the Study

### Socio-demographic background of informants

- ) The use of OTC medication is prevalent among almost all age groups of informants ranging from below 24 years to above 55 years of age.
- ) It was found that the majority of male (53.7%).
- ) The majority of the people taking OTC medication belongs to the janajatis ethninc groups (46.3%) especially Gurungs and magars which shows their dense population in the area.
- ) It showed that people with different religions practice OTC medication. Among them majority of Hindu religion (77.8%) visited in the pharmacy.
- ) It was found that the majority with married status (79.6%) were found visiting the pharmacy for OTC medication.
- ) Majority of Secondary level educational status were found visiting pharmacy for OTC medications. Also, illiterate people were also found visiting pharmacy with the names of the medicines previously taken and presented with the cover of the medicines.
- ) The majority of the people who came to purchase medicine at different pharmacies were found service holder.
- ) The number of family size of the informants in the study were found varying ranged from below 4 and above 8 with the highest 48.1% with 5-7 members in the family.
- ) As per the finding of the study, the monthly family income of the informants varies from less than 10000 to more than 80000.
- ) It was found that majority of the informants 60.2% are residing permanently who visited the medical halls for OTC medication.

### **7.2.2 Knowledge and Perception on OTC medicines.**

- ) 87% of the informants had developed positive attitudes towards the pharmacists and found a good source of information about minor health problems
- ) 77.8% of the informants preferred visiting pharmacy rather than visiting doctor though there are availability of advanced types of services in the hospital,
- ) Almost all 93.5% were aware that the medicine if changed in color, odor and change in the shape i.e. breakage should be discarded.
- ) Majority of the informants (81.5%) reported that the source of knowledge about OTC medicine was pharmacy.
- ) Most of the informants (83.3%) reported that the OTC medications are neither cheap nor expensive.
- ) Most (81.5%) of the informants reported that the source of knowledge about OTC medicine was pharmacy.
- ) Most of the informants (63.9%) were aware about the correct dose at right time for medication.
- ) 78.7% of the informants reported that the OTC drugs are primarily used for minor illness and injuries. They believed that they do not need to consult or need to medicate under the supervision of physicians
- ) Majority of the informants (57.4%) reported that the OTC medicines can have adverse effects.
- ) The majority of the informants (65.7%) found that the treatment by OTC were slightly effective.
- ) Majority(52.8%) believed that OTC medicines are not always safe to use.
- ) Most of the users (77.8%) found their health problems were treated successfully by OTC medicines.
- ) OTC medicines were commonly used for fever, cold, sore throat, decongestant and cough and aches/pain/headaches.

### **7.2.3 Practice and Influencing factors**

- ) Majority of the informants (64.8%) of the research reported that they visit the nearby pharmacy/ medical hall after fallen sick.
- ) If the first effort for treatment does not work, 76.6 % of the informants reporting plan to visit the secondary site like hospitals with more facilities and consult health experts.
- ) Around half (44.4%) of the informants waits and continue treatment for 1-2 days and 42.6% wait and continue treatment for 3-4 days
- ) The majority of the informants (76.9%) initiated self OTC medications by themselves.
- ) Most of the informants (53.7%) were found residing at a distance of 15 minutes walking distance from the resident
- ) Irrespective of the distance, they visit the pharmacy for minor illness and go to hospital for major ( as they said for 'thulo rog') health problems only.
- ) Half (52.8%) of the users informed that they use OTC if sicknes is minor and self-mangeable.
- ) 1.9% of the informants responded that due to lack of money, and 5.6% of the informants do not have time to go to the hospital and therefore use OTC medicines as the option
- ) Majority of the informants started OTC medicine on the second day after the onset of symptoms of sickness. They waited for a single day to see whether the symptoms subside without using medicines
- ) Majority of the customers (70.4%) purchase OTC medicines telling the symptoms to the pharmacist. They reported that they feel easy to tell the symptoms to the pharmacist and buy medicine as per the advice of the pharmacist. But they do not prefer visiting physicians or hospital. 16.7% of the informants purchase medicines mentioning the name of the medicines.
- ) Among the informants, 46.3% only responded that they always read and follow instructions and 43.5% read and follow instruction occasionally

though the medicines were purchased without prescription. Also 10.5% of the informants were found that they never read the instructions.

- ) 70.4% of the informants always check the expiry date of the OTC medicine. 18.5% informants were found who check the expiry date occasionally. Also 9.3% of the informants were also found who never check the expiry date of the OTC medicine.
- ) Majority of informants (42.6%) were found storing medicine on the open table. While some of the informants (37%) have medicine box to store the medicines. Some of them 14.8% reported that they store medicines in bedroom and some are that much conscious that they store the medicine in the locked cabinet
- ) The informants were aware that the medicine if changed in color, odor and change in the shape i.e. breakage should be discarded. Almost all 93.5% of the informants reported they would discard such medicines immediately.
- ) Most of the informants were found conscious about using the OTC medications. 72.2% of the informants reported that they asked the detailed information about the medicine regarding the dose, the frequency for taking medicine, the time to take medicine
- ) Nearly half of the informants (46.3)% clearly understood whereas nearly other half informants 51.9% just understood some information provided by the pharmacists. The language, the medical terminology, the time to grab the given information of the informants, the clarity in the delivery of information, the hurriedly situation of the customers, were the aspects for not fully clearly understanding the provided information.
- ) The informants 54.6 % who partially follow the instruction are greater in percentage than the informants 43.5% who fully follow the instruction. They reported that it was hard to take medicine on time. They missed dose. Sometime they would not take full course medicine. Some informants who partially understood had chance to take medicine as per his/her wish.
- ) It was found out that almost all except 3.7% of the informants took the medicine of appropriate dose. However some of the informants used

medicines more than or less than the recommended dose because of severity. For severe case, they thought that more than the recommended dose works faster and would help in sooner recovery. Also, some of the informants believed that the higher dose of medicine harms so; they themselves lower the dose than the recommended dose

- J The informants those who had taken OTC medicines just 15 days back were found 36.1%, those who had taken 1 week back were 25% and those who had taken 1 month back were 22.2%. This showed that almost informants 83.3% had taken OTC medicine since 1 month. Informants who took OTC medicines 6 months back and 1years back was found at least percent i.e. 3.7% and 7.4%.
- J Majority of the informants (85.2%) had not experienced any type of adverse effects due to OTC medicines. An individual can be allergic to certain medicine. If
- J 14.8% of the informants experienced adverse effect due to OTC medicine. They had itching, nausea, gastric with pain in the abdominal area, sometimes in the chest area, sometime sleepy after taking Decold, Sinex and other cough syrup, weakness, no taste in the tongue, loss of appetite.

### **7.3 Conclusion**

The research found out that the OTC users have developed positive attitudes towards the pharmacists and found them as a good source of informants about medicines and minor health problems. The pharmacist being nearby their residing area, the rapport they have built, familiarity, no hesitation on any inquiry, time availability. More informants preferred visiting pharmacy rather than visiting doctors and hospitals though there is availability of advanced types of services in the hospital. This happened so due to the unavailability of the doctors on time, the crowd, they should be on queue for each and every procedure and found lengthy process. The informants regarding the awareness about the change in color, odor and change in the shape i.e. breakage of the medicine, they mentioned that those medicines should be discarded

immediately. They believed that such medicine won't work. The source of knowledge about OTC medicine was pharmacy. They informants reported that the OTC drugs are primarily used for minor illness and injuries.

From the study it was found that people visit the nearby pharmacy/ medical hall after health problems. If the pharmacy's' medicine do not manage the problems, then only they go to the hospitals or visit doctors. They initiate OTC medications by themselves. As per their experience of having betterment by the previously taken medicine for the same problem had influenced them to continue the same treatment for the same illness. The research site being the city area, more pharmacies can be found compared to the remote area. This had made the customers easier from getting medicinal services from the nearest pharmacy for minor illness. It was found that the condition for using OTC medicine was that it was thought to be minor sickness and can be self-managed. They started OTC medicine on the second day after the onset of symptoms of sickness. They waited for a single day to see whether the symptoms subside without using medicines. They feel easy to tell the symptoms to the pharmacist and buy medicine as per the advice of the pharmacist.

While informing about the frequency of the medicine to be taken, pharmacist simplifies to take thrice times a day medication as to take medicine at morning, day time and at night which may effect in intake of the medicine at correct time interval. So, certain time interval like every 8 hours needs to be advised.

The study found out that there are different factors influencing the use of OTC medication. The OTC medicines are easily accessible nearby their residential area.

## REFERENCES

- Alam, K., Mishra, P., Prabhu, M., Shankar, P. R., Palaian, S., Bhandari, R. B., & Bista, D. (2006). 'A study on rational drug prescribing and dispensing in outpatients in a tertiary care teaching hospital of Western Nepal' in *Kathmandu University Medical Journal*.4(4):436-43.
- Allen, Nicholas (1976). Shamanism among the
- Beine, Dave (2012). 'The Medical Hall: The New Shaman? Examining a New Trend and its Implication in Health Seeking Behavior in Nepal', in *Readings in Anthropology and Sociology of Nepal*. Kathmandu: SASON. Pp 2-
- Cockerham, William C. (2005). *Medical Sociology and Sociological Theory*. II in William C. Cockerham (edl) *The Blackwell Companion to Medical Sociology*. Blackwell Publishing Ltd. pp. 3-22.
- Foucault, Michel. (1994). *The Birth of the Clinic: An Archaeology of Medical Perception*. New York: Vintage Books.
- Hahn, Robert A. (1995). *Sickness and Healing: An anthropological perspective. Chapter 10 of Medical Anthropology of Anthropological Medicine*, pp 262-293.
- Kleinman, Arthur (1980). *Patients and Healers in the Context of Culture, Berkeley*: University of California Press. 24-178.
- Kleinman, Arthur, (1995). *What is specific to Biomedicine. In Writing the Margin, Los Angeles*: University of California Press, pp. 21-40.
- Morgan, L. M. (1998). *Dependency Theory in the Political Economy of Health: An Anthropological Critique, In the art of Medical Anthropology: Readings*, Amsterdam: Her Spinhuis, pp, 106-119.
- Singer, M. (1986). *Developing a Critical Perspective in Medical Anthropology. Medical Anthropology Quarterly* 17(5): 128-129.
- Singer, Merrill and Hans Bear, (2007). *What is Health, Experiencing Illness, Knowing Disease*. Chapter 3 of *Introducing Medical Anthropology: A discipline in Action*, pp 6-79, London: Aktamira.

- Wachter DA1, Joshi MP, Rimal B. (1999). 'Antibiotic dispensing by drug retailers in Kathmandu, Nepal' in *Tropical Medication International Health*. 4 (11) : 782-8.
- White, Kevin, (2002). *An Introduction to the Sociology of Health and Illness*. (Chapter 6) Parsons, American sociology of Medicine and the Sick Role. *An Introduction to the Sociology of Health and Illness*, pp 104-116, Canberra: Sage Publication.
- Young, Allan, (1982). *The Anthropologies of Illness and Sickness*. *Annual Review of Anthropology*. 11:257-285.



## Annex 1

### Interview Questionnaire

**"Users' Perception and Practices on Over-the-counter medication Interview schedule"**

Please provide us with the information in the questionnaire. The information that you provide us will not be shared with none. You do not need to share with your friends or any other individuals. It is purely for the purpose of research and your identity will not be disclosed in any conditions. So, feel free to fill up the information asked here in the questionnaires.

Socio-demographic characteristics of respondents

Q.N.	Question	Response	Remarks
1)	Age (in years)	.....	
2)	Gender	a) Male b) Female	
3)	Caste/Ethnic group	.....	
4)	Religion	.....	
5)	Marital status	a) Married b) Unmarried c) Separated/ divorced d) Widow/widower e) Others .....	
6)	Education	a) Illiterate b) Primary level c) Secondary level d) Higher secondary level e) Above higher secondary	
7)	Main source of income/ Occupation	a) Agriculture b) Service holder c) Business d) Others .....	
8)	Types of family	a) Nuclear b) Joint	
9)	No of family members	.....	
10)	Monthly family income (in NRs.)	.....	
11)	Types of residency	a) Permanent b) Temporary	

## Knowledge, perceptions and practice about OTC medication

S. N.	Question	Response	Remarks
1.	What do you do at first after you fall sick?	a) Start household treatment with natural things. b) Visit Dhami/jhankri/Shamans c) Visit nearby pharmacy/medical hall d) Visit health facility/ health care centers e) Others.....	
2.	If the first treatment plan fails or there is no improvement of sickness, what next step do you take?	a) Keep retrying the household treatment. b) Revisit the firstly visited site c) Plan to visit the hospital. d) Visit Dhami/jhankri/shamans.. e) Others.....	
3.	How long will you wait for the first treatment to shift to the second treatment plan?	a) Just try with a first single dose. b) Wait and continue treatment for 1-2 days. c) Wait and continue treatment for 3-4 days d) Wait and continue medication for 5-6 days. e) Continue medication until recovery. f) Others.....	
4.	What are the conditions for using over the counter medicines?	a) Aches/ Pains and Headaches b) Fever c) Cold/ sore throat /Decongestant and cough d) Ant-allergies' e) Anti-diarrheal	

		f) Anti nausea and vomiting g) Acidity and gastritis h) Dysmenorrhoea. (female only). i) Skin rashes and itching j) Others (specify) .....	
5.	OTC drugs are primarily used to treat minor illness and injuries that do not require physician's supervision.	a) Yes b) No c) Don't know	
6.	Do you think that a pharmacist is a good source of information about minor health problem?	a) Yes b) No c) Don't know Remarks.....	
7.	Do you have to be more careful while administrating non prescribed medicines?	a) Yes b) No c) Don't know Why? .....	
8.	Do you think that the OTC medicines if	a) Yes b) No c) Don't know	

	used as directed by the pharmacist are safe to use?	Why? .....	
9.	By whom were you influenced to take OTC medicines?	a) self b) friends c) Family d) media advertisement e) Others (specify).....	
10.	What is the main reason for purchasing OTC medicines?	a) Easy access b) Time saving c) less costing d) Avoid consultation fee e) To prevent occurrence of the known illness based on their previous illness. f) Same medication after consultation too. g) Follow other's suggestion. h) Purchasing site nearby home. i) Others.....	
11.	When do you usually use over the counter medicines?	a) Felt that the sickness is minor and self-manageable. b) Whenever I feel sick c) When I cannot visit doctor. d) When I have no money to consult the doctor. e) When I don't have time to go to the hospital. Others.....	
12.	Do you prefer going to the	a) Yes b) No Why?.....	

	Pharmacy rather than visiting doctor?		
13.	Do you read and follow all the instructions/ directions in drug level before taking the non-prescribed medicines?	a) Yes, always b) Yes, but occasionally c) No, Never.	
14.	How often do you check the expiry date of the OTC medicine?	a) Yes, always b) Yes, occasionally c) No, never.	
15.	Where do you store the OTC drugs?	a) Medicine box b) Open in the table c) Bed room d) Others.....	
16.	What do you do if the color, odor and shape of the medicine get changed?	a) Discard immediately b) Continue using. c) Does not matter.	
17.	Do you ask the pharmacist	a) Yes, always. b) Yes, sometime.	

	about the dose, frequency and other related information related to the medicine?	c) No, never.	
18.	Do you understand all the information provided by the pharmacists?	a) Yes, very clearly b) Somehow clear c) Not clear at all.	
19.	Do you follow all the instruction accordingly as advice by pharmacist?	a) Yes, fully b) Yes, Partially c) Not at all.	
20.	Have you ever taken OTC medicine dose more than the recommendation?	a) Yes b) No If yes, Why..... .....	
21.	When do you start OTC medication after symptoms of sickness?	a) Immediate after onset of symptoms b) After 2 <sup>nd</sup> day of illness c) After 3 <sup>rd</sup> day of illness d) After 4 or more days of illness	

22.	How do you know about the OTC medicine?	a) Previously prescribed by physicians b) Recommended by friend/family c) Media advertisement a) Pharmacy given b) Others (mention) .....	
23.	How do you purchase OTC medications?	a) Mentioning the name of the medication b) Telling symptoms to the pharmacists c) Showing the old prescriptions d) Showing the cover of old medicines. e) Others (mention) .....	
24.	How do you find the costing of the OTC medicines?	a) Cheap b) Expensive c) Neither cheap nor expensive.	
25.	Are you aware about the correct dose and frequency of the OTC medicines?	a) Yes b) No If yes, mention the dose and frequency of the drug. ....	
26.	Do you think that OTC medications can has adverse effect?	a) Yes b) No c) Don't know	
27.	Have you ever experienced any adverse effect due to	a) Yes b) No c) If yes, mention, medicine used and the	

	OTC medicines previously?	effect. Medicine..... Side effect .....	
28.	If any side effects are seen what should you do?	a) immediately stop the medication b) Take dose in low dose. c) immediately consult the pharmacist d) Immediately visit hospital. e) Don't know.	
29.	Are you aware about the interaction of the purchasing medicines with other medicines?	a) Yes b) No.  If yes, mention the name of the medicines and the interaction. .....	
30.	How effective do you find the treatment by OTC medicines?	a) Very effective b) slightly effective c) Not effective	
31.	How far is the nearest hospital or health facility from your residing area?	a) At 15 minutes walking distance b) At 30 minutes walking distance c) At one hour and more walking distance	
32.	At what distance is the nearest	a) at a distance of less than 10 minutes b) At a distance of 11-20 minutes c) At a distance of 21-30 minutes	



	pharmacy from your resident?	d) At a distance of 30 minutes and more.	
33.	Do you think that OTC medicines are always safe to use?	a) Yes, always b) Not always. c) Don't know.	
34.	When had you taken OTC medication recently?	a) 1 week back b) 15 days back c) 1 month back d) 6 months bac e) 1 year and more years back.	
35.	Are your last health problems/sickness successfully treated with over the counter medicine?	a) Yes b) No c) What was the condition? ..... d) What did you do? .....	

Thank you for the cooperation.

**Annex 1**  
**Photo Gallery**



OTC users in the Pharmacy Hall



OTC users Receiving Medicines



**Pharmacy Owner Searching for the requested OTC Medicine**



**Photo Taking data From Informant**



**Researcher Interviewing with the Information**