Adolescent girl's Initiative – Kishori Shakti Yojana

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Title:

An Epidemiological Study to assess the effectiveness of Multidimensional Health Care Interventions and Nutritional supplementations on physical, psychological, intellectual & social status of adolescent girls in rural area of Konkan.

Need for the Study:

Indian Context

- In absolute numbers, India is home to more adolescents – around 243 million – than any other country. It is followed by China, with around 200 million adolescents.
- Nearly 50 per cent of adolescent girls aged 15–19 in India are underweight, with a body mass index of less than 18.5.
- Bangladesh, India and Nigeria alone account for one in every three of the world's adolescent births.
- In India, less than 30 per cent of mothers under 20 years old in the poorest households are assisted during delivery by a skilled birth attendant, compared to 90 per cent of young mothers in the richest households.
- Young women in the poorest households are seven times more likely to give birth before age 18 than young women from the richest households in India.

South Asian context

- Nearly 90 per cent of the world's 127 million illiterate youth live in South Asia (65 million) and sub-Saharan Africa (47 million).
- Some 71 million children of lower secondary school age worldwide are not in school and 127 million youth between 15 and 24 are illiterate – the vast majority in South Asia and sub-Saharan Africa.

Global Context

- Some 1.2 billion adolescents (10–19 years old) today make up 18 per cent of the world's population. More than half of all adolescents live in Asia.
- Each year 1.4 million adolescents die from road traffic injuries, childbirth complications, suicide, AIDS, violence and other causes.
- Some 75 million young people between the ages of 15 and 24 are unemployed.
- A report identifies sub-Saharan Africa as the most challenging place for an adolescent to live and it is projected to have the greatest number of adolescents in the world by 2050.
- This report says that over a third of women aged 20 to 24 in developing countries excluding China were married or in a union by the age of 18 with about one third of these being married by age 15.
- Globally, each year around 16 million girls aged 15–19 give birth, accounting for around 11 per cent of all births.
- In 21 developing countries where enough data is available to assess the situation, more than one third of all girls aged 15 to 19 suffer from anaemia.
- An estimated 2.2 million adolescents are living with HIV – around 60 per cent of whom are girls.

Note: Source for above statistics is: UNICEF document titled Progress for Children – A Report Card on Adolescents.

Challenges Faced by Girl Child from Before Birth to Adolescent:

Years	**Problem faced**
Before Birth to 1 year	Foeticide and Infanticide • Infant mortality • Discrimination in breast feeding and infant food • Neglect of health (immunization)
1 to 11 years (this includes specific problems faced by age groups 1-5 years and 6-11 years)	Discrimination in access to food and health care • Malnutrition and anemia • Health problems like Polio and diarrhea • Iodine and Vitamin A and Micro nutrient deficiency • Low school enrolment and School drop outs • Vulnerable to trafficking, child labour, child marriage

	• Abuse, exploitation and violence • Domestic chores • Looking after siblings • Restriction on mobility and play • Discrimination in overall treatment and parental care
11 to 18 years (Adolescents)	Poor health • Low literacy level • Restriction on mobility and play • Frequent illness due to Malnutrition, Aneamia and micro-nutrient deficiency • Child Marriage • Early Child bearing morbidity and mortality • Poor access/ Denial to information and services • Early and frequent pregnancy coupled with abortions • Marital and domestic violence • Dowry Harassment, desertion, polygamy, divorce • Child labour, trafficking. • STDs and HIV/AIDs • Heavy domestic work including commuting long distances to collect fire wood/ drinking water. • Unpaid and unrecognized work, and drudgery. • No voice either in Home or society.

Note: Source for above statistics is: Working Group on Development of Children for the Eleventh Five Year Plan (2007-2012) - A Report

Project Goals:

a. **Vision Statement:** Physical , psychological, intellectual & social empowerment of adolescent girls i.e. Multifaceted and Multidimensional Overall Development of Adolescent Girls

b. Aim:

To ensure rights of adolescents to holistic health care through model on 'Kishori Shakti Yojana' in communities with active participation of community, local and govt. institutions.

c. Objectives:

- To conduct baseline survey of adolescent girls to assess their health, psychological and social status.
- To find out the net macronutrient defeciency by 24 hrs dietary recall method in adolescent girls and accordingly device nutritional counselling for them.
- To assess the effectiveness of nutritional supplementation (Laddos and Medicines) on Anthropometric Parameters.
- To assess the effectiveness of psychological and social interventions on psychological, intellectual & social status of adolescent girls.
- Advocacy Communication and Social Mobilization (A.C.S.M) and capacity development activities for Adolescent Girls and important stakeholders.
- To arrange residential camps for overall development of Adolescent girls.
- To form groups of adolescent girls- 'Balika Mandals' / micro SHGs for imparting vocational training and income generation activities for Adolescent Girls (pivotal point for further intervention)
- To establish '24x7 help-line' and Psychology O.P.D for adolescent girls.

Research Methodology:

Phased Approach till the specified Project goal is achieved.

Phase I: Survey of adolescent girls and assessment of BMI, Hb, nutrition, health and social status in schools & community.

Phase II: Arranging Health Check-up camps for adolescent girls at community and hospital level and establishment of referral services.

Phase III: Provision of nutritious food to beneficiaries and establishing periodic nutritional surveillance protocol. Each group is given ladoos for 6 months and medicines for 3 months.

Phase IV: Field and hospital based 1 day workshops & 10 days residential camp for overall personality development.

Phase V: Developing training modules and I.E.C material.

Phase VI: Establishment of 24 by 7 helpline for adolescent girls.

Phase VII: Establishment of Psychology OPD and Counseling Services at hospital level for adolescent girls and conducting Psychological testing like I.Q., E.Q., personality test, carrier guidance and counseling for adolescent girls.

Phase VIII: Formation of Micro Self Help Groups/ Balika Mandal and imparting Vocational training to them.

Phase IX: Research and Publication of research findings in National and International journals.

Note: 1. Some of theresearch phases may be running simultaneously.

2. Ladoos Means Special Nutritional Balls (Nutritional Supplements)

Sample Size: 70

Research Milestones, Tasks and Deliverables:

Research Milestones	Tasks	Deliverables
Survey of adolescent girls and assessment of health, nutrition and social status	1. Finding out eligible population from Census Data. 2. Conducting survey in target area for confirming eligible group. 3. Anthropometric study, 24 hours dietary recall, social interview in order to assess health, nutritional and social status	1. Beneficiaries and Target area defined. 2. Health, Nutritional and social status known. 3. Operational feasibility of project studied.
Arranging Health Check-up camps for	1. Health Check-up camp would involve basic	1. Baseline BMI and Hb status known.

adolescent girls at community and hospital level and establishment of referral services.	anthropometry, BMI status, Hb status. 2. Complete screening for common adolescent problems 3. Referral services for adolescents requiring specialized care	2. Health check-up camp repeated after 3 months and 6 months. 3. Effectiveness of interventions found out. 4. Specialized care given to adolescents needing referral services.
Provision of nutritious food to beneficiaries and establishing periodic nutritional surveillance protocol.	1. Based on nutritional needs, formulation of feeds decided by expert nutritionist. 2. Nutritional Medicines given for 3 months 3. Supplementary feeds (ladoos) given for 6 months.	1. Supplementary feeds now available based on local needs and scientific research. 2. Nutritional Medicines started for 3 months based on health check-up findings. 3. Supplementary Feeds Ladoos started for eligible group.
Field and Hospital Based 1 day workshop	1. Arranging field based and hospital based 1 day workshop	1. 1 day workshop two times in the month. 2. Capacity building of adolescent girls
Hospital based 10 days residential camps .	1. Arranging hospital based 10 days residential camps. 2. Providing free health check up and medicines. 3. Assessment by Gynecologist and specialist doctors. 4. Capacity building workshops: a. First Aid training	3. 10 days residential camp (quarterly base). 4. Overall vocational training and empowerment of adolescent girls. 5. Motivation for formation of Micro-SHGs and Balika Mandal in the future. 6. Motivation for becoming pivotal point in their own villages for arranging health

	b. Gardening skills c. Motivational movies d. Vocational training e. Soft Skills f. Sports	services / advocacy and mobilization of villagers for availing health care facilities.
Developing training modules and I.E.C material.	1. Preparation of training material for adolescents. 2. Pretesting of training material 3. Pretesting of IEC material 4. Preparation of TOT (Training of Trainers) module.	1. Fixed training protocols for adolescent would be formulated. 2. IEC material would be prepared and disseminated. 3. Training workshops would be arranged for Anganwadi workers, government functionaries and T.O.T would be conducted
Establishment of 24 by 7 helpline for adolescent girls.	1. Dual SIM Android Mobile purchased. 2. Fixed Mobile Number allotted for 24 by 7 telephonic help line services. 3. Help-line managed by trained psychologist. 4. Helpline number publicly announced in various media for wide-spread awareness regarding help-line services.	1. Implementation of 24 by 7 help-line services. . Mobilization of clients in need of counseling for availing Psychology O.P.D Services at hospital level.
8. Establishment of Psychology OPD and Counseling Services at hospital level for	1. Psychological testing including I.Q.,E.Q.,personality test 2. Counseling services.	1. Screening of adolescent for psychological problems. 2. Counseling and prevention of depression and neurosis in

adolescent girls	3. Carrier guidance services.	adolescents. 3. Aptitude of adolescents found out and carrier guidance done accordingly.
9. Formation of Micro Self Help Groups/ Balika Mandal	1. Motivation of adolescents for forming Balika Mandals 2. Formation of Balika Mandal consisting of 10 to 15 girls 3. Vocational training imparted to Balika Mandal	1. Balika Mandal formed at village level. 2. Income generation activities started in Balika Mandal. 3. Balika Mandal become pivotal point for implementation of health services at village level. 4. Balika Mandal used for A.C.S.M activities at field level.
10. Research and Publication	1. Creation of data base of beneficiaries 2. Data analysis using statistical packages 3. Submission of papers for publication	1. Data Base would be created in EPI Info software. 2. Data Analysis would b done by SPSS statistical software. 3. Published Research papers would help in further advocacy and development of model.
11. Project Evaluation and Impact Assessment.	1. Project Evaluation planned in 2015 based on systems approach.	1. Output, outcome and Impact of AGI project would be known. 2. A role model of programme if successful would be prepared for implementation in other places.

Analysis and Findings (As of 1st October 2012)

A.1. Age Statistics

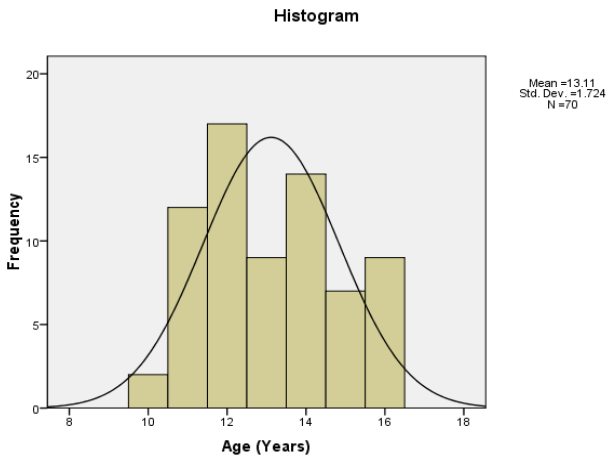
The age group covered in the study was from 10 to 16 years and the median age was found to be 13 years.

Minimum Age	10 years
Maximum Age	16 years
Mean	13.11 years
Median	13 years
Total Sample Size	70

A.2. Age Distribution

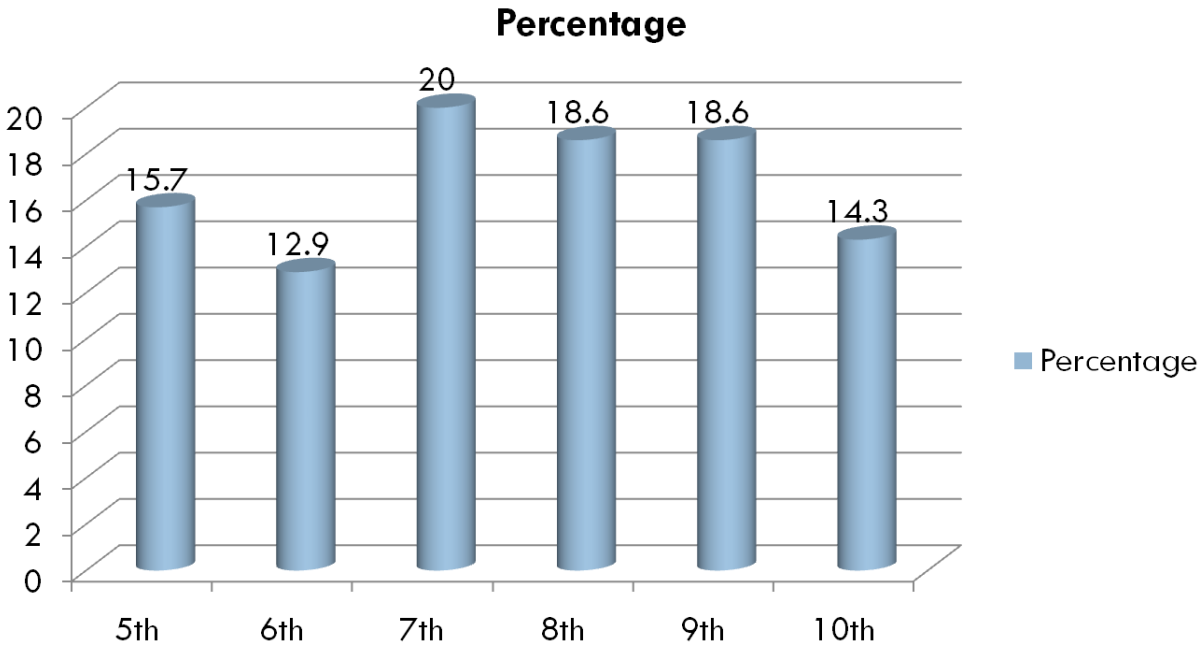
Age	Fequency	Percentage
10 years	2	2.9
11 years	12	17.1
12 years	17	24.3
13 years	9	12.9
14 years	14	20.0
15 years	7	10.0
16 years	9	12.9
Total	70	100

A.3. Age Histogram



B. Current Education

Adolescent girls from 5th (10 years of age) to 10th (16 years of age) were covered in the study. These adolescents were from ZP Schools. The age group of more than 16 years i.e. Junior college was not included in the study keeping in mind the operational feasibility.



C.1. Base Line and Post Intervention Haemoglobin Status:

65.7 % of Adolescent Girls are Anaemic i.e. having Hb less than 11 gm% in June while after 3 months of intervention (Medicines+ Ladoos+ Health Education) the prevellance of anaemia reduced to 32.9% which was statistically significant.

Hb Status gm%	June (Freq)	June (%)	Aug (Freq)	Aug (%)
< 11 gm% (Anaemic)	46	65.7	23	32.9%
11 to 12 gm%	20	28.6	28	40%
>12 gm%	4	5.7	19	27.1%
Total	70	100	70	100

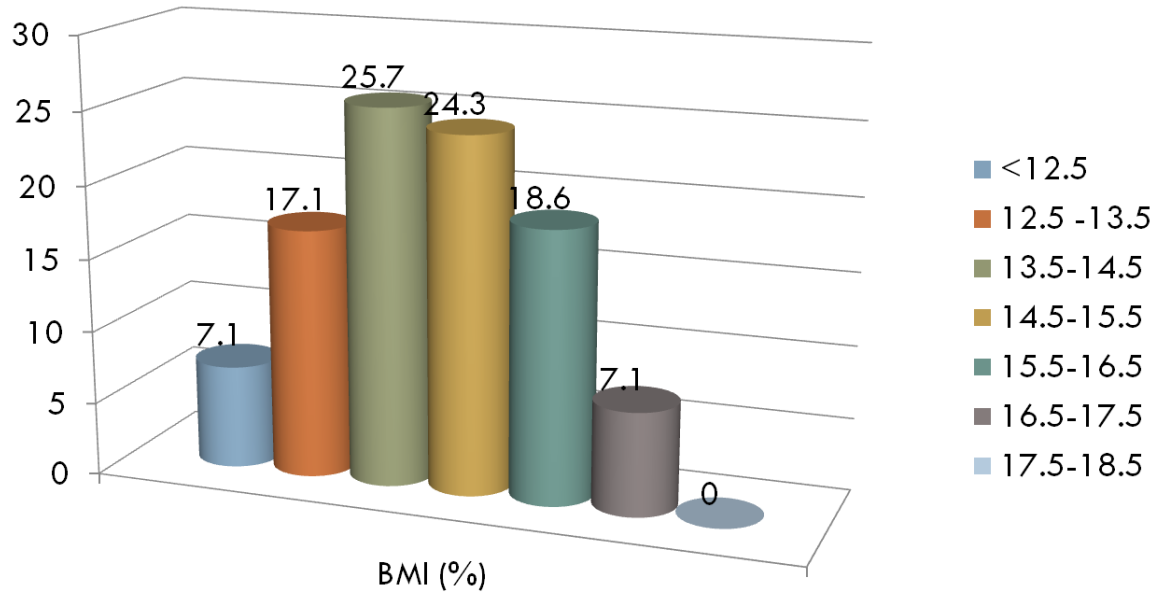
D.1 Weight gain/ loss after 3 months of nutritional interventions (Medicines + Laddo+ Health Education)

61.5% of adolescent girls have weight gain at the end of 3 months.

Weight change	Frequency	Percentage
Weight loss	12	17.1
No Change	15	21.4
Upto 1 kg weight gain	18	25.7
1 to 2 kg weight gain	16	22.9
2 to 4 kg weight gain	4	5.7
>3 kg weight gain	5	7.1
Total	**70**	**100%**

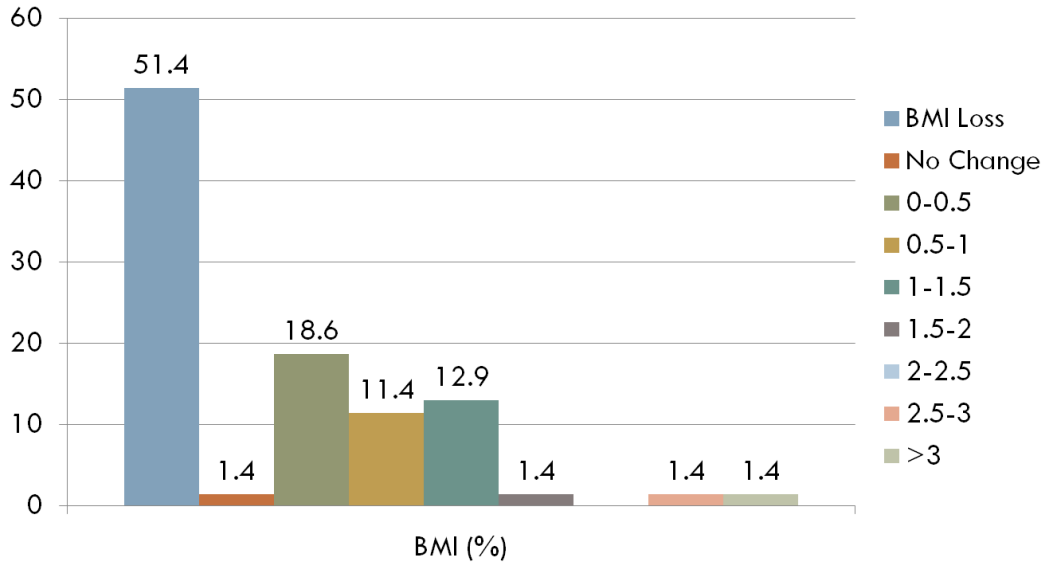
E.1 Baseline Body Mass Index (B.M.I) Status

100 % of Adolescent Girls selected for the study were underweight having BMI<18.5



E.2 BMI Status after 3 months of nutritional interventions (Medicines + Laddo+Health Education)

53% of Adolescent girls had BMI loss or no change in status while 47% had improvement in their BMI Status.



F.1 Baseline 24 hours dietary recall in adolescent girls (Reference values National Institute of Nutrition Hyderabad)

In the baseline study Net energy defeciency of 1098.5 kcal/day, net carbohydrate defeciency of 233.4gms/day, and protein defeciency of 23.8gms/day and fat defeciency of 5.7 gms/day was found, these defeciency decreased in post intervention dietary recall due to nutritional counselling and change in dietary habits. Protein and fat defeciencies decreaed significantly.

	Net Energy Deficiet Kcal per day	**Net Carbohydrate Defecit gms per day**	**Net Protein defecit gms per day**	**Net fat defecit gms per day**
Base Line (All 70 cases)	-1098.5 kcal/day	-233.4 gms/day	-23.8 gms/day	-5.7 gms/day
Post Intervention (All 70 cases)	-991.7 kcal/day	-231 gms/day	-7.6 gms/day	+3.1 gms/day
Post Intervention (Only defecient cases)	-991.7 kcal/day	-231 gms/day	-20.3 gms/day	-3.2 gms/day

F.2 Reference Values of RDA (Recommended Dietary Allownace – NIH Hyderabad)

Group	Particulars	Body wt	Net Energy	Protein	Fat	Calcium	Iron	Vit.A.µg/d		Thiamin	Riboflavin	Nicotinin Acid	Pyridoxin	Ascorbic Acid	Folic Acid	Vit B-12
		Kg	Kcal/d	g/d	g/d	mg/d	mg/d	Retinol	ß-Carotene	mg/d	mg/d	mg/d	mg/d	mg/d	µg/d	µg/d
Man	SedentaryWork		2425							1.2	1.4	16				
	ModerateWork	60	2875	60	20	400	28	600	2400	1.4	1.6	18	20	40	100	1
	Heavy Work		3800							1.6	1.9	21				
Woman	SedentaryWork		1875							.0.9	1.1	12				
	ModerateWork	50	2225	50	20	400	30	600	2400	1.1	1.3	14	20	40	100	1
	Heavy Work		2925							1.2	1.5	16				
	PregnantWoman	50	300	15	30	1000	38	600	2400	0.2	0.2	2	2.5	40	400	1
	Lactation															
	0-6 Months	50	550	25	45	1000	30	950	3800	0.3	0.3	4	2.5	80	150	1.5
	6-12 Months	50	400	18	45	1000	30	950	3800	0.2	0.2	3	2.5	80	150	1.5
Infants	0-6 Months	5.4	108/kg	2.05/kg		500				55µg/kg	65µg/kg	700µg/kg	0.1	25	25	0.2
	6-12 Months	8.6	98/kg	1.65/kg		500		350	1200	50µg/kg	60µg/kg	650µg/kg	0.4	25	25	0.2
Children	1-3 Years	12.2	1240	22			12	400	1600	0.6	0.7	8	0.9		30	
	4-6 Years	19	1690	30	25	400	18	400	1600	0.9	1	11	0.9	40	40	0.2-1.0
	7-9 Years	26.9	1950	41			26	600	2400	1	1.2	13	1.6		60	
Boys	10-12 Years	35.4	2190	54	22	600	34	600	2400	1.1	1.3	15	1.6	40	70	0.2-1.0
Girls	10-12 Years	31.5	1970	57	22	600	19	600	2400	1	1.2	13	1.6	40	70	0.2-1.0
Boys	13-15 Years	47.8	2450	70	22	600	41	600	2400	1.2	1.5	16	2	40	100	0.2-1.0
Girls	13-15 Years	46.7	2060	65	22	600	28	600	2400	1	1.2	14	2	40	100	0.2-1.0
Boys	16-18 Years	57.1	2640	78	22	600	50	600	2400	1.3	1.6	17	2	40	100	0.2-1.0
Girls	16-18 Years	49.9	2060	63	22	600	30	600	2400	1	1.2	14	2	40	100	0.2-1.0

Source - National Institute of Nutrition, Hyderabad, India

G.1: Change in Anthropometric Parameters at the end of 3 months

Paired t test was applied for finding out statistical significance. It was found that weight gain and height gain were statistically highly significant at the end of 3 months (P<0.001) while BMI gain was not statistically significant.

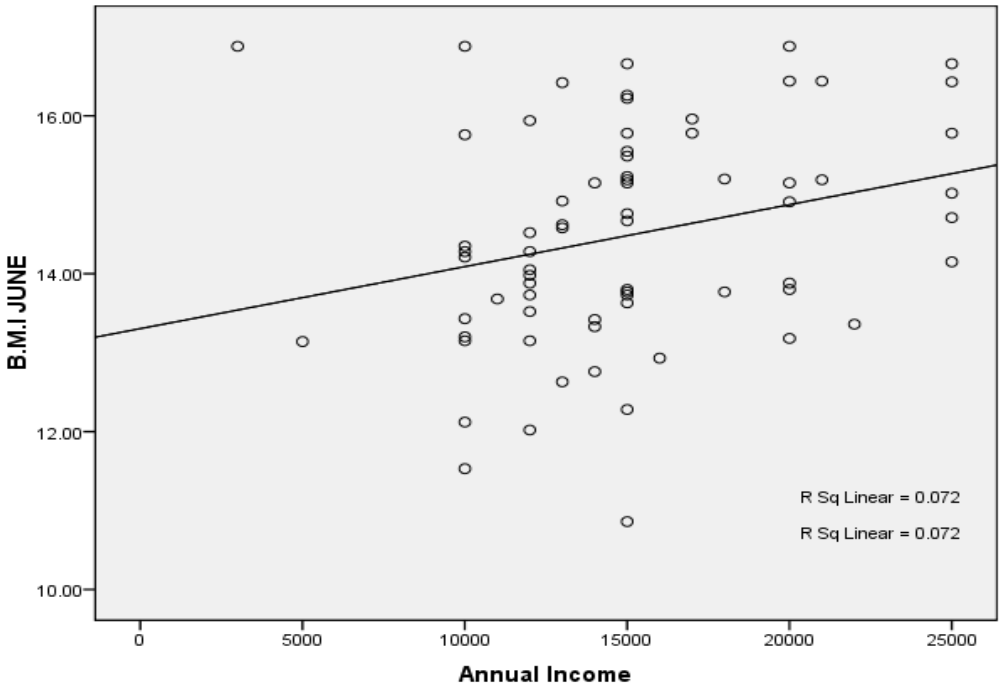
		Mean	Sample Size	Std. Deviation	Std. Error Mean
BMI Gain	B.M.I Aug (Sig = 0.293)	14.6093	70	1.56932	.18757
	B.M.I JUNE	14.4880	70	1.38845	.16595
Weight Gain	Aug Wt (Kg.) (Sig = 0.001)	30.37	70	5.585	.668
	June Wt (Kg.)	29.27	70	5.464	.653
Height Gain	Aug Ht (mts.) (Sig = 0.001)	143.46	70	7.822	.935
	June Ht (mts.)	141.61	70	7.941	.949

H.1: Coorelation between Body Mass Index and Annual Income

A positive coorelation was found between Body Mass Index and Annual Income i.e. More the annual income, more the Body Mass Index.

		Annual Income	B.M.I JUNE
Annual Income	Pearson Correlation	1	.268*
	Sig. (2-tailed)		.025
	N	70	70
*. Correlation is significant at the 0.05 level (2-tailed).			

H.2: Coorelation between Body Mass Index and Annual Income



I.1: Baseline and Post Intervention Psychological Status (Note: N=56 as only girls more than or equal to 12 years are considered for psychological test)

50% of adolescent girls had optimistic attitutde before intervention which increased to 80.3 % post intervention. Similarly pessimistic and neutral attitude decreased post intervention which shows the effectiveness of counselling in adolescent age group.

Attitude	Baseline Freq	Baseline %	Post Intervention Freq	Post Intervention %
+ Pessimistic	0	0%	1	1.7%
Pessimistic	6	10.8%	3	5.4%
Neutral	22	39.2	7	12.5%
Optimistic	23	41	19	33.9%
+ Optimistic	5	8.9	26	46.4%
Total	56	100%	56	100%

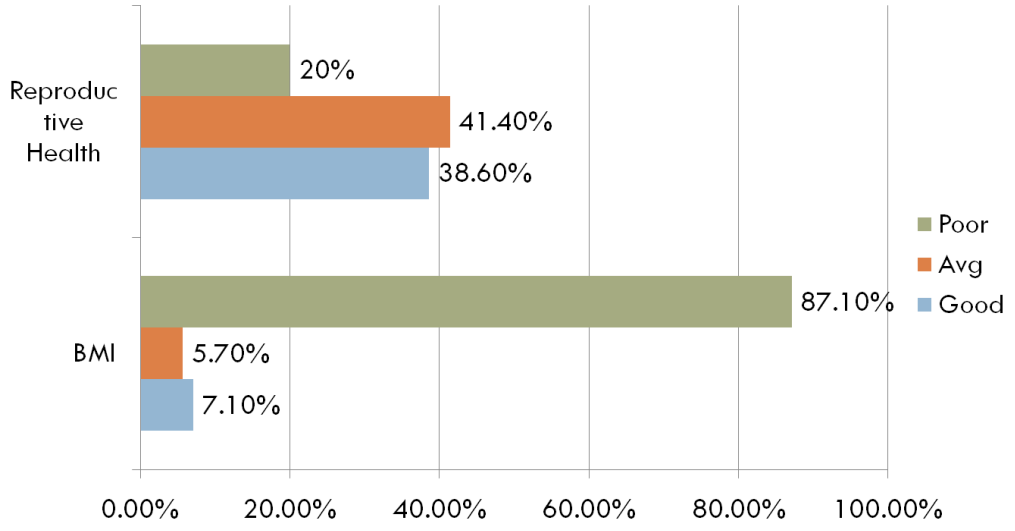
I.2 Self Perception regarding health (Health Barometer)

Only 24 % of adolescents perceived their health as good in the baseline survey while this percentage increased to 61% after intervention.

Criteria		Pre	%	Post	%
0- < 2	Poor	13	18.57	0	0
2- < 4	Average	40	57.14	27	38.57
4-5	Good	17	24.28	43	61.42

I.3 Preintervention knowledge regarding reproductive health and body mass index.

38.6 % of adolescent girls already have good knowledge regarding reproductive health while 87.2 % have poor knowledge regarding body mass index and importance of weight and height. Knowledge regarding reproductive health and body mass index improved after interventions.



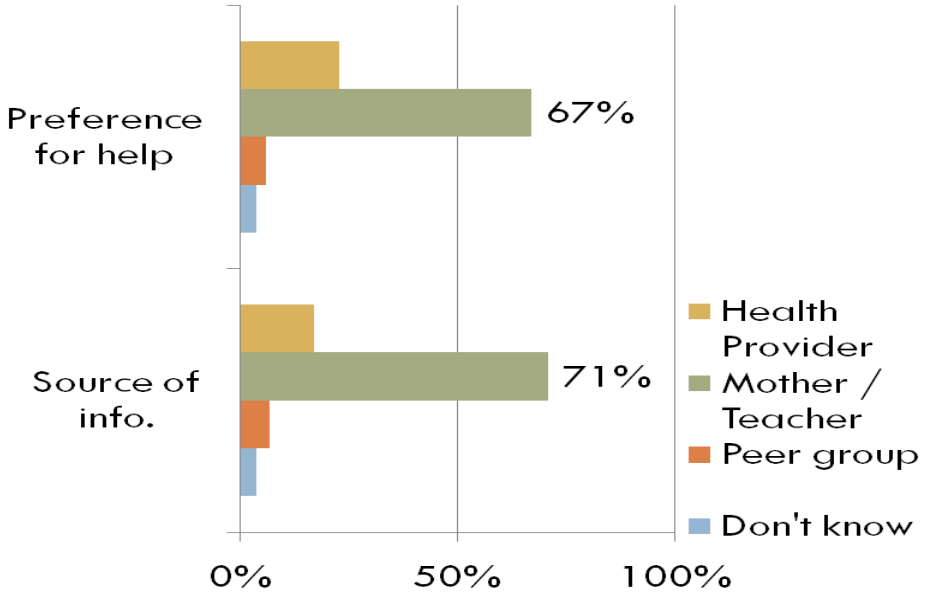
Criteria	Pre Poor	Pre Avg	Pre Good	Post Poor	Post Avg	Post Good
Knowledge regarding Physical Growth	61 (87.2%)	4 (5.7%)	5 (7.1%)	19 (27.1%)	32 (45.8%)	19 (27.1%)
Knowledge regarding Reproductive Health	14 (20%)	29 (41.4%)	27 (38.6%)	0 (0%)	14 (20%)	56 (80%)

I4. Knowledge about characteristics indicating puberty

	Pre	Post
Don't know at all	9 (12.85%)	0
Girls know at least 2 characteristics	4 (5.7%)	0
Girls know 3to 5 characteristics	24 (34.28%)	10 (14.28%)
Girls know all characteristics	31 (44.28%)	60 (85.71%)
Don't know about menstrual cycle	6 (8.5%)	0

I.5 Source of information regarding reproductive health and preference for help in case of reproductive problems

71% of adolescent girls gain their reproductive health information from mothers and teachers while 67% prefer their mothers help in case of reproductive health problems. 73% of adolescents think it is very important to gain information regarding reproductive health.



I.6: Preferential source for gaining general information used by rural adolescents

Criteria	Preference			
	1st	2nd	3rd	4th
Auto-biographies	4	1	1	1
Story books	17	3	4	0
Newspaper	18	17	3	0
T.V.	12	18	1	1
Magazines	0	2	1	0
No Response	20			

I.9: Perception regarding appropriate age for marriage and decision making regarding marriage:

Majority of adolescents (59%) feel that the right age for getting married is 21 to 25 years while 33% prefer early mirriage between 18 to 20 years. 56% of the adolescents also feel that the decision for suitable partner should be with their parents and self. While 30% feel that only their parents should take the decision.

I.8: Receptiveness for a 24X7 adolescent help line:

78% of the adolescents were positively receptive regarding an adolescent help line (A phone service where they could call the counsellor in case of any distress and get telephonic counselling) only 22% of adolescents did not like the idea and were not receptive.

Recommendations

1. According to the study adolescent age group has high physical, psychological and social morbidity. The need of the hour is to develop a holistic health care model especially for adolescent age group. This model can then be scaled up to cover all districts with government participation.

2. Developing a PPP (Public private partnership) with government for Kishori Shakti Yojana is vital, Kishori Shakti Yojana should be implemented in all districts of Maharashtra and local NGO's should play a vital role in its implementation. Capcity building of all governemnt staff can be done by technically qualified NGO's.

3. Malnutrition, Anaemia, Reproductive Health problems and Psychological problems are the main health problems encountered in the study, the public health approach used for intervention can be health education, check-up and referral services.Medicines (iron, folic acid, calcium, vitamins and deworming) should be given for atleast 3 months and nutritional supplements like ladoos or locally available nutritious food can be given under supervision for 3 to 6 months.

4. Awareness generation with the help of one day workshops and 10 day residential camps is a vital component, topics like physical and psychological changes, diet and nutrition, reproductive health, soft skills, counselling etc should be covered in these workshops.

5. In order to make these adolescent economically productive formation of micro-SHG's and imparting vocation training to the adolescents is important. Skills like gardening, paper bag making, first aid, artifical jewellary etc should be taught to these adolescents.

6.Speical initiative for ensuring gender equality should be started at community level for which the role of a social activist is of vital importance as the study indicates that almost 75% of adolescent girls interviewed faced some sort of gender discrimination either at home or in the community.

7. A 24 by 7 telephonic helpline can be started for the adolescent girls where telephonic consultation and advice can be taken in times of distress. A full time counsellor is needed for the same. A special psychology OPD can be established at hospital level to address the counselling and other needs of adolescents.

Annexure 1: B.K.L WALAWALKAR HOSPITAL DIAGNOSTIC AND RESEARCH CENTRE ADOLESCENT GIRLS EMPOWERNMENT PROJECT

NAME---------- ADDRESS----------

SCHOOL----------CLASS---------- AGE----------

DATE----------HEIGHT----------WEIGHT----------B.M.I ----------

GENERAL SYMPTOMS	**Poor posture……** **Failure to gain wt over 3-4 months……..** **Under nourished…….** **Fever ……..** **Frequent head ache….** **Nausea or vomiting….** **Pain in abdomen…….** **Diarrhea……** **Cramps……..** **Passing worms……** **Obesity……** **Gets tired easily……** **Tired easily/Palpitations** **Joint pains…….** **Menstruation history:** **…...…….(Reg/ Irreg)** **Flow: Scanty/ Mod/Heavy** **Dysmenorrhea: Yes/ No** **White discharge: Yes/ No** **Menarche Date:** **L.M.P.:**			**HEAD**	**Lice……..** **Dandruff……** **Hair falling…**	
			SKIN	**White patches…….** **Rough skin……** **Itching…….** **Boils, pimples, warts…….** **Nails: Pallor/ Clubbing**	
			EYES	**Unable to read black board, charts……** **Watery eyes….** **Inflamed eye…** **Swollen eye lids……** **Styes or crushed lids…..** **Hold book too close or too far...** **Dislike for eye tasks……..** **Dark circles around eyes…….**	
FOOD HABITS	**Under eating……..** **Over eating……** **Diet: Veg/ Non Veg** **Diet Chart: Req/ Not Req**		**EARS**	**Hearing Loss……..** **Inattentive…….** **Turns head to listen……** **Ear ache…….** **Discharge from ear…….** **Wax in ear……..**	

EMOTIONAL	Nervous habits- nail biting, etc …… Day dreamer……. Excessively noisy…… Overly aggressive……. Irritable…… Excessive blinking……. Withdrawal from group... Seems rejected by group.. Seems depressed…….. Timid…… Gets accident frequently.. Excessive use of toilet…… Hesitation in speech			NOSE THROAT	Frequent sore throat or cold…... Coughing…… Mouth breathing…… Sneezing…… D.N.S……. Frequent nose bleeding…….. Discharge from nose…….. Coated / excessive red tongue… Cracked lips……..	
				TEETH	Carious teeth……. Bleeding gum……. Halitosis……. Tooth ache…….. Irregular teeth……. Treatment Req……	
SPEECH	Stammering…….. Speech defect……					
	Health problem identified 1. 2. 3.			OTHER	Vision test: R……. : L…….. Hearing test: R……... : L……... Other……	

Investigation: Hb…….Others Required……

R/S:……..C.V.S……CNS……P/A……

Treatment Given/Required:……....

Examined by whom: **Referred Dept:** **Follow up date:**

रक्त तपासण्यासाठी संमती आहे . (स्वतः / अंगणवाडी सेविका) अंगणवाडी सेविका ः

Annexure 2:

Adolescent girl's Initiative: Kishori Shakti Yojana

SOCIAL INTERVIEW

Name : …… Age:……..

Address : …….

Phone No…… Date of Birth: …….

Education: …….. Current Educational Status: ……..

Hobby/ Personal Interest: …… Sports Activity:…….

No. of Family Members:…….. Gravida : ……

Annual Income: …….. BPL/ Non BPL : …….

Type of House: Kaccha …… / Pakka…… Toilet: ……

Participation of cultural program: Yes:……No:…… which type :……

No. Of Friends: ……..

General Awareness:

Updated News / Knowledge: Books **: ……/** Magzines**: ……./** News Paper**: …… /**
T.V. **: ……./** Internet **:……./ Mobile : ……**

Usage of Essential Services : Hospital **: ……** / Bank **: ……../** Post **:……../**Auto/ Vehicle **: ……**

Family History:

No.	Relation	Age	Education	Occupation
1.				
2.				
3.				
4.				

Knowledge Practice & Attitude

Physical / Diet

BMI and Hemoglobin

Do you know what 'BMI' means?

1. Don't know 2. Proportion of weight to height

- What is the range of normal BMI?

  1. Don't know 2. 18 to 24 3. 15 to 17 4. 20 to 25

- According to you which factors have an effect on BMI?

  1. Exercise 2. Balanced diet food 3. Both 1. & 2.

  4. Don't know

- According to you which factors have an effect on Hb?

1. Iron rich food 2. Intake of Vitamin ‘c’ Don’t know

- What do you eat in daily meal?

Chapati	Barley Bhakari	Rice Bhakari	Rice
Dal	Vegetable	Green vegetable	Sprouts
Chatani	Pickle		

- What do you eat in dinner daily?

Chapati	Barley Bhakari	Rice Bhakari	Rice
Dal	Vegetable	Green vegetable	Sprouts
Chatani	Pickle		

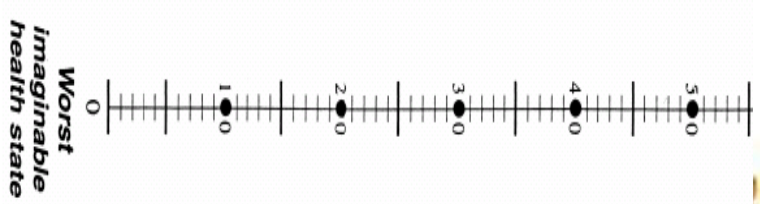
- Non-veg?
  1. Once in a week 2. Twice in a week 3. More than twice in a week

- Do you eat fruits regularly?
  1. Yes 2. No 3. As per availability

Personal hygiene practices

- What kind of toilet facility does your household have?
  1. Modern toilet 2. Pit latrine 3. Open latrine
  4. No facility / bush / field
- Dental Care
  1. Good 2. Average 3. Poor

- From 0 to 5 on scale, please indicate how good or bad your own health is today? (Barometer)



Health education

- Do you know when ‘Puberty’ takes place in girls?
  9 t0 13 12 to14 11 to 16

- What characteristics indicate that girl has reached her puberty? (mark all that apply)

Pimples on face	Hair grows under arms & in genital area
Gets curvy shape	Breasts starts to develop
Has menstruation every month	Attraction to boys
Likes to dress up	

- Where do you get information?

Don’t know	Mother	Gynaecologist/doctor	Friend
Elder sister	Grand parents	Other relatives	Nurse

Teachers Books Training course
Telephone
(help line) Other ----------

- If you had a reproductive health (menstrual cycle) problem or question, where would you go for help? (Multiple response).

Don't know Mother Gynocologist/doctor Friend Elder sister
Grand parents Other relatives Peer Educator Nurse Teachers
Books Training course Telephone (help line) Other

- How important is information about reproductive health to you?
Very less moderate very important

- In your opinion what is an ideal age to get married?
1. 18-20 years 2. 21-25 years 3. 26-30 years 4. After 35 years

- At what age would you wish to get married?
1. 18-20 years 2. 21-25 years 3. 26-30 years 4. After 30 years

Personality Development / decision making

- For general awareness what you prefer? (multiple choice with preference level)
1. Auto- biographies 2. Story books 3. News Paper
4. T. V. 5. Magazines. 6. Other

- In your opinion, who takes decision regarding marriage of adolescent girls in the family?
1. Mother, Father & herself 2. Mother 3. Father
4. Self 5. Other relatives
- In your opinion, who should take decision regarding marriage of adolescent girls in the family?
2. Mother, Father & herself 2. Mother 3. Father
4. Self 5. Other relatives

Psychological/ Social

- Here are few things that are denied to girls only because of they are girls.
  - Equal rest, time to play and adequate nutrition.
  - Chance to go to school / take up higher studies
  - Freedom to play sports late in the evening
  - Freedom to move and speak / express your views freely in home, school and neighborhood.
  - Safety & security inside and outside the home

- Which of the following you experience only because of you are girls?
  - Equal rest, time to play and adequate nutrition.
  - Chance to go to school / take up higher studies
  - Freedom to play sports late in the evening
  - Freedom to move and speak / express your views freely in home, school and neighborhood.
  - Safety & security inside and outside the home

- Which of the following things you expect from your surroundings.
  - Equal rest, time to play and adequate nutrition.
  - Chance to go to school / take up higher studies
  - Freedom to play sports late in the evening
  - Freedom to move and speak / express your views freely in home, school and neighborhood.
  - Safety & security inside and outside the home

- Here are few things that are denied to boys only because of they are boys.
  - Boys cannot work inside the house even if they wish to help
  - They are not allowed to cry or express their feelings/ emotions.
-
- Have you ever heard about help-line for children?
  1. Yes 2. No

- If such information given to you, would you like to receive help from it.
  1. Yes 2. No

Knowledge of AG's parents

- Do you know about need of AGs?
  1. Yes 2. No

- Arrange as per priority, what are the needs of adolescent girls.
  1. They should get information on reproductive health.
  2. Equal opportunities to girls and boys in home, school and society.
  3. Knowledge about nutritional needs
  4. Personal hygiene & sanitation

- In your opinion who should give this knowledge to adolescent girls (preference level)
  1. Mother 2. Father 3. Both parents
  4. Teacher 5. Any female Grand parent 6. Elder sister
  7. Any other female relative

Annexure 3:
Job Responsibilities:

1. **Medical Director**: Dr. Suvarna Patil - Overall In charge of Project

2. **Community Health Physician**: Dr. Rishikesh A. Wadke
   a. Project Planning.
   b. Supervision and Monitoring.
   c. Reporting – Internal and External.
   d. Budgeting.
   e. Human Resource Management.
   f. ACSM activities.
   g. Research and Publications.
   h. Project Evaluation.

3. **Psychologist:** Ms. Ashwini Chavan
   a. Field Supervision of project.
   b. Psychological testing & counseling – Managing Psychology O.P.D
   c. Co-ordination with hospital & community.
   d. Attending calls on 24"x7 helpline.
   e. Coordination for 1 day adolescent workshops.
   f. Coordination for 10 days residential camps.
   g. Documentation of Tadoos and medicine distribution.

4. **Super specialist Doctors**: Health check up & and Referral Services
   a. Gynaecologist (Dr. Sulatkal)
   b. Physician (Dr. Kaustub)
   c. Opthalmologist (Dr. Kulkarni)
   d. E.N.T (Dr. Mankame)
   e. Dentist (Dr. Kondujkar)

5. **Social Activist:** Ms Snehal D.K
   a. Community Motivation and Mobilization.
   b. Preparation of I.E.C material and training modules

c. Facilitation for workshop and residential camp.

d. Survey and Participatory Rural Appraisals.

6. **Dietician:** Ms. Dipti Parab
   - **a.** Planning & reporting of diet related activities.
   - **b.** 24 hours dietary recall of adolescent girls.
   - **c.** Preparation of diet sheet for adolescent girls.
   - **d.** Lectures and motivational talks related to diet.

7. **Physiotherapist:** Ms. Priyanka Reddies
   - **a.** Planning and implementing exercise schedule for adolescent girls
   - **b.** Teaching Meditation and Yoga
   - **c.** Teaching Ergonomics and right posture to adolescent girls
   - **d.** Coordinating sports related activities in residential camps and workshops.
   - **e.** Preparing Exercise, Yoga and Meditation IEC material for distribution in schools

8. **Sister In Charge:**

   a. Arranging field level activities & hospital based workshop & residential camp.

   b. Staff management.

   c. Vehicles coordination

   d. Indenting Medicines and Ladoos

   e. Preparation of monthly reports.

9. **Sisters:**

a. Documentation of project, case paper work, Health check up (Wt., Ht., BMI ,HB),

b. Arrangement of field & hospital based 1 day workshops & hospital based 10 days residential camp.

c. All activities as told by Sister In charge.

10. **Data Entry Operator (D.E.O):** All data entry and computerized report generation.

Annexure 4:

Gnatt Chart of Research Project

Milestones	June 12	Sep 12	Dec 12	Mar 13	June 13	Sep 13	Dec 13	Mar 14	June 14	Sep 14	Dec 14	Mar 14
Survey	→		→		→		→		→		→	
School leval – BMI (Wt. & ht.) & Hb chech up.	→	→	→	→	→	→	→	→	→	→	→	→
Distribution of Ladoos	→	→	→	→	→	→	→	→	→	→	→	→
Distribution of medicines	→		→	→		→		→		→		
Field and Hospital Based 1 day workshop	→	→	→	→	→	→	→	→	→	→	→	→
Refferal services (hospital based)	→	→	→	→	→	→	→	→	→	→	→	→
Hospital Based 10 days residential camp	→	→	→	→	→	→	→	→	→	→	→	→
Psychological Testing & Counseling	→		→		→		→		→		→	
Vocational training		→		→		→		→		→		→

Social Mobilization for Community	➡		➡		➡		➡		➡		➡	
Phone based 24 hours help line.	➡	➡	➡	➡	➡	➡	➡	➡	➡	➡	➡	➡
Research and Publication												➡
Project Evaluation												➡