# Integrated Reproductive and Sexual Health and Family Planning Project for Adolescent Girls and Young Married Women in Urban Slums of Pune City

# Protection of young married women from the adverse consequences of early marriage

**End line Study Report – 2018** 

Prepared by Institute of Health Management, Pachod

#### Introduction:

Institute of Health Management, Pachod (IHMP) implemented a life skills education project from 1998 to 2006, with support from the Ford Foundation and Rockefeller Foundation. The key outcome of this project was a delay in age at marriage. The project was evaluated by the International Centre for Research on Women (ICRW). The Institute was invited to present the findings of this project at the 31<sup>st</sup> Annual Global Health Council Conference in June 2004. IHMP received the Investing in Women Award for Innovation for this project from ICRW in 2006.

IHMP-AGRT has been implementing a project to delay age at first conception and avert the adverse consequences of early motherhood in rural Maharashtra since 2003, with support from the MacArthur Foundation. In 2006, the project was evaluated and the findings were presented at the Fourth Asia Pacific Conference on Reproductive and Sexual Health and Rights, held in October 2007, in Hyderabad. From 2008 to 2011, the project interventions were scaled up through a coalition of NGOs in 5 districts of Maharashtra. The scaled up project was evaluated by Gokhale Institute of Politics and Economics, Pune and New Concepts, Delhi. The outcomes of the scaled up project were similar to the pilot project. In 2010, the five intervention components of the model were simplified and adapted to enable their implementation in the public health sector. National Rural Health Mission (NRHM) funds were leveraged and the interventions were successfully mainstreamed with Reproductive and Child Health (RCH) in one block with 250,000 population. IHMP-AGRT received the Dasra award for this project in 2013.

Based on this experience, IHMP is being implementing an integrated program aimed at a. empowering unmarried girls, b. addressing the consequences of early conception - with the aim of demonstrating a synergistic and sustainable impact on the RSH of unmarried and married adolescent girls in urban slums of Pune City.

The specific objectives of the intervention for young married women are;

- 1. To increase the proportion of young married women having 1<sup>st</sup> child birth after 19 years
- 2. To increase the proportion of young women using contraceptives for spacing
- 3. To increase proportion of young married women receiving minimal, standard, antenatal and postnatal care
- 4. To increase the proportion of young married women taking treatment for maternal morbidity
- 5. To demonstrate a measurable reduction in maternal morbidity (ante, intra and post natal morbidity) and RTIs / STIs in married adolescent girls.
- 6. To reduce the prevalence of LBW babies among married adolescent girls

**Description of intervention:** The project was implemented in the 12 slums of Pune city covering a population of 20,000. A total of 1200 young married women of age <=24 were covered under the intervention. The intervention was implemented through community health volunteers. Following activities have been implemented under the program;

- 1. Monthly needs assessment & morbidity surveillance through Community Health Worker (CHW)
- 2. Need specific BCC by CHWs

- 3. Outreach clinics by IHMP ANMs for primary health care MNH, RH & Family Planning services
- 4. Group BCC sessions by project staff
- 5. Counseling for Family Planning & treatment seeking by IHMP staff
- 6. Capacity building of CHWs
- 7. Slum Health & Development Committees to monitor work of CHWs and IHMP staff

### Research objective:

To assess the impact of an intervention for young married women that implemented in the 12 slums under ward no 43 of Hadpasar area covering 20,000 urban poor population of the Pune city after 3 years. The direct beneficiaries will be the young married women <=24 years of age & their husbands this area.

# Specific objectives of end line study:

To study the impact of SRHR intervention for young married women of age 13-24 on;

- Utilization of antenatal care services by young married women of age <=24 years</li>
- Utilization of postnatal care services among young married women of age <=24 years</li>
- Prevalence of maternal and neonatal morbidity among young married women of age
  424 years
- Treatment seeking behaviour for maternal and neonatal morbidity among young married women of age <=24 years</li>
- Prevalence of low birth weight babies
- Prevalence of use of family planning methods among young married women of age
  424 years

# **Study Design and Methodology**

#### **Study Design:**

This study was conducted in 12 slums under ward no 43 of Hadpasar area of Pune city A quasi-experimental study design has been adopted with pre-post test in both the study and control groups.

**Sampling unit:** Young married women of age <=24 years from study and control area.

**Inclusion criteria for study respondents:** All the permanent resident young married women of age <=24 years were listed out and included in the sampling frame

**Sampling frame** – Slums in the study and control area were mapped, and a complete census was conducted in each. All the young married women of age <=24 years in each slum were listed, and their house location was mapped for future reference. The sampling frame consisted of all young married women of age <=24 years.

#### Sample Size:

Primary outcome - Utilization of minimum standard antenatal care (registered within 12 weeks of pregnancy, received three AN check ups, 2 TT injections, consumed 90 & more IFA tablets during pregnancy)

To detect a 10% increase in utilization of minimum standard antenatal care services over three years, assuming an alpha of 0.05 and using a two-sided test to achieve 80 percent power, it was determined that a sample size of 160 would be needed at each site. (Fleiss et al, 2003).

The sample size is 160 young married women of age <=24 years at baseline and end line. To avoid replacement against non-covered individuals and to reduce the non-response error a random sample of 200 young married women of age <=24 years at baseline and a random sample of 200 young married women of age <=24 years at end line was taken.

#### Method of data collection - Interview Schedule:

A uniform pre-coded interview schedule was designed for the data collection. The interview schedule was designed in Marathi, and pre-tested by the IHMP staff through 9 interviews completed in three slums from the other PUHC area. Based on the pre-test, appropriate modifications were made in the interview schedule, which was then used to collect information from young married women <=24 years.

Interview schedule included questions on socio-demographic profile, exposure to mass media, reproductive history, service utilization for maternal care, maternal morbidity, treatment seeking for maternal morbidity, use of contraceptives, reproductive morbidity, knowledge of MNH and reproductive health, domestic violence, utilization of primary level care services and exposure to BCC activities.

#### **Data Collection and Processing**

A total of 10 female external investigators and four supervisors were recruited based on their previous experience of data collection.

Investigators were trained for 4 days at IHMP, Pune Centre. Investigators were trained in the skills of interviewing, how to conduct oneself in the field and how to fill questionnaires. Explanation was also given about each question in the questionnaire. The main emphasis of the training was to impart practical skills to each person interviewing and filling the questionnaires. This was done with the help of dummy interviews, role plays and actual interviews in a slum not included in the Project.

After ensuring that each investigator could conduct interviews and fill the questionnaires satisfactorily, the actual baseline data collection was initiated. Data collection team included seven female investigators, four supervisors, one researcher for quality control.

A total of 327 young married women of age <=24 at baseline and 333 at end line were interviewed.

Data quality assurance: During data collection at the slum level, supervisor observed at least one interview of each investigator every day. At IHMP, Pune office the filled-in questionnaires was checked by the researcher. Manual data analysis for data quality assurance was done regularly. Based on findings of the supervisor, feedback was given to data collection team regularly to standardize data quality.

#### Data entry and cleaning:

Data was entered using a program developed in 'Epi data'. A data entry clerk entered data from each questionnaire, and a second data entry clerk checked the entries. After the data was entered, it was cleaned and analyzed using STATA

## Impact assessment analysis was done as;

- Change in levels of knowledge/attitudes/ service utilization behaviors was assessed by comparing – Baseline Vs exposure of YMW to intervention at end line (Baseline Vs No exposure at end line Vs Medium exposure at end line Vs High exposure at end line)
- 2. Change in levels of morbidity was assessed by comparing Baseline Vs end line prevalence's

#### **Results of Impact Assessment:**

# **Background characteristics of the respondent:**

This section comprised of questions about socio-demographic characteristics of the respondent and her husband. It covered their personal and family characteristics: type of family (joint or nuclear), religion, socio-economic, and exposure to mass media.

A total of 327 young married women of age <=24 years at baseline and 333 at end line were interviewed.

No significant difference was observed in most of the characteristics of young married women between baseline and end line sample.

Table 1: Characteristics of young married women

Characteristics	Category	Baseline (n=327) %	End line (n=333) %
	13-19 years	47.7	27.9
Current age of the respondent – in	20-24years	52.3	72.1
completed years	Mean age	19.97	21.03
	SD	2.45	2.14
Level of education	Nil	13.8	07.8
	1-7 <sup>th</sup> std	35.5	33.0
	8 <sup>th</sup> -12 <sup>th</sup> std	46.5	51.4
	13 <sup>th</sup> -15 <sup>th</sup> std	04.3	07.8
	House wife	91.4	89.8
Occupation of the respondent	Labourer/Maid	05.2	06.3
	Others	03.4	03.9
Working outside home	Yes	91.4	89.8
	No	08.6	10.2

Fig 1: Levels of Exposure – YMW exposed to intervention services



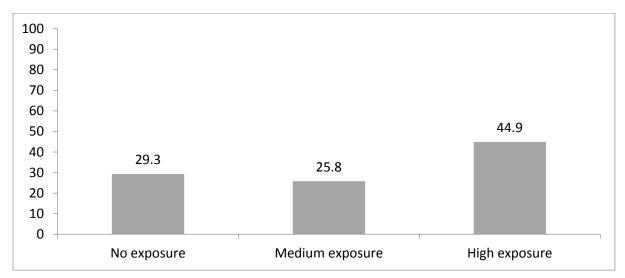
No exposure :- No visit of CHW to YMW in the last three months

Medium exposure: 1-2 visits of CHW to the YMW in the last three months

High exposure :- At least three visits of CHW to the YMW in the last three months

A set of questions on levels of exposures to the interventions were asked at baseline as well as at end line. Based on that a composite index as stated above has designed. The coverage with monthly surveillance and need based behaviour change communication at the household level is appreciably high.

Fig 2: Surveillance & need based BCC visits by CHW to the Young Married Women during their pregnancy



**No** exposure :- No visit of CHW to YMW during her pregnancy

Medium exposure:- CHW paid visits to the pregnant YMW in her second or third

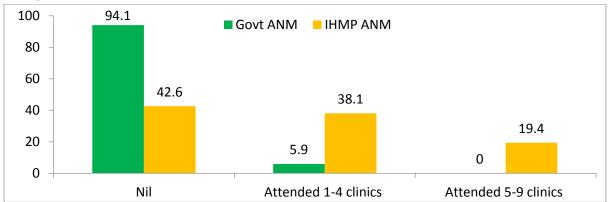
trimester during her last pregnancy

**High** exposure :- CHW paid first visit to the pregnant YMW in her first trimester

and had at least three visits during 9 months of pregnancy

The coverage with monthly surveillance and need based behaviour change communication at the household level is appreciably high. Increasing the coverage beyond this level seems unlikely because of the temporary migration of married adolescent girls and young women to their natal homes during pregnancy.

Fig 3: Pregnant YMW attended Slum level outreach clinics conducted by Govt. ANMs and IHMP ANMs



There is not much change in the outreach clinics conducted by Government ANMs. The results of this evaluation will be shared with MOH, PMC in order to increase access. There is a distinct increase in optimal utilisation of outreach services provided by IHMP. The proposed digital App for maternal care may bring about a further increase in accessibility

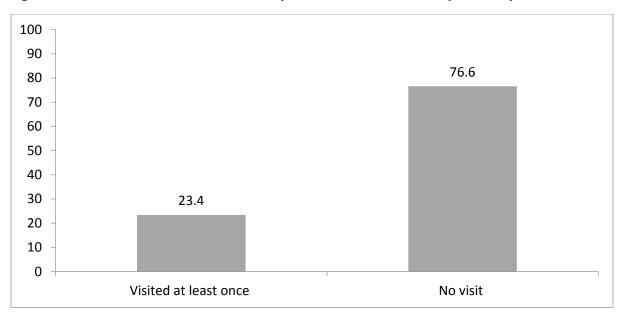


Fig 4: Surveillance & need based BCC visits by CHW to the YMW in their postnatal period

Accessibility and coverage with household visits has improved during the post natal period. The coverage is constrained by the temporary migration of young women to their natal homes Future programme must consider a suitable BCC intervention for women going to their natal homes for delivery. Further improvement is possible with increased focus

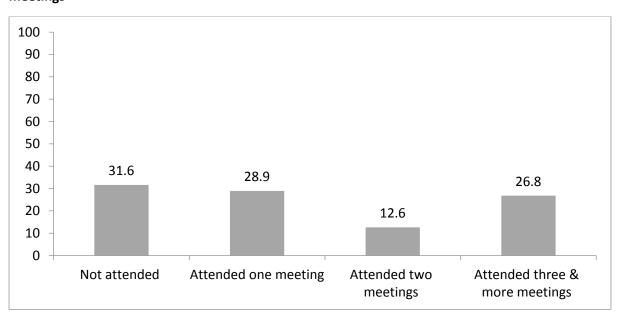
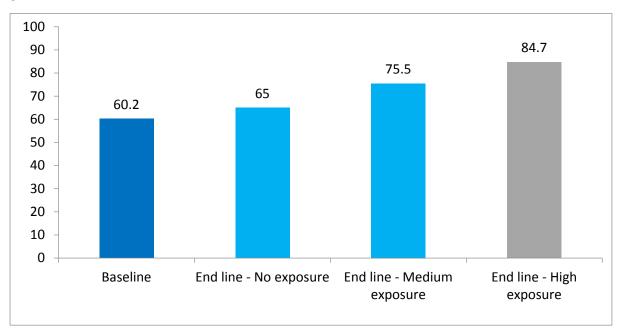


Fig 5: Group BCC meetings attended by YMW in the last six months by YMW aware of group meetings

Considering how busy slum women are in making two ends meet it is encouraging to see this level of participation in group meetings and BCC

# Impact of RSH intervention on Maternal Health - service utilization & Morbidity

Fig 6: Registration for antenatal care – percent mothers got registered within 12 weeks of gestation



Significant increase (**24.5 percentage points**) in proportion of women getting registered within 12 weeks of gestation for antenatal care at end line as compared to baseline by level of exposure to the intervention. There is a significant increase in the percentage of mothers that got registered within 12 weeks of gestation. There is a distinct correlation with the level of exposure to the intervention. Further improvement is possible if we explore the barriers that prevent some women from registering early

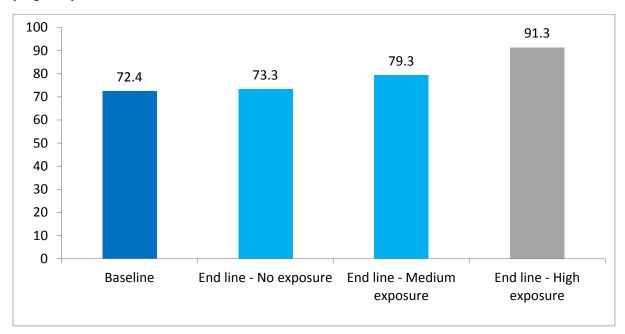
Table 2: Place for antenatal care registration

	Baseline	End line – Exposure			
Place of antenatal registration		No	Medium	High	
	%	%	%	%	
Outreach clinics	02.7	00.0	01.9	00.0	
Primary urban health centre (PUHC)	11.8	10.3	05.8	13.0	
Other Govt. hospitals	41.4	27.6	07.7	17.3	
Sasoon hospital	11.3	18.9	32.7	09.8	

Private clinic + NGO	32.8	43.1	51.9	59.8

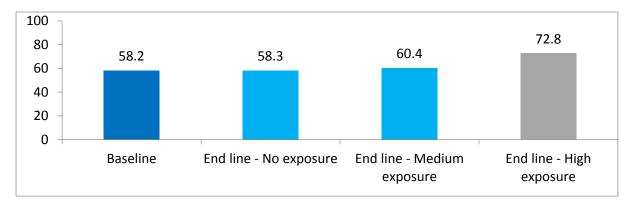
High proportion of YMW got registered at the private clinics for antenatal care services at end line as compared to the baseline. At end line, YMW from project area preferred "Sane Guruji" (NGO) Hospital" where they are referred for registration for AN care. Antenatal care is a primary level service. IHMP referred women to the PUHC and a nearby NGO hospital "Sane Guruji". The data clearly indicates a preference for the NGO hospital because of convenience as well as better quality of care. IHMP needs to advocate for improvement of quality of care at the PUHC.

Fig 7: Proportion of Young Married Women received at least five antenatal check ups during last pregnancy



Significant increase (**18.9 percentage points**) in proportion of mothers received at least 5 antenatal check ups at end line as compared to baseline by level of exposure to intervention. There is a significant increase in young women undergoing five examinations during pregnancy which is highly correlated to exposure to intervention. The intensity of the intervention can be increased. Women going to their natal homes in the 2<sup>nd</sup> or 3<sup>rd</sup> trimester will not allow improvement beyond a certain point

Fig 8: Proportion of Young Married Women weighed at least five times during last pregnancy



Significant increase (**14.6 percentage points**) in proportion of mothers weighed at least 5 times during their pregnancy at end line with high exposure to the intervention as compared to baseline by level of exposure to intervention. There is a significant increase in young women weighed during pregnancy which is highly correlated to exposure to intervention. Women going to their natal homes in the 2<sup>nd</sup> or 3<sup>rd</sup> trimester will not allow improvement beyond a certain point

100 90 82.6 80 70.4 70 69.8 70 60 50 40 30 20 10 0 Baseline End line - No exposure End line - Medium End line - High exposure exposure

Fig 9: Proportion of Young Married Women covered with abdominal check ups during antenatal care at least five times in the last pregnancy

Increase of (12.2 percentage points) in proportion of mothers who received at least 5 abdominal check ups during their last pregnancy at end line as compared to baseline by level of exposure to intervention. Women going to their natal homes in the 2<sup>nd</sup> or 3<sup>rd</sup> trimester will not allow improvement beyond a certain point

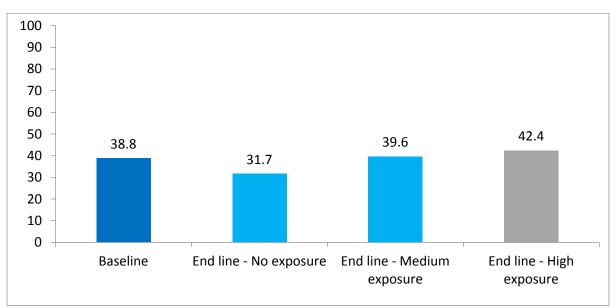
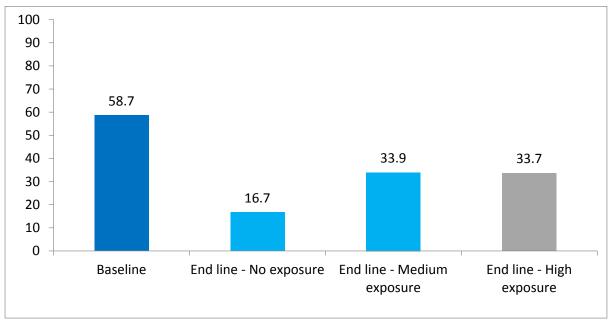


Fig 10: Proportion of Young Married Women checked for symptoms of anemia during antenatal care at least five times in the last pregnancy

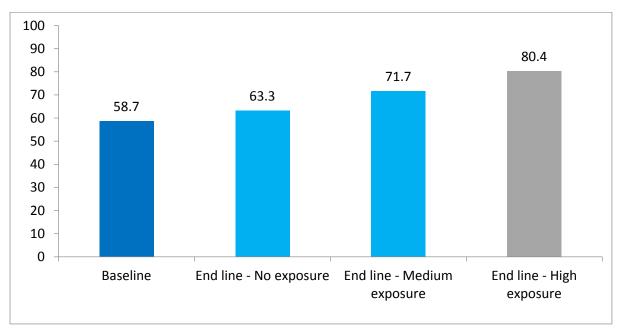
No change in checking of symptoms of anemia during antenatal care at end line as compared to baseline. There is clear room for improvement in the % of women checked for symptoms of anaemia. IHMP needs to adopt a non invasive method for Hb examination to replace the symptomatic approach adopted at present

Fig 11: Proportion of Young Married Women checked for swelling over feet during antenatal care at least five times in the last pregnancy



Reduction in checking of swelling over feet during antenatal care at end line as compared to baseline. This finding is an enigma and deserves further in-depth analysis

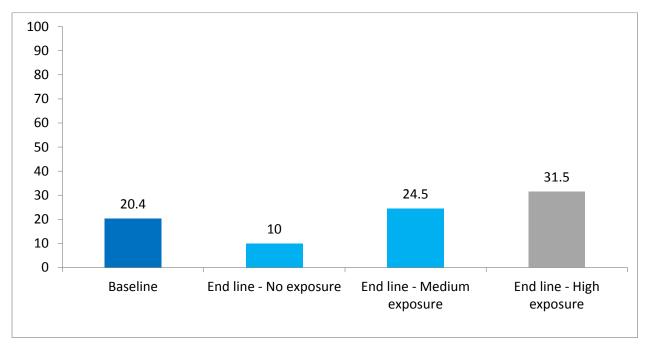
Fig12: Proportion of Young Married Women reported that their Blood Pressure check up was done during antenatal care at least five times in the last pregnancy



Increase of (21.7 percentage points) in proportion of mothers reported that their blood pressure was checked up for at least 5 times during their last pregnancy at end line with high exposure to the

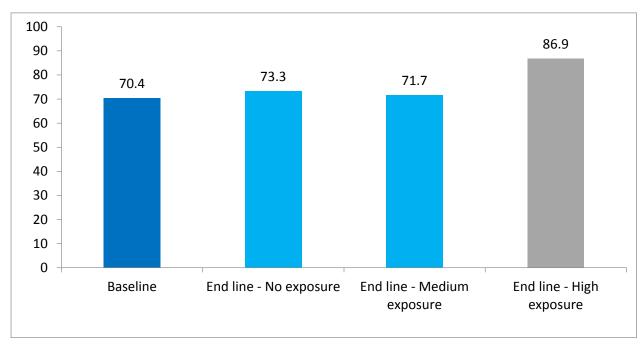
intervention as compared to baseline. The coverage with blood pressure examination is high. Must be further improved as this is a symptom that can lead to serious complications in pregnant women

Fig 13: Proportion of Young Married Women reported that they had undergone blood test for HB levels at least three times during the last pregnancy



Increase of (11.1 percentage points) in proportion of mothers reported that their Hb was tested for at least 3 times during their last pregnancy at end line as compared to baseline by level of exposure to intervention. In order to increase coverage IHMP needs to adopt a non invasive method for Hb exam to replace the present invasive one which girls try and avoid

Fig 14: Proportion of Young Married Women received Two Tetanus Injection in the last pregnancy



Significant increase of (**16.5 percentage points**) in proportion of mothers reported 2 TT injections during their last pregnancy at end line as compared to baseline by level of exposure to intervention. There is significant increase in coverage with TT vaccination. Further improvement may not be possible because of migration of women to their natal homes during pregnancy

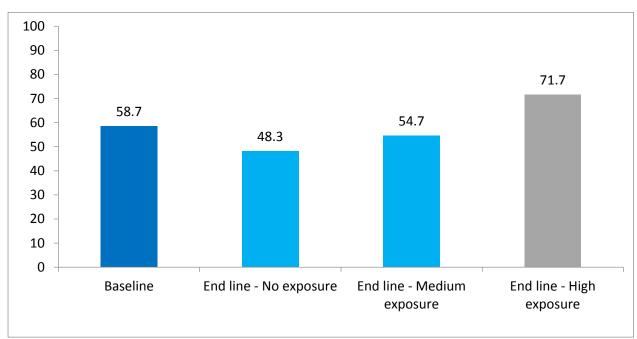
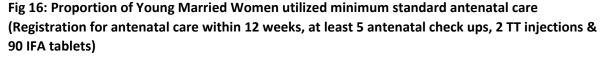
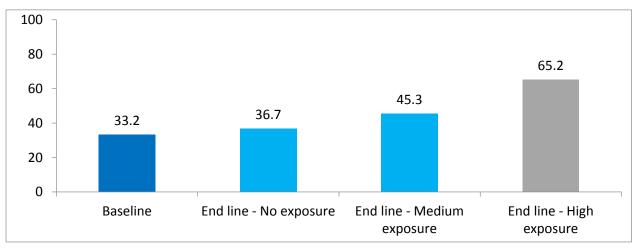


Fig 15: Proportion of Young Married Women consumed at least 90 IFA tablets in the last pregnancy

Significant increase of (13 percentage points) in proportion of women that consumed at least 90 IFA tablets during their last pregnancy at end line as compared to baseline by level of exposure to intervention. There is significant increase in consumption of iron and folic acid tablets during pregnancy. Further improvement may not be possible because of migration of women to their natal homes during pregnancy. In the next phase of the project IHMP should may consider feasibility of DOT strategy for IFA.





Significant increase of ( **32 percentage points**) in proportion of mothers utilized minimum standard antenatal care during their last pregnancy at end line as compared to baseline by level of exposure to intervention. There is a very significant increase in the proportion of young women that received minimum standard antenatal care. This indicator determines the extent to which maternal health outcomes will improve. There is scope for further improvement in the coverage with minimum standard antenatal care through better monitoring and supervision.

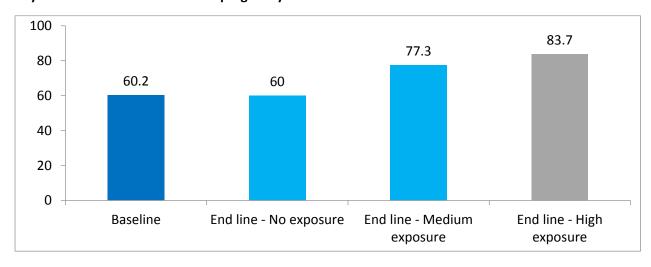
Table 3: Place for antenatal care

Place	Baseline	End line – Exposure		
		No	Medium	High
	%	%	%	%
Primary urban health centre (PUHC)	14.5	12.1	05.8	15.2
Other Govt. Hospital	06.5	22.4	03.8	07.6
Sasson Hospital	12.4	17.2	38.5	10.8
Cantonment hospital	13.4	05.2	01.9	06.5
Private clinics + NGO	52.1	43.1	50.0	59.8

High proportion of YMW received antenatal care from private clinics. YMW from project area preferred "Sane Guruji Hospital" where they were referred for antenatal care . As in the case of registration for antenatal care IHMP referred women to the PUHC and a nearby NGO hospital "Sane Guruji"

The data clearly indicates a preference for the NGO hospital because of convenience as well as better quality of care. IHMP needs to advocate for improvement of quality of care at the PUHC.

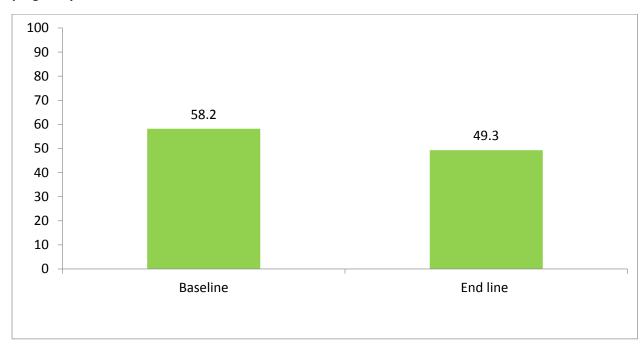
Fig 17: Diet in pregnancy - Proportion of Young Married Women consumed at least 3 meals per day in the third trimester of their pregnancy



Significant increase of (23.5 percentage points) in proportion of women that consumed at least 3 meals per day in their third trimester of pregnancy at end line as compared to baseline by level of exposure to intervention. There is a significant improvement in dietary behaviour but much more needs to be achieved in order to improve reproductive health outcomes

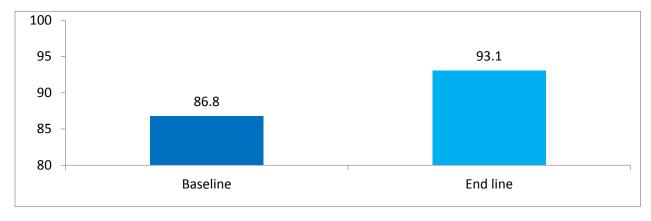
# Self reported prevalence of antenatal morbidity

Fig 18: Proportion of Young Married Women experienced antenatal complication in the last pregnancy



There was 8.9 percentage points reduction in self reported symptoms of antenatal complications at end line as compared to baseline. There is a considerable decline in the prevalence of self reported antenatal complications. In order to reduce maternal morbidity it is necessary to have more robust monitoring and supervision of pregnancies, which is what is being planned for the next phase

Fig 19: Proportion of Young Married Women took treatment for antenatal complications



There was considerable increase in treatment taking for antenatal complications at end line as compared to baseline. There is a considerable increase in proportion of young married women taking treatment for reported antenatal complications. In order to reduce maternal morbidity it is

necessary to have more robust monitoring and supervision, which is what is being planned for the next phase

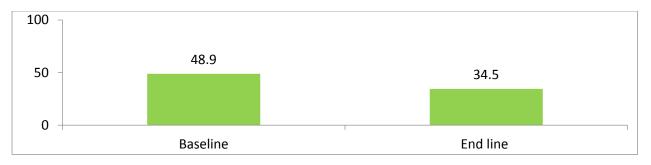
#### Intra natal care

Table: Intra natal care

Indicator	Category	Baseline	End line	End line – Exposure		
			No	Medium	High	
		%	%	%	%	
	Home	05.6	03.3	01.9	01.1	
	Sasoon Hospital	18.9	21.7	33.9	11.9	
Place of delivery	Govt. Hospital outside Pune	21.4	33.3	15.1	20.6	
	Command Hospital	11.2	03.3	01.9	05.4	
	Sane Guruji Hospital	18.9	16.7	24.5	39.1	
	Private Hospital	23.9	21.7	22.6	21.7	
Type of delivery	Normal	76.5	75.0	69.8	61.9	
	Caesarean	20.9	25.0	28.3	34.8	
	Forceps	01.0	00.0	00.0	01.1	
	Use of injections	01.5	00.0	01.9	02.2	

99 % women delivered in a hospital, largest proportion in an NGO hospital. There is an unacceptable increase in the proportion of caesarean operations. Young women being delivered in a hospital is more or less universal in slums of Pune city . There is a considerable increase in proportion of young married women being delivered through caesarean operation, which is a matter of serious concern. IHMP hopes to undertake advocacy with the Pune Municipal Corporation as well as at the community level regarding this issue

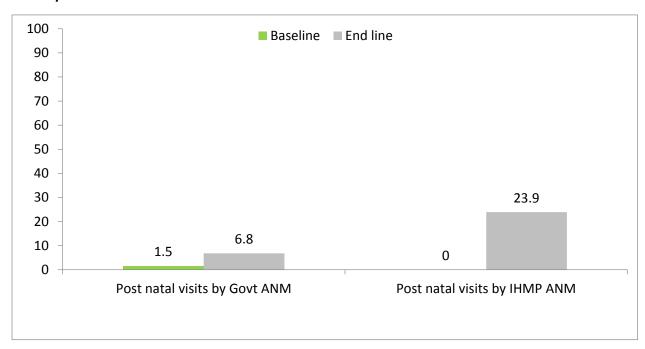
Fig 20: Proportion of Young Married Women experienced intra-natal complication



Significant reduction in intra natal complications at the end line as compared to baseline . There is a significant reduction in the prevalence of reported intra-natal complications. This is probably a reflection of the increase in hospital deliveries .

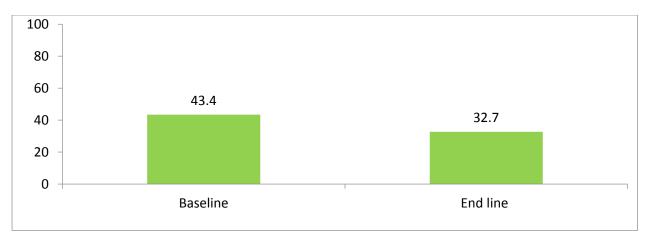
# **Impact on Postnatal care**

Fig 21: Proportion of Young Married Women received postnatal care at home within 42 days after delivery



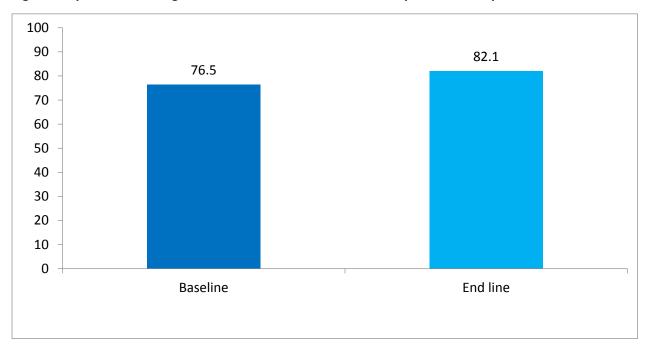
Significant increase in proportion of mothers who received postnatal services within 42 days of delivery at the end line as compared to baseline. There is a significant increase in the proportion of young women that received home based post natal care. Much more needs to be done in terms of strict supervision and monitoring to increase the coverage with this essential service. Young Married Women going to natal home should be counseled to seek postnatal care

Fig 22: Proportion of Young Married Women experienced postnatal complication



Significant reduction in postnatal complications at end line as compared to baseline. There is a significant reduction in the prevalence of reported postnatal complications. With better supervision and monitoring further change is possible

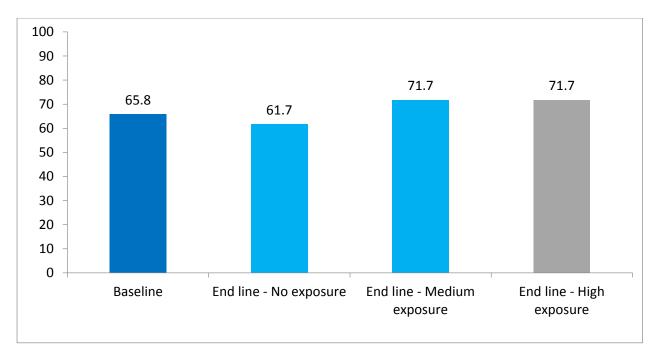
Fig 23: Proportion of Young Married Women took treatment for postnatal complications



Some increase in treatment taking for postnatal complications at end line as compared to baseline. The treatment seeking response to postnatal complications is very disappointing and requires strict supervision and monitoring in future.

# Impact on Neonatal care

Fig 24: Proportion of Young Married Women fed "Colostrum" as a first feed to their newborn



Slight increase in colostrums feeding to the newborns at end line as compared to baseline. There is a significant increase in proportion of young mothers initiating breast feeding within 1 hour of birth. The change is seen in women with medium and high exposure.

100 90 80 70 60 50 40 30 23.3 14.3 20 12.7 12 10 0 Baseline End line - No exposure End line - Medium End line - High exposure exposure

Fig 25: Proportion of Young Married Women gave birth to Low birth weight babies

Reduction in Low Birth Weight babies at end line as compared to baseline. There is a reduction in the prevalence of low birth weight babies irrespective of level of exposure to the intervention. A multi pronged interventions that addresses all the underlying causes of low birth weight needs to be implemented in future

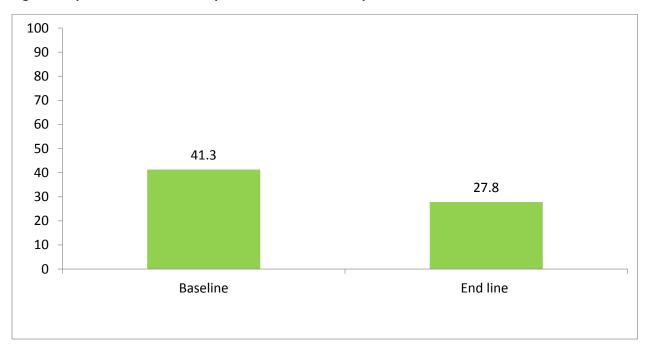
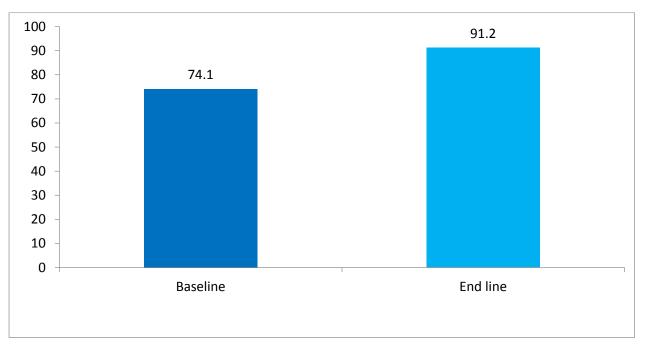


Fig 26: Proportion of neonates experienced neonatal complication

Significant reduction in neonatal complications at end line as compared to baseline. The prevalence of reported neonatal complications has reduced significantly. This could be because of an increase in institutional deliveries as well as better antenatal care and change in maternal nutrition in addition to home based postnatal care. It is difficult to dissect out the role of each indicator. For the future

project there needs to be a focus on all of the above indicators but additionally target pre-pregnancy status of young women

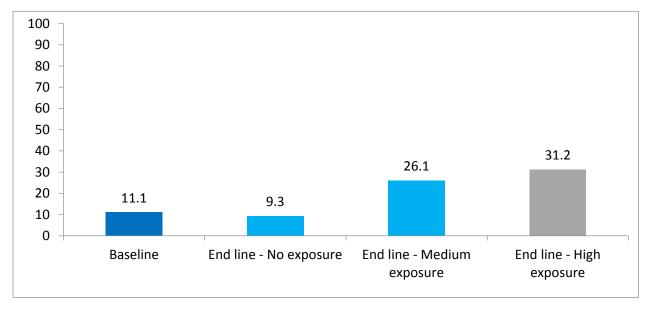
Fig 27: Proportion of Young Married Women took their neonates for treatment of neonatal complications



Increase in treatment taking for neonatal complications at end line as compared to baseline. There is a significant increase in treatment utilization behaviour for neonatal complications. The focus for both maternal and neonatal complications will be on increasing awareness regarding complications, disseminating information through print media and strict monitoring for early detection and effective utilization of referral services

#### Impact of RSH intervention on Use of temporary family planning methods

Fig 28: Proportion of Young Married Women currently using temporary contraceptives to delay pregnancy – by exposure to the intervention



Significant increase in the prevalence of using temporary contraceptive methods to delay pregnancy among YMW at end line as compared to baseline. Almost 300 % increase in current use of contraceptives is very significant and should further increase with the proposed intervention. The findings indicate that if the exposure is intensified the utilization will increase further

11.1 Baseline End line

Fig 29: Proportion of Young Married Women currently using temporary contraceptives – Baseline Vs End line

Significant increase ( **16.2 percentage points**) in the prevalence of using temporary contraceptive methods to delay pregnancy among YMW to delay pregnancy at end line as compared to baseline Almost 250 % increase in current use of contraceptives is very significant and should further increase with the proposed intervention. There needs to be greater emphasis on use of contraceptives to delay first birth

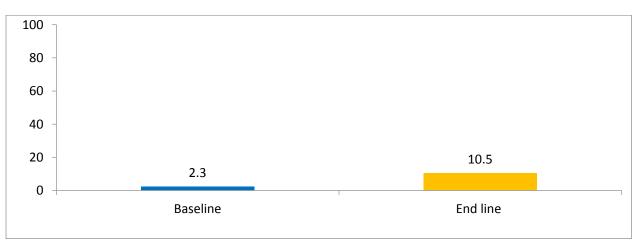
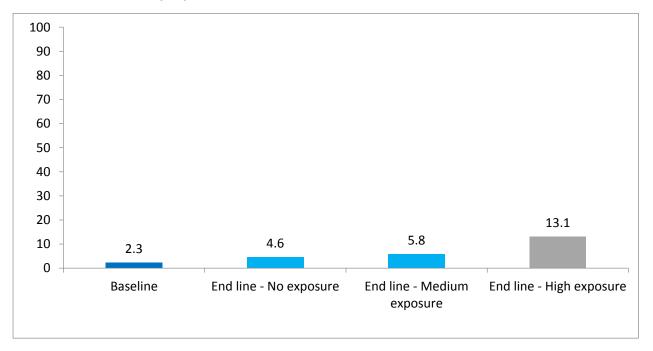


Fig 30: Sustained users - Percent young married women currently using temporary contraceptives since last 12 months – Baseline Vs End line

Significant increase (8.2 percentage points) in the prevalence of using temporary contraceptives for at least 12 months among YMW at end line as compared to baseline. The increase in sustained use of contraceptives is very significant and should further increase with the proposed intervention.

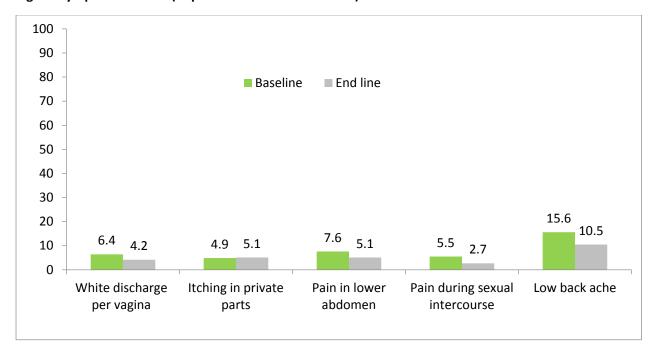
Fig 31: Sustained users - Percent young married women currently using temporary contraceptives since last 12 months – by exposure of the intervention



Significant increase in the prevalence of using temporary contraceptive for at least 12 months among YMW at end line as compared to baseline Vs. exposure to BCC. The increase in sustained use of contraceptives is very significant and should further increase with the proposed intervention

# Impact of RSH intervention on Reproductive Tract Infections (RTIs)

Fig 32: Symptoms of RTIs (Reproductive Tract Infections)



Reduction in reported symptoms of reproductive tract infections at end line as compared to baseline The trend appears to be a lower prevalence of most RTI symptoms, There is need for intensification of the intervention. This does not seem to be a priority with Government health facilities. This requires advocacy with the PMC. Alternatively women will have to be directed towards accessible and affordable services available in the private/ NGO sectors.

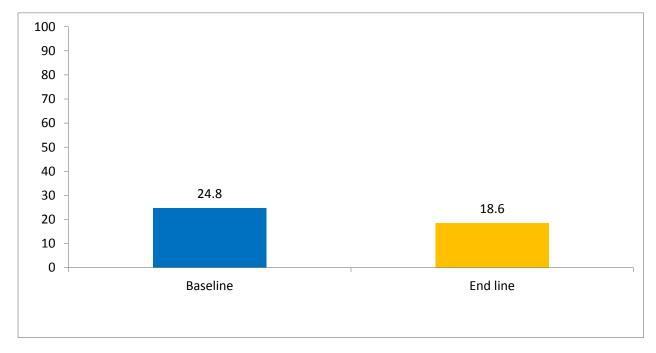


Fig 33: Prevalence of any one symptom of RTIs

Significant reduction in self reported prevalence of any one symptom of RTI s at end line as compared to baseline. Even though there is a statistically significant reduction in prevalence of reported RTIs, the intervention needs to be revamped.

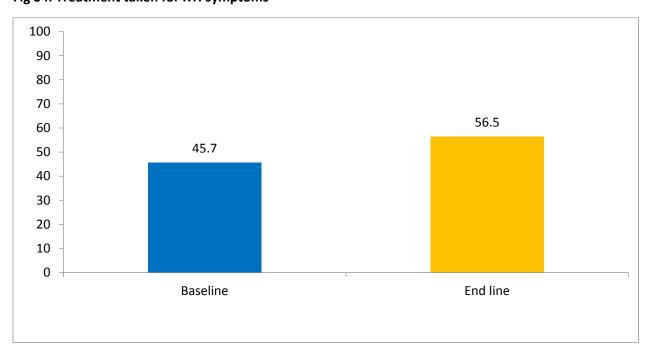


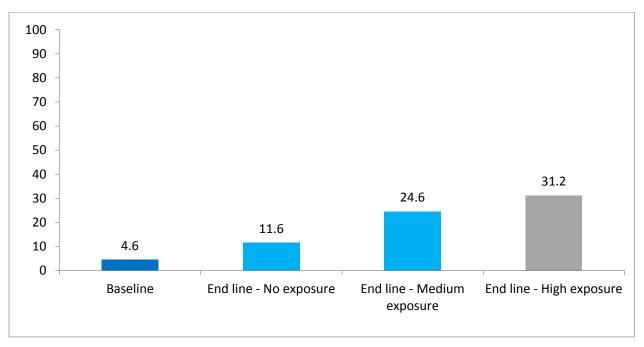
Fig 34: Treatment taken for RTI symptoms

Some increase in proportion of YMW taking treatment for symptoms of RTIs at end line as compared to baseline . The increased access to provision of specialist services through weekly Ob.- Gynae

clinics did not increase uptake significantly. Exploratory research is required to determine why women are not responding by utilizing the available services.

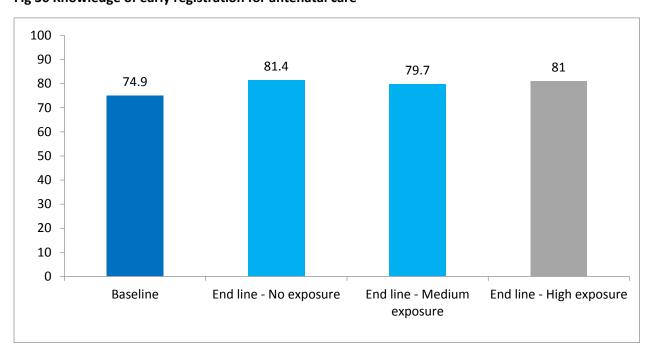
# Impact of RSH intervention on Knowledge of Reproductive Health

Fig 35: Percent young married women stated correctly the cause of Anemia



Significant increase ( **26.6 percentage points**) in the proportion of YMW who stated correctly the knowledge about causes of anemia at end line as compared to baseline Significant increase in knowledge is not getting translated to a change in dietary behavior. In future there is need to do an exploratory research study to determine the underlying causes of dietary behaviour in adolescent girls and young women.

Fig 36 Knowledge of early registration for antenatal care



Some increase in the proportion of YMW who stated correctly that a woman should go for registration for antenatal care within 12 weeks of gestation at end line as compared to baseline. The awareness level regarding the need for early registration for antenatal care was high even during baseline. The proposed project should focus on increasing access to pregnancy testing at household level and active linkage with ANMs

100 90 80 68.8 65.2 70 55.8 60 50 39.5 40 30 20 10 0 Baseline End line - No exposure End line - Medium End line - High exposure exposure

Fig 37: Knowledge of consumption of at least 90 IFA tablets during pregnancy by the pregnant mother

Significant increase ( **29.3 percentage points**) in the proportion of YMW who stated that a pregnant mother should consume at least 90 IFA tablets during her pregnancy at end line as compared to baseline

The awareness levels are significantly higher among respondents with high exposure to the intervention. The proposed project will test out the possibility of a DOTs strategy to increase compliance.

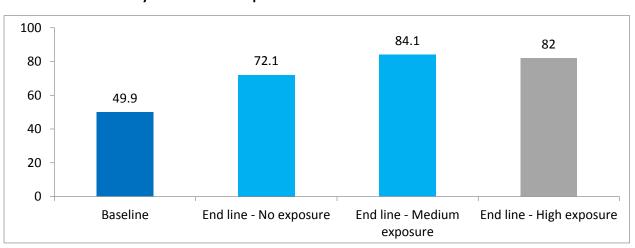


Fig 38: Knowledge regarding symptoms of antenatal complications - Percent young married women stated correctly at least one complication

Significant increase ( **32.1 percentage points**) in the proportion of YMW who stated correctly at least one symptom of antenatal complication at end line as compared to baseline. The awareness levels are significantly higher among respondents with high exposure to the intervention. The high level of awareness needs to be translated to early utilization of relevant referral services. The project proposes to focus on facilities and establish a referral system thereby addressing both demand and supply issues.

100 90 80 67.4 70 62.3 60 45.5 50 43.3 40 30 20 10 0 Baseline End line - No exposure End line - Medium End line - High exposure exposure

Fig 39: Knowledge regarding symptoms of postnatal complications - Percent young married women stated correctly at least one complication

Significant increase ( **24.1 percentage points**) in the proportion of YMW who stated correctly at least one symptom of postnatal complication at end line as compared to baseline. Post natal period is when the risk of maternal and neonatal mortality is the highest. The high level of awareness needs to be translated to early utilization of relevant referral services. The project proposes to focus on facilities and establish a referral system

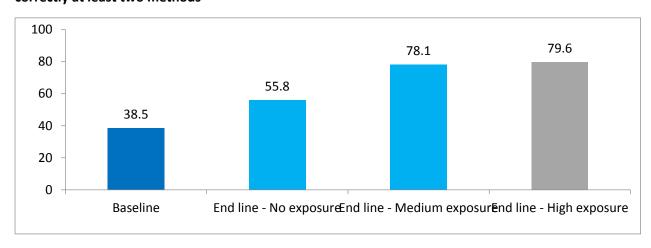


Fig 40: Knowledge of temporary family planning methods - Percent young married women stated correctly at least two methods

Significant increase ( **41.1 percentage points**) in the proportion of YMW who stated correctly at least two methods of temporary family planning methods at end line as compared to baseline. There is a very significant increase in awareness. However there is a gap between awareness and practice which needs to be addressed. Hereafter, IHMP proposes to address both demand and supply issues.

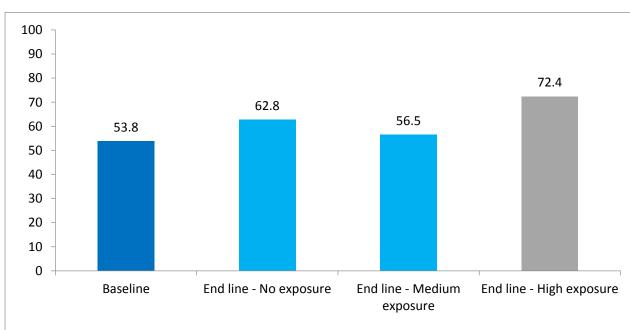


Fig 41: Knowledge of age at first birth – woman should have her first child after completing 20 years of age

Significant increase (**18.6 percentage points**) in the proportion of YMW who stated that a woman should have her first child after completing 20 years of age at end line as compared to baseline. The project needs to reach out to the "more difficult to change" group in the population. The change in strategy proposed by IHMP and the use of a digital App should increase uptake

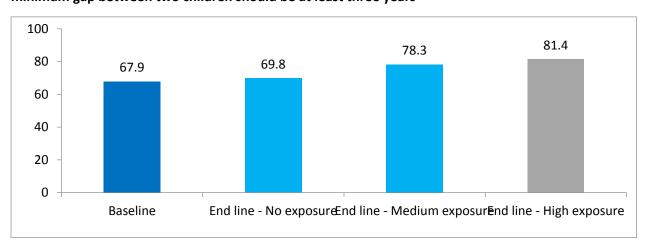


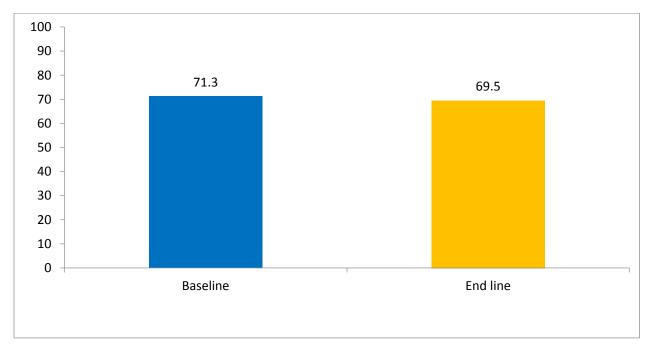
Fig 42: Knowledge of spacing between two children – Percent young married women stated minimum gap between two children should be at least three years

Significant increase (13.5 percentage points) in the proportion of YMW who stated that minimum gap between two children should be at least three years, at end line as compared to baseline. The project needs to reach out to the "more resistant" group in the population. By identifying non users

and focusing the intervention on them the gap between awareness and practice may reduce further. The change in strategy proposed by IHMP and the use of a digital App will increase uptake

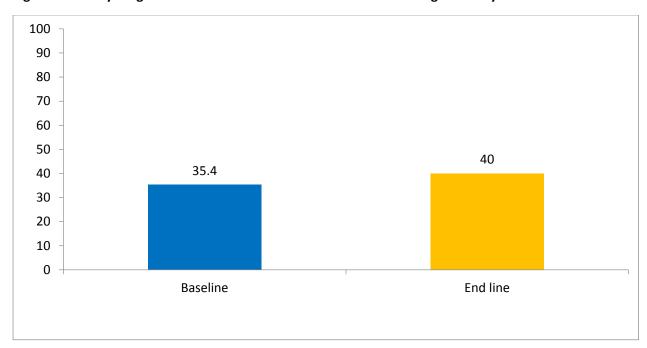
# Impact of RSH intervention on Age at marriage & age at first birth

Fig 43: Percent young married women of age 20-24 years got married before the age of 18 years



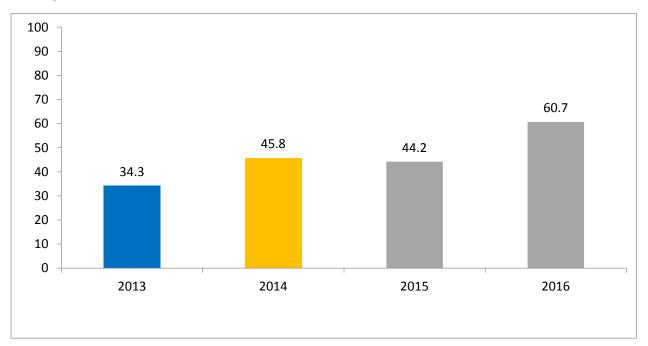
No change in proportion of YMW got married before the age of 18 years at end line as compared to baseline. There is need to reach out to young men and motivate them to choose girls over 18 years of age at the time of marriage

Fig 44: Percent young married women had first child birth after the age of 19+ years



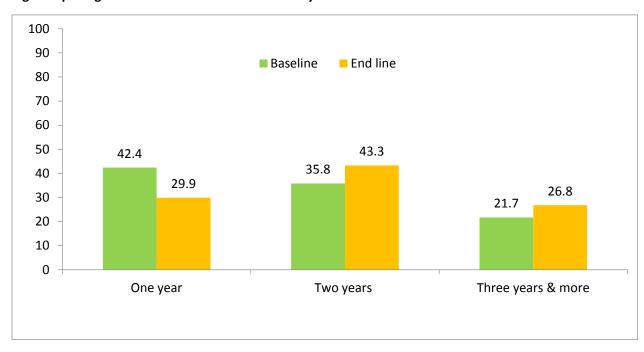
Small increase in proportion of YMW who had their first child birth after 19 years of age at end line as compared to baseline

Fig 45: Percent young married women had first child birth after the age of 19+ years by year of marriage



Small increase in proportion of YMW who had their first child birth after 19 years of age. More focused interventions are required for this target population in order to delay first birth

Fig 46: Spacing between last two childbirths - in years



Significant increase observed in proportion of YMW who space at least two years between their last two pregnancies at end line as compared to baseline. The increase in spacing between children is reflected in lower neonatal morbidity. This intervention needs further emphasis

#### **Conclusions**

Interventions for YMW demonstrated significant impact on;

- High coverage of Married adolescent girls and young married women with monthly surveillance and need specific BCC
- Most women utilize outreach services if they are accessible
- Attendance of group BCC, necessary for influencing social norms, is appreciably high
- Increase in proportion of YMWs with knowledge of RSH
- Increase in proportion of YMWs using temporary contraceptives to delay pregnancy
- Increase in proportion of sustained users of temporary family planning methods
- Contraceptive use is primarily for spacing
- Increase in proportion of YMWs utilizing minimum standard antenatal care
- Universal coverage with hospital deliveries
- Post natal care needs further improvement
- Increase in proportion of YMWs utilizing treatment for maternal morbidity
- No significant change in prevalence or treatment seeking for RTIs / STIs
- Reduction in maternal morbidity
- Reduction in neonatal morbidity and LBW babies