



## Outcome of Swa - Prerit Adrash Gram Yojana & Project Interventions among Rural Population of Budhera Village, Gurugram, Haryana

**Rashmi Negi**

Assistant Professor, Faculty of Nursing,  
SGT University, Budhera, Gurugram

**Prof. Chinna Devi**

Dean, Faculty of Nursing, SGT University,  
Budhera, Gurugram

### ABSTRACT

This project investigated the overall morbidity pattern of the village area including the antenatal cases, immunization status & elderly health conditions. This scheme called Swa-Prerit Adarsh Gram Yojna strives to upgrade the Basic Amenities to bring them at par with those in the Urban Areas and started for betterment of health.

The project involved two phases: Collection of Basic data of health and socio-demographic variables by household survey of the village & Specific interventions regarding health problems e.g. RCH, Immunization, Adolescent health, Reducing risk behavior were undertaken. The study was carried out using pre-tested schedule consisting of information on socioeconomic profile, type of living conditions, water supply, History of pregnant females within 24 months, any currently pregnant females, and immunization status of children, any chronic diseases or disabilities in the family. Sex ratio of study population was found to be 1000: 878. Majority of houses were pucca (74.5%), 84.3 % houses had separate kitchen and 15 % families used biomass/wooden fuel, 90.5 % piped water supply, Sanitary latrines were installed in 97.6% houses. ANC registration 81%, TT coverage 98% and Iron Folic Acid Tablet (100 tablets) compliance 94 % .The morbidities were studied. Specific interventions were undertaken to achieve 100% ANC registration, IFA Compliance, TT and complete Immunization from 93% to 100%. An integrated approach to health problems in rural health is an effort to delineate the

health disorders and mitigate them by specific interventions.

**Keywords:** *Immunization status, Morbidity, Health, Survey, Risk Behaviour.*

### INTRODUCTION

Health improvements over the last century have been impressive, but health systems have reached a crucial turning point. Despite increasing health expenditures and unprecedented advances in modern medicine over the last century, people today in villages are not necessarily healthier in mind and body. Neither are they more content with the health care they receive. Access, patient safety and quality and responsiveness of care are important and pressing global issues<sup>1</sup>.

The present project Swa-Prerit Adarsh Gram Yojna strives to upgrade the basic amenities to bring them at par with those in the urban areas and started for betterment of health<sup>2</sup>. Health project under Swa-Prerit Adrash Gram Yojana has been pioneered and implemented by Department of Community Medicine under which Budhera village has been targeted for health care activities with the objective to study common morbidity pattern, analyze existing gaps under national health programmes and implement appropriate health interventions for them.

### MATERIALS AND METHODS

The project involved two phases:

**Phase 1-**

Collection of Basic data of household regarding health status and socio-demographic variables by household survey of entire village.

**Phase 2-**

- a) Specific interventions regarding health problems identified which include promoting RCH activities, Immunization, child feeding & weaning practices, adolescent health, reducing risk behavior and identification & care of chronic diseases and disability among study population.
- b) Evaluation after specific interventions after 6 months to study the outcome on the village population.

The study was carried out in village Budhera, district Gurgaon, Haryana from 01 Jan 2015 to 31 December 2016. Initially to build the rapport with village natives, meetings were organized with the villagers and representatives of the village. Family health survey team consisted of Medical, Dental, Physiotherapy, Nursing, Clinical Psychology to form integrated one health team. The data was collected using predesigned, pre-tested, family health survey schedule. Health Team gathered information on a

structured questionnaire on socioeconomic profile, type of living conditions, water supply, history of pregnant females within 24 months, any currently pregnant females, and immunization status of children, any chronic diseases or disabilities in the family. Treatment for basic ailments is provided then and there and patients were referred to medical college hospital for specialized investigation & care. Three revisits were done for missed out houses during the scheduled visits before declaring them non contactable. Data was entered in excel spread sheet and analyzed using SPSS version 21.0 (IBM).

**RESULTS**

Out of total 720 houses listed in the village, 584 could be contacted. Remaining houses were found locked in spite of three visits. Reasons were migration to city, staying in another house due to owning of multiple houses.

**Socio demographic profile of village population:**

Total Population covered during house-to-house Visit was 3838 out of which 2044 were males and 1794 were females. Sex ratio of study population was found to be 1000 males: 878 females (**table 1**)

**Table 1 Age & sex distribution of Budhera Village**

Age (yrs)	Male	Female	Total	%
0-5	267	87	354	13
6-10	235	140	375	10
11-15	211	137	348	9
16-20	83	181	264	8
21-25	301	249	549	14
26-30	80	208	288	6
31-35	171	147	319	8
36-40	155	124	279	6
41-45	133	98	231	6
46-50	110	81	191	5
51-55	70	71	141	4
56-60	77	130	207	4
61-65	50	77	126	3
65+	101	64	164	4
Total	2044	1794	3838	100

Out of total 3838 population, 56.7 % population were married, 6.4% were divorced/widowed/ separated, remaining 36.9 % were unmarried/minors. A majority

of population was literate, 11.5 % college educated and 2.7 % illiterate & 14.5 % preschool age. 37.6 % adults were unemployed, 8.8 % still studying, 3.1 %

retired, 41.4 employed in unskilled /skilled occupations. A majority of houses were pucca type (74.5%), 3% semi pucca and 21.9% were kucha type. 40.5 % houses have one /2 rooms and 59.5 % have 3 or more rooms. Ventilation & lighting were adequate in 88.3% of houses and overcrowding was found in 30.9 % houses. 84.3 % houses were provided with separate kitchen and remained cooked in living rooms/outside in open. A total of 15 % families used biomass/wooden fuel causing smoky

environment. 90.5 % had safe piped water supply, Sanitary latrines were installed in 97.6% houses.

A total of 90 were women had pregnancy in last 24 months, of which 27 had current pregnancy. ANC registration was found to be 81%. TT coverage 98% and Iron Folic Acid Tablet compliance was 94 % among pregnant women. 93% of the children in the age group of 12-23 months were fully immunized (one dose of BCG, measles and three doses of DPT and OPV)

**Table 2 Morbidity State among various age group (N=3838).**

Morbidity Type	Gp-15 n=	16-30	31-45	46-60	61+	Total	% Prevalence rate among total population
Hypertension						35	0.912
Diabetes						16	0.417
Seizures						1	0.003
Rheumatoid Arthritis						2	0.006
Bronchial Asthma						3	0.08
Headache						1	0.003
Coronary Artery Disease						2	0.006
Otitis Media						1	0.003
Hypotension						1	0.003
Hypothyroidism						2	0.006
Fatty Liver						1	0.003
Cataract						5	0.13
Low Back ache						44	1.146
Other Joints disorders						117	3.04
Musculo -skeletal disorders						163	4.24
Total						383	9.979

A total of 10% of population had one or other health disorders. Main morbidity found among rural population were Hypertension (0.91% of population),

Diabetes 0.42%, Low backache 1.14 %, Joints disorders 3.04 % and other Musculo-skeletal disorders 4.24% of population . Substance abused by adults was

found to be as alcohol moderate/ severe 59.63 %, Tobacco smoking/ chewing 55.8 % and others (drugs) 2.9 % of adults. Other health disorders found were Bronchial asthma, Rheumatoid Arthritis, Ottis Media, Coronary Artery Diseases. Cataract , Hypothyroidism, and Dental disorders.

**Table 3** Adult individuals with significant substance abuse (n=379)

Substance	Heavy	Moderate	Mild	Total
Alcohol	62 (16.35%)	38 (10.03%)	126 (33.25%)	226 (59.63)
Tobacco chewing	45 (11.87%)	29 (7.65%)	84 (22.16%)	158 (41.68)
Tobacco smoking	85 (22.42%)	50 (13.19%)	125 (32.98%)	260 (68.59)
Others (Drug abuse)	3 (0.79%)	1 (0.26%)	7 (1.85%)	11(2.90)

**Table 4** Gaps identified for specific interventions 3:

Category	Before Interventions (%)	After interventions (%)	Increased (%)
ANC registration	81	100	19
TT coverage in pregnancy	98	100	02
IFA Compliance	84	98	14
Immunization coverage	93	99	06
Exclusive breast feeding	69	84	15
Utilization of Govt. health services	63	78	15

After interventions target achieved aware ANC registration from 81% to 100%, TT coverage from 98% to 100% , Iron folic acid (IFA) from 84% to 98% and complete Immunization from 93% to 99%. Provide Nutrition Extension Programme for behavioral change to have an outcome of reduction of nutritional deficiencies. Training of expectant mothers and female decision makers on exclusive breast feeding resulted in increase from 63% to 78 %. Counseling sessions to reduce risk behaviors (Alcoholism, smoking, substance abuse) among all age groups are under progress. Utilization of health care services also found as increased from 63% to 78 %. The interventions have brought major beneficial impacts on the village population.

## DISCUSSION

In the present study Sex ratio of study population was found to be 1000 males: 878 females. The same is below national average and also similar to other Haryana state. A majority of houses were pucca type

(74.5%), 84.3 % houses were provided with separate kitchen and 15 % families used biomass/wooden fuel

causing smoky environment. 90.5 % had safe piped water supply, Sanitary latrines were installed in 97.6% houses. These figures are better than national average. As per National Family Health Survey 2015-16 (NFHS-4) <sup>3</sup> , fact sheet Haryana State, 91.7%(Rural-94.3%, Urban-88%) of the households had improved drinking water source,79.2% (Rural-77.4%,Urban-81.7%) of the household used improved sanitation facility,52.2% (Rural-28.9%,Urban-84.9%) of the households used clean fuel for cooking. Joon et al<sup>4</sup> also reported similar findings in their survey.

A total of 90 were women had pregnancy in last 24 months, of which 27 had current pregnancy. ANC registration was found to be 81%, TT coverage 98% and Iron Folic Acid Tablet (100 tablets) compliance 94 % among pregnant women. Similar studied carried out by – reported. As per NFHS-4 survey<sup>3</sup>, 92 % (Rural-92.5%, Urban-91.1%) of the registered pregnancies received mother and child protection card whereas as per present survey only 81% of the Pregnancies were registered which was below the state indicators of Haryana. Also 93% of the children in the age group of 12-23 months were fully immunized (one dose of BCG, measles and three doses of DPT and OPV) which was quite higher as

compared to 62.2% (Rural-65.1, Urban-57%) as per NFHS-4 Haryana<sup>3,5</sup>. A study conducted at Dehradun by Vyas et al<sup>6</sup> 85.6% of the study population was completely immunized and only 4.40% of the children did not receive any vaccine. Morbidity was found to be higher (75%) in children who were unimmunized as compared to those who were fully immunized (48.8%).

Vijaylaxmi et al<sup>7</sup> reported from their study as 64.7% mother's breastfed their infants within an hour after birth and 72% infants were exclusively breastfed till six months and 5.9% newborns were given pre-lacteal feed.

In the present study, a total of 10% of population had one or other health disorders. Main morbidity found among rural population were Hypertension (0.91% of population), Diabetes 0.42%, Low backache 1.14 %, Joints disorders 3.04 % and other Musculo-skeletal disorders 4.24%. Substance abused alcohol moderate/severe 20.4 %, Tobacco smoking/ chewing 55.8 % and others (drugs) had 1.8 %. Other health disorders found to be were Bronchial asthma, Rheumatoid Arthritis, Otitis Media, Coronary Artery Diseases. Cataract, Hypothyroidism, and Dental disorders. Similar figures reported by Joshi et al<sup>8</sup>, and Bharati et al<sup>9</sup> from their respective studies. Study conducted by Purty et al<sup>10</sup> was among elderly so figures are discordant. The prevalence of Hypertension was quite low (0.91%) in the present study when compared with a meta-analysis study conducted by Raghupaty A et al<sup>11</sup> on Hypertension in India where they concluded that about 33% urban and 25% rural Indians are hypertensive but denominator considered by them were adults. The overall prevalence of diabetes was low (0.42%) as compared to WHO data<sup>12</sup> on diabetes which was 8.7% among adults. Most of the elderly suffered from Joint Pains and other musculoskeletal disorders. Substance use and pattern of tobacco use is concordant with other studies<sup>13</sup>.

In the present study, interventions have brought major beneficial impacts on the village population. Similar results were indicated by other similar projects<sup>14,15</sup>.

### Conclusion:

An integrated approach to health problems in rural health is an effort to delineate the health disorders and mitigate them by specific interventions. It has also helped in identifying the gaps in targets fixed and achieved for various National Health Programmes

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