WOMEN'S PERCEPTION OF QUALITY OF HEALTH SERVICES AND ITS INFLUENCE ON THEIR CONTINUED UTILIZATION OF HEALTH CARE FOR REPRODUCTIVE TRACT INFECTIONS IN RURAL YUNNAN, CHINA

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This is a cross-sectional study aimed to explore women's perceptions of the quality of health care services and the accessibility of these services, and their influences on patients' continued utilization of health services. It was a quantitative study complemented with qualitative methods including in-depth interviews and focused group discussions. It was conducted in four villages of Tonghai county, Yunnan province, China during Nov. and Dec. 1999. The target population were married women who perceived themselves to have RTI symptoms and who had had at least one health care seeking experience.

It was found that the self-reported RTI symptoms in this study was 30.5%. Although the percentage of women seeking services for RTI symptoms was not low (56.6 percent), more than one-half of women (51.8 percent) sought services only once, after which, most of them (71.9 percent) still were troubled by those symptoms.

Women in this study were satisfied with the quality of services provided by the health care facilities, but this study found that women had not been given enough information about the cause, consequences, and the prevention of their disease, side effects of drugs, and follow-up visits to the health care facilities. The majority of women perceived the services they received as convenient and available, but most of them perceived the cost of services to be high.

Results based on logistic regression analysis showed that five variables were found to have effects on women's continued utilization of health services. Four variables, namely, perceived mechanisms to encourage continuity of health care, perceived doctor-patient information exchange, seeking services at village level clinics, and perceived respectful and responsive behavior of the doctor, had positive effects, while another variables, perceived waiting time had negative effects.

Based on the findings of the study, several recommendations were made in order to improve women's health care services in rural Yunnan. These recommendations included providing more information to women, improving health education, training health care providers, enhancing regular gynecological check-up in rural areas, and recommendations for further research.

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RTI: Reproductive Tract Infections

MCH: Maternal and Child Health

FP: Family Planning

FPSS: Family Planning Service Station

FGDs: Focus Group Discussion

IUD: Intrauterine Device

PID: Pelvic Inflammatory Disease

YRHRA: Yunnan Reproductive Health Research Association

CHAPTER I

INTRODUCTION

1.1 Situation of the RTI Problem

In developing countries, reproductive tract infections (RTIs) problem is one of the major reproductive health problems that threaten women's health, and also their lives. RTIs involve three types of infection: sexual transmitted diseases (STDs), endogenous infections, and iatrogenic infections, which are associated with unsafe medical procedures related to family planning or other reproductive health services. Most of these infections are preventable and treatable.

The prevalence of RTIs in developing countries is unacceptably high. For example, in India, a survey in fifty-eight villages reported that 92 percent of women had at least one gynecological disease, half of which were RTIs (Bang, 1994). In Indonesia, 58% of women who were sent to a menstrual regulation clinic had clinically diagnosed RTIs (Inne, 1995). Among 509 ever-married women in a rural Egyptian community, 52 percent had RTIs (Younis, 1993). A study of RTIs in Haiti revealed that 48 percent of women who were enrolled pregnant had at least one RTI (Behets, 1994). In Nigeria, 84.4% of women reported vaginal discharge, and there was also a very high rate of RTIs among girls under 17 years of age (Brabin, 1995).

Unfortunately, globally widen the proportion who seek health care services among women with RTIs is very low. Many women who suffering from RTIs,

especially in developing countries, do not seek treatment nor report their symptoms or conditions to health workers. A survey among women with RTIs in Nigeria found that most of them never go to a public or private health facility (O'Toole, 1993). The study in India found that even though 92 percent of women had at least one gynecological disease, only 7.8 percent of them had ever sought and received medical care for these problems (Bang, 1994).

In China, as is the case in other developing countries, the prevalence rate of RTIs is also very high. Some surveys reported that 24~67 percent of women suffered from cervicities (Kuafman, 1995). The RTI prevalence rates are reported to be from 35.8 to 85.1 percent (Sun, 1995, Chen, 1995, Wang S., 1995, Zhang Y., 1995, Wang R., 1995). A recent survey of 3045 rural women in Yunnan province revealed that 70.4 percent of women in villages and 51.7 percent of women in towns were reportedly had RTIs (Liu, 1995).

A study in Yunnan province cited that although 67.6 percent of rural women reported gynecological disorders, less than one third of them had sought health care services for these problems (Fang, 1997). In a recent study conducted in Hebei province, China, it was reported that the proportion of seeking health services at governmental hospitals among women with RTI symptoms was only 18 percent, and 73.5 percent of them took only one step of care seeking from government health services (Guo, 1999).

Although there are many factors influencing women's health seeking behavior, including biological, psychological, socioeconomic, and cultural factors. It seems that of the principle reasons on under-use of health care services are dissatisfaction with health care services related to inaccessibility, poor quality of

services, shortage of health care personnel, drug unavailability, long waiting time and high costs.

Therefore, it is necessary to better understand women's health seeking behavior for their RTI problems and whether or not they are satisfied with the health care services that they have received. It is more important to understand the relationship between quality of services and health seeking behavior of women for their RTIs treatment in order to improve the quality of health care services and control RTIs, and therefore promote women's reproductive health in rural areas.

1.2 Factors Affecting Women's Health Seeking Behavior Regarding RTIs

According to a number of reports, many women with RTIs are often asymptomatic or only feel slightly unwell, so they usually do not seek health care. Once the symptoms occur, the women still do not want to see the doctor because they may not perceive these symptoms as serious problems. Economic factors and inaccessibility of health care are important factors in women's utilization of health care services. Social stigma of RTIs and the traditional taboo related to sex might encourage to keep silence and feel ashamed to see the doctor. Women with little education and low social and economic status are particularly more likely to delay receiving needed treatment.

A study of health seeking strategies among female sex workers in India revealed that the most important factor affecting their service choice was "convenience". They perceived that the private sector's greater flexibility gave an

advantage over public/voluntary sector counterparts, including a minimal loss of time since local private practitioners were available virtually 24 hours a day, could be consulted without a long wait, and were located just a two minute's walk away from the community. Their perceptions of the efficacy were related to the cost of treatment and the doctor's ability to offer "good" medicine that led to a speedy cure. Additionally, the sex and personal characteristics of the doctor, and perceived healing skill were considered to be more important influences on choice of practitioner (Evans, 1997). In addition, a study of health seeking behavior of STDs patients in Kenya found that 62.3% of STDs patients had visited private or informal sectors for their symptoms before presenting their problems at health centers. The main reasons given for having sought care in the private medical or informal sectors were convenience of access and perceived greater privacy (Stephen, 1994).

A qualitative study which employed focus group discussions and was conducted in the Philippines reported that women were more likely to seek health services in private clinics rather than a public clinic. Specific complaints mentioned with regard to the public clinics were that their personnel were less competent and less accommodating, that waiting times were longer, and that they could not offer sufficient privacy. Private practitioners were perceived as offering more in the way of privacy, confidentiality and competency, but they also charged higher fees (Palabrica, 1997).

A qualitative research in Egypt indicated that 51 percent of women interviewed had RTIs and half of them had never sought health treatment. The reasons for not seeking treatment included: quality of health services was very poor; there was not good communication between women and health care workers; and the health

workers did not want to or could not listen to the feelings and ideas of women about their diseases, etc. (Huda, 1994). Bang's study in India (1994) found that non-availability of doctors in rural areas, cultural inhibitions in consulting a male doctor for gynecological disease, lack of time, money and support contribute to the very low proportion of women seeking medical care.

The delay in seeking health treatment or unabsolutely treatment for RTIs can allow for continued transmission and a great probability of adverse sequel. For example, RTIs may result in pelvic inflammatory disease (PID) or cervical cancer which threatens women's lives. Pregnant women with RTIs may experience miscarriage, premature ruptures of membranes, low birth weight, infants' infection, and even infant death. Women with RTIs also have an increased risk of suffering from HIV/AIDS.

1.3 Statement of Problem

In the past in China, maternal health care facilities in rural areas provided free regular gynecological check-up to rural women. Women who were diagnosed with RTIs or other reproductive health problems could get free treatment or were charged only for drugs. With the economic reforms since the 1980s, the hospitals have entered the free market and have to make more profits through fee for services, so that the free gynecological check-up and treatment for rural women has been cut. Women with RTIs will seek health care by themselves. They have to think about the barriers and the benefits of seeking health care.

Yunnan is one of the poorest and the most remote provinces in China. It

shares the southwestern border with Myanmar, Laos and Vietnam. Most of the province is covered by mountains that afford a hardscrabble existence and hamper development efforts (Glenn, 1995).

In rural Yunnan, there are three levels of health services network, i.e. county level, township level and village level health care facilities. These health care facilities provide health care services to local people. Usually, at the county level, there are several hospitals located in the County Town. The County Hospital is the highest level health care facility in a county, and it provides virtually all kinds of medical services. The Maternal and Child Health (MCH) Center provides prenatal care, delivery, postnatal care, child health care and women's care including diagnosis and treatment of RTIs. County Traditional Hospital provides traditional Chinese medicine and therapy. At the township level, a Township Health Center provides some health services such as general practices and MCH services. The conditions of township health centers vary largely from township to township depending on economic development, population density and distance from County Town. The Village Clinics usually are private practices, and sometimes take responsibility for the most essential MCH or family planning services. Moreover, there are many private clinics in different places that can provide limited services because of simple and crude equipment and very few providers.

There is a pluralistic health care system in China: the traditional medical system is still strong in rural areas. People most likely go to see the traditional healers because of lower cost, less social and cultural distance, and greater accessibility. However for RTIs, the traditional herbs are often less effective than modern medicine. It may lead women to delay seeking health care in other health care facilities.

In rural China, women who have symptoms of RTIs are more likely to take self-medication. Few of them seek health care at governmental hospitals. The major barriers of health care utilization are lack of knowledge about RTIs, high social stigma of RTIs, low family income, the perception that RTIs are not severe, heavy workload, high drug prices, strong traditional beliefs about the etiology of RTIs, inadequate treatment and lack of treatment at the village level (Guo, 1999).

Quality of health services is an important factor in seeking health care for women with RTIs. In a study in rural Yunnan, in addition to the well-known barriers of cost, distance and lack of transportation, there are other factors that keep women from using available health services, such as inappropriate or unpredictable service hours, the lack of female health workers, or doubts about the ability of neighborhood clinics to treat certain ailments (Glenn C., 1995). Fang (1997) reported that local health care services couldn't meet women's RTIs treatment needs, because most grass-roots health providers cannot treat RTIs. Furthermore many health providers do not regard the symptoms of RTIs as a serious problem and do not pay attention to it.

It is clear that quality of services is an important factor affecting women's satisfaction with health care services and their health-seeking behavior for their RTI treatment. The foregoing researches found that women with RTIs did not utilize health care services in part due to poor quality of services. But until now, there is no systematic study about the quality of women's health care services and its influence on women seeking health care for their RTI treatment yet. This study will explore women's perception of the quality of services and its influence on their continuity of seeking care for their RTI problems.

1.4 Research Questions

On the basis of the problems stated above, the general research question of this study is: what is women's perception of the quality of women's health care services received for their RTI treatment, and how does it influence their continuity of utilization of these health care services for RTI treatment?

The specific questions are:

1. What are the patterns of health care utilization among rural women who perceived symptoms of RTIs in study sites?

2. What is the quality of women's health care services assessed by rural women who have sought health care for RTI treatment in study sites?

3. Does the women's perception of quality of women's health care services influence their continuity of health care utilization for RTI treatment? If so, how does it influence?

4. Does the women's perception of accessibility of services influence their continuity of seeking health care utilization for their RTI problems? and

5. Do demographic characteristics of women also influence their continuity of medical care utilization?

1.5 Research Objectives

The overall objective of this study is to better understand quality of women's health care services and accessibility of these services from a rural women's perspective and its influence on their continuity of health care utilization for RTI

treatment in rural Yunnan.

The specific objectives are:

1. To describe the patterns of health care utilization of rural women who perceived symptoms of RTIs in study sites.

2. To describe continuity of health care utilization among rural women for their RTI treatment in Yunnan.

3. To explore women's perception of quality of women's health care services and its accessibility.

4. To analyze the relationship between women's perception of quality of women's health care services and their continuity of health care services utilization.

5. To analyze the relationship between women's perception of accessibility of these services and their continuity of health care services utilization.

CHAPTER II

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Theoretical Framework

Quality of services is defined as a complex set of interpersonal transactions between clients and service providers (Bruce, 1990). It focuses on the way clients are treated by the system, not only in a technical sense, but also in terms of the interpersonal process of care giving. This study focuses on women's perception of the quality of women's health care services for RTI treatment that was provided by health care facilities and its influence on women's continuity of health care utilization for their RTIs problems. Most of the elements from the Bruce's (1990) quality of family planning services framework are transferable to a framework for women's health care services, although the indicators differ (Barbara, 1993). In this study, it is used as a theoretical framework.

Provider-Woman Information Exchange

Conveying information to women, i.e. (a) explanation of the diagnosis, (b) information, where medically appropriate, on treatment options, (c) information on the therapeutic regime, (d) information on contraindications to and side-effects of all medications and drugs; and listening to and understanding women, including their (a) background, (b) preferences for treatment, and medical history.

Provider Competence

These include: (a) accurate knowledge about the disease, problem, or condition; (b) technical proficiency in providing safe and appropriate clinical treatment known to produce an impact on mortality, morbidity or the existing condition, and (c) knowledge of procedures for referring cases which cannot be adequately managed.

Interpersonal Relations

Sensitive treatment of women including: (a) privacy, (b) respectful and responsive provider behavior, (c) encouragement of women's participation in decision making, (d) avoidance of moral judgments, (e) confidentiality, (f) limited waiting time, and (g) adequate amount of time spent with women.

Mechanisms to Encourage Continuity of Medical Care

It includes: (a) information from provider about when to return and, if possible, other locations where services and medications can be obtained, and (b) specific follow-up procedures including, when deemed necessary, future appointments and home visits.

2.2 Conceptual Framework

Based on the Barbara's framework for women's health care services and the review of literature, the framework for this study on women's perception of quality of

women's health care services and its influence upon their continuity of health seeking for their RTIs treatment is shown in figure 2.1.

Perceived Provider-Woman Information Exchange

Quality of services is related to information exchange between health provider and women. Doctor-patient's interaction is considered to be an important aspect of quality of health care services. Doctor-patient information exchange includes: a) women get explanations from providers about diagnosis, cause and consequence of disease; and b) doctors listen to and understand women's background and medical history.

Perceived Respectful and Responsive Behavior of Providers

Doctors' attitude towards their clients may influence women's continuity in seeking health care. Doctors should treat women in a culturally appropriate and sensitive manner (Ambar, 1998). This concept includes women's perception of doctor's attitude toward them and the time spent with the doctor.

Perceived Privacy

Privacy is regarded as an important factor in health care services utilization of people who suffered from sex-related problems (Oskowitz, et al., 1997). Women's perception of privacy during the consultation might influence their continuity of health care services utilization.

Mechanisms to Encourage Continuity of Medical Care

The mechanisms to encourage continuity of health care refer to follow-up procedures. It means that women should get information from the provider about when and why to return and, if possible, other locations where services and medications can be obtained, and specific follow-up procedures including future appointments and home visits.

Perceived Technical Competence

The competence of health providers is an essential factor in encouraging women to seek care for their RTIs problems continuously. This concept includes perceived competence of health care providers and outcomes of treatment, and information about remedies and side-effects of medicine.

Perceived Accessibility of Services

A generally recognized prerequisite for good quality health care is the availability, accessibility and affordability of basic health care services, for general as well as for gender-specific health problems (Cecile, et al., 1996). In this study, it also explores the women's perception of accessibility of services. This factor involves: a) perceived convenience, b) perceived availability of services, c) perceived cost of services, d) perceived availability of female doctor, and e) perceived waiting time.

Demographic Factors

Social demographic factors influence women's health seeking behavior directly and also indirectly that through affecting both women's perception of quality

of health care services and accessibility of services. These factors include women's age, education, marital status, family income, family size and type, major economic activities, and decision-making in general household matters.

Types of Facilities

Women's perception of quality of services and accessibility may vary according to the different types of health care facilities. This may influence their continuity of health care utilization for their RTI problem. In this study, type of facility includes county, township and village level health care facilities and traditional Chinese medicine.

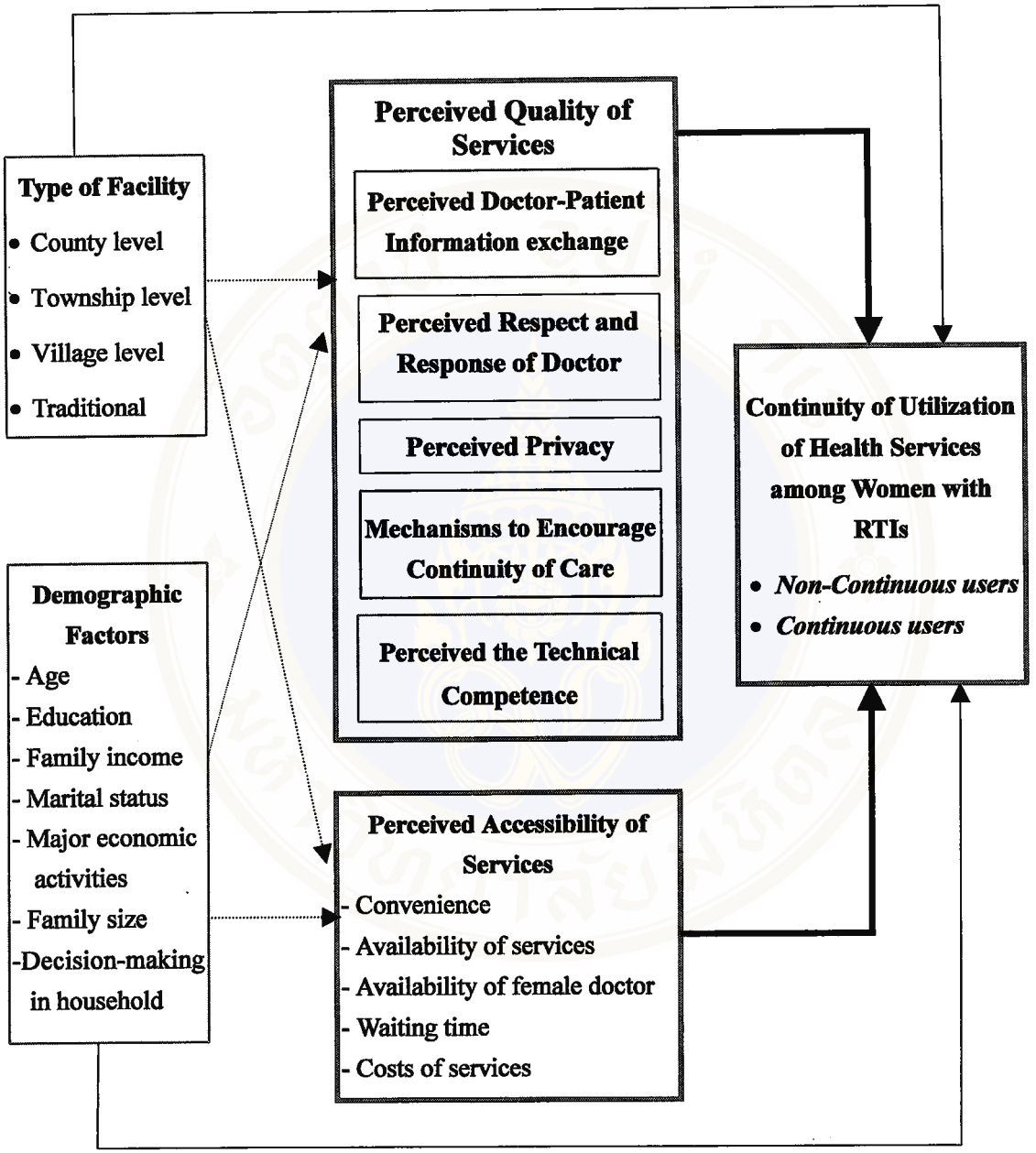


Figure 1. Framework for Women's Perception of Quality of Health Care Services, Accessibility of Services Affecting Their Continuity of Health Seeking for RTIs' Symptom.

2.3 Review of Obvious Research Findings

2.3.1 Researches in Quality of Services

There have been only a few studies conducted which explore quality of women's health care services. One important finding from the previous studies is that quality of services has a positive and significant role in determining where people seek health care services (David, 1998; Layi, 1983).

A qualitative study conducted at an inner-city sexually transmitted diseases (STDs) clinic in Johannesburg, South Africa explored the perceptions and experiences of patients and providers in the clinic and from this extrapolated lessons for the development of quality health care services. From the patients' views, effective treatment, the presence of doctors and "STDs experts", affordability, and a centrally located, accessible formed the essential motivations for using the clinic. On the other hand, lack of explanations, long waiting time, and lack of anonymity and privacy were negative aspects which could play a role in discouraging prompt treatment for STDs. In contrast, front-line providers complained that STDs clients lied about their sexual history, abused the service because it is free, and ignored counseling about the prevention of future STDs episodes. The researchers outlined a model for a series of processes (developing empathy and vision, team building, and participatory planning) into which technical inputs could be incorporated, and which address what they regarded as the most important challenges to narrowing the "gap in quality" of STDs care (Oskowitz B. et al, 1997).

Another study conducted in the Philippines used a discrete choice model to estimate the effects of quality, price, distance, and individual characteristics on the

choice of obstetric care. This study reported that facility attributes, such as crowding, doctor attending deliveries and drug availability, had a significant impact on choice of provider; price and distance to the health facility had a negative effect on facility choice (David, 1998). The results suggest that improving the quality of public facilities would be expected to increase the utilization not only for non-poor households, but for poor households as well. The researchers recommended that when public facilities simultaneously increase user fees and the aspects of quality over which policy makers can exercise control in the short-run, the mean probability of using public facilities will increase for both poor and non-poor households.

John S. (1995) used household data combined with data on prices and quality of care, which were collected directly from facilities, to estimate the demand for health care services. He concluded that price and quality significantly affect health care choices, and higher prices can be offset by higher quality. He also found that raising prices with constant quality will reduce usage of health services, but spending the increased funds to improve quality such as availability of drugs and physical condition may on net even increase usage, especially for the public sector.

Another qualitative study, a participatory research project with the staff of a clinic that provided reproductive health services, conducted in Chile examined the quality of care from women's point of view. The women defined high quality of care as "being treated as a human being." Among the specific elements of care they identified were cleanliness, promptness and availability of services, time made available for consultation, learning opportunities for themselves and their partners, and cordial treatment (Vera, 1993).

A study of quality of reproductive health services conducted in four

counties of rural Yunnan, China, employed Judith's framework on quality of care to assess the quality of reproductive health services provided at the township and village level. The results showed that, choice of methods, information given to clients, provider's technical competence, and continuity mechanisms needed to be significantly improved, whereas interpersonal relations and appropriate constellation of services had a better foundation. It was suggested that a key approach to upgrade the quality of care in rural grassroots was to enhance the capacity of service providers and to strengthen information provision (Fang, 1997).

2.3.2 Perceived Quality of Health Care Services

2.3.2.1 Perceived Respectful and Responsive Provider's Behavior

Doctor-patient's interaction is considered to be an important factor in women's satisfaction with services and their health care utilization. Women may place more emphasis on the interpersonal relationship than providers. This means that doctors' attitude towards their clients may influence women's satisfaction with health care services and the probability of continuously seeking health care for their health problems.

Provider's behaviors may strongly influence clients' confidence in their own choices and ability, satisfaction with services, and the probability of a return visit (Barbara, 1994). A qualitative study about women's view of high-quality care in Chile reported that, from women's perspectives, the mark of good quality of services in MCH-FP clinic was "being treated like a person, like a human being" (Vera, 1993).

Another study in Yunnan found that women were reluctant to go to higher-

level health facilities in the township or county seat because they were afraid of being bullied or looked down upon (Glenn, 1995). Furthermore, adequate time to listen to women's fears and doubts, responsive provider's behavior, gender sensitivity and culturally appropriate services as well as timely delivery of services to women have been found to be important factors encouraging women to utilize health care services (Anita, 1994; Vera, 1993). The use of psychological concepts to encourage clients and advocacy to inform and empower women to understand their problems (Barbara, 1994) have been cited as important points that support the utilization of health care among women.

2.3.2.2 Perceived Provider-Women Information Exchange

Quality of services is related to information exchange between health provider and women. The significance of information sharing in the medical consultation is readily apparent. For the doctor, information is crucial for formulating diagnoses and prescribing treatment; for the patient, information fosters an understanding of one's health status that in turn may reduce uncertainty, alleviate concerns, and improve health. Unfortunately, the exchange of information between the patient and physician is often fraught with problems. Although expecting doctors to be informative, patients often perceive them as insufficiently so, which in turn contributes to the patient's dissatisfaction, non-compliance, and misunderstanding of medical information (Richard, 1991). Usually, women tend to stop taking their medication as soon as they become asymptomatic (Evans, 1997). They will seek health care again only when the symptoms occurring again or become more serious. Sometimes this can be attributed at least in part to poor doctor-patient

communication. Doctors very rarely take the time to explain the potential side effects or the importance of completing courses of antibiotic therapy.

A qualitative research in Egypt indicated that 51 percent of women studied had RTIs and half of them have never sought health treatment. The reasons for not seeking treatment included: there was not good communication between women and health care workers; and the health workers didn't want to or couldn't listen to the feelings and ideas of women about their diseases, etc. (Huda, 1994). Fang (1997) found that many rural women were dissatisfied because poor information was given by providers during consultation, and this dissatisfaction influenced their continuity of health care services utilization. Women complained that they spent money to see the doctor but still knew nothing about their disease, so it was not worthy to return.

2.3.2.3 Perceived Privacy

Many studies reported that the most common reason for not seeking health care services among women with RTIs was that they felt ashamed. Social stigma has a strong relationship with RTIs so that women have to keep silence and do not want to see doctors. Focus group discussions held in three diverse settings in the Philippines, found that the women associated RTIs with stigmatization and shame. They were more likely to go to private clinics rather than government health centers because they perceived private doctors as offering more in the way of privacy, confidentiality and competency (Palabrica, 1997). Women also were reluctant to describe their genital symptoms openly to a doctor, so they spoke obliquely in symbolic language, describing their condition as "weakness". The doctors being unaware of the hidden meaning often fail to appreciate their real problem and treat them for anemia, leaving

their problem of white discharge untouched (Bang, 1994).

As illustrated by the previously mentioned studies, women's perception of privacy and confidentiality of health facilities may be an important factor influencing their health-seeking behavior.

2.3.2.4 Perceived Mechanisms to Encourage Continuity of Services

Mechanisms to encourage continuity of services are correlated with clients' compliance with the follow-up visit. This means that after health providers have provided the service, it is dependent upon the client to act to return to the facility for the scheduled appointments. Young (1992) found that a high level of return visits could be attributed to a high level of scheduled follow-up appointments for the clients. It can be hypothesized that women who receive information about follow-up treatment may be more likely to continue seeking services at the health care facility.

2.3.2.5 Perceived Technical Competence

Numerous studies have found that the most important predictor of satisfaction with health care services is patients' attitude toward the provider's technical skills and competence (John H., 1994). Women's perception of efficacy is a more important factor affecting their choice of services and continuity of health care utilization. Perceptions of efficacy are related to the cost of treatment and the doctor's ability to give "good" medicines that lead to a speedy cure. The doctor's personal characteristics and perceived healing skill are considered to be more important influences on choice of practitioner (Evans, 1997). In Nigeria, people have used retail pharmacies as clinics because "The treatment given in them is often efficacious"

(Igun, 1987).

A study in rural Yunnan showed that women did not seek health care because village health providers often have no remedies for women's most frequent health complaints, gynecological problems such as itching and vaginal discharge (Glenn, 1995). For Aletta women, the unique reason for choosing women doctors seems to be the doctor's high experience with women's health problems (Van, et al., 1997). Usually, women are hesitant to consult a male doctor if their complaints are RTIs, but the ability of the doctor is more important than whether the doctor is a woman.

Outcomes of treatment may be the main factor in the assessment of quality of services from women who have utilized health care facilities for their RTIs. The results of services provided may be improvements in maintenance of health. Women choose a doctor depending on the doctor's "hand" (healing skill). They switch frequently to seek other services in the middle of treatment if a "cure" is not immediately forthcoming (Evans, 1997). They will be more likely to choose those facilities where the treatments are perceived to be more effective.

2.3.3 Perceived Accessibility of Services

In rural areas, problems with infrastructure are frequently identified as a source of patient dissatisfaction. Long waiting time resulting in client's dissatisfaction is due to the shortage of health personnel. Limited access means inappropriate care (Cristina, 1992). People choose one kind of health service over another due to access factors, such as nearest, cheap, short waiting time, etc (Igun, 1987).

Accessibility of health care services includes distance from women's home

to health care facilities, the suitability of the working hours of facilities, drug availability, cost of services, waiting time to see the doctor, comprehensive services in health care facilities, and physical environment of health care facilities. If women have positive experiences with health care facilities, then they are more likely to return there.

Convenience

Women have limited time to attend to their own personal needs. Many studies have shown that the major barrier to utilizing health care is lack of time. So women's choice of health care facility mostly depends on distance, suitable working time, and also short waiting time.

Evans's study (1997) found that the most important factor affecting women's health care service choice was "convenience". The female sex workers seeking health care from the private sector involved a minimal loss of time, since local private practitioners were available virtually 24 hours a day, and some were situated just a two-minute's walk away from the community. In this respect, the private sector's greater flexibility gave it an advantage over its public/voluntary sector counterparts.

Distance is a most important factor affecting health care choices (Layi, 1983). In rural Yunnan, distance and lack of transportation and time are important factors affecting women's use of health care (Fang, 1997). Living a long distance from the hospital causes women to spend much time in seeing a doctor. For example, in mountainous areas of Yunnan, women have to leave home very early and walk several hours to reach a health care facility, and then wait for a long time to see the

doctor. They may spend a whole day to see a doctor and cannot work and take care of their home. They feel it is too difficult to see a doctor (Glenn, 1995).

Availability of Services

A study conducted in rural Yunnan found that women complained that the working hours of doctors were not suitable for them. Health workers were often away from the local clinics, working their fields instead. Even if the women were able to make their way to a health care post, often there would be no one there to help them. While some health workers and village doctors were known to see patients during the evening hours, some village women were reluctant to be out on the paths after dark (Glenn, 1995). In Hoffman's (1997) study, women with acute illness attended private services much more than public services because acute illness requires immediate intervention and the public health services are not always available.

Availability of drugs was an important factor in the actual usage of the health facilities. Failure to provide drugs at the clinic is seen as an important source of patient dissatisfaction (Adetoro, et al. 1991). When drugs available in health care facilities decreased, the usage of health facilities dropped off. Improving the availability of drugs would increase the probability of using modern health care (David, 1998, John S., 1995).

Availability of Female Doctors

Preference for physicians' sex is an obvious and well-documented example of patients' attitudes. Female patients prefer female gynecologists and female physicians for women's health problems, especially for gynecological procedures

(Jan, 1997; Carla, 1991). The reasons for preferring for female doctor include being more at ease with a physical examination, being able to talk more easily, and being less ashamed to broach a problem in the presence of a women doctor (Van, et al, 1997). Women would be embarrassed to call on a male doctor if they were ill and they would be especially hesitant if their complaint was a RTI (Glenn, 1995).

Sex of doctor is an important component of status, and the fact that female doctors and female patient are much closer in status, enables easier communication (Jan, 1997).

Although women would prefer in principle to consult a female doctor, the doctor's personal characteristics and perceived healing skill were considered to be more important influences on choice of practitioner (Evans, 1997).

Costs of Treatment

Cost of treatment is evidenced in many studies as a major barrier of health care utilization among poor women (Fang, 1997; Glenn, 1995; Inne, 1995). The inaccessibility of the services is directly related to capacity to pay for the service fees (Cristina, 1992). The price of health care can influence utilization. A study showed that for every 1% increase in the price of health care, utilization decreased by approximately 0.32% (Richard A., 1989). Hoffman (1997) also found that women with chronic illness were more likely to use public services because a chronic illness would require repeated visits which would be prohibitively expensive if private practitioners were used. A population-based study found that a significant proportion of respondents stated that they had foregone seeking care due to the high patient charges (Elofsson, et al., 1998).

On the other hand, cost of treatment is interpreted as an indication of quality, i.e. one has to pay more to obtain good quality care (Evans, 1997). Higher prices can be offset by higher quality of services. John S. (1995) found that if price increases are combined with a feasible level of quality improvement, the public sector could increase its usage by a large amount, even if the private sector offered the same prices and provided the same quality care. If the public prices were raised and the revenues used to increase the quality of care, the usage of public facilities in general might in fact increase. Results from a study in Cameroon showed that after introducing user fees plus a quality improvement policy (reliable drug supply) to the population, the probability of using health centers increased significantly. Furthermore, the probability of poor people in these areas using the health center increased proportionately more than the probability for the rest of the population (Jennie, 1993).

In sum, cost of services is an important factor affecting health care utilization. Usually, high cost of services is the major barrier of health care seeking. However, sometimes the cost of services is regarded by clients as being related to the quality of services, i.e. high cost means higher quality of services.

Waiting Time

Many studies reported that patients' dissatisfaction with health care services was associated with long waiting time at the hospital. Long waiting time due to the shortage of staff is seen as a more important complaint about services (Mary, 1997). A facility-based study of patient satisfaction with health care services in Japan and the US found that patients were most dissatisfied with waiting to see their provider (John

H., et al., 1994).

For rural women, lack of time is regarded as a major barrier to seeking health care. Time cost is a problem as these costs compete with other demands on the women's time, such as child care, household work, agriculture and other economically productive activities and thus could be an important factor in determining women's use of health services (Kanani, 1994). Carla's (1991) study found that many women were willing to pay for services in the private sector in order to avoid the long waiting times that characterize outpatient care in the public sector. Therefore, long waiting times at health facilities may strongly influence whether women return there.

2.3.4 Demographic Factors

The relationship between respondents' socio-demographic characteristics and health care services utilization was examined in many researches (Jagdish, 1995; Janardan, 1989; Develay, 1996; Okafor, 1983, etc.). The results of these studies indicate that socio-demographic factors have significant influences on health care services utilization in different ways.

Age

The results of studies examining the relationship between age and health care utilization are mixed. Some researches showed that elderly women were more likely to seek treatment than younger women (Jagdish, 1995). A study of the frequency of hospital trips among a rural population in Nigeria found that very young (under 20) and elderly (over 50) groups of people were more frequently seeking

health care services than those between the age of 21 to 50 (Okafor, 1983). Another study conducted in rural China reported that elderly women more likely to delay seeking treatment for their RTIs problems because they believe that RTIs would be cured naturally after menopause (Sun R, 1995).

Education

The role of respondents' education level in health services utilization has been explored in many researches. The argument is that better educated people are more conscious of disease, and so react more promptly to it in terms of seeking medical care. Furthermore, they seek medical care at earlier stages of disease and this prompt response might be partly responsible for the higher frequency of demand among this group (Okafor, 1983). Moreover, for rural women, education level may influence their depth of understanding about their reproductive health needs (Ambar, 1997). The importance of education level has been demonstrated by many studies. For example, Khan (1994) found that educated, literate women are more likely than their illiterate counterparts to utilize health care services. This trend is more pronounced for women with a middle-school education than those with a primary-level education. The effect of education is less significant in urban areas where modern health care is easily accessible. Janardan (1989) found a contrary result in Katmandu, the Capital of Nepal, i.e. individuals who had been to school were more likely to seek modern health services than individuals who had never been to school. David (1998) found that the education level of the women interacted in important ways with quality of care in influencing choice of facilities.

A study in India found that better educated women from more affluent

households were more likely to seek treatment for symptoms of gynecological problems than were their less privileged counterparts (Jagdish, 1995). Okafor (1983) also found that educated people visited hospitals more frequently than those who were illiterate or educated only up to the primary level.

Employment Status

Employment status also has been found to have effect in health care utilization in some researches. Okafor (1983) used occupation as a measure of income in a study of frequency of hospital trips among a rural population in Nigeria. He found that farmers, traders and craftsman, who are largely self-employed, use hospital services less frequently than civil servants and teachers, who are salaried workers. He gave the possible explanation that salaried workers could get permission to take time off work to visit the hospital without any loss of income. But this is not so for the self-employed. To this category of workers, time generally means money and time taken off from work usually involves some loss of income, directly or indirectly. It is not unlikely that among such people there will be some desires to keep the amount of time spend unproductively, which is to say, on non-economic pursuits including visits to hospitals, down to the barest minimum.

Family Income

As the cost of treatment is a major barrier to seeking health care services, income is also an important factor influencing women's health care utilization. Many studies have shown that a strong association exists between family income and health care utilization (Newbold, 1995; Keskimaki, 1995; Janardan, 1989; Okafor, 1983).

That is, an increase in household income is associated with an increase in the likelihood of having been admitted to the hospital (Newbold Bruce K. et al, 1995). In Elofsson's (1998) study, among those who assessed their financial situation as poor, they reportedly had foregone care much more than those who assessed their financial situation as good.

In China, some studies have also shown the relationship between family income and health care utilization (Chen, 1995; Huang, 1995). Women who have lower family income may be less likely to seek health services for RTI problems.

Family Size and Type

Family size also is a factor associated with health care utilization. Usually, women who live in extended families use health care less than those who live in nuclear families. This may be due to the power of women in the family to make decisions regarding whether the women should go to see the doctor and when and where they should go. In an extended family, the mother-in law has more power than the daughter-in-law. Women usually have to follow the decision of their mother-in-law (Guo, 1999).

Woman's Status in the Household

Women's status in the household refers to their power to make decisions regarding household matters. Women who have equal status with other members of the family can enjoy fewer social restriction and exercise more freedom of movement and greater participation in decisions affecting the household (Ambar, 1997). They also can make decisions about seeking health services when they are sick. For

example, a study of retail pharmacy utilization in Nigeria found that, women who sought treatment at these retail pharmacies rather than hospitals had the decision made for them by their husbands (Igun, 1987).

Women's economic earning capacity may provide women with the economic independence that can improve their status. They can then enjoy more freedom in making decisions, especially decisions concerning their own needs; in turn, they may have more autonomy in their own life, including matters related to their health which includes reproductive health needs. Women with economic earning capacity have more freedom to spend their money to pay for their health budget without any restriction from other members of the family (Ambar, 1997). Based on these points, in this study, decision-making in general household matters and major economic activities are used as measures of women's status.

2.4 Hypotheses

In order to determine how the quality of women's health care services affects women's satisfaction with these services and their continuity of seeking health care for their RTI treatment, the following hypotheses are tested:

1. Women who are satisfied with doctor-patient interactions including doctor-patient information exchange, doctor's respective and responsive behavior, and privacy are more likely to continuously seek health care services.

2. Women who perceive more mechanisms to encourage continuity of care are more likely to use health services continuously.

3. Women who perceive a high technical competence of the doctors are

more likely to continuously utilize health care services.

4. Women who perceive health care services as more accessible are more likely to seek care continuously.

5. Women with young age, higher level of education, higher family income, living in nuclear families, and having higher status in the families are more likely to use health care services continuously.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

This is a cross-sectional survey. In order to achieve all the objectives of the study, both quantitative and qualitative techniques are used to carry out this study. The qualitative research particularly focus group discussion and in-depth interview methods, meanwhile quantitative methods, was employed to complement the quantitative technique in order to enhance the understanding of the quality of services from the women's perspective and to understand their health seeking behavior for their RTI problems.

3.2 Population and Sampling

3.2.1 Target Population

The target population in this study are rural women in Yunnan Province of China, aged 15-60 years who reported having ***at least*** one of the symptoms related to RTI during the past 12 months, and had ***at least*** one experience of seeking health care for treatment of RTI symptoms at any health care facility.

3.2.2 Sample and Sampling Technique

This research was conducted in Tonghai County, Yunnan Province. Purposive selection was used in selecting townships and villages. The principle for selecting the research sites was based on high population density. Yangguang and Hexi were selected as research townships. Within each township, the most populous village in the township was selected as the sample, and then followed by the second most populous village. The selection process was continued until the total sample size was obtained and 4 villages, 2 in each township, were visited.

3.3 Sample Size

According to Fang's (1997) research conducted in Yunnan, the proportion of the women seeking health care was about 20 percent. The smallest sample size for this study was calculated based on the following equation.

$$N = \frac{Z^2(p \cdot q)}{d^2}$$

$$= \frac{(1.96)^2(0.20)(0.80)}{(0.05)^2} = 246$$

Where N = estimated sample size

Z = significance level at 0.05 with = 1.96

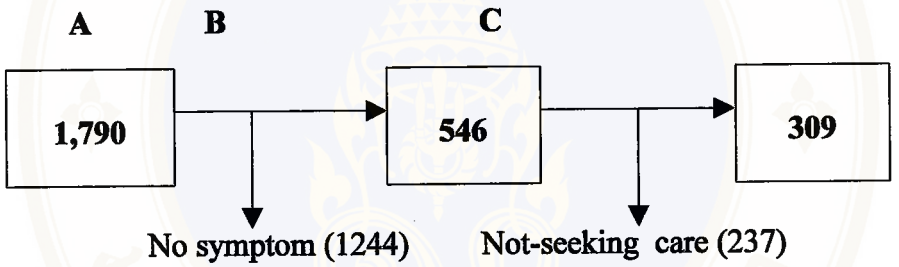
p = rate of seeking health care = 0.20

q = 1-p = 1- 0.20 = 0.80

d = degree of accuracy desired, set at 0.05

The actual sample size in this study is 309. They were screened from 546 women who had perceived at least one RTI related symptom last 12 months. The 546

women were screened from 1,790 rural women in the research site area. The process of the sample screening is shown in figure 3.1. The total of 1,790 married rural women age 15 to 60 years were screened for RTIs symptom. 546 women from this population reported that ever had at least one RTIs symptom during last 12 months. Of these 546 women who ever had RTIs symptom, 309 women who had at least one experience of seeking health care for RTIs symptom were selected as the target population of this study screened by screening questionnaire (as shown in Appendix A).



A: married women aged 15 to 60 years
B: women who ever had at least one RTIs symptom in past year
C: women had at least one experience of seeking care for RTIs symptom

Figure 3.1: The process of sample screening

Eight respondents were chosen to conduct in-depth interviews. They were chosen from among those women who had used different health care facilities and had different steps of seeking health care services for their RTIs problem.

3.4 Data Collection

This field survey was conducted from October to December of 1999. All the interviewers are doctors from Tonghai County MCH Hospital. They interviewed every woman house by house in the villages included in the research area. All the women were interviewed except those women who were absent from home when the survey was conducted.

Training of Interviewers: Fourteen interviewers were trained carefully before conducting the actual interviews. A one-day training class was held at Tonghai County MCH Hospital by the researcher. The training methods included lecture, role-playing and practice in the field, which were used to help the interviewers understand the intention and flow of the questions and complete the interviews successfully. The interviewers were supervised by the researcher to ensure that they understood the purpose and order of the questions.

Survey Administration: The research team consisted of two field supervisors (including the researcher) and fourteen interviewers. During the research process, the field supervisors checked the completed questionnaire at the end of each day. Each error was corrected promptly. Eight in-depth interviews were conducted by the researcher.

3.5 Research Instrument

Three primary methods were used to gather the data for this study.

1. A structured questionnaire was used as the major research tool to collect information to identify women's perception of quality of health care services, accessibility of services and its influence on their continuity of health care services utilization for RTIs treatment. Before using the structured questionnaire, the screening questionnaire (shown in Appendix A) was used to select the women who perceived RTI symptoms and had sought health care service as respondents. The structured questionnaire included all the variables listed in the conceptual framework of this descriptive and analytic study. The questionnaire consisted of the following four parts (shown in Appendix B):

(1) Disease history and health seeking behavior;

(2) Perceived quality of RTI treatment services;

(3) Perceived accessibility of health care services; and

(4) Social, economic and demographic information.

2. Focus Group Discussions (FGDs) were conducted according to the women's age and education level. The FGDs guideline was used to understand the health seeking behaviors of local women for RTI symptoms, their perception of the quality of services in different types of health care facilities and its influence on women's continuous use of health care services, and how to improve the quality of services (shown in Appendix C). FGDs were conducted before collecting the structured questionnaire data.

3. The purpose of in-depth interview is to describe the health seeking

behavior of women with RTIs; to explore their perception of the quality of services and its influence on women's satisfaction with health care services and their health seeking behavior for RTIs; to explore the relationship between women's perception of quality of services and their health seeking behavior for RTI. An in-depth interview guideline with open-ended questions was used (shown in Appendix D).

Pretest

The questionnaire and in-depth interview guideline were pre-tested prior to the data collection. The questionnaire was given to 7 women, and the in-depth interview guideline was conducted with 2 women in order to examine the appropriateness and patterning of the questions. After the pretest, the questionnaire and in-depth guideline were revised and improved in terms of content and sequence of the questions.

3.6 Operational Definition of Variables

The ***dependent variable*** is continuity of health care services utilization among women who perceived RTI symptoms. This refers to whether or not women continuously seek health care for their RTI problems on the basis of their experience at the first step of seeking care. This variable is categorized into non-continuous users (seeking care only once) and continuous users (seeking care at any health care facilities more than one time).

Independent Variables:

1. Type of facility refers to location and position of the health care facility. It is divided into four types:

County level hospitals: County Hospital, County MCH Hospital, and other health care centers equal or above the county level

Township level hospitals: Township Health Care Centers or hospitals

Village level clinics: Village Clinics and private clinics

Traditional Chinese Medicine: traditional Chinese hospitals and clinics, and department of traditional Chinese medicine in any health care facilities

2. Perceived doctor-patient information exchange refers to women's perception concerning both providers attentiveness in listening to them and giving them information and basic knowledge about their RTI problems.

3. Perceived providers' respectful and responsive behavior refers to the women's perception of the providers' behavior concerning demonstrating respect towards patients and responsiveness to the patients.

4. Perceived privacy refers to women's perception of the privacy during diagnosis and treatment.

5. Perceived mechanisms to encourage continuity of services refers to the women's perception on follow-up procedures.

6. Perceived technical competence refers to the women's perception of the provider's medical skills and proficiency in handling services, and the outcome of the treatment that they received.

7. Perceived convenience refers to the women's perception of the distance from facilities, convenience of transportation and suitability of the working hours of

the facilities.

8. Perceived availability of services refers to the women's perception of the availability of doctors and drugs in the health facilities.

9. Perceived availability of female doctor refers to the women's perception of the availability of female doctor in the health facilities.

10.Perceived cost of services refers to the women's perception of the cost of services including drugs, tests, and physical check-up and consultation.

11. Perceived waiting time refers to the women's perception of the waiting time for seeing the doctor at the health facilities.

12. Age refers to respondents' age in years. It is classified into three categories: young is under 35, middle is 35-45, old is 46 and over.

13. Education level refers to respondents' years of schooling. It is categorized into four groups: illiterate, low is from 1 to 6 years schooling, middle is from 7 to 9 years, and high education level is more than 9 years schooling.

14. Family income refers to respondents' family income per year in monetary units. It is classified into three grous: less than 5,000 Yuan per year, 5,000 to 10,000 Yuan and more than 10,000 Yuan.

15. Family size refers to the number of the respondent's family members. It is classified into nuclear and extended family.

16. Marital status refers to respondent's state of marriage. It is categorized as married or unmarried.

17. Major economic activity refers to respondent's major economic activity in general. It is classified into farming and others.

18.Decision-making in household matters refers to whether or not women

can make decisions in general household matters by themselves. It is categorized into three groups: self means woman can make decision by herself, with husband means both women and her husband can make decision, others means decisions is made only by other family members such as husband, parents-in-law, or parents.

3.7 Level of Measurement

There is a series of questions about each topic. Each response was given a score according to general or medical knowledge. The respondent's answers were tabulated and given an overall score for each topic. Finally, the overall score for each topic was compared to the mean and standard deviation calculations and then categorized as follows:

Low score is less than mean - standard deviation;

Middle score is between mean ± standard deviation; and

High score is more than mean + standard deviation.

If the distribution of total score of variable is not a normal distribution, the P_{16} and P_{84}, which was the same percentage of the frequency as using mean ± standard, were used to classify data. As the results of classifying data by using mean and standard deviation or percentiles were the same, the mean and standard deviation were still used for skew data in order to make the data comparable with other variables.

Table 3.1 List of Variables and Level of Measurement

Variables	Level of measurement
Dependent variables	
Continuity of seeking health care	Nominal: Continuous user Non-continuous user
Independent Variables	
1. Age	Interval: current age Ordinal: young, middle, old
2. Education level	Interval: years of schooling Ordinal: low, middle, high
3. Family size	Nominal: nuclear, extended
4. Family income	Ordinal: low, middle, high
5. Marital status	Nominal: married, unmarried
6. Decision-making in household matters	Ordinal: self, with husband, others
7. Major economic activity	Nominal: farmer, others
8. Perceived doctor-women information exchange	Interval: total score of responses Ordinal: low, middle, high
9. Perceived privacy	Interval: total score of responses Ordinal: low, middle, high
10. Perceived doctor's respect and response	Interval: total score of responses Ordinal: low, middle, high
11. Perceived mechanisms to encourage continuity of care	Interval: total score of responses Ordinal: low, middle, high
12. Perceived technical quality of services	Interval: total score of responses Ordinal: low, middle, high
13. Perceived convenience of services	Interval: total score of responses Ordinal: low, middle, high

Table 3.1 List of Variables and Level of Measurement (continued)

Variables	Level of measurement
14. Perceived availability of services	Interval: total score of responses Ordinal: low, middle, high
15. Perceived availability of female doctor	Nominal: yes, no
16. Perceived cost of services	Interval: total score of responses Ordinal: low, middle, high
17. Perceived waiting time	Ordinal: low, middle, high
18. Type of facility	Nominal: county, township, village, traditional

3.8 Data Processing and Analysis

Qualitative data was sorted and classified into units of analysis whereby items, concepts and relationships could be identified and compared.

Quantitative data was processed using SPSS/PC and analyzed using descriptive statistics such as mean, standard deviation, median, percentage etc. Multivariate analysis such as logistic regression was used to analyze the relationship between dependent and independent variables.

3.9 Ethical Consideration

The data was collected with the oral consent of respondents. The respondents were informed about the purpose of the study and any benefit that might result from the study. The respondents were allowed to drop out if they did not wish to be interviewed. During the interview, the respondents were honored, respected and thanked for their contribution to the study.

CHAPTER IV

RESULTS OF THE STUDY

In order to see a complete picture, the results of this study are divided into two sections. One section contains the quantitative result, while the other is composed of the qualitative results. The quantitative results are then divided into three parts. The first part is a general description of the respondents' demographic characteristics. The second part describes the women's perceptions of health care services and their health care utilization. It covers 1) Perceived quality of women's health care services, which includes perceived doctor-patient information exchange, perceived privacy, perceived respectful and responsive behavior of doctor, perceived encouragement for continuity of care, and perceived technical competence of doctor. 2) Perceived accessibility of services includes perceived convenience, perceived availability of female doctor, perceived availability of services, perceived cost of treatment, and perceived waiting time. The third part explores association between continuity of health care utilization of women with RTI symptoms and their perceived quality of care, perceived accessibility of health care services, and women's demographic characteristics based on cross tabulations. At the end of this part, a logistic regression analysis is used to select factors affecting women's continuity of health care services utilization. The qualitative results are presented in the last section including case studies and findings from qualitative research.

The Research Sites

Tonghai County is located in central Yunnan Province, 140 km from the capital city of the province, Kunming. Until the end of 1999, the total population in Tonghai County was 260,617. Besides rice and wheat, the major crops in Tonghai County are tobacco, garlic and vegetables. It is one of the most developed counties in Yunnan province. In 1999, the annual per capita income of peasants was 2815 Yuan. The study was conducted in two townships, Yangguang and Hexi. They are located 5 and 14 km respectively from the County Town.

In Tonghai County, many women have other economic activities besides fieldwork, such as selling vegetables and fruits, making clothing, conducting some small trade, etc. They can earn extra money from their small businesses. The situation of the respondents' major economic activities differs from other rural areas where farming is the only economic activity of women.

4.1 Respondents' Demographic Characteristics

A community-based and face-to-face interview with screening questionnaires was conducted among 1,790 women in order to screen for seeking care for RTI symptoms. Of 546 women who reported having at least one symptom of RTIs during the past year, 309 women had at least one experience of seeking care in any health care facility. So, the percentage of self-reported symptoms of RTI is 30.5, and the percentage of women's seeking care for RTI symptoms is 56.6 (see figure 3.1 on pp.35).

The socio-demographic characteristics of respondents are briefly presented

including their age, education level, family size, family income, and major economic activity, as shown in Table 4.1.

The age of the women is distributed between 20 to 59 years old with a mean age of 34.1. About two thirds (66.7 percent) of the women are age 20-35 years old, more than one-fifth (22.0 percent) are 36-45 years old and the rest (11.3 percent) are aged 46-60 years old. Regarding women's education level, nearly half (49.5 percent) of them were educated in primary school (less than 6 years schooling), about one third (34.3 percent) were educated in secondary school (7 to 9 years schooling), and few of them are illiterate (9.7 percent) or were educated in high school and above (more than 9 years schooling) (6.5 percent). The mean of the women's years of schooling is 6 years. In terms of women's family income, since it is difficult to obtain actual income by using interview only, family income in this study is an approximate figure. The annual family income of women in 1998 varies from less than 5,000 to more than 30,000 Yuan (1 US$ = 8.3 Yuan). Nearly two-fifths of the respondents (39.4 percent) have a family income of higher than 10,000 Yuan, one-third (33.0 percent) have a family income between 5,000 to 10,000 Yuan and less than one-third of the women (27.5 percent) have a family income less than 5,000 Yuan. It is found that the majority of the women (80.6 percent) live in nuclear families. In terms of women's marital status, almost all of the women (98.4 percent) in this study are married (not listed in Table 4.1).

Regarding women's major economic activity, about three-fifths of them (60.8 percent) do fieldwork only, and the rest (39.2 percent) have other economic activities besides farming. In terms of decision-making in general household maters, most of the women (66.3 percent) can make decisions with their husband, while some

of them (26.9) can make decision by themselves. Only a few (6.8 percent) of them cannot make decisions in the household, as the decision-makers in their families are only the husband, parents-in-law or their parents.

In sum, the respondents of this study are married women aged 20 to 59 years old. Most of them are young, live in nuclear families and have a low education level. The majority of them have a family income at the middle and high level. Most of them work in the field, but some of them earn extra money from other economic activities. The majority of the women have the rights to make decisions in general household matters.

Table 4.1 The Demographic Characteristics of Respondents

Demographic characteristics	Number	Percentage	Mean	S.D
Age (years)			34.07	8.23
20-- 35	206	66.7		
36-- 45	68	22.0		
46--	35	11.3		
Total	309	100.0		
Education (years of schooling)			6.08	3.01
Illiterate	30	9.7		
1-6 years	153	49.5		
7-9 years	106	34.3		
More than 9 years	20	6.5		
Total	309	100.0		
Family Size				
Nuclear	249	80.6		
Extended	60	19.4		
Total	309	100.0		
Family Income (Yuan)				
< 5,000	85	27.5		
5,000-10,000	102	33.0		
> 10,000	122	39.5		
Total	309	100.0		
Major Economic Activity				
Farming	188	60.8		
Others	121	39.2		
Total	309	100.0		
Decision-making in household matters				
Self	21	6.8		
With husband	205	66.3		
Others	83	26.9		
Total	309	100.0		

4.2 Women's Perceptions of Quality of Health Care and Their Health Care Utilization

In this section, information about women's perception of quality of health care is presented in terms of the following elements:

1. Perceived doctor-patient information exchange;
2. Perceived privacy;
3. Perceived respectful and responsive behavior of doctor;
4. Perceived encouragement for continuity of care, and
5. Perceived technical competence of doctor.

Moreover, women's perception of accessibility of services is described in this part also. And it details women's health care utilization for their RTI problem.

4.2.1 Perceived Doctor-Patient Information Exchange

Information given to patients is an important element of quality of services. In this study, women's perceptions of doctor-patient information exchange are measured by their response to seven questions. The data in table 4.2 shows that the majority (90.3 and 96.8 percent) of women perceive that doctors asked about their history of disease and listened to them carefully. However, about one-third (33.0 percent) of the respondents think that they did not get information about what disease they suffered. About two-thirds (67.3 percent) were not given information about the cause of their disease. A similar percentage (64.1 percent) of the respondents did not obtain information about the prevention of their disease. More than two-thirds (71.2 percent) were not told about the consequences the disease might cause. Two-fifths

(40.5 percent) were not told that the disease could be cured.

In order to summarize the women's perception of doctor-patient information exchange, respondents' answers for these seven questions are scored and summarized to a total score. Then, these score were categorized into three groups as low, middle and high according to the mean and standard deviation (SD) of the total score (as shown in the lower portion of Table 4.2). It is shown that the majority (61.2 percent) of women have a medium score regarding the satisfaction with doctor-patient information exchange. About one-fifth (23.0 percent) have a high score and the remainder (15.9 percent) have a low score. It seems that most of women perceived that the information exchange between doctor and patient are not enough.

In conclusion, the majority of women in this study perceived a middle level of doctor-patient information exchange. While most of the women perceived that the doctor asked about their history of disease and listened to them carefully, the majority of women did not think they received the information about the cause, consequence and prevention of their disease offered by their doctor.

Table 4.2 Respondents' Perception of Doctor-Women's Information Exchange

Perceived doctor-patient information exchange	Agree	Not sure	Disagree	Total (N=309)
Doctor listened to you carefully.	96.8	1.3	1.9	100.0
Doctor asked about your history of disease carefully.	90.3	0.6	9.1	100.0
Doctor told you about the disease you have.	67.0	4.5	28.5	100.0
Doctor explained about the cause of this disease.	32.7	3.9	63.4	100.0
Doctor did not tell you what consequences this disease might cause.	68.9	2.3	28.8	100.0
Doctor told you this disease could be cured.	59.5	2.3	38.2	100.0
Doctor did not tell you how to prevent this disease and other women's problems.	60.2	3.9	35.9	100.0

Level of Perceived Doctor-Patient Information Exchange	Number	Percentage
Low	49	15.9
Middle	189	61.2
High	71	23.0
Total	309	100.0

Mean=17.7 SD =4.0 Minimum = 9 Maximum = 21

4.2.2 Perceived Privacy

Perceived privacy during the consultation was found influencing health seeking behavior of patients who suffered from disease related to sex including RTIs by many researches. In this study, under the heading of perceived privacy, four questions are considered to measure women's perception of privacy during the consultation. Most of the women (94.5 percent) think they can expose their lower body to the doctor. A similar percentage (91.3 percent) of women feel they had adequate privacy when they told their problem to the doctor. Nearly one-third (29.4 percent) think that they did not tell all their problems to the doctor because there were other patient present. While one-fifth (19.7 percent) do not feel a sense of privacy because others might know they had such a problem.

The distribution of the total score obtained by summing the responses of four questions is a non-normal distribution. Most of women give the high score to the privacy. When women's perception of privacy is classified into three groups. It is found that more than half (57.0 percent) of women have a high level of perception of privacy. Only less than one-fifth (18.1 percent) have a low score and the rest (24.9 percent) have a medium score (shown in Table 4.3).

In sum, most of the women feel that they had adequate privacy during their consultation. However, some of them still did not tell the doctor all their problems due to there were other patients present. They did not perceived a sense of privacy because they were afraid that others might know about their situation.

Table 4.3 Women's Perception of Privacy during Consultation

Perceived Privacy	Agree	Not sure	Disagree	Total (N = 309)
You aren't willing to expose your lower body even to the doctor.	3.2	2.3	94.5	100.0
You did not tell the doctor all of your problems because there were other persons present.	27.8	1.6	70.6	100.0
You did not feel a sense of privacy because others might know you had such problems.	19.7	1.3	79.0	100.0
You were afraid to tell your real symptoms to the doctor because you didn't feel the consultation was private.	8.4	0.3	91.3	100.0

Level of Perceived Privacy	Number	Percentage
Low	56	18.1
Middle	77	24.9
High	176	57.0
Total	309	100.0

Mean = 10.8 SD= 1.7 Minimum = 6 Maximum = 12

RTIs can be diagnosed by a gynecological check-up. Of 264 women in this study, only 180 received a gynecological check-up. Nearly one third (28.7 percent) of the women did not receive a gynecological check-up during consultation. The reasons given by women who did not receive the check-up include: the doctor was not able to provide it due to lack of skill and/or equipment in the facility (28.7 percent), the

doctor did not provide a check-up (40.3 percent), respondents sought traditional medicine (27.1 percent), and others (3.9 percent), including the respondents felt shy.

Some questions are directed to those women who received gynecological check-ups as shown in Table 4.4. Two of these questions are used to examine women's perception of privacy during the check-up. It is found that most of women who received a gynecological check-up perceive a high level of privacy during the check-up.

Table 4.4 Women's Perception of Conditions of Gynecological Check-up

Perceived conditions of gynecological check-up	Agree	Not sure	Disagree	Total (N = 180)
Privacy				
You felt uncomfortable because the exam area is not separated.	23.3	1.1	75.6	100.0
You felt a sense of privacy because only the doctor was in that room.	80.0	11.1	8.9	100.0
Equipment				
You did not fear that you would get other infections because the bed was clean.	80.0	11.1	8.9	100.0
You felt that you would get infections from the check-up because the doctor did not use disposable tools during the check-up.	28.3	6.1	65.6	100.0
Doctor's experience				
You felt uncomfortable because it took very long time to do the check-up.	3.3	10.0	86.7	100.0
Doctor conducted the check-up skillfully.	90.6	6.1	3.3	100.0
You are afraid to take the check-up again.	15.6	3.9	80.5	100.0

4.2.3 Perceived Respectful and Responsive Behavior of Doctor

Perceived respectful and responsive behavior of doctor refers to respondents' perception of doctor's attitude toward them during consultation. Eight questions are asked to measure the women's perception of the degree of respectfulness and responsiveness behavior displayed by the doctor, as shown in Table 4.5. It is found that most of the women are satisfied with the doctor's attitude towards them. For example, they feel that the doctor spoke with them politely (98.1 percent), and that the doctor paid attention when they explained about their problem (98.4 percent). They also feel that the doctor respected them during the consultation. For example, they feel that the doctor answered them carefully (90.3 percent), and did not feel angry when they asked the doctor questions (80.3 percent). Most of them (92.9 percent) think that the doctor talked about their disease in an understandable manner. A similar percentage (95.1 percent) of women do not feel that the doctor did other irrelevant things during the consultation, nor do they feel that the doctors look down upon them because they are farmers (94.8 percent). However, nearly half (46.0 percent) of the women feel that the duration of the consultation was very short.

Since the distribution of total scores is extremely a skewed distribution, majority of women perceived a high level of doctor's respectful and responsive behavior. The data is categorized into only two groups, as shown in the lower portion of Table 4.5. It is shown that about two-thirds (68.3 percent) of women have a high score regarding perception of the doctor's respectful and responsive behavior, while the remainder (31.7 percent) have a low score.

In conclusion, most of the women in this study are satisfied with the doctor's respectful and responsive behavior during the consultation. However, nearly half of the women think that the doctor spent a very short time with them during the consultation.

Table 4.5 Women's Perception of Doctor's Respectful and Responsive Behavior

Perceived respectful and responsive behavior of the doctor	Agree	Not sure	Disagree	Total (N = 309)
Doctor spoke with you politely.	98.1	1.6	0.2	100.0
Doctor paid no attention when you talked about your symptoms.	0.6	1.0	98.4	100.0
Doctor did not answer your questions carefully.	2.3	7.4	90.3	100.0
Doctor felt angry when you asked many questions.	3.2	16.5	80.3	100.0
Doctor explained your disease in medical terminology.	2.3	4.8	92.9	100.0
Doctor spent a very short time with you.	25.6	20.4	54.0	100.0
Doctor did other irrelevant things during consultation.	3.6	1.3	95.1	100.0
You felt that the doctor looked down upon you because you are a farmer.	2.9	2.3	94.8	100.0

Level of Perception of Doctor's Respectful and Responsive Behavior	Number	Percentage
Low	98	31.7
High	211	68.3
Total	309	100.0

Mean = 20.3 SD= 1.2 Minimum = 14 Maximum = 24

4.2.4 Perceived Mechanisms to Encourage Continuity of Care

Perceived mechanisms to encourage continuity of care refers to women's perception of follow-up procedures after first consultation at the health care facility. Under this heading, four questions are asked to explore women's perception of mechanisms to encourage continuity of care as listed in Table 4.6. It is found that although the majority (74.4 percent) of women think that the doctor told them about follow-up visits, only two-fifths (41.7 percent) think that the doctor told them why they needed to return and about one-tenth (12.6 percent) remember that the doctors had established medical records for them. Only a few (8.4 percent) of the women think that the health providers referred them to another health care facility.

In order to summarize the women's perception of mechanisms to encourage continuity of care, a total score was summed from the four statements and the data was reclassified into three groups according to the mean and standard deviation of the total score, as shown in the lower portion of Table 4.6. It is shown that two-thirds (68.0 percent) of the women have a medium level of perception. Nearly one-fifth (20.7 percent) have a low score and a few (11.3 percent) have a high score.

In sum, women in this study perceive that the mechanisms to encourage continuity of care were inadequate. Although the majority of them were given verbal notices about follow-up visits, most of them were not told why they should return. Only a few of them had medical records established by the doctors. Some of them were referred to another health facility by the village providers.

Table 4.6 Women's Perception of Mechanisms to Encourage Continuity of Care

Perceived mechanisms to encourage continuity of care	Agree	Not sure	Disagree	Total (N = 309)
Health provider told you whether you need to return.	74.4	0.6	24.9	100.0
Health provider told you why you need to return.	41.7	2.9	55.3	100.0
Health provider referred you to another health facility.	8.4	1.6	90.0	100.0
Doctor established a medical record for you.	12.6	0.3	87.1	100.0

Score of Perceived Encouragement of Continuity of Care	Number	Percentage
Low	64	20.7
Middle	210	68.0
High	35	11.3
Total	309	100.0

Mean=6.8 SD =1.9 Minimum =4 Maximum =12

4.2.5 Perceived Technical Competence

In this study, perceived technical competence refers to the women's perception of the provider's medical skills and proficiency in handling services, and the outcome of the treatment that they received. Five questions were asked to measure the women's perception of the technical competence of the doctor (Table 4.7). The data shows that the majority of the women (97.7 percent) think that the doctor explained in a clear and understandable manner about how to take the medicine. More than two-thirds (74.4 percent) feel that the doctor was experienced in the treatment of women's problems. Most of them (81.9 percent) feel that they got better after taking the medicine prescribed by the doctor. In answer to the question "Do you think the medicine prescribed by the doctor was not as good as somewhere else?", more than half (57.0 percent) of the women disagree with this statement, but more than one-third (38.2 percent) of them cannot answer this question because they sought health care only in one place. More than half (56.0 percent) of the women think that the doctor did not tell them the side effects of medicine.

The bottom portion of Table 4.7 shows the total score of the women's perception of the technical competence of the doctor. Less than two-thirds (64.7 percent) of the women have a medium score on perceived technical competence of the doctor. More than one-fifth (23.3 percent) have a high score and a few of them (12.0 percent) have a low score on perceived technical competence of the doctor.

In conclusion, most of the women perceive that the doctor they visited possessed a high level of technical competence. However, the majority of them think that the doctor did not tell them the side effects of the medication.

Table 4.7 Women's Perception of Technical Competence of the Doctor

Perceived technical competence	Agree	Don't know	Disagree	Total (N=309)
Doctor explained how to take the medicine in a clear and understandable manner.	97.7	0.3	1.9	100.0
Doctor is experienced in treatment of women's problems.	74.4	22.3	3.2	100.0
You felt better after you took medicine prescribed by the doctor.	81.9	2.3	15.9	100.0
The medicine was not as good as somewhere else.	4.9	38.2	57.0	100.0
Doctor did not tell you about the side effects of the medicine.	56.0	2.3	41.7	100.0

Level of Perceived Technical Quality of Services	Number	Percentage
Low	37	12.0
Middle	200	64.7
High	72	23.3
Total	309	100.0

Mean=12.7 SD =1.9 Minimum =6 Maximum =15

4.2.6 Perceived Accessibility of Services

In this study, women's perceptions of accessibility of health care services include five elements. They are perceived convenience of health care services, perceived availability of services, perceived availability of female doctors, perceived cost of services and perceived waiting time, as shown in Table 4.8.

There are four questions under the heading of perceived convenience of services. The result shows that most of the women in this study perceive that the health care services are convenient. For example, nearly four-fifths (78.3 percent) do not feel that the health care facility is far from their home, and most of them (94.5 percent) think that it is easy to get there. Slightly more than three-fifths (62.8 percent) feel that the working hours of facilities is suitable for them, and nearly nine-tenths (89.3 percent) do not feel the process of getting services is too complication.

Perceived availability of services refers to women's perception of the availability of doctor and drugs at the health care facilities attended by them. Five questions were asked to measure women's perceived availability of health care services. Nearly four-fifths (79.6 percent) of the women feel that the doctors in the facilities attended by them are available, and a similar percent (78.3 percent) of them feel that they can get services there at any time. Most of them (94.8 and 95.5 percent) perceive that medications are available in the facilities. Meanwhile, nearly half (47.2 percent) of the women think that the health care facilities do not have good equipment for treatment of women's problem.

In this study, most of the women (69.3 percent) prefer female doctors as their providers. Fortunately, almost all (95.5 percent) of the women in this study saw a female doctor at the health care facilities. It seems that female doctors are available in

these facilities.

Cost of services is regarded as one of the major barrier of women's health care utilization for their RTIs. In terms of perceived cost of services, the result shows that nearly half (44.0 percent) of the women in this study perceive the cost of services for their consultation to be high. While only a few (15.2 percent) of them perceive a low cost of services. One half (50.5 percent) of the women do not think that the medicine in the facilities is more expensive than in drugstores.

Previous research has demonstrated that long waiting time is also one of the major barriers to women in terms of seeking care for their problems. The result from this study shows that most of the women (86.4 percent) perceive the waiting time they experienced in the health care facilities to be short, while only about one-tenth (12.0 percent) perceive that the waiting time was too long.

In conclusion, most of the women perceive that the services they received are convenient and available. The female doctors are available. The majority of them do not perceive that the waiting time in the health care facility was too long. However, nearly half of the respondents perceive a high cost of services.

Table 4.8 Women's Perception of Accessibility of Services

Perceived Accessibility of Services	Agree	Not sure	Disagree	Total (N = 309)
Perceived Convenience of Services				
The health care facility is far from your home.	21.7	--	78.3	100.0
It is easy for you to get there.	94.5	--	5.5	100.0
Working hours for the services in this facility is suitable for you.	62.8	--	37.2	100.0
The process of receiving services at the facility was too complicated.	7.1	3.6	89.3	100.0
Perceived Availability of Services				
No doctor was present at the health facility when you arrived there.	19.1	1.3	79.6	100.0
The health facility lacked adequate equipment.	17.8	35.0	47.2	100.0
The facility had all of the drugs that the doctor prescribed to you.	94.8	2.9	2.3	100.0
You can get services there at any time.	78.3	9.1	12.6	100.0
Doctor told you to buy some medicine from the drugstore.	3.2	1.3	95.5	100.0
Perceived Availability of Female Doctors				
Your doctor was a female.	95.5	--	4.5	100.0
Perceived Cost of Services				
The cost of services in this health care facility was expensive.	44.0	40.8	15.2	100.0
The medicine there was more expensive than in drugstores.	9.1	40.5	50.5	100.0
Perceived Waiting Time				
The waiting time you experienced at the health care facility was too long.	12.0	1.6	86.4	100.0

4.2.7 Women's Health Care Services Utilization

In this section, women's health care services utilization is described in detail. As the dependent variable is whether women continuously use health services in health care facilities, respondents are divided into two groups. These groups are continuous users and non-continuous users.

Women's First Time Health Care Utilization

Of 547 women who reportedly have at least one of the symptoms related to RTIs last 12 months, 309 have at least one experience of seeking care. 238 of women who perceived symptoms of RTIs have never use any health care facilities in the past year. Among women who never use health care services for RTIs problem, more than half (57.2 percent) use medicine bought from the drugstore, another 21.0 percent use warm water or salt water to wash their lower body, and 21.8 percent do nothing. The reasons given by women for not using health services include the perception that the problem was not severe (60.9 percent), do not have time due to busy schedule (7.6 percent), do not have enough money to see the doctor (5.0 percent), feel too shy to see the doctor (3.8 percent) and various others.

Women sought health care in different health care facilities at first time. The level and type of health care facilities, which women attended, for the first consultation is shown in Table 4.9. It is found that most of the women (47.2 percent) sought care at the county level, while was followed by the township level (34.0 percent), while less than one-fifth (17.8 percent) of the women sought health care at village level clinics.

Previous research has cited that in rural areas, women are more likely to seek traditional medicine. But in this study, the result shows that most of the women (90.3 percent) sought care at modern health care facilities. Only a few (9.7 percent) saw traditional doctors.

To sum up the results of women's first time health care utilization in this study, half of the respondents sought health care at county level hospitals, and most of them sought modern health care treatment.

Table 4.9 First Time Health Care Utilization among Women with RTIs

Women's Health Care Utilization	Number	Percentage
Level of facility		
County	146	47.2
Township	105	34.0
Village	58	17.7
Total	309	100.0
Type of Medicine		
Modern medicine	279	90.3
Traditional medicine	30	9.7
Total	309	100.0

Women's Continuity of Health Care Services Utilization

Women's continuity of health care service utilization for symptoms related to RTIs in past year is shown in Table 4.10. It is reported that slightly more than one half (51.8 percent) of the women in this study sought care only one time and 48.2

percent of them sought care more than one time.

Table 4.10 Continuity of Health Care Utilization among Women with RTIs

Health care services	Number	Percentage
Non-continuous user	160	51.8
Continuous user	149	48.2
Total	309	100.0

Health Services Utilization of Non-Continuous Users

Table 4.11 shows the reasons cited by women who did not seek care continuously. It is found that about one-third (34.4 percent) of the women think that buying medicine from the drugstore was more convenient than getting medicine from the hospital. They go to the drugstore to buy the medicine that the doctor prescribed to them at first consultation and they think that they will get the same medicine if they seek care again. Slightly more than one-fifth (22.5 percent) think that they got better after treatment and it is not serious and unnecessary to seek care again. A few of them (9.4 percent) think that the problem, are common among women and cannot be cured.

Of women who non-continuously using health care, 45 (28.1 percent) think that they already have recovered from the RTI after first seeking care because their symptoms disappeared and did not trouble them again. As the symptom is the signal to seek health care among women with RTIs, these women will no longer seek care once the symptom disappeared. These women are dropped out from data, which will be shown later, analyzing the factors affecting women's continuity of health care utilization.

In sum, women do not continuously use health care services for their RTIs due to various reasons. Major reasons are convenience of buying medicine from drugstores and perceived recovery from RTIs. Some of the women do not seek care because their problems became less serious after the first treatment. Some women think RTIs are common problems among women which cannot be cured, so it is unnecessary to seek care again.

Table 4.11 Reason of not using Health Services Continuously

Reason for non-continuous use	Number	Percentage
Buying medicine from the drugstore was more convenient	55	34.4
Recovered from RTIs	45	28.1
Getting better so it is not necessary to see the doctor again	36	22.5
RTIs cannot be cured	15	9.4
Others	9	5.6
Total	160	100.0

Health Services Utilization of Continuous Users

Women's continuity of health care service utilization is shown in Table 4.12. Nearly one half (45.0 percent) of the women have only one follow-up visit to the health care facilities for their RTIs. Most of the women (78.9 percent) went to a different health care facility for their second attempt at seeking care. About one half (47.0 percent) of them went to a higher-level health care facility. A few of the women (14.1 percent) went to a lower level health care facility for their second visit. The

major reason for changing facilities is inefficacy of treatment at the first facility (53.0 percent), followed by expensive treatment (12.8 percent) and long distance between home and health care facility (8.1 percent). Most of respondents (91.3 percent) still chose modern medicine for their second visit to a health care facility.

In conclusion, nearly half of the women made only one revisit to a health care facility. Most of the respondents who continued to seek care changed health care facilities and went to a higher-level health care facility for their second visit. The major reasons for changing facilities for the second visit are inefficacy of treatment and expensive treatment at the facility the women attended for their first visit.

Table 4.12 Health Care Utilization of Continuous Users

Utilization of health care	Number	Percentage
Number of times seeking care		
Two	67	45.0
Three	44	29.5
Four	19	12.8
Five	8	5.4
Six and above	11	7.4
Total	149	100.0
Facility attended at second visit		
Same as first time	33	22.1
Same level as first time	25	16.8
Higher level than first time	70	47.0
Lower level than first time	21	14.1
Total	149	100.0
Type of facility at second visit		
Modern medicine	136	91.3
Traditional medicine	13	8.7
Total	149	100.0
Reasons for changing facility		
Inefficacy	79	53.0
Too expensive	19	12.8
Too far from home	12	8.1
Inexperienced doctor	4	2.7
Others	2	1.3
Total	149	100.0

4.3 Association between Women's Perceptions of Health Services and Their Continuity of Health Care Service Utilization

There are many factors affecting women's health seeking behavior for their RTIs. As previously noted, quality of care is a principle reason for not using health care services. The percentage of distribution by applying cross tabulation demonstrates the association between women's continuity of health care utilization and women's demographic characteristics, their perception of quality of services and perception of accessibility of services. Logistic regression analysis is used to elicit explanatory factors regarding women's continuity of health care service utilization.

4.3.1 Association between Socio-demographic Factors and Women's Continuity of Health Care Utilization

Age

Some previous studies examined the relationship between age and health care utilization (Jagdish, 1995; Guo, 1999; Sun R, 1995). The results of these studies are mixed. Some researches showed that elderly women were more likely to seek treatment than young women, perhaps because young women feel shyer than middle-old women do. In contrast, another study report that elderly women were more likely to delay seeking treatment for their RTIs because they believed that RTIs will be cured naturally after menopause (Sun R, 1995).

The Results shown in Table 4.13 indicate that, continuity of health care utilization among different age groups is different. Young and middle age groups express more continuously health care utilization, while old age group of women are

tend to be non-continuous users. Nearly two-thirds (61.3 percent) of middle age women and more than half (56.5 percent) of younger women are continuous health care users, while 53.1 percent of older women are non-continuous users. It seems to be that elder women are less likely than other age groups to seek health care services continuously.

Education

Regarding education level, the results show that the continuity and non-continuity of health care services utilization among different educational level groups tend to be similar. In other words, women's education level does not strongly influence their continuity of health care services utilization, but, the highest proportion of women demonstrating non-continuity of health service usage is found among the group of illiterate women, while the highest proportion of women who continuously to seek care is among the group of women with a high level of education.

Family Type

The results show that 58 percent of women who live in nuclear families seek health services continuously, and 50 percent of women who live in extended families. This means that, women who live in nuclear families tend to use health care services more continuously than those women who live in extended families.

Family Income

Family income has been regarded as an important factor influencing health care services utilization. The results of this study show that proportion of women who seek care continuously in high-level family income (59.6 percent) group is slightly grater than in both groups of those women with medium (53.5 percent) and low level of family income (55.1 percent). It might be regarded that women with lower level of family income are more likely than those women with medium and high level of family income to be non-continuous users of health care services.

Major Economic Activities

Table 4.13 shows that women who have other economic activities outside working in the fields (53.5 percent) tend to use health services less continuously than those women who do field work only (58.3 percent).

Decision-Making in General Household Matters

Comparing among the different decision-making groups reveals that nearly three-fifths (59.8 percent) of women who have equal rights with their husbands to make decisions in general household matters are continuous health care services users, while 52.9 percent of women who cannot make decisions are continuous users. However, women who can make decision in general household matters by themselves are tend to be in the group of non-continuous users (50.7 percent). It seems to be that women who can make decisions by themselves in general household matters are less likely than both those women who can make decisions with their husband or those who cannot make decisions to continuously seek care for their RTI problem.

In sum, the descriptive analysis between women's demographic characteristics including age, education, family type, family income and major economic activities and women's continuity of health care services utilization shows that women who have the characteristics of being middle age, having a high education level, living in nuclear families, have a higher family income, not having other economic activity besides farming, and having the equal rights with their husband to make decisions in general household matters are more likely to continuously seek health care for their RTI symptoms.

Table 4.13 Women's Continuity of Health Care Services by Demographic Characteristics

Variable		Continuously Using Services		Total (N)
		No.	Yes.	
Age				
Young		43.5	56.5	100.0 (170)
Middle		38.7	61.3	100.0 (62)
Old		53.1	46.9	100.0 (32)
	Total	43.6	56.4	100.0 (264)
Education				
Illiterate		46.2	53.8	100.0 (26)
Low		42.3	57.7	100.0 (156)
Middle		45.1	54.9	100.0 (91)
High		41.2	58.8	100.0 (17)
	Total	43.6	56.4	100.0 (264)
Family type				
Nuclear		42.0	58.0	100.0 (212)
Extended		50.0	50.0	100.0 (52)
	Total	43.6	56.4	100.0 (264)
Family income				
Low		44.9	55.1	100.0 (69)
Middle		46.5	53.5	100.0 (86)
High		40.4	59.6	100.0 (109)
	Total	43.6	56.4	100.0 (264)
Major Economic Activity				
Farming		41.7	58.3	100.0 (163)
Others		46.5	53.5	100.0 (101)
	Total	43.6	56.4	100.0 (264)
Decision-making in Household matters				
Others		47.1	52.9	100.0 (17)
With husband		40.2	59.8	100.0 (174)
Self		50.7	49.3	100.0(73)
	Total	43.6	56.4	100.0 (264)

4.3.2 Association between Women's Continuity of Health Care Services Utilization and Their Perception of Quality of Services

Table 4.14 presents the relationship between women's continuity of health care services utilization and their perception of quality of services, namely perceived doctor-patient information exchange, perceived privacy, perceived doctor's respectful and responsive behavior, perceived mechanisms to encourage continuity of care, and perceived technical competence.

Perceived Doctor-Patient Information Exchange

Data in Table 4.14 shows that nearly four-fifths (80.0 percent) of women who perceive a low level of doctor-patient information exchange are non-continuous service users, while 40.7 percent of women with medium and 45.0 percent of women with high level of perception of doctor-patient information exchange. Furthermore, women who perceived middle and high level of information exchange might tend to be in the group of continuous users. It seems to be that women who perceive a high level of doctor-patient information exchange are more likely than those who perceive a low level of information exchange to use health care services continuously.

Perceived Privacy

Regarding women's perception of privacy, the result shows that women who perceive a low level of privacy (54.5 percent) are more likely to be in the group of non-continuous users. Women who perceived medium (62.0 percent) and high level (57.0 percent) of privacy tend to be in the group of continuous users. It seems to be

that women who perceived low level of privacy during the consultation are less likely than those women who perceive a medium level and a high level of privacy to use health services continuously,

Perceived Doctor's Respectful and Responsive Behavior

Doctor's attitude toward the patient is regarded as an important element of quality of care, and it may influence women's health care services utilization in the future. The results of this study show that the proportion of women seeking care continuously tends to increase, while the proportion of women who not continuous seek health care decreases according to the increase in the level of perceived doctor's respectful and responsive behavior. It might be said that women who perceived respectfulness and responsiveness from the doctors are more likely to continuously seek health care services.

Perceived Mechanisms to Encourage Continuity of Medical Care

Mechanisms to encourage continuity of medical care are direct factors influencing women's continuity of health care utilization. The result in Table 4.14 shows that the proportion of women who continuously seek care tended to increase with an increase in the level of their perceived mechanisms to encourage continuity of health care. The lowest proportion (32.0 percent) of continuous users is found among the group of women who perceive a low level of mechanisms to encourage continuity of health care; this proportion is less than both groups with middle level (66.7 percent) and high level (56.4 percent) of perception of mechanisms to encourage continuity of health care services. While the highest proportion of women who

demonstrating non-continuity of health service usage is found among the group of women with a low level of perception of mechanisms to encourage continuity of health care. It indicates that women's perception of the mechanisms to encourage continuity of health care seems to have a positive effect on their continuity of health care utilization.

Perceived Technical Competence

In this study, women's perception of the technical competence of services includes their perception of doctor's competence and outcomes of treatment. It is found that the proportion of women who sought care continuously tended to be decrease according to increasing level of perceived technical quality of services. In the group of women who have a low level of perception of technical quality of care, only nearly one-third (35.1 percent) of them did not use health care services continuously; the proportion increase to 45 percent among women with middle and high levels of perception of technical quality of services. And the highest proportion of women demonstrating non-continuity of health service usage is found among the group of women who perceived high level of doctor's competence. Therefore, it seems to show that women's perception of technical competence of the doctors tends to have a negative effect on their continued utilization of health care services.

In conclusion, women's perception of quality of services might influence their continuity of health care services utilization. It is found that women who perceived high level of doctor-patient information exchange, more mechanisms to encourage continuity of health care, more privacy, a high level of respectfulness and

responsiveness from the doctor, and lower technical competence are more likely to continuously use health care services for their RTIs.

Table 4.14 Women's Continuity of Health Care Services Utilization by Their Perceived Quality of Services

Variable	Continuously Using Health Care		Total (N)
	No.	Yes.	
Information exchange			
Low	80.0	20.0	100.0 (15)
Medium	40.7	59.3	100.0 (209)
High	45.0	55.0	100.0 (40)
Total	43.6	56.4	100.0 (264)
Privacy			
Low	54.5	45.4	100.0 (44)
Medium	38.0	62.0	100.0 (71)
High	43.0	57.0	100.0 (149)
Total	43.6	56.4	100.0 (264)
Respectful and responsive behavior of the doctor			
Low	60.0	30.0	100.0 (22)
Medium	49.5	50.5	100.0 (93)
High	37.7	62.3	100.0 (151)
Total	43.6	56.4	100.0 (264)
Encourage continuity			
Low	68.0	32.0	100.0 (50)
Medium	37.9	62.1	100.0 (182)
High	37.5	62.5	100.0 (32)
Total	43.6	56.4	100.0 (264)
Technique quality of services			
Low	35.1	64.9	100.0 (37)
Medium	44.9	55.1	100.0 (167)
High	45.0	55.0	100.0 (60)
Total	43.6	56.4	100.0 (264)

4.3.3 Association between Women's Continuity of Health Care Utilization and Their Perceived Accessibility of Services

Accessibility of health care services is one of the most important factors affecting women's health care utilization in rural areas (Cristina, 1992; Igun, 1987). In this study, women's perception of accessibility of services includes perceived convenience, availability of services, cost of service, waiting time and availability of female doctors. The results are displayed in Table 4.15.

Theoretically, convenience is a strong determinant of health services utilization for women (Evans, 1995; Fang, 1997). The result in Table 4.15 shows that similar proportions of women (59.4 percent and 60.9 percent) who seek care continuously are in the groups of low and high scores of perceived convenience, comparing with the group of women who have a medium score of perceived convenience (50.0 percent).

Perceived availability of services includes women's perception of availability of doctors, drugs, and services. It is found that the highest proportion of women who continuously seek care is among the group of low level of perceived availability of services (69.4 percent), while the highest proportion of non-continuous users is in the group of women with medium level of perception.

The result in Table 4.15 shows that the proportion of women who did not use health services continuously tends to increase according to increasing level of perceived cost of services. The highest proportion of women who continuously seek care is among the group of high level of perceived cost of services. This means that women who perceive a high cost of services are more likely to continuously seek

health care services.

Regarding women's perception of waiting time, it is found that 72.2 percent of women who perceive a short waiting time are continuous health services users as comparing with 53.9 percent of women who perceive a long waiting time. It seems to be that women who perceived long waiting time to see the doctor tend to be in the group of non-continuous users of health services.

The data shows that in groups of women who continuously use health services, the percentage of women who perceive availability of female doctors (61.5 percent) is slightly greater than those women who do not perceive availability of female doctor (56.2 percent).

The relationships between women's continuity of health services utilization and their perceived accessibility of services including perceived convenience, availability, and cost of services, availability of female doctor, and waiting time are described above. In might be concluded that, women who perceive shorter waiting-time, greater availability of female doctors, and higher cost of services are more likely to continuously seek health care services for RTIs.

Table 4.15 Women's Continuous Use of Health Care Services by Their Perception of Accessibility of Services

Variable	Continuously Using Health Care		Total (N)
	No.	Yes.	
Convenience			
Low	40.6	59.4	100.0 (32)
Medium	50.0	50.0	100.0 (104)
High	39.1	60.9	100.0 (128)
Total	43.6	56.4	100.0 (264)
Availability of services			
Low	35.1	64.9	100.0 (37)
Medium	47.3	52.7	100.0 (146)
High	40.7	59.3	100.0 (81)
Total	43.6	56.4	100.0 (264)
Cost of services			
Low	44.8	55.2	100.0 (29)
Medium	44.1	55.9	100.0 (213)
High	36.4	63.6	100.0 (22)
Total	43.6	56.4	100.0 (264)
Waiting time			
Short	27.8	72.2	100.0 (36)
Long	46.1	53.9	100.0 (228)
Total	43.6	56.4	100.0 (264)
Availability of female doctor			
Yes	43.8	61.5	100.0 (251)
No	38.5	56.2	100.0 (13)
Total	43.6	56.4	100.0 (264)

4.3.4 Association between the Type of Health Care Facility Women Attended and Their Continuity of Health Care Utilization

Women attending different types of health care facilities might have a different perception of the quality of services which they received, and this might influence their continuity of health care services utilization. The result shows nearly two-thirds (64.6 percent) of women who attended village level clinics as their first step of treatment are in the group of continuous users, while more than half (53.3 percent) of women who chose traditional medicine as their first step of treatment are in the group of non-continuous users. There are similar proportions of continuous use of health care services in both groups of women who attended county level (56.3 percent) or township level hospitals (55.4 percent). This indicates that that women who attended village level clinics as their first step of treatment seem to be more likely than those who attended other types of facilities to continuously seek health care services. On the contrary, women who sought traditional Chinese medicine as the first step of treatment tend to be non-continuous users.

Table 4.16 Women's Continuous Use of Health Care Services by Types of Health Care Facilities

Types of Facilities	Continuously Using Health Care		Total (N)
	No.	Yes.	
County	43.8	56.3	100.0 (112)
Township	44.6	55.4	100.0 (74)
Village	35.4	64.6	100.0 (48)
Traditional	53.3	46.7	100.0 (30)
Total	43.6	56.4	100.0 (264)

4.3.5 Logistic Regression Analysis of Factors Related to Women's Continuity of Health Services Utilization

As shown and stated in the conceptual framework, Chapter 2 (pp. 15), women's perception of quality of services, perception of accessibility of services and their demographic characteristics are used for the analysis of women's continuity of health services utilization. The previous sections present associations between women's continuity of health care utilization and the related factors. In this section, a logistic regression is used in order to examine whether and how women's perception of quality of health services and its accessibility, and their socio-demographic characteristics affect their continuity of health services utilization, This analysis comprehensively determines the most important factors affecting women's continuity of health services utilization, and also explains the interrelationship between independent variables.

The dependent variable is whether women continuously used health services for their RTI problems. Independent variables include the selected variables shown in the framework in Figure 1, Chapter two (see pp. 15). The model including all the independent variables is shows in the below equation. Five variables are selected by a backward stepwise method of the Wald statistic as predictive variables which are shown in Table 4.17. They are perceived mechanisms to encourage continuity of health services utilization, perceived waiting time, perceived doctor-patient information exchange, seeking care at village clinics for first step of treatment, perceived respectful and responsive behavior of the doctors. Another two variables are found having weak effects ($0.05 < P < 0.10$) on women's continuity of health care

services utilization. They are decision-making in household matters and major economic activities. The model lead to a correct classification of 68.18 percent of continuity of health services utilization and has statistically significant at the 0.0001 level with a Chi-square= 32.694.

Equation of the full model of continuously health care utilization

$$\text{Log}\left(\frac{\text{Prob. (continuously using)}}{\text{Prob. (non-continuously using)}}\right)$$
$$= a + b_1\,AGE + b_2\,EDU + b_3\,FAMILY + b_4\,INCOME + b_5\,DEM + b_6\,ECA + b_7\,Q1 + b_8\,Q2 + b_9\,Q3 + b_{10}\,Q4 + b_{11}\,Q5 + b_{12}\,A1 + b_{13}\,A2 + b_{14}\,A3 + b_{15}\,A4 + b_{16}\,A5 + b_{17}\,CT + b_{18}\,TS + b_{19}\,VC + b_{20}\,TM$$

Where a: constant

b_1—b_{20}: regression coefficients

AGE: the groups of the age of the respondents

EDU: the groups of the education

FAMILY: family types

INCOME: groups of family income

DEM: decision-making in general household matters

ECA: major economic activities

Q1: perceived doctor-patient information exchange

Q2: perceived privacy

Q3: perceived respectful and responsive behavior of the doctors

Q4: perceived mechanisms to encourage continuity of care

Q5: perceived competence of the doctor

A1: perceived convenience

A2: perceived availability of services

A3: perceived availability of the female doctors

A4: perceived cost of service

A5: perceived Waiting time

CT: using county level facilities as the first step treatment

TS: township level facilities

VC: village level clinics

TM: traditional medicine

Table 4.17 presents the results of the logistic regression analysis. The variable perceived mechanisms to encourage continuity of care has the strongest partial contribution to the model (Wald = 12.1508). When women perceived a medium and high level of mechanisms to encourage continuity of care, the probability of continuity of services is 3.43 and 3.52 times more than those women who perceived lower level of mechanisms.

Another variable that has a highly significant ($P<0.01$) effect on women's continuity of care is perceived waiting time. This is a negative effect. When women perceive a long waiting time, the probability of continuously using health services is only 0.33 times the probability of those women who perceive a short waiting time, after controlling for the effects of all other variables in the model.

There are three other variables which have significant ($P<0.05$) net effects on women's continuity of health care utilization. They are used village level clinics as the first step of treatment, perceived doctor-patient information exchange, and perceived respectful and responsive behavior of the doctors. When women perceived medium level of doctor-patient information exchange, the probability of continuity of care is 2.77 times higher than if women perceived low level of doctor-patient information exchange. Another variable, perceived respectful and responsive behavior of the doctors has a positive effect on women's continued seeking care for their RTIs problems. When who perceived middle level of respectfulness and responsiveness from the doctor are 2.89 times more likely than those women with low level of perception to continuously seek health services for RTIs.

The last variable is using village level clinics as the first step of treatment. If women first seek services at village level or private clinics, the probability of continuity of health services utilization is 2.06 times higher than if women seek care in another type of facility.

In summary, seven variables enter into the model, while only five of these variables have statistical significance. Four variables, namely, perceived mechanisms to encourage continuity of care, perceived doctor-patient information exchange, perceived respectful and responsive behavior of the doctors, and using village level clinics as first step of treatment have positive effects on women's continuity of health care, while perceived waiting time has negative effect.

Table 4.17 Logistic Regression of Variables Influencing Women's Continuity of Health Care Services Utilization

Variables	B	Wald	P	R	Exp(B)
Perceived mechanisms to encourage continuity of health care (Q4)					
		12.1508	0.0023	0.1501	
Low (r)					
Medium	1.2317	11.8285	0.0006*	0.1649	3.4269
High	1.2592	6.1296	0.0133*	0.1069	3.5224
Perceived waiting time (A5)					
Short (r)					
Long	-1.2674	8.4798	0.0036*	-0.1339	0.2816
Perceived doctor-patient information exchange (Q1)					
		5.8902	0.0526	0.0723	
Low (r)					
Medium	1.0195	5.5358	0.0186*	0.0989	2.7719
High	0.7144	2.0253	0.1547	0.0084	2.0430
Use of village level clinics as first step of treatment (T23)					
No (r)					
Yes	0.7243	3.9307	0.0474*	0.0731	2.0632
Perceived respectful and responsive behavior of doctor (Q3)					
		5.5711	0.0617	0.0659	
Low (r)					
Medium	0.5712	1.1350	0.2867	0.0000	1.7704
High	1.0621	4.0474	0.0442*	0.0752	2.8921
Decision-making in general household matters (X6)					
		5.1243	0.0771	0.0558	
Others(r)					
With husband	0.2445	0.1702	0.6799	0.0000	1.2770
Self	-0.4531	0.5229	0.4696	0.0000	0.6357
Family type (Family)					
Nuclear (r)					
Extended	-0.5703	2.7465	0.0975	-0.0454	0.5654

Note: Model Chi-square = 32.69, P = 0.0001, the overall correct is 68.18%.
r: reference group

The equation for the final logistic model is:

$$\text{Log}\left(\frac{\text{Prob. (continuously using)}}{\text{Prob. (non-continuously using)}}\right)$$

$$= -0.8499$$

$$+ 1.2317\ Q4\ \text{(medium level of mechanisms)}$$

$$+ 1.2592\ Q4\ \text{(Perceived high level of mechanisms)}$$

$$- 1.2674\ A5\ \text{(perceived waiting time)}$$

$$+ 1.0195\ Q1\ \text{(Perceived medium level of information exchange)}$$

$$+ 0.7243\ T23\ \text{(Sought care at village level clinics)}$$

$$+ 1.0621\ Q3\ \text{(perceived high level of doctor's attitude toward patients)}$$

Therefore, it can be concluded from this quantitative research that the major factors affecting women's continuity of health care services utilization are perceived mechanisms to encourage continuity of health care, perceived waiting time, perceived doctor-patient information exchange, seeking health care services at village level clinics, and perceived respectful and responsive behavior of the doctor. Among these variables, four variables, namely, perceived mechanisms to encourage continuity of health care, perceived doctor-patient information exchange, perceived respectful and responsive behavior of the doctor, and seeking health care first at village level clinics, have positive effects on women's continuity of health services utilization, while another variable, perceived waiting time, has negative effects.

4.4 Results of Qualitative Research

In order to enhance understanding of quality of services from a women's perspective and in order to understand their health-seeking behavior for RTI problems, qualitative research, particularly focus group discussion and in-depth interview methods, was employed to complement the quantitative technique in this study. Three FGDs and eight in-depth interviews were undertaken.

4.4.1 Case Studies

Eight in-depth interviews were conducted during research. They represented different patterns of health seeking behavior for RTIs. The results of the case studies are presented below.

Case One

Zhang was 33 years old and had only one 10-year-old son. She had finished 9 years of secondary school study. She lived with her farmer husband and son and had a low family income of 3,000 Yuan per year. They didn't have any other income except farming.

She had suffered from profuse white discharge for more than one year. She used warm water to clean her lower body and felt better. She thought that it was not a serious problem and did not pay more attention to it nor go anywhere to see a doctor.

About five months before being interviewed, she went to the township family planning service station to receive an IUD insertion, and it was discovered that she suffered from trichomoniasis. The doctor prescribed some medicine for her, such

as "MIE DI LING"(anti-trichome) and "JIE ER YIN"(a kind of liquid traditional medicine for washing the vulva). After she took these medicines, she felt better and did not return to the township FPSS and nor go anywhere else to seek care again even though the symptom persisted. When she had depleted the medicine that the doctor had prescribed to her, sometimes she went to the drugstore to buy the same medicine and take it again. Regarding the reason why she did not return to the township FPSS, she said: " the doctor did not say anything about revisiting, and also I already felt better after I took the medicine. It is not necessary to go there again."

Regarding the knowledge of trichomoniasis, she did not know anything except the name of the disease. She did not ask any question about her disease during the consultation because she did not know what she shuld ask, and also the doctor did not tell her anything, not even instructions regarding how to take the medicine. When she was told that her husband also needed to take medicine and clean his lower body at the same time, she said with surprise: "The doctor didn't tell me this. I took the medicine according to the paper in the box (directions of use). So that's why the symptom occurred again and again."

She was satisfied with the doctor's attitude toward her, but did not know how to assess the doctor's competence, because "The doctor patiently asked me about my menstruation history and my symptom, and she carefully did a gynecological check-up on me. After that, she only prescribed some medicine to me, and did not say any thing else except something about IUD."

In terms of accessibility of services, she said that the facility was not far from her home and she can go there easily because it situated just a few minutes walk from her house. The cost of services was not expensive. But she felt that there was not

good equipment in the township FPSS to treat gynecological problems, so she didn't want to go there the next time. "As another person has suggested to me, I would like to go to the county MCH hospital next time."

Case Two

Wang was 45 years old with 6 years of primary school education and lived with her husband and a 19 years old daughter. Her married son had separated from her family. Her husband and she worked in the field and had a family income of 5,000 Yuan per year.

She had suffered from genital itching for one week. Due to the suggestion of other women, she went to a private clinic and was told that she suffered from trichomoniasis. The doctor prescribed some medicine and a one-week vaginal irrigation treatment. She went there every day for irrigation during that week and took the medicine at the same time. After that, the symptom disappeared completely and didn't trouble her again.

She was satisfied with the outcome of treatment, but felt that the cost of services was too expensive. " I am sure I will not go there again if it is necessary to go many times to see a doctor." She also complained about the doctor's attitude toward patients. "In that clinic, doctor and patient looked like cat and mouse. The doctor reproved her patients for some small matters. I felt too bad when I waited to see her there. If I did not think that she was good at the treatment of women's problem, I am sure that I would have left at that moment. She scolded me because I could not remember the date of my last menstruation."

She had received only a poor amount of information about her disease. She said that the doctor only spent about 2 minutes with her and she did not ask the doctor any questions because she was afraid of being scolded by the doctor. Also, she did not ask the doctor whether she needed to visit again after she had finished the irrigation treatment. Despite all this, she was still willing to recommend that other women go there for "women's problems" because of the doctor's good skills.

Case Three

Yang was 25 years old and had married her farmer husband three years ago. She had been to primary school for 7 years. She lived with her farmer husband and a two year old daughter with a family income of 8,000 Yuan per year.

She had suffered from profuse white discharge with odor for more than two years. At first, she went to a drug store and the seller told her to buy some medicine. After she took the medicine, she felt a little better, but the symptoms occurred again and again and became more and more serious, so she went to the township hospital where she had delivered her daughter. After taking the medicine that the doctor prescribed to her, she didn't feel better and changed to the county hospital the next time. Even though she felt a little better after the second consultation, she didn't want to return there because of the doctor's bad attitude toward her and the very high price of treatment.

The third time her husband took her to the county FPSS and the result still was not good. Following other women's suggestions, she went to another township hospital to see a doctor who was believed to be good at gynecological treatment. The

treatment in this hospital was effective but the price was pretty high. " I spent more than 160 Yuan for that consultation. It is not affordable to see the doctor there," said she. She didn't want to go to the hospital any more because she thought that her disease could not be cured and she didn't want to waste her money.

She was not satisfied with the information given by all the above four facilities. She didn't know anything about her disease, not even the name of the disease from which she suffered. " I thought that the doctor would tell me everything about my disease. I didn't know what I should ask the doctor and I dare not to ask them. Especially in the county hospital, the doctor's attitude was too bad and made me feel so bad. She is a woman too, why she did not have any sympathy for us? I don't want to see the doctor there again."

Regarding her reasons for changing the facility at which she sought treatment, effectiveness of treatment was the most important factor. That is, she will seek services at another facility the next time if the treatment was not effective, even though the doctor told her about coming in for a follow-up visit. Cost of services also influenced her choice of facility for seeking care. In addition, she mentioned about over-prescription at the fourth consultation. " The doctor prescribed a lot of medicine to me. They cost my more than 160 Yuan. I thought that some of the medicine was not for my disease at all."

Case Four

Lee was 51 years old and illiterate. She lived in an extended family including mother-in law, two sons, a daughter-in-law, and two grandchildren. Her

husband had died two years ago. Her elder son worked in the County Steel Factory and had a salary of more than 1,000 Yuan per month. She sold vegetables on the street in the morning aside from her fieldwork and had a family income of more than 20,000 Yuan per year.

She had suffered from profuse white discharge with color and bad odor since she had received an IUD after the delivery of her younger son 20 years ago. She had gone to the county hospital years ago. There were many students being trained there while the doctor did a gynecological check-up on her. She felt very bad and did not want to go again. She could not remember what the doctor told her about the disease from which she suffered. After that, she went to the township hospital to see a traditional doctor every time the symptoms became serious. In the past year, she went to see the same doctor three times for her symptoms. After she took the traditional medicine, she felt better, but after a period of time, the symptoms would come again if she " had too much heat in the body". When this occurred she would see the doctor who would give her some traditional medicine " to clean away the heat from my body".

She felt that the traditional doctor was "very kind and patient, has good experience in treating women's problems", and that traditional medicine was cheaper than western medicine. So, she was more likely to see the traditional medicine practitioner for her problems. Regarding her disease, she didn't know anything except that " too much heat in the body" was the cause of her symptom, as the doctor had told her. She didn't think that her problem was serious because " you might have these problems if you are a woman".

As the symptom had troubled her for a very long time, she was planning to

try western medicine in the county MCH hospital because of the suggestion of other women. She wanted to find out more about her disease in there from the MCH hospital.

Case Five

Chen was 23 years old with 7 years of primary education. She lived in her parents' home with her parents, younger sister, her one-year old son and her husband, who had married into her parents' home because she did not have any brothers. Her husband and she went to the field with the other family members and had a family income of more than 10,000 Yuan per year.

She had suffered from profuse white discharge with color and bad odor for three years after she had married. She did not seek care until several months ago when the symptoms became too serious to bear. She went to a township hospital to see the doctor who was regarded as having good skills in the treatment of women's diseases. After she took the medicine prescribed by the doctor, she did not feel well. Next time, she went to see a traditional healer in a private clinic because " The modern medicine could not cure my problem, so I went to try traditional Chinese medicine." As the traditional medicine still was not effective, she did not want to see a doctor any more. She went to the drugstore to buy some medicine that she had heard about from a TV advertisement. Some of the medicine was effective, but the symptom still persisted.

"I spent more than 80 Yuan for the first consultation, but it was not even a little effective. Traditional medicine was not expensive, but it was still not effective and tasted bad. I don't know where I should go to see a doctor. It's better to buy drugs at the drugstore."

She also worried about contracting other infections from the hospital because the doctor might not use disposable tools and gloves during the gynecological check-up.

"There were many patients checked on that bed, so it must be very dirty. I feared getting other serious disease from there. And I did not know whether or not the doctor used disposable tools and gloves during the check-up. I don't want to receive a check-up again."

Regarding doctor's attitude toward her, she thought that both modern and traditional doctors showed a good attitude toward her, but it was not useful for her problem because both of them could not cure her problem.

She perceived that both doctors possessed good skills although she did not get effective treatment. She explained that: "Both doctors had good skills in the treatment of women's problems because many women had recovered from their diseases after consulting them. But, the efficacy also depends on the patients themselves. Some patients get a recovery and some do not. I may belong to the latter group."

Case Six

Zhao was 32 years old and had finished 6 years of primary school education. She lived with her farmer husband and their two sons. They had a low family income of 3,000 yuan per year.

She had suffered from bean dregs discharge and genital itching for ten days and went to see a doctor at village clinic the first time. The doctor prescribed some medicine to her and suggested she go to the county level hospital if the symptoms

continued. She did not pay for the medicine because "She (village doctor) did not know what disease I suffered from, and how to prescribe effective medicine to me." She went to the county MCH hospital after three days because the symptom became more serious and she felt very uncomfortable. She was told that she suffered from candidasis. After taking the medicine prescribed by the doctor, she felt that she had recovered from this disease and did not return there.

The doctor had asked her to revisit the next week, but she did not go because she thought that it was not necessary to return when the symptom had disappeared. She said: "I already recovered from the disease. It is a waste of my money if I returned. I don't want to do it because I don't have much money."

She felt that the doctor she consulted at the county MCH hospital had a good attitude toward her, the treatment was effective, and the cost of services was not expensive. She was satisfied with every thing except the information received. "Our rural women are so shy that we fear to ask doctor questions. The doctor spends too short of a time with us, did not tell us enough health information, so we don't know how to prevent such diseases. The doctor should tell us more things about our disease."

She mentioned that the village doctor lacked the experience to treat her problem and hoped this situation could be improved.

"Doctors here (village clinic) and I know each other very well. I always see them for my children's minor problem, but they don't have enough experience to treat women's diseases. They often suggest that women go to the hospitals in town because they can do nothing here except prescribe some medicine. It is of course very good if they can solve these problems because we can save time and money."

Case Seven

Lin was 29 years old and had 10 years of schooling. She lived with her husband and their 6 year old daughter. Besides doing fieldwork, she helped her husband in their noodle workshop and had a family income of 15,000 Yuan per year.

She had suffered from profuse white discharge with color and genital itching for several months. She cleaned her vulva by using "JIE ER YIN" (one kind of hygiene liquid made from traditional medicine techniques) bought from the drugstore, but she did not get better. She was too busy to seek care. Her first time seeking care was at the county traditional hospital when she went to the county town and passed by there. After taking the traditional Chinese medicine prescribed by the doctor, she did not feel better. As the symptoms became more serious, she went to the township hospital to see the doctor because it was near and she had a relative working there. After receiving a gynecological check-up and laboratorial test of her discharge, she was told that she suffered from trichomoniasis. She went there two times and recovered from the disease.

She thought that traditional medicine was not good for "women's problems" because the doctors do not do gynecological check-ups, so that they might not diagnose clearly, and the doctor in the traditional hospital was too young to have experience in the treatment of these problems. So she did not return to the traditional hospital even though the doctor displayed a good attitude and good behavior toward her. Because the treatment was ineffective, although the cost of the medicine was only 30 Yuan, she still felt this was expensive.

She was satisfied with the services provided in the township hospital. She

felt that the doctor was very kind and patient, treatment was very efficacious, and service was available at any time. Also, she received enough information from the doctor about the cause, and consequence of the disease, and how to prevent re-infection. Regarding the reason why she returned to the hospital, she said that,

" I was very busy at that time and did not want to return, but the doctor said that, after I took enough medicine, the symptom would disappear. But, it did not mean that I had recovered because the trichome might still exist in my vagina. It might result in the symptom once again. So, I returned there for the discharge test and was told I really had recovered."

Case Eight

Liu was 39 years old and had finished 12 years of high school education. She had two daughters and lived with her husband. She had a tailor shop on the street of the township town. She was no longer farming with her husband and was busy with her own business. Her elder daughter helped her in her shop and the younger daughter went to school. They had a family income of more than 10,000 Yuan per year.

She had suffered from profuse white discharge with color and odor for half a year. When the symptoms first occurred, she went to the drugstore near her shop to buy "JIE ER YIN", which she had heard about from a TV advertisement, and used it to wash her vulva, but she did not get better. After that, she was busy with her business and did not pay more attention to the symptoms. But the symptoms became more and more serious, as she said: "I had heavy discharge just like passing urine. It wetted my seat and crotch frequently, and also the smell was too bad. It made me feel

too embarrassed to face my clients. So, I went to see the doctor at the County MCH Hospital."

At the county MCH hospital, she received a gynecological check-up and discharge test and was told that she suffered from cervicitis. She received a laser treatment and was told that she should return there in three month. After a few days of profuse pink discharge, she felt much better than before and became busy with her work again. She did not return because she was too busy to go to the hispital.

"In the slack season, I am usually busier than in the busy season because people have more free time to go to the tailor's. I work almost more than 12 hours everyday. How can I find time to go to the hospital? I have to put it aside."

Regarding the quality of services she received, she felt very satisfied with the services. The doctor was so nice and gave her much information about her disease, and did not show any signs of impatience even though she asked many questions. She also thought that the doctor was very experienced and that the treatment was quickly efficacious. In addition, she mentioned the clean environment of the facility and 24 hours working time.

In terms of cost of services, she felt that the cost of the services she received was high (she spent more than one hundred Yuan), but not too high because she received a laser treatment and several kinds of medicine. She complained that it cost much money to seek care in the hospital, even for a minor problem. She thought that it is not affordable for rural people.

She would like to return to the hospital for her problem if she has some free time. She still wanted to go to the county MCH hospital, as she had done the first time, but she did not know when she could go.

4.4.2 Summary of Qualitative Study

The patterns of health services utilization of the eight cases are summarized in figure 4.1. The findings of this qualitative research are strong evidences that women's perception of quality of services and accessibility of health care play an important role in their continuity of health care services utilization.

Figure 4.1. Patterns of Health Services Utilization by Cases

Type of facility	Stages of seeking health services			
	Step 1	Step 2	Step 3	Step 4
County level hospital	① ⑧	③ ⑥	③	
Township level hospital	③ ⑤	⑦	⑦	③
Village clinics	② ⑥			
Traditional medicine	⑦ ④	⑤ ④	④	

Note: the number in the circle is the case number.

Peer Influence on Choice of Health Services

Peer influence is an important factor in choice of health services. This can be seen in case study two, three and five. Most of the respondents in FGDs choose a health care facility because of the suggestions of other women. Also, peer influence has an effect on continuity of health services utilization.

"The doctor asked me to return there. But others who had several experiences of seeking care told me that it is not necessary to go to hospital again if I felt better because the doctor will prescribe the same medicine to me and the problem cannot be cured at all. It is better to buy medicine in the drugstore. So, I do as they said."

Many women mention the regular gynecological check-ups organized by a committee of villagers and the village clinic and provided by doctors from the County MCH Hospital. They expected the check-ups because they could get services they needed in the community without making a difficult decision regarding where to seek health care services.

"The doctors (from county MCH hospital) came to our village clinic and provided gynecological check-ups for us. They always displayed a very good attitude toward us. Meanwhile, our women also have a chance to gather together and discuss our problems. If we have any questions, we are not afraid to ask the doctors, unlike when we see them at the hospital."

During this research, we had the strong feeling that the women had really expected the check-up for a long time. When the village doctor asked some women who were coming to the clinic to attend focus group discussions, at the beginning they came quickly because they thought the doctors would provide gynecological check-ups. Many women who were interviewed asked when they could receive a check-up at the village clinic. Until now, I still feel very regretful that I could not arrange check-ups in the research villages due to budget and time limitations.

Information Given to the Women

As health education has improved women's health care knowledge, most of them no longer dismissed the symptoms related RTIs, but their knowledge about RTIs is still poor. They think, " These problems (RTIs) cannot be cured absolutely. After a period of time, the symptom must occur again."

Women received poor information about their diseases from the doctor. In case studies, only two cases, case seven and eight, obtained the adequate information from the doctor. Case three even was not told the name of the disease from which she suffered.

Women's continuous utilization of health care services for their RTI problem was found to be influenced by information about why they need to return. According to case study seven, she was told clearly about why she needed to come for a follow-up visit. So, even though she thought that she had recovered from the disease and was very busy at that time, she still returned to the facility. According to case one, she did not obtain enough information about her disease and about follow-up visits. Although she was still troubled by the symptom, she did not return to the health care facility.

Some of women in FGDs heard about PID from the doctor, but most of them do not know about the consequences of RTIs. They perceive these symptoms to be small problems. "It is not a serious problem except it was uncomfortable." Some of them do not seek health services again once they feel better. As a woman said: "The doctor only said that I should return if it did not get well. So, I did not return because I had already recovered."

Doctor's Competence

With the advent of economic development in Tonghai County, the economic factor is no longer a major barrier for women seeking health services for their RTIs. Very few of them do not seek care due to poverty. On the contrary, most of them seek care at higher-level hospitals rather than village clinics, which they regard as the cheapest facilities.

"We are more likely to seek care in village clinics for general health problems. Because you can get services here in anytime services are needed. The doctors here are our neighbors and have a very good relationship with us. And also the medicine here is cheaper than at other hospitals. But the equipment is very simple and the doctors lack experience in the treatment of women's problems. So we usually go to other places."

According to the case studies, women chose health care facilities also depending on the competence of the doctor. Only one case, case six, sought care at a village clinic once because of convenience. Finally, she did not pay for the medicine prescribed by the village doctor because of the poor skills of the village doctor.

They perceive that there is a greater amount of technical equipment at the county hospital and link this to cost of services.

"There is good equipment at the county hospital. Our diseases can be diagnosed clearly. So, we are more likely to seek care there even though it is more expensive than other places."

From the women's perception, the most important aspect of quality of health services is the doctor's good skill in the treatment of diseases. Efficacy of treatment is an important reason guiding their choice of health services.

"The most important thing is that the doctor can make you feel better. If not, it means nothing even though the doctor shows the best attitude toward you. And if the doctor is good at the treatment of our diseases, although she/he treated you with a very bad attitude, we are still willing to go there."

Case three cited that she did not get well after the first treatment, and so she shifted to the county level facilities because of the high competence of the county level doctors. Following this visit she then changed to the township level also due to the doctor's good skills in the treatment of women's problem. According to case five, her first choice of facility was due to the doctor's good competence, which she had heard about from other women. Case two stated that although she experienced the doctor's negative attitude towards her, the patient, she was still willing to introduce other women to that facility because of the doctor's good skills.

Cost of Services

Cost of services still influences women's health seeking behavior. Most of women complain that the costs of services are pretty high recently. They feel that drugs in the hospital are expensive.

"You could not bargain in hospital as in other trades. You have to pay the money that the doctor charge you."

Women feel that the cost of services in private clinics and traditional medicine hospitals are more expensive than in other health facilities. This might influence them in terms of seeking services at private clinics and traditional medicine facilities. Case study two cited that she sought care at a private clinic as the first step treatment and felt that the cost of service was too expensive so she did not want to go

there again. According to case three, she spent 160 Yuan (about 20 US$) for the treatment and perceived that this treatment was unaffordable. Even though the treatment was efficacious, she still did not return.

Some women mention the practice of over-prescription in some facilities. They attribute this to the fact that doctors can make more profits from drugs.

"At present, the price of drugs is too expensive. So, doctors usually prescribe more medicine and make more profits. Sometimes, doctors prescribe some 'BU YAO' (which means tonic medicine) which are more expensive and ineffective to cure our diseases."

Case study three revealed that she felt that the doctor prescribed too much medicine for her and she thought that some of the medicine was not for her disease at all.

Women's perception of the cost of treatment depends partly on the outcome of treatment. As one woman mentioned that: "If it (the treatment) is effective, it is not expensive, and we feel it is expensive if the treatment is not efficacious." According to case study eight, she spent more than a hundred Yuan for the treatment and thought that it was not too expensive because the treatment was efficacious. On the contrary, case seven cited that the first treatment only cost her 30 Yuan, but she still felt this was expensive due to the ineffectiveness of the treatment.

Women in FGDs also perceive that the cost of drugs in drugstores is cheaper than in the health care facilities, so some of them are more likely to go to drugstores than to health care facilities.

Doctor's Attitude Toward Patients

Women are satisfied with the attitude of most of the doctors toward them. They think that most medical doctors have a good attitude; however, a few doctors display poor medical ethics and disrespectful behavior to patients.

"You might feel that seeking health care there was like asking alms of her. You would feel very bad and do not want to return there."

"As patients, you already feel unwell both physically and psychologically. You seek help there and get a dressing-down from the doctor. What do you think? It must make you feel very bad and you don't want to see her again."

In case study two, she had very strong feelings about the doctor's very negative attitude toward patients. As a result, she did not return even though she did not ask about a follow-up visit. Case three also perceived a bad attitude on the part of the doctor and did not return to the facility.

Generally, women do not care too much about the doctor's attitude toward them as compared with the outcome of treatment as stated above.

The Role of Traditional Medicine

Traditional medicine is not a major choice of women for their RTIs in this study. Most of the women are more likely to seek modern medicine than traditional medicine due to the quick efficacy and convenience of western medicine. "Western medicine can cure my problems quickly, and traditional medicine has effective treatment but it works very slowly and is inconvenient to take."

Case study four cited that she was more likely to use traditional medicine rather than western medicine. She believed in the etiology of the RTIs given by the traditional practitioner. According to case five, she did not continue to use modern

medicine but turned to traditional medicine instead because in general she had faith in traditional medicine.

Some women seek traditional medicine because they do not want to undergo a gynecological check-up. Most of them, though, as case seven think that the disease can be diagnosed clearly by a gynecological check-up, so they are willing to receive the check-up even though they sometimes feel shy.

Another factor influencing women's choice about seeking traditional medicine is the fact that the cost of traditional medicine has increased rapidly in past years.

"In the past, one dose of traditional medicine only cost 1 or 2 Yuan. But now, the cost has increased to several Yuan or more than ten Yuan. It has become too expensive to afford."

Waiting Time

Waiting time is not a major barrier to women's health care utilization in this study. The respondents usually do not care about waiting time.

"If you make the decision to see a doctor, you should wait there until you get service, no matter how long you have waited. It is impossible that you will get service as soon as you arrive there."

Women perceive that the waiting time was longer at high-level hospitals (big hospitals) and private clinics. Some of them think that the greater number of people waiting there meant that the treatment provided there might be more effective.

"People might be willing to wait there if the doctor has good skills in treatment. This means that the doctor has good skills so that there are many patient

waiting to see her/him. This of course happens in big hospitals, and also in some private clinics."

Women's Status in Household

When women in FGDs were asked whether they should secure the agreement of their husbands if they want to seek care, they laughed and denied it immediately.

"Here, women are major decision-makers in 80 percent of the households. Husbands are willing to let us make decisions in general household matters. Thus, they can have leisure. Of course, they can make decisions too if they want. Generally, we make decisions in some important things such as buying valuables after discussion with each other."

"We can make decisions by ourselves about where and when we seek health care services. Men (husbands) usually do not care about this, and sometimes they will press us to see the doctor."

The increase in family income has led to health care services becoming more affordable. Women do not think that someone in their village would not seek health services due to lack of money. On the other hand, women who are involved in economic activities outside of farming might be too busy to seek care or might delay seeking health care services, such as case seven and case eight.

CHARPTER V

DISCUSSION, CONCLUSION AND RECOMMENDATION

5.1 Discussions and Conclusion

Since 1980s' economic reform in China, the health care system in rural areas has improved rapidly. Rural people have gained access to all kinds of health care services. Along with this economic development, lack of money and transportation, the major barriers to women's health care services utilization, have become insignificant factors. However, some recent researches conducted in rural areas of China have indicated that the prevalence rates of RTIs in rural women is still at a very high level, and that the rate of seeking health care services among women with RTIs is very low (Fang, 1997; Guo, 1999; Gong, 1996, China MCH program, 1997). RTIs problem has been regarded as a worldwide threat in the medical, socio-cultural, psychosocial, and economic spheres. In developing countries, RTIs are regarded as the major issue that might affect the success of the family planning programs because most health complaints that occur subsequent to the adoption of contraceptive methods are attributed to family planning (Ruth, 1990).

Among the factors affecting women's health care services utilization, quality of services is receiving more and more attention from many researchers in the field of women's RTI problems. Therefore, the purpose of this study is to explore quality of health care services from the women's perception and its influence on

women's health services utilization for their symptoms related to RTIs. In the modified framework, which comes from Barbara's (1993) framework for women's health care services, two groups of variables, women's perceptions of quality of services and perceptions of accessibility of services, are hypothesized as the key factors influencing women's continuity of health care services utilization.

5.1.1 Health Care Services Utilization by Women with RTIs

A cross-sectional quantitative study complemented with qualitative methods, including in-depth interviews and focus group discussions, was conducted in four villages of Tonghai County, Yunnan Province, China, during November and December 1999. The target population was married women aged 15 to 60, who perceived at least one symptom related to RTIs and had at least one experience seeking care at any health care facility last 12 months. The total sample was 309, which was screened from 1,790 rural women in the study site.

It is found that the self-reported RTI symptoms in this study is 30.5 percent, which is lower than the percentage found in many studies (Gong, 1996; Fang, 1997a; Liu, 1995; Guo, 1999), but similar to the findings of another study in China (China Maternal and Child Health Care Program, 1997). Among women with RTI symptoms, the percentage of those seeking services is not low (56.6 percent), and even much higher than those found in rural Yunnan (Fang, 1997b) and Hebei (Guo, 1999), where the proportion of health care utilization is 20-30 and 18 percent respectively. The socio-economic development and health care services improvement in Tonghai County might contribute to this lower prevalence of RTIs symptoms and higher percentage of health care utilization. The findings might also relate to the purposive

sample selection of study villages.

Unfortunately, more than one-half of women (51.8 percent) seek services only once, even though this is also much higher than the rate found in another province (Guo, 1999), where the proportion of continuous users was only 26.5 percent, most of the respondents (71.9 percent) are still troubled by symptoms. The major reasons given by women for non-continuously using health care services are the perception that drugstores were more convenient, perceived recovery, felt better and thought it was not necessary to seek care again, and the belief that RTIs could not be cured.

Most of the women who continuously seek health care changed to another health care facility for the second visit. The reasons for changing facility include that treatment was inefficacy, services were too expensive, facility located too far from home, and inexperienced doctor. Women are more likely to seek modern medicine rather than traditional Chinese medicine due to the perceived rapid effects of modern medicine and the increasing expense of traditional medicine. The reasons for non-use of traditional Chinese medicine are explored in qualitative research. These reasons include perceived high price of traditional medicine, inconvenience of taking traditional medicine, and rapid efficacy of modern medicine.

In sum, RTIs still constitute a heavy burden of diseases even in more developed rural Yunnan. Although the proportion of health seeking among women with RTI symptoms is not low, half of them seek health care only once, and most of them are still troubled by symptoms related to RTIs. The non-continuity of health care utilization is mainly due to the quality of services and poor accessibility of health care.

5.1.2 Women's Perceptions of Health Care Services and Their Continuity of Health Care Utilization

The result from the logistic regression analysis shows that there are eight variables in the model. These variables are decision-making in general household matters, seeking services at village level clinics, perceived waiting time, perceived cost of services, perceived mechanisms to encourage continuity of health care, perceived technical competence, perceived doctor-patient information exchange, and perceived privacy. Women who can make decisions in general household matters, sought health services first at village level and private clinics, perceived more doctor-patient information exchange, perceived more privacy during consultation, perceived a lower cost of services, perceived a lower level of doctor's competence, perceived a short waiting time, and perceived more mechanisms to encourage continuity of care are more likely to use health care services continuously.

5.1.2.1 Women's Perceptions of Quality of Services

Regarding the quality of women's health care services, several lessons can be drawn from this study. Women are satisfied with some elements of quality of services including doctor's respectful and responsive behavior, and privacy during consultation, and doctor's technical competence. Quality of services at the study site is problematic in regards to some elements, especially concerning mechanisms to encourage continuity of care and information exchange between doctor and women. Most of the women did not obtain enough information from their doctor about their problem, including information about cause, consequence, prevention of their problem and side-effects of medicine. Women perceive a poor level of mechanisms to

encourage continuity of health services after consultation, which should influence their choice to return to the health care facility for continuous treatment.

Poor Mechanisms to encourage Continuity of Health Care

The most direct factor affecting women's continuity of health services is mechanisms to encourage continuity of services. Young et al. (1992) found that clients return visits were highly correlated with high quality of services and having a scheduled follow-up appointment for clients. In this study, it is also found that women who perceived more mechanisms for encouraging continuity of health services utilization are more than 3 times more likely than those women who perceived less mechanisms to use health care services continuously. Unfortunately, women's perceptions of mechanisms to encourage continuity of health care services are poor. The results show that most of the women were told that they needed to return, but half of them did not know why they needed to return. Only a few of them had medical records established by the doctor during at the time of the first consultation. According to the qualitative research, women explain that they did not return because most of the doctors talk about a follow-up visit just as a polite remark, so they do not think they must return there, especially when they feel better. It might be concluded that women's perception of mechanisms to encourage continuity of health care is the most important factors affecting their continuously health care utilization.

Poor Doctor-patient Information Exchange

In terms of doctor-patient information exchange, most of the women did not receive enough information from the doctors about their disease, including causes,

consequences, prevention of RTI problems, and whether the disease can be cured. This indicates that health care providers do not pay much attention to RTI problems, which possibly may be due to the fact that the health care services providers themselves are not confident about their knowledge of these matters (Ambar, 1997). A recent study conducted in rural Yunnan indicated that health providers at the township level and the village level health care facilities do not have enough skills to provide essential reproductive health services to local women (Fang, 1997).

Poor information given to women might result in their lack of knowledge about RTIs and an inaccurate perception of the severity of their problems. Their belief that RTIs cannot be cured also came partly from their experience after seeking health services. This experience might influence their utilization of health care services (Guo, 1999). It is also found that women who perceived a low level of doctor-patient information exchange tended to be in the group of non-continuous users. The results of logistic regression also show the positive relationship between women's perceptions of doctor-women information exchange and their continuity of health services utilization. Women who perceived a medium level of doctor-patient information exchange are nearly 3 times more likely than those who perceived a lower level of exchange to continuously use health services. Information exchange between doctor and patient should be given more attention in Tonghai County.

Perceived Privacy

Privacy is regarded as a more important factor affecting health seeking behavior of patients who suffered from diseases related to sexuality (Helen, et al., 1997). In this study, most of the women who sought health care at the different

facilities give a high score on privacy, but some of them did not tell the doctor their real problems because they fear that other persons might then find out about their problem. Nearly a quarter (23.3 percent) of the women who received a gynecological examination felt uncomfortable because the exam area was not separated. The result also shows that women's perceived privacy has a positive effect on their continuity of health services utilization. Women who perceived a high or medium level of privacy during consultation are more likely than those who perceived a low level of privacy to continuously seek health care. Although the relationship between perceived privacy and women's continuity of health services utilization is not strong, it should still be a concern of health personnel.

Doctor's Attitude toward Their Patients

Doctor's attitude toward their patient might influence patients' satisfaction with the services they received. Women might fear to discuss their problem with the doctor because the doctor might look down upon them (Bang, 1994). Imbalance of power between doctor and patient might lead to lack of information. This imbalance of power comes from the different background and social status between doctor and patient. Patients, especially women with a low level of education, are reluctant to ask question and if they do not understand an explanation, they are reluctant to say so (Agnes, 1991). In this study, the majority of women give a high score on doctor's respectful and responsive behavior. In other words, they are satisfied with the doctor's attitude toward them. Unfortunately, the results also show that the doctor often did not have a high regard for their patient. Most of the women did not receive enough information from their doctor. Although they perceive that the doctor answer their

questions carefully, in fact only a few of the women asked the doctor questions because they do not know what they should ask. Only half of the women perceived that the doctor spent enough time with them during consultation. They feel that the provider should increase the amount of time with their patient. The short amount of time spent with the patient may relate to poor information exchange between doctors and women.

The logistic regression analysis shows that the relationship between women's perception of doctor's respectful and responsive behavior and their continuity of health care services utilization is statistically significant. When women perceived a high level of doctor's respectful and responsive behavior, the probability of continuously using health care services is 2.89 times of those women who perceived a low level of doctor's behavior. And the poor information given to the women reflects that the doctors in the study area do not have a high regard for women. In addition, the qualitative research found that some women mentioned the very negative attitude of some doctors. This indicates that the doctors' attitude toward patients needs to be improved in some aspects.

Competence of the Doctor

Competence of the doctor is an important element in quality of services. As found in the qualitative research, most of the women regard the doctor's competence as having good skills to treat their problem. This means that doctor has good competence if she/he helps the patient get better. This is similar to the results of Evens's (1997) study. In this quantitative study, however, the influence of technical competence of the doctor on women's continuity of health services utilization is not

found according to the logistic regression analysis. One possible reason stems from the fact that women's perceived competence of the doctor directly influences their health seeking behavior. On the one hand, women seek health services continuously due to efficacy of treatment. On the other hand, they do not continue using health services because they feel better, which is also due to the efficacy of treatment. This means that overall the influence of women's perception of the doctor's competence may be offset. However, the doctor's competence is to be found to influence the women's decision to change health care facilities for the second consultation. Most (77.9 percent) of women changed health care facilities at second step of health seeking for RTIs, and nearly half (47.0 percent) of them sought health care services at a higher-level health care facility. And the major reason for changing facilities is inefficacy of the treatment at the first facility.

Women who sought services at the village level might perceive a lower level of doctor's competence, but they are still more likely to seek health services continuously due to the village doctor's suggestion. Therefore, it would not be correct to simple state that doctor's technical competence does not influence women's continuity of health care services utilization.

5.1.2.2 Women's Perceptions of Accessibility of Services and Their Continuity of Health Care Services Utilization

Women in this study perceive more access to health care services for their RTIs. However, there are still some problems in accessibility of health care services in this developed rural area of China. Women perceive a high cost of services, unsuitable working hours of the facility, long waiting time at high-level facilities, and poor

equipment in grass-roots facilities as major problems of accessibility of women's health care services. It can be concluded that when distance and transportation are no longer the major barriers to women's health care utilization, cost of services, availability of services and waiting time still remain as problems of women's access to health services.

High Cost of Services

High cost of services has been found to be the most important factor affecting women's health seeking behavior (Fang, 1997; Glenn, 1995; Inne, 1995; Cristina, 1992). In this study, nearly half (44.0 percent) of the women perceive a high cost of services. It is also found from the qualitative research that women are less likely than before to seek traditional Chinese medicine partly due to the rapidly increasing price of traditional medicine. However, it is not found that perceived cost of services has an effect on women's continuity of health care utilization. This result might be due to several reasons. The definition of the continuous users might cause this result. In this study, continuous users refer to those women who use any health care facilities more than one time. If the definition of the continuous users refers to those women who use the same health facilities more than one time, cost of services might be supposed to have influence on women's continuity of health care utilization. This is because most (77.9 percent) of women changed health facilities at second step of health seeking.

Another reason attributed to this result might due to the women's perception about cost. According to the qualitative research, many women complain about the high cost of services. On the other hand, they do not feel that the cost is high when the

treatment is efficacious. When the first treatment was inefficacious, women might perceive the cost of services to be high. Some of them sought treatment again because the first treatment did not work well. In other words, women's perception of cost of services might be influenced by other factors, such as family income, efficacy of treatment, and so on. The influence of cost on women's continuity of health care service utilization might be offset. Therefore, it would not be said that cost of services does not influence women's continuity of health services utilization.

Perceived Waiting Time

Long waiting time is one of the major barriers to health seeking behavior (Mary, 1997; Oskowitz, 1997). In this study, it is found that waiting time has a significant effect on women's continuity of health care services utilization. When women perceived a long waiting time to see the doctor, the probability of continuity of health care services utilization decreased to 0.32 times of those who perceived a short waiting time. This result is similar to the findings of other studies (Mary, 1994; John H., et al., 1997), but in this study, only a few of the women (12 percent) perceive the waiting time they experienced at the health care facilities to be long, i.e. the majority of the women perceive a short waiting time rather than long. Therefore, waiting time is not an important problem of health care services at this study site.

Availability of Female Doctor

Most of the women in this study also prefer a female doctor as their health provider, which is the same as in other studies. Availability of female doctors will encourage women's continuity of health care services utilization. In this study, 95.5

percent of women saw a female doctor for their first step of treatment and availability of female doctors was not a problem at the health care facilities, especially at the grass-roots level, where as it had been a problem in other studies (Guo, 1999; Qi, 1997). This result might be due to the purposive sampling technique of this study. The study was conducted in valley areas with high population density where female doctors are more available when compared with mountainous areas with low population density where female doctors are usually unavailable.

Availability of Services

Although transportation is not a problem in seeking health services at the study sites, one-third of the women in this study feel that the working hours of the health care facilities is not suitable for them. According to the qualitative research, women complain that after they finish housework and go to the health care facility in the later morning, sometimes there is no doctor at the facility and they have to wait there for a long time.

As mentioned before, with the economic reform in China since 1980, the health care facilities have shifted from the governmental budget to the market economy and have become responsible for their own profits and losses. Under this condition, most of the free services, including regular gynecological check-ups for rural women, have been cut (Li, 1997). Only a few of the women (about 5 percent) in rural areas can get this check-up regularly. Rural women in the research area hope that they can receive regular gynecological check-ups provided by high-level doctors, regardless of whether they have to pay for the check-up. Actually, this service is not only beneficial to rural women, who can receive what they want without making a

difficult decision regarding where to seek health services, but the health providers also can make a profit from this service.

According to many researches, availability of drugs is regarded as a major problem in quality of services which influenced people's health care services utilization (David, 1998; John S., 1995; Adetoro et al., 1991). In this study, it is not found that drugs were unavailable at the health care facilities attended by the women. This is also due to the economic development and health care system reform. Drug availability in rural areas has improved the health care utilization of local people and has improved the efficacy of treatment for common health problems. Nevertheless, it should also concern policy-makers that as the price of drugs has increased dramatically in China over the past years, health care facilities have obtained very high profits from drugs. This situation might lead to over-prescription in some health care facilities, which results in very expensive services. Over-prescription was mentioned by some of the women who were interviewed for the qualitative research. This might influence the health care utilization of rural people, especially among the poor population.

The Role of the Village Doctor

The results found that women who sought health care services first at village level or private clinics were 2.06 times more likely to continuously seek health care services. This finding is similar to the result of another research conducted in Nepal (Janardan, 1989). In that study, it is found that when people turn to modern health services, they do so because of their dissatisfaction with the previous folk or traditional help provided or because an indigenous health professional advised them

to seek modern hospital services.

All of the women who sought services first at village clinics turned to the high-level health care facilities at the time of second visit. This was due to the inefficacy of treatment at village clinics, a reason which was cited by many women, because of lack of experienced doctors in the treatment of RTIs and lack of essential equipment at village clinics. The other important reason which contributed to this result might be because of the suggestion of the village doctors. Undoubtedly, village clinics are the nearest health care resource for rural people and most of the women usually use the village clinics for minor health problem. The results also show that only a small proportion of the women (17.7 percent) sought health services for their RTIs first at village level clinics, a percentage which including some women who sought care first at private clinics. When women consult modern health services for their RTI problems, they tend to "jump over" the nearest facilities in order to seek care from those having a greater range of equipment and personnel (Develay, et al., 1996).

Although the village doctor cannot provide effective treatment for women's RTI problems, most of them give suggestions to the women about where they should go and about the type of problem from which they might be suffering. It is worth paying more attention to the fact that village doctors, who are chosen from the community, usually have good relations with women and spend more time with them during consultation. Therefore, they can be considered as a key resource for health education at the community level.

5.1.2.3 Other Factors Affecting Women's Continuity of Health Services Utilization

Some socio-demographic characteristics of respondents are found to influence their health care utilization and continuity of care in many studies (Okafor, 1983; Janardan, 1989; Chen, 1995; Huang, 1995; Jagdish, 1995; Ambar, 1997; Fang, 1997). In this study, all of the women's demographic characteristics were not found to have a relationship with women's continuity of health care services utilization. It is hard to say though that women's socio-demographic characteristics do not affect their continuity of health care utilization for their RTIs because this study is a small-scale research. Some factors might ought to be mentioned.

High Status in Household

It is found that two variables, whether women have rights to make decisions in general household matters and family type, have weak effect on their continuously use health care services. This indicates that women's status in the family might influence their health care services utilization. Women's status in the family might be due to the family type and women's economic activities. The result shows that the majority of women (80.6 percent) live in nuclear families, which might relate to the women's status in the family. Women who live in nuclear families with their husband and children might have more rights to make decisions in household matters than those who live in extended families where other family members, especially parents-in-law, will make decisions in general household matters. Also, women who live in nuclear families might be able to control the cash of the family more than those who live in extended families, enabling them to more easily make the decision to see the

doctor.

It is also found that nearly two-fifths (39.4 percent) of the women earned extra income outside tending the fields. Women who earn more money might have a higher status in the family. It should be considered, though, that women who earn more money have less of a tendency to continuously use health care. One possible explanation is that women who only do field work have to work hard in the busy season, such as at harvest season and seeding time, but they have more free time in the slack season. They can do other things that they want to do, including seeking health care for their own health problems, which might generally be regarded as minor problems. Women who have extra work outside field, though, such as small trade or tailoring might be as busy in the slack season as in the busy season. So, even though they earn more money than women who only do field work, they still place their own health problems in a less important position and are less likely to continuously seek health services for RTI symptoms. This tendency is in evidence in the qualitative research.

Family Income

Family income has been regarded as an important factor affecting health care services utilization in many researches conducted in various countries (Newbold, 1995; Keskimaki, 1995; Janardan, 1989; Chen, 1995; Huang, 1995). In this study, though, the relationship between women's continuity of health services utilization and their family income is not found. This might be due to the method of data collection. By using interview only, it is hard to obtain the actual level of family income because people are highly suspicious of questions relating to their income. In addition, not all

income is earned in cash; some producers, especially farmers, consume part of their product (Okafor, 1983). In China, especially in rural areas, people are not willing to talk to the strangers about their income. Sometimes income cannot be accurately estimated because respondents cannot remember the details of their income and expenditure over a long period of time. In this study, family income is obtained from the question in the questionnaire which asked women directly about family income, and the answer might not represent the real family income. So, it is difficult to say that family income does not influence women's continuity of health care services.

5.2 Recommendations

5.2.1 Recommendation for Quality of Women's Health Care Services

Based on the findings of this study, the quality of women's health care services in more developed rural areas of Yunnan needs to be significantly improved in several aspects, including information dissemination to the patient, enhancing the capacity of services providers, encouraging continuity of health care service, and so on. The accessibility of women's health care services and women's status also need to be improved in rural areas. The recommendations are made as follows.

Providing More Information to Women

Poor information given to women is a more important factor affecting their continuity of health care utilization. Needed information includes diagnosis, treatment, and other basic knowledge about RTIs, and an explanation of the reason for

a follow-up visit. The information given to patients should be significantly improved in order to improve the quality of health care services. Information giving may be more effective where there is greater rapport: doctors are likely to be more willing to provide explanations if they feel confident that the patient understands and if they have a high regard for the patient (Agnes, 1991). At first, health providers should regard women's RTI problems as an important matter and show concern about it. The health providers should actively provide enough information to women and not just passively answer the patients' questions. Secondly, increasing the amount of time providers spend with women, and allowing providers more time to explain conditions to patients, and also giving patients the chance to ask doctors about what they want to know would also improve quality of care. Thirdly, information can be provided to the women by using varied media, such as TV, radio, newspapers, and other instruments of propaganda. Women also can effectively obtain some information from blackboards or wall newspapers at the health care facilities.

Improving Health Education

As women who suffer from RTIs are more likely than men to be asymptomatic or to have only profuse white discharge, vulva itch, etc. which are not perceived as serious problems, they are more likely to take self-medication for these symptoms. It is very necessary to improve women's health care by means of health education. The goals of health education will be to improve not only the use of effective treatment for women's RTI problems but also to promote the ability to recognize the signs and symptoms that require visits to modern health care services. One study conducted in Beijing, China, found that a health education program, aimed

to improve women's knowledge about their disease and change their health behavior, had achieved a tangible result in reducing the prevalence of RTIs in female factory workers (Xiao, 1997).

As already mentioned above, village health care providers, at the grass-roots level of the health system, do not have as much training as the personnel of the already existing facilities at the township and the county level. Furthermore, the equipment at the village level was not as sophisticated as it was in high-level facilities. Women who seek health services will bypass the village level for their RTI problem and directly consult the high-level facilities. So, village doctors can be considered as a key resource for health education. Training of village doctors not only should emphasize basic curative care of RTIs, but also should be focused on health education matters, especially in the more developed rural areas where people have more access to health services. This can help women to overcome social barriers which might be underlying reasons for the low level of utilization of health services.

Enhancing Regular Gynecological Check-ups

As regular gynecological check-ups plays an important role in the diagnosis and treatment of women's RTI problems, programs to provide check-ups should be greatly enhanced in rural areas. Health policy makers and health care facilities, especially those facilities related to reproductive health care services, should think about how to make full use of the existing health care service resources to meet the needs of local women, and how to enhance regular gynecological check-ups for rural women on a mutually beneficial basis. Fee for services with a mobile team conducted in some counties of Yunnan and has obtained better economic benefits and social

effects.

Training Health Care Providers at the Grass-roots Level

Health care providers at the rural grassroots level usually lack sufficient knowledge about RTIs (Guo, 1999; Fang, 1997). When this is the case, the health providers cannot provide a high quality of reproductive health services, such as prescribing the appropriate treatment and drugs, and giving enough information to local rural women. In order to improve rural women's reproductive health services, the training of grass-roots health care providers becomes a key approach. The training should not only emphasize technical matters, but also teach counseling skills, which can improve communication and interpersonal relations between health providers and women. Moreover, as mentioned previously, village health providers should play an important role in health education about RTIs. The training also should include relevant health education matters.

Availability of female health care providers is found in this study, and this might relate to higher proportions of women seeking-care for RTIs and it also might related to continuity of care in Tonghai County, which seemed to have greater continuity of health care services utilization than other rural areas in other studies. Female health providers play more important role in women's health care services utilization for their RTIs. Training female grassroots health providers should be considered by health care planners in order to improve women's health care services in rural areas.

5.2.2 Recommendations for Further Research

This study explores the quality of women's health care services from the women's perception. Based on the previously stated findings and discussion, several limitations must be mentioned.

Methodological limitations

1. A modified conceptual framework for quality of services of women's health care was used in this study. Since quality of services is a complex set of interpersonal transactions between clients and services providers, one framework cannot cover every aspect of quality of services.

2. Health seeking behaviors are regarded as influenced by many socio-economic, psychological and biological factors. As many factors affect women's health seeking behavior, there will be correlations between women's perception of quality of services and other factors, such as socio-economic and psychological factors. But, it is impossible to explore every factor related to health care services utilization in one study, so, maybe some important factors influencing the relationship between women's perception of quality of services and their continuity of care are missed.

3. Purposive selection and cluster sampling techniques were used in this study. The results, then, cannot be generalized to other areas.

4. This study only explores women's views of quality of health care services without objective observation and analysis of medical records. This might lead to some biases in the evaluation of the quality of services provided in the study area because the women's perception would be influenced by factors such as

women's age, education, health status, and so on.

5. Self-reported symptoms were used to screen rural women with RTIs without clinical check-ups and laboratory test. Therefore, point prevalence of the RTIs in this study is only self-reported prevalence rate.

6. The result of this study found that some variables, such as doctor's competence, cost of services, had no influence on women's continuity of health care utilization. This might due to the definition of the continuous users in this study refers to those who use any health care facilities more than one time. If the definition of the continuous users refers to those who use the same health facilities more than one time, these variables might be supposed to have influence on women's continuity of health care utilization. This is because, the result of this study, women who perceived incompetence of the doctor, and high cost of the services changed health facilities at second step of health seeking.

Based on the findings and methodological limitations described above, the recommendations for further research on quality of women's health care services are proposed as follows:

First, this study was conducted in a more developed rural area. Most of the respondents live in valley areas of the county due to the purposive selection and cluster sampling techniques. This sample cannot represent the whole situation of women in the studied county and it is especially problematic for women in mountainous areas. In order to get the whole picture of women's health care services utilization for their RTIs, a larger sample research is needed to explore the perceptions of the quality of women's health care services and accessibility of services among

those women who live in different geographical surroundings and have different socio-economic backgrounds.

Second, since psychosocial and cultural factors are found to have influences on women's health care utilization, it is necessary to know what psychosocial and cultural factors other than quality of services influence women's continuity of health care utilization in rural Yunnan. This information will be more useful for developing health education programs to improve women's reproductive health.

Third, in order to get the whole picture of the quality of women's health care services at the study sites, situation research is needed to explore the actual quality of services. This situation research can include interviews with health providers other than women and observations at the health facilities.

Fourth, based on the findings of this study, research with a new or strengthened service delivery and health education program (intervention) can be done. By comparing the change in the quality of women's health care services and women's continuity of health services utilization before and after intervention, women's health care services should be improved in the study areas. The results can be used in health services planning and development of community health care facilities.

Fifth, cost of services was found to be high in some health facilities. Research on cost of services in different health care facilities should be done in order to understand whether the high cost of services is due to the price of the drug itself or due to over-prescription on the part of the doctor. Furthermore, the influence of out-of-pocket cost on women's health care utilization should be conducted.

Sixth, women's perception of quality of services and accessibility could be

analyzed according to different type of facilities in order to better understand the problems of these different facilities, and then improve quality of services at these facilities, for example, doctor's attitude toward patients, adequacy of medical equipment, and so on.

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APPENDIX

APPENDIX A

SCREENING QUESTIONNAIRE

1. Have you ever had these problems in the past year? (see next page)

Number	Name	Age	Village	Having Symptom		Note
				Yes	No	

Number_____

Name of respondent_____

Address: _____County _____ Township _____Village

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1. Have you ever had these problems in the past year?

Symptoms	Yes (How long did you get this symptom?)	No
Genital itching		
Profuse white discharge		
Discharge with color		
Discharge with odor		
Abdominal pain during intercourse.		
Vaginal bleeding during intercourse.		
Lower abdominal pain not caused by menstruation.		

2. Did you go to any health care facility after the symptom occurred?

1) Yes. 2) No. (go to question 4)

3. What did you take care these symptoms before you went to health facility?

1) Did nothing. 2) Took medicine bought from _____.

3) Did self-medication _____.

4. Why you did not go to see doctor?

1) No time. 2) Shy.

3) Not serious problem. 4) No money.

5) Others _____.

5. What did you do to the symptom?

1) Did nothing.

2) Took medicine bought from _____.

3) Did self-medication _____.

Date:

Interviewer:

APPENDIX B

QUESTIONNAIRE

Women's Perception of Quality of Services and Its Influence on Their Health Care Utilization for RTIs in Rural Yunnan

Number_____

Name of respondent_____

Address: _____County _____ Township _____Village

Section 1. History of health seeking

1. How many times have you ever been to the health care facility for the symptoms?

_____times.

2. What kind of health facility have you ever visited?

Sequence of time	Facility*	Why did you go there?
First time		
Second time		
Third time		
Fourth time		

Note: * health facility: 1) County hospital 2) County MCH hospital
3) Township hospital 4) Village clinic
5) Private clinic _____(who)

6) County family planning service station (FPSS)

7) Others: (detail)

3. (For woman who only has one time health seeking) Why did you only seek health care one time?

1) Got recover

2) Others: (detail)

Section 2. Perceived Quality of Services

Satisfaction with Doctor-Patient Information Exchange

2.1 During your first visiting the health facility, what is your feeling about the doctor you have met?

Items	Agree	Not sure	Disagree
Doctor listened to you carefully.			
Doctor asked about your history of disease.			
Doctor told you about what disease you have.			
Doctor explained about the cause of this disease.			
Doctor spent very short time with you.			
Doctor did not tell you what consequences might be caused by this disease.			
Doctor told you this disease could be cured.			
Doctor did not tell you how to prevent this disease and other gynecological problems.			

Perceived Privacy

2.2 During the contacting with doctor, what was your feeling about following?

Items	Agree	Not sure	Disagree
You don't will to open you low body to even doctor.			
You did not tell doctor your all problems because there are other persons there.			
You did not fell privacy because others may know you had such problems.			
You fear to tell your real symptom to doctor because you didn't feel privacy.			

1) For woman who took gynecological exam: did you have such felling as following:

Items	Agree	Not sure	Disagree
You felt uncomfortable because the exam area is not separated.			
You felt privacy because only doctor was in that room.			
You felt that it took very long time to do exam.			
You fear to take exam again.			
Doctor did exam skilled.			

2) For woman who did not take exam: why you did not take exam?

(1) Felt shy

(2) Doctor did not give

(3) Doctor did not have equipment to do exam.

(4) You did not want to take exam because:_____.

(5) Others:

Perceived Respectful and Responsive Behavior of Doctor

2.3 What are your feelings about the doctor?

Items	Agree	Not sure	Disagree
Doctor spoke with you politely.			
Doctor paid no attention when you talk about your symptoms.			
Doctor did not answer your question carefully.			
Doctor felt angry when you asked many questions.			
Doctor explained your disease understandable.			
You felt pleased because doctor treated you well.			
Doctor did other irrelative things during consulting.			
You felt that doctor looked down you because you are farmer.			

Perceived Mechanisms to Encourage Continuity of Care

2.4 After gave you prescription, did doctor do the following:

Items	Agree	Not sure	Disagree
Health provider told you whether or not you need return.			
Health provider told you why you need return.			
Health provider suggested you to go to another health facility.			
Doctor did not say anything about return.			
Doctor used a record book.			

Perceived Technical Competence of Doctor

2.5 During your visit, what were your feelings about doctor's competent?

Items	Agree	Not sure	Disagree
Doctor explain how to take the medicine clearly and understandable.			
Doctor is experienced in treatment of women's problems.			
You felt better after you took medicine prescribed by doctor.			
The medicine was not as good as somewhere.			
Doctor did not tell you about side effects of medicine.			

Section 3. Perceived Accessibility of Services

Perceived Convenience

3.1 Do you think that the facility is far from your home?

1) Yes 2) No.

3.2 Is it easy for you to get there?

1) Yes, because _____

2) No, because_____

3.3 Is open time for services in this facility suitable for you?

1) Yes. 2) No, because:

3.4 Do you think the process of receiving services at there is too complicated?

1) Yes. 2) No. 3) Don't know.

Perceived Availability of Services

3.5 What are your feelings of the health facility you visited?

Items	Agree	Not sure	Disagree
The health facility did not have doctor when you get there.			
There was not well equipment in there.			
The facility has all of drugs that doctor prescribed to you.			
You can get services there if you want see doctor in any time.			
Doctor told you buying some medicine from drugstore.			

Perceived Availability of Female Doctor

3.6 Was your doctor a female or male?

1) Female 2) Male

3.7 Do you think have opposite sex of doctor is a problem?

1) Yes 2) No

3) Why_____

Perceived Cost of Treatment

3.8 How much did you spend your money in the visit?

_____Yuan

3.9 Did you think the cost of services was expensive?

1) Yes. 2) No. 3) Don't know

3.10 Did you fell that the medicine in this facility was more expensive than in drug store?

1) Yes. 2) No. 3) Don't know

Perceived Waiting time

3.11 Did you feel that the waiting time you experienced at health care facility was too long?

1) Yes. 2) No. 3) Don't know

3.12 How long do you think the waiting time is suitable for you?

_____.

3.13 Do you want to seek care there for your own problems next time?

1) Yes 2) No

3.14 If your friends or relatives want seek care for such problems, do you suggest them to go to there?

1) Yes.

2) No.

3) Why?

3.15 Do you have any suggestions for improving the women's health care services?

Section 4. Social, Economic and Demographic Information

1. Birth date _____Year _____Month. Symbol____ Age ____Years

2. Ethnicity _____

3. Years of school _____Years.

4. Marital Status:

1) Married 2) Separated 3) Divorced 4) Widow 5) Unmarried

5. How many persons are there in your family? _____Persons

They are: (detail)

6. What is your annual income for the household? _____Yuan

7. Do you have available cash in your hand any time if you want to go to see the doctor?

1) Yes 2) No 3) Not sure

8. In your family, who make decision in daily matter?

1) Yourself 2) Your husband 3) Both 4) Others_____

9. Can you decide when and where you will see the doctor if you were ill?

1) Yes 2) No (who decide:_____)

3) Not sure _____

10. Did your work in field mainly?

1) Yes 2) No

11. Did you have other work that can earn money except farming?

1) Yes, it is:

2) No.

Interviewer:

Date:

Signature of check:

Date:

APPENDIX C

FOCUS GROUP DISCUSSIONS GUIGELINE

Health Seeking Behavior of Women:

1. What are common health problems of women in your village?
2. What is the cause of RTIs?
3. What is the adverse sequel of RTIs?
4. Do you know RTIs can be cure and prevent or not?
5. Where did you get this information?
6. What do you do when you have these problems?
7. Why do you do like this?
8. Do you fear to disclose your problems because stigmatization?
9. What kinds of self-treatment are used in this area?
10. Which one is more effective from your opinion or experience?
11. If the treatment was ineffective, what do you do?

Perceived the Quality of Health Care Services:

1. What kinds of health care facility you like to go? Why?
2. Which health facility is the best one from your opinion and why?

3. How many times do you think you need to see the doctor for the same problems?
4. Does health facility have female doctor to serve you?
5. Do you feel that it is a problem to see a male doctor? Why?
6. What kind of doctor you prefer?
7. What do you think about the doctors' attitude towards their patients in county (township, or village) hospital?
8. How about the doctors listen to you talking about your problem in county (township, or village) hospital?
9. How about the doctors give your information about your problems in county (township, or village) hospital?
10. What do you think doctors' behavior in county (township, or village) hospital?
11. How about the encourage care mechanisms in county (township, or village) hospital?
12. What do you think about doctors' competence in county (township, or village) hospital?

Perceived the Accessibility of Health Care Services:

1. How do you feel about the convenience to seek care?
2. How do you feel about the availability of services?
3. What are your feelings about waiting time?
4. What do you think about cost of treatment?
5. Are you satisfied with the services in health care facilities?

APPENDIX D

IN-DEPTH INTERVIEW GUIDELINE

1. What problems do you have?
2. When you get it?
3. How did you get it from your opinion?
4. Can you tell me in detail about what did you do after you get this symptom?
5. How many times you went to see the doctor for you RTIs treatment?
6. Where were you first choice for RTIs treatment?
7. Why did you choose this facility?
8. Can you describe the visit?
9. After your visit, were you satisfied with the services in general?
10. Do you think service of this facility is good or not? Why?
11. What do you feel about doctor's attitude toward you during that visit?
12. How did you feel about doctor (respectful and responsive)?
13. Did you understand what the doctor said to you about your disease?
14. How did you feel about the doctor's competence?
15. What is your feeling about the effective of treatment the doctor provided?
16. How did you feel about convenience to see doctor at this facility?
17. What are you feelings about the availability of services (doctor and drug)?
18. What are you feelings about the waiting time?
19. What do you think about the cost of services?

20. Did you prefer same sex of doctor, and why?
21. Did you return this facility for same problem, and why?
22. Is there anything you would like to change about your experience at this facility?

    If yes, what would you like to change?
23. Did you return to same facility? Why?
24. Why do you go to the facility for more than one time?
25. Why did you change facility?

APPENDIX E

SCORE TABLE

Perceived with Doctor-Patient Information Exchange

Items	Agree	Not sure	Disagree
Doctor listened to you carefully.	3	2	1
Doctor asked about your history of disease.	3	2	1
Doctor told you about what disease you have.	3	2	1
Doctor explained about the cause of this disease.	3	2	1
Doctor did not tell you what consequences might be caused by this disease.	1	2	3
Doctor told you this disease could be cured.	3	2	1
Doctor did not tell you how to prevent this disease and other gynecological problems.	1	2	3

Perceived Privacy

Items	Agree	Not sure	Disagree
You don't will to open you low body to even doctor.	1	2	3
You did not tell doctor your all problems because there are other persons there.	1	2	3
You did not fell privacy because others may know you had such problems.	1	2	3
You fear to tell your real symptom to doctor because you didn't feel privacy.	1	2	3

Perception on Gynecological Examination

Items	Agree	Not sure	Disagree
You felt uncomfortable because the exam area is not separated.	1	2	3
You felt privacy because only doctor was in that room.	3	2	1
You felt that it took very long time to do exam.	1	2	3
You fear to take exam again.	1	2	3
Doctor did exam skilled.	3	2	1

Perceived Respectful and Responsive Behavior of Doctor

Items	Agree	Not sure	Disagree
Doctor spoke with you politely.	3	2	1
Doctor paid no attention when you talk about your symptoms.	1	2	3
Doctor did not answer your question carefully.	1	2	3
Doctor felt angry when you asked many questions.	1	2	3
Doctor explained your disease understandable.	3	2	1
Doctor spent very short time with you.	1	2	3
Doctor did other irrelative things during consulting.	1	2	3
You felt that doctor looked down you because you are farmer.	1	2	3

Perceived Mechanisms to Encourage Continuity of Care

Items	Agree	Not sure	Disagree
Health provider told you whether or not you need return.	3	2	1
Health provider told you why you need return.	3	2	1
Health provider suggested you to go to another health facility.	3	2	1
Doctor used a record book.	3	2	1

Perceived Technical Competence

Items	Agree	Not sure	Disagree
Doctor explain how to take the medicine clearly and understandable.	3	2	1
Doctor is experienced in treatment of women's problems.	3	2	1
You felt better after you took medicine prescribed by doctor.	3	2	1
The medicine was not as good as somewhere.	1	2	3
Doctor did not tell you about side effects of medicine.	1	2	3

Perceived Accessibility of Services

Items	Yes	Not sure	No
Perceived convenience			
Do you think that the facility is far from your home?	2		1
Is it easy for you to get there?	1		2
Is open time for services in this facility suitable for you?	2		1
Do you think the process of receiving services at there is too complicated?	2		1
Perceived availability of female doctor			
Was your doctor a female?	1		2
Perceived availability of services			
The health facility did not have doctor when you get there.	1	2	3
There was not well equipment in there.	1	2	3
The facility has all of drugs that doctor prescribed to you.	3	2	1
You can get services there if you want see doctor in any time.	3	2	1
Doctor told you buying some medicine from drugstore.	1	2	3
Perceived cost of treatment			
Did you think the cost of services was expensive?	3	2	1
Did you fell that the medicine in this facility was more expensive than in drug store?	3	2	1
Perceived waiting time			
Did you feel that the waiting time you experienced at health care facility was too long?	3	2	1

APPENDIX F

Correlation Coefficients among Independent Variables (N = 264)

Variables	Kendall Correlation Coefficients						
	X6	Q2	Q3	Q5	Q6	Q8	Q10
Q2	0.0726						
Q3	-0.0728	-0.1853					
Q5	0.1269*	0.3498*	-0.149*				
Q6	0.0023	0.2997*	-0.0583	0.1956*			
Q8	-0.0311	-0.118*	0.1150*	-0.0775	-0.1021*		
Q10	-0.0053	0.0462	0.0984	0.0047	-0.0243	-0.0969	
T23	0.0760	-0.0389	-0.0424	-0.0378	-0.0434	-0.165*	0.187*

Note: * P <0.05.

X6: Decision-making in general household matters

Q2: Perceived doctor-patient information exchange

Q3: Perceived privacy

Q5: Perceived mechanisms to encourage continuity of services

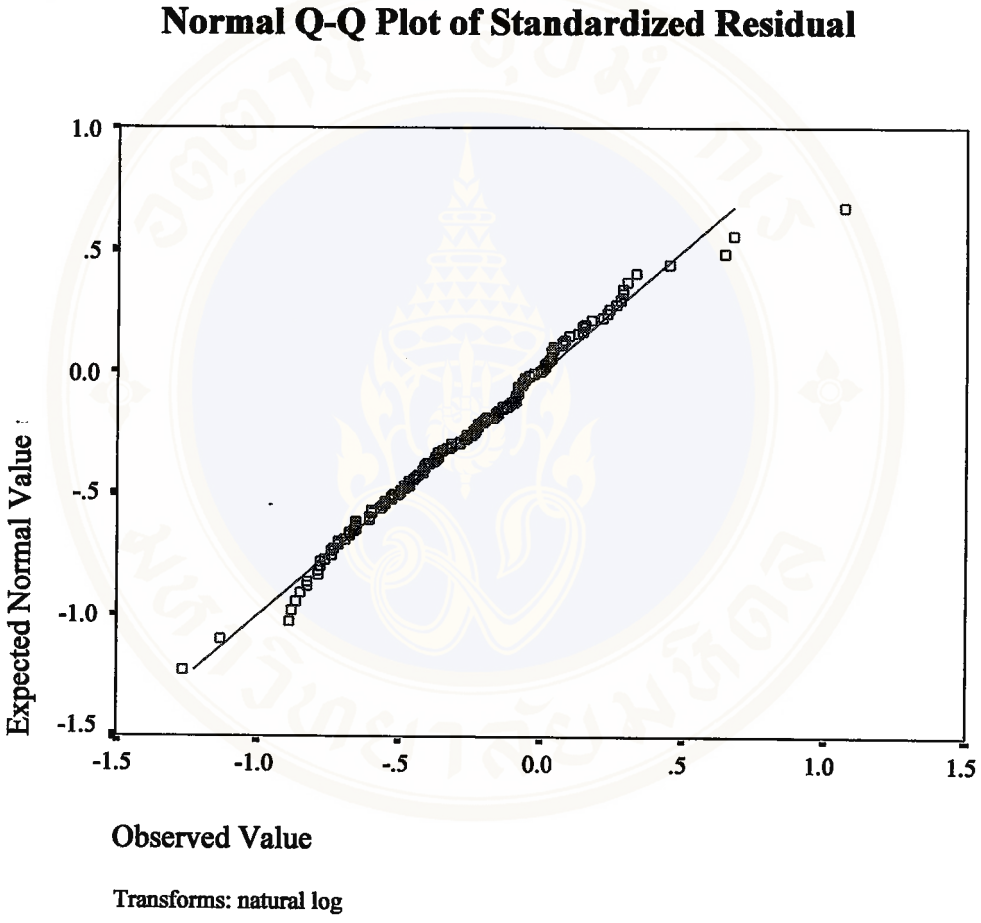
Q6: Perceived technical competence of doctor

Q8: Perceived cost of services

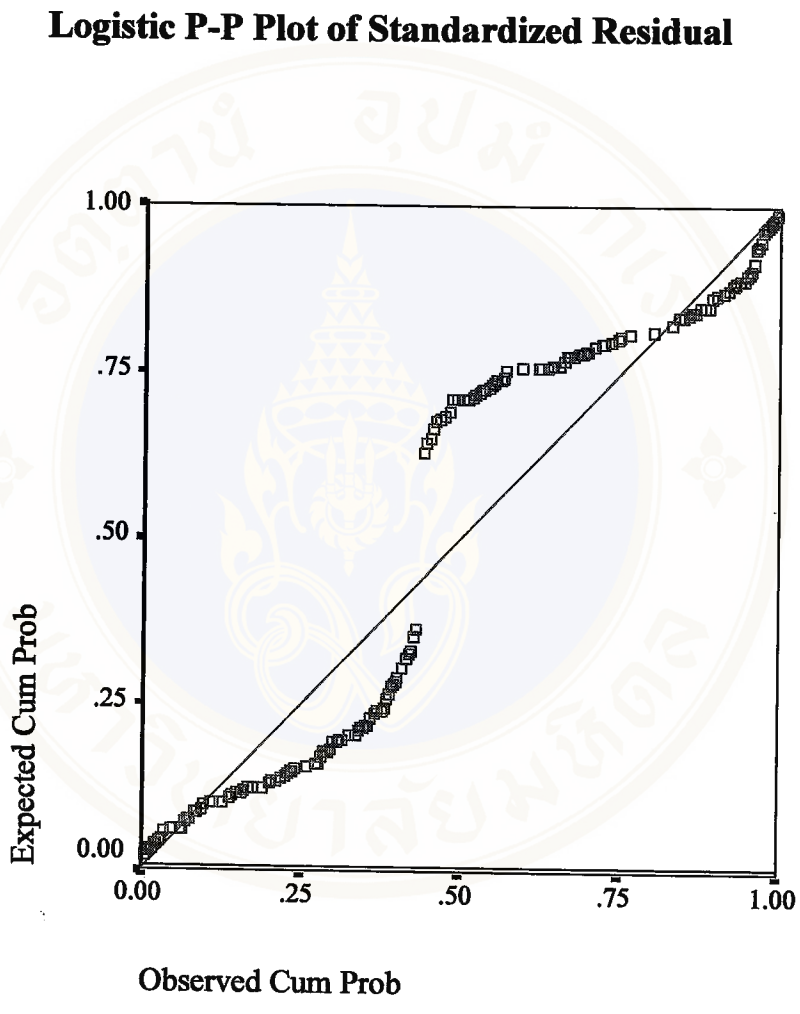
Q10: Perceived waiting time

T23: Seeking care in village level clinics at first time

APPENDIX G



APPENDIX H



BIOGRAPHY

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