**PRIORITY AREA 5: REPRODUCTIVE HEALTH**

**Topics**

*The Impact of Socio-Cultural Factors on Maternal and Child Health Care in Nepalese Society* .......................................................... 3

*An Opinionnaire Survey of High School Teachers regarding the Inclusion of Sex Education and Reproductive Health in Secondary School Curriculum* ...... 5

*Comparative Study on Incidence of Puerperal Sepsis in Hospital and Home Delivery at Bhaktapur District* .......................................................... 7

*Socio-Cultural Characteristics of Permanent Family Planning Users of Marginalized Population: A Sociological Perspective* .......................... 9

*A Community Based Study on "Prevalence and Risk Factors of Breast Lump among Reproductive Aged Women of Jalpapur V.D.C. of Sunsari District, 2003"* .......................................................... 11

*Knowledge, Attitude and Practice of Family Planning Methods among Muslim Community at Dhakdhai VDC Nepal* ........................................ 13

*Research on Adolescent Reproductive Health in Six High Schools in Kailali*.. 14

*A Study on Safe Motherhood: Causes behind Uterus Prolapse amongst Women in 3 VDCs of Dadeldhura District* .......................................................... 16

*A Study on the Factors Associated with Affecting Unmet Need for Family Planning among Married Women of Reproductive Age in Birendranagar Municipality of Surkhet District* .......................................................... 18

*Research on Reproductive Tract Infection (STIs) among Women of Reproductive Age in Dhangadhi Municipality, Kailali* ........................................ 19
Report on Quality of Reproductive Health Service provided at PHCCs in Nepal

Quality of Reproductive Health Service at Primary Health Care Level with Special Reference to Client's Satisfaction in Nepal

Reproductive and Sexual Health Problems and Its Coping Mechanism among Adolescents and Youth with Disability of Bardia

Adolescent Girls Reproductive Health Situation in Nepal: A Case Study from Mahottari District

Safe Motherhood Practices among Muslim Women in Taple VDC of Gorkha District

Report on Status of Skilled Birth Attendants (SBAs) in Nepal

Uterine Prolapse in Doti District of Nepal

Breast and Cervical Cancer Risk Factors and Screening Awareness among Nurses Working in Government Sectors in Eastern Region of Nepal

Current State of Management of Severe Pre-Eclampsia and Eclampsia using Magnesium Sulphate in Different Health Facilities of Mid Western Development Region

Progesterone for Prevention of Recurrent Preterm Labor after Threatened Preterm Labor - A Randomized Controlled Trial

Women’s sexual reproductive health (SRH) practices in Southern Lalitpur

Study of Unmet Need for Family Planning among Married Women of Reproductive Age in a District of Eastern Nepal

Antenatal Care (ANC) & Birth Preparedness Practices (BPP) among Mothers in Mahottari, District, Nepal

Menopausal Health Status of Women of Kapilvastu District: Assessment of Menopausal Symptoms Using Menopause Rating Scale

Budhathoki CB, Dahal GP

Background
Women health is not a medical issue alone, such factors as education, nutrition, sanitation, water, access to economic resources and the power to make decision are very important. Health of infant is also connected with maternal health and nutrition during the pregnancy and after delivery. Poor status of health and nutrition is further compounded by lack of appropriate care and socio-cultural beliefs. Therefore this study was carried out with the objective of examining the impact of socio-cultural factors on maternal and child health care in Nepalese society.

Methods
A descriptive study was carried out in Dhullubaskot VDC of Baglung district among 120 sample households selected by stratified sampling technique. The study was mainly based on primary data collected using questionnaire-interview, informal discussion and observation. The collected data were edited and coded carefully. The coded data were entered into the dBASE program and analyzed using SPSS/PC+ programme.

Results
More than 40 percent of people made first choice of treatment as consulting the traditional healer-Dhami/Jhakri. The majority of women faced some kinds of health problems during pregnancy but only few of them visited for medical checkup. About 80 percent of delivery was carried out in the dark room over dirty mattress. More than 60 percent of people cut the umbilical cord without sterilizing the tools. Feeding colostrums was found to be poor. Only 17.4 percent of mothers had the knowledge of preparing Sarbottom Pitho. With regard to awareness of immunization, 7.6 percent of sample women were
aware of at least one disease which could be controlled by immunization. Likewise about 84.8 of total respondents have been informed of Jeevan Jal but only 60.7 percent had ever used Jeevan Jal in diarrhoeal episodes. Diarrhoea and worm infestation were quite common diseases among the children of under five years. Least number of people consulted the health post while children got some kinds of health problems. There is an interesting cultural practice that people smear the millet flour over the body of the child affected with measles and feed the soup prepared from white ant's hives as medicine. Among the cultural groups, the coverage of the immunization was low in the children of Kami, Damai and Sarkee community. Nutritional status of Magar children was better than that of Brahmin and Kami, Damai and Sarkee children. Likewise, nutritional status is significantly associated with social class and type of family.

**Conclusions**

Antenatal/postnatal clinic must be established at the village health post and sub-health post with essential facilities and manpower. Traditional healers should be trained relating to modern health care and utilize them to health development.

**Keywords:** impact; maternal and child health; socio-cultural factors.
An Opinionnaire Survey of High School Teachers regarding the
Inclusion of Sex Education and Reproductive Health in Secondary
School Curriculum (1997)

Gautam K

1Department of Health and Physical Education, Faculty of Education, Tribhuwan University, Kirtipur, Kathmandu, Nepal.

Background
In the context of Nepal, adolescents lack access to reproductive health information. Most of them get their first information about sexuality from their peer whose views are often inaccurate and based on rumor. Nowadays sexual activities have become more acceptable among youth and the society in general. Pre-marital sex has given rise to a range of alarming problems. Teenage pregnancies pose many problems in the society. Up to a certain extent, sexual permissiveness is encouraged by sexual message conveyed through the mass media. The school could play praiseworthy role and the teacher could be the best educators to educate their students about the human sexuality. They can help to change the pre-occupied values and fear of opponents of sex education and reproductive health with logical arguments. The present study was therefore carried out to identify the attitudes and opinions of secondary school teachers regarding the inclusion of sex education and reproductive health in secondary school curriculum.

Methods
The study was carried out in Kathmandu district. Twenty public and private schools were chosen purposively. From each school, five teachers were selected from the secondary level using random method. The questionnaire schedule was used as a tool of data collection. Simple numerical treatment like number and percentage were used for data analysis and interpretation.

**Results**

Majority of the high school teachers showed their good attitude towards the necessity of curriculum about sex education and reproductive health. Majority of respondents were found hopeful with the aforesaid curriculum to overcome narrow thinking about sexuality, to get safe from sexually transmitted diseases and the problems of early pregnancies. Majority of the teachers opinioned in favor of the curriculum. However 35% teachers ignored the same for some reasons. Regarding the content to be placed in the curriculum, human sexuality, sexually transmitted diseases, anatomy and physiology of reproductive organs, care of reproductive organs etc were suggested by the teachers. Majority of teachers suggested both text books and audio-visual materials are to be selected to make teaching learning activities more effective.

**Conclusions**

Sex education and reproductive health as on one of the subject area should be introduced in the Nepalese society in the Nepalese secondary schools within the context of traditional beliefs, values and behavioral and educational norms of the society.

**Keywords:** high school teachers; inclusion; sex education and reproductive health.
Comparative Study on Incidence of Puerperal Sepsis in Hospital and Home Delivery at Bhaktapur District (1997)

Thapa U¹
¹Community Health Awareness Center, Bhaktapur, Nepal.

Background
Incidence of puerperal sepsis is expected to be very high in Nepal because of women do not have safe place to deliver their babies. In Nepal, only 6-10% of women get facility to give birth to their babies in the hospital which is considered to be the safe place for delivery. Delivery in other places is considered unsafe because most of the deliveries are conducted by unqualified persons such as sudenies/mother-in-laws. They are experienced but not scientifically trained to attend the deliveries. Due to lack of knowledge on cleanliness and hygiene of mother and the baby, the delivery may not be safe. Consequences of this will fall on the mother and new born baby. Thus majority of cases suffer from puerperal sepsis and often resulted to death. This study therefore was conducted to identify the incidence of puerperal sepsis in hospital and home delivery and to find out the contributing factors.
Methods
This study was carried out at Bhaktapur hospital and rural community of the Bhaktapur district. The targeted population was the postnatal mothers within 15 days of delivery. A total of 500 respondents were included in the study. Semi-structured questionnaire was designed to collect information from the respondents. In order to obtain the sign and symptoms of puerperal sepsis, certain clinical instruments like clinical thermometer and measuring tape were used to measure involution of uterus.

Results
The incidence of sepsis showed higher in percentage in home delivery (8%) and comparatively lower in hospital delivery (6.5%). Majority of women with developed sepsis were in age group of 20-24 years in both group. Evidence of sepsis was common in primiparous in hospital and multiparous women in home delivery. As the duration of labour becomes longer the evidence of sepsis showed higher in percentage in both home and hospital delivery cases. In terms of delivery attendants by the persons in home delivery, the study showed that the deliveries attended by untrained person were more likely to develop sepsis than the delivery attended by the trained person.

Conclusions
Puerperal sepsis study should be conducted at remote areas.

Keywords: home delivery; hospital delivery; incidence; postnatal mothers; puerperal sepsis.


Background
The contraceptive prevalence rate (CPR) in Nepal is about 30%. Majority of the contraceptive prevalence rate is contributed by permanent method users. This has a long term impact on the program as unsatisfied clients may create a long term barrier for acceptance of barrier among new users. Besides, the low rate of temporary users might have effect on the permanent method users. Many scholars, demographers and various national and international researchers unanimously agree that Nepal's birth rate is very high yet there has been very little micro level study to assess the exact birth rate and the effectiveness of family planning in different communities of rural areas. This study therefore tries to find out the attitude and socio-cultural characteristics of both male and famle permanent family planning users in different ethnic and lower caste groups of Jhapa district of Nepal.

Methods
The proposed study was descriptive in nature. Both quantitative and qualitative research methods were used to carry out research. Jhapa district
from eastern terai was selected for the study. Three VDCs namely Topgachhi, Dhaijan and Chandragadi, two municipalities namely Damak and Mechinagar were selected purposively for the study. 100 users of permanent family planning methods were selected. Tools and techniques such as semi-structured questionnaire, unstructured interview schedule, case study and key informant interview were developed to elicit both quantitative and qualitative information. All the information and data were recorded for computer analysis.

Results
The study revealed that 53% of the respondents have used permanent family planning methods at Bhadrapur hospital which is situated at a distance of 37.5 km from the residence of Dhimal and Satar. Some respondents have used this method in India at a distance of 75 km from their residence. This indicates that people prefer to use permanent family planning method at the reliable and safe place regardless of distance. The use of permanent family planning methods was found to be high among the female respondents. The rate of the users of family planning is affected by many socio-cultural factors, preference of son was found to be the most important factors. All the respondents in the study area used this method only after having 3 to 4 living sons.

Conclusions
There was lack of availability of permanent family planning method in the vicinity of the residential places of the respondents. They had to go far distance places to use permanent method of family planning. Most of the respondents had complained about the effect of operation on their health situation.

Keywords: marginalized population; permanent family planning methods; socio-cultural characteristics; users.

Shah T¹
¹College of Nursing, B.P.Koirala Institute of Health Sciences, Dharan, Nepal

Background
Breast lump is localized swelling, protuberance or mass in the breast. It is one of the prime indicators of breast disorders. A lump might be a cyst, a benign tumor or a malignancy. The majority of these lumps will be nothing to worry about; it is only a small proportion of breast lumps that are malignant i.e. around 20-30%. Breast cancer is leading cancer among women worldwide, with more than 540,000 new cases occurring each year. Over 40% of these cases are in the developing countries. The incidence of breast cancer is rising all over the world. In south Asia there is significant increase in incidence of breast cancer among the women of reproductive age group.

Methods
It was a quantitative research method and descriptive cross-sectional study exploratory in nature. The setting of study was Jalpapur VDC of Sunsari District, Eastern Nepal. Target population of the study was all women 15-49 years of age, irrespective of their education, occupation, income, religion, marital status, residing at Jalpapur VDC. Interview schedule and breast examination checklist was prepared by the investigators and consulted with experts of concerned departments. Risk assessment tool given by cancer line U.K. was adopted to identify the associated risk factors of breast cancer in this study. Training on technique of physical examination of breast was given to the co-workers by the investigators. The data was collected in Jalpapur VDC, during the month of September & October 2003. Using descriptive and inferential statistics, collected data were analyzed and interpreted.

Results
Out of 541 respondents, 21 (3.9%) had breast lumps. Of these 21 respondents, 80.9% had single lumps. Out of a total of 25 lumps, 44% cases of lumps were in upper inner quadrants of the breasts. In 96% cases the lumps were round to oval in shape. In 60% cases, of lumps were soft in consistency. In 68% cases the lumps were tender. Total 58.3% cases of lumps were of the size of 2 cms. There was no significant relation of age with breast lump.

Conclusions
There is a need for launching an intensive screening programme for evaluation of breast lump, an information, education and communication campaign and also a need for follow up action for the detection of the breast lump, as found in present study.

Keywords: breast cancer; breast lump; prevalence; reproductive aged women; risk factors.
Knowledge, Attitude and Practice of Family Planning Methods among Muslim Community at Dhakdhai VDC Nepal (2003)

Ghimire S¹

¹Institute of Medicine Nursing Campus, Maharajgunj, Kathmandu, Nepal.

Background
It is believed that due to religious belief, Muslims were far behind in family planning practice but the reality would be different. Therefore, this research was intended to find out the knowledge, attitude and practice of family planning methods among Muslim community in Dhakdhai VDC of Rupandehi district.

Methods
This was a descriptive study carried out among 50 Muslim women of reproductive age having at least one child in Dhakdhai VDC of Rupandehi district. Samples were selected purposively. Semi-structured questionnaire was used to collect information. The collected data were analyzed manually in terms of frequency, percentages, proportion and other analytical methods of statistics.

**Results**
The study revealed that 74% respondents were illiterate. 92% women had knowledge of family planning methods. But all the respondents told that using family planning methods is against their religion especially permanent family planning methods. Only 32% respondents were using family planning methods. Women between 15-29 had 1-4 children and 30-49 years women had 4-8 children.

**Conclusions**
Literacy rate, awareness and utilization of family planning methods among Muslim women is low. Therefore education status of the Muslim women should be improved and health education programs should be conducted on family planning methods.

**Keywords:** attitude; family planning methods; knowledge; Muslim community; practice.

---

**Research on Adolescent Reproductive Health in Six High Schools in Kailali (2004)**

Centre for Integrated Community Development, Dhangadi, Kailali, Nepal

**Background**
Kailali, in the Far Western Development Region, is one of the poorest and underdeveloped areas in Nepal. The area is mainly rural, with the majority of people relying on subsistence farming. Like other areas of Nepal, the adolescent population makes up a large percentage of the area (making up more than 1/5 of the total population). Due to the high illiteracy rates, early
marriage and childbearing ages, cultural conservativeness and neglected undevelopment and poverty exist in the Far West. The overall purpose of this study is to provide baseline information about the level knowledge, attitude and practice (KAP) among adolescent students on the topics and issues related to Reproductive Health and Adolescent Reproductive Health.

**Methods**
The 6 High Schools were selected to give the greatest cross-section of students in the District of Kailali. Thus 3 urban and 3 rural schools were chosen and different levels of schools (poor government, moderate government, private) were selected. The data was collected by responses from a questionnaire developed and written by the CICD research team. This questionnaire was designed to cover all components of RH and ARH. The research team themselves did the research data analysis. Quantitative data was translated and compared in both English and Nepali to ascertain the best understanding of the answer. The answers were counted and recorded by school, categories were developed by subject/answer and numbers were selected by category. Quantitative answers were also broken down by school, answers counted and recorded in tables designed by Center for Integrated Community Development, and percentages were also recorded. Percentages were calculated by the total number of students in most cases, in others by number of respondents. In all types of data, answers were recorded and tabulated to easily discover if there was any discrepancy between rural/urban/private/government schools.

**Results**
Adolescents in this area do not seem to be as acquainted with sex education on one hand, nor do they seem to possess adequate knowledge about reproductive health; even their awareness toward high priority campaigns with extensive media exposure such as HIV/AIDS is far lower than expected. For example, a majority of students could not differentiate between HIV positive and HIV negative. With regard to their attitude toward sex, it was found that often they took it as a means of physical pleasure no matter how catastrophic the results might be after unsafe practices. This can be
illustrated by the 25% of students who reasoned that they had to make an agreement for sex for it to bring pleasure.

**Conclusions**
The adolescents lack necessary access to information about safe sex, family planning, standards of reproductive health as essential to their knowledge for building careers (and staying in school), safe mothering, and appropriate attitudes toward sex.

**Keywords:** adolescents; high schools; reproductive health; rural; urban.
The Far Western Development Region of Nepal is the remotest region of the country with low level of development in terms of social, infrastructure, health and economy. The traditional socio-cultural value system creates a disabling environment for the progress and development of girls and women. As a result the life of women and girls is very difficult. The districts of this region are reported as having the lowest rank in the gender discrimination indicators. The main objective of this study was to contribute to the improvement of the reproductive health of women of the Far Western Region of Nepal, with special focus on uterus prolapse.

**Methods**

A free health camp was organized on uterine prolapse. Pamphlets were printed and distributed through the volunteers to provide public information on the free health camp in the target areas. An orientation was organized for the health workers, nurses, researchers and programme motivators who were to be involved in research camp. Orientation and inputs on the questionnaire was provided to get a clear understanding of the forms. Only 150 patients out of 260 were interviewed. All filled questionnaires were brought to Kathmandu, the answers were tabulated and the key findings were analyzed.

**Results**

A total of 588 women attended the two-day health camp cum research programme. Out of the total 260 women were found to be patients of uterine prolapsed. Among the 150 interviewed women, 53% were from Jogbuda VDC, 35% from Sirsa VDC and 12% from Alital VDC. The causes identified by the patients who took part in this study were: pregnancy and childbirth (29% reported giving birth within 5 hours), raised intra-abdominal pressure, menopause, fibroid tumors, congenital factors like collagen defect, race. The women who reported about their cases in this study displayed all the classic symptoms of uterine prolapse.

**Conclusions**
There has been/is no serious attempt on the part of the government health service delivery system to even remotely address the problem of uterine prolapse.

**Keywords:** causes; health camp; uterine prolapse; women.
A Study on the Factors Associated with Affecting Unmet Need for Family Planning among Married Women of Reproductive Age in Birendranagar Municipality of Surkhet District (2005)

Pokhrel GS, Mahato BL

Background
Family planning services are designed to reduce maternal and neonatal mortality to enhance child survival and to bring about a balance in population growth and socio-economic development. This study aims to find extent of unmet need among the mother of reproductive age and seeks to find out the factors associated with unmet need of family planning in Birendranagar municipality of Surkhet district.

Methods
It was a non-experimental descriptive study. Out of 12 wards of the Birendranagar municipality of Surkhet district, 3 wards were selected by applying lottery method. Out of 1420 households, 399 samples of married women of reproductive age were selected by systematic random sampling method.

Results
The extent of unmet need among married women of reproductive age was 19 percent. Among them, 10.5 percent wished to use terminal method and the remaining for spacing method. Majority of the mothers belonged to the age group 20-29 years (43 percent), had 3 or more children (47 percent) and were illiterate (66 percent). The main reasons for unmet need were disapproval of husband (31 percent), rumors regarding contraceptive (26 percent), side effects (20 percent), no proper counseling (8 percent), time constraints (7 percent) and others including absence of husband (9 percent).

Conclusions
Improving communication (interpersonal communication), women empowerment and gender equity programs focusing on women as well as men will reduce unmet need.

Keywords: contraceptive device; data interpretation; family planning; female; fertility; human; sampling studies; statistical; unmet need.
Research on Reproductive Tract Infection (STIs) among Women of Reproductive Age in Dhangadhi Municipality, Kailali (2005)

K.C. M¹, Dangol BK¹

¹Center for Integrated Community Development, Dhangadi, Kailali. Nepal.

Background
The incidence of sexually transmitted infection continues to increase worldwide and infection is becoming more severe. Sexually transmitted diseases also facilitate the development of HIV infection and AIDS. Thus the scope of the health problems they create is increasing. This study was done to find out the cause of reproductive tract infection and prevalence in women of reproductive age.

Methods
This was a community based descriptive analytical study conducted from 15 Magh to 15 Falgun 2061. Sample size was 312 women and cluster random sampling done in ward number 1, 2, 5, 6 and 13 of Dhangadi municipality. Structured, semi-structured and non-structured questionnaires were constructed for the interview. Following data collection the hand tabulate sheets were prepared and all findings were tabulated in sheets.

Results
This study revealed that prevalence rate of sexually transmitted infection in total was 342.94/1000. Majority of the respondents have heard of sexually transmitted infection and the main source information were radio and television.

Conclusions
Community awareness programs, health care and counseling services should be expanded.

Keywords: prevalence; reproductive tract infection; sexually transmitted infection; women of reproductive age.
Report on Quality of Reproductive Health Service provided at PHCCs in Nepal (2007)

Bhatta R

Background
Reproductive health is a crucial part of overall health so it has been taken as a fundamental human right and its importance has been mainly focused from 1994, International Conference on Population and Development (ICPD) held in Cairo. This study has mainly focused to explore the quality and status of reproductive health service at PHC level.

Methods
It was a cross-sectional/descriptive study which includes both qualitative as well as quantitative data. Six districts were chosen purposively which includes Kathmandu, Bhaktapur, Lalitpur, Kavre, Chitwan and Kanchanpur. From these districts, total 15 primary Health Care Centers were selected as convenient to the researcher. Structured questionnaire and observation checklist were used to collect information.

Results
Most of the Primary Health Care Centers have fulfilled the sanctioned posts of health personnel except few, where the staff were in study leave or deputed temporarily to other place, but regarding medical officers only 20% of them were present in the Primary Health Care Centers. For providing reproductive health service mainly staff nurse and ANMs were involved. Most of the services were found to be conducted regularly except abortion service which was only conducted by 13% of the Primary Health Care Centers. Likewise, Norplant and IUCD services were still not available in 33% of these Primary Health Care Centers. Necessary infrastructures were available in most of the visited Primary Health Care Centers but operation theatre and post operation room were found only in 27% of the Primary Health Care
Centers. Similarly lab service did not seem to be well established in the visited Primary Health Care Centers. Reproductive health protocol was not used in most of the Primary Health Care Centers by the service providers. Although outreach clinic were regularly conducted by the Primary Health Care Centers, but only 67% were providing the family planning service and 40% were providing Antenatal Care service. It was found that only 53% of the visited Primary Health Care Centers have provided support for conducting home deliveries. Complicated pregnancy cases were not found to be handled in the visited Primary Health Care Centers. Likewise only 60% of the Primary Health Care Centers had initiated cost sharing scheme. For providing RTI/STI service, only 33% of the Primary Health Care Centers were found to be providing lab based diagnosed service. Most of the Primary Health Care Centers had conducted awareness program on the reproductive health issues. Reproductive health programs conducted by the Primary Health Care Centers were regularly monitored and supervised by the District Public Health office and other responsible concerned bodies. Similarly it was found that Primary Health Care Centers were also being supported by the communities for conducting the service effectively.

Conclusions
The reproductive health services provided from the Primary Health Care Centers still needs to be strengthened in various aspects as it exist in present situation so that it will be able to cover the unmet demand of the population and can provide quality service at the community level.

Keywords: primary health care centers; reproductive health service; quality.
Quality of Reproductive Health Service at Primary Health Care Level with Special Reference to Client's Satisfaction in Nepal (2007)

Luitel N, Dulal B

**Background**

Nepal has experienced significant development in health services in the last decade which is justified by the increased numbers of health service providers. But the important and missing link is that those services centers are almost located in the district headquarters of limited districts. People living in rural parts are still beyond the access of basic health facilities. Primary Health Care centers, by principle, have to provide services in rural areas. However, poor physical facilities, insufficient and poor staffing and unavailability of medicines people are not benefited from those service centers; meanwhile they are also compelled to visit district hospitals and/or other private health service centers carrying economic burden. This trend has pushed a large number of populations into vicious circle of poverty. The study is an attempt to explore whether clients are satisfied with the services provided by PHCs and also identify the obstacles for providing regular and quality health services. In addition, the present study has explored additional expectations of clients on reproductive health services from the PHCs.

**Methods**

The study was conducted in the Kathmandu valley, two Tarai districts namely Chitwan and Kanchanpur and one hill district Kavre. A total of 6 districts and 16 PHCs are covered in this study. The present study has covered 231 married women of reproductive age (15-49) from six districts who received...
reproductive health services from PHCs. DBase IV and SPSS software were used to computerize the data. Before transferring to the SPSS software for analysis, dBase IV software was used to eliminate all inconsistencies. Frequency, percentage and cross tables were generated as needed and support the objectives of study.

Results
A few respondents (1.7%) filed complained that PHCs were not open all office days (6 days a week) but exceeding to proportion complaining by some 7 folds gave an extremely positive response that PHCs used to provide services all-round the weeks. There were also complains on irregularity of services providers at PHCs. about 80 percent respondents reported to have ever used any modern method of contraceptives. Proportion of women using Injectables (Depo-Provera) was the highest, which shows the popularity of the specific method for birth spacing. Of those who received family planning services from PHCs, about one-fifth had complains that they were not counseled before adopting contraceptive method. Injectables (Depo-Provera) tops among the temporary female contraceptives in the popularity, pills and condom follow injectables. More than four-fifths of clients had positive response on regularity of the family planning services at PHCs. Side effects of contraceptive were experienced by more than two-fifths of respondents. STIs symptoms were experienced by a few respondents. Those experiencing STIs, more than three-fifths visited PHCs. Respondent reporting to receive ANC services is remarkably higher compared to national average. Coverage of PNC services compared to ANC was noticed to be poor. More than half of the respondents were interested to file suggestions for improvement of the physical facilities and services provided by PHCs. More than 7 in 10 respondents wanted improvement in services.

Conclusions
Despite some drawbacks in the service delivery systems, physical facilities and quality of services, the findings of this study are positive certifications for the government and service providers. If paid attention to the reported
dissatisfactions of clients, the services can be made more effective, comprehensive and acceptable.

**Keywords:** client's satisfaction; primary health care; primary health center; reproductive health services; quality.

---

**Reproductive and Sexual Health Problems and Its Coping Mechanism among Adolescents and Youth with Disability of Bardia (2008)**

Rana R, Adhikari S, Poudel BP

**Background**

Adolescents and Youths with disabilities (AYDs) is one of important and the minority segment of Nepalese society and population. It is also marginalized from main stream of our society. On other hand, sexuality is still one of the taboos in our society. In this situation, AYDs may not bring out their sexual problems and talk with other people so that it can be prevented or minimize these problems in time. This study thus aims to identify the reproductive and sexual health problems among adolescents and youth with disabilities and find out coping mechanisms against these problems

**Methods**

It was a descriptive and cross-sectional study. The study was undertaken in Bardia district of Nepal. A total of 6327 (projected population) was the population of people with disability. A sum of 350 AYDs was sampled by using purposive sampling method. It was a total of 10 AYDs from each VDC and 40
from one municipality. The data collection tool was Interview schedule. The data was collected in the month of May 2008 by trained and experienced enumerators. The collected data was analyzed by the help of SPSS. Simple statistical calculation i.e. frequency, percent, mean, median, standard deviation etc have been done for discussion of the data.

Results
A total of 3 percent male and 19.3 percent female faced pressure for sexual contact. The coping mechanism against pressure were shouting/crying (60 percent and 31.4 percent respectively) complaining to family (25.7 percent female) becoming angry or showing angry face (14.3 percent female), request not to do so (40 percent male and 20 percent female) and complaining police (8.6 percent female). Only 3 percent male and 20.4 percent female were found sexually exploited. Various coping mechanism among AYDs were observed against sexual exploitation 40 percent male and 24.3 percent female used to ask help from other while, 40.5 percent and 8.1 percent females respectively used to run away and fighting. Similarly 40 percent male and 13.5 percent female used to request not to do so and finally 60 percent male and 37.8 percent female used to complaining to their friends. A total of 10.8 percent and 11.6 percent were perceived that they were infected by STDs. The sources of knowledge related to SRH were friends/peers (59.5 percent male and 46.4 percent female), family (15.4 percent male and 40.3 percent female), school/teachers (29 percent male and 17.7 percent female), neighbors/relatives (3.6 percent male and 6.6 percent female) and other like media, newspaper, book, advertisement (11.2 percent male and 4.4 percent female).

Conclusions
The majorities of AYDs used to share their reproductive and sexual health problem with their friends, relatives and family members so the special and effective programs targeting to the AYDs should be carried out through peer approach as well as other collective or holistic method in various related issues i.e. sexual desire, exploitation, sexual dysfunction, STIs etc. AYDs were found doing nothing against some kind of problems which is not good
because it can bring any big problem in the future so that they should be
encouraged and made aware about health seeking behavior in time and they
should be given enough information about the places where they get
services about SRH.

**Keywords:** adolescent and youth with disabilities; coping mechanisms;
reproductive and sexual health problems.

---

**Adolescent Girls Reproductive Health Situation in Nepal: A Case
Study from Mahottari District (2009)**

Subedi G, Dwidedy RK

**Background**

Adolescence is a crucial age and full of curiosity about sexuality. Knowledge
of adolescents regarding puberty, reproduction, masturbation, premarital
sex, contraceptives and STD/HIV/AIDS is low. There are several factors
contributing to low level of Sexual and Reproductive Health knowledge
among adolescent girls in Nepal. The main objective of this study therefore is
to understand the knowledge, attitude and practice of adolescent girls in
Mahottari district on Sexual and Reproductive Health needs.

**Methods**
The study was carried out in Mahottari district and two VDCs from the northern side of the district and two VDC from the southern side of the district were purposively selected. In the first stage, wards were selected from the selected VDCs. From each VDC, three wards were selected by using lottery methods. In the second stage, 25 households were selected using the simple random sampling procedure. In the third stage, one adolescent girl aged 10-19 years irrespective of the marital status was interviewed in each sampled household. Tools of data collection included semi-structured interview questionnaire, focused group discussions and key informant interview. Data were entered in SPSS/PC. In case of qualitative data, the issues were reviewed; they were translated from Nepali language to English and contextualized.

Results
Knowledge of contraceptive method among adolescent girls is low in the study VDCs with about 57 per cent of the total adolescent girls knowing at least one method of family planning. Knowledge on the ANC among the adolescent girls is poor: 37 percent have knowledge about TT Vaccine, 36 per cent in ANC check up, 35 per cent in Iron/Folic and 4 per cent in Calcium. With regard to delivery care, more than two-thirds of adolescent girls delivered their births at home with 79 per cent for Madheshi groups and 55 per cent for hill groups. About half of the adolescent girls interviewed had heard about abortion. However, this proportion is much lower among Madheshi groups (23%) compared to the hill groups (73%). Of the total adolescent girls, 54 percent have knowledge on infertility with 83 percent for hill groups and 75 per cent for Madheshi groups. Of the total respondents, an overwhelming majority of adolescent girls (89%) have knowledge on physical changes with increasing ages. Of the total respondents, around 53 percent have knowledge of STIs. With regard to knowledge of HIV/AIDS, 65 percent have heard of HIV/AIDS with 87 per cent for hill groups and 41 per cent for Madheshi groups. Almost half of the respondents have knowledge about some form of gender discrimination practiced in the family and in the community.
Conclusions
Adolescent girls of Madhesi groups are of low level of knowledge on any of the Sexual and Reproductive Health components compared to the hill groups. The study indicates that adolescents need appropriate information and advice to cope with the changes that they are experiencing physically, mentally, emotionally and socially. The finding of the study justifies in developing a differentiated approach to intervene effectively in the backward communities regarding Sexual and Reproductive Health needs among adolescent girls.

**Keywords:** adolescents; attitude; knowledge; practice; reproductive health; sexual and reproductive health.

Safe Motherhood Practices among Muslim Women in Taple VDC of Gorkha District (2009)

Lamichhane M

Background
The socio-economic factors such as religion, cultural beliefs, education, occupation and economic status etc affect the practices of safe motherhood. Therefore, safe motherhood programme need to be reached to the women who have an unmet need of critical maternal services so that the Government of Nepal could achieve Millennium Development Goal of 3/4th reduction of maternal mortality ratio. Therefore, this research attempted to explore Safe-Motherhood practices among Muslim women in Taiple VDC of Gorkha district.

**Methods**

Census of all the Muslim women between the age of 15-49 residing in ward no 1, 2, 4, 5, 6 and 8 was done. Among those total married women who have at least a child below 5 years old was selected and interviewed to collect the primary data. A structured questionnaire was developed for collecting the data. Interview Guideline and Focus Group Discussion Guidelines were also developed to collect qualitative data. The quantitative data was entered in Ms-Excel and further analysis and statistical tests were done by using SPSS program. The qualitative data were analyzed manually.

**Results**

Out of the total respondents (123), most of the respondents were unfamiliar about safe motherhood. The percentage of first ANC visit was also very low (8%) as compared to DoHS 2006/2007 which is 73.1% of national level. But the contraceptive prevalence rate is nearly 50% which is quite good. The study has found that most of the deliveries took place in household and health institutional deliveries are very low. The qualitative data shows that education level, economic status and religion of the Muslim people affect safe motherhood practices.

**Conclusions**

Safe motherhood program aimed at improving maternal and child health care and its accessibility and maximum utilization of this service by the women. For this governmental and non-government, national and international level safe motherhood plan has to be revised.

**Keywords:** Gorkha district; Muslim women; safe motherhood practices.
Background

Increasing skilled birth attendants at childbirth is a major component of the drive towards reducing maternal (MMR) and neonatal mortality rate (NMR) in Nepal. For the MDG 4 &5 Nepal is a signatory country of reducing maternal mortality by three quarters between 1990 and 2015, and under 5 mortality by two thirds during the same period. About 60% of all births should be assisted by SBA to achieve the set target of the year 2015. So the country has an enormous challenge to reach the set target. Currently only 23% of births are attended by health workers, and apart from that not all health workers are qualified as SBAs.

Methods

The study was conducted through primary and secondary data but it was mainly based on secondary data. Literatures were reviewed from documents, journals and internet sources. The investigator had visited focal persons in due course of collecting quantitative data. Structured questionnaire was used as a tool. During the course of primary and secondary data collection, the investigator had visited Family Health Division (FHD), DoHS, Teku and National Health Training Center (NHTC), Teku, which were the Government apex body for in-service trainings.

Results

Currently there are 862 SBAs in Nepal. Out of which 454 ANMs, 298 Staff Nurses, 84 Doctors, and 26 Pre-Service. And, almost all of them are working in the government health facilities. According to the sources, further 800 persons will be trained by the end of Asadh 2067. There is a provision of charging fees for the training. The training is free of cost for government participants whereas other participants have to pay 20-30 thousand for 60 days training. Currently, the total training sites are 15 and the total participants are approximately 900. The ultimate objective of the training is to train all ANM, Staff Nurse and Doctors from all health institutions and it
also provides training as per requirement. There are only twelve zones, out of fourteen, which have training sites.

**Conclusions**

The training sites should be established as soon as possible in the remaining zones. The number of training sites should be strengthened in every zone so that more people can be trained at a time which will help in production of SBAs.

**Keywords:** health workers; skilled birth attendant; status; training.
Uterine Prolapse in Doti District of Nepal (2010)

Paneru DP

Background
Pelvic organ prolapse is the widespread chronic problem among women in Nepal; particularly among adult and old women of hilly areas. There are 600,000 diagnosed cases of symptomatic Utero-vaginal prolapse. Uterine Prolapse is a condition when the uterus drops from its normal position in the pelvic cavity, descending into and eventually, in extreme stages, out of the vagina. The major purpose of the study was to assess the prevalence and factors associated with Uterine Prolapse in Doti district of Nepal.

Methods
This was the community based descriptive cross sectional study conducted among the 360 women of the Doti district who have experienced at least once a pregnancy during her life. Three stage stratified sampling procedure was adopted. Face to face interview was conducted with respondents using pre-tested, structured interview schedule. Data were analyzed by statistical package for Social Sciences (16 Version) and results were presented in table and figures. Percentage, mean, median, Chi Square test, Fisher’s exact test, one way ANOVA, correlation coefficient and regression analyses were applied.

Results
Prevalence of uterine prolapse was reported to be 35.97 %. Median duration of suffering was 5.5 years. Majorities of the respondents were over 35 year’s age. Visible protrusion was reported by more than 52% cases. All the respondents reported backache, something coming down per vagina and pain around the waist region (> 98%) as major symptoms. Family size, literacy status, income, caste, age of respondents, age at marriage; numbers of children, parity, type of delivery, time to resume work after delivery, and
associated diseases after delivery were independently and significantly associated with uterine prolapse (p<0.05). The strongest variation was observed due to parity of women followed by type of second and fourth delivery; moreover type of delivery at first, second, third and fourth child birth, age at marriage, numbers of children, parity of women, and age at first child birth was observed to be the strongest associative factors accounting for 40 percent variations. Less than 40% had received treatment of uterine prolapse and most of them received services from hospitals followed by mobile camps. Only 65 % who were treated against uterine prolapse were satisfied with services that they received, nevertheless only 34.6% were fully satisfied.

Conclusions
Uterine prolapse was observed among large numbers of women; among these almost all were married before the age of 20 years. Illiterates and high parity women were suffered greatly. The perceived service satisfaction was reported to be low among respondents. Women’s empowerment, limiting frequent pregnancies and provision of educational opportunities are recommended for the prevention of uterine prolapse.

Keywords: associated factors; perceived satisfaction; uterine prolapse.

Shah T, Pokharel N, Shah S, Rai M

Background
Awareness of the nurses in risk factors and screening modalities of breast and cervical cancer is helpful to reduce morbidity and mortality and increase life expectancy of women as well. This study therefore was conducted to examine the level of awareness of risk factors and screening behaviors regarding breast and cervical cancer among the nurses working in the eastern region of Nepal.

Methods
A descriptive cross-sectional design and the quantitative research method were used for this study. Three strata was formed on the basis of geographical distribution, 1 district from mountainous region named as Sankhuwasava (33%), 3 districts from hilly region such as Panchthar, Dhankutta and Udayapur (37.5%) and 2 districts from terai named as Morang and Saptari (40%) was selected randomly. Simple random sampling technique was used to select the districts from each geographical region. Total samples were 204 (44.4% of total population). Structured and semi-structured questionnaire was developed to gather information to meet the objectives. Descriptive and inferential statistics were used to obtain study results to meet the study objectives.

Results
Out of 204 respondents, 32 (15.6%) had adequate knowledge of breast cancer risk factors. Majorities of the respondents 68.1% (139) had adequate
knowledge on screening modalities of breast cancer. Almost half (49.5%) of the respondents had adequate knowledge on general information, risk factors and screening modalities of cervical cancer. Significant differences were observed between risk factors of breast cancer and screening modalities. Statistically significant factors influencing knowledge scores were related to the nursing profession, namely nursing qualifications, current nursing post and current workplace.

Conclusions
There is very urgent need for updating the various curricular of these categories of nurses to include courses in screening methods for early detection of such cancers like breast cancer and cervical cancer.

Keywords: awareness; breast and cervical cancer; knowledge; nurses; risk factors; screening.
Current State of Management of Severe Pre-Eclampsia and Eclampsia using Magnesium Sulphate in Different Health Facilities of Mid Western Development Region (2010)

Chalise Dhakal G

Background
According to the Nepal Maternal Mortality and Morbidity Study (2009), pre-eclampsia/eclampsia is the second leading cause of maternal mortality in Nepal—accounting for 21% of all maternal deaths. For management of severe pre-eclampsia and eclampsia (SPE/E), WHO has identified magnesium sulphate as the most effective and low cost medication. This global evidence-based practice is also the national medical standard in Nepal. Despite this, many health facilities in Nepal are not using this drug for the management of severe pre-eclampsia and eclampsia. This study helps to explore in detail the current situation of severe pre-eclampsia and eclampsia management using magnesium sulphate in selected health facilities of Mid Western Development Region (MWDR).

Methods
The study was carried out in 10 different health facilities from Mid Western Development Region. These health facilities were 5 hospitals—regional hospital, zonal hospital and district hospitals and 5 PHCCs, one PHCC from five districts. From Poush to Phalgun 2066, the records of FY 2065/66 BS were reviewed from these 10 health facilities. Maternity ward and store were observed to identify the availability and stock outs of emergency drugs and equipment needed for management of severe pre-eclampsia and eclampsia and maternity ward in-charge was interviewed to figure out the availability of
Basic Emergency Obstetric Care and Comprehensive Emergency Obstetric Care services. In pre-test, the current knowledge and skills of maternity ward staffs in diagnosing, managing and monitoring severe pre-eclampsia and eclampsia was assessed. Immediately after pre-test, clinical update was done by using in-service education package. At the same time, on-site coaching was conducted to support maternity ward staffs. After 10 days of this intervention, post test of those staffs using the same tool used in pre-test was conducted. In both assessments, each provider’s performance was scored 0-3 (0-100%), and then these were averaged to create the facility score.

**Results**

In most of the hospitals, these cases were managed with the national standard drug i.e., magnesium sulphate. Among these 10 health facilities, no facilities were using other treatment modalities for severe pre-eclampsia and eclampsia management. In Dang Sub Regional Hospital and Pyuthan District Hospital, only 50% and 25% cases were managed with magnesium sulphate. Except one PHCC from Surkhet district, other 4 PHCC were not using this drug for SPE/E case management. The maternal and neonatal outcome of SPE/E cases was found good; only one maternal mortality was recorded due to severe pre-eclampsia and eclampsia in Bheri Zonal Hospital. Most of the health facilities had this life saving drug and related supplies there. Some of the Basic Emergency Obstetric Care and Comprehensive Emergency Obstetric Care sites were not providing standard services due to lack of human resources. After clinical updates, on-site coaching and dissemination of job aids, health facilities had made significant improvements. Because of this, 50% health facilities were performing at 80% or higher during post-test.

**Conclusions**

Making national standard and providing training is not sufficient to improve maternal and neonatal health. Regular follow up with on-site coaching and competency based training is essential to implement these standards.
**Keywords:** eclampsia; health facilities; magnesium sulphate; management; pre-eclampsia.

**Progesterone for Prevention of Recurrent Preterm Labor after Threatened Preterm Labor - A Randomized Controlled Trial (2010)**

Uprety D¹

¹B.P.Koirala Institute of Health Sciences, Dharan, Nepal.

**Background**

Preterm birth is the major cause of neonatal mortality and morbidity. In addition, prematurity is strongly associated with long-term developmental disabilities, accounting for 1 in 5 children with mental retardation, 1 in 3 children with vision impairment, and almost half of children with cerebral palsy. So, prevention of preterm birth is a public health priority.

**Methods**

A randomized controlled trial was undertaken in BP Koirala Institute of Health Sciences, where 60 patients were randomized into group 1 (n=29, weekly intramuscular Progesterone) and group 2 (n=31, no treatment) after the arrest of preterm labor with tocolysis. Their latency period till delivery and recurrence of preterm labor and neonatal outcomes were compared.

**Results**

There was significant reduction in recurrence of preterm labor and increase in latency period in progesterone group. However neonatal outcomes were similar.
Conclusions
Progesterone is useful in reducing the recurrence of preterm labor in a patient who had preterm labor.

Keywords: preterm labor; progesterone; tocolysis.

Women's sexual reproductive health (SRH) practices in Southern Lalitpur (2010)
Khakurel D

Background
Women’s health and particularly their sexual and reproductive health is severely affected by their low familial and social status, patriarchal perspectives, traditional values, illiteracy, poverty, etc. Women have limited access to information and health services and awareness level. With only 10.2 percent of the rural women giving birth being attended by a skilled birth attended, most women fall prey to causes of maternal death like hemorrhage, obstructed labor, abortion, ectopic pregnancy or obstetric complications which are preventable. This research aims to explore the status of women in terms of Sexual Reproductive Health (SRH) issues.

Methods
The research has adopted exploratory, descriptive and explanatory type of research design. The study site was selected to be Badikhel and Lele VDCs, the southern part of Lalitpur district. Primary data were generated through survey, key informants interview and case studies. Secondary data were generated through different relevant literatures, documents, reports; policy documents related to the study were reviewed thoroughly to get
better insight about the study topics. Purposive sampling was done in Lele and Badikhel VDCs respectively where the household of Tamang and Pahari community were selected. The data analysis has been carried out through the usage of computer application like SPSS and pie charts and cross tabulated table to find the relationship of different dependent and independent variables has been used to analyze and interpret the data.

**Results**

The most common adverse Sexual Reproductive Health issues among women in both the VDCs are pelvic inflammation disease (PID), white discharge, uterine prolapse and adverse effects of contraceptives use such as excess bleeding, menopause, anemia and depression. 58 percent of the respondents shared that they have no knowledge about anyone who is suffering from adverse Sexual Reproductive Health issues whereas 16 percent have no idea about adverse Sexual Reproductive Health issues. One percent did not respond to the question where as 25 percent responded that they knew someone with adverse Sexual Reproductive Health issues. Those 25 percent aware of adverse Sexual Reproductive Health issues, 49 percent of them suffered from uterine prolapse, followed by painful menstruation (31.4%), Malnutrition (23.5%), Obstructed labor (21.6%) followed by adverse Sexual Reproductive Health issues like extended labor, white discharge, implication of unsafe abortion and so on. Similarly, among those 25 percent of the respondents, 23 percent informed that they are suffering from adverse Sexual Reproductive Health issues whereas 72 percent shared that they do not have any problem regarding their Sexual Reproductive Health whereas five percent were unaware about the condition of their sexual health.

**Conclusions**

The government has been seen to promote more female contraceptives methods with many women using these methods than male using any of its kind. The shift in this paradigm is highly awaited as these are also having adverse hormonal effects upon women’s health.

**Keywords:** awareness; knowledge; sexual reproductive health; women.

Bhandari GP\textsuperscript{1}

\textsuperscript{1}Department of Community Medicine, B.P. Koirala Institute of Health Sciences, Dharan, Nepal.

**Background**

The unmet need for family planning in Nepal is 27.8 percent. The reasons for unmet need may be lack of information, lack of decision making power, limited resources, distance from service delivery point, poor, quality of care, traditional beliefs. Usually unintended pregnancies end in abortion which results in various complications. These complications are leading reasons in increasing high mortality rate which is 539 per 100,000 live births in Nepal. So, unmet need is of great challenge for family planning programme for reaching and serving millions of women.

**Methods**
This study was a cross-sectional descriptive conducted in Rangeli VDC in Morang district among married women of reproductive age. The sample size was 1050. The district and VDC were selected purposively and the samples using random sampling method. A semi-structured questionnaire was used as a tool for data collection. Data entry and tabulation was done in SPSS 10.0. The data was analyzed as per the study variables.

**Results**

The study showed that about 24% of the married women had unmet need for family planning- 9% for spacing purposes and 15% for limiting births. The current contraceptive prevalence rate among married women was 50%. Unmet need for spacing is highest among younger women while the unmet need for limiting childbearing is higher among older women. Majority of women with unmet need for family planning were Hindu by religion (99% and 94% for spacing and limiting respectively). Unmet need is lower among women's husband with at least a SLC+ than among less educated women's husband. Unmet need in nuclear type of family was highest (51%). About 80% of the women having unmet need had low socio-economic status.

**Conclusions**

For family planning programs, making contraception more available has been key to raising contraceptive prevalence.

**Keywords:** family planning; married women of reproductive age; unmet need.

**Antenatal Care (ANC) & Birth Preparedness Practices (BPP) among Mothers in Mahottari, District, Nepal (2011)**

Sharma R, Mishra SK

**Background**

Maternal mortality remains one of the biggest public health problems in Nepal. Lack of access to basic maternal healthcare, difficult geographical terrain, poorly developed transportation and communication systems, poverty, illiteracy, women's low status in the society, political conflict, and shortage of health care professional and under utilization of currently
available services are major challenges to improving maternal health in Nepal. In order to effect real improvements in maternal health, attention needs to be focused both on biomedical and social interventions. This study was carried out to assess knowledge and practices on Antenatal Care among mothers of Mahottari district.

**Methods**
This was a cross-sectional descriptive study. 400 mothers with a 3 year child and expecting mothers were interviewed for the required information with the structured interview. This study was based on probability sampling method. Performa was developed to record the required information and structured pre-tested interview schedule was used to collect information from the respondents. Data was collected by house to house survey method. All the data was entered computer software SPSS and EPI Info and analyzed regarding the objectives of the study. The results of the study were presented by tables, charts, figures and statistical tools to assure the result of the study.

**Results**
More than two third of mothers were illiterate. The source of income was agriculture followed by foreign laborer. More than three fourth of mothers had to take permission from family head. Decision maker in the family was father in law and husband. Less than fifty percent of the mothers had visited four times. Reason for not visiting four times were the lack of awareness in more than two third followed by permission not granted by family head, economical problem.

Most of mothers had knowledge of danger signs during pregnancy. In case of danger signs, two third of the mothers took to hospital followed by taking rest and some had no idea what to do during danger signs. Most of the mothers had made preparation for child birth during pregnancy. Three-fourth of the mothers had preferred for health post and hospital and rest at home for baby delivery.

**Conclusions**
The education in mothers, level of health awareness in the community, involvement in decision making, economical condition, health service compliance were some issues to improve Antenatal care visit and Birth preparedness practices and finally to reduce maternal and child mortality.

**Keywords:** antenatal care; birth preparedness practices; Mahottari district; mothers.

---


**Background**
Non-reproductive health of women has drawn an attention in public health, in recent years, due to population aging and lifestyle transition. Women face various health problems in their post-menopausal years, mostly in low income countries particularly with high fertility. Nepal, in particular has scarce of knowledge regarding menopause and the related problems.

**Methods**

It was a descriptive, cross-sectional study carried out among women aged 40–60 years in Kapilvastu district. A total of 924 respondents were selected applying multistage cluster sampling and were interviewed face to face using structured questionnaire. Key informant interview was conducted with the health professional of each selected VDC. Data was entered in Epi-data 3.1., cleaned and analyzed using SPSS full version 16.0.

**Results**

Almost all (98.8%) women reported at least one symptom listed in Menopause Rating. Sexual problems (80.8%), physical and mental exhaustion (76.3%) and joint and muscular discomfort (71.3%) were common. The occurrence of at least one psychological symptom and urogenital symptom was noticeable, 91.2% and 91.8% respectively. Sexual problems (11.9%), joint and muscular discomfort (9.5%) and sleep problems were perceived very severe by women. The proportion of women suffering from somatic and urogenital symptoms increased from premenopausal to menopausal stage. Indeed, premenopausal women had high of depressive mood and anxiety than perimenopausal women, while irritability was prevalent at uniform proportion among different stages. The major complaints of premenopausal women were sexual problems (78.3%), physical vi and mental exhaust (69.4%), while it was sexual problems (86.5%) and physical and mental exhaustion (76.4%) among perimenopausal women. The later were highly prevalent in menopausal women as well (81.7% and 81.5% respectively). Surprisingly, only two out of 100 were aware of menopause symptoms and issues. Comprehensive knowledge on menopause was lacking even among health care providers.
Conclusions
Health education campaigns on health risks of middle aged women and capacity building of health service providers on management of menopausal issues need a greater start. A large study on national sample is must to provide a clear portrait on health needs of menopausal women in Nepal.

Keywords: menopausal symptoms; menopause; menopause rating scale; prevalence; women.