

A.P.B. Govt. Post Graduate College Agasyamuni



RESEARCH PRAPOSAL
UNDER THE
ASIAN DEVELOPMENT BANK

**INCIDENCE OF DISEASES: FOCUSSED ON PUBLIC
HEALTH & HYGIENE**

Submitted By

Department of Zoology

Govt. Post Graduate College Agastyamuni

EXECUTIVE SUMMARY

There are an estimated 105 million adolescent girls in the age group 10-19 in India. For young girls and women in India, poor nutrition, and early childbearing and reproductive health complications compound the difficulties of adolescent physical development. Anemia is one of the primary contributors to maternal mortality (20-25%) and is associated with compromised pubertal growth spurt and cognitive development among girls aged 10-19. Nutritional deprivation, increased iron demand for adolescent growth, excessive menstrual losses of iron and early/frequent pregnancies aggravate and exacerbate pre-existing anemia and its effects.

Most young girls and women are not adequately aware of their increased nutritional needs for growth (especially increasing their food intake to meet calorie demands of pubertal growth), and importance of various services like pregnancy, infant and child health care resulting in less demand of such services among the young girls and women. The poor nutritional status of mothers' especially young mothers heightens obstetric risk during pregnancy and childbirth, contributes to maternal mortality, and puts their infants at risk. Neonatal and infant mortality rates among adolescent mothers are 60% higher than among infants born to mothers in the 20-29 age groups.

The social, physical, economic, nutritional and health status of all segments of the society reflect the real index of development of any nation. In order to promote comprehensive development, United Nations declared 'Health for All' by 2015. Government of India (GoI) has aligned its national goals with this declaration and during its 5 years plans has launched number of schemes and programmes like NRHM (NHM), TSC, Swajal, ICDS and SSA for ensuring reproductive and Child Health (RCH) services, environmental sanitation, Safe Drinking Water, Health and Hygiene, HIV etc.

Department of Zoology Govt. Post Graduate College Aagstyamuni, Rudraprayag has initiated a project on 'Public Health and Hygiene' through preventive and promotive health services for the students and for the Rural Poor Population. The present proposal is focused to assess the current hygiene and sanitation practices among adolescent girls. The project also measures the knowledge, attitude, and practice (KAP) amongst key stakeholders (Pregnant and lactating women, women in the reproductive age group 20-49 years, and adolescent girls of 11-19 years). The project highlights significant gaps between the knowledge and practices in terms of various maternal and child health indicators.

Overall, the goal of this project will show the public health mainly maternal health related child health situation. Comparing to the median age at first marriage among women age 20-49 in rural India (16 percent), NFHS II report, only 7.1 percent of pregnant women, 9.5 percent of lactating, and 14.1 percent women age 20-49 have got married below legal age which shows a declining trend in practice of early marriage. 48.5 percent of women age 20-49 and only 28.5 percent lactating mothers had three or more visits. Despite all government and non-governmental efforts 66.7 percent of women age 20-49 and 32.2 percent of lactating women had home delivery. The preference for home delivery among currently pregnant women is found to be 64.3 percent which indicates community's strong preference of this practice.

The pregnancy-related health problems are commonly reported by ever married women. 50 percent of the pregnant and 54 percent of the lactating and 52.6 percent of women age 20-49 have had problems during pregnancy. A high prevalence of problems during delivery was also reported. 63.5 percent of lactating

women had reported any type of health problems during delivery than to women age 20-49 (62.8 percent). 55.6 percent of the lactating mothers and 39.7 percent of women age 20-49 had post partum health problems. Only 11.1 percent of the lactating women and 10.3 percent of women age 20-49 have gone for post delivery check up. Regarding receiving supplementary nutrition from ICDS department, only 35.1 percent of the lactating women and 21.6 percent of women age 20-49 received supplementary nutrition from ICDS department.

Project strategies

The main goal of the project is to improve health awareness's and the health status of the communities in the Agastyamuni and Okhimath block of Rudraprayag district, Uttarakhand through preventive and promotive primary health care services. And, the baseline study will shows that what are the specific areas where more efforts need to be putted upon to improve the overall status of mother and child health of the project area. The adolescent girls who are future mother need to be more informed about importance of use of ANC services particularly taking TT injection during pregnancy time, going any health institution for delivery, and consuming IFA. The adolescent girls are also needed to be informed about danger signs of new borne baby, and Pneumonia.

A special emphasis has to be given to explain importance is that the use of sanitary napkins or important precautions in case of using old cloths during periods is again important to be informed to adolescent girls. Appropriate health seeking behavior in case of menstruation related problems, RTI/STIs needs to be promoted. Knowledge about RTI/STI and HIV and AIDS need to be enhanced among young adolescent girls and they particularly needed to inform about HIV testing facilities.

Among ever married pregnant and lactating women age 20-49, importance of utilization of ante-natal care services has to be reinforced particularly consumption of IFA tablets. Again importance of delivery at health institution has to be emphasized by explaining about possible risk and danger to mother and baby. Symptoms of pregnancy, delivery, and post-delivery complications have to be explained with emphasis on early treatment from qualified doctors or health workers from the hospitals or clinics. Some effective messages about check-up of new born after delivery within 24 hours and post-partum check-up of mothers have to be delivered in very effective way including adolescent girls as well.

Community level mass awareness campaign should be launched in collaboration with government department to create awareness on contraceptives awareness particularly about condom, emergency contraceptive pills has to promote. Assessment of the reach out of the government department and acceptance of the contraceptive methods among men should be done by the help of government department and grassroots health workers. Efforts should be made to promote use of any contraceptive methods particularly condom by using cafeteria approach.

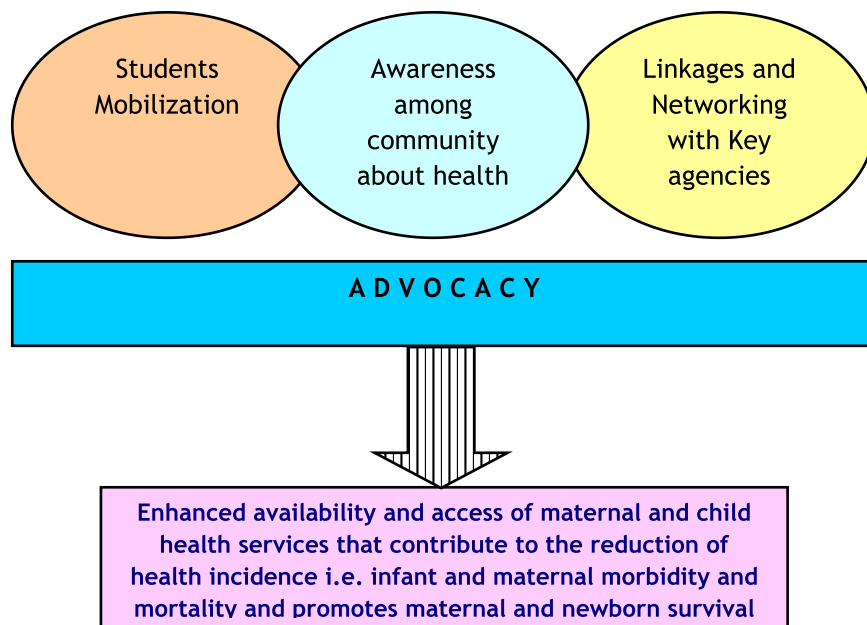
Male involvement in providing support to their wives is found to be okay but taking responsibility of using contraceptive methods has to be promoted. A close work with young boys and men can change the attitude and then expected behaviors can be promoted. Discussion with the young boys and men on perception about use of condom, intention to use condom in future and sharing responsibility of being husband and father can help bringing such change among young male adolescents and youth. Additionally, young male adolescent and youth should also be provided information about husband's role

in maternal and child health care. They should also be informed about various physical, mental, psychological, emotional and nutritional needs of mothers during pregnancy.

Community level special awareness programme on general hygienic and sanitation practices needs to be launched. Importance of washing hand after going to toilets, before and after taking meals has to be emphasized. Source of drinking water and keeping drinking water clean and ways to treat to increase potability of drinking water have to be explained and promoted. School education for girls as well as for boys should be promoted as indirect method of improving maternal and child health status of the project area.

The ever married young and women age 20-24 also needs to be informed about importance of post-partum checkup and consumption of supplementary nutrition distributed by ICDS department through Anganwadi centers in the village. The male members of the community including young men need to make aware about triple benefits of use of condom. However, community members need to be regularly contacted and be informed about management of RTI/STI, diarrhea, Pneumonia, and HIV/AIDS.

The community members are also needed to inform about importance of health insurance. Information on benefits of adopting healthy habits, ways to improve personal hygiene, regular ANC checkup during pregnancy, and treatment seeking from modern health care institutions is important and should be disseminated through mass media campaign. The capacity of health workers need to improve to deal with local tradition and health practices.



The project aimed to develop and integration of cadre of community health volunteers into primary health care services. The project also aims at fostering better coordination and convergence between various departments' of the district officials, like health, ICDS, Total Sanitation Campaign (TSC), Swajal, Panchayati Raj etc. The key project strategies included mobilizing community groups, sensitizing and capacity building of health functionaries and CBOs, thus strengthening health systems and building

networking & linkages with key agencies having similar mandate. Advocacy with key functionaries also received special attention of the project through generating consensus on key health issues for the larger benefit of the community.

Project layout

The project rolled out span of three years has been divided into following phases:

- Formative Phase – 4 months
- Implementation Phase –30 months
- Assessment Phase – 2 months

1 (a). Formative Phase I (6 Months): Identified villages in district Rudraprayag along with different blocks and clusters. To monitor women's health throughout their youngs (with health department of Rudraprayag) including reproductive and mental health along with sanitation. Contact shall be established with village chief (Pradhan) and block development officer from to ascertain information on number of households population structure, socio-economic status, ecological condition etc. Based on the information sampling strategy, modules with specific questionnaires and handouts will be developed, prospective trainers (students) and locators shall be identified for each village with the help of the field agency.

(b) Formative Phase II : (6 Months): Analysis and report writing, strengthening MIS framework, orientation of project team members, identifying and collecting relevant IEC materials, guidelines for CBOs functioning, preparing outline for capacity building of target groups i.e., Master Trainers, health service providers.

2. Implementation Phase (01 year): Is planned to execute activities as per plans. This will be a crucial phase which mainly comprise of creating awareness amongst community groups on key identified issues, identification of women with leadership qualities and showing interest improving health status of their community. It will also work for the formation of women's groups in the communities and capacity building of identified women. The project will link the CBOs with the existing public health functionaries like AWWs (ICDS), NHM functionary who share similar mandate of improving the health status of mother and child. The project will strengthen the hands of public health system for ensuring access of community in general and women in particular to quality reproductive and child health services.

3 (a). Assessment Phase (01 year): To observe activities including end line and report writing. The major learning and challenges of the project will be disseminated across the stakeholders through meetings and sharing of end line findings at larger level.

(b). Statical Analysis: Data based on questionnaires shall be entered into computers on the spot using CS Pro software. Data generated from laboratory analyze shall be tabulated and subjected to statistical analyses using SPSS and Graph PAD Prism.

Rationale for baseline study

Present baseline study will attempt to assess the prevailing situation of Mother and Child Health (MCH) with regard to social, cultural, educational, economic and environmental determinants/facets which have a bearing on women and child health. Findings of the baseline study would not only help to gauge the contemporary situation of the project sites, but it will also facilitate in developing a robust project

implementation plan based on the perceived needs of the community. In addition, study findings will also be used as base line for developing key monitoring, and evaluating indicators for the project.

Aims and objectives of the baseline study

- To measure the knowledge, attitude, and practice (KAP) amongst key stakeholders (Adolescent girls, pregnant and lactating women, and women in the reproductive age group 20-49) regarding MCH services at the project sites of the Agastyamuni and Okhimath Block of District Rudraprayag.
- Examine the current status of service delivery for maternal and child health in the project areas.
- To make pragmatic recommendations to improve upon health status of mother and child (MCH) at the project sites.

METHODOLOGY

1: INTRODUCTION

In order to obtain complete, accurate and reliable information, research demands careful planning involving proper formulation of the procedures. A proper planning and methodology helps in drawing valid and logical conclusions. This chapter explains the methodology adopted by the present study to fulfill the objectives. It has been discussed in the following sections under the sub-headings such as the study area, study design, data collection tools, ethical considerations, and analysis plan.

2: STUDY AREA

The department of Zoology Govt. Post Graduate College AAGSTYAMUNI has District Rudraprayag Uttarakhand are direct intervention area of Post Graduate College and remotely located near the Kedarnath belt, have considered as study area for the present study.

REPRODUCTIVE HEALTH OF WOMEN AND MALE INVOLVEMENT

Reproductive health of women and male involvement has been a research priority in India in view of its poor MCH indicators coupled with patriarchal social structure and poor status of women. The present chapter describes the health seeking behavior of the respondents besides depicting the contraceptive awareness as well as prevalence in the study population. Further, it presents the awareness of, attitude towards and prevalence of STI in the study area. Along with that, the chapter focuses on male participation in women's reproductive health.

Husbands' awareness of maternal care has a very important role to play on overall maternal and child health status. A pregnant women needs to have mental, psychological and emotional supports and different help in doing daily household chores are important. Husbands' responsibility and participation in wives' care can influence maternal and child health and its outcome.

All three categories of ever married women were asked about getting support from their husband during their last/current pregnancy and delivery.

Adolescent health

India has one of the fastest growing youth populations in the world, with an estimated 190 million adolescents. Girls below 19 years of age comprise one quarter of India's rapidly growing population. Adolescent girls in India are caught in the cycle of early marriage, repeated pregnancy and poverty limiting their future choices of healthy life and development. That is why emphasis is given on adolescent health that is of future mother.

Personal hygiene and healthy habits

Maintaining better personal hygiene and adopting good healthy habits are the factors that help us to remain healthy and keep us safe from different morbidity and many other health problems. Project focus is to show that adolescent girls need to be more informed about use of sanitary napkins for better hygiene.

Prevalence of menstruation related problems and symptoms

For the most recent time in the three months preceding the survey, the adolescent girl was asked if at any time she experienced any of the following menstruation related problems: No periods, Painful periods, Frequent or short periods, Irregular periods, prolonged bleeding, scanty bleeding, Inter-menstrual bleeding, and Blood clots/excessive bleeding.

Knowledge and awareness about RTI/STI and source of knowledge

Knowledge and attitude towards STI seems important as it has a direct association with subsequent treatment seeking. This section describes the awareness, source of information and mode of transmission about RTI/STI in the project areas. Along with, the section presents self reported prevalence of RTI/STI among respondents.

All adolescent girls interviewed were asked if they had ever heard of an illness called RTI/STI. Additionally, all the respondents who had heard of RTI/STI were then asked a series of questions to ascertain the extent of their knowledge.

Prevalence of RTI/STI related problems and symptoms

For the most recent time i.e. three months preceding the survey, the adolescent girl was asked if at any time she experienced any of the following RTI/STI related problems: Itching or irritation over vulva, boils/ulcers/warts around vulva, pain in lower abdomen not related to menses, pain during urination or defecation, swelling in the groin, painful blister like lesions in and around vagina, low backache, pain during sexual intercourse, and spotting after sexual intercourse.

Knowledge about pregnancy care

Several of the national socio-demographic goals for 2010 specified by the policy pertain to safe motherhood. For 2010, the goals are that 80 percent of all deliveries should take place in institutions, 100 percent of deliveries should be attended by trained personnel, and the maternal mortality ratio should be reduced to a level below 100 per 100,000 live births.

Knowledge and awareness about pregnancy, delivery and post partum complications

The baseline survey will collect information from adolescent girls on specific problems they may have during or after their pregnancies. In addition, the survey asked girls whether they are aware about pregnancy, delivery and post partum complications.

Knowledge and awareness on Infant and child care

Knowledge and information on danger signs of new born, danger signs of Pneumonia, awareness about diarrhea, knowledge of ORS, and breast feeding are importance to child health. Additionally, early treatment practices and contact with health services in case of children ill with the most important childhood illnesses (Pneumonia, and diarrhoea) help in reducing the disease and death due to the illnesses. Knowledge on the treatment of diarrhoeal disease with oral rehydration therapy and increased fluids along with appropriate sanitary practices can help prevent and reduce the severity of diarrhoeal disease.

Expected Outcomes: This study will constitute the first systematic detailed investigate to be conducted in Indian mountain (Garhwal, Distric Rudraprayag) on simultaneous assessment of nutrition, reproduction, physical and mental health will give insights into the current status of Incidence of diseases and its impact on reproduction as also on the offspring of deficient mothers.


Utility of the Outcomes: Apart from publishing results in leading international journals the recommendations shall disseminated to Govt. Agencies, who require database for adequate management of reproductive health, mental health, pregnancy and physical health e.g. ICMR, state and centred departments of medical health and family welfare, reproductive and child health care etc.

Approximate Budget:

SN	Activities	Approximate Budget	Total
1	Stationary /Contingency	25000	25000
2	Baseline Survey Questioner Design @ 100 per *500	50000	50000
3	Format Printing @150*500	75000	75000
4	Traning of volunteers of data collection.Refreshement/Stationary/ volunteer @200*20	4000	4000
5	Incentives, TA/B/L per volunteer @500/day*30 days	15000	15000
6	SPSS analysis of formats ans final assessment @500*100	50000	50000
7	Health camps (Total 10 camps in 10 locations) Consultancy fee of medical staff/Medicines and transportation/B/L refreshment etc. @ 200000/ camp*10	2000000	2000000
8	Video/Photography @ 1000/camp*10	10000	10000
9	IEC material (Banner/Poster etc.)	50000	50000
10	Final report 5000 publishing	5000	5000
11	Miscelenious (Staff Travel/B/L, Refreshement and other arrangements @25000 per camp	250000	250000
12	CBC Matchine (Minre Agapye)	350000	350000
13	Autoanalyser	150000	150000
14	Cooling Centriguge @ 150000	150000	150000
15	Micropipet @500*10 (10 microlitter, 20, 50 microml)	5000	5000
		Grand Total	3189000.00

Approximate Budget:			
SN	Activities	Approximate Budget	Total (in ₹)
1	Stationary /Contingency	25000	25000
2	Baseline Survey Questioner Design @ 100 per *500	50000	50000
3	Format Printing @150*500	75000	75000
4	Traning of volunteers of data collection.Refreshement/Stationar y/ volunteer @200*20	4000	4000
5	Incentives, TA/B/L per volunteer @500/day*30 days	15000	15000
6	SPSS analysis of formats ans final assessment @500*100	50000	50000
7	Health camps (Total 10 camps in 10 locations) Consultancy fee of medical staff/Medicines and transportation/B/L refreshment etc. @ 200000/ camp*10	2000000	2000000
8	Video/Photography @ 1000/camp*10	10000	10000
9	IEC material (Banner/Poster etc.)	50000	50000
10	Final report 5000 publishing	5000	5000
11	Miscelenious (Staff Travel/B/L, Refreshement and other arrangements @25000 per camp	250000	250000
12	CBC Matchine (Minre Agapye)	350000	350000
13	Autoanalyser	150000	150000
14	Cooling Centriguge @ 150000	150000	150000
15	Micropipet @500*10 (10 microlitter, 20, 50 microml)	5000	5000
Grand Total			3189000.00


(Prof. Pushpa Negi)


(Dr. Anjima Farswan)