

# Convergence and Outreach for Successful Implementation of Rashtriya Kishor Swasthya Karyakram

Khushi Kansara, Deepak Saxena, Tapasvi Puwar, Sandul Yasobant<sup>1</sup>, Poonam Trivedi, Shital Savaliya, Manish Fancy<sup>2</sup>

Department of Epidemiology, Indian Institute of Public Health Gandhinagar, Gujarat, India, <sup>1</sup>Center for Development Research (ZEF), Bonn, Germany,

<sup>2</sup>Department of Health and Family Welfare, Government of Gujarat, Sabarkantha, Gujarat, India

## Abstract

**Background:** Adolescents (10–19 years of age) constitute about one-fifth of India's population. The Ministry of Health and Family Welfare, Government of India, has launched Rashtriya Kishor Swasthya Karyakram (RKSK) in 2014 to improve health of adolescents. Adolescent Health Day (AHD) is an important intervention of RKSK for outreach and to secure convergence among relevant departments. **Objectives:** The objective of this study is to design and document methodology for effective implementation of AHD. **Materials and Methods:** This study was conducted in Talod block of Sabarkantha district of Gujarat. The methodology was developed using ABCDE approach – assess, build, create, deliver, and evaluate. **Results:** During assess phase, experts identified convergence an important component for successful implementation of RKSK. Formative research reaffirm that convergence played an important role in effective implementation of RKSK. Findings from these two phases led to the creation of a methodology which was used to deliver AHDs. This was further evaluated using interviews with key stakeholders in health and education department. It is now being used to organize AHDs in the district. **Conclusion:** ABCDE approach can be used to develop a better health interventions for National Health Programs.

**Keywords:** Adolescent health, Adolescent Health Day, convergence, Rashtriya Kishor Swasthya Karyakram

## INTRODUCTION

Adolescents constitute a large population size among all the age groups; about one-fifth of India's population is adolescents (10–19 years' age group).<sup>[1]</sup> This is also considered to be one of the important age groups for nation's social and economic development. It is well understood that future of any nation is largely dependent on the nation's adolescent population. Thus, care during this crucial phase is important as it can significantly affect nation's growth.

The Ministry of Health and Family Welfare, Government of India, launched, in 2014, Rashtriya Kishor Swasthya Karyakram (RKSK) to improve the prospects of adolescent's crucial physical, biological, and psychological outcomes.<sup>[2]</sup>

However, it was found that implementation of RKSK was quite patchy, and there was no comprehensive program addressing all the needs of adolescents. The absence of proper guidance, parent's ignorance, lack of skills, and insufficient services from health-care delivery system were the major barriers observed for its poor implementation.<sup>[3]</sup> Therefore, it is important to

adapt a systematic approach which can help to guide effective program design and implementation to achieve desired results.

Theory of Change is a new approach which can systematically guide analysis, program development, and its execution. It can assist one to think clearly about the pathways by which innovations can be made in the program, to design its interventions which may help in feasible implementation of the program, and to better evaluate the whole program with their outcomes.<sup>[4]</sup> One such is ABCDE approach – assess, build, create, deliver, and evaluate – proposed by Aunger and Val Curtis,<sup>[5]</sup> which is often used to design behavior change interventions. However, looking into the steps involved, it was found that this approach can also help to carry out systematic

**Address for correspondence:** Ms. Khushi Kansara,  
Indian Institute of Public Health, Gandhinagar, Gujarat, India.  
E-mail: [kkansara89@gmail.com](mailto:kkansara89@gmail.com)

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

**For reprints contact:** [reprints@medknow.com](mailto:reprints@medknow.com)

**How to cite this article:** Kansara K, Saxena D, Puwar T, Yasobant S, Trivedi P, Savaliya S, *et al.* Convergence and outreach for successful implementation of Rashtriya Kishor Swasthya Karyakram. *Indian J Community Med* 2018;43:S18-22.

**Received:** 20-07-18, **Accepted:** 27-11-18

### Access this article online

Quick Response Code:



Website:  
[www.ijcm.org.in](http://www.ijcm.org.in)

DOI:  
10.4103/ijcm.IJCM\_226\_18

situational assessment which can be analyzed to design national program interventions where program outcomes are significantly associated with the nation's growth and development.

In this article, we describe our experience of utilizing the approach for developing a methodology for organizing Adolescent Health Days (AHDs) which created awareness among the stakeholders about the strategies to strengthen the adolescent health services ultimately leading to achievement of program objectives.

## MATERIALS AND METHODS

This study was conducted in Talod block of Sabarkantha district of Gujarat. The steps to utilize ABCDE Theory of Change in the present study include [Figure 1]:

- Assess:** To assess the existing quality of ongoing program, secondary data from published and unpublished research work were collected. Expert opinion was also received by conducting meetings with experts at state level
- Build:** This phase can also be called as formative research; it was conducted in two phases, baseline data collection by conducting qualitative and quantitative interviews with beneficiaries and health-care providers, and process documentation by observing program activities
- Create:** Based on the findings of formative research and process documentation, a systematic model AHD was prepared. It also considered the opinions of the stakeholders at state and district level [Figure 2]
- Deliver:** After designing model AHD, it was implemented at field level where it delivered all the planned services
- Evaluate:** Given the short duration of time, it was decided to undertake the process evaluation of the program by interviews with key stakeholders.

## RESULTS

### Assess

This phase was carried out in two steps

- Through review of secondary data or available literature.
- By conducting several round table meetings with experts to know their opinions on RKSK implementation.

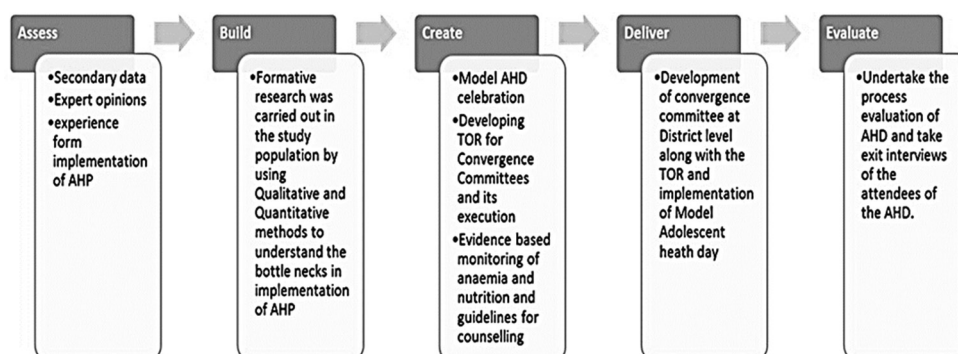
There were several studies which have cited various aspect on poor RKSK implementation. A study conducted by population

council found that RKSK has various technical as well as implementation issues at grass root level<sup>[6]</sup> Similar observation were made in one of the study conducted in Gujarat where 10 pilot districts reported poor implementation of RKSK.<sup>[7]</sup> Implementation of the RKSK was found weak in the 10 pilot districts of Gujarat.<sup>[7]</sup> Implementation of the RKSK was found weak in the 10 pilot districts of Gujarat. Improving its awareness, strengthening or revamping service delivery, and evaluating outreach strategies were identified as important components for better implementation of RKSK.<sup>[7]</sup> Discussions with experts revealed that poor interdepartmental convergence, weak management, and underprioritizing the adolescent age group compared to maternal and child health have diluted the program objectives which has negatively affected the implementation of RKSK. Therefore, a formative study for identifying determinants in RKSK implementation was carried out.

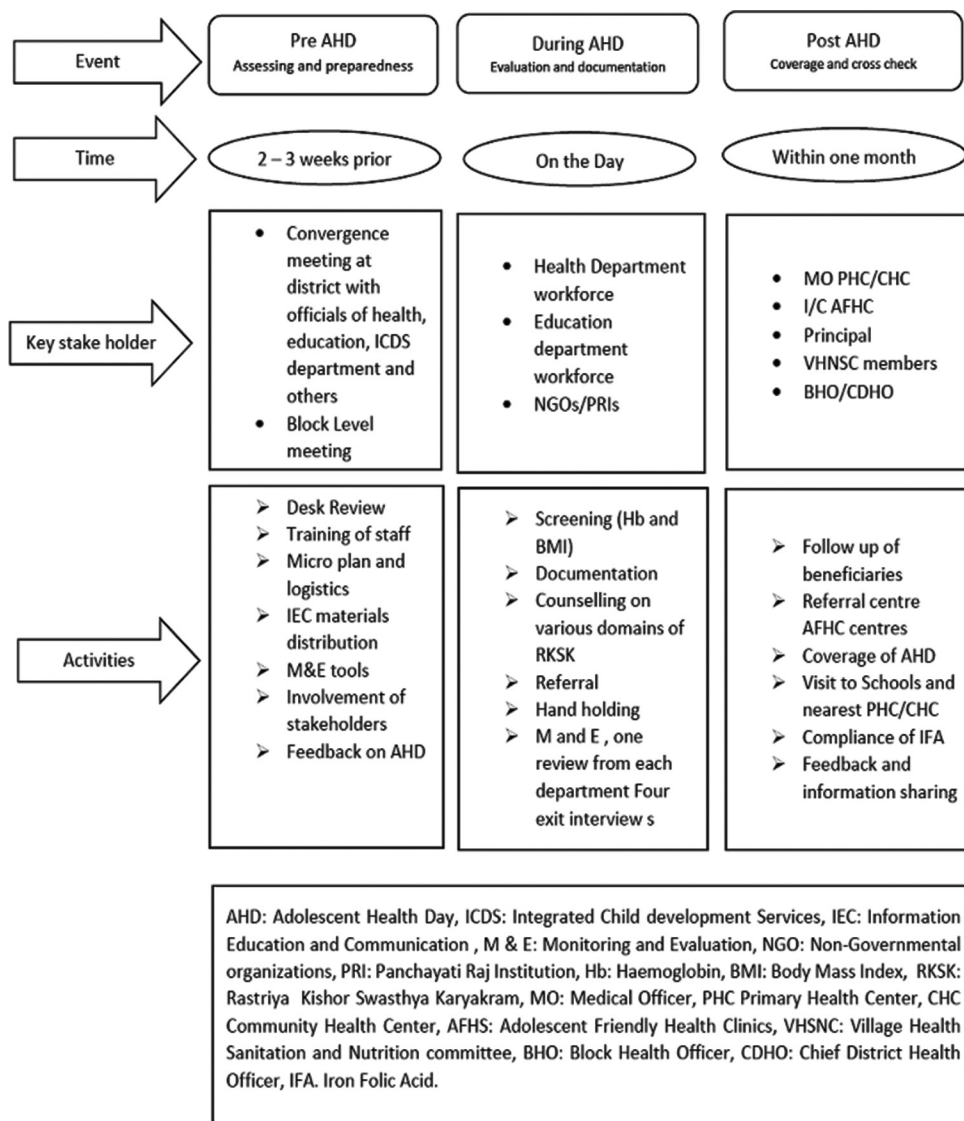
### Build

This phase can also be called as formative research; it was conducted using triangulated approach using qualitative and quantitative methods. This revealed main reasons about the poor program implementation of RKSK. The main reason was poor interdepartmental convergence, which ultimately affected community involvement, involvement of grass-root functionaries in planning and organizing, underprioritized program, and poor community mobilization. Teachers were identified as key functionaries for counseling adolescents.<sup>[8]</sup>

- Sixteen AHDs were celebrated in different villages in Talod this resulted in maximum coverage adolescents.<sup>[9]</sup> It also demonstrated the feasibility and utility of AHDs. Therefore, district and block officials asked for a methodology to organize AHDs which they can use from conducting AHD.
- Process documentation was also carried out during AHD celebration, it revealed following strategy to strengthen the AHD celebration
- Positive influence of teachers on adolescents could be utilized in AHD. Thus, teachers role could be found important in discussing topics on anemia and menstrual hygiene in AHD
- Celebration of AHD on weekdays does not cover all the adolescents participants of village as it is unable to cover out of school adolescents. Therefore celebration of AHD



**Figure 1:** Assess, build, create, deliver, and evaluate theory of change<sup>[7]</sup>



**Figure 2:** Strategy for celebrating Adolescent Health Day<sup>[10]</sup>

on weekends should be promoted, as it would help to cover out of school adolescents.

- Training on measuring anthropometry and plotting weight on growth chart would improve the technical skills of staff. This would improve the utility of activity as it can help to promote better health outcomes among adolescents
- Testing hemoglobin (Hb) levels through Sahli's acid hematin method require validation. This concern was raised with the block health officer (BHO), following which, in the subsequent AHDs, the issue was resolved by doing validation of the method by adopting proper technique which involves time management, increasing number of instruments, and preparation of freshly prepared 1% HCl solution
- Provision of appropriate promotional materials such as posters with key messages in local language for discussing important topics such as reproductive tract infections, sexually transmitted infections, menstruation, and nutrition could help teachers and other health staff in

discussing such topics with students during AHDs. This can also help to make program more effective

- Efforts for promoting community participation and engagement should be made; this could make program more effective
- Safe disposal of biomedical waste and precautions while handling blood samples and lancet during AHDs was not found satisfactory. Addressing these issues can strengthen the program even more.

### Create: Model Adolescent Health Day

As AHD is one of the important community-based strategies under RKSK, model AHD was designed after carefully studying outcomes of the first two stages of the approach [Table 1]. Convergence emerged to be an important component to solve many of the issues in RKSK implementation. Therefore, on the basis of it, a model AHD was planned and delivered and its implementation process was documented. Model adolescent day was conducted in three phases – pre-AHD activity, activities during AHD, and post-AHD activity [Figure 2].

**Table 1: Outcome and its implications**

Outcomes of assess and build phase	Key implications for developing methodology for organizing AHD
Issues related to interdepartmental convergence	Organizing an interdepartmental convergence meeting before conducting Adolescent Health Day
Methodological issues found in Sahli's method to measure Hb level	Make use of more laboratory instruments during AHD and use freshly prepared 1% HCl solution
Documenting and triangulating Hb reading and BMI status	BMI status should be triangulated with Hb of adolescents, which is later documented and analyzed to see the effect of BMI on Hb status of adolescents
Absence of IEC material for topics such as RTI, STI, and menstruation	Provision of appropriate health promotional material such as posters with the key messages in the vernacular language
Teachers were found to be more effective for discussing the topics such as anemia and menstruation	Allocate duty of counseling adolescents on topics of anemia and menstruation to teachers
Community involvement was found least during AHD	Local students with leadership qualities should be mobilized for outreach of the AHD activity. Furthermore, involve local leaders, VHSNC members, and local NGOs
Unsafe disposal of BMW	Provide BMW guidelines to laboratory workers and ensure that program follows BMW guidelines in managing waste during AHD

BMW: Biomedical waste, AHD: Adolescent Health Day, STI: Sexually transmitted infections, RTI: Reproductive tract infections, HB: Hemoglobin, VHSNC: Village health sanitation and nutrition committee, NGOs: Nongovernment organization, IEC: Information, education, and communication

### Deliver

A total of 16 AHDs were conducted utilizing the above methodology in Talod block which covered 821 adolescents. This model AHD delivered the following services such as organizing AHD, supervision of AHD, data management, treatment of identified adolescents and their referrals.

Some of the key technical features of the organization of model AHDs are as follows:

- Anthropometry: The WHO guidelines were followed for measuring height and weight of adolescents.<sup>[11]</sup> This activity was carried out by schools teachers, accredited social health activists (ASHAs), Anganwadi workers (AWWs), and student volunteers. Each individual was allotted specific duties. Adolescents were involved in this activity of categorizing themselves into body mass index (BMI) color-coded classification of RED, YELLOW, and GREEN according to the severity of the BMI status followed by ASHAs and AWWs suggesting referrals and further management if severity persists<sup>[12]</sup>
- Hb estimation: Sahli's method was used for Hb estimation, as the method was time-consuming provision of five Durham tubes and was made for each primary health center (PHC) where the AHD was being conducted. This step hastened the procedure of estimating HB of five participants at a stretch<sup>[12]</sup>
- Information, education, and communication (IEC): IEC materials such as posters of BMI chart for plotting BMI and reproductive system apron were provided to staff for counseling of adolescents. Provision of IEC material helped them to counsel adolescents during AHD
- Disposal of biomedical waste: Laboratory staff was provided training on management of biomedical waste, and they were also provided with IEC material for the same.

### Evaluation

Model AHD was evaluated by qualitative methods such as interviews. At the end of the activity, chief district health officer (CDHO), medical officer (MO), BHO as well as

adolescents were interviewed to evaluate the quality of the model AHD activity for its validation. It was found that BHO and CDHO were satisfied with the quality of services provided. They shared that both the adolescents and teachers enthusiastically participated in the AHD which was important for success of program. They also shared that the adolescents were aware about their Hb level and the grade of malnutrition in which they fall.

*"This model is good to engage with students and teachers. Most of the time teachers feel that it is just a routine exercise and hence do not actively participate. However this model is explicable and will be more participatory."* CDHO Sabarkantha

Staff engaged in data evaluation shared that they now have the list of anemic and malnourished adolescents. This list can help them for further follow-ups. During the AHD, the list of students who required urgent referral was also generated. This was appreciated by the PHC MO and school principal. This model also engaged school teachers to deliver common messages as a part of health education and counseling, which was specifically appreciated by the principal and the CDHO.

After implementation of model AHD program in Talod block, CDHO ordered to implement similar strategy in all of the blocks of Sabarkantha district.

Various stakeholders such as school teachers, principals, RBSK medical officer, and laboratory technicians expressed their perceptions about the quality of the services, which were recorded and are listed below:

- School Principal 1 shared *"This model of AHD implementation resulted in us receiving a list of students who needed referral. This will help us communicate the same to their parents and ensure that they get adequate treatment"*
- School Principal 2 shared *"I am happy that all the students with whom I interacted, knew the colour of the BMI grade to which they belonged and that is what is required as young minds are open to novel ideas and are full of curiosity. They even knew which grade they wanted to move to"*
- One of the teachers shared *"Seeing the Medical Officer*



*interacting with the students and asking about type of service and quality of service availed will make the staff more vigilant. This model creates ownership, and will also increase faith of school and students in engaging in such activities”*

- RBSK medical officer shared that “*Such a model builds trust as we interacted with the school teachers/principal from day one for planning i.e., Pre-AHD phase and that was useful as everybody knew what and how we intend to implement AHD. Hence things became easier on the day of execution. I will also ensure that those students who were identified for referral are adequately followed up”*
- Laboratory technician shared “*I am happy to see how simple low cost innovation of using multiple tubes for Hb estimation has reduced time constraint and improve quality of measurement.”*

Overall, the evaluation of model AHD methodology showed that AHD implementation requires meticulous planning and effective field-level convergence of various stakeholders such as school teachers, AWWs, ASHAs, MOs, PRI members, and the students themselves. Further, it also showed that AHD activities should be carried out in various phases to ensure smooth execution, and engaging with students and teachers was crucial for successful implementation of AHD.

## DISCUSSION

Theory of Change is an emerging approach to guide program development, execution, and its analyses. Having an explicit Theory of Change helps one to think clearly about the pathways by which change occurs, to design interventions that are more likely to affect those pathways, and to better evaluate how program inputs have led to the desired outcomes and impacts. This Theory of Change has been a guiding tool for creating a systematic implementation model.

Model AHD was designed utilizing this approach. It assisted in identifying the lacunae in its current implementation of AHDs. Assessing the situation of RKSK program, it was found that convergence needed more emphasis for better implementation of the program. Therefore, after analyzing the outcomes of the formative research, it was also found that along with convergence, there were other components which needed attention for effective organization of AHDs, such as inadequate IEC material, using different indicators for measuring adolescent’s BMI, poor management in organizing and conducting AHD at school level, scarce recourses such as laboratory equipment in measuring Hb levels of adolescents, and lack of leadership initiatives at village level. All these components were addressed in developing AHD methodology.

Convergence within health department can help in distribution of work among health staff for implementation of the program; it may also help to avoid the duplication of the health activity of different program by making a common platform for adolescent-related activity under RKSK. It can also help to increase the coverage and improve the quality of the work performed by service providers which can give an impactful outcome.

Every program has challenges when it comes to its implementation, and challenges in seeking convergence were expected to create some turbulence in the program activity. Advocacy with district/block convergence committee remains a great challenge for the system in Gujarat state.

ABCDE theory was discovered to design behavior change model after evaluating behavior of individuals; however, stages involved in this theory can also assist in developing and implementing public health program in a systematic way.

## CONCLUSION

Utilizing existing workforce to strengthen the program implementation was found advantageous through convergence. Delegation of duties to employees of different departments assisted to improve the quality of work and to achieve the program objectives. Thus, using ABCDE approach can improve understanding about any program, its implementation, and lacunae to further rectify them, which can help in designing and implementing effective program interventions.

## Financial support and sponsorship

This study was funded by John D. and Catherine T. MacArthur Foundation. Funders have no role in study designing and findings from this research.

## Conflicts of interest

There are no conflicts of interest.

## REFERENCES

1. National Health Portal. Available from: [http://www.nhp.gov.in/rashtriya-kishor-swasthya-karyakram-rksk\\_pg](http://www.nhp.gov.in/rashtriya-kishor-swasthya-karyakram-rksk_pg). [Last accessed on 2016 Mar 26].
2. Operational Framework Rashtriya Kishor Swasthya Karyakram (RKSK). Available from: <http://www.nrhm.gov.in/rashtriyakishor-swasthya-karyakram.html>. [Last accessed on 2016 Mar 26].
3. Sivagurunathan C, Umadevi R, Rama R, Gopalakrishnan S. Adolescent health: Present status and its related programmes in India. Are we in the right direction? *Journal of clinical and diagnostic research* 2015; 9:LE01-6.
4. Auger R Curtis V. *A Guide to Behaviour Change Design*; 2015.
5. Aunger R, Curtis V. Behaviour centred design: Towards an applied science of behaviour change. *Health Psychol Rev* 2016; 10:425-46.
6. Desai S. Adolescent Health: Priorities and Opportunities for Rashtriya Kishor Swasthya Karyakram (RKSK) in Uttar Pradesh. Policy Brief.
7. RKSK–Rashtriya Kishor Swasthya Karyakram An Exploratory Study on the Implementation Status in 10 Pilot Districts of Gujarat. (n.d.). Available from: [http://www.sahaj.org.in/uploads/4/5/2/5/45251491/rksk\\_study\\_in\\_10\\_pilot\\_districts\\_of\\_gujarat.pdf](http://www.sahaj.org.in/uploads/4/5/2/5/45251491/rksk_study_in_10_pilot_districts_of_gujarat.pdf). [Last accessed on 2016 Sep 06].
8. Adolescent Health Division, Ministry of Health and Family Welfare, G. of I. Rashtriya Kishor Swasthya Karyakram-Operational Framework; 2014.
9. Trivedi PK, Saxena D, Puwar T, Yasobant S, Savaliya S, Fancy M. Assessment of nutritional status of adolescents: Field experience from rural Gujarat, India. *Natl J Community Med* 2016; 7:926-30.
10. Saxena D, Yasobant US, Puwar T, Fancy MJ, Trivedi P, Savaliya S. Revealing adolescent health day: Field experience from Rural Gujarat, India. *Annals of Medical and Health Science Research* 2017; 7:355-8.
11. World Health Organization, Growth Reference 5-19 Years; 2016. Available from: <http://www.who.int/growthref/en>. [Last accessed on 2016 Mar 26].
12. Puwar T, Saxena D. Use of IAP BMI standards for measuring nutritional status of adolescents in Indian. *National Journal of Community Medicine* 2018; 7:545.